



Circuit-breakers IZM up to 6300 A
Switch-disconnectors IN up to 6300 A

With the new IZM series, Eaton presents a complete offering of air circuit-breakers (ACB) up to 6300 A. Five construction sizes make it possible to select the most economical switch for each project.
The new star is the circuit-breaker IZMX16. This innovative concept allows economical construction of two circuit-breakers within a field width of 600 mm.
There is no greater performance within such small space.



Eaton After Sales Service
Testing switching devices in compliance with regulations applicable to this technology
→ Chapter 22

Basic devices IZM
Switching capacity 440 V AC, $I_{cu} = I_{cs}$ from 42 – 100 kA +++ 3 or 4 pole +++ electronic releases for system protection, selective and universal protection, universal protection with power measurement +++ rated operational current from 630 – 6300 A +++ rated operating voltage U_e 1100 V for IZM32…3200-1100V

High availability
Withdrawable units +IZM-CAS… +++ Main terminal kits IZM-T… +++ mechanical interlocks IZM-MIL…

Comprehensive fixed mounted accessories
Motor operator IZM…M… +++ Shunt release IZM…ST… +++ Closing release IZM…-SR… +++ Undervoltage release IZM…-UV… +++ Auxiliary contact IZM…-AS… +++ Latch check switch IZM…LCS… +++ Trip indicator auxiliary switch IZM…-OTS +++ Mechanical interlocks

Worldwide novelty ARMS™ – greater safety for maintenance personnel
If there is an accidental arc, the ARMS™ system (Arcflash Reduction Maintenance System) shuts down faster than a short circuit trip device. In connection with IZM, additional components from the accidental arc protection system ARCON provide incremental protection against accidental arcing.









Circuit-breakers IZMX16, switch-disconnectors INX16 from 630 A to 1600 A

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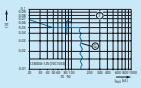
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IZMX16, INX16

I_{cu}/I_{cs} at U_e = 440/690 V AC I_{cu}: Rated ultimate short-circuit breaking capacity at rated operational voltage U_e I_{cs}: Rated service short-circuit breaking capacity at rated operational voltage U_e		**Basic switching capacity (B)**		**Normal switching capacity (N)**		**High switching capacity (H)**	
Circuit-breakers	Rated operational current I_n A	440 V AC I_{cu} / I_{cs} kA/kA	690 V AC I_{cu} / I_{cs} kA/kA	440 V AC I_{cu} / I_{cs} kA/kA	690 V AC I_{cu} / I_{cs} kA/kA	440 V AC I_{cu} / I_{cs} kA/kA	690 V AC I_{cu} / I_{cs} kA/kA
IZMX16							
	630 - 1600	42/42	42/42	50/50	42/42	65/50	42/42

I_{cw} at U_e = 440/690 V AC I_{cw} at t = 1 s I_{cw}: Rated short-time withstand current		**Basic switching capacity (B)**	**Normal switching capacity (N)**	**High switching capacity (H)**
Circuit-breaker, switch-disconnector	Rated operational current I_n A	440/690 V AC I_{cw} kA	440/690 V AC I_{cw} kA	440/690 V AC I_{cw} kA
IZMX16				
	630 - 1600	42	42	42

I_cm at U_e = 440/690 V AC I_{cm}: Rated short-circuit making capacity (Peak value) at rated operational voltage U_e		**Basic switching capacity (B)**	**Normal switching capacity (N)**	**High switching capacity (H)**
Switch-disconnector	Rated operational current I_n A	440/690 V AC I_{cm} kA	440/690 V AC I_{cw} kA	440/690 V AC I_{cw} kA
INX 16				
	630 - 1600	88	88	88

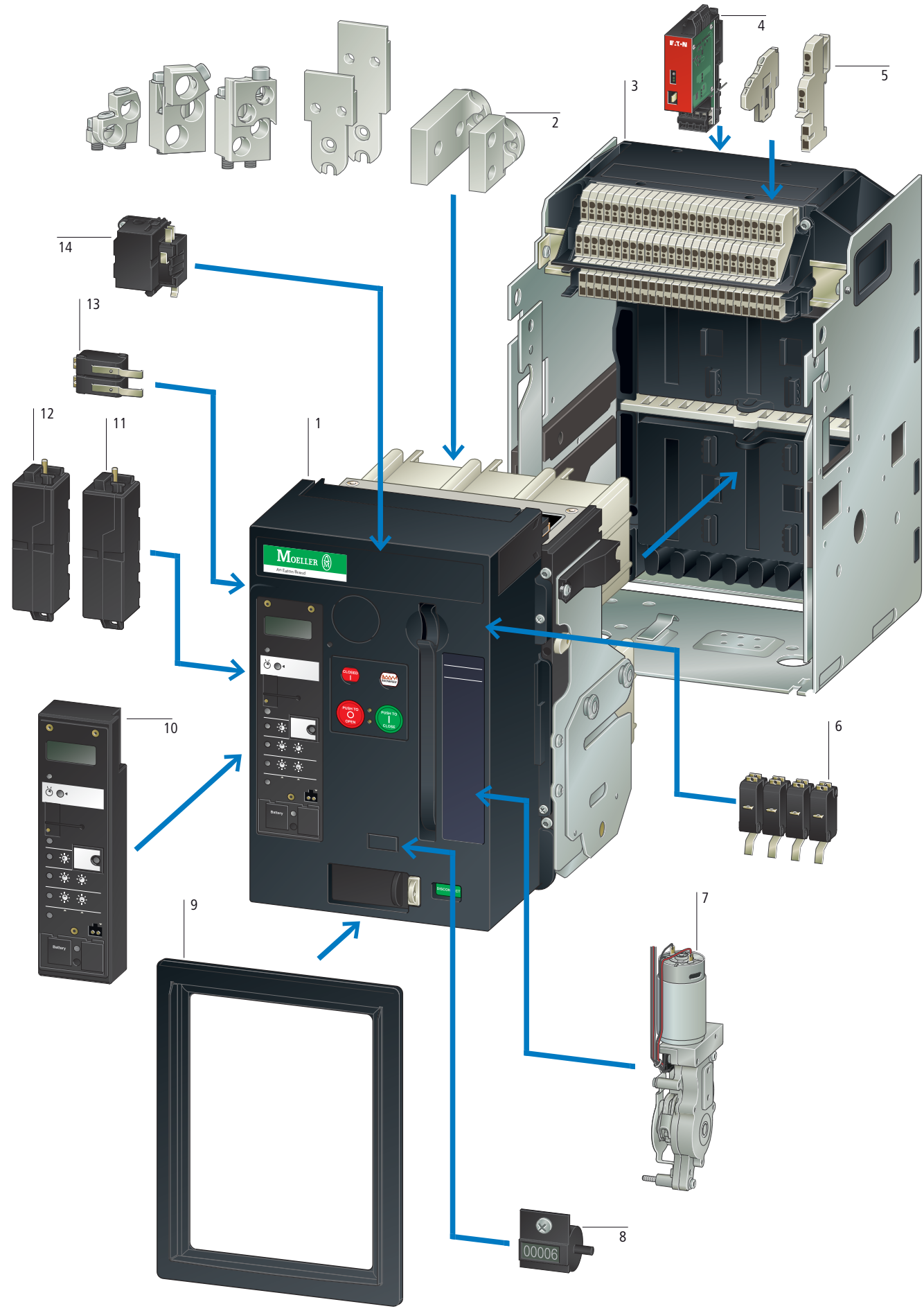
IZMX16

		IZMX16…A…	**IZMX16…V…**	**IZMX16…U…**
		System protection DTA Digitrip 520	Selectivity protection DTV Digitrip 520	Universal protection DTU Digitrip 520M
				
Current range		200 A - 1600 A	200 A - 1600 A	200 A - 1600 A
RMS value monitoring		●	●	●
Protective functions				
General				
Ordering options		LI	LSI, LSIG	LSI, LSIG, LSIA
Rating plug (I_n)		●	●	●
Overtemperature trip		●	●	●
Overload protection	**L**			
Overload trip		(0.5 - 1.0) x I_n	(0.5 - 1.0) x I_n	(0.5 - 1.0) x I_n
Delay time I^2t at 6 x I_r		2 - 24 s	2 - 24 s	2 - 24 s
Thermal memory		●	●	●
Short-time delayed short-circuit protection	**S**			
Delayed short-circuit protection		-	(2 - 10) x I_r	(2 - 10) x I_r
Short delay time I^2t at 8 x I_r		-	100 - 500 ms	100 - 500 ms
Short delay time, flat characteristic curve		-	100 - 500 ms	100 - 500 ms
Zone selectivity ZSI[1]		○	○	○
Non-delayed short-circuit protection	**I**			
Non-delayed short-circuit protection		(2 - 10) x I_n	(2 - 12) x I_n	(2 - 12) x I_n
Switch-off function		●	●	●
Closing releases MCR		●	●	●
Optional ground fault protection	**G**			
Ground/fault alarm		-	-	○[1]
Ground/fault protection release		-	(0.25 - 1.0) x I_n[3]	(0.25 - 1.0) x I_n[3]
Short delay time I^2t at 0.625 x I_n		100 - 500 ms	100 - 500 ms	100 - 500 ms
Short delay time, flat characteristic curve		100 - 500 ms	100 - 500 ms	100 - 500 ms
Zone selectivity ZSI[1]		○	○	○
Thermal memory		●	●	●
Neutral conductor-conductor protection	**N**	●	●	●
System diagnostics				
Status/Overload LED		-	●	●
Cause of trip LEDs		-	●	●
Current at trip point (display indication)		-	-	●[1]
Ground fault release/alarm remote signaling (relay contact)	**A**	-	-	●[1]
Overload alarm monitoring	**A**	-	-	●[1]
System monitor				
Digital display		-	-	4-digit LCD
Field bus communication		-	-	Optional: Modbus, PROFIBUS
Additional functions				
Test possibility[2]		-	Hand held test unit	Hand held test unit
Maintenance mode ARMS (Arc Flash Reduction Maintenance System™)		-	-	○[1]

Notes

I_n = rating plug (rate current module) = rated operational current current transformer
I_r = Set value overload trip (= rated operational current of system)
[1] Requires external 24 V DC control voltage supply.
[2] Hand-held tester for simulating of secondary current
[3] In combination with ARMS function limited to 1200 A.
● Standard
○ Optional

System overview



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3- and 4 pole,
horizontal/vertical
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Either 8, 20 or 30 units
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Key to type references

IZM	X16	B	3	-	A	06	W
IN		N	4		V	08	F
		H			U	10	
						12	
						16	

IZM, IN = Product family

Frame size
X16: Compact ACB, 630 - 1600 A

Switching capacity
B = Basic
N = Normal
H = High

Number of poles
3: 3 pole
4: 4 pole

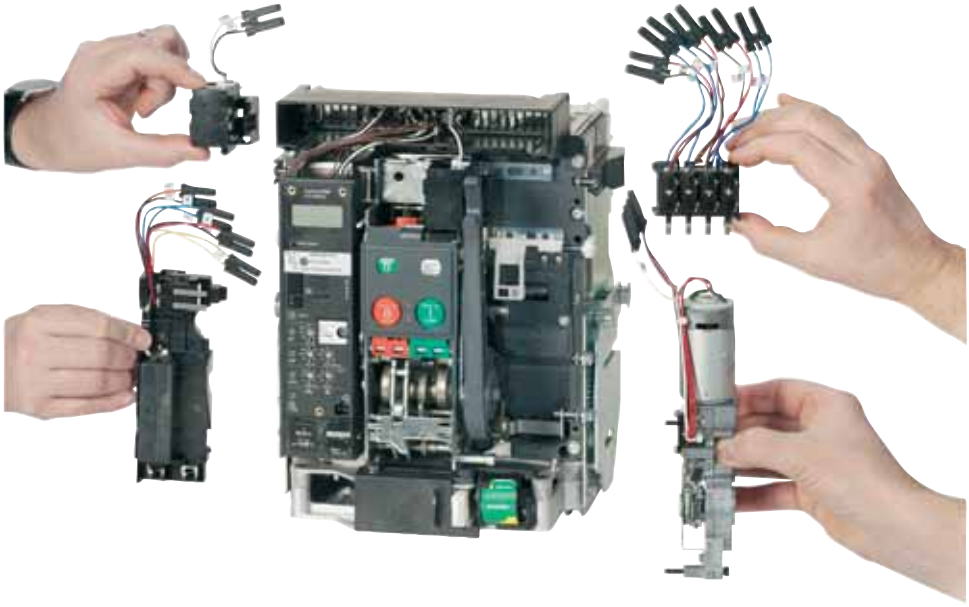
Trip type
A = System protection = Digitrip 520 LI
V = Selective trip = Digitrip 520 LSI(G)
U = Universal protection = Digitrip 520MC LSI(G)

Rated operational current
06: 630 A
08: 800 A
10: 1000 A
12: 1250 A
16: 1600 A

Model
W = Withdrawable units
F = Fixed mounted

IZMX16, INX16

Space-saving circuit-breakers with useful accessories



IZMX16

The innovative concept of the IZMX16 makes it possible to install two withdrawable circuit-breakers in a 600 mm wide section. This enables more economical section design and also saves operating space. This additional performance in a minimum of space goes far beyond the standard available worldwide.

Applications

The circuit-breakers can be used in four main application areas depending on the type of equipment to be protected:
- System protection,
- Motor protection,
- Transformer protection,
- Generator protection.

These key applications make different demands on the switches, which are met with a range of control units.

Switches with closing release
They are particularly suitable for synchronization tasks.

Coupler switches
Beside the IZMX16 circuit-breakers, INX16 switch-disconnectors are available. These are used, for example, as coupler switches between different power supplies.

Modular design

The retrofitting of accessories is made considerably easy thanks to the efficient "plug & work" technology. Accessory drawers and snap-fit mechanisms makes it possible to fit the latest accessories with virtually no tools. This allows you to respond flexibly to changing requirements within your system.

Standard scope of delivery as usual

- With the new IZMX16, you select a basic device that is already fitted with an electronic release.
- The standard mounting is on a horizontal mounting plate or on horizontal traverses in the switching cabinet. The IZMX16 can also be fastened to vertical mounting plates.
- With four-pole devices, the neutral conductor is arranged on the left (front view).
- The neutral conductor can be loaded 100% like the phase conductors.
- The circuit-breakers are provided with a standard mechanical reclosing lockout. After an overload trip, the fault is usually examined first of all. After the fault is identified and rectified, the mechanical reclosing lockout is reset by pressing the red mechanical trip indicator on the front of the circuit-breaker.
- An "Automatic Reset" can be ordered as an option. This enables the circuit-breaker to be restored to operation immediately at any time after the spring-operated stored energy mechanism is retensioned. In these applications compulsory fault analysis is intentionally avoided.
- The number of control cable terminals depends on the accessories fitted.
- If a cassette is ordered without the basic device, this can be already fitted with the maximum number of control cable terminals. For greater economy in large plants, the cassette is also offered without control circuit terminals so that fitting can be carried out later at the installation or when the required accessories are determined at a later time.
- 2 changeover contacts are provided as standard for ON/OFF status indication.
- A coding mechanism between the basic device and the cassette prevents impermissible combinations ("Rejection Interlock").

Expanded standard scope of delivery for IZXM16

Some order types from the past can no longer be found since the following options are now already part of the standard scope of delivery:
- The door escutcheon is now always included in the scope of delivery. With withdrawable designs this is supplied with the cassette (withrawable unit).
- On withdrawable units the circuit-breaker can be pulled out to inspect the arc chutes. With fixed units, it is recommended that sufficient space is provided above the circuit-breaker to enable inspection. An additional cover is not required.
- All basic devices that are provided with universal protection (with Digitrip 520M…), now feature a display.
- On each circuit-breaker the integrated Digitrip electronic release is factory fitted with a sealable protective cover.
- If a motor operator is ordered, the "Spring-operated stored energy mechanism tensioned" indicator switch is automatically provided.

Other benefits of the IZMX16

- The design of the main terminal offers maximum flexibility. The horizontal terminal can be rotated simply at the installation so that it can also be used as a vertical connection. With withdrawable units, additional terminal pieces can even be dispensed with.
  The cassette of the IZMX16 offers an integrated flange terminal to which the system busbars can be connected directly. For this reason, the main terminal pieces for IZMX16 are not part of the standard scope of delivery. Don't forget to order additionally required terminal pieces if needed.
- Thanks to the separate mounting position, a switching operations counter can now be used also independently of a motor operator.
- Withdrawable unit operation:
  The unit is actuated with a hand crank supplied as a standard feature and has a secure position in the basic device. This is now possible also with a standard tool (square drive socket 1/4").

External 24 V supply

- The standard protection functions of the IZMX16 operate generally independently of an external control voltage supply. The power supply of the electronics unit, for example for overload and short-circuit protection, is implemented via the current transformers integrated in the circuit-breaker.
- The universal release unit with display can be fed with a 24 V DC supply if required so that the display function can also be used without a load. An external 24 V DC power supply is needed if communication functions are required.

Communication capability

The communication-capability of the IZMX16 circuit-breakers open up new possibilities in power distribution. It provides all important operational information and passes this on. This increases system transparency and shortens the response times to states such as overcurrent, phase asymmetry and overvoltage.

A rapid intervention in a process can, for example, prevent downtimes and help to schedule maintenance activities and therefore boost plant availability.

A Modbus interface is offered as an alternative in addition to the Profibus interface.

Greater safety for maintenance personnel with ARMS™

If the IZMX16 is fitted with the newly patented ARMS system (Arcflash Reduction Maintenance System™), a non-delayed immediate disconnection is ensured in the event of an arc fault. This disconnection is even faster than that of a non-delayed short-circuit release.

This function can be activated directly on the circuit-breaker or via an external switch, such as when maintenance personnel enter a hazardous area. Other components of the ARCON arc fault protection system, in conjunction with the IZMX16, enable an expansion of arc fault protection in stages.
ARCON on the Internet:
www.moeller.net/arcon

Selection criteria for IZMX16 circuit-breakers

Fundamental criteria for the selection of circuit-breakers:

- Max short-circuit current $I_{k\,max}$ at the circuit-breaker' point of installation: this value determines the short-circuit breaking capacity or the short-circuit current carrying capacity of the circuit-breaker. It is compared with the I_{cu}, I_{cs} and I_{cw} values of the switch and essentially determines its size (see Technical data).
- Rated operational current I_n which should flow through the respective branch circuit:
  This value must not be greater than the maximum switch rated operational current of the circuit-breaker. The rated operational current can be adjusted down using additional rated operational current modules.
- Ambient temperature of the circuit-breaker: This is generally the internal temperature in the control panel. Observe the derating values with increased ambient temperature (see Technical data).
- Circuit-breaker type: fixed mounted or withdrawable units, 3 or 4 pole.
- Minimum short-circuit current, which flows through the switching device: The release must recognize this value as a short-circuit and may react with a trip.
- Protection functions of the circuit-breaker: This is determined by the selection of the respective overcurrent release.

Documentation

Operating manual
AWB1230-1628de (deutsch)
AWB1230-1628en (english)

CurveSelect characteristics program

Display characteristic curves according to specific settings and assess their interaction effectively:
www.moeller.net/de/support

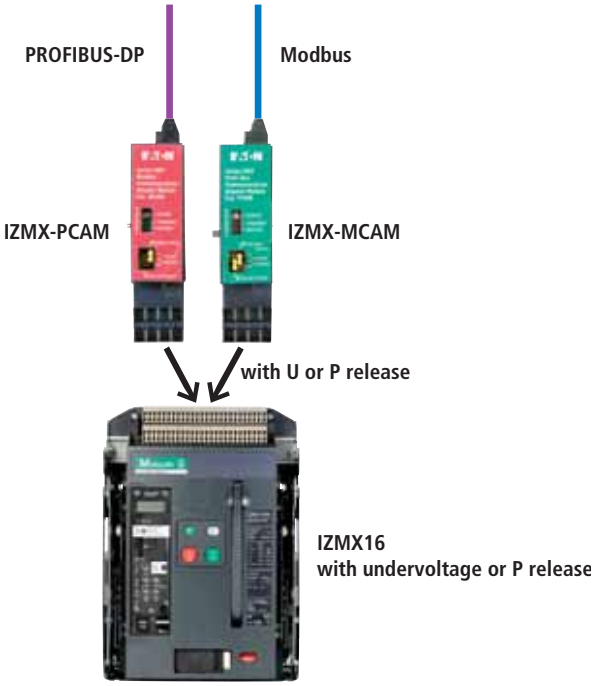
Components for IZMX16 communication

For the IZMX16, PROFIBUS-DP or Modbus RTU are optionally available as fieldbus connections. Communication modules IZMX-PCAM and IZMX-MCAM are compact units for direct mounting in the auxiliary terminal strip. On retrofitting, four modular terminals are replaced with one communication module. This is possible for both for fixed and withdrawable units. The terminals provide all data available in the trip block to the fieldbus, including switching state, current, voltage, power, energy, and diagnostic information such as overcurrent, phase asymmetry and overvoltage. Through the bus the motor operator can also be remotely controlled.

Requirements

The communications modules can be used in combination with IZMX16 circuit-breakers …-U or IZMX16…-P… (in preparation) circuit-breakers.

Configuration



PROFIBUS-DP configuration

Communications module IZMX-PCAM has a 9-pin D-Sub socket for connection to PROFIBUS. The module works as a slave on PROFIBUS-DP; the data is defined through a standardized device master data file, which permits smooth integration of IZMX in a DP line.

- On the PROFIBUS-DP side the module supports automatic baud rate detection; the PROFIBUS-DP bus address is set through the trip unit's display. The maximum cable length is 2.4 km.
- To operate the IZMX-PCAM, a supply voltage of 24 V DC is required.
- The data connection to the circuit-breaker is implemented internally through a serial high--speed data connection.

Data access via PROFIBUS-DP

The data on PROFIBUS-DP are offered according to the profile for low-voltage switchgear (LVSG) of PROFIBUS International (PROFIBUS and PROFINET User Group). Five different data structures with varying numbers of parameters are available through the device master data file. This allows a data filter to be easily implemented, which simplifies integration of the IZM data into the control system.

Modbus configuration

Communications module IZMX-MCAM has a plug-in screw terminal for connection to Modbus. The module operates as a Modbus slave.

- Baud rate, data format and address (max. 247) for Modbus are set with the input keys of the trip unit. The maximum cable length is 1.2 km.
- The Modbus must be terminated with a 120 Ω terminating resistor.
- To operate the IZMX-PCAM, a supply voltage of 24 V DC is required.
- The data connection to the circuit-breaker is implemented internally through a serial high-speed data connection.

Data access via Modbus

The data is contained in comprehensive data tables. Each data point is available as floating-point (IEEE) or fixed-point value. This variance allows the integration of the IZMX to be adapted to the Modbus architecture. This enables a simple means of implementing a data filter, which facilitates the integration of IZMX data in the control system.

Documentation

Operator manual
For device series IZM26:
AWB1230-1621de (deutsch)
AWB1230-1621en (english)
AWB1230-1622de (deutsch)
AWB1230-1622en (english)

For device series IZMX16:
AWB1230-1623de (deutsch)
AWB1230-1623en (english)
AWB1230-1624de (deutsch)
AWB1230-1624en (english)

Ordering

Switching capacity	Rated operational current	**Setting range** Overload releases	Short-circuit releases: Delayed	Short-circuit releases: Non-delayed	Fixed **Part no.** Article no.	**Price** See price list	Withdrawable **Part no.** Article no. Cassette must be ordered separately.	**Price** See price list	Std. pack
I_{cu}/I_{cs} kA/kA	$I_n = I_u$ A	I_r A	$I_{sd} = I_r$ x …	$I_i = I_n$ x …					
3 pole									
Circuit-breakers for selective protection (Digitrip 520 M)									
Main terminals must be separately ordered.									
42/42	630	315 - 630	–	2 - 10, OFF	**IZMX16B3-A06F** 123341		**IZMX16B3-A06W** 122818		1 off
	800	400 - 800			**IZMX16B3-A08F** 123342		**IZMX16B3-A08W** 122819		
	1000	500 - 1000			**IZMX16B3-A10F** 123343		**IZMX16B3-A10W** 122820		
	1250	625 - 1250			**IZMX16B3-A12F** 123344		**IZMX16B3-A12W** 122849		
	1600	800 - 1600			**IZMX16B3-A16F** 123345		**IZMX16B3-A16W** 122850		
50/50	630	315 - 630			**IZMX16N3-A06F** 123366		**IZMX16N3-A06W** 123085		
	800	400 - 800			**IZMX16N3-A08F** 123367		**IZMX16N3-A08W** 123087		
	1000	500 - 1000			**IZMX16N3-A10F** 123368		**IZMX16N3-A10W** 123090		
	1250	625 - 1250			**IZMX16N3-A12F** 123369		**IZMX16N3-A12W** 123092		
	1600	800 - 1600			**IZMX16N3-A16F** 123370		**IZMX16N3-A16W** 123094		
65/50	630	315 - 630			**IZMX16H3-A06F** 123391		**IZMX16H3-A06W** 123141		
	800	400 - 800			**IZMX16H3-A08F** 123392		**IZMX16H3-A08W** 123142		
	1000	500 - 1000			**IZMX16H3-A10F** 123393		**IZMX16H3-A10W** 123143		
	1250	625 - 1250			**IZMX16H3-A12F** 123394		**IZMX16H3-A12W** 123144		
	1600	800 - 1600			**IZMX16H3-A16F** 123395		**IZMX16H3-A16W** 123145		
4 pole									
Circuit-breakers for universal protection (Digitrip 520 M)									
Main terminals must be separately ordered.									
42/42	630	315 - 630	–	2 - 10, OFF	**IZMX16B4-A06F** 123466		**IZMX16B4-A06W** 123201		1 off
	800	400 - 800			**IZMX16B4-A08F** 123467		**IZMX16B4-A08W** 123207		
	1000	500 - 1000			**IZMX16B4-A10F** 123468		**IZMX16B4-A10W** 123213		
	1250	625 - 1250			**IZMX16B4-A12F** 123469		**IZMX16B4-A12W** 123219		
	1600	800 - 1600			**IZMX16B4-A16F** 123470		**IZMX16B4-A16W** 123220		
50/50	630	315 - 630			**IZMX16N4-A06F** 123491		**IZMX16N4-A06W** 123241		
	800	400 - 800			**IZMX16N4-A08F** 123492		**IZMX16N4-A08W** 123242		
	1000	500 - 1000			**IZMX16N4-A10F** 123493		**IZMX16N4-A10W** 123243		
	1250	625 - 1250			**IZMX16N4-A12F** 123494		**IZMX16N4-A12W** 123244		
	1600	800 - 1600			**IZMX16N4-A16F** 123495		**IZMX16N4-A16W** 123245		
65/50	630	315 - 630			**IZMX16H4-A06F** 123516		**IZMX16H4-A06W** 123266		
	800	400 - 800			**IZMX16H4-A08F** 123517		**IZMX16H4-A08W** 123267		
	1000	500 - 1000			**IZMX16H4-A10F** 123518		**IZMX16H4-A10W** 123268		
	1250	625 - 1250			**IZMX16H4-A12F** 123519		**IZMX16H4-A12W** 123269		
	1600	800 - 1600			**IZMX16H4-A16F** 123525		**IZMX16H4-A16W** 123270		

Switching capacity	Rated operational current	**Setting range** Overload releases	Short-circuit releases		Fixed **Part no.** Article no.	**Price** See price list	Withdrawable **Part no.** Article no. Cassette must be ordered separately.	**Price** See price list	Std. pack
			Delayed	Non-delayed					
I_{cu}/I_{cs} kA/kA	$I_n = I_u$ A	I_r A	$I_{sd} = I_r$ x …	$I_i = I_n$ x …					
3 pole ircuit-breaker for selective protection Main terminals must be separately ordered.									
42/42	630	315 – 630	2 - 10	2 - 12, OFF	**IZMX16B3-V06F** 123346		**IZMX16B3-V06W** 122851		1 off
	800	400 – 800			**IZMX16B3-V08F** 123347		**IZMX16B3-V08W** 122918		
	1000	500 – 1000			**IZMX16B3-V10F** 123348		**IZMX16B3-V10W** 122920		
	1250	625 – 1250			**IZMX16B3-V12F** 123349		**IZMX16B3-V12W** 122922		
	1600	800 – 1600			**IZMX16B3-V16F** 123350		**IZMX16B3-V16W** 122924		
50/50	630	315 – 630			**IZMX16N3-V06F** 123371		**IZMX16N3-V06W** 123097		
	800	400 – 800			**IZMX16N3-V08F** 123372		**IZMX16N3-V08W** 123099		
	1000	500 – 1000			**IZMX16N3-V10F** 123373		**IZMX16N3-V10W** 123101		
	1250	625 – 1250			**IZMX16N3-V12F** 123374		**IZMX16N3-V12W** 123103		
	1600	800 – 1600			**IZMX16N3-V16F** 123375		**IZMX16N3-V16W** 123106		
65/50	630	315 – 630			**IZMX16H3-V06F** 123396		**IZMX16H3-V06W** 123146		
	800	400 – 800			**IZMX16H3-V08F** 123397		**IZMX16H3-V08W** 123147		
	1000	500 – 1000			**IZMX16H3-V10F** 123398		**IZMX16H3-V10W** 123148		
	1250	625 – 1250			**IZMX16H3-V12F** 123399		**IZMX16H3-V12W** 123149		
	1600	800 – 1600			**IZMX16H3-V16F** 123405		**IZMX16H3-V16W** 123150		
4 pole circuit-breakers for universal protection (Digitrip 520 M) Main terminals must be separately ordered.									
42/42	630	315 – 630	2 - 10	2 - 12, OFF	**IZMX16B4-V06F** 123471		**IZMX16B4-V06W** 123221		1 off
	800	400 – 800			**IZMX16B4-V08F** 123472		**IZMX16B4-V08W** 123222		
	1000	500 – 1000			**IZMX16B4-V10F** 123473		**IZMX16B4-V10W** 123223		
	1250	625 – 1250			**IZMX16B4-V12F** 123474		**IZMX16B4-V12W** 123224		
	1600	800 – 1600			**IZMX16B4-V16F** 123475		**IZMX16B4-V16W** 123225		
50/50	630	315 – 630			**IZMX16N4-V06F** 123496		**IZMX16N4-V06W** 123246		
	800	400 – 800			**IZMX16N4-V08F** 123497		**IZMX16N4-V08W** 123247		
	1000	500 – 1000			**IZMX16N4-V10F** 123498		**IZMX16N4-V10W** 123248		
	1250	625 – 1250			**IZMX16N4-V12F** 123499		**IZMX16N4-V12W** 123249		
	1600	800 – 1600			**IZMX16N4-V16F** 123500		**IZMX16N4-V16W** 123250		
65/50	630	315 – 630			**IZMX16H4-V06F** 123531		**IZMX16H4-V06W** 123271		
	800	400 – 800			**IZMX16H4-V08F** 123537		**IZMX16H4-V08W** 123272		
	1000	500 – 1000			**IZMX16H4-V10F** 123543		**IZMX16H4-V10W** 123273		
	1250	625 – 1250			**IZMX16H4-V12F** 123549		**IZMX16H4-V12W** 123274		
	1600	800 – 1600			**IZMX16H4-V16F** 123555		**IZMX16H4-V16W** 123275		

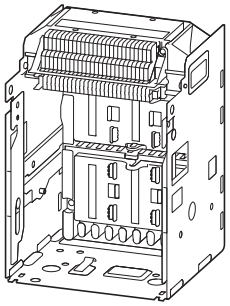
Switching capacity	Rated operational current	**Setting range** Overload releases	Short-circuit releases		Fixed **Part no.** Article no.	**Price** See price list	Withdrawable **Part no.** Article no. Cassette must be ordered separately.	**Price** See price list	Std. pack
			Delayed	Non-delayed					
I_{cu}/I_{cs} kA/kA	$I_n = I_u$ A	I_r A	$I_{sd} = I_r$ x …	$I_i = I_n$ x …					
3 pole circuit-breakers for universal protection (Digitrip M) Main terminals must be separately ordered.									
42/42	630	315 – 630	2 - 10	2 - 12, OFF	**IZMX16B3-U06F** 123351		**IZMX16B3-U06W** 122940		1 off
	800	400 – 800			**IZMX16B3-U08F** 123352		**IZMX16B3-U08W** 122941		
	1000	500 – 1000			**IZMX16B3-U10F** 123353		**IZMX16B3-U10W** 122979		
	1250	625 – 1250			**IZMX16B3-U12F** 123354		**IZMX16B3-U12W** 122984		
	1600	800 – 1600			**IZMX16B3-U16F** 123355		**IZMX16B3-U16W** 123020		
50/50	630	315 – 630			**IZMX16N3-U06F** 123376		**IZMX16N3-U06W** 123109		
	800	400 – 800			**IZMX16N3-U08F** 123377		**IZMX16N3-U08W** 123111		
	1000	500 – 1000			**IZMX16N3-U10F** 123378		**IZMX16N3-U10W** 123114		
	1250	625 – 1250			**IZMX16N3-U12F** 123379		**IZMX16N3-U12W** 123129		
	1600	800 – 1600			**IZMX16N3-U16F** 123380		**IZMX16N3-U16W** 123130		
65/50	630	315 – 630			**IZMX16H3-U06F** 123411		**IZMX16H3-U06W** 123151		
	800	400 – 800			**IZMX16H3-U08F** 123417		**IZMX16H3-U08W** 123152		
	1000	500 – 1000			**IZMX16H3-U10F** 123423		**IZMX16H3-U10W** 123153		
	1250	625 – 1250			**IZMX16H3-U12F** 123429		**IZMX16H3-U12W** 123154		
	1600	800 – 1600			**IZMX16H3-U16F** 123435		**IZMX16H3-U16W** 123155		
4 pole circuit-breakers for selective protection (Digitrip 520 M LSI) Main terminals must be separately ordered.									
42/42	630	315 – 630	2 - 10	2 - 12, OFF	**IZMX16B4-U06F** 123476		**IZMX16B4-U06W** 123226		1 off
	800	400 – 800			**IZMX16B4-U08F** 123477		**IZMX16B4-U08W** 123227		
	1000	500 – 1000			**IZMX16B4-U10F** 123478		**IZMX16B4-U10W** 123228		
	1250	625 – 1250			**IZMX16B4-U12F** 123479		**IZMX16B4-U12W** 123229		
	1600	800 – 1600			**IZMX16B4-U16F** 123480		**IZMX16B4-U16W** 123230		
50/50	630	315 – 630			**IZMX16N4-U06F** 123501		**IZMX16N4-U06W** 123251		
	800	400 – 800			**IZMX16N4-U08F** 123502		**IZMX16N4-U08W** 123252		
	1000	500 – 1000			**IZMX16N4-U10F** 123503		**IZMX16N4-U10W** 123253		
	1250	625 – 1250			**IZMX16N4-U12F** 123504		**IZMX16N4-U12W** 123254		
	1600	800 – 1600			**IZMX16N4-U16F** 123505		**IZMX16N4-U16W** 123255		
65/50	630	315 – 630			**IZMX16H4-U06F** 123561		**IZMX16H4-U06W** 123276		
	800	400 – 800			**IZMX16H4-U08F** 123567		**IZMX16H4-U08W** 123277		
	1000	500 – 1000			**IZMX16H4-U10F** 123573		**IZMX16H4-U10W** 123278		
	1250	625 – 1250			**IZMX16H4-U12F** 123579		**IZMX16H4-U12W** 123279		
	1600	800 – 1600			**IZMX16H4-U16F** 123580		**IZMX16H4-U16W** 123285		

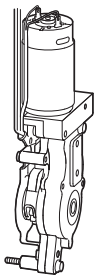
Compact open switch-disconnectors, 3- and 4 pole

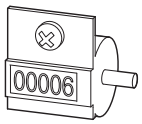
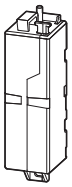
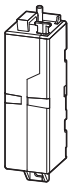
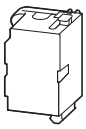
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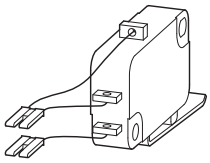
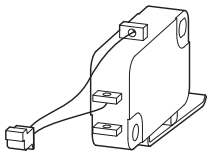
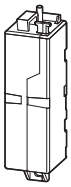
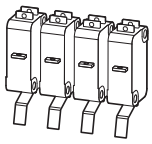
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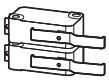
Rated short-circuit making capacity I_{cm} kA	Rated operational current $I_n = I_u$ A	Rated short-time withstand current t = 1 s I_{cw} kA	Fixed **Part no.** Article no.	**Price** See price list	Withdrawable **Part no.** Article no. Cassette must be separately ordered.	**Price** See price list	Std. pack
3 pole switch-disconnectors: Main terminals must be separately ordered.							
88	630	42	**INX16B3-06F** 123361		**INX16B3-06W** 123073		1 off
	800		**INX16B3-08F** 123362		**INX16B3-08W** 123076		
	1000		**INX16B3-10F** 123363		**INX16B3-10W** 123078		
	1250		**INX16B3-12F** 123364		**INX16B3-12W** 123080		
	1600		**INX16B3-16F** 123365		**INX16B3-16W** 123083		
4 pole switch-disconnectors: Main terminals must be separately ordered.							
88	630	42	**INX16B4-06F** 123486		**INX16B4-06W** 123236		1 off
	800		**INX16B4-08F** 123487		**INX16B4-08W** 123237		
	1000		**INX16B4-10F** 123488		**INX16B4-10W** 123238		
	1250		**INX16B4-12F** 123489		**INX16B4-12W** 123239		
	1600		**INX16B4-16F** 123490		**INX16B4-16W** 123240		

	Rated operational current I_n A	Rated ultimate short-circuit breaking capacity I_{cu} kA	Pole	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Withdrawable units								
Cassettes Equipment supplied: arcing chamber cover, coding to basic device								
	≦ 1600	≦ 65	3	IZMX16…3-...W INX16…3-...W	**IZMX-CAS163-1600** 101537		1 off	Without control circuit terminals
					+IZMX-CAS163-1600 101536			With control circuit terminals according to ordered options
					IZMX-CAS163-1600-SEC 123986			Fully equipped with control circuit terminals
	≦ 1600	≦ 65	4	IZMX16…4-...W INX16…4-...W	**IZMX-CAS164-1600** 101539			Without control circuit terminals
					+IZMX-CAS164-1600 101538			With control circuit terminals according to ordered options
					IZMX-CAS164-1600-SEC 124175			Fully equipped with control circuit terminals
Shutter protection against direct contact When the switch is withdrawn from its connected position, the shutters automatically cover the cassette's live main terminals.								
	800 - 1600	–	3	(+)IZMX-CAS163…	**IZMX-SH163** 101542		1 off	–
					+IZMX-SH163 101541			
			4	(+)IZMX-CAS164…	**IZMX-SH164** 101544			
					+IZMX-SH164 101543			

	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Motor operator						
The motor automatically tensions the spring-operated stored energy mechanism for remote or local actuation. A signaling switch for the "Spring-operated stored energy mechanism tensioned" message is included as standard.						
	24 DC	IZMX16… INX16…	**IZMX-M16-24DC** 123594		1 off	For retrofitting, two additional control circuit terminal blocks are required. → Page 18/19
	24 DC	IZMX16… INX16…	**+IZMX-M16-24DC** 123593			
	48 DC	IZMX16… INX16…	**IZMX-M16-48DC** 123596			
	48 DC	IZMX16… INX16…	**+IZMX-M16-48DC** 123595			
	110 - 125 DC	IZMX16… INX16…	**IZMX-M16-110DC** 123598			
	110 - 125 DC	IZMX16… INX16…	**+IZMX-M16-110DC** 123597			
	220 - 250 DC	IZMX16… INX16…	**IZMX-M16-220DC** 123600			
	220 - 250 DC	IZMX16… INX16…	**+IZMX-M16-220DC** 123599			
	110 - 127 AC	IZMX16… INX16…	**IZMX-M16-110AC** 123602			
	110 - 127 AC	IZMX16… INX16…	**+IZMX-M16-110AC** 123601			
	220 - 240 AC	IZMX16… INX16…	**IZMX-M16-230AC** 123604			
	220 - 240 AC	IZMX16… INX16…	**+IZMX-M16-230AC** 123603			

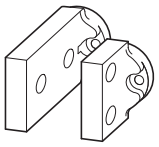
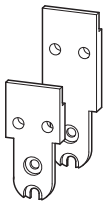
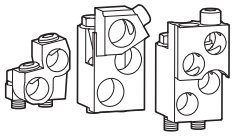
	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Switching operations counter Counts the number of On-Off operations. Can also be installed without motor operator.						
	–	IZMX16… INX16…	**IZMX-OC16** 123606		1 off	–
	–	IZMX16… INX16…	**+IZMX-OC16** 123605		1 off	–
Voltage releases A closing release can be combined with a voltage release and an undervoltage release or with two voltage releases.						
Shunt releases						
	24 DC	IZMX16… INX16…	**IZMX-ST24DC** 123608		1 off	An additional control circuit terminal block is required for retrofitting. → Page 18/19
			+IZMX-ST24DC 123607			
	48 DC		**IZMX-ST48DC** 123656			
			+IZMX-ST48DC 123616			
	110 - 125 DC 110 - 127 AC		**IZMX-ST110AD** 123728			
			+IZMX-ST110AD 123696			
	220 - 250 DC 208 - 240 AC		**IZMX-ST230AD** 123730			
			+IZMX-ST230AD 123729			
2nd shunt release Cannot be combined with an undervoltage release.						
	24 DC	IZMX16… INX16…	**+IZMX-STS24DC** 123731		1 off	An additional control circuit terminal block is required for retrofitting. → Page 18/19
	48 DC		**+IZMX-STS48DC** 123732			
	110 - 125 DC 110 - 127 AC		**+IZMX-STS110AD** 123733			
	220 - 250 DC 208 - 240 AC		**+IZMX-STS230AD** 123734			
Closing releases without latch check switch						
	24 DC	IZMX16… INX16…	**IZMX-SR24DC** 123736		1 off	An additional control circuit terminal block is required for retrofitting. → Page 18/19
			+IZMX-SR24DC 123735			
	48 DC		**IZMX-SR48DC** 123738			
			+IZMX-SR48DC 123737			
	110 - 125 DC 110 - 127 AC		**IZMX-SR110AD** 123740			
			+IZMX-SR110AD 123739			
	220 - 250 DC 208 - 240 AC		**IZMX-SR230AD** 123742			
			+IZMX-SR230AD 123741			

	Rated control voltage U_s V	For use with	**Part no.** Article no. / **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Voltage releases						
Latch check switch, 1 changeover contact						
	–	IZMX16… INX16…	**IZMX-LCS16** 123885		1 off	For external application
	–		**+IZMX-LCS16** 123884			
	–		**IZMX-LCS16-SR** 123887			For use with closing release IZMX16-SR...
	–		**+IZMX-LCS16-SR** 123886			
Under voltage release Cannot be combined with a second voltage release.						
	24 DC	IZMX16… INX16…	**IZMX-UVR24DC** 123744		1 off	An additional control circuit terminal block is required for retrofitting. → Page 18/19
			+IZMX-UVR24DC 123743			
	48 DC		**IZMX-UVR48DC** 123748			
			+IZMX-UVR48DC 123747			
	110 - 125 DC 110 - 127 AC		**IZMX-UVR110AD** 123801			
			+IZMX-UVR110AD 123761			
	220 - 250 DC 208 - 240 AC		**IZMX-UVR220AD** 123873			
			+IZMX-UVR220AD 123841			
Auxiliary contacts						
Standard auxiliary switch for On-Off signaling The basic device already contains two changeover contacts. Two additional changeover contacts possible.						
	–	IZMX16… INX16…	**IZMX-AS22** 123881		1 off	Three additional control circuit terminal blocks are required for retrofitting. → Page 18/19
			+IZMX-AS22 123880			

	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article No. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Trip indication and reset options					
Trip-indicating auxiliary switch Overcurrent trip switch (OTS) with two changeover contacts.					
	IZMX16…	**IZMX-OTS** 123889		1 off	Three additional control circuit terminal blocks are required for retrofitting.
		+IZMX-OTS 123888			
Automatic reset The switch can be switched on again immediately after a trip. The switch does not contain the mechanical trip-indicator (red pin). Cannot be combined with remote reset.					
	IZMX16…	**IZMX-RA** 123898		1 off	–
		+IZMX-RA 123897			–
Locking facilities					
Locking of ON/OFF buttons Padlockable front cover for On-Off pushbutton.					
	IZMX16… INX16…	**IZMX-PLPC16** 123946		1 off	–
		+IZMX-PLPC16 123906			–
Key locking in safe Off The "Safe Off" locking feature prevents switching on. Neither remote nor local switching on is possible.					
	IZMX16… INX16…	**IZMX-KLP-SO16-CASTELL** 124184		1 off	Castell installation kit without lock cylinder.
		IZMX-KLP-SO16-RONIS 124186			Ronis installation kit without lock cylinder.
		IZMX-KLP-SO16-KIRK 126481			Kirk installation kit without lock cylinder.
		IZMX-KLP-SO16-CES 126479			CES installation kit without lock cylinder.

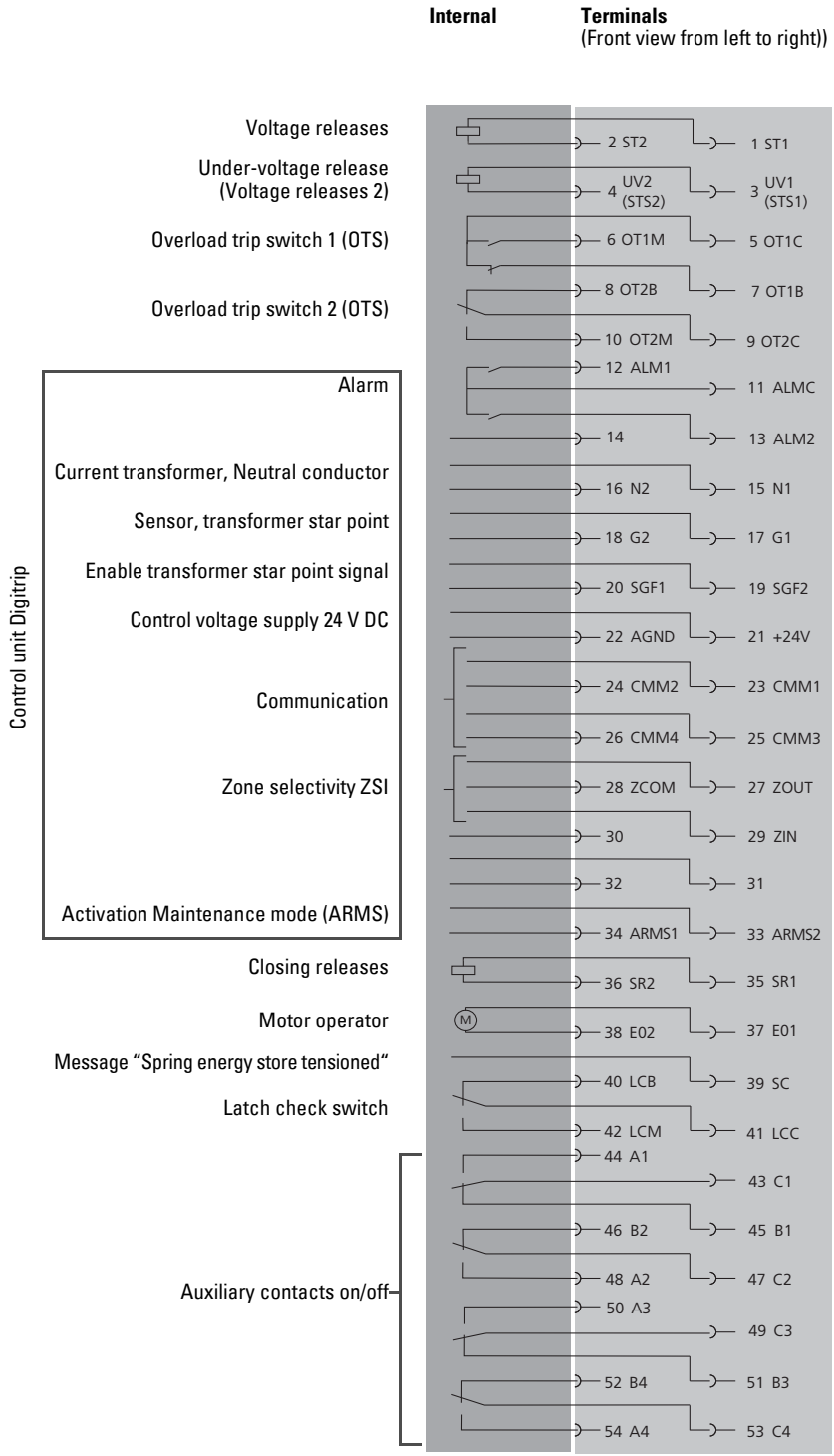
	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Options and accessories for trip units						
Trip unit for system protection Type A (Digitrip 520)	–		**IZMX-DTA** 124012		1 off	–
Control unit for selective protection	–		**IZMX-DTV** 124013		1 off	–
Add-on functions for Type Vcircuit-breakers (equipped with Digitrip 520LSI)						
Ground fault protection	–	IZMX16…-V… (Digitrip 520LSI)	**+IZMX-DTV-EP** 124016		1 off	–
Zone selectivity Zone selectivity shortens the stagger times in the range of the delayed short-circuit protection.	–	IZMX16…-V… (Digitrip 520LSI)	**+IZMX-DTV-ZSI** 124017		1 off	–
Control unit for universal protection Standard for all circuit-breakers Type U: • Display • Communication-capability • Overload alarm signal Instead of the overload alarm (HLA) either the function ground-fault protection (EP) or ground-fault alarm (EA) can be selected. For fieldbus communications a communications module must be selected in addition.	–		**IZMX-DTU** 124014		1 off	–
Add-on functions for circuit-breakers Type U (equipped with Digitrip 520M)						
Ground fault protection With ground-fault protection instead of overload alarm.	24 DC	IZMX16…-U… (Digitrip 520M)	**+IZMX-DTU-EP** 124018		1 off	24 V DC control voltage required
Ground alarm With ground-fault alarm instead of overload alarm.	24 DC	IZMX16…-U… (Digitrip 520M)	**+IZMX-DTU-EA** 124019		1 off	
ARMS Function The ARMS (Arcflash Reduction Maintenance System™) function enhances personnel safety by reducing the tripping time through a short-circuit protection bypass in the event of an arcing fault.	24 DC	IZMX16…-U… (Digitrip 520M)	**+IZMX-DTU-ARMS** 124020		1 off	
Zone selectivity Zone selectivity decreases the time delays in time selective coordination.	24 DC	IZMX16…-U… (Digitrip 520M)	**+IZMX-DTU-ZSI** 124021		1 off	
Communication modules						
Communication module Modbus	–	IZMX16…	**IZMX-MCAM** 122892		1 off	When retrofitting, four additional control circuit terminal blocks are required. → Page 18/19
Communication module PROFIBUS	–	IZMX16…	**IZMX-PCAM** 122913		1 off	
Test device Hand-held tester for Digitrip Hand-held tester (100 - 240 V AC)	–	IZMX16... IZM26...	**IZM-TEST-KIT** 124161		1 off	–

	Rated operational current I_n A	For use with	Part no. Article no. / Part no. suffix "+IZM..." Article no. for ordering with basic device	Price See price list	Std. pack	Notes
Options and accessories for electronic releases						
Rating plugs (Rate current modules), 3 pole, 4 pole The rated current can be reduced by changing the rating plug, for example, in order to adapt to changed conditions in the application. The rating plug's nominal value must be less than or equal to the basic device's rated current. The rating plug can be replaced on site without replacing the transformer.						
	200	$I_u \leqq 800$ A	**IZMX-RP16A-200** 124027		1 off	–
	200	$I_u \leqq 800$ A	**+IZMX-RP16-200** 124026			
	250	$I_u \leqq 800$ A	**IZMX-RP16A-250** 124029			
	250	$I_u \leqq 800$ A	**+IZMX-RP16-250** 124028			
	300	$I_u \leqq 800$ A	**IZMX-RP16A-300** 124031			
	300	$I_u \leqq 800$ A	**+IZMX-RP16-300** 124030			
	400	$I_u \leqq 800$ A	**IZMX-RP16A-400** 124033			
	400	1000 A $\leqq I_u \leqq$ 1250 A	**IZMX-RP16B-400** 124034			
	400	$I_u \leqq 1250$ A	**+IZMX-RP16-400** 124032			
	500	$I_u \leqq 800$ A	**IZMX-RP16A-500** 124036			
	500	1000 A $\leqq I_u \leqq$ 1250 A	**IZMX-RP16B-500** 124037			
	500	$I_u \leqq 1250$ A	**+IZMX-RP16-500** 124035			
	630	$I_u \leqq 800$ A	**IZMX-RP16A-630** 124039			
	630	1000 A $\leqq I_u \leqq$ 1250 A	**IZMX-RP16B-630** 124040			
	630	800 A $\leqq I_u \leqq$ 1250 A	**+IZMX-RP16-630** 124038			
	800	$I_u \leqq 800$ A	**IZMX-RP16A-800** 124042			
	800	1000 A $\leqq I_u \leqq$ 1250 A	**IZMX-RP16B-800** 124043			
	800	$I_u = 1600$ A	**IZMX-RP16C-800** 124051			
	800	1000 A $\leqq I_u \leqq$ 1600 A	**+IZMX-RP16-800** 124041			
	1000	1000 A $\leqq I_u \leqq$ 1250 A	**IZMX-RP16B-1000** 124131			
	1000	$I_u = 1600$ A	**IZMX-RP16C-1000** 124156			
	1000	1250 A $\leqq I_u \leqq$ 1600 A	**+IZMX-RP16-1000** 124091			
	1250	$I_u \leqq 1250$ A	**IZMX-RP16B-1250** 124158			
	1250	$I_u = 1600$ A	**IZMX-RP16C-1250** 124159			
	1250	$I_u = 1600$ A	**+IZMX-RP16-1250** 124157			
	1600	$I_u = 1600$ A	**IZMX-RP16C-1600** 124160			
Current sensor for neutral conductor						
Measuring current sensor for reading off the N conductor. Allows, for example, ground-fault protection in four-conductor systems with three-pole circuit-breakers.	–	IZMX16…	**IZMX-CT16-N** 124188		1 off	An additional control circuit terminal block is required for retrofitting. → Page 18/19

		Rated operational current I_n A	Pole	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Main terminal kits							
Main terminals are not supplied as standard with the basic devices and cassettes. This universal adapter can be used both as horizontal and as vertical connector. Each set contains the connections for top and bottom. 3 pole = 6 off; 4 pole = 8 off							
	Rear universal connection for fixed/withdrawable mounting	800 - 1600	3	IZMX16…3-W INX16…3-W	**IZMX-THV163** 124181		1 off
			4	IZMX16…4-W INX16…4-W	**IZMX-THV164** 124177		
	Rear universal connection (long) for fixed/withdrawable mounting	800 - 1600	3	IZMX16…3-W INX16…3-W	**IZMX-THVL163** 124233		
			4	IZMX16…4-W INX16…4-W	**IZMX-THVL164** 124234		
	Front universal connection (long) for withdrawable mounting	800 - 1600	3	IZMX16…3-W INX16...3-W	**IZMX-TFL163** 124183		
			4	IZMX16…4-W INX16...4-W	**IZMX-TFL164** 124179		
Tunnel terminals							
For use only in combination with front universal connection IZMX-TFL...							
	For connecting cables with 50-240 mm²	800 - 1600	–	IZMX16…3- INX16…3-	**IZMX-TCA16-2** 124230		1 off
	For connecting cables with 95-185 mm²		–		**IZMX-TCA16-3** 124231		
	For connecting cables with 120-240 mm²		–		**IZMX-TCA16-4** 124232		
General accessories							
Control circuit terminal blocks for fixed mounting							
	Control circuit terminals, 8 blocks	–	–	IZMX16…F INX16…F	**IZMX-SEC16-TB8-F** 124166		1 off
	Control circuit terminals, 20 blocks	–	–	IZMX16…F INX16…F	**IZMX-SEC16-TB20-F** 124167		
	Control circuit terminals, 30 blocks	–	–	IZMX16…F INX16…F	**IZMX-SEC16-TB30-F** 124168		
Control circuit terminal blocks for withdrawable blocks							
	Control circuit terminals, 8 blocks	–	–	IZMX16…W INX16…W	**IZMX-SEC16-TB8-W** 124162		1 off
	Control circuit terminals, 20 blocks	–	–	IZMX16…W INX16…W	**IZMX-SEC16-TB20-W** 124163		
	Control circuit terminals, 30 blocks	–	–	IZMX16…W INX16…W	**IZMX-SEC16-TB30-W** 124165		
Protective cover, IP55							
	The protective cover allows a higher protection type.	–	–	IZMX16… INX16…	**IZMX-DC 16** 124171		1 off
Blank cover for door cutout, IP41							
	Cover for a door cutout (reserved compartment)	–	–	IZMX16… INX16…	**IZMX-BC16** 124172		1 off
Replacement coding, basic device to cassette							
	This is a spare part. The coding is supplied as standard with withdrawable switches.	–	–	IZMX16…W INX16…W	**IZMX-CRB16** 124173		1 off
Replacement hand lever							
	This is a spare part. The hand lever is supplied as standard with withdrawable switches.	–	–	IZMX16…W INX16…W	**IZMX-LT16** 124174		1 off
Spare door seal, IP41							
	This is a spare part. The door sealing frame is supplied as standard with fixed mounting.	–	–	IZMX16…F INX16…F	**IZMX16-DEG-F** 124335		1 off
	This is a spare part. The door sealing frame is supplied as standard with withdrawable units.	–	–	IZMX16…W INX16…W	**IZMX16-DEG-W** 124390		1 off

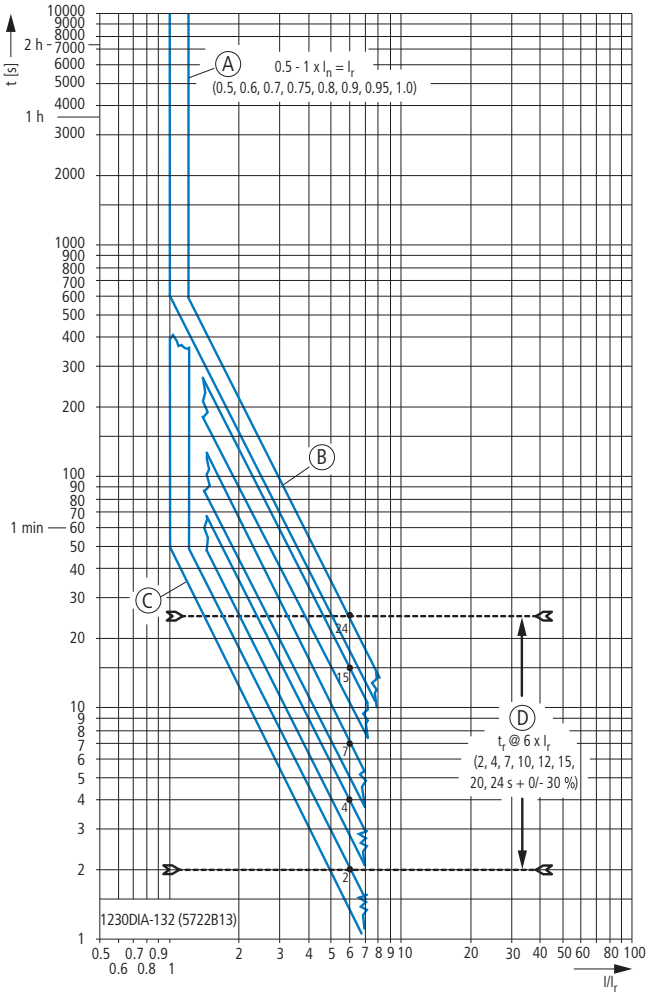
Terminal assignment of control circuit terminals

IZMX16



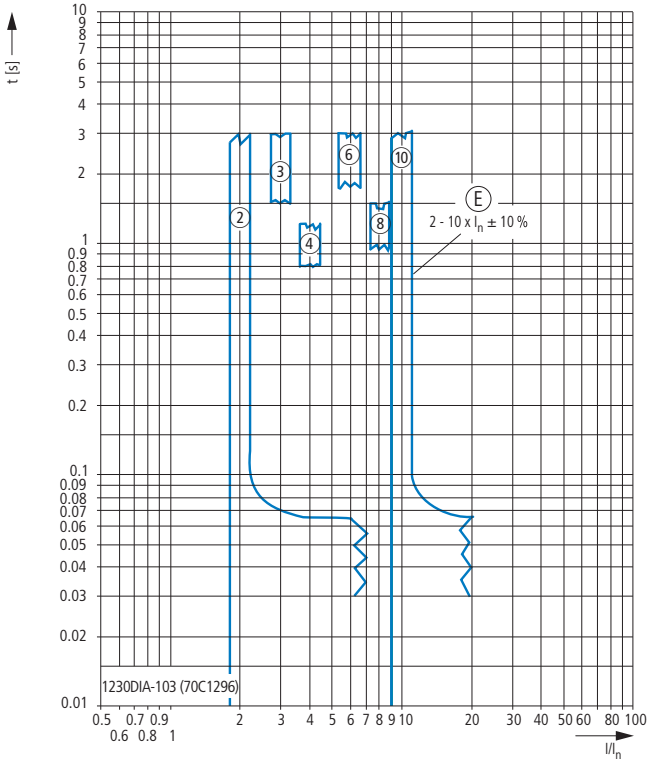
IZMX16…A… Tripping characteristics for selective protection
Overload protection (L) and non-delayed short-circuit protection (I)

L-protection: Adjustable
See Notes 1, 2, 3.



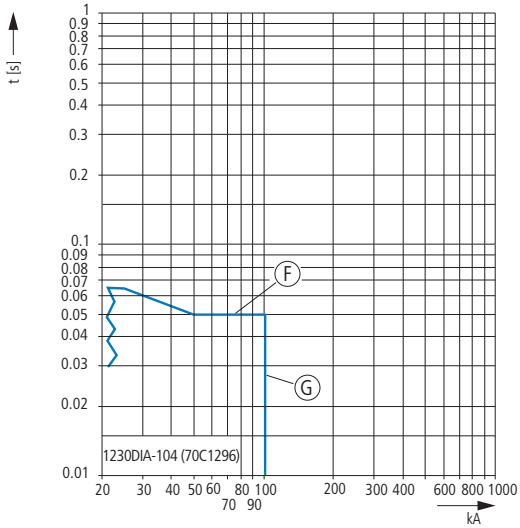
A Set values for overload protection
B Maximum total opening delay
C Minimum total opening delay
D Set values for long delay

I-protection: Adjustable
See Notes 3, 4, 5, 6, 7.



E Set values for non-delayed short-circuit protection

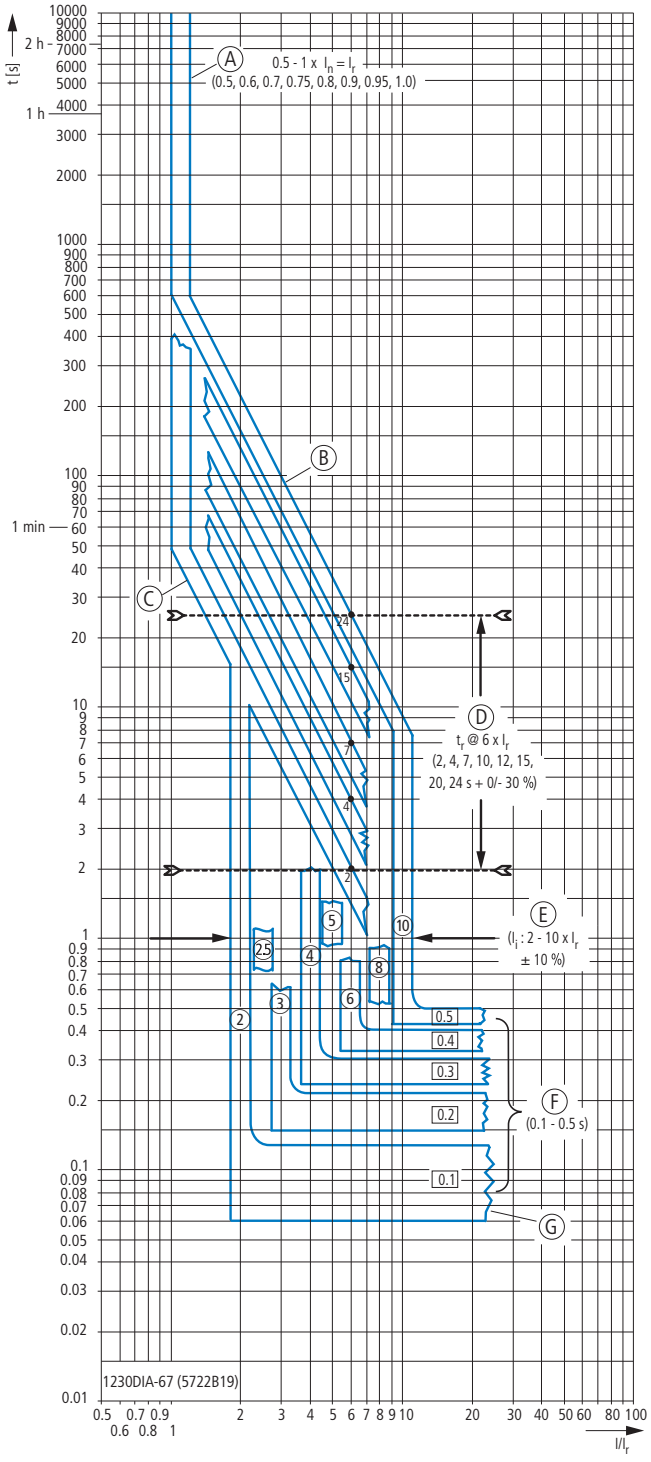
I-protection: For high short-circuit currents
See Notes 3, 4, 5, 6, 7.



F Set values for short-time delayed short-circuit protection with flat characteristic curve
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

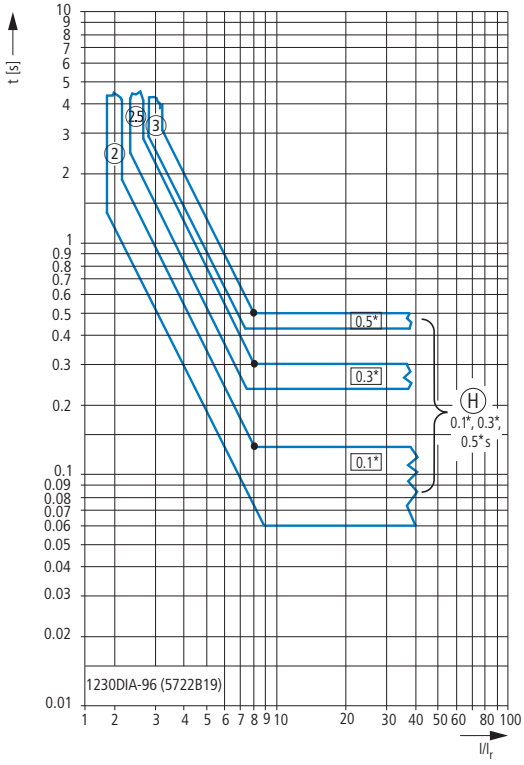
IZMX16…V(U)... Tripping characteristics for selectivity protection and universal protection
Overload protection (L) and short-time delayed short-circuit protection (S)

L-Protection: I²t-Characteristic curve and S-Protection: flat characteristic curve
See Notes 1 to 7.



A Set values for overload protection
B Maximum total opening delay
C Minimum total opening delay
D Set values for long delay
E Set value non-delayed short-circuit protection I_i
F Set values for short-time delayed short-circuit protection with flat characteristic curve
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

S-Protection: I²t-Characteristic curve
See Notes 1 to 7.



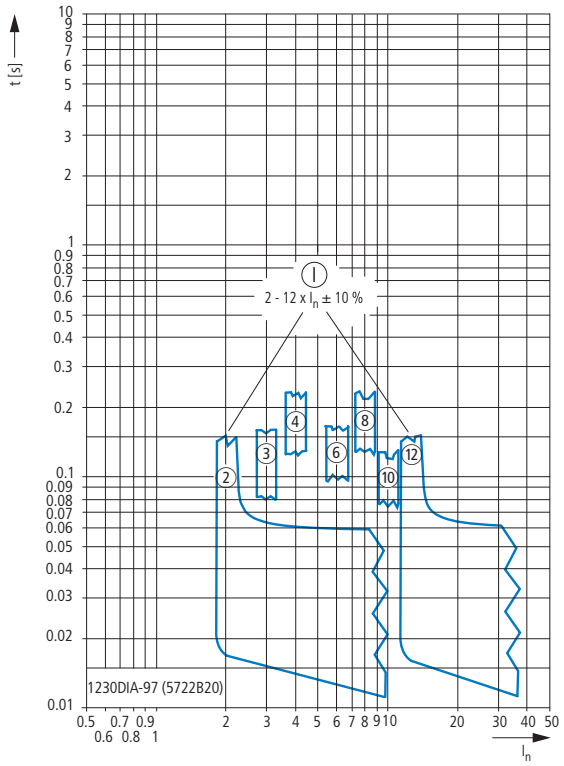
H The characteristic curve for the overload release can extend up to the M1 set value.

IZMX16…V(U)... Tripping characteristics for selectivity protection and universal protection

Non-delayed short-circuit protection (I)

I-protection: Adjustable

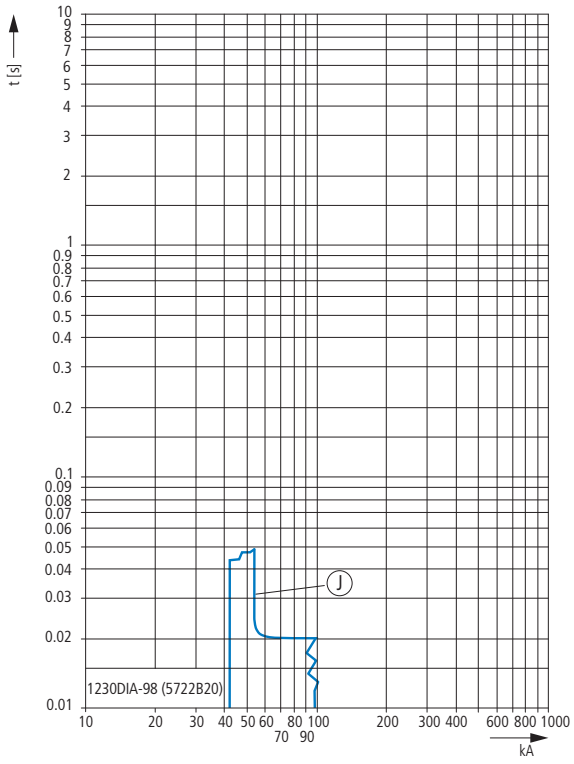
See Notes 2, 6, 8, 9, 10, 11.



I Available set values for non-delayed short-circuit protection I_{sd}

I-protection: For high short-circuit currents

See Notes 2, 6, 8, 9, 10, 11.

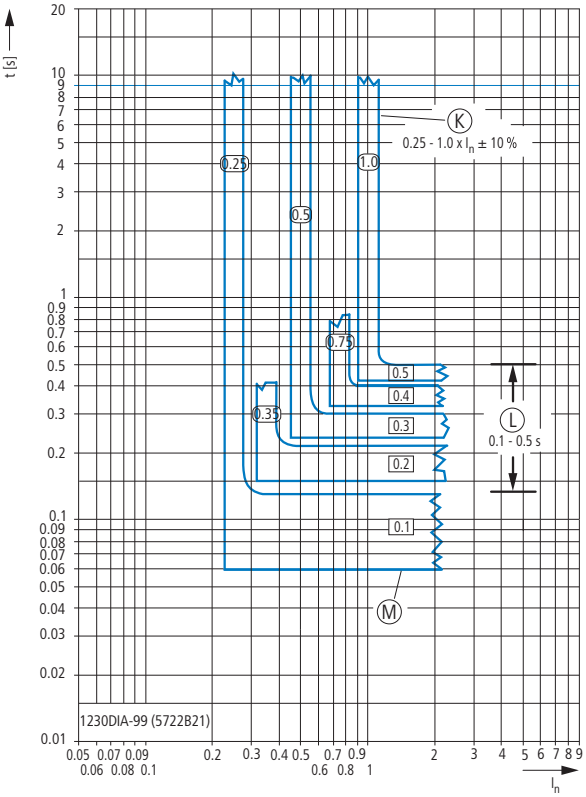


J Short-circuit release for very high currents

IZMX16…V(U)... Option Ground fault protection +IZMX-DTV(U)-EP

G: Ground fault protection, flat characteristic curve

See Notes 2, 6, 12, 13, 14, 15, 16.



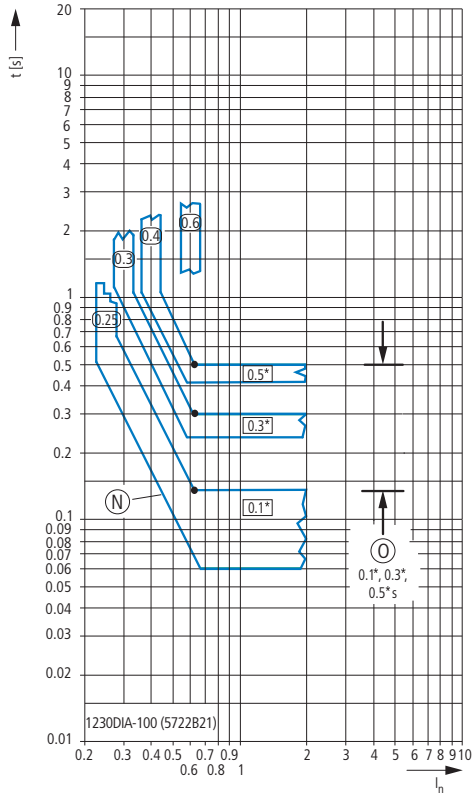
K Set values for short-time delay at I²t characteristic curve

L Set values for ground-fault protection

M Set values for ground-fault protection delay at flat characteristic curve

G: Ground fault protection, I²t-Characteristic curve

See Notes 2, 6, 12, 13, 14, 15, 16.



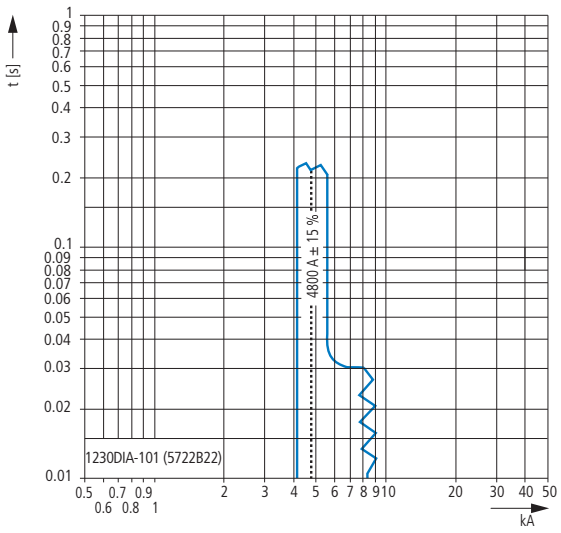
N Flat characteristic curve for the delay time fault protection

O I²t characteristic for ground-fault protection delay time

IZMX16…U... Option Maintenance mode option +IZMX-DTU-ARMS

ARMS-maintenance mode

See Notes 2, 6, 11, 17, 18, 19, 20.



A Set values for overload protection I_r
B Maximum total opening delay
C Minimum total opening delay
D Set value for long delay t_r
E Set value non-delayed short-circuit protection I_i
F Set values for short-time delayed short-circuit protection with flat characteristic curve
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.
H The characteristic curve for the overload release can extend up to the M1 set value.
I Available set values for non-delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
K Set values for short-time delay at I^2t characteristic curve
L Set values for ground-fault protection
M Set values for ground-fault protection delay at flat characteristic curve
N Flat characteristic curve for the delay time fault protection
O I^2t characteristic for ground-fault protection delay time

1 The trip unit has a thermal memory, which can shorten the value in the overload range. This function plays a role whenever a current is higher than the overload release's value and which is then isolated by a downstream circuit-breaker or the circuit-breaker itself. On a subsequent overload current the circuit-breaker will trip more quickly than normal. The reduced value is inversely proportional to the time expired since the last overload. After about five minutes the thermal memory is reset.

2 The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

3 The overload release trips at 110 % I_r with a tolerance of ±10 % (indicated by the "Unit Status" LED). The short-time delayed short-circuit release I_{sd} is activated at a pick-up time of conventionally 100 % with a tolerance of ±10 %.

4 When zone selectivity (ZSI) is activated in the short-time delayed short-circuit release and no blocking signal is applied, the minimum time value (0.10 s) applies irrespective of the short-time delay settings.

5 The upper lines of the I^2t characteristic curves are horizontal from a value of 8 × I_r (indicated by the points).

6 The listed overall switch-off times include the response times of the trip unit, the opening times of the switch and the time required to switch off the current.

7 The characteristic curves apply to applications in a temperature range from -20 °C to +55 °C. Temperatures over +85 °C cause automatic tripping, indicated by an orange-colored LED. The circuit-breaker must be selected according to the temperature-dependent derating values from the table in the technical data.

8 The non-delayed short-circuit release is activated at a response value of conventionally 100 % with a tolerance of ±10 %.

9 The non-delayed short-circuit release can be disabled by the user with an additional Off position.

10 All trip units feature an additional, permanently set non-delayed short-circuit release, which becomes active at a peak value of 90 kA. Tripping by this short-circuit release is indicated by a flashing INST LED. This protective function remains active when non-delayed tripping is set to Off.

11 The listed overall switch-off times are conservative and take into account the trip unit's maximum response times, the circuit-breaker's maximum opening delays and the longest current interruption times with regard to factors that contribute to worst-case conditions, such as maximum rated operational voltage, single-phase interruptions and minimum power factor. Fast breaking times are possible but depend on the system conditions and the circuit-breaker model.

12 The ground-fault release is activated at a response value of conventionally 100 % with a tolerance of ±10 %.

13 Unless otherwise specified, the current value tolerances are ±10 % of the values shown in the diagram.

14 In combination with ARMS function, ground-fault protection is limited to 1200 A.

15 When zone selectivity (ZSI) is activated in ground-fault protection and no blocking signal is applied, the minimum time value (flat characteristic curve) applies irrespective of the settings.

16 The upper lines of the I^2t characteristic curves are horizontal from a value of 0.625 × I_r (indicated by the points).

17 The maintenance mode function (ARMS) must be activated with a switch or through the communications terminals for these characteristic curves to apply. A blue LED indicates that the maintenance mode settings are active.

18 The shown switch-off times apply for connection to an additional auxiliary power supply.

19 Tripping by the ARMS Maintenance Mode Trip is indicated by the non-delayed short-circuit protection LED.

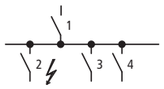
20 The tolerance is ±15 %.

Rating plugs (Plus types)

I_u [A] / I_n [A]	630	800	1000	1250	1600
200	+IZMX-RP16-200				
250	+IZMX-RP16-250				
300	+IZMX-RP16-300				
400	+IZMX-RP16-400				
500	+IZMX-RP16-500				
630	Standard	+IZMX-RP16-630			
800		Standard	+IZMX-RP16-800		
1000			Standard	+IZMX-RP16-1000	
1250				Standard	+IZMX-RP16-1250
1600					Standard

Rating plugs (individual types)

I_u [A] / I_n [A]	630	800	1000	1250	1600
200	IZMX-RP16A-200				
250	IZMX-RP16A-250				
300	IZMX-RP16A-300				
400	IZMX-RP16A-400		IZMX-RP16B-400		
500	IZMX-RP16A-500		IZMX-RP16B-500		
630	IZMX-RP16A-630		IZMX-RP16B-630		
800		IZMX-RP16A-800	IZMX-RP16B-800		IZMX-RP16C-800
1000			IZMX-RP16B-1000		IZMX-RP16C-1000
1250				IZMX-RP16B-1250	IZMX-RP16C-1250
1600					IZMX-RP16C-1600



I_n: Rated operational current
I_u: Rated uninterrupted current
I_{cu} : Rated short-circuit breaking capacity
I_i: Set value non-delayed short-circuit releases

Selectivity 415 V AC
between circuit-breakers enables the separate disconnection of faulty system sections.

Selectivity exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 remain operational.

Selection:
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$).
These details represent the limits of selectivity.
Both circuit-breakers will switch off with higher short-circuit currents.
On IZM circuit-breakers with V, U, D releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

	Incoming circuit-breaker (1)		**IZMX16…-A**															**IZMX16…-V**					
		I_n [A]	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	630	630	630	800	800	800
		I_{cu} [kA]	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65
		I_i [A]	6300	6300	6300	8000	8000	8000	10000	10000	10000	12500	12500	12500	16000	16000	16000	7560	7560	7560	9600	9600	9600
Outgoing circuit-breaker (2)	I_u [A]	$I_{cu2(415V)}$ [kA]	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H
			Prospective short-circuit current ($I_{cc\ rms}$ in kA)																				
NZMB(C)(N)(H)1-A(M)…	20	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	25	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	32	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	40	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	50	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	63	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	80	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	100	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	125	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
	160	25 - 100	6	6	6	9	9	9	15	15	15	T(25)	T(25)	T(25)	T	T	T(50)	T	T	T	T	T	T
NZMB(C)(N)(H)2-A(M)(V)…	20	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	25	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	32	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	40	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	50	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	63	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	80	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	90	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	100	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	125	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	140	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	160	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	200	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	220	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	250	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
	300	25 - 150	8	8	8	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T	T	T	T	T	T	T
NZMC(N)(H)3-A(M)(V)…	220	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	250	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	320	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	350	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	400	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	450	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	500	36 - 150	6	6	6	7	7	7	9	9	9	12	12	12	18	18	18	T	T	T	T	T	T
	630	36 - 150	–	–	–	7	7	7	9	9	9	12	12	12	18	18	18	–	–	–	T	T	T
NZMN(H)4-A(M)(V)…	550	50 - 100	6	6	6	7	7	7	9	9	9	12	12	12	15	15	15	T	T	T	T	T	T
	630	50 - 100	–	–	–	7	7	7	9	9	9	12	12	12	15	15	15	–	–	–	T	T	T
	800	50 - 100	–	–	–	–	–	–	9	9	9	12	12	12	15	15	15	–	–	–	–	–	–
	875	50 - 100	–	–	–	–	–	–	9	9	9	12	12	12	15	15	15	–	–	–	–	–	–
	1000	50 - 100	–	–	–	–	–	–	–	–	–	12	12	12	15	15	15	–	–	–	–	–	–
	1250	50 - 100	–	–	–	–	–	–	–	–	–	–	–	–	15	15	15	–	–	–	–	–	–
	1400	50 - 100	–	–	–	–	–	–	–	–	–	–	–	–	15	15	15	–	–	–	–	–	–
	1600	50 - 100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

IZMX16…-V									**IZMX16…-U**														
1000	1000	1000	1250	1250	1250	1600	1600	1600	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600
42	50	65	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65
12000	12000	12000	15000	15000	15000	19200	19200	19200	7560	7560	7560	9600	9600	9600	12000	12000	12000	15000	15000	15000	19200	19200	19200
B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H
Prospective short-circuit current ($I_{cc\ rms}$ in kA)																							
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T

				IZMX16B…06…	IZMX16B…08…	IZMX16B…10…	IZMX16B…12…	IZMX16B…16…	IZMX16N…06…	IZMX16N…08…	IZMX16N…10…	IZMX16N…12…	IZMX16N…16…
General													
Standards				IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947
Ambient temperature	Storage		°C	-40 - +70 (devices with LCD display -20 - +70)									
	Operation (open)		°C	-25 - +70 (devices with LCD display -20 - +70)									
Mounting position													
Utilization category				B	B	B	B	B	B	B	B	B	B
Protection type				IP20, IP54 with protective cover									
Direction of incoming supply				Any	Any	Any	Any	Any	Any	Any	Any	Any	Any
Main contacts													
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	630	800	1000	1250	1600	630	800	1000	1250	1600
Rated uninterrupted current at 50 °C[1)]		I_u	A	599	760	950	1188	1520	599	760	950	1188	1520
Rated uninterrupted current at 60 °C[1)]		I_u	A	567	720	900	1125	1440	567	720	900	1125	1440
Rated uninterrupted current at 70 °C[1)]		I_u	A	504	640	800	1000	1280	504	640	800	1000	1280
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Rated operational voltage		U_e	V AC	690	690	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V		I_{IT}	kA	21	21	21	21	21	21	21	21	21	21
Use in IT electrical power networks up to U = 690 V		I_{IT}	kA	-	-	-	-	-	-	-	-	-	-
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage		U_i	V	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Switching capacity													
Rated short-circuitmaking capacity	Up to 440 V50/60 Hz	I_{cm}	kA	88	88	88	88	88	105	105	105	105	105
	Up to 690 V 50/60 Hz	I_{cm}	kA	88	88	88	88	88	88	88	88	88	88
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	42	42	42	42	42	42	42	42	42	42
	t = 3 s	I_{cw}	kA	-	-	-	-	-	-	-	-	-	-
Rated short-circuit breaking capacity I_{cn}													
IEC/EN 60947 Operating sequence I_{cu} O-t-CO													
	Up to 240 V 50/60 Hz	I_{cu}	kA	42	42	42	42	42	85	85	85	85	85
	Up to 440 V 50/60 Hz	I_{cu}	kA	42	42	42	42	42	50	50	50	50	50
	Up to 690 V 50/60 Hz	I_{cu}	kA	42	42	42	42	42	42	42	42	42	42
	Up to 1100 V 50/60 Hz	I_{cu}	kA	-	-	-	-	-	-	-	-	-	-
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO													
	Up to 240 V 50/60 Hz	I_{cs}	kA	42	42	42	42	42	50	50	50	50	50
	Up to 440 V 50/60 Hz	I_{cs}	kA	42	42	42	42	42	50	50	50	50	50
	Up to 690 V 50/60 Hz	I_{cs}	kA	42	42	42	42	42	42	42	42	42	42
	Up to 1100 V 50/60 Hz	I_{cs}	kA	-	-	-	-	-	-	-	-	-	-
Switching times													
Total opening delay			ms	20	20	20	20	20	20	20	20	20	20
Closing delay			ms	25	25	25	25	25	25	25	25	25	25
Closing delay electrical (via closing release)			ms	30	30	30	30	30	30	30	30	30	30
Opening delay electrical (via shunt release / undervoltage release)			ms	25/50	25/50	25/50	25/50	25/50	25/50	25/50	25/50	25/50	25/50
Opening delay via trip electronics (non-delayed short-circuit release)			ms	25	25	25	25	25	25	25	25	25	25
Lifespan	Mechanical, without maintenance	Operations		12500	12500	12500	12500	12500	12500	12500	12500	12500	12500
	Mechanical, with maintenance	Operations		20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
	Electrical, without maintenance	Operations		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
	Electrical, with maintenance	Operations		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Maximum operating frequency		Operations/h		60	60	60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading	Fixed		W	36	59	92	132	235	36	59	92	132	235
	Withdrawable		W	50	80	125	180	320	50	80	125	180	320
Weight													
Fixed	3 pole		kg	15	15	15	15	15	15	15	15	15	15
	4 pole		kg	20	20	20	20	20	20	20	20	20	20
Withdrawable	3 pole		kg	39	39	39	39	39	39	39	39	39	39
	4 pole		kg	47	47	47	47	47	47	47	47	47	47
Empty cassette	3 pole		kg	18	18	18	18	18	18	18	18	18	18
	4 pole		kg	21	21	21	21	21	21	21	21	21	21

Notes [1)] Permissible continuous current for circuit-breakers used at different temperatures within a switchgear assembly.
The expected internal temperatures can be estimated according to the applicable IEC Standards.

				IZMX16H…06…	IZMX16H…08…
General					
Standards				IEC/EN 60947	IEC/EN 60947
Ambient temperature	Storage		°C	-40 - +70 (devices with LCD display -20 - +70)	
	Operation (open)		°C	-25 - +70 (devices with LCD display -20 - +70)	
Mounting position					
Utilization category				B	B
Protection type				IP20, IP54 with protective cover	
Direction of incoming supply				Any	Any
Main contacts					
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	630	800
Rated uninterrupted current at 50 °C[1)]		I_u	A	599	760
Rated uninterrupted current at 60 °C[1)]		I_u	A	567	720
Rated uninterrupted current at 70 °C[1)]		I_u	A	504	640
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000
Rated operational voltage		U_e	V AC	690	690
Use in IT electrical power networks up toU = 440 V		I_{IT}	kA	21	21
Use in IT electrical power networks up toU = 690 V		I_{IT}	kA	-	-
Overvoltage category/pollution degree				III/3	III/3
Rated insulation voltage		U_i	V	1000	1000
Switching capacity					
Rated short-circuit making capacity	Up to 440 V 50/60 Hz	I_{cm}	kA	137	137
	Up to 690 V 50/60 Hz	I_{cm}	kA	88	88
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	42	42
	t = 3 s	I_{cw}	kA	-	-
Rated short-circuit breaking capacity I_{cn}					
IEC/EN 60947 Operating sequence I_{cu} O-t-CO					
	Up to 240 V 50/60 Hz	I_{cu}	kA	85	85
	Up to 440 V 50/60 Hz	I_{cu}	kA	65	65
	Up to 690 V 50/60 Hz	I_{cu}	kA	42	42
	Up to 1100 V 50/60 Hz	I_{cu}	kA	-	-
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO					
	Up to 240 V 50/60 Hz	I_{cs}	kA	65	65
	Up to 440 V 50/60 Hz	I_{cs}	kA	50	50
	Up to 690 V 50/60 Hz	I_{cs}	kA	42	42
	Up to 1100 V 50/60 Hz	I_{cs}	kA	-	-
Switching times					
Total opening delay			ms	20	20
Closing delay			ms	25	25
Closing delay electrical (via closing release)			ms	30	30
Opening delay electrical (via shunt release / undervoltage release)			ms	25/50	25/50
Opening delay via trip electronics (non-delayed short-circuit release)			ms	25	25
Lifespan					
Mechanical, without maintenance		Operations		12500	12500
Mechanical, with maintenance		Operations		20000	20000
Electrical, without maintenance		Operations		10000	10000
Electrical, with maintenance		Operations		10000	10000
Maximum operating frequency		Operations/h		60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading					
Fixed			W	36	59
Withdrawable			W	50	80
Weight					
Fixed	3 pole		kg	15	15
	4 pole		kg	20	20
Withdrawable	3 pole		kg	39	39
	4 pole		kg	47	47
Empty cassette	3 pole		kg	18	18
	4 pole		kg	21	21

Notes [1)] Permissible continuous current for circuit-breakers used at different temperatures within a switchgear assembly.
The expected internal temperatures can be estimated according to the applicable IEC Standards.

				IZMX16H…10…	IZMX16H…12…	IZMX16H…16…
General						
Standards				IEC/EN 60947	IEC/EN 60947	IEC/EN 60947
Ambient temperature	Storage		°C	-40 - +70 (devices with LCD display -20 - +70)		
	Operation (open)		°C	-25 - +70 (devices with LCD display -20 - +70)		
Mounting position						
Utilization category				B	B	B
Protection type				IP20, IP54 with protective cover		
Direction of incoming supply				Any	Any	Any
Main contacts						
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	1000	1250	1600
Rated uninterrupted current at 50 °C[1)]		I_u	A	950	1188	1520
Rated uninterrupted current at 60 °C[1)]		I_u	A	900	1125	1440
Rated uninterrupted current at 70 °C[1)]		I_u	A	800	1000	1280
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000	8000
Rated operational voltage		U_e	V AC	690	690	690
Use in IT electrical power networks up toU = 440 V		I_{IT}	kA	21	21	21
Use in IT electrical power networks up toU = 690 V		I_{IT}	kA	-	-	-
Overvoltage category/pollution degree				III/3	III/3	III/3
Rated insulation voltage		U_i	V	1000	1000	1000
Switching capacity						
Rated short-circuit making capacity	Up to 440 V 50/60 Hz	I_{cm}	kA	137	137	137
	Up to 690 V 50/60 Hz	I_{cm}	kA	88	88	88
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	42	42	42
	t = 3 s	I_{cw}	kA	-	-	-
Rated short-circuit breaking capacity I_{cn}						
IEC/EN 60947 Operating sequence I_{cu} O-t-CO						
	Up to 240 V 50/60 Hz	I_{cu}	kA	85	85	85
	Up to 440 V 50/60 Hz	I_{cu}	kA	65	65	65
	Up to 690 V 50/60 Hz	I_{cu}	kA	42	42	42
	Up to 1100 V 50/60 Hz	I_{cu}	kA	-	-	-
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO						
	Up to 240 V 50/60 Hz	I_{cs}	kA	65	65	65
	Up to 440 V 50/60 Hz	I_{cs}	kA	50	50	50
	Up to 690 V 50/60 Hz	I_{cs}	kA	42	42	42
	Up to 1100 V 50/60 Hz	I_{cs}	kA	-	-	-
Switching times						
Total opening delay			ms	20	20	20
Closing delay			ms	25	25	25
Closing delay electrical (via closing release)			ms	30	30	30
Opening delay electrical (via shunt release / undervoltage release)			ms	25/50	25/50	25/50
Opening delay via trip electronics (non-delayed short-circuit release)			ms	25	25	25
Lifespan						
Mechanical, without maintenance		Operations		12500	12500	12500
Mechanical, with maintenance		Operations		20000	20000	20000
Electrical, without maintenance		Operations		10000	10000	10000
Electrical, with maintenance		Operations		10000	10000	10000
Maximum operating frequency		Operations/h		60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading						
Fixed			W	92	132	235
Withdrawable			W	125	180	320
Weight						
Fixed	3 pole		kg	15	15	15
	4 pole		kg	20	20	20
Withdrawable	3 pole		kg	39	39	39
	4 pole		kg	47	47	47
Empty cassette	3 pole		kg	18	18	18
	4 pole		kg	21	21	21

			INX16B…06…	INX16B…08…	INX16B…10…	INX16B…12…	INX16B…16…
General							
Standards			IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947	IEC/EN 60947
Ambient temperature							
Storage		°C	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70
Operation (open)		°C	-25 - +70 (devices with LCD display -20 - +70)				
Mounting position							
Utilization category			B	B	B	B	B
Protection type			IP20, IP54 with protective cover	IP20, IP54 with protective cover	IP20, IP54 with protective cover	IP20, IP54 with protective cover	
Direction of incoming supply			Any	Any	Any	Any	Any
Main contacts							
Rated operational current = Rated uninterrupted current	$I_n = I_u$	A	630	800	1000	1250	1600
Rated uninterrupted current at 50 °C[1)]	I_u	A	599	760	950	1188	1520
Rated uninterrupted current at 60 °C[1)]	I_u	A	567	720	900	1125	1440
Rated uninterrupted current at 70 °C[1)]	I_u	A	504	640	800	1000	1280
Rated impulse withstand voltage	U_{imp}	V AC	8000	8000	8000	8000	8000
Rated operational voltage	U_e	V AC	690	690	690	690	690
Use in IT electrical power networks up toU = 440 V	I_{IT}	kA	21	21	21	21	21
Use in IT electrical power networks up toU = 690 V	I_{IT}	kA	-	-	-	-	-
Overvoltage category/pollution degree			III/3	III/3	III/3	III/3	III/3
Rated insulation voltage	U_i	V	1000	1000	1000	1000	1000
Switching capacity							
Rated short-circuit making capacity							
Up to 440 V 50/60 Hz	I_{cm}	kA	88	88	88	88	88
Up to 690 V 50/60 Hz	I_{cm}	kA	88	88	88	88	88
Rated short-time withstand current 50/60 Hz							
t = 1 s	I_{cw}	kA	42	42	42	42	42
t = 3 s	I_{cw}	kA	-	-	-	-	-
Switching times							
Total opening delay		ms	20	20	20	20	20
Closing delay		ms	25	25	25	25	25
Closing delay electrical (via closing release)		ms	30	30	30	30	30
Opening delay electrical (via shunt release / undervoltage release)		ms	25/50	25/50	25/50	25/50	25/50
Lifespan							
Mechanical, without maintenance	Operations		12500	12500	12500	12500	12500
Mechanical, with maintenance	Operations		20000	20000	20000	20000	20000
Electrical, without maintenance	Operations		10000	10000	10000	10000	10000
Electrical, with maintenance	Operations		10000	10000	10000	10000	10000
Maximum operating frequency	Operations/h		60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading							
Fixed		W	36	59	92	132	235
Withdrawable		W	50	80	125	180	320
Weight							
Fixed							
3 pole		kg	15	15	15	15	15
4 pole		kg	20	20	20	20	20
Withdrawable							
3 pole		kg	39	39	39	39	39
4 pole		kg	47	47	47	47	47
Empty cassette							
3 pole		kg	18	18	18	18	18
4 pole		kg	21	21	21	21	21

Notes

[1)] Permissible continuous current for circuit-breakers used at different temperatures within a switchgear assembly. The expected internal temperatures can be estimated according to the applicable IEC Standards.

Notes

Notes

IZMX-AS22, IZMX-OTS, IZMX-S..., IZMX-U...

			Auxiliary contacts IZMX-AS22	Overload trip IZMX-OTS	IZMX-LCS16(-SR)
Rated breaking capacity					
Inductive load					
250 V AC		A	10	10	10
125 V DC		A	0.5	0.5	0.5
250 V DC		A	0.25	0.25	0.25

			Voltage releases				Closing releases			
			IZMX-ST24DC IZMX-STS24DC	IZMX-ST48DC IZMX-STS48DC	IZMX-ST110AD IZMX-STS110AD	IZMX-ST230AD IZMX-STS230AD	IZMX-SR24DC	IZMX-SR48DC	IZMX-SR110AD	IZMX-SR230AD
Rated control voltage										
AC 50/60 Hz	U_s	V	–	–	110 - 127	208 - 240	–	–	110 - 127	208 - 240
DC	U_s	V	24	48	110 - 125	220 - 250	24	48	110 - 125	220 - 250
Power consumption										
AC		VA	–	–	(pick-up 450)	(pick-up 450)	–	–	(pick-up 450)	(pick-up 450)
DC		W	(pick-up 250)	(pick-up 250)	(pick-up 450)	(pick-up 450)	(pick-up 250)	(pick-up 250)	(pick-up 450)	(pick-up 450)
Response time of the circuit-breaker with U_s		ms	35	35	35	35	40	40	40	40
Operating range										
Drop-out voltage										
AC operated, 50/60 Hz	Drop-out	x U_c	–	–	–	–	–	–	–	–
Pick-up voltage										
	pick-up	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard

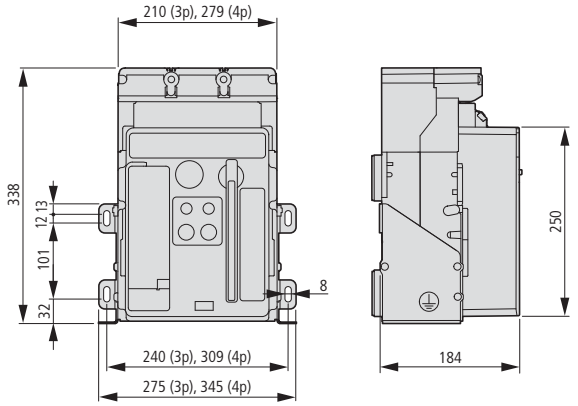
			Under-voltage releases			
			IZMX-UVR24DC	IZMX-UVR48DC	IZMX-UVR110AD	IZMX-UVR220AD
Rated control voltage						
AC 50/60 Hz	U_s	V	–	–	110 - 127	208 - 240
DC	U_s	V	24	48	110 - 125	220 - 250
Power consumption						
AC		VA	–	–	5 (pick-up 890)	5 (pick-up 910)
DC		W	5 (pick-up 500)	5 (pick-up 850)	5 (pick-up 890)	5 (pick-up 910)
Response time of the circuit-breaker with U_s		ms	50	50	50	50
Operating range						
Drop-out voltage						
AC operated, 50/60 Hz	Drop-out	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard
Pick-up voltage						
	pick-up	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard

			Motor operator					
			IZMX-M16-24DC	**IZMX-M16-48DC**	**IZMX-M16-110AC**	**IZMX-M16-110DC**	**IZMX-M16-230AC**	**IZMX-M16-220DC**
Rated control voltage								
AC 50/60 Hz	U_s	V	–	–	110 - 127	–	220 - 240	–
DC	U_s	V	24	48	–	110 - 125	–	220 - 250
Necessary time required for charging of the spring-operated stored energy mechanism at 1 x U_s		s	3	3	3	3	4	4
Rated operational current	I_n	A	5	3	2	1	1	1
Starting current		A	25	15	6	5	10	10
Power consumption								
AC 50/60 Hz		VA	–	–	280	280	280	280
DC		W	150	150	150	150	150	280

Dimensions

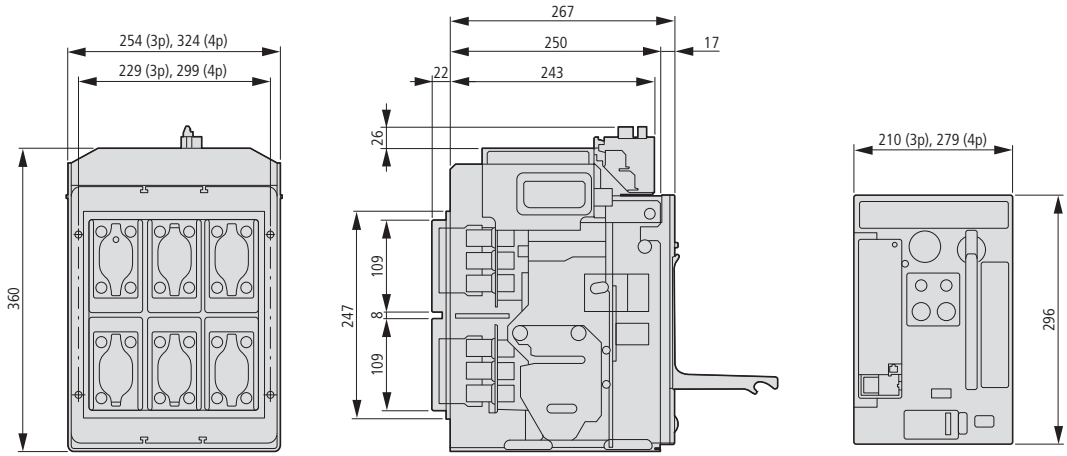
INX16, IZMX16 fixed mounted

INX16…F, IZMX16…F



INX16, IZMX16 withdrawable units

INX16…W, IZMX16…W



IZM26

I_{cu} = I_{cs} at U_e = 440/690 (1100) V AC
I_{cu}: Rated ultimate short-circuit breaking capacity at rated operational voltage U_e
I_{cs}: rated service short-circuit breaking capacity at rated operational voltage U_e

Circuit-breaker	Rated operational current I_n A	Basic switching capacity (B) 440/690 V AC I_{cu} /I_{cs} kA/kA	Normal switching capacity (N) 440/690 V AC I_{cu} /I_{cs} kA/kA	High switching capacity (H) 440/690 V AC I_{cu} /I_{cs} kA/kA	(S) 1100 V AC I_{cu} /I_{cs} kA/kA
IZM20	800 - 1600	50/50	65/65	-	-
IZM20	2000	50/50	65/65	-	-
IZM32	800 - 1600	65/65	85/85	100/85	-
IZM32	2000 - 3200	65/65	85/85	100/85	-
IZM40	4000	-	85/65	100/65	-
IZM63	4000 - 6300	-	85/85	100/100	-
IZM32S	3200	-	-	-	25

I_{cu} = I_{cs} at U_e = 440/690 (1100) V AC
I_{cw} at t = 1 s/t = 3 s
I_{cw}: Rated short-time withstand current

Circuit-breaker	Rated operational current I_n A	Basic switching capacity (B) t = 1 s/t = 3s I_{cw} /I_{cw} kA/kA	Normal switching capacity (N) t = 1 s/t = 3s I_{cw} /I_{cw} kA/kA	High switching capacity (H) t = 1 s/t = 3s I_{cw} /I_{cw} kA/kA
IZM20	800 - 1600	50/-	65/40	-
IZM20	2000	50/30	65/40	-
IZM32	800 - 1600	65/-	85/65	85/65
IZM32	2000 - 3200	65/50	85/65	85/65
IZM40	4000	-	85/65	100/65
IZM63	4000 - 6300	-	85/65	100/65

I_{cm} at Ue = 440/690 V AC I_{cm}: Rated short-circuit making capacity (Peak value) at rated operational voltage U_e		**Basic switching capacity (B)**	**Normal switching capacity (N)**	**High switching capacity (H)**	**(S)**
		440/690 V AC	440/690 V AC	440/690 V AC	1100 V AC
Switch-disconnector	Rated operational current I_n A	I_{cm} kA	I_{cm} kA	I_{cm} kA	I_{cm} kA
IN20	800 - 1600	105	143	-	-
IN20	2000	105	143	-	-
IN32	800 - 1600	143	187	-	-
IN32	2000 - 3200	143	187	-	-
IN40	4000	-	187	220	-
IN63	4000 - 6300	-	187	220	-
IN32S	3200	-	-	-	52

I_{cm} at U_e = 440/690 V AC I_{cw} at t = 1 s/t = 3 s I_{cw}: Rated short-time withstand current		**Basic switching capacity (B)**	**Normal switching capacity (N)**	**High switching capacity (H)**
		t = 1 s/t = 3s	t = 1 s/t = 3s	t = 1 s/t = 3s
Switch-disconnector	Rated operational current I_n A	I_{cw} /I_{cw} kA/kA	I_{cw} /I_{cw} kA/kA	I_{cw} /I_{cw} kA/kA
IN20	800 - 1600	50/-	65/40	-
IN20	2000	50/30	65/40	-
IN32	800 - 1600	65/-	85/65	-
IN32	2000 - 3200	65/50	85/65	-
IN40	4000	-	85/65	100/65
IN63	4000 - 6300	-	85/65	100/65



		IZM26 ...-A... System protection DTA Digitrip 520 LI	**IZM26 ...-V...** Selectivity protection DTV Digitrip 520 LSI(G)	**IZM26 ...-U...** Universal protection DTU Digitrip 520MC LSI(G)	**IZM26 ...-P...** Universal protection with power measurement DTP Digitrip 1150i LSI(G)
					
Current range		200 A – 3200 A	200 A – 6300 A	200 A – 6300 A	200 A – 6300 A
RMS value monitoring		●	●	●	●
Protective functions					
General					
Ordering options		LI	LSI, LSIG	LSI, LSIG, LSIA	LSI, LSIG, LSIA
Rating plug (I_n)		●	●	●	●
Overtemperature trip		●	●	●	●
Overload protection	**L**				
Overload trip		(0.4 - 1.0) x I_n	(0.4 - 1.0) x I_n	(0.4 - 1.0) x I_n	(0.4 - 1.0) x I_n
Long delay time I^2t at 6 x I_r		2 - 24 s	2 - 24 s	2 - 24 s	2 - 24 s
Long delay time I^4t		–	–	–	1 - 5 s
Thermal memory		●	●	●	●
Overload alarm signal		–	–	○[1]	○[1]: (0.5 - 1.0) x I_r
Short-time delayed short-circuit protection	**S**				
Short delay pickup		–	(2 - 10) x I_r and M1[2]	(2 - 10) x I_r and M1[2]	(2 - 10) x I_r and M1[2]
Short delay time I^2t at 8 x I_r		–	100 - 500 ms	100 - 500 ms	100 - 500 ms
Short delay time, flat characteristic curve		–	100 - 500 ms	100 - 500 ms	100 - 500 ms
Zone selectivity ZSI[1]		–	○	○	○
Non-delayed short-circuit protection	**I**				
Non-delayed short-circuit protection		(2 - 10) x I_n	(2 - 10) x I_n and M1[2]	(2 - 10) x I_n and M1[2]	(2 - 10) x I_n and M1[2]
Switch-off function		–	●	●	●
Closing releases MCR		●	●	●	●
Ground operational fault protection	**G**				
Ground/fault alarm		–	–	○1)	○1)
Ground fault protection release		–	(0.25 - 10) x I_n	(0.25 - 10) x I_n[3]	(0.25 - 10) x I_n[3]
Short delay time I^2t at 0.625 x I_n		–	100 - 500 ms	100 - 500 ms	100 - 500 ms
Short delay time, curve		–	100 - 500 ms	100 - 500 ms	100 - 500 ms
Zone selectivity ZSI[1]		–	○	○	○
Thermal memory		–	●	●	●
Neutral conductor-conductor protection	**N**	●	Only for type LSI	Only for type LSI	Only for type LSI

Notes

I_n = rating plug (rated current module) = rated operational current current transformer
I_r = Set value overload trip (= Rated operational current of system)
[1] Requires an external 24 V DC control voltage supply.
[2] Additionally available M1 set values:

IZM20
M1 = 14 x I_n for rated operational currents von 200 A to 1250 A
M1 = 12 x I_n for rated operational currents from 1600 A to 2000 A
IZM32
M1 = 14 x I_n for rated operational currents von 200 A to 1250 A
M1 = 12 x I_n for rated operational current from 1600 A to 2500 A
M1 = 10 x I_n for rated operational currents from 3200 A
IZM40
M1 = 12 x I_n for rated operational currents from 4000 A
IZM63
M1 = 14 x I_n for rated operational currents from 2000 A 2500 A
M1 = 12 x I_n for rated operational currents von 3200 A 5000 A
M1 = 10 x I_n for rated operational currents from 6300 A

[3] In combination with ARMS function limited to 1200 A.

● Standard
○ Optional

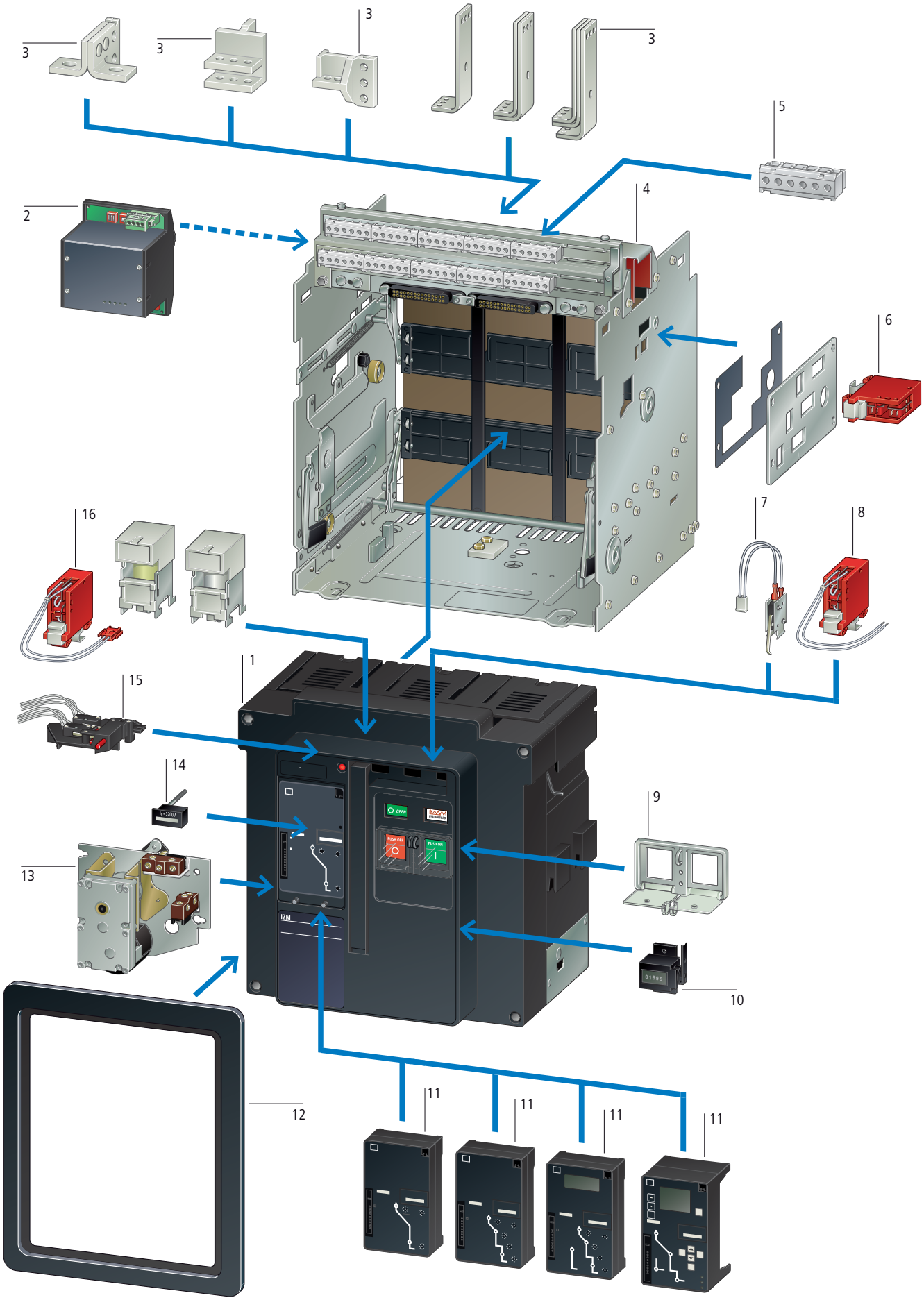
		IZM26 ...-A...	**IZM26 ...-V...**	**IZM26 ...-U...**	**IZM26 ...-P...**
		System protection DTA Digitrip 520 LI	Selectivity protection DTV Digitrip 520 LSI(G)	Universal protection DTU Digitrip 520MC LSI(G)	Universal protection with power measuring DTP Digitrip 1150i LSI(G)
					
System diagnostics					
Cause of trip LEDs		●	●	●	●
Current at trip point		–	–	●[1]	●[1]
Remote signaling contacts	**A**	–	–	●[1]	●[1]
Programmable signal contacts	**A**	–	–	–	●[1]
System monitor					
Digital display		–	–	4-digit LED	24-digit LED
Current display (%)		–	–	●	●
Phase voltage (%)		–	–	–	●
Power and energy (%)		–	–	–	●
Apparent power kVA reference and delivery		–	–	–	●
Reactive power kVAR		–	–	–	●
Power factor		–	–	–	●
Crest factor		–	–	–	●
Power quality, harmonics		–	–	–	●
THD factor (%)		–	–	–	●
Fieldbus communication		–	–	Modbus, PROFIBUS	Modbus, PROFIBUS
Additional functions					
Trip history (3 events)		–	–	–	●
Electronic operations counter		–	–	–	●
Test possibility[2]		Hand held test unit	Hand held test unit	Hand held test unit	Hand held test unit and integrated function
Maintenance mode ARMS		–	–	○[1]	○[1]
Curve-form plotting		–	–	–	●

Notes

I_n = rating plug (rate current module) = rated operational current current transformer
I_r = Set value overload trip (= rated operational current of system)
[1] Requires an external 24 V DC control voltage supply.
[2] Hand-held tester for simulating secondary current

● Standard
○ Optional

System overview



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Key to type references

IZM	20	B	3	-	A	08	W
IN	32	N	4		V	10	F
	40	H			U	12	
	63	S			P	16	
						20	
						25	
						32	
						40	
						50	
						63	

IZM, IN = Product family

Frame size
20: Narrow 800 - 2000 A
32: Standard 800 - 3200 A
40: Double narrow 4000 A
63: Double wide 4000 - 6300 A

Switching capacity
B = Basic
N = Normal
H = High
S = Special type for 1100 V (only for size 32, 3200 A)

Number of poles
3: 3 pole
4: 4 pole

Trip type
A= System protection = Digitrip 520 LI
V= Selective protection = Digitrip 520 LSI(G)
U= Universal protection = Digitrip 520MC LSI(G)
P= Universal protection with power measurement = Digitrip 1150i+ LSI(G)

Rated operational current
08: 800 A
10: 1000 A
12: 1250 A
16: 1600 A
20: 2000 A
25: 2500 A
32: 3200 A
40: 4000 A
50: 5000 A
63: 6300 A

Model
W = Withdrawable
F = Fixed



IZM26: Robust safety

Eaton's IZM26 circuit-breakers offer a proven and complete range of air circuit-breakers up to 6300 A. Four sizes enable the ideal circuit-breaker to be selected economically for any project. In this way, only the module width increases with the required rated operational current, enabling the most compact and economical size to be selected.

The particularly rugged circuit-breakers are already in use 100,000 times in harsh industrial environments worldwide. Large material thicknesses and a high short-time withstand current are its characteristic features.

Applications

The circuit-breakers can be used in four main application areas depending on the type of equipment to be protected:
- System protection,
- Motor protection,
- Transformer protection,
- Generator protection.

These key applications make different demands on the switches, which are met with a range of trip units.

Switches with closing release
They are particularly suitable for synchronization tasks.

Coupler switches
Beside the IZM26 circuit-breakers, IN26 switch-disconnectors are available. These are used, for example, as coupler switches between different power supplies.

Modular design

Because components are installed from the front, retrofitting accessories is especially quick and easy. This allows flexible response to changing requirements within the system.

Standard scope of delivery as usual

- With the new IZM26, you also select a basic device that is already fitted with an electronic release and horizontal terminal adapters.
- The standard mounting is on a horizontal mounting plate or on horizontal traverses in the switching cabinet.
- With four-pole devices, the neutral conductor is arranged on the left (front view).
- The neutral conductor can be loaded 100% like the phase conductors.
- The circuit-breakers are provided with a standard mechanical reclosing lockout. After an overload trip, the fault is usually examined first of all. After the fault is identified and rectified, the mechanical reclosing lockout is reset by pressing the red mechanical trip indicator on the front of the circuit-breaker.
- An “Automatic Reset” can be ordered as an option. This enables the circuit-breaker to be restored to operation immediately at any time after the spring-operated stored energy mechanism is retensioned. In these applications compulsory fault analysis is intentionally avoided.
- The number of control cable terminals depends on the accessories fitted.
- If a cassette is ordered without the basic device, this is already fitted with the maximum number of control cable terminals.
- The standard consists of 2 NO contacts and 2 NC contacts for ON/OFF status indication.
- A coding mechanism between the basic device and the cassette prevents impermissible combinations (“Rejection Interlock”).

Expansion of Standardequipment supplied for IZM26

Some order types from the past can no longer be found since the following options are now already part of the standard scope of delivery:
- The door escutcheon is now always included in the scope of delivery. With withdrawable designs this is supplied with the cassette (withdrawable unit).
- On withdrawable units the circuit-breaker can be pulled out to inspect the arc chutes. With fixed units, it is recommended that sufficient space is provided above the circuit-breaker to enable inspection. An additional cover is not required.
- All basic devices that are provided with universal protection (with Digitrip 520M…), now feature a display.
- On each circuit-breaker the integrated Digitrip electronic release is factory fitted with a sealable protective cover.
- If a motor operator is ordered, the “Spring-operated stored energy mechanism tensioned” indicator switch is automatically provided.

Other benefits of the IZM26

- There are still four main variants of overcurrent release units. Only the fourth variant was renamed and is now “P” (as in Power Measurement) instead of “D” (as in Digital trip). On each P circuit-breaker (Digitrip 1150) the power measurement is already an integral part of the electronic release.
- The voltage tap-off for power measurement is integrated in the device so that an additional external voltage transformer is unnecessary. This solution saves costs, space and installation effort.
- Certain applications require the use of an interface to the external control voltage supply (see below). A new feature is that the electronic release can be prepared for an external control voltage supply of 120 V AC or 240 V AC (order option).
- A switching operations counter can now be used thanks to the separate mounting position, also independently of a motor operator.
- Withdrawable unit operation: The unit is actuated with a hand crank supplied. This is now possible also with a standard tool (square drive socket 3/8").
- Four sizes are available to ensure the optimum device for any application. As before, the entire rated operational current range from 800 A to 6300 A can be covered with two sizes.
- Sizes IZM40 and IZM63 are produced in simple terms by doubling sizes IZM20 and IZM32. This consequently provides on the IZM40 and IZM63 two terminals for each phase on the incoming side and on the outgoing side. This facilitates the thermal design of the switchboard and in some switchboard systems simplifies production and reduces the number of busbar adapter variants.
- The phase sequence for the IZM40 and IZM63 is as follows: (NN)AABBCC.
- The IZM for 6300 A is now offered with horizontal connection as standard, thus considerably simplifying the busbar connection for most switchboard systems.

External control voltage supply

- The standard protection functions of the IZM26 operate generally independently of an external control voltage supply. The power supply of the electronics unit, for example for overload and short-circuit protection, is implemented via the current transformers integrated in the circuit-breaker.
- The universal release unit with display can be fed with a 24 V DC/48 V DC supply or a 120 V AC or 240 V AC supply if required so that the display function can also be used without a load. An external power supply is needed if communication functions are required.
- The P release unit should always be operated with an external power supply as it is normally selected due to its extensive control voltage dependent functions.

Communication capability

The communication-capability of the IZM26 circuit-breakers enable them to open up new possibilities in power distribution. They can thus provide and transmit all important operational information. This increases system transparency and shortens the response times to states such as overcurrent, phase asymmetry and overvoltage.

A rapid intervention in a process can, for example, prevent downtimes and help to schedule maintenance activities and therefore boost plant availability.

A Modbus interface is offered as an alternative in addition to the Profibus interface.

Greater safety for maintenance personnel with ARMS™

If the IZM26 is fitted with the newly patented ARMS system (Arcflash Reduction Maintenance System™), a non-delayed immediate disconnection is ensured in the event of an arc fault. This disconnection is even faster than that of a non-delayed short-circuit release..

This function can be activated directly on the circuit-breaker or via an external switch, such as when maintenance personnel enter a hazardous area. Other components from the ARCON protective system, in conjunction with the IZM26 enable arc fault protection in stages. ARCON on the Internet: www.moeller.net/arcon

Selection criteria for IZM26 circuit-breakers

Fundamental criteria for the selection of circuit-breakers:

- Max short-circuit current $I_{k\,max}$ at the circuit-breaker’s point of installation: this value determines the short-circuit breaking capacity or the short-circuit current carrying capacity of the circuit-breaker. It is compared to the I_{cu}, I_{cs} and I_{cw} values of the circuit-breaker and determines essentially its size (see Technical data).
- Rated operational current I_n which should flow through the respective branch circuit:
  This value must not be greater than the maximum switch rated operational current of the circuit-breaker. The rated operational current can be adjusted down using additional rated operational current modules.
- Ambient temperature of the circuit-breaker: This is generally the internal temperature in the control panel. Observe the derating values with increased ambient temperature (see Technical data).
- Circuit-breaker type: fixed mounted or withdrawable units, 3 or 4 pole.
- Minimum short-circuit current, which flows through the switching device: The release must recognize this value as a short-circuit and may react with a trip.
- Protection functions of the circuit-breaker: This is determined by the selection of the respective overcurrent release.

Documentation

Operating manual
AWB1230-1605de (deutsch)
AWB1230-1605en (english)

CurveSelect characteristics program

Display tripping characteristics according to user settings and assess their interaction effectively:
www.moeller.net/de/support



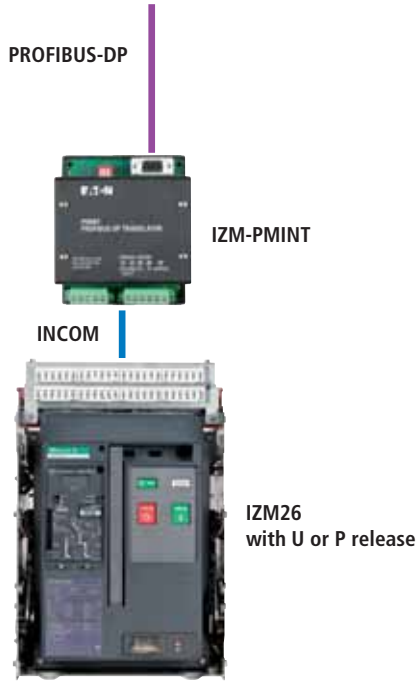
Components for IZM26 communication

The IZM26 series devices can be connected to a PROFIBUS-DP or Modbus RTU filed bus. Interfaces IZM-PMINT and IZM-MMINT are compact devices for mounting on top-hat rails, i.e. independently of the switch. They output all information available in the trip unit to the fieldbus, including switch status, current, voltage, power, and energy, as well as diagnostic information such as overcurrent, phase asymmetry and overvoltage. The fieldbus also facilitates actuation of the motor operator and therefore its remote operation.

Requirements

The communications modules can be used in combination with IZMX26…-U or IZMX26…-P… circuit-breakers.

PROFIBUS-DP configuration



Communications module IZM-PMINT has a 9-pin D-Sub socket for connection to PROFIBUS. The module works as a slave on PROFIBUS-DP; the data is defined through a standardized device master data file, which permits smooth integration of the IZM in a DP line.

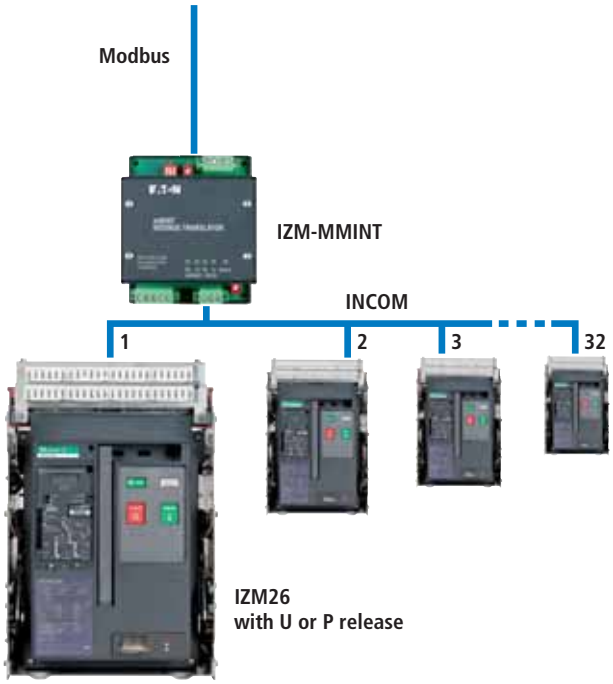
PROFIBUS
- On the PROFIBUS-DP side the module supports automatic baud rate detection; the PROFIBUS-DP bus address is set through the trip unit's display. The maximum cable length is 2.4 km.
- To operate the IZM-PMINT, a supply voltage of 24 V DC or 240 V AC is required.

INCOM
- The data connection to the circuit-breaker is implemented through a serial INCOM data connection. A shielded, twisted-pair data cable (recommended are Belden 9463 or 3073F) can be used.
- The INCOM bus must be terminated with a 100 Ω terminating resistor, connected between the two cable strands at the circuit-breaker end.
- The maximum cable length is 3 km.

Data access via PROFIBUS-DP

The data on PROFIBUS-DP are offered according to the profile for low-voltage switchgear (LVSG) of PROFIBUS International (PROFIBUS and PROFINET User Group). Five different data structures with varying numbers of parameters are available through the device master data file. This allows a data filter to be easily implemented, which simplifies integration of the IZM data into the control system.

Modbus configuration



Communications module IZM-MMINT has a plug-in screw terminal for connection to Modbus. The module operates as a Modbus slave. The interface to the circuit-breaker can be operated as a bus, so that up to 32 IZM26 units can be connected to an IZM-MMINT. This makes the use of the IZM with the Modbus architecture specially efficient.

Modbus
- The baud rate for Modbus communications is selectable with coding switches on the IZM-MMINT; the bus address (up to 247) is set through the display of the trip unit. The maximum cable length is 1.2 km.
- The Modbus must be terminated with a 120 Ω terminating resistor. If the IZM-MMINT is the last device in the network, a built-in terminating resistor can be activated there with a coding switch.
- To operate the IZM-MMINT, a supply voltage of 24 V DC or 240 V AC is required.

INCOM
- The data connection to the circuit-breaker is implemented through a serial INCOM bus connection. A shielded, twisted-pair data cable (recommended are Belden 9463 or 3073F) can be used.
- The INCOM bus must be terminated with a 100 Ω terminating resistor, connected between the two cable strands at the circuit-breaker end.
- The maximum cable length is 3 km.

Data access via Modbus

The data for each circuit-breaker connected to the INCOM bus is contained in comprehensive data tables. Each data point is available as floating-point (IEEE) or fixed--point value. This variance allows the integration of the IZM to be adapted to the Modbus architecture. This allows a data filter to be easily implemented, which simplifies integration of the IZM data into the control system.



Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	Std. pack
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							

Circuit-breakers for system protection

Including main terminals at rear and control circuit terminals according to ordered options.

50	800	IZM20	320 – 800	–	2 - 10	**IZM20B3-A08F** 123400		**IZM20B3-A08W** 123160		1 off
	1000		400 – 1000			**IZM20B3-A10F** 123401		**IZM20B3-A10W** 123161		
	1250		500 – 1250			**IZM20B3-A12F** 123402		**IZM20B3-A12W** 123162		
	1600		640 – 1600			**IZM20B3-A16F** 123403		**IZM20B3-A16W** 123163		
	2000		800 – 2000			**IZM20B3-A20F** 123404		**IZM20B3-A20W** 123164		
65	800		320 – 800			**IZM20N3-A08F** 123430		**IZM20N3-A08W** 123190		
	1000		400 – 1000			**IZM20N3-A10F** 123431		**IZM20N3-A10W** 123191		
	1250		500 – 1250			**IZM20N3-A12F** 123432		**IZM20N3-A12W** 123192		
	1600		640 – 1600			**IZM20N3-A16F** 123433		**IZM20N3-A16W** 123193		
	2000		800 – 2000			**IZM20N3-A20F** 123434		**IZM20N3-A20W** 123194		
	800	IZM32	320 – 800			**IZM32B3-A08F** 123899		**IZM32B3-A08W** 123609		
	1000		400 – 1000			**IZM32B3-A10F** 123900		**IZM32B3-A10W** 123610		
	1250		500 – 1250			**IZM32B3-A12F** 123901		**IZM32B3-A12W** 123611		
	1600		640 – 1600			**IZM32B3-A16F** 123902		**IZM32B3-A16W** 123612		
	2000		800 – 2000			**IZM32B3-A20F** 123903		**IZM32B3-A20W** 123613		
	2500		1000 – 2500			**IZM32B3-A25F** 123904		**IZM32B3-A25W** 123614		
	3200		1280 – 3200			**IZM32B3-A32F** 123905		**IZM32B3-A32W** 123615		
85	800		320 – 800			**IZM32N3-A08F** 123939		**IZM32N3-A08W** 123649		
	1000		400 – 1000			**IZM32N3-A10F** 123940		**IZM32N3-A10W** 123650		
	1250		500 – 1250			**IZM32N3-A12F** 123941		**IZM32N3-A12W** 123651		
	1600		640 – 1600			**IZM32N3-A16F** 123942		**IZM32N3-A16W** 123652		
	2000		800 – 2000			**IZM32N3-A20F** 123943		**IZM32N3-A20W** 123653		
	2500		1000 – 2500			**IZM32N3-A25F** 123944		**IZM32N3-A25W** 123654		
	3200		1280 – 3200			**IZM32N3-A32F** 123945		**IZM32N3-A32W** 123655		
100	800		320 – 800			**IZM32H3-A08F** 123979		**IZM32H3-A08W** 123689		
	1000		400 – 1000			**IZM32H3-A10F** 123980		**IZM32H3-A10W** 123690		
	1250		500 – 1250			**IZM32H3-A12F** 123981		**IZM32H3-A12W** 123691		
	1600		640 – 1600			**IZM32H3-A16F** 123982		**IZM32H3-A16W** 123692		
	2000		800 – 2000			**IZM32H3-A20F** 123983		**IZM32H3-A20W** 123693		
	2500		1000 – 2500			**IZM32H3-A25F** 123984		**IZM32H3-A25W** 123694		
	3200		1280 – 3200			**IZM32H3-A32F** 123985		**IZM32H3-A32W** 123695		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$ kA	$I_n = I_u$ A		I_r A	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
Selectively-opening circuit-breakers										
Including main terminals at rear and control circuit terminals according to ordered options.										
50	800	IZM20	320 – 800	2 - 10	2 - 10, OFF	**IZM20B3-V08F** 123406		**IZM20B3-V08W** 123166		1 off
	1000		400 – 1000			**IZM20B3-V10F** 123407		**IZM20B3-V10W** 123167		
	1250		500 – 1250			**IZM20B3-V12F** 123408		**IZM20B3-V12W** 123168		
	1600		640 – 1600			**IZM20B3-V16F** 123409		**IZM20B3-V16W** 123169		
	2000		800 – 2000			**IZM20B3-V20F** 123410		**IZM20B3-V20W** 123170		
65	800		320 – 800			**IZM20N3-V08F** 123436		**IZM20N3-V08W** 123196		
	1000		400 – 1000			**IZM20N3-V10F** 123437		**IZM20N3-V10W** 123197		
	1250		500 – 1250			**IZM20N3-V12F** 123438		**IZM20N3-V12W** 123198		
	1600		640 – 1600			**IZM20N3-V16F** 123439		**IZM20N3-V16W** 123199		
	2000		800 – 2000			**IZM20N3-V20F** 123440		**IZM20N3-V20W** 123200		
	800	IZM32	320 – 800			**IZM32B3-V08F** 123907		**IZM32B3-V08W** 123617		
	1000		400 – 1000			**IZM32B3-V10F** 123908		**IZM32B3-V10W** 123618		
	1250		500 – 1250			**IZM32B3-V12F** 123909		**IZM32B3-V12W** 123619		
	1600		640 – 1600			**IZM32B3-V16F** 123910		**IZM32B3-V16W** 123620		
	2000		800 – 2000			**IZM32B3-V20F** 123911		**IZM32B3-V20W** 123621		
	2500		1000 – 2500			**IZM32B3-V25F** 123912		**IZM32B3-V25W** 123622		
	3200		1280 – 3200			**IZM32B3-V32F** 123913		**IZM32B3-V32W** 123623		
85	800		320 – 800			**IZM32N3-V08F** 123947		**IZM32N3-V08W** 123657		
	1000		400 – 1000			**IZM32N3-V10F** 123948		**IZM32N3-V10W** 123658		
	1250		500 – 1250			**IZM32N3-V12F** 123949		**IZM32N3-V12W** 123659		
	1600		640 – 1600			**IZM32N3-V16F** 123950		**IZM32N3-V16W** 123660		
	2000		800 – 2000			**IZM32N3-V20F** 123951		**IZM32N3-V20W** 123661		
	2500		1000 – 2500			**IZM32N3-V25F** 123952		**IZM32N3-V25W** 123662		
	3200		1280 – 3200			**IZM32N3-V32F** 123953		**IZM32N3-V32W** 123663		
	4000	IZM40	1600 – 4000			**IZM40N3-V40F** 124303		**IZM40N3-V40W** 124193		
	4000	IZM63	1600 – 4000			**IZM63N3-V40F** 124304		**IZM63N3-V40W** 124194		
	5000		2000 – 5000			**IZM63N3-V50F** 124305		**IZM63N3-V50W** 124195		
	6300		2520 – 6300			**IZM63N3-V63F** 124306		**IZM63N3-V63W** 124196		

Switching capacity	Rated operational current	Fame size	**Setting range** Overload release	Short-circuit releases		Fixed mounted **Part no.** Article no.	**Price** See price list	Withdrawable units **Part no.** Article no.	**Price** See price list	Std. pack
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							
Selectively-opening circuit-breakers										
Including main terminals at rear and control circuit terminals according to ordered options.										
100	800	IZM32	320 – 800	2 - 10	2 - 10, OFF	**IZM32H3-V08F** 123987		**IZM32H3-V08W** 123697		1 off
	1000		400 – 1000			**IZM32H3-V10F** 123988		**IZM32H3-V10W** 123698		
	1250		500 – 1250			**IZM32H3-V12F** 123989		**IZM32H3-V12W** 123699		
	1600		640 – 1600			**IZM32H3-V16F** 123990		**IZM32H3-V16W** 123700		
	2000		800 – 2000			**IZM32H3-V20F** 123991		**IZM32H3-V20W** 123701		
	2500		1000 – 2500			**IZM32H3-V25F** 123992		**IZM32H3-V25W** 123702		
	3200		1280 – 3200			**IZM32H3-V32F** 123993		**IZM32H3-V32W** 123703		
	4000	IZM40	1600 – 4000			**IZM40H3-V40F** 124323		**IZM40H3-V40W** 124213		
	4000	IZM63	1600 – 4000			**IZM63H3-V40F** 124324		**IZM63H3-V40W** 124214		
	5000		2000 – 5000			**IZM63H3-V50F** 124325		**IZM63H3-V50W** 124215		
	6300		2520 – 6300			**IZM63H3-V63F** 124326		**IZM63H3-V63W** 124216		
Circuit-breaker for universal protection										
Including main terminals at rear and control circuit terminals according to ordered options.										
50	800	IZM20	320 – 800	2 - 10	2 - 10, OFF	**IZM20B3-U08F** 123412		**IZM20B3-U08W** 123172		1 off
	1000		400 – 1000			**IZM20B3-U10F** 123413		**IZM20B3-U10W** 123173		
	1250		500 – 1250			**IZM20B3-U12F** 123414		**IZM20B3-U12W** 123174		
	1600		640 – 1600			**IZM20B3-U16F** 123415		**IZM20B3-U16W** 123175		
	2000		800 – 2000			**IZM20B3-U20F** 123416		**IZM20B3-U20W** 123176		
65	800		320 – 800			**IZM20N3-U08F** 123442		**IZM20N3-U08W** 123202		
	1000		400 – 1000			**IZM20N3-U10F** 123443		**IZM20N3-U10W** 123203		
	1250		500 – 1250			**IZM20N3-U12F** 123444		**IZM20N3-U12W** 123204		
	1600		640 – 1600			**IZM20N3-U16F** 123445		**IZM20N3-U16W** 123205		
	2000		800 – 2000			**IZM20N3-U20F** 123446		**IZM20N3-U20W** 123206		
	800	IZM32	320 – 800			**IZM32B3-U08F** 123915		**IZM32B3-U08W** 123625		
	1000		400 – 1000			**IZM32B3-U10F** 123916		**IZM32B3-U10W** 123626		
	1250		500 – 1250			**IZM32B3-U12F** 123917		**IZM32B3-U12W** 123627		
	1600		640 – 1600			**IZM32B3-U16F** 123918		**IZM32B3-U16W** 123628		
	2000		800 – 2000			**IZM32B3-U20F** 123919		**IZM32B3-U20W** 123629		
	2500		1000 – 2500			**IZM32B3-U25F** 123920		**IZM32B3-U25W** 123630		
	3200		1280 – 3200			**IZM32B3-U32F** 123921		**IZM32B3-U32W** 123631		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$					
kA	A		A					Cassette must be ordered separately.		
										
Circuit-breaker for universal protection										
Including main terminals at rear and control circuit terminals according to ordered options.										
85	800	IZM32	320 – 800	2 - 10	2 - 10, OFF	**IZM32N3-U08F** 123955		**IZM32N3-U08W** 123665		1 off
	1000		400 – 1000			**IZM32N3-U10F** 123956		**IZM32N3-U10W** 123666		
	1250		500 – 1250			**IZM32N3-U12F** 123957		**IZM32N3-U12W** 123667		
	1600		640 – 1600			**IZM32N3-U16F** 123958		**IZM32N3-U16W** 123668		
	2000		800 – 2000			**IZM32N3-U20F** 123959		**IZM32N3-U20W** 123669		
	2500		1000 – 2500			**IZM32N3-U25F** 123960		**IZM32N3-U25W** 123670		
	3200		1280 – 3200			**IZM32N3-U32F** 123961		**IZM32N3-U32W** 123671		
	4000	IZM40	1600 – 4000			**IZM40N3-U40F** 124307		**IZM40N3-U40W** 124197		
	4000	IZM63	1600 – 4000			**IZM63N3-U40F** 124308		**IZM63N3-U40W** 124198		
	5000		2000 – 5000			**IZM63N3-U50F** 124309		**IZM63N3-U50W** 124199		
	6300		2520 – 6300			**IZM63N3-U63F** 124310		**IZM63N3-U63W** 124200		
100	800	IZM32	320 – 800			**IZM32H3-U08F** 123995		**IZM32H3-U08W** 123705		
	1000		400 – 1000			**IZM32H3-U10F** 123996		**IZM32H3-U10W** 123706		
	1250		500 – 1250			**IZM32H3-U12F** 123997		**IZM32H3-U12W** 123707		
	1600		640 – 1600			**IZM32H3-U16F** 123998		**IZM32H3-U16W** 123708		
	2000		800 – 2000			**IZM32H3-U20F** 123999		**IZM32H3-U20W** 123709		
	2500		1000 – 2500			**IZM32H3-U25F** 124000		**IZM32H3-U25W** 123710		
	3200		1280 – 3200			**IZM32H3-U32F** 124001		**IZM32H3-U32W** 123711		
	4000	IZM40	1600 – 4000			**IZM40H3-U40F** 124327		**IZM40H3-U40W** 124217		
	4000	IZM63	1600 – 4000			**IZM63H3-U40F** 124328		**IZM63H3-U40W** 124218		
	5000		2000 – 5000			**IZM63H3-U50F** 124329		**IZM63H3-U50W** 124219		
	6300		2520 – 6300			**IZM63H3-U63F** 124330		**IZM63H3-U63W** 124220		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$ kA	$I_n = I_u$ A		I_r A	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
Circuit-breaker for universal protection with power monitoring										
Including main terminals at rear and control circuit terminals according to ordered options.										
50	800	IZM20	320 – 800	2 - 10	2 - 10, OFF	**IZM20B3-P08F** 123418		**IZM20B3-P08W** 123178		1 off
	1000		400 – 1000			**IZM20B3-P10F** 123419		**IZM20B3-P10W** 123179		
	1250		500 – 1250			**IZM20B3-P12F** 123420		**IZM20B3-P12W** 123180		
	1600		640 – 1600			**IZM20B3-P16F** 123421		**IZM20B3-P16W** 123181		
	2000		800 – 2000			**IZM20B3-P20F** 123422		**IZM20B3-P20W** 123182		
65	800		320 – 800			**IZM20N3-P08F** 123448		**IZM20N3-P08W** 123208		
	1000		400 – 1000			**IZM20N3-P10F** 123449		**IZM20N3-P10W** 123209		
	1250		500 – 1250			**IZM20N3-P12F** 123450		**IZM20N3-P12W** 123210		
	1600		640 – 1600			**IZM20N3-P16F** 123451		**IZM20N3-P16W** 123211		
	2000		800 – 2000			**IZM20N3-P20F** 123452		**IZM20N3-P20W** 123212		
	800	IZM32	320 – 800			**IZM32B3-P08F** 123923		**IZM32B3-P08W** 123633		
	1000		400 – 1000			**IZM32B3-P10F** 123924		**IZM32B3-P10W** 123634		
	1250		500 – 1250			**IZM32B3-P12F** 123925		**IZM32B3-P12W** 123635		
	1600		640 – 1600			**IZM32B3-P16F** 123926		**IZM32B3-P16W** 123636		
	2000		800 – 2000			**IZM32B3-P20F** 123927		**IZM32B3-P20W** 123637		
	2500		1000 – 2500			**IZM32B3-P25F** 123928		**IZM32B3-P25W** 123638		
	3200		1280 – 3200			**IZM32B3-P32F** 123929		**IZM32B3-P32W** 123639		
85	800		320 – 800			**IZM32N3-P08F** 123963		**IZM32N3-P08W** 123673		
	1000		400 – 1000			**IZM32N3-P10F** 123964		**IZM32N3-P10W** 123674		
	1250		500 – 1250			**IZM32N3-P12F** 123965		**IZM32N3-P12W** 123675		
	1600		640 – 1600			**IZM32N3-P16F** 123966		**IZM32N3-P16W** 123676		
	2000		800 – 2000			**IZM32N3-P20F** 123967		**IZM32N3-P20W** 123677		
	2500		1000 – 2500			**IZM32N3-P25F** 123968		**IZM32N3-P25W** 123678		
	3200		1280 – 3200			**IZM32N3-P32F** 123969		**IZM32N3-P32W** 123679		
	4000	IZM40	1600 – 4000			**IZM40N3-P40F** 124311		**IZM40N3-P40W** 124201		
	4000	IZM63	1600 – 4000			**IZM63N3-P40F** 124312		**IZM63N3-P40W** 124202		
	5000		2000 – 5000			**IZM63N3-P50F** 124313		**IZM63N3-P50W** 124203		
	6300		2520 – 6300			**IZM63N3-P63F** 124314		**IZM63N3-P63W** 124204		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							
Circuit-breaker for universal protection with power monitoring										
Including main terminals at rear and control circuit terminals according to ordered options.										
100	800	IZM32	320 – 800	2 - 10	2 - 10, OFF	**IZM32H3-P08F** 124003		**IZM32H3-P08W** 123713		1 off
	1000		400 – 1000			**IZM32H3-P10F** 124004		**IZM32H3-P10W** 123714		
	1250		500 – 1250			**IZM32H3-P12F** 124005		**IZM32H3-P12W** 123715		
	1600		640 – 1600			**IZM32H3-P16F** 124006		**IZM32H3-P16W** 123716		
	2000		800 – 2000			**IZM32H3-P20F** 124007		**IZM32H3-P20W** 123717		
	2500		1000 – 2500			**IZM32H3-P25F** 124008		**IZM32H3-P25W** 123718		
	3200		1280 – 3200			**IZM32H3-P32F** 124009		**IZM32H3-P32W** 123719		
	4000	IZM40	1600 – 4000			**IZM40H3-P40F** 124331		**IZM40H3-P40W** 124221		
	4000	IZM63	1600 – 4000			**IZM63H3-P40F** 124332		**IZM63H3-P40W** 124222		
	5000		2000 – 5000			**IZM63H3-P50F** 124333		**IZM63H3-P50W** 124223		
	6300		2520 – 6300			**IZM63H3-P63F** 124334		**IZM63H3-P63W** 124224		

Switching capacity	Rated operational current	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
		Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
			Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$	I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A	A							
IZM32 for 1100 V									
Including main terminals at rear and control circuit terminals according to ordered options.									
Circuit-breakers for system protection									
25	3200	1280 – 3200	–	2 - 10	**IZM32S3-A32F-1100V** 123725		**IZM32S3-A32W-1100V** 123721		1 off
Selectively-opening circuit-breakers									
25	3200	1280 – 3200	2 - 10	2 - 10, OFF	**IZM32S3-V32F-1100V** 123726		**IZM32S3-V32W-1100V** 123722		1 off
Circuit-breaker for universal protection									
25	3200	1280 – 3200	2 - 10	2 - 10, OFF	**IZM32S3-U32F-1100V** 123727		**IZM32S3-U32W-1100V** 123723		1 off
Circuit-breaker with circuit-breaker									
25	3200	1280 – 3200	2 - 10	2 - 10, OFF	**IZM32S3-P32F-1100V** 123749		**IZM32S3-P32W-1100V** 123724		1 off

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							

Circuit-breakers for system protection

Including main terminals at rear and control circuit terminals according to ordered options.

50	800	IZM20	320 – 800	–	2 - 10	**IZM20B4-A08F** 123520		**IZM20B4-A08W** 123280		1 off
	1000		400 – 1000			**IZM20B4-A10F** 123521		**IZM20B4-A10W** 123281		
	1250		500 – 1250			**IZM20B4-A12F** 123522		**IZM20B4-A12W** 123282		
	1600		640 – 1600			**IZM20B4-A16F** 123523		**IZM20B4-A16W** 123283		
	2000		800 – 2000			**IZM20B4-A20F** 123524		**IZM20B4-A20W** 123284		
65	800		320 – 800			**IZM20N4-A08F** 123550		**IZM20N4-A08W** 123310		
	1000		400 – 1000			**IZM20N4-A10F** 123551		**IZM20N4-A10W** 123311		
	1250		500 – 1250			**IZM20N4-A12F** 123552		**IZM20N4-A12W** 123312		
	1600		640 – 1600			**IZM20N4-A16F** 123553		**IZM20N4-A16W** 123313		
	2000		800 – 2000			**IZM20N4-A20F** 123554		**IZM20N4-A20W** 123314		
	800	IZM32	320 – 800			**IZM32B4-A08F** 124044		**IZM32B4-A08W** 123754		
	1000		400 – 1000			**IZM32B4-A10F** 124045		**IZM32B4-A10W** 123755		
	1250		500 – 1250			**IZM32B4-A12F** 124046		**IZM32B4-A12W** 123756		
	1600		640 – 1600			**IZM32B4-A16F** 124047		**IZM32B4-A16W** 123757		
	2000		800 – 2000			**IZM32B4-A20F** 124048		**IZM32B4-A20W** 123758		
	2500		1000 – 2500			**IZM32B4-A25F** 124049		**IZM32B4-A25W** 123759		
	3200		1280 – 3200			**IZM32B4-A32F** 124050		**IZM32B4-A32W** 123760		
85	800		320 – 800			**IZM32N4-A08F** 124084		**IZM32N4-A08W** 123794		
	1000		400 – 1000			**IZM32N4-A10F** 124085		**IZM32N4-A10W** 123795		
	1250		500 – 1250			**IZM32N4-A12F** 124086		**IZM32N4-A12W** 123796		
	1600		640 – 1600			**IZM32N4-A16F** 124087		**IZM32N4-A16W** 123797		
	2000		800 – 2000			**IZM32N4-A20F** 124088		**IZM32N4-A20W** 123798		
	2500		1000 – 2500			**IZM32N4-A25F** 124089		**IZM32N4-A25W** 123799		
	3200		1280 – 3200			**IZM32N4-A32F** 124090		**IZM32N4-A32W** 123800		
100	800		320 – 800			**IZM32H4-A08F** 124124		**IZM32H4-A08W** 123834		
	1000		400 – 1000			**IZM32H4-A10F** 124125		**IZM32H4-A10W** 123835		
	1250		500 – 1250			**IZM32H4-A12F** 124126		**IZM32H4-A12W** 123836		
	1600		640 – 1600			**IZM32H4-A16F** 124127		**IZM32H4-A16W** 123837		
	2000		800 – 2000			**IZM32H4-A20F** 124128		**IZM32H4-A20W** 123838		
	2500		1000 – 2500			**IZM32H4-A25F** 124129		**IZM32H4-A25W** 123839		
	3200		1280 – 3200			**IZM32H4-A32F** 124130		**IZM32H4-A32W** 123840		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							
Selectively-opening circuit-breakers										
Including main terminals at rear and control circuit terminals according to ordered options.										
50	800	IZM20	320 – 800	2 - 10	2 - 10, OFF	**IZM20B4-V08F** 123526		**IZM20B4-V08W** 123286		1 off
	1000		400 – 1000			**IZM20B4-V10F** 123527		**IZM20B4-V10W** 123287		
	1250		500 – 1250			**IZM20B4-V12F** 123528		**IZM20B4-V12W** 123288		
	1600		640 – 1600			**IZM20B4-V16F** 123529		**IZM20B4-V16W** 123289		
	2000		800 – 2000			**IZM20B4-V20F** 123530		**IZM20B4-V20W** 123290		
65	800		320 – 800			**IZM20N4-V08F** 123556		**IZM20N4-V08W** 123316		
	1000		400 – 1000			**IZM20N4-V10F** 123557		**IZM20N4-V10W** 123317		
	1250		500 – 1250			**IZM20N4-V12F** 123558		**IZM20N4-V12W** 123318		
	1600		640 – 1600			**IZM20N4-V16F** 123559		**IZM20N4-V16W** 123319		
	2000		800 – 2000			**IZM20N4-V20F** 123560		**IZM20N4-V20W** 123320		
	800	IZM32	320 – 800			**IZM32B4-V08F** 124052		**IZM32B4-V08W** 123762		
	1000		400 – 1000			**IZM32B4-V10F** 124053		**IZM32B4-V10W** 123763		
	1250		500 – 1250			**IZM32B4-V12F** 124054		**IZM32B4-V12W** 123764		
	1600		640 – 1600			**IZM32B4-V16F** 124055		**IZM32B4-V16W** 123765		
	2000		800 – 2000			**IZM32B4-V20F** 124056		**IZM32B4-V20W** 123766		
	2500		1000 – 2500			**IZM32B4-V25F** 124057		**IZM32B4-V25W** 123767		
	3200		1280 – 3200			**IZM32B4-V32F** 124058		**IZM32B4-V32W** 123768		
85	800		320 – 800			**IZM32N4-V08F** 124092		**IZM32N4-V08W** 123802		
	1000		400 – 1000			**IZM32N4-V10F** 124093		**IZM32N4-V10W** 123803		
	1250		500 – 1250			**IZM32N4-V12F** 124094		**IZM32N4-V12W** 123804		
	1600		640 – 1600			**IZM32N4-V16F** 124095		**IZM32N4-V16W** 123805		
	2000		800 – 2000			**IZM32N4-V20F** 124096		**IZM32N4-V20W** 123806		
	2500		1000 – 2500			**IZM32N4-V25F** 124097		**IZM32N4-V25W** 123807		
	3200		1280 – 3200			**IZM32N4-V32F** 124098		**IZM32N4-V32W** 123808		
	4000	IZM40	1600 – 4000			**IZM40N4-V40F** 124358		**IZM40N4-V40W** 124248		
	4000	IZM63	1600 – 4000			**IZM63N4-V40F** 124359		**IZM63N4-V40W** 124249		
	5000		2000 – 5000			**IZM63N4-V50F** 124360		**IZM63N4-V50W** 124250		
	6300		2520 – 6300			**IZM63N4-V63F** 124361		**IZM63N4-V63W** 124251		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							
										
Selectively-opening circuit-breakers										
Including main terminals at rear and control circuit terminals according to ordered options.										
100	800	IZM32	320 – 800	2 - 10	2 - 10, OFF	**IZM32H4-V08F** 124132		**IZM32H4-V08W** 123842		1 off
	1000		400 – 1000			**IZM32H4-V10F** 124133		**IZM32H4-V10W** 123843		
	1250		500 – 1250			**IZM32H4-V12F** 124134		**IZM32H4-V12W** 123844		
	1600		640 – 1600			**IZM32H4-V16F** 124135		**IZM32H4-V16W** 123845		
	2000		800 – 2000			**IZM32H4-V20F** 124136		**IZM32H4-V20W** 123846		
	2500		1000 – 2500			**IZM32H4-V25F** 124137		**IZM32H4-V25W** 123847		
	3200		1280 – 3200			**IZM32H4-V32F** 124138		**IZM32H4-V32W** 123848		
	4000	IZM40	1600 – 4000			**IZM40H4-V40F** 124378		**IZM40H4-V40W** 124268		
	4000	IZM63	1600 – 4000			**IZM63H4-V40F** 124379		**IZM63H4-V40W** 124269		
	5000		2000 – 5000			**IZM63H4-V50F** 124380		**IZM63H4-V50W** 124270		
	6300		2520 – 6300			**IZM63H4-V63F** 124381		**IZM63H4-V63W** 124271		
Circuit-breaker for universal protection										
Including main terminals at rear and control circuit terminals according to ordered options.										
50	800	IZM20	320 – 800	2 - 10	2 - 10, OFF	**IZM20B4-U08F** 123532		**IZM20B4-U08W** 123292		1 off
	1000		400 – 1000			**IZM20B4-U10F** 123533		**IZM20B4-U10W** 123293		
	1250		500 – 1250			**IZM20B4-U12F** 123534		**IZM20B4-U12W** 123294		
	1600		640 – 1600			**IZM20B4-U16F** 123535		**IZM20B4-U16W** 123295		
	2000		800 – 2000			**IZM20B4-U20F** 123536		**IZM20B4-U20W** 123296		
65	800		320 – 800			**IZM20N4-U08F** 123562		**IZM20N4-U08W** 123322		
	1000		400 – 1000			**IZM20N4-U10F** 123563		**IZM20N4-U10W** 123323		
	1250		500 – 1250			**IZM20N4-U12F** 123564		**IZM20N4-U12W** 123324		
	1600		640 – 1600			**IZM20N4-U16F** 123565		**IZM20N4-U16W** 123325		
	2000		800 – 2000			**IZM20N4-U20F** 123566		**IZM20N4-U20W** 123326		
	800	IZM32	320 – 800			**IZM32B4-U08F** 124060		**IZM32B4-U08W** 123770		
	1000		400 – 1000			**IZM32B4-U10F** 124061		**IZM32B4-U10W** 123771		
	1250		500 – 1250			**IZM32B4-U12F** 124062		**IZM32B4-U12W** 123772		
	1600		640 – 1600			**IZM32B4-U16F** 124063		**IZM32B4-U16W** 123773		
	2000		800 – 2000			**IZM32B4-U20F** 124064		**IZM32B4-U20W** 123774		
	2500		1000 – 2500			**IZM32B4-U25F** 124065		**IZM32B4-U25W** 123775		
	3200		1280 – 3200			**IZM32B4-U32F** 124066		**IZM32B4-U32W** 123776		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$					
kA	A		A					Cassette must be ordered separately.		
										
Circuit-breaker for universal protection										
Including main terminals at rear and control circuit terminals according to ordered options.										
85	800	IZM32	320 – 800	2 - 10	2 - 10, OFF	**IZM32N4-U08F** 124100		**IZM32N4-U08W** 123810		1 off
	1000		400 – 1000			**IZM32N4-U10F** 124101		**IZM32N4-U10W** 123811		
	1250		500 – 1250			**IZM32N4-U12F** 124102		**IZM32N4-U12W** 123812		
	1600		640 – 1600			**IZM32N4-U16F** 124103		**IZM32N4-U16W** 123813		
	2000		800 – 2000			**IZM32N4-U20F** 124104		**IZM32N4-U20W** 123814		
	2500		1000 – 2500			**IZM32N4-U25F** 124105		**IZM32N4-U25W** 123815		
	3200		1280 – 3200			**IZM32N4-U32F** 124106		**IZM32N4-U32W** 123816		
	4000	IZM40	1600 – 4000			**IZM40N4-U40F** 124362		**IZM40N4-U40W** 124252		
	4000	IZM63	1600 – 4000			**IZM63N4-U40F** 124363		**IZM63N4-U40W** 124253		
	5000		2000 – 5000			**IZM63N4-U50F** 124364		**IZM63N4-U50W** 124254		
	6300		2520 – 6300			**IZM63N4-U63F** 124365		**IZM63N4-U63W** 124255		
100	800	IZM32	320 – 800			**IZM32H4-U08F** 124140		**IZM32H4-U08W** 123850		
	1000		400 – 1000			**IZM32H4-U10F** 124141		**IZM32H4-U10W** 123851		
	1250		500 – 1250			**IZM32H4-U12F** 124142		**IZM32H4-U12W** 123852		
	1600		640 – 1600			**IZM32H4-U16F** 124143		**IZM32H4-U16W** 123853		
	2000		800 – 2000			**IZM32H4-U20F** 124144		**IZM32H4-U20W** 123854		
	2500		1000 – 2500			**IZM32H4-U25F** 124145		**IZM32H4-U25W** 123855		
	3200		1280 – 3200			**IZM32H4-U32F** 124146		**IZM32H4-U32W** 123856		
	4000	IZM40	1600 – 4000			**IZM40H4-U40F** 124382		**IZM40H4-U40W** 124272		
	4000	IZM63	1600 – 4000			**IZM63H4-U40F** 124383		**IZM63H4-U40W** 124273		
	5000		2000 – 5000			**IZM63H4-U50F** 124384		**IZM63H4-U50W** 124274		
	6300		2520 – 6300			**IZM63H4-U63F** 124385		**IZM63H4-U63W** 124275		

Switching capacity	Rated operational current	Frame size	**Setting range**			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$					
kA	A		A					Cassette must be ordered separately.		
Circuit-breaker for universal protection with power monitoring										
Including main terminals at rear and control circuit terminals according to ordered options.										
50	800	IZM20	320 – 800	2 - 10	2 - 10, OFF	**IZM20B4-P08F** 123538		**IZM20B4-P08W** 123298		1 off
	1000		400 – 1000			**IZM20B4-P10F** 123539		**IZM20B4-P10W** 123299		
	1250		500 – 1250			**IZM20B4-P12F** 123540		**IZM20B4-P12W** 123300		
	1600		640 – 1600			**IZM20B4-P16F** 123541		**IZM20B4-P16W** 123301		
	2000		800 – 2000			**IZM20B4-P20F** 123542		**IZM20B4-P20W** 123302		
65	800		320 – 800			**IZM20N4-P08F** 123568		**IZM20N4-P08W** 123328		
	1000		400 – 1000			**IZM20N4-P10F** 123569		**IZM20N4-P10W** 123329		
	1250		500 – 1250			**IZM20N4-P12F** 123570		**IZM20N4-P12W** 123330		
	1600		640 – 1600			**IZM20N4-P16F** 123571		**IZM20N4-P16W** 123331		
	2000		800 – 2000			**IZM20N4-P20F** 123572		**IZM20N4-P20W** 123332		
	800	IZM32	320 – 800			**IZM32B4-P08F** 124068		**IZM32B4-P08W** 123778		
	1000		400 – 1000			**IZM32B4-P10F** 124069		**IZM32B4-P10W** 123779		
	1250		500 – 1250			**IZM32B4-P12F** 124070		**IZM32B4-P12W** 123780		
	1600		640 – 1600			**IZM32B4-P16F** 124071		**IZM32B4-P16W** 123781		
	2000		800 – 2000			**IZM32B4-P20F** 124072		**IZM32B4-P20W** 123782		
	2500		1000 – 2500			**IZM32B4-P25F** 124073		**IZM32B4-P25W** 123783		
	3200		1280 – 3200			**IZM32B4-P32F** 124074		**IZM32B4-P32W** 123784		
85	800		320 – 800			**IZM32N4-P08F** 124108		**IZM32N4-P08W** 123818		
	1000		400 – 1000			**IZM32N4-P10F** 124109		**IZM32N4-P10W** 123819		
	1250		500 – 1250			**IZM32N4-P12F** 124110		**IZM32N4-P12W** 123820		
	1600		640 – 1600			**IZM32N4-P16F** 124111		**IZM32N4-P16W** 123821		
	2000		800 – 2000			**IZM32N4-P20F** 124112		**IZM32N4-P20W** 123822		
	2500		1000 – 2500			**IZM32N4-P25F** 124113		**IZM32N4-P25W** 123823		
	3200		1280 – 3200			**IZM32N4-P32F** 124114		**IZM32N4-P32W** 123824		
	4000	IZM40	1600 – 4000			**IZM40N4-P40F** 124366		**IZM40N4-P40W** 124256		
	4000	IZM63	1600 – 4000			**IZM63N4-P40F** 124367		**IZM63N4-P40W** 124257		
	5000		2000 – 5000			**IZM63N4-P50F** 124368		**IZM63N4-P50W** 124258		
	6300		2520 – 6300			**IZM63N4-P63F** 124369		**IZM63N4-P63W** 124259		

Switching capacity	Rated operational current	Frame size	Setting range			Fixed mounted		Withdrawable units		Std. pack
			Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** see price list	
				Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$		I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A		A							
Circuit-breaker for universal protection with power monitoring										
Including main terminals at rear and control circuit terminals according to ordered options.										
100	800	IZM32	320 – 800	2 - 10	2 - 10, OFF	**IZM32H4-P08F** 124148		**IZM32H4-P08W** 123858		1 off
	1000		400 – 1000			**IZM32H4-P10F** 124149		**IZM32H4-P10W** 123859		
	1250		500 – 1250			**IZM32H4-P12F** 124150		**IZM32H4-P12W** 123860		
	1600		640 – 1600			**IZM32H4-P16F** 124151		**IZM32H4-P16W** 123861		
	2000		800 – 2000			**IZM32H4-P20F** 124152		**IZM32H4-P20W** 123862		
	2500		1000 – 2500			**IZM32H4-P25F** 124153		**IZM32H4-P25W** 123863		
	3200		1280 – 3200			**IZM32H4-P32F** 124154		**IZM32H4-P32W** 123864		
	4000	IZM40	1600 – 4000			**IZM40H4-P40F** 124386		**IZM40H4-P40W** 124276		
	4000	IZM63	1600 – 4000			**IZM63H4-P40F** 124387		**IZM63H4-P40W** 124277		
	5000		2000 – 5000			**IZM63H4-P50F** 124388		**IZM63H4-P50W** 124278		
	6300		2520 – 6300			**IZM63H4-P63F** 124389		**IZM63H4-P63W** 124279		

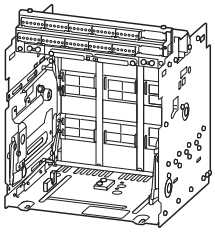
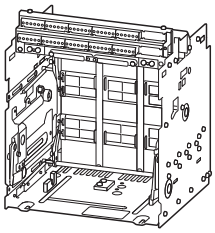
Switching capacity	Rated operational current	Setting range			Fixed mounted		Withdrawable units		Std. pack
		Overload release	Short-circuit releases		**Part no.** Article no.	**Price** See price list	**Part no.** Article no.	**Price** See price list	
			Delayed	Non-delayed					
$I_{cu} = I_{cs}$	$I_n = I_u$	I_r	$I_{sd} = I_r \times \ldots$	$I_i = I_n \times \ldots$			Cassette must be ordered separately.		
kA	A	A							
IZM32 for 1100 V									
Including main terminals at rear and control circuit terminals according to ordered options.									
Circuit-breakers for system protection									
25	3200	1280 – 3200	–	2 - 10	**IZM32S4-A32F-1100V** 123866		**IZM32S4-A32W-1100V** 123750		1 off
Selectively-opening circuit-breakers									
25	3200	1280 – 3200	2 - 10	2 - 10, OFF	**IZM32S4-V32F-1100V** 123867		**IZM32S4-V32W-1100V** 123751		1 off
Circuit-breaker for universal protection									
25	3200	1280 – 3200	2 - 10	2 - 10, OFF	**IZM32S4-U32F-1100V** 123868		**IZM32S4-U32W-1100V** 123752		1 off
Circuit-breaker with circuit-breaker									
25	3200	1280 – 3200	2 - 10	2 - 10, OFF	**IZM32S4-P32F-1100V** 123869		**IZM32S4-P32W-1100V** 123753		1 off

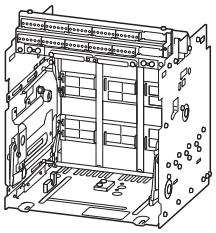
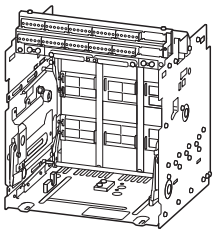
Rated short-circuit making capacity I_{cm} kA	Rated operational current $I_n = I_u$ A	Frame size	Rated short-time withstand current t = 1 s I_{cw} kA	Fixed mounted **Part no.** Article no.	**Price** See price list	Withdrawable units **Part no.** Article no. Cassette must be seperately ordered.	**Price** See price list	Std. pack
Including main terminals at rear and control circuit terminals according to ordered options.								
55	800	IN20	50	**IN20B3-08F** 123424		**IN20B3-08W** 123184		1 off
		IN32	65	**IN32B3-08F** 123931		**IN32B3-08W** 123641		
		IN32	85	**IN32N3-08F** 123971		**IN32N3-08W** 123681		
	1000	IN20	50	**IN20B3-10F** 123425		**IN20B3-10W** 123185		
		IN32	65	**IN32B3-10F** 123932		**IN32B3-10W** 123642		
		IN32	85	**IN32N3-10F** 123972		**IN32N3-10W** 123682		
	1250	IN20	50	**IN20B3-12F** 123426		**IN20B3-12W** 123186		
		IN32	65	**IN32B3-12F** 123933		**IN32B3-12W** 123643		
		IN32	85	**IN32N3-12F** 123973		**IN32N3-12W** 123683		
	1600	IN20	50	**IN20B3-16F** 123427		**IN20B3-16W** 123187		
		IN32	65	**IN32B3-16F** 123934		**IN32B3-16W** 123644		
		IN32	85	**IN32N3-16F** 123974		**IN32N3-16W** 123684		
	2000	IN20	50	**IN20B3-20F** 123428		**IN20B3-20W** 123188		
69	800	IN20	65	**IN20N3-08F** 123454		**IN20N3-08W** 123214		
	1000	IN20	65	**IN20N3-10F** 123455		**IN20N3-10W** 123215		
	1250	IN20	65	**IN20N3-12F** 123456		**IN20N3-12W** 123216		
	1600	IN20	65	**IN20N3-16F** 123457		**IN20N3-16W** 123217		
	2000	IN20	65	**IN20N3-20F** 123458		**IN20N3-20W** 123218		
		IN32	65	**IN32B3-20F** 123935		**IN32B3-20W** 123645		
		IN32	85	**IN32N3-20F** 123975		**IN32N3-20W** 123685		
110	2500	IN32	65	**IN32B3-25F** 123936		**IN32B3-25W** 123646		
	2500	IN32	85	**IN32N3-25F** 123976		**IN32N3-25W** 123686		
	3200	IN32	65	**IN32B3-32F** 123937		**IN32B3-32W** 123647		
	3200	IN32	85	**IN32N3-32F** 123977		**IN32N3-32W** 123687		
138	4000	IN40	85	**IN40N3-40F** 124315		**IN40N3-40W** 124205		
		IN40	100	**IN40H3-40F** 124191		**IN40H3-40W** 124189		
		IN63	85	**IN63N3-40F** 124316		**IN63N3-40W** 124206		
		IN63	100	**IN63H3-40F** 124336		**IN63H3-40W** 124226		
210	3200	IN32	–	**IN32S3-32F-1100V** 123871		**IN32S3-32W-1100V** 123870		
217	5000	IN63	85	**IN63N3-50F** 124317		**IN63N3-50W** 124207		
	5000	IN63	100	**IN63H3-50F** 124337		**IN63H3-50W** 124227		
	6300	IN63	85	**IN63N3-63F** 124318		**IN63N3-63W** 124208		
	6300	IN63	100	**IN63H3-63F** 124338		**IN63H3-63W** 124228		

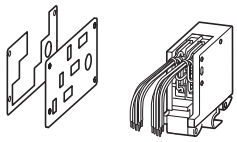
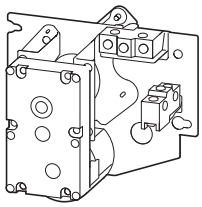


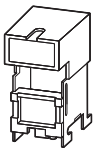
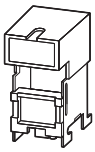
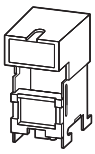
Rated short-circuit making capacity I_{cm} kA	Rated operational current $I_n = I_u$ A	Frame size	Rated short-time withstand current t = 1 s I_{cw} kA	Fixed mounted **Part no.** Article no.	**Price** See price list	Withdrawable units **Part no.** Article no. Cassette must be seperately ordered.	**Price** See price list	Std. pack
Including main terminals at rear and control circuit terminals according to ordered options.								
55	800	IN20	50	**IN20B4-08F** 123544		**IN20B4-08W** 123304		1 off
		IN32	65	**IN32B4-08F** 124076		**IN32B4-08W** 123786		
		IN32	85	**IN32N4-08F** 124116		**IN32N4-08W** 123826		
	1000	IN20	50	**IN20B4-10F** 123545		**IN20B4-10W** 123305		
		IN32	65	**IN32B4-10F** 124077		**IN32B4-10W** 123787		
		IN32	85	**IN32N4-10F** 124117		**IN32N4-10W** 123827		
	1250	IN20	50	**IN20B4-12F** 123546		**IN20B4-12W** 123306		
		IN32	65	**IN32B4-12F** 124078		**IN32B4-12W** 123788		
		IN32	85	**IN32N4-12F** 124118		**IN32N4-12W** 123828		
	1600	IN20	50	**IN20B4-16F** 123547		**IN20B4-16W** 123307		
		IN32	65	**IN32B4-16F** 124079		**IN32B4-16W** 123789		
		IN32	85	**IN32N4-16F** 124119		**IN32N4-16W** 123829		
	2000	IN20	50	**IN20B4-20F** 123548		**IN20B4-20W** 123308		
69	800	IN20	65	**IN20N4-08F** 123574		**IN20N4-08W** 123334		
	1000	IN20	65	**IN20N4-10F** 123575		**IN20N4-10W** 123335		
	1250	IN20	65	**IN20N4-12F** 123576		**IN20N4-12W** 123336		
	1600	IN20	65	**IN20N4-16F** 123577		**IN20N4-16W** 123337		
	2000	IN20	65	**IN20N4-20F** 123578		**IN20N4-20W** 123338		
		IN32	65	**IN32B4-20F** 124080		**IN32B4-20W** 123790		
		IN32	85	**IN32N4-20F** 124120		**IN32N4-20W** 123830		
110	2500	IN32	65	**IN32B4-25F** 124081		**IN32B4-25W** 123791		
	2500	IN32	85	**IN32N4-25F** 124121		**IN32N4-25W** 123831		
	3200	IN32	65	**IN32B4-32F** 124082		**IN32B4-32W** 123792		
	3200	IN32	85	**IN32N4-32F** 124122		**IN32N4-32W** 123832		
138	4000	IN40	85	**IN40N4-40F** 124370		**IN40N4-40W** 124260		
		IN40	100	**IN40H4-40F** 124192		**IN40H4-40W** 124190		
		IN63	85	**IN63N4-40F** 124371		**IN63N4-40W** 124261		
		IN63	100	**IN63H4-40F** 124391		**IN63H4-40W** 124281		
210	3200	IN32	–	**IN32S4-32F-1100V** 123894		**IN32S4-32W-1100V** 123872		
217	5000	IN63	85	**IN63N4-50F** 124372		**IN63N4-50W** 124262		
	5000	IN63	100	**IN63H4-50F** 124392		**IN63H4-50W** 124282		
	6300	IN63	85	**IN63N4-63F** 124373		**IN63N4-63W** 124263		
	6300	IN63	100	**IN63H4-63F** 124393		**IN63H4-63W** 124283		

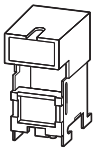


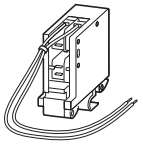
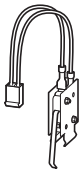
	Rated operational current I_n A	For use with	3 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	4 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack
Withdrawable units							
Cassettes in combination with basic device Standard equipment: • Arc chute cover • Coding between cassette and switch • Horizontal Connection • Door seal							
	≦ 1000	IZM20…W IN20…W	**+IZM-CAS203-1000** 124147		**+IZM-CAS204-1000** 124155		1 off
	≦ 2000	IZM20…W IN20…W	**+IZM-CAS203-2000** 122065		**+IZM-CAS204-2000** 122713		
	≦ 2000	IZM32…W IN32…W	**+IZM-CAS323-2000** 122066		**+IZM-CAS324-2000** 122714		
	≦ 2500	IZM32…W IN32…W	**+IZM-CAS323-2500** 124212		**+IZM-CAS324-2500** 124229		
	2500 - 3200	IZM32…W IN32…W	**+IZM-CAS323-3200** 122067		**+IZM-CAS324-3200** 122715		
Cassettes, ordered separately Standard components fitted to separately ordered cassette: • Arc chute cover • Complete set of control circuit terminals • Coding between cassette and switch • Horizontal Connection • Door seal							
	≦ 1000	IZM20…W IN20…W	**IZM-CAS203-1000** 124107		**IZM-CAS204-1000** 124115		1 off
	≦ 2000	IZM20…W IN20…W	**IZM-CAS203-2000** 122855		**IZM-CAS204-2000** 122863		
	≦ 2000	IZM32…W IN32…W	**IZM-CAS323-2000** 122856		**IZM-CAS324-2000** 122864		
	≦ 2500	IZM32…W IN32…W	**IZM-CAS323-2500** 124123		**IZM-CAS324-2500** 124139		
	2500 - 3200	IZM32…W IN32…W	**IZM-CAS323-3200** 122857		**IZM-CAS324-3200** 122865		
	4000	IZM40…W IN40…W	**IZM-CAS403-4000** 122859		**IZM-CAS404-4000** 122867		
	4000	IZM63…W IN63…W	**IZM-CAS633-4000** 122860		**IZM-CAS634-4000** 122868		
	5000 - 6300	IZM63…W IN63…W	**IZM-CAS633-6300** 122861		**IZM-CAS634-6300** 122869		

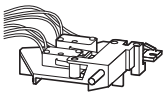
	Rated operational current I_n A	For use with	3 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	4 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack
Withdrawable units							
Cassettes 1100 V in combination with basic device Standard equipment: • Arc chute cover • Coding between cassette and switch • Horizontal Connection • Door seal							
	3200	IZM32…W-1100V IN32…W-1100V	**+IZM-CAS323-3200-1100V** 122712		**+IZM-CAS324-3200-1100V** 122720		1 off
Cassettes 1100 V, ordered separately Standard equipment: • Arc chute cover • Complete set of control circuit terminals • Coding between cassette and switch • Horizontal Connection • Door seal							
	3200	IZM32…W-1100V IN32…W-1100V	**IZM-CAS323-3200-1100V** 122862		**IZM-CAS324-3200-1100V** 122870		1 off
Shutter (touch protection) When the switch is moved out of the CONNECT position, the shutters close automatically to cover the primary contacts.							
	–	IZM20…W IN20…W	**IZM-SH203** 122871		**IZM-SH204** 122875		1 off
		IZM20…W IN20…W	**+IZM-SH203** 122721		**+IZM-SH204** 122725		
		IZM32…W IN32…W	**IZM-SH323** 122872		**IZM-SH324** 122876		
		IZM32…W IN32…W	**+IZM-SH323** 122722		**+IZM-SH324** 122726		
		IZM40…W IN40…W	**IZM-SH403** 122873		**IZM-SH404** 122877		
		IZM40…W IN40…W	**+IZM-SH403** 122723		**+IZM-SH404** 122727		
		IZM63…W IN63…W	**IZM-SH633** 122874		**IZM-SH634** 122878		
		IZM63…W IN63…W	**+IZM-SH633** 122724		**+IZM-SH634** 122728		

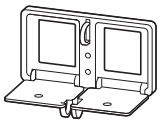
		For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Position signalling switches						
One module each with 4 changeover contacts is possible for indication of each position (extended, Test, retracted). Only one mounting plate is required per withdrawable unit. Each additional auxiliary contact (up to 3) requires 2 secondary terminal blocks IZM-SEC...; alternatively it can be wired directly to external terminals. If a shutter is used, mounting is possible on the right side only.						
	Four changeover contacts: One module without mounting plate	IZM20, 32, 40, 63...W IN20, 32, 40, 63...W	**IZM-CS4** 122879		1 off	–
	Four changeover contacts: One module with mounting plate		**IZM-CS4MB** 122880			
	Eight changeover contacts: Two modules with mounting plate		**IZM-CS8MB** 122881			
	Twelve changeover contacts: Three modules with mounting plate		**IZM-CS12MB** 122882			
Motor drive						
The motor operator electrically tensions the spring-operated stored energy mechanism. For electrical remote On and Off switching, a closing release and a voltage release are required. A signaling switch labeled "Spring-operated stored energy mechanism tensioned" is included as standard.						
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-M24DC** 122927		1 off	If ordered separately a secondary terminal block IZM-SEC-… is necessary for connection. Order separately if required.For terminal assignment, see page 77
			+IZM-M24DC 122729			
			IZM-M48DC 122928			
			+IZM-M48DC 122730			
			IZM-M60DC 123093			
			+IZM-M60DC 123079			
			IZM-M110DC 122929			
			+IZM-M110DC 122731			
			IZM-M220DC 122930			
			+IZM-M220DC 122732			
			IZM-M110AC 122931			
			+IZM-M110AC 122733			
			IZM-M230AC 122932			
			+IZM-M230AC 122734			
Switching cycle counter						
Counts the number of On-Off operations. Can also be used without motor operator.						
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-OC** 122933		1 off	–
			+IZM-OC 122735			

	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Voltage releases						
A closing release can be combined with a shunt release and an undervoltage release or with a second shunt release. (DF: 100%). Suited for uninterrupted operation, which ensures electrical interlocking in Off position.						
Shunt release						
	24 DC	IZM20, 32, 40, 63... IN20, 32,40, 63...	**IZM-ST24DC** 122934		1 off	If ordered separately a secondary terminal block IZM-SEC… is necessary for connection. Order separately if required. For terminal assignment, see page 77
	24 DC		**+IZM-ST24DC** 122736			
	48 DC		**IZM-ST48DC** 122935			
	48 DC		**+IZM-ST48DC** 122737			
	60 DC		**IZM-ST60DC** 122930			
	60 DC		**+IZM-ST60DC** 123914			
	110 - 125 DC 110 - 127 AC		**IZM-ST110AD** 122936			
	110 - 125 DC 110 - 127 AC		**+IZM-ST110AD** 122738			
	220 - 250 DC 208 - 240 AC		**IZM-ST230AD** 122937			
	220 - 250 DC 208 - 240 AC		**+IZM-ST230AD** 122739			
2nd shunt release Can not be combined with an undervoltage release.						
	24 DC	IZM20, 32, 40, 63... IN20, 32,40, 63...	**+IZM-STS24DC** 122740		1 off	If ordered separately a secondary terminal block IZM-SEC… is necessary for connection. Order separately if required. For terminal assignment, see page 77
	48 DC		**+IZM-STS48DC** 122741			
	60 DC		**+IZM-STS60DC** 123922			
	110 - 127 DC 110 - 127 AC		**+IZM-STS110AD** 122742			
	208 - 250 DC 208 - 250 AC		**+IZM-STS230AD** 122743			
Closing releases						
	24 DC	IZM20, 32, 40, 63... IN20, 32,40, 63...	**IZM-SR24DC** 122942		1 off	If ordered separately a secondary terminal block IZM-SEC… is necessary for connection. Order separately if required. For terminal assignment, see page 77
	24 DC		**+IZM-SR24DC** 122744			
	48 DC		**IZM-SR48DC** 122943			
	48 DC		**+IZM-SR48DC** 122745			
	60 VDC		**IZM-SR60DC** 123954			
	60 VDC		**+IZM-SR60DC** 123938			
	110 - 125 DC 110 - 127 AC		**IZM-SR110AD** 122944			
	110 - 125 DC 110 - 127 AC		**+IZM-SR110AD** 122746			
	220 - 250 DC 208 - 240 AC		**IZM-SR230AD** 122945			
	220 - 250 DC 208 - 240 AC		**+IZM-SR230AD** 122747			

		Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Voltage releases							
Undervoltage release Can not be combined with a second shunt release.							
	–	24 DC	IZM20, 32, 40, 63... IN20, 32,40, 63...	**IZM-UVR24DC** 122946		1 off	If ordered separately a secondary terminal block IZM-SEC-… is necessary for connection. Order separately if required. Terminal assignment page 77
		24 DC		**+IZM-UVR24DC** 122748			
		32 DC		**IZM-UVR32DC** 122947			
		32 DC		**+IZM-UVR32DC** 122749			
		48 DC		**IZM-UVR48DC** 122948			
		48 DC		**+IZM-UVR48DC** 122750			
		60 DC		**IZM-UVR60DC** 123970			
		60 DC		**+IZM-UVR60DC** 123962			
		110 - 125 DC		**IZM-UVR110DC** 122949			
		110 - 125 DC		**+IZM-UVR110DC** 122751			
		220 - 250 DC		**IZM-UVR220DC** 122950			
		220 - 250 DC		**+IZM-UVR220DC** 122752			
		110 - 127 AC		**IZM-UVR110AC** 122951			
		110 - 127 AC		**+IZM-UVR110AC** 122753			
		208 - 240 AC		**IZM-UVR230AC** 122952			
		208 - 240 AC		**+IZM-UVR230AC** 122754			
		380 - 415 AC		**IZM-UVR400AC** 122953			
		380 - 415 AC		**+IZM-UVR400AC** 122755			
Time delay modules For combination with an undervoltage release. Delay times: 0.1 s, 0.5 s, 1.0 s, 2.0 s							
	Only in combination with IZM-UVR110AC	120 AC	IZM20, 32, 40, 63... IN20, 32,40, 63...	**IZM-UVR-TD-120AC** 122956		1 off	–
	Only in combination with IZM-UVR230AC	230 AC		**IZM-UVR-TD-230AC** 122957		1 off	

		For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Auxiliary contacts						
Standard auxiliary switch for On-Off signaling 2 NC contacts/N/O contacts are already contained in the basic device. Maximum for IZM20, IN20: 4 N/O or NC contacts (corresponds with an additional AS22). Maximum, for IZM32, IZM40, IZM63: 6 N/O or NC contacts (corresponds with an additional AS44). 6 N/O or NC contacts are possible only when no second shunt release is installed.						
	Additionally 2 NC contact/ NO contact	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**+IZM-AS22** 122758		1 off	–
	Additionally 4 NC contacts/ N/O contacts		**+IZM-AS44** 122759			Cannot be combined with a second shunt release; can not be combined with IZM20, IN20.
	Additionally 2 NC contact/ N/O contact		**IZM-AS22** 122958			If ordered separately a secondary terminal block IZM-SEC-… is necessary for connection. Order separately if required. Terminal assignment page 77
Latch check switch Latch check switch with one changeover contact.						
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-LCS-SR** 122974		1 off	for internal wiring with closing release
			+IZM-LCS-SR 122760			
			IZM-LCS 122959			for external keypad Indication
			+IZM-LCS 122761			

	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Trip indication and reset options						
Trip-indicating auxiliary switch (OTS) Two changeover contacts						
	–	IZM20, 32, 40, 63...	**IZM-OTS** 122960		1 off	If ordered separately a secondary terminal block IZM-SEC-… is necessary for connection. Order separately if required. Terminal assignment page 77
			+IZM-OTS 122762			
Automatic reset The circuit-breaker is immediately ready to close again. Not fitted with mechanical trip indicator (red pin). Can not be combined with remote reset.						
	–	IZM20, 32, 40, 63...	**IZM-RA** 122964		1 off	–
			+IZM-RA 122766			

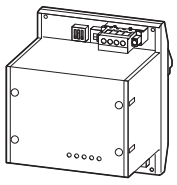
		For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack
Locking facilities					
Padlockable cover of ON/OFF buttons ON-Off pushbutton cover sealable with lead seal and lockable with padlock.					
	Metal, On pushbutton blocked	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**+IZM-PLPC-CB-M** 125820		1 off
	Plastic, On pushbutton blocked		**+IZM-PLPC-CB-P** 125649		
	Metal		**IZM-PLPC-M** 122966		
			+IZM-PLPC-M 122768		
	Plastic		**IZM-PLPC-P** 122965		
			+IZM-PLPC-P 122767		
Key locking in safe Off					
	CES installation kit, without lock cylinder and key	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-KLP-SO-CES** 122968		1 off
			+IZM-KLP-SO-CES 122770		
	Kirk installation kit, without lock cylinder and key		**IZM-KLP-SO-KIRK** 122969		
			+IZM-KLP-SO-KIRK 122771		
	Castell installation kit, without lock cylinder and key		**IZM-KLP-SO-CASTELL** 122970		
			+IZM-KLP-SO-CASTELL 122772		
	Ronis installation kit, without lock cylinder and key		**IZM-KLP-SO-RONIS** 122971		
			+IZM-KLP-SO-RONIS 122773		
Cassette key locking facility This device is fitted to the cassette and prevents a switch being switched on in its operating (Connected) position.					
	Installation on right, without lock cylinder and key	IZM20, 32, 40, 63...W IN20, 32, 40, 63...W	**IZM-KLP-CASS-R** 122972		1 off
	Installation on left, without lock cylinder and key		**IZM-KLP-CASS-L** 122973		1 off

		For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Locking facilities					
Mechanical interlock, fixed mounting					
	Type 2, for 2 circuit-breakers: A normal power supply (A) and an emergency mains supply (B). 1 set of cables also required.	IZM20, 32, 40, 63...F IN20, 32, 40, 63...F	**IZM-MIL2C-F** 122980		1 off
	Type 31, for 3 circuit-breakers: Two normal power supplies (A, C) and an emergency network supply (B). When B in Off, A and C can be switched on. B can be switched on only when A and C are in Off. Two sets of cables required in addition.		**IZM-MIL31C-F** 122981		
	Type 32, for 3 circuit-breakers: Two normal power supplies (A, C) and a coupling (B). Any one or two circuit-breakers can be closed at the same time. Three sets of cables are required in addition.		**IZM-MIL32C-F** 122982		
	Type 33, for 3 circuit-breakers: Three power supplies (A, B, C), normal or emergency network. Only one of the three circuit-breakers can be switched on at any one time. Three sets of cables are required in addition.		**IZM-MIL33C-F** 122983		
Mechanical interlock, withdrawable units					
	Type 2, for 2 circuit-breakers: A normal power supply (A) and an emergency network supply (B). 1 set of cables also required.	IZM20, 32, 40, 63...W IN20, 32, 40, 63...W	**IZM-MIL2C-W** 122985		1 off
	Type 31, for 3 circuit-breakers: Two normal power supplies (A, C) and an emergency network supply (B). When B in Off, A and C can be switched on. B can be switched on only when A and C are in Off. Two sets of cables required in addition.		**IZM-MIL31C-W** 122986		
	Type 32, for 3 circuit-breakers: Two normal power supplies (A, C) and a coupling (B). Any one or two circuit-breakers can be closed at the same time. Three sets of cables are required in addition.		**IZM-MIL32C-W** 122987		
	Type 33, for 3 circuit-breakers: Three power supplies (A, B, C), normal or emergency network. Only one of the three circuit-breakers can be switched on at any one time. Three sets of cables are required in addition.		**IZM-MIL33C-W** 122988		
Cable sets for mechanical interlock Depending on the type of interlock, a particular number of cable connectors is required. With the flexible cable connectors, various different switch arrangements can be implemented. Each set contains two cables.					
	1520 mm long	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-MIL-CAB1520** 122975		1 off
	1830 mm long		**IZM-MIL-CAB1830** 122976		
	2440 mm long		**IZM-MIL-CAB2440** 122977		
	3050 mm long		**IZM-MIL-CAB3050** 122978		

Instruction
For possible switching states, → Page 77

	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack	**Notes**
Options and accessories for electronic releases						
One of the following overcurrent releases (DT = Digitrip) is supplied as standard with every IZM circuit-breaker: • Type A: DT-520LI • Type V: DT-520LSI • Type U: DT-520MC • Type P: DT-1150						
Trip unit for Type A circuit-breaker (equipped with Digitrip 520LI)						
System protection		IZM…-A… (Digitrip 520LI)	**IZM-DTA** 122774		1 off	
Trip unit for Type V circuit-breaker (equipped with Digitrip 520LSI)						
Selectivity protection		IZM…-V… (Digitrip 520MC)	**IZM-DTV** 122775		1 off	
Add-on function for Type V circuit-breaker						
Ground fault protection	–	IZM…-V… (Digitrip 520LSI)	**+IZM-DTV-EP** 122776		1 off	–
Trip unit for Type U circuit-breaker (equipped with Digitrip 520M)						
Universal protection Type U contains the following as standard: • Communication interface • Overload alarm with signalling contact • Prepared for external 24/48 V DC supply (e.g. for display) • (A14 = +24 VDC/A15 = -24 VDC) Only one of the following three options can be selected at a time: Ground-fault protection, ground-fault alarm or overload alarm. For fieldbus communications an interface module IZM-PMINT/IZM-MMINT is required in addition.		IZM…-U… (Digitrip 520LSI)	**IZM-DTU** 122777		1 off	
	240 AC	IZM…-U… (Digitrip 520MC)	**+IZM-DTU-HA2** 122779		1 off	Not in combination with ground-fault protection or alarm
With ground-fault protection instead of overload alarm, prepared for 24/48 V DC.	24/48 DC		**+IZM-DTU-EP** 122780		1 off	Not in combination with overload or ground-fault alarm
With ground-fault protection instead of overload alarm, prepared for 240 V AC.	240 AC		**+IZM-DTU-EP2** 122782		1 off	Not in combination with overload or ground-fault alarm
With ground-fault alarm instead of overload alarm, prepared for 24/48 V DC.	24/48 DC		**+IZM-DTU-EA** 122783		1 off	Not in combination with overload alarm or ground-fault protection
With ground-fault alarm instead of overload alarm, prepared for 240 V AC.	240 AC		**+IZM-DTU-EA2** 122785		1 off	Not in combination with overload alarm or ground-fault protection
Through a simple, reliable means, the ARMS (Arcflash Reduction Maintenance System™) function can reduce the Off time for enhanced safety. Must be specifically activated.	–		**+IZM-DTU-ARMS** 122791		1 off	–
NC-reduced: The Type U electronics are supplied without communications interface.	–		**+IZM-DTU-NC** 122790		1 off	Cannot be combined with: • IZM-DTU-NPC • IZM-DTU-ARMS
NPC-reduced: The Type U electronics are supplied without communications interface and without interface to the external supply.	–		**+IZM-DTU-NPC** 122788		1 off	Only in combination with IZM-DTU-EP. Can not be combined with other options.

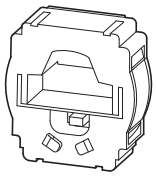
	Rated control voltage U_s V	For use with	**Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack
Options and accessories for electronic releases					
Trip unit for Type P circuit-breakers					
Power measurement		IZM…-P… (Digitrip 1150)	**IZM-DTP** 122894		1 off
Type P contains the following as standard: • Power measurement • Communication interface • Overload alarm with signalling contact • Prepared for external 24/48 V DC supply (e.g. for display) • (A14 = +24 VDC/A15 = -24 VDC). Ground-fault protection and alarm are combined in a single option (IZM-DTP-EPA), which can be combined with overload alarm. For field bus communications a corresponding interface module IZM-PMINT/IZM-MMINT is required in addition.					
Add-on function for Type P circuit-breaker					
With overload alarm, prepared for external 240 V AC supply instead of 24/48 V DC.	240 AC	IZM…-P… (Digitrip 1150)	**+IZM-DTP2** 122906		1 off
With additional ground-fault protection and alarm, prepared for 24/48 V DC.	24/48 DC		**+IZM-DTP-EPA** 122915		
With additional ground-fault protection and alarm, prepared for 240 V AC.	240 AC		**+IZM-DTP-EPA2** 122938		
Through a simple, reliable means, the ARMS (Arcflash Reduction Maintenance System™) function can reduce the Off time for enhanced safety. Must be specifically activated.	–		**+IZM-DTP-ARMS** 122939		
Voltage tap on power supply at bottom: Internally, voltage is tapped at the lower (instead of the upper) contacts. Voltage tapping is relevant for power monitoring.	–		**+IZM-DTP-PFBT** 122990		
TripLink transmits all protection parameters from one switch to the other, for example when replacing a device for maintenance.	–		**IZM-DTP-TL** 122989		
Digital relay module for circuit-breakers (Type P) power measurement			**IZM-DTP-RM** 101534		

		Rated control voltage U_s V	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Communication modules						
Fieldbus interfaces for Digitrip IZM-...-U... and IZM...-P...						
	The PROFIBUS communication interface is mounted on top-hat rails.	–	IZM…-U… (Digitrip 520MC) IZM…-P… (Digitrip 1150)	**IZM-PMINT** 124235		1 off
	The Modbus communication interface is mounted on top-hat rails.			**IZM-MMINT** 124236		1 off
Hand held test unit for Digitrip						
	IZM…-A… (Digitrip 520LI) IZM…-V… (Digitrip 520LSI) IZM…-U… (Digitrip 520M)		Testing device for IZM26	**IZM-SIM-KIT** 101535		1 off

Rating plug sensor and current transformer

This combination is required when a circuit-breaker's rated operational current is to be reduced.



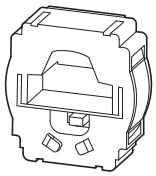


Rated operational current I_n A	For use with	3 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	4 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack
200	IZM20… 800 A ≦ I_u ≦ 2000 A	**IZM-RP203-200** 122995		**IZM-RP204-200** 123026		1 off
200	IZM20… 800 A ≦ I_u ≦ 2000 A	**+IZM-RP203-200** 122793		**+IZM-RP204-200** 122824		
250	IZM20… 800 A ≦ I_u ≦ 2000 A	**IZM-RP203-250** 122996		**IZM-RP204-250** 123027		
250	IZM20… 800 A ≦ I_u ≦ 2000 A	**+IZM-RP203-250** 122794		**+IZM-RP204-250** 122825		
300	IZM20… 800 A ≦ I_u ≦ 2000 A	**IZM-RP203-300** 122997		**IZM-RP204-300** 123028		
300	IZM20… 800 A ≦ I_u ≦ 2000 A	**+IZM-RP203-300** 122795		**+IZM-RP204-300** 122826		
400	IZM20… 800 A ≦ I_u ≦ 2000 A	**IZM-RP203-400** 122998		**IZM-RP204-400** 123029		
400	IZM20… 800 A ≦ I_u ≦ 2000 A	**+IZM-RP203-400** 122796		**+IZM-RP204-400** 122827		
630	IZM20… 800 A ≦ I_u ≦ 2000 A	**IZM-RP203-630** 122999		**IZM-RP204-630** 123030		
630	IZM20… 800 A ≦ I_u ≦ 2000 A	**+IZM-RP203-630** 122797		**+IZM-RP204-630** 122828		
800	IZM20… 800 A ≦ I_u ≦ 2000 A	**IZM-RP203-800** 123000		**IZM-RP204-800** 123031		
800	IZM20… 800 A ≦ I_u ≦ 2000 A	**+IZM-RP203-800** 122798		**+IZM-RP204-800** 122829		
1000	IZM20… 1000 A ≦ I_u ≦ 2000 A	**IZM-RP203-1000** 123001		**IZM-RP204-1000** 123032		
1000	IZM20… 1000 A ≦ I_u ≦ 2000 A	**+IZM-RP203-1000** 122799		**+IZM-RP204-1000** 122830		
1250	IZM20… 1250 A ≦ I_u ≦ 2000 A	**IZM-RP203-1250** 123002		**IZM-RP204-1250** 123033		
1250	IZM20… 1250 A ≦ I_u ≦ 2000 A	**+IZM-RP203-1250** 122800		**+IZM-RP204-1250** 122831		
1600	IZM20… 1600 A ≦ I_u ≦ 2000 A	**IZM-RP203-1600** 123003		**IZM-RP204-1600** 123034		
1600	IZM20… 1600 A ≦ I_u ≦ 2000 A	**+IZM-RP203-1600** 122801		**+IZM-RP204-1600** 122832		
2000	IZM20… 2000 A	**IZM-RP203-2000** 123004		**IZM-RP204-2000** 123035		
200	IZM32… 800 A ≦ I_u ≦ 3200 A	**IZM-RP323-200** 123005		**IZM-RP324-200** 123036		
200	IZM32… 800 A ≦ I_u ≦ 3200 A	**+IZM-RP323-200** 122803		**+IZM-RP324-200** 122834		
250	IZM32… 800 A ≦ I_u ≦ 3200 A	**IZM-RP323-250** 123006		**IZM-RP324-250** 123037		
250	IZM32… 800 A ≦ I_u ≦ 3200 A	**+IZM-RP323-250** 122804		**+IZM-RP324-250** 122835		
300	IZM32… 800 A ≦ I_u ≦ 3200 A	**IZM-RP323-300** 123007		**IZM-RP324-300** 123038		
300	IZM32… 800 A ≦ I_u ≦ 3200 A	**+IZM-RP323-300** 122805		**+IZM-RP324-300** 122836		
400	IZM32… 800 A ≦ I_u ≦ 3200 A	**IZM-RP323-400** 123008		**IZM-RP324-400** 123039		
400	IZM32… 800 A ≦ I_u ≦ 3200 A	**+IZM-RP323-400** 122806		**+IZM-RP324-400** 122837		
630	IZM32… 800 A ≦ I_u ≦ 3200 A	**IZM-RP323-630** 123009		**IZM-RP324-630** 123040		
630	IZM32… 800 A ≦ I_u ≦ 3200 A	**+IZM-RP323-630** 122807		**+IZM-RP324-630** 122838		
800	IZM32… 800 A ≦ I_u ≦ 3200 A	**IZM-RP323-800** 123010		**IZM-RP324-800** 123041		
800	IZM32… 800 A ≦ I_u ≦ 3200 A	**+IZM-RP323-800** 122808		**+IZM-RP324-800** 122839		

Rating plug sensor and current transformer

This combination is required when a circuit-breaker's rated operational current is to be reduced.

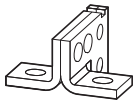
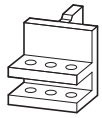
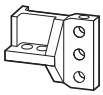
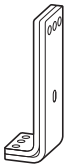
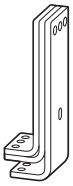




Rated operational current I_n A	For use with	3 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	4 pole **Part no.** Article no. **Part no. suffix "+IZM..."** Article no. for ordering with basic device	**Price** See price list	Std. pack
1000	IZM32… 1000 A ≦ I_u ≦ 3200 A	**IZM-RP323-1000** 123011		**IZM-RP324-1000** 123042		1 off
1000	IZM32… 1000 A ≦ I_u ≦ 3200 A	**+IZM-RP323-1000** 122809		**+IZM-RP324-1000** 122840		
1250	IZM32… 1250 A ≦ I_u ≦ 3200 A	**IZM-RP323-1250** 123012		**IZM-RP324-1250** 123043		
1250	IZM32… 1250 A ≦ I_u ≦ 3200 A	**+IZM-RP323-1250** 122810		**+IZM-RP324-1250** 122841		
1600	IZM32… 1600 A ≦ I_u ≦ 3200 A	**IZM-RP323-1600** 123013		**IZM-RP324-1600** 123044		
1600	IZM32… 1600 A ≦ I_u ≦ 3200 A	**+IZM-RP323-1600** 122811		**+IZM-RP324-1600** 122842		
2000	IZM32… 2000 A ≦ I_u ≦ 3200 A	**IZM-RP323-2000** 123014		**IZM-RP324-2000** 123045		
2000	IZM32… 2000 A ≦ I_u ≦ 3200 A	**+IZM-RP323-2000** 122812		**+IZM-RP324-2000** 122843		
2500	IZM32… 2500 A ≦ I_u ≦ 3200 A	**IZM-RP323-2500** 123015		**IZM-RP324-2500** 123046		
2500	IZM32… 2500 A ≦ I_u ≦ 3200 A	**+IZM-RP323-2500** 122813		**+IZM-RP324-2500** 122844		
3200	IZM32... 3200 A	**IZM-RP323-3200** 123016		**IZM-RP324-3200** 123047		
2000	IZM40… 2000 A ≦ I_u ≦ 4000 A	**IZM-RP403-2000** 123017		**IZM-RP404-2000** 123048		
2000	IZM40… 2000 A ≦ I_u ≦ 4000 A	**+IZM-RP403-2000** 122815		**+IZM-RP404-2000** 122846		
2500	IZM40… 2500 A ≦ I_u ≦ 4000 A	**IZM-RP403-2500** 123018		**IZM-RP404-2500** 123049		
2500	IZM40… 2500 A ≦ I_u ≦ 4000 A	**+IZM-RP403-2500** 122816		**+IZM-RP404-2500** 122847		
3200	IZM40… 3200 A ≦ I_u ≦ 4000 A	**IZM-RP403-3200** 123019		**IZM-RP404-3200** 123050		
3200	IZM40… 3200 A ≦ I_u ≦ 4000 A	**+IZM-RP403-3200** 122817		**+IZM-RP404-3200** 122848		
4000	IZM40… 4000 A	**IZM-RP403-4000** 122802		**IZM-RP404-4000** 122814		
2000	IZM63… 4000 A	**IZM-RP633-2000** 124244		**IZM-RP634-2000** 124321		
2000	IZM63… 4000 A	**+IZM-RP633-2000** 124319		**+IZM-RP634-2000** 124264		
2500	IZM63… 4000 A ≦ I_u ≦ 5000 A	**IZM-RP633-2500** 124320		**IZM-RP634-2500** 124211		
2500	IZM63… 4000 A ≦ I_u ≦ 5000 A	**+IZM-RP633-2500** 124209		**+IZM-RP634-2500** 124299		
3200	IZM63… 4000 A ≦ I_u ≦ 6300 A	**IZM-RP633-3200** 124210		**IZM-RP634-3200** 124322		
3200	IZM63… 4000 A ≦ I_u ≦ 6300 A	**+IZM-RP633-3200** 124374		**+IZM-RP634-3200** 124354		
4000	IZM63… 4000 A ≦ I_u ≦ 6300 A	**IZM-RP633-4000** 123023		**IZM-RP634-4000** 123054		
4000	IZM63… 4000 A ≦ I_u ≦ 6300 A	**+IZM-RP633-4000** 122821		**+IZM-RP634-4000** 122852		
5000	IZM63… 5000 A ≦ I_u ≦ 6300 A	**IZM-RP633-5000** 123024		**IZM-RP634-5000** 123055		
5000	IZM63… 5000 A ≦ I_u ≦ 6300 A	**+IZM-RP633-5000** 122822		**+IZM-RP634-5000** 122853		
6300	IZM63… 6300 A	**IZM-RP633-6300** 123025		**IZM-RP634-6300** 123056		

Rated operational current I_n A	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Current sensors for Neutral conductor				
For neutral conductor protection or comprehensive ground-fault protection of 3 pole circuit-breakers an external converter is required for current monitoring in the neutral conductor.				
200	IZM20... IZM32…	**IZM-CTN-200** 123057		1 off
250	IZM20... IZM32…	**IZM-CTN-250** 123058		
300	IZM20... IZM32…	**IZM-CTN-300** 123059		
400	IZM20... IZM32…	**IZM-CTN-400** 123060		
630	IZM20... IZM32…	**IZM-CTN-630** 123061		
800	IZM20... IZM32…	**IZM-CTN-800** 123062		
1000	IZM20... IZM32…	**IZM-CTN-1000** 123063		
1250	IZM20... IZM32…	**IZM-CTN-1250** 123064		
1600	IZM20... IZM32…	**IZM-CTN-1600** 123065		
2000	IZM20... IZM32…	**IZM-CTN-2000** 123066		
2500	IZM32…	**IZM-CTN-2500** 123067		
3200	IZM32…	**IZM-CTN-3200** 123068		
4000	IZM40... IZM63...	**IZM-CTN-4000** 123069		
5000	IZM63…	**IZM-CTN-5000** 123070		
6300	IZM63…	**IZM-CTN-6300** 123071		

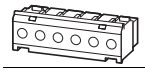
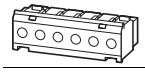
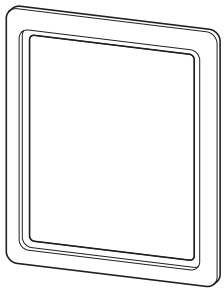


	Rated operational current I_n A	Rated ultimate short-circuit breaking capacity I_{cu} kA	Pole	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Main terminal kits							
Each basic device of the IZM26 series is supplied with horizontal connections as standard.[1]							
Vertical connections for fixed mounting or cassette							
	≦ 2000	≦ 65	3	IZM20… IN20…	**IZM-TV203N-2000** 123072		1 off
	4000	≦100	3	IZM40… IN40…	**IZM-TV403H-4000** 123081		
	≦ 2000	≦ 65	4	IZM20… IN20…	**IZM-TV204N-2000** 123086		
	4000	≦100	4	IZM40… IN40…	**IZM-TV404H-4000** 123095		
	≦ 1600	≦ 65	3	IZM32… IN32…	**IZM-TV323B-1600** 123074		
	≦ 2000	≦ 100	3	IZM32B…20 IN32B…20 IZM32H…, IN32H…	**IZM-TV323H-2000** 123075		
	2500 - 3200	100	3	IZM32… IN32…	**IZM-TV323H-3200** 123077		
	≦ 1600	≦ 65	4	IZM32… IN32…	**IZM-TV324B-1600** 123088		
	≦ 2000	≦ 100	4	IZM32B…20 IN32B…20 IZM32H…, IN32H…	**IZM-TV324H-2000** 123089		
	2500 - 3200	100	4	IZM32… IN32…	**IZM-TV324H-3200** 123091		
	4000	100	3	IZM63… IN63…	**IZM-TV633H-4000** 123082		
	5000 - 6300	100	3	IZM63… IN63…	**IZM-TV633H-6300** 123084		
	4000	100	4	IZM63… IN63…	**IZM-TV634H-4000** 123096		
	5000 - 6300	100	4	IZM63… IN63…	**IZM-TV634H-6300** 123098		
Front connections for fixed mounting or cassette							
	≦ 1250	≦ 65	3	IZM20… IN20…	**IZM-TF203N-1250** 123100		1 off
	≦ 1250	≦ 65	4	IZM20… IN20…	**IZM-TF204N-1250** 123108		
	1600 - 2000	≦ 65	3	IZM20… IN20…	**IZM-TF203N-2000** 123102		
	4000	≦100	3	IZM40… IN40… IZM63N(H)3...40[2]	**IZM-TF403H-4000** 123107		
	≦ 2000	≦ 65	4	IZM20… IN20…	**IZM-TF204N-2000** 123110		
	4000	≦100	4	IZM40… IN40… IZM63N(H)4...40[2]	**IZM-TF404H-4000** 123115		
	≦ 1250	≦ 65	3	IZM32B… IN32B…	**IZM-TF323B-1250** 124225		
	1600 - 2500	≦ 65	3	IZM32B… IN32B…	**IZM-TF323B-2500** 123104		
	≦ 3200	≦ 100	3	IZM32B…32... IN32B…32… IZM32N…, IN32N… IZM32H…, IN32H… IZM63N(H)3...50 (63)[2]	**IZM-TF323H-3200** 123105		
	≦ 1250	≦ 65	4	IZM32B… IN32B…	**IZM-TF324B-1250** 124280		
	≦ 2500	≦ 65	4	IZM32B… IN32B…	**IZM-TF324B-2500** 123112		
	≦ 3200	≦ 100	4	IZM32B…32... IN32B…32… IZM32N…, IN32N… IZM32H…, IN32H… IZM63N(H)4...50 (63)[2]	**IZM-TF324H-3200** 123113		

Notes

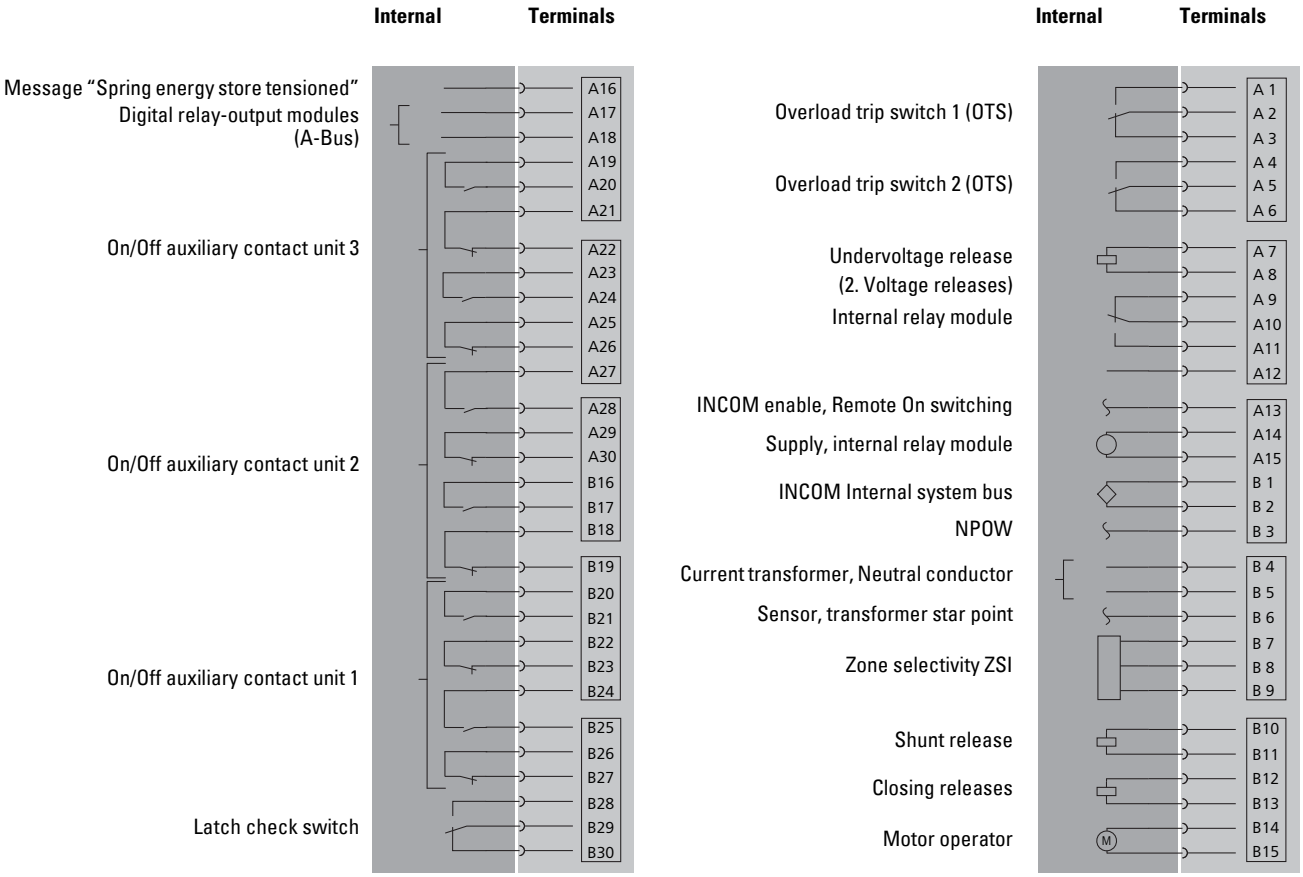
[1] For 3 pole switches: 6 off; for 4 pole switches: 8 off.
IZM40: For 3 pole switches: 12 off, for 4 pole switches: 16 off

[2] For use with this type, you must order the corresponding article twice.

	Rated control voltage U_s V	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
General accessories					
Control circuit terminal, 2 blocks Two terminal blocks, each for six control circuit terminals, complete with labels; AMP tool (AMP No. 305183) and internal wiring.					
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-SEC-TB2** 123116		1 off
Control circuit terminal, 15 blocks 15 terminal blocks, each for six control circuit terminals, with labels. Order wiring set separately.					
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-SEC-TB15** 123117		1 off
Wiring set for control circuit terminals Wiring material (built into switch), 90 wires for 15 terminal blocks.					
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-SEC-WR90** 122789		1 off
Spare door escutcheon, IP41 Spare part; the door escutcheon is supplied as standard with the basic unit or cassette.					
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-DEG** 122925		1 off
Protective cover, IP55					
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-DC** 122926		1 off
Lifting yoke for lifting Consists of two specially shaped steel hooks that engage in the molded lifting handles in the basic unit of the switch closure.					
	3	IZM20… IN20…	**IZM203-8651C91G09** 124237		1 off
	3	IZM32… IN32…	**IZM323-8651C91G02** 124239		
	3	IZM40… IN40…	**IZM403-2A10886G03** 124241		
	3	IZM63… IN63…	**IZM633-8651C91G05** 124243		
	4	IZM20… IN20…	**IZM204-8651C91G10** 124238		
	4	IZM32… IN32…	**IZM324-8651C91G07** 124240		
	4	IZM40… IN40…	**IZM404-2A10886G07** 124242		
	4	IZM63… IN63…	**IZM634-8651C91G08** 124245		
Trolley Allows lifting of the switch basic unit in combination with the lifting yoke.					
	–	IZM20, 32, 40, 63... IN20, 32, 40, 63...	**IZM-6727D63H20** 124246		1 off

Terminal assignment of control circuit terminals, Switch states.

IZM26

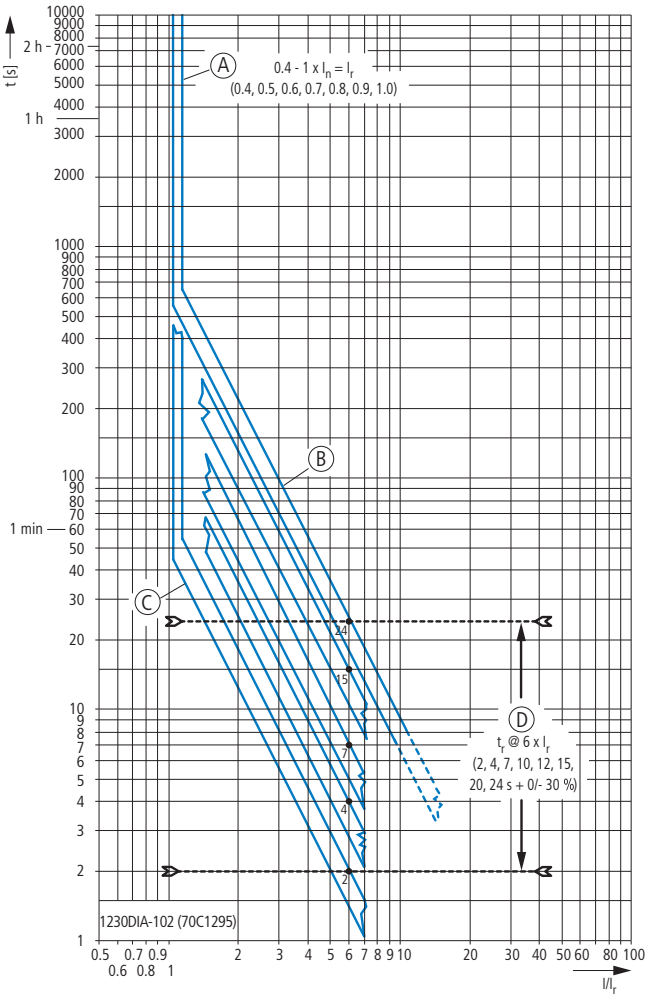


Switching states at mechanical interlock

Mechanical interlock	Possible switching states		
	Switch A	Switch B	
Part no. 2	0	0	
	1	0	
	0	1	
Part no. 31	Switch A	Switch B	Switch C
	0	0	0
	1	0	0
	0	1	0
	0	0	1
	1	0	1
Part no. 32	Switch A	Switch B	Switch C
	0	0	0
	1	0	0
	0	1	0
	0	0	1
	1	1	0
	0	1	1
	1	0	1
Part no. 33	Switch A	Switch B	Switch C
	0	0	0
	1	0	0
	0	1	0
	0	0	1

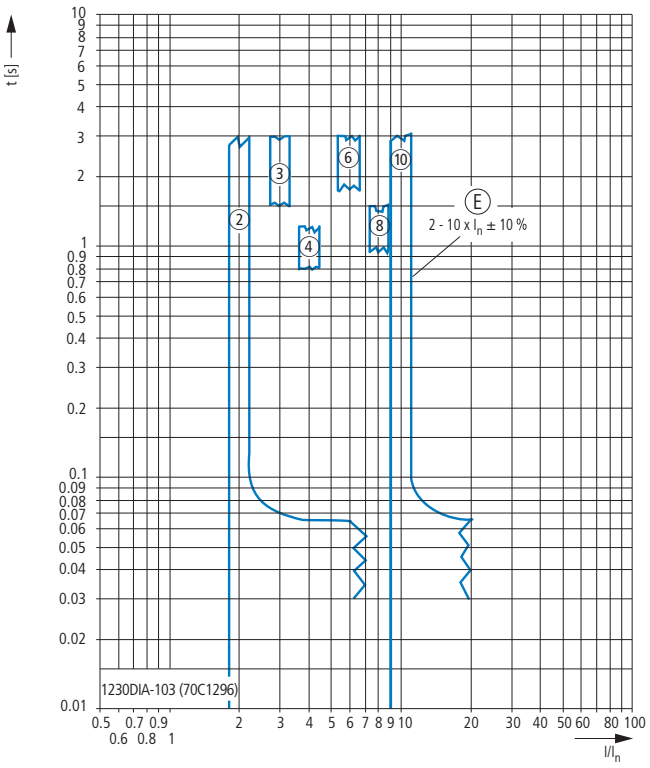
IZM26…A...Tripping characteristics for selective protection
Overload protection (L) and non-delayed short-circuit protection (I)

L-Protection: Adjustable
See Notes 1, 2, 3.



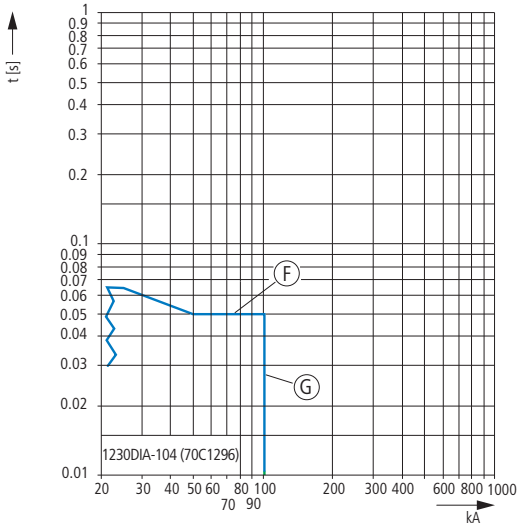
A Set values for overload protection
B Maximum total opening delay
C Minimum total opening delay
D Set values for long delay

I-protection: Adjustable
See Notes 3, 4, 5, 6, 7.



E Set values for short-time delayed short-circuit protection

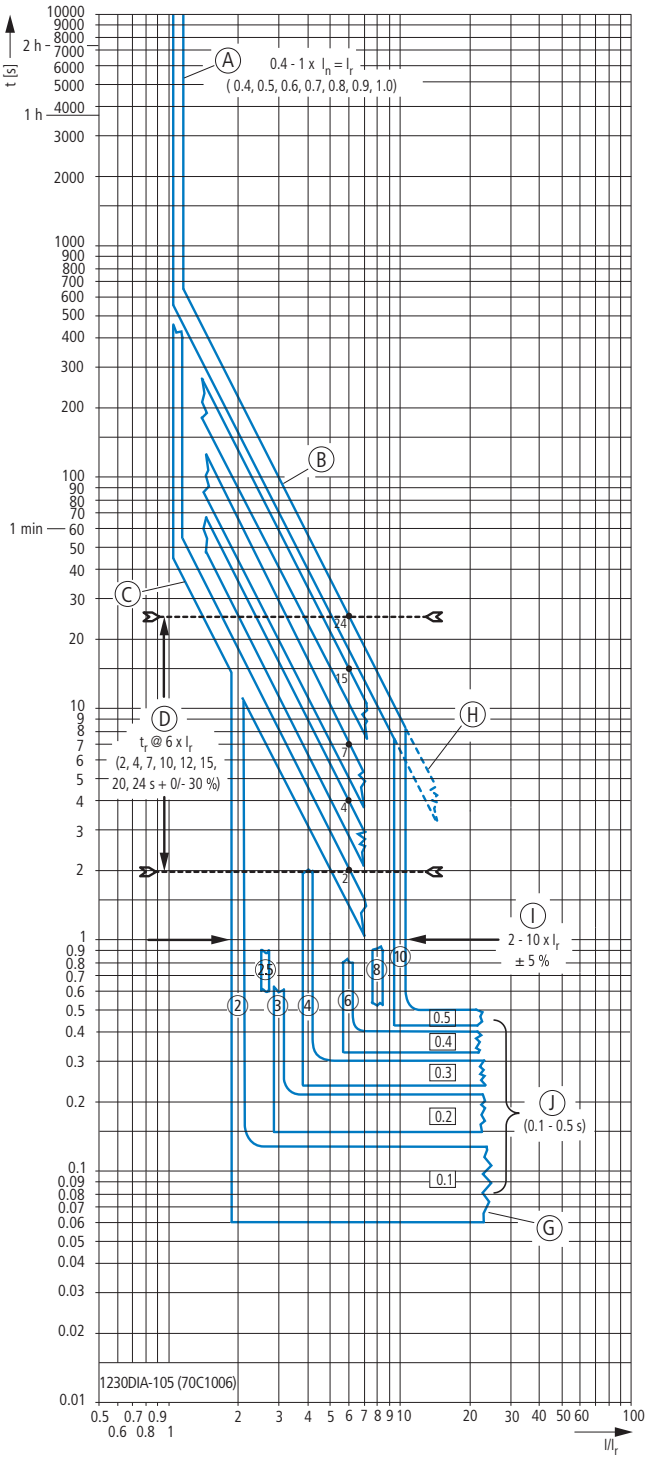
I-protection: For high short-circuit currents
See Notes 3, 4, 5, 6, 7.



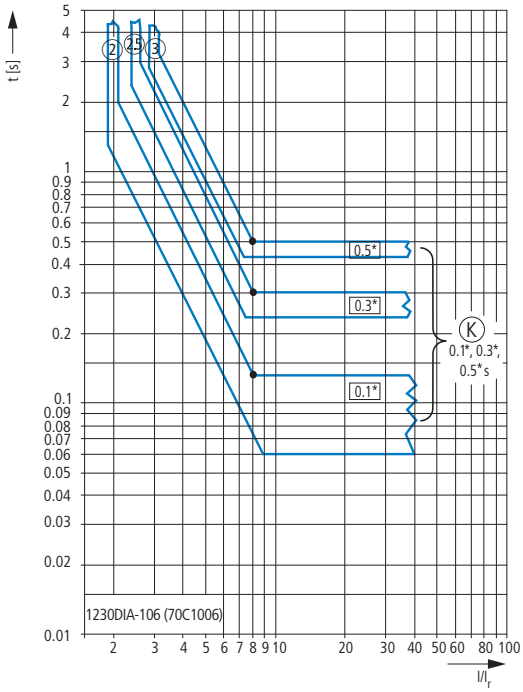
F Set values for short-time delayed short-circuit protection with flat characteristic curve
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

IZM26…V(U)... Tripping characteristics for selectivity protection and universal protection
Overload protection (L) and short-time delayed short-circuit protection (S)

L-Protection: I^2t characteristic curve and S protection: flat characteristic curve
See Notes 1, 3, 4, 6, 7, 8, 9, 10.



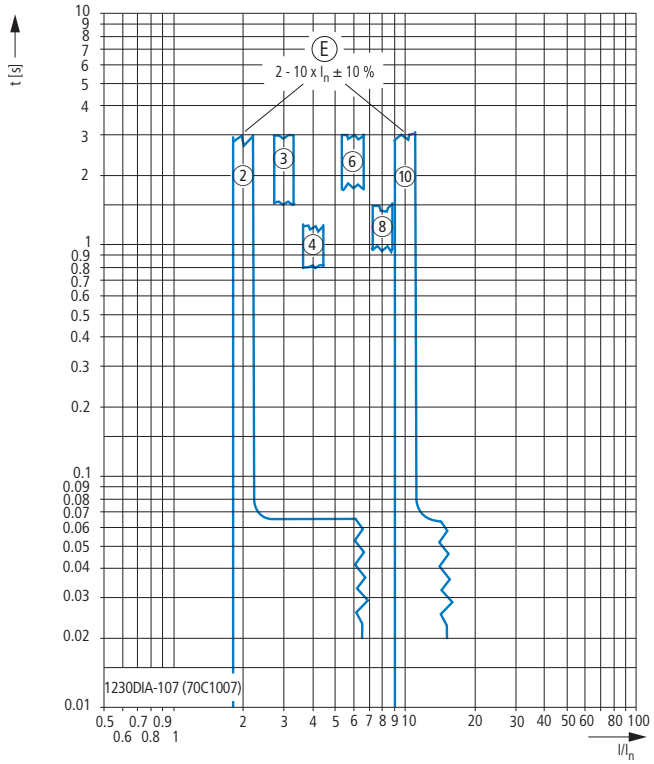
S protection: I^2t characteristic curve
See Notes 1, 3, 4, 6, 7, 8, 9, 10.



A Set values for overload protection
B Maximum total opening delay
C Minimum total opening delay
D Set values for long delay
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.
H The characteristic curve for the overload release can extend up to the M1 set value.
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
K Set values for ground fault protection

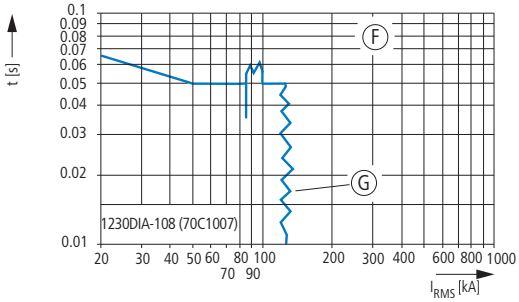
IZM26…V(U)... Tripping characteristics for selectivity protection and universal protection
Non-delayed short-circuit protection (I)

I-protection: Adjustable
See Notes 4, 5, 6, 7, 11, 12.



E Set values for short-time delayed short-circuit protection

I-protection: For high short-circuit currents
See Notes 4, 5, 6, 7, 11, 12.

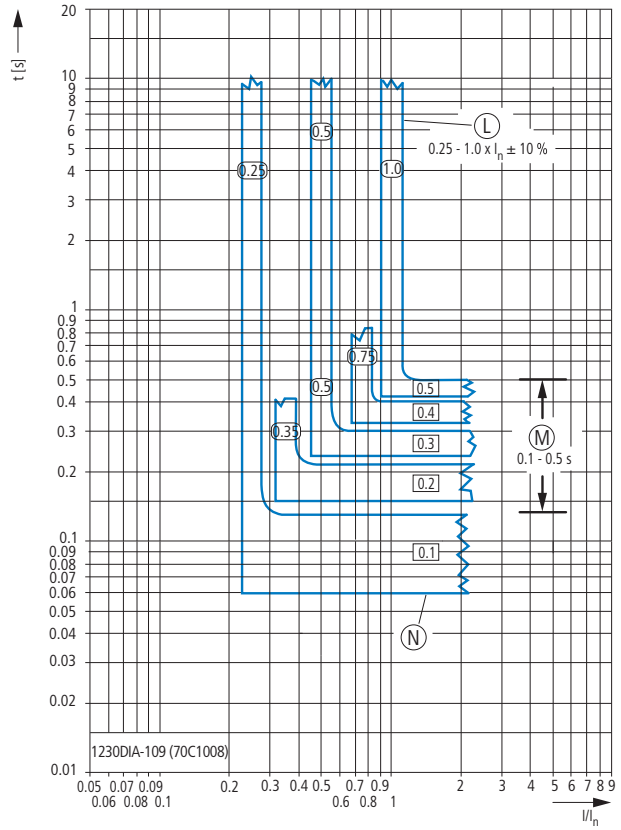


F Set values for short-time delayed short-circuit protection with flat characteristic curve

G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

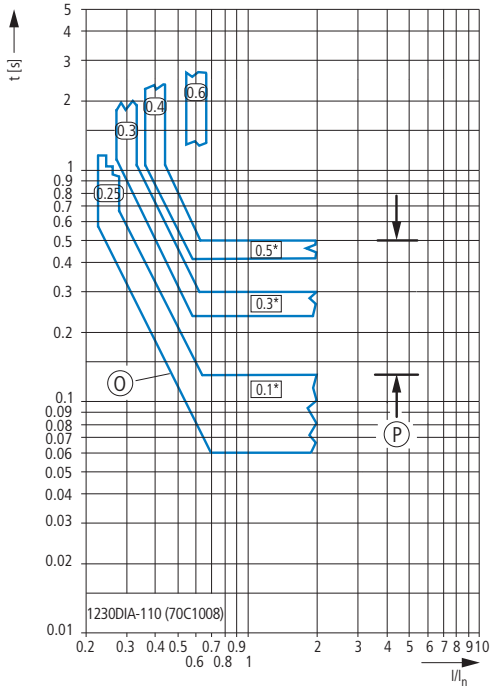
IZM26…V(U)... Option ground-fault protection +IZM-DTV(U)-E…

G: Ground fault protection, flat characteristic curve
See Notes 4, 6, 13, 14, 15, 16, 17.



L Set values for ground-fault protection
M Set values for ground-fault protection delay at flat characteristic curve
N Flat characteristic curve for the delay time fault protection

G: Ground fault protection, I^2t-Characteristic curve
See Notes 4, 6, 13, 14, 15, 16, 17.

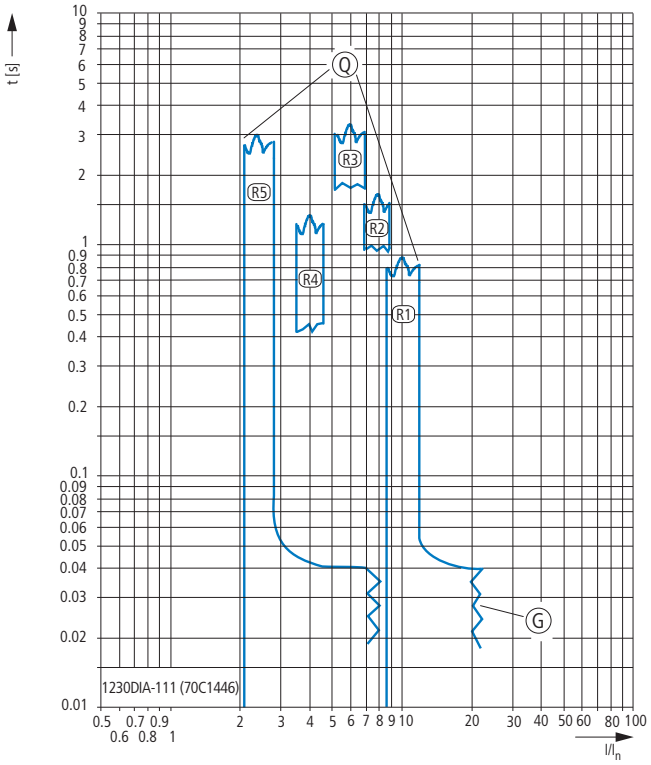


O I^2t characteristic for ground-fault protection delay time

P Set values for ground-fault protection delay with I^2t characteristic

IZM26…U... Option Maintenance mode option +IZM-DTU-ARMS

ARMS-maintenance mode
See Notes 4, 6, 12, 18, 19, 20, 21.



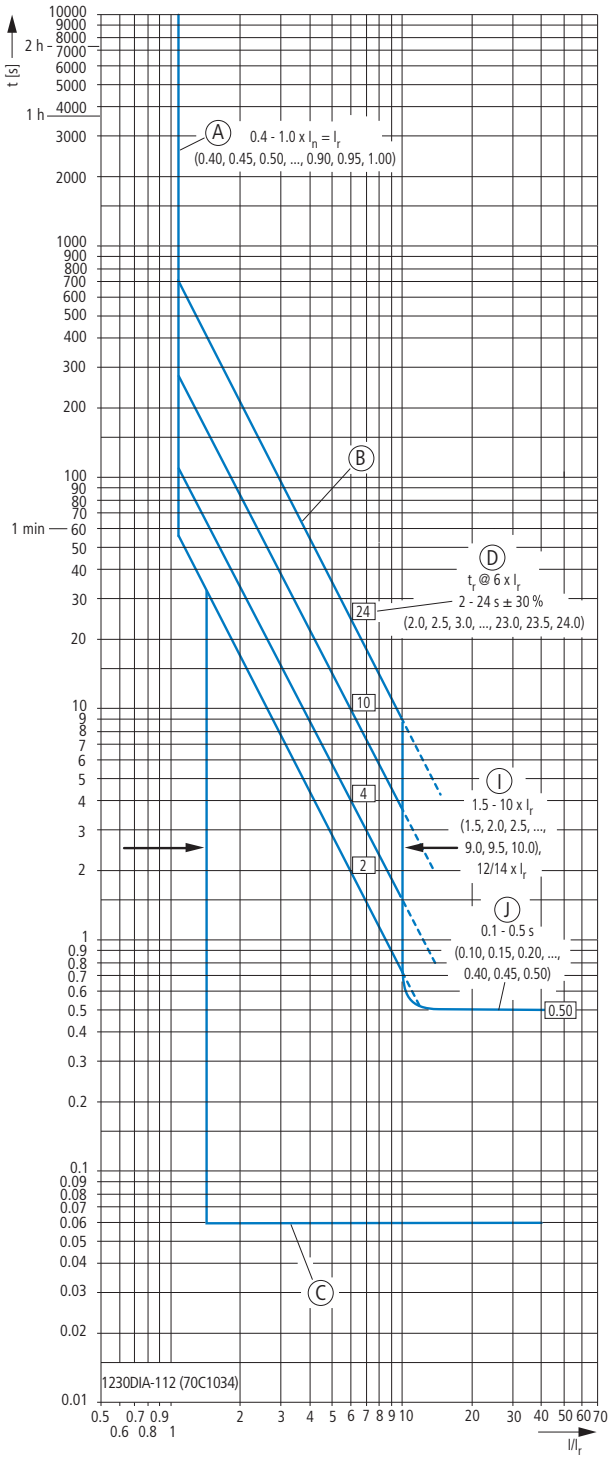
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

Q Set values for maintenance mode (ARMS):
R5 = max. reduction,
R1 = min. reduction

IZM26...P...

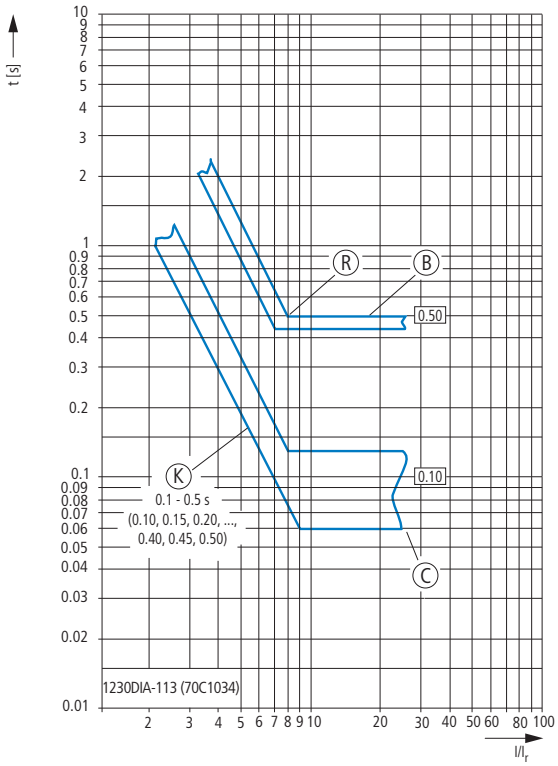
IZM26…P... Tripping characteristics for universal protection with power measurement
Overload protection (L) and short-time delayed short-circuit protection (S)

L-Protection: I^2t characteristic curve and S protection: flat characteristic curve
See Notes 1, 3, 7, 9, 22, 23, 24, 25, 26.



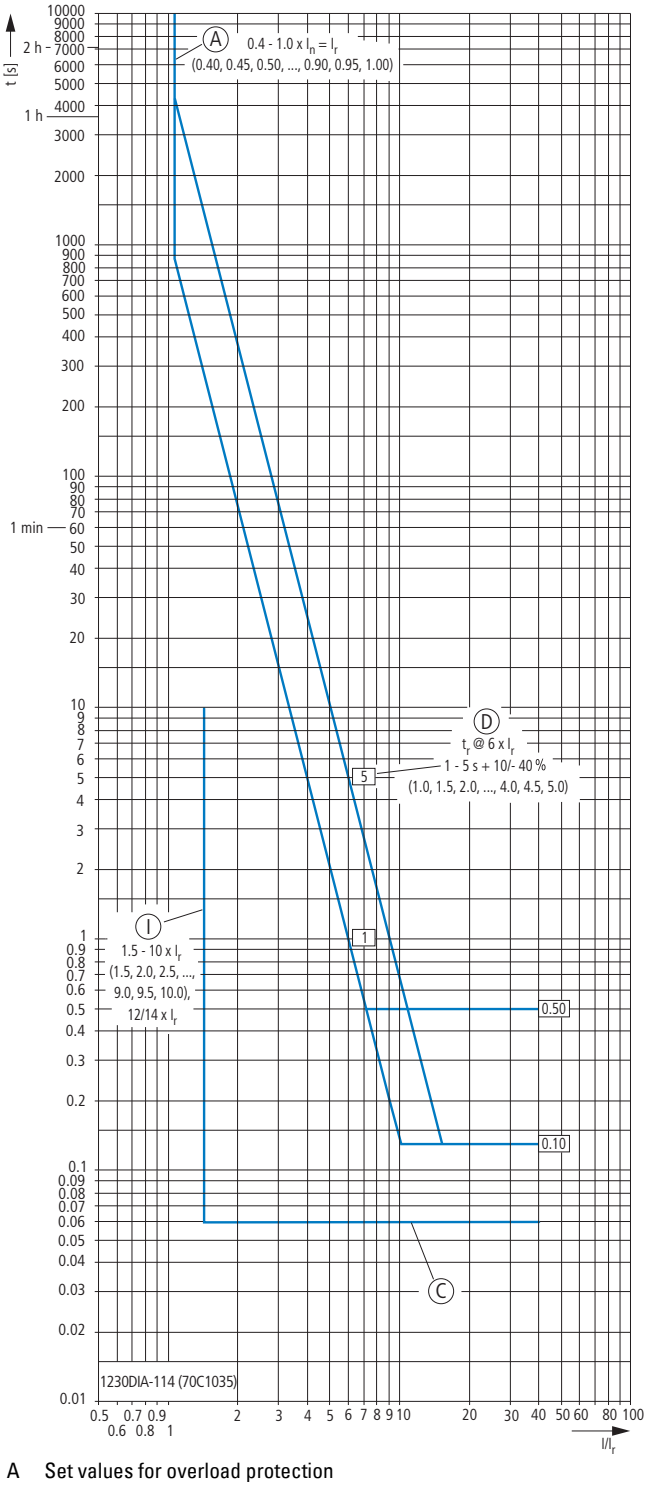
A Set values for overload protection
B Maximum total opening delay
C Minimum total opening delay
D Set values for long delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents

S protection: I^2t characteristic curve
See Notes 1, 3, 7, 9, 22, 23, 24, 25, 26.



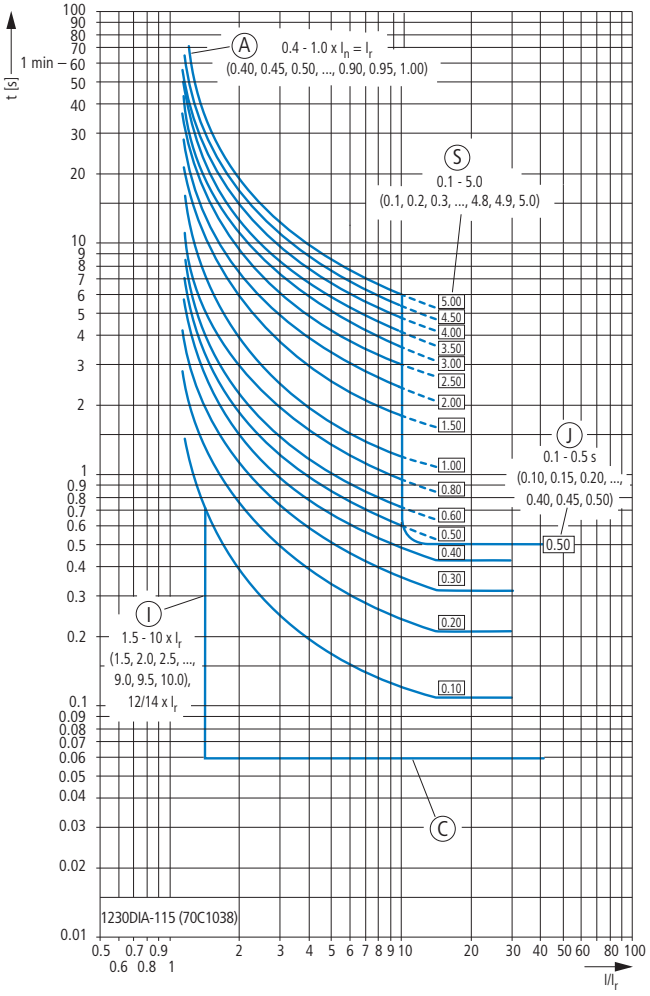
B Maximum total opening delay
C Minimum total opening delay
K Set values for ground fault protection
R Characteristic curve turning point

L protection: I^4t characteristic curve and S protection: flat characteristic curve
See Notes 1, 3, 7, 9, 22, 23, 24, 25, 27.



A Set values for overload protection
C Minimum total opening delay
D Set values for long delay
I Available set values for short-time delayed short-circuit protection I_{sd}

L protection: IEEE standard inverse tripping, and S protection: flat characteristic curve
See Notes 3, 7, 8, 9, 23, 25, 28, 29.

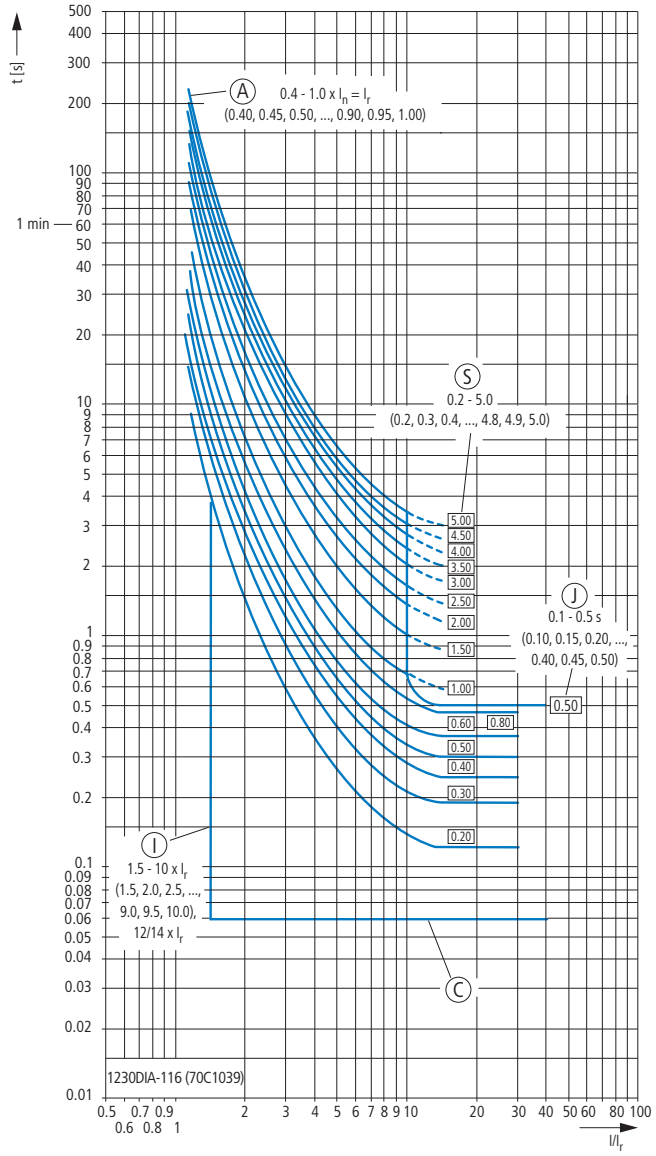


A Set values for overload protection
C Minimum total opening delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
S Long delay time at 14 × I_r

IZM26 tripping characteristics

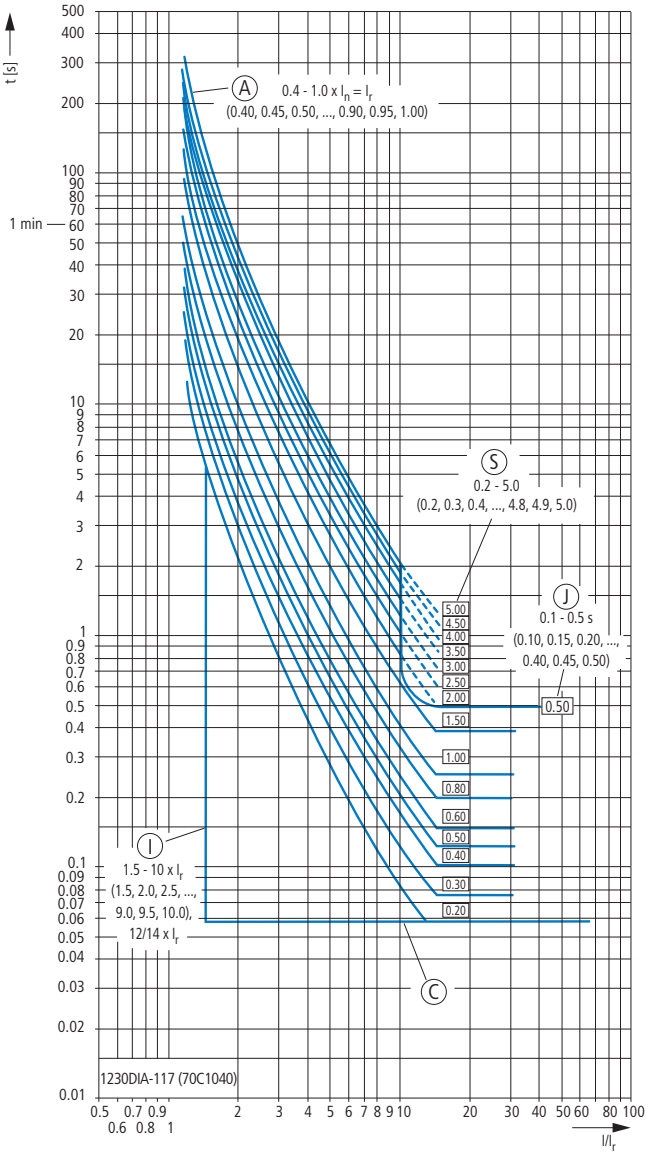
IZM26…(P)…

L protection: IEEE high inverse tripping, and S protection: flat characteristic curve
See Notes 3, 7, 8, 9, 23, 25, 28, 29.



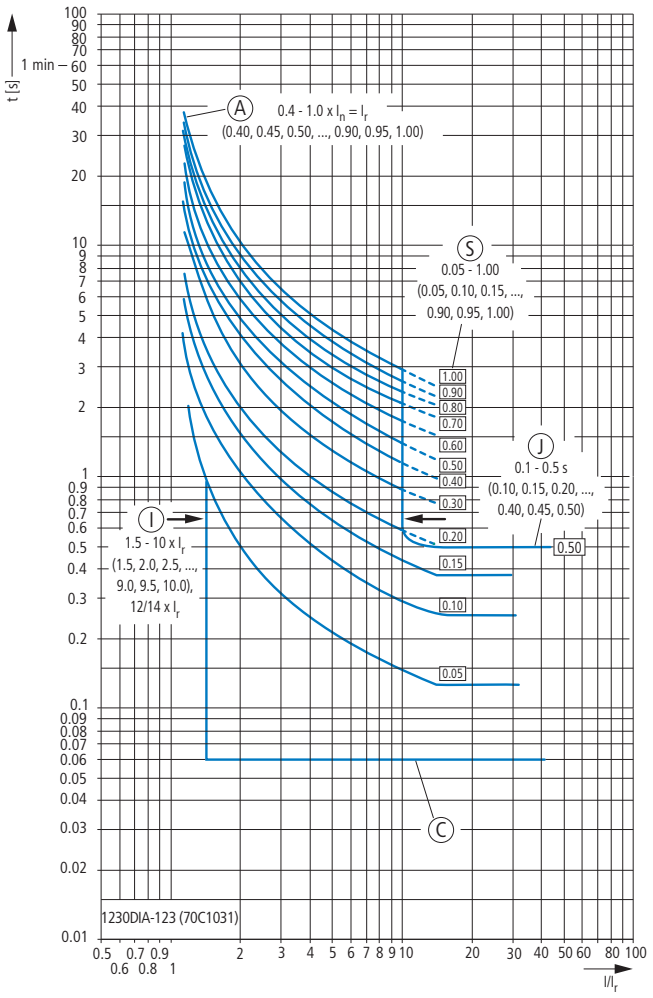
A Set values for overload protection
C Minimum total opening delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
S Long delay time at 14 × I_r

L protection: IEEE extreme inverse tripping, and S protection: flat characteristic curve
See Notes 3, 7, 8, 9, 23, 25, 28, 29.



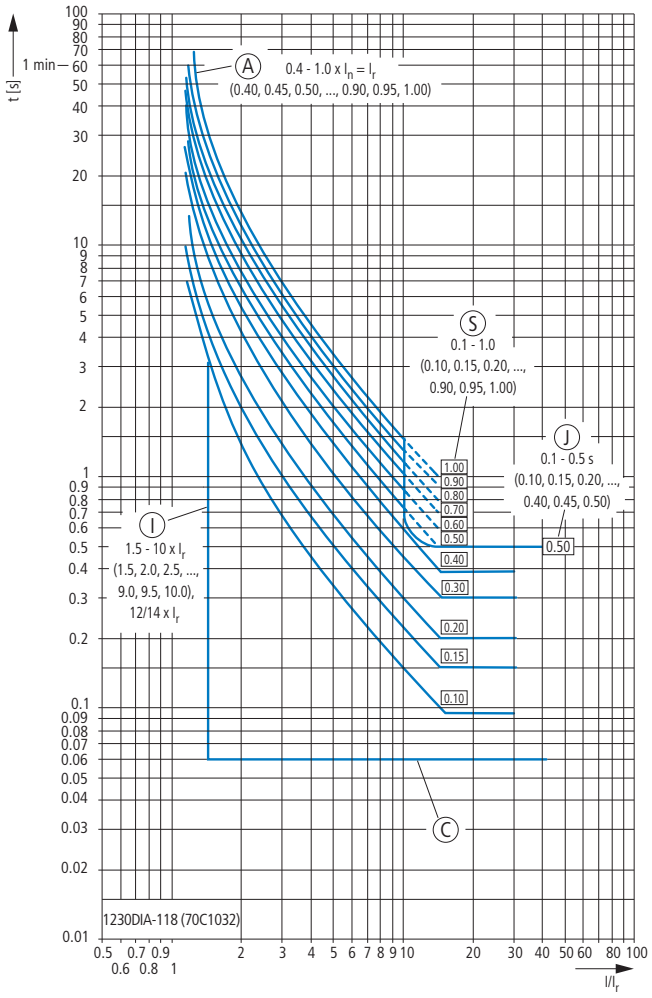
A Set values for overload protection
C Minimum total opening delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
S Long delay time at 14 × I_r

L protection: IEC-A standard inverse tripping, and S protection: flat characteristic curve
See Notes 3, 7, 8, 9, 23, 25, 28, 29.



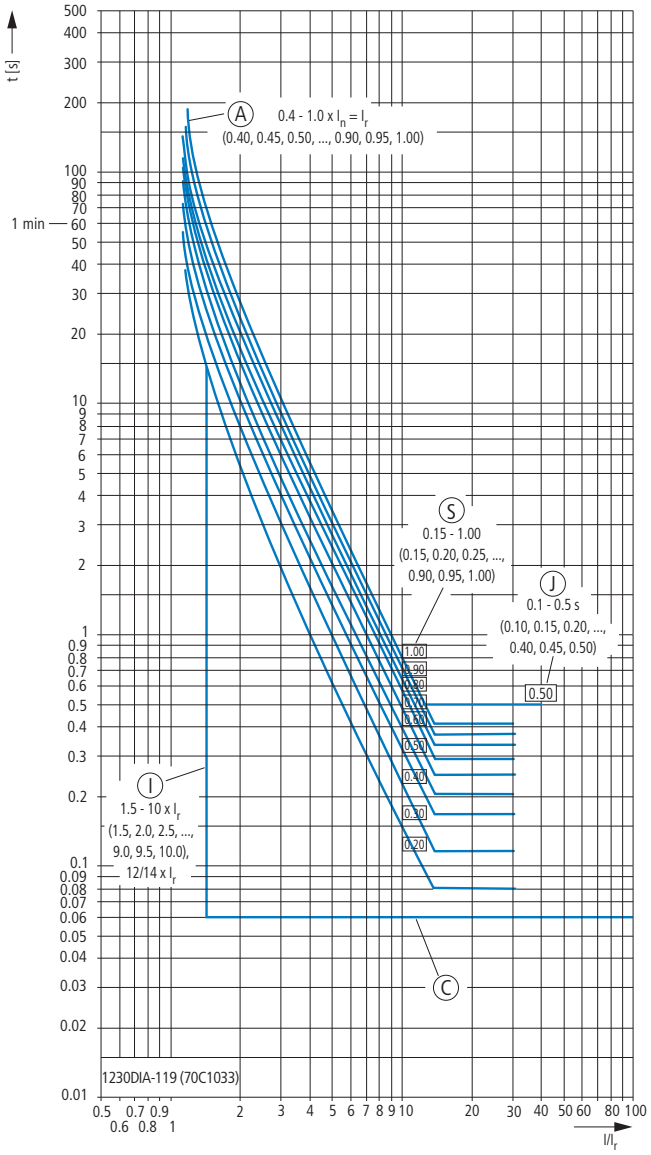
A Set values for overload protection
C Minimum total opening delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
S Long delay time at 14 × I_r

L protection: IEC-B high inverse tripping, and S protection: flat characteristic curve
See Notes 3, 7, 8, 9, 23, 25, 28, 29.



A Set values for overload protection
C Minimum total opening delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
S Long delay time at 14 × I_r

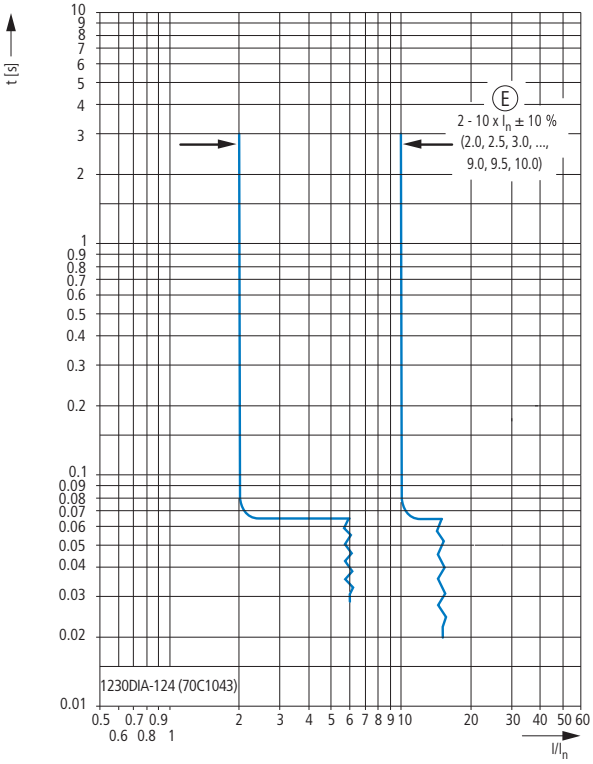
L protection: IEC-C extreme inverse tripping, and S protection: flat characteristic curve
See Notes 3, 7, 8, 9, 23, 25, 28, 29.



A Set values for overload protection
C Minimum total opening delay
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
S Long delay time at 14 × I_r

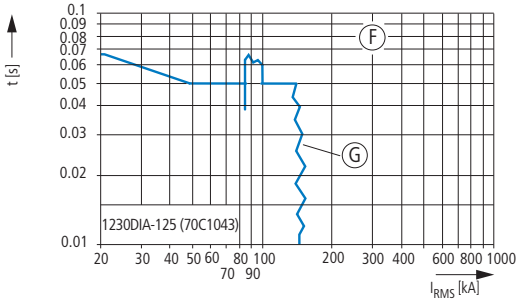
IZM26…P... Tripping characteristics for trip units with power measurement
Non-delayed short-circuit protection (I)

I-protection: Adjustable
See Notes 1, 4, 5, 6, 7, 11, 12.



E Set values for short-time delayed short-circuit protection

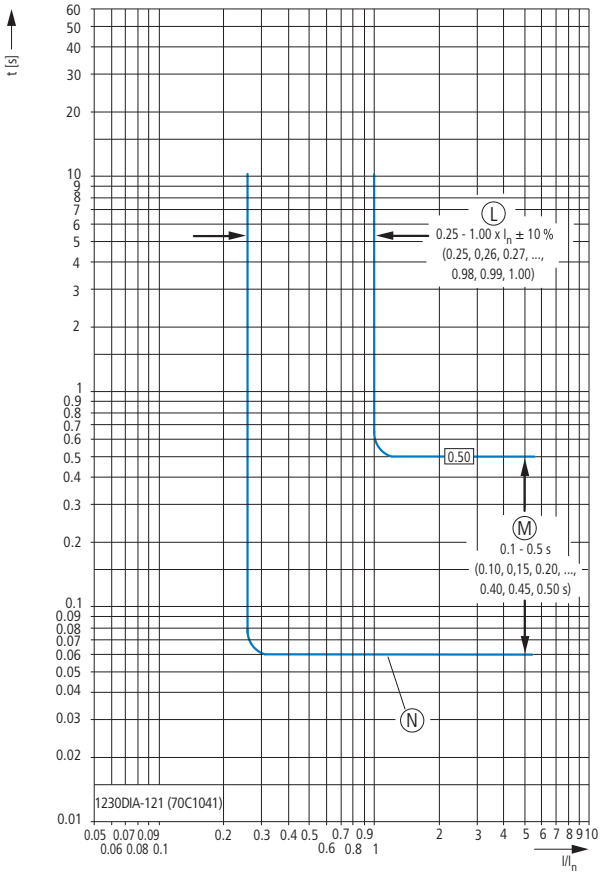
I-protection: For high short-circuit currents



F Set values for short-time delayed short-circuit protection with flat characteristic curve
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.

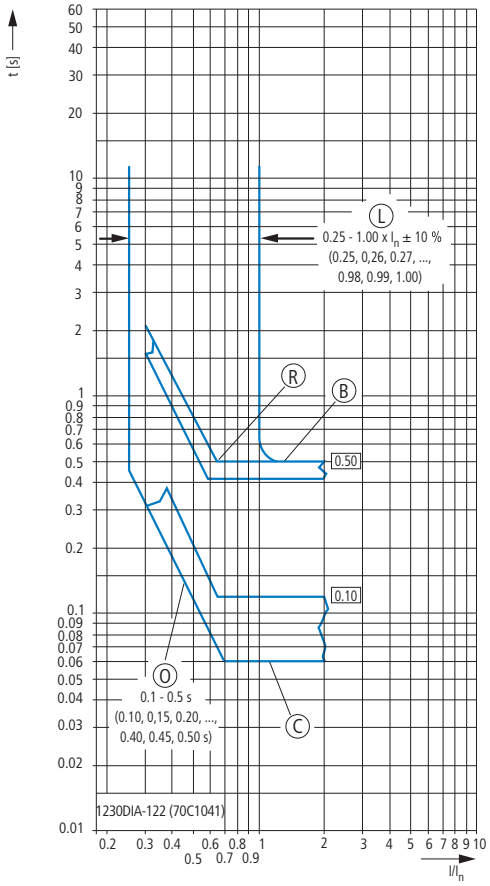
IZM26…P... Option Ground fault protection +IZM-DTP-E…

G: Ground fault protection, flat characteristic curve
See Notes 4, 6, 13, 14, 15, 16, 25, 26, 30.



L Set values for ground-fault protection
M Set values for ground-fault protection delay at flat characteristic curve
N Flat characteristic curve for the delay time fault protection

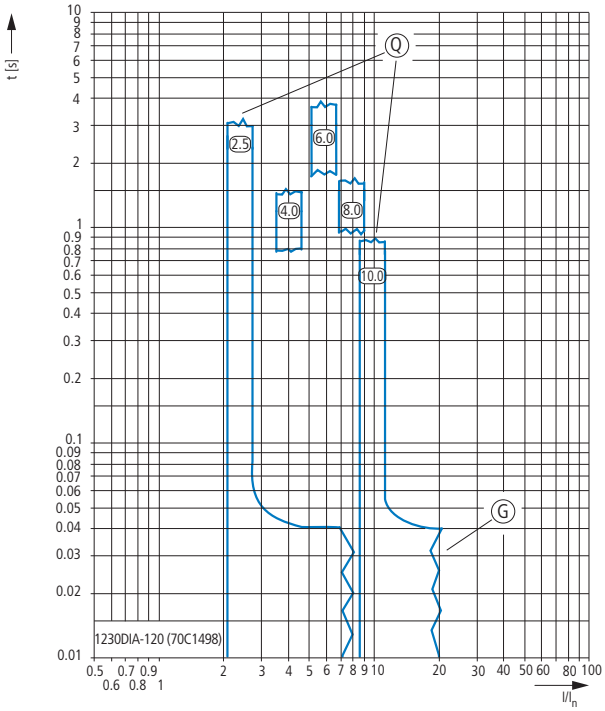
G: Ground fault protection, I²t-characteristic curve
See Notes 4, 6, 13, 14, 15, 16, 25, 26, 30.



B Maximum total opening delay
C Minimum total opening delay
L Set values for ground-fault protection
O I²t characteristic for ground-fault protection delay time
R Characteristic curve turning point

IZM26…P... Option Maintenance mode option +IZM-DTP-ARMS

ARMS-maintenance mode
See Notes 4, 6, 12, 18, 19, 20, 21.



G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.
Q Set values for maintenance mode (ARMS):
R5 = max. reduction, R1 = min. reduction

IZM26 tripping characteristics

IZM26...A(V)(U)(P)...

1 The trip unit has a thermal memory, which can shorten the tripping time in the overload range.

This function plays a role whenever a current is higher than the overload release's tripping time and which is then isolated by a downstream circuit-breaker or the circuit-breaker itself. On a subsequent overload current the circuit-breaker will trip more quickly than normal.

The reduced tripping time is inversely proportional to the time expired since the last overload. After about five minutes the thermal memory is reset.

2 The overload release is activated at a pick-up time of 110 % I_r with a tolerance of ±5 % (indicated by the lit "Unit Status" LED).

3 The characteristic curves apply to applications in a temperature range from -20 °C to +55 °C. Temperatures over +85 °C cause automatic tripping. The circuit-breaker must be selected according to the temperature-dependent derating values from the table in the technical data.

4 The end of the characteristic curve is determined by the type of application and the switching capacity of the selected circuit-breaker.

5 The non-delayed short-circuit release is activated at a response value of conventionally 100 % with a tolerance of ±10 %.

6 The listed overall switch-off times include the response times of the trip unit, the opening times of the switch and the time required to switch off the current.

7 Additional setting "max M1":

IZM20
M1 = 14 × I_n for nominal currents of 200 A to 1250 A
M1 = 12 × I_n for nominal currents of 1600 A to 2000 A

IZM32
M1 = 14 × I_n for nominal currents of 200 A to 1250 A
M1 = 12 × I_n for nominal currents of 1600 A to 2500 A
M1 = 10 × I_n for nominal currents of 3200 A

IZM40
M1 = 12 × I_n for nominal currents of 4000 A

IZM63
M1 = 14 × I_n for nominal currents of 2000 A to 2500 A
M1 = 12 × I_n for nominal currents of 3200 A to 5000 A
M1 = 10 × I_n for nominal currents of 6300 A

8 The overload release trips at 110 % I_r with a tolerance of ±5 % (indicated by the "Unit Status" LED).

The short-time delayed short-circuit release I_{sd} is activated at a pick-up time of conventionally 100 % with a tolerance of ±5 %.

9 When zone selectivity (ZSI) is activated in the short-time delayed short-circuit release and no blocking signal is applied, the minimum time value (0.10 s) applies irrespective of the short-time delay settings.

10 The upper lines of the I^2t characteristic curves are horizontal from a value of 8 × I_r (indicated by the points).

11 IZM circuit-breakers32 feature an additional, permanently set non-delayed short-circuit release, which is set to a peak value of 170 kA with a tolerance of ±10 %.

This protective function remains active when the non-delayed short-circuit release is switched off.

12 The listed overall switch-off times are conservative and take into account the trip unit's maximum response times, the circuit-breaker's maximum opening delays and the longest current interruption times with regard to factors that contribute to worst-case conditions, such as maximum rated operational voltage, single-phase interruptions and minimum power factor.

Fast disconnecting times are possible but depend on the system conditions and the circuit-breaker model.

13 The ground-fault release is activated at a response value of conventionally 100 % with a tolerance of ±10 %.

14 Unless otherwise specified, the current value tolerances are ±10 % of the values shown in the diagram.

15 In combination with ARMS function, ground-fault protection is limited to 1200 A.

16 When zone selectivity (ZSI) is activated in ground-fault protection and no blocking signal is applied, the minimum time value (flat characteristic curve) applies irrespective of the settings.

17 The upper lines of the I^2t characteristic curves are horizontal from a value of 0.625 × I_n (indicated by the points).

18 The maintenance mode function must be activated with a switch or through the communications terminals for these characteristic curves to apply. A blue LED indicates that the maintenance mode settings are active.

19 The shown switch-off times apply for connection to an additional auxiliary power supply.

20 Tripping by the Maintenance Mode Trip is indicated by the non-delayed short-circuit protection LED.

21 The nominal reduction values (response values), with a tolerance of ±15 % are:
2.5 x I_n (= R5), 4 x I_n (= R4), 6 x I_n (= R3), 8 x I_n (= R2), 10 x I_n (= R1)

22 This characteristic curve is shown as a multiple of the overload release setting I_r. The overload release trips at 110 % Ir with a tolerance of ±5 % (indicated by the "Unit Status" LED).

23 The delayed short-circuit release I_{sd} also has an "M1" setting, which may increase the response threshold when I_{sd} is active (at the curves' point of overlap).

24 The delayed short-circuit release I_{sd} trips at 100 %, with a tolerance of ±5 %.

25 Delay tolerances in the area of the flat characteristic curve:
The tolerance is +0/-80 ms of the set values, with the following exceptions:
At 100 ms the tolerance is 6 to 13 ms
At 150 ms the tolerance is 10 to 17 ms
At 200 ms the tolerance is 15 to 22 ms

26 I^2t-function
The upper lines of the I^2t characteristic curves are horizontal from a value of 8 × I_r (for ground-fault protection 0.625 × I_n), the lower limit value of the band following the line.

The characteristic curve has a tolerance of +0/-30 % for all settings except the following ones:
For 0.10 s +30 %/-25 %
For 0.15 s +20 %/-25 %
For 0.20 s +10 %/-25 %

For all characteristic curves the lower, minimum time value, which merges with the I^2t line, determines the break point and the shape of the upper characteristic curve.

27 In the time range ≦ 0.5 s the I^4t characteristic curve becomes horizontal. Tripping does not take place faster than the set short-time delay t_{sd}. (In the drawing a displacement of the characteristic curve is avoided.)

28 This characteristic curve is shown as a multiple of the overload release setting I_r.

This so-called "E-/IEC-... inverse" characteristic curve results from the time setting "TimeDial" in combination with the delayed short-circuit release I_{sd} and the delay t_{sd} (shown as thick lines). The non-delayed short-circuit release I_i, shown as a separate characteristic curve, can be disabled (Off position).

29 For each current > 1.2 × I_r the tolerance is [±15 %] or [-15 %, +90 ms], whichever is greater.

This characteristic curve flattens out for smaller time settings ("TimeDial": 0.1 to 0.4) at 14 × I_r and, if the curves overlap, merges with the characteristic curve for short-term delay I_{sd} for larger time settings ("TimeDial": 0.5 to 1.0).

The delay of the short-circuit release and the "TimeDial" time setting are applied independently of each other. The IEC-B (very inverse) characteristic curve always remains active, even when the lines cross over.

30 With Digitrip 1150 trip unit without ARMS function the ground-fault protection settings already begin at 0.1 × I_n.

A Set values for overload protection I_r
B Maximum total opening delay
C Minimum total opening delay
D Set value for long delay t_r
E Set value non-delayed short-circuit protection I_i
F Set values for short-time delayed short-circuit protection with flat characteristic curve
G The end of the characteristic curve is determined by the type of application and the switching capacity of the selected switch.
H Setting values for short time delay with i2t characteristic.
I Available set values for short-time delayed short-circuit protection I_{sd}
J Short-circuit release for very high currents
KP Set values for short-time delay at I^2t characteristic
L Set values for ground fault protection
M Set values for ground-fault protection delay at flat characteristic curve
N Flat characteristic curve for the deceleration time Ground fault protection
O I^2t characteristic for ground-fault protection delay time
P Set values for ground-fault protection delay with I^2t characteristic
q Set values for maintenance mode (ARMS):
R5 = max. reduction,
R1 = min. reduction
R Characteristic curve turning point
S Long delay time with 14 x I_r

Rating-Plug-Combinations for IZM20…

Rating plugs (plus types, 3 pole)

I_u [A]	800	1000	1250	1600	2000
I_n [A]					
200	+IZM-RP203-200				
250	+IZM-RP203-250				
300	+IZM-RP203-300				
400	+IZM-RP203-400				
630	+IZM-RP203-630				
800	Standard	+IZM-RP203-800			
1000		Standard	+IZM-RP203-1000		
1250			Standard	+IZM-RP203-1250	
1600				Standard	+IZM-RP203-1600
2000					Standard

Rating plugs (plus types, 4 pole)

I_u [A]	800	1000	1250	1600	2000
I_n [A]					
200	+IZM-RP204-200				
250	+IZM-RP204-250				
300	+IZM-RP204-300				
400	+IZM-RP204-400				
630	+IZM-RP204-630				
800	Standard	+IZM-RP204-800			
1000		Standard	+IZM-RP204-1000		
1250			Standard	+IZM-RP204-1250	
1600				Standard	+IZM-RP204-1600
2000					Standard

Rating-Plug-Combinations for IZM32…

Rating plugs (plus types, 3 pole)

I_u [A]	800	1000	1250	1600	2000	2500	3200
I_n [A]							
200	+IZM-RP323-200						
250	+IZM-RP323-250						
300	+IZM-RP323-300						
400	+IZM-RP323-400						
630	+IZM-RP323-630						
800	Standard	+IZM-RP323-800					
1000		Standard	+IZM-RP323-1000				
1250			Standard	+IZM-RP323-1250			
1600				Standard	+IZM-RP323-1600		
2000					Standard	+IZM-RP323-2000	
2500						Standard	+IZM-RP323-2500
3200							Standard

Rating plugs (plus types, 4 pole)

I_u [A]	800	1000	1250	1600	2000	2500	3200
I_n [A]							
200	+IZM-RP324-200						
250	+IZM-RP324-250						
300	+IZM-RP324-300						
400	+IZM-RP324-400						
630	+IZM-RP324-630						
800	Standard	+IZM-RP324-800					
1000		Standard	+IZM-RP324-1000				
1250			Standard	+IZM-RP324-1250			
1600				Standard	+IZM-RP324-1600		
2000					Standard	+IZM-RP324-2000	
2500						Standard	+IZM-RP324-2500
3200							Standard

Rating-Plug-Combinations for IZM40…

Rating plugs (plus types, 3- and 4 pole)

	3 pole	4 pole
I_u [A]	4000	4000
I_n [A]		
2000	+IZM-RP403-2000	+IZM-RP404-2000
2500	+IZM-RP403-2500	+IZM-RP404-2500
3200	+IZM-RP403-3200	+IZM-RP404-3200
4000	Standard	Standard

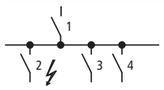
Rating-Plug-Combinations for IZM63…

Rating plugs (plus types, 3 pole)

I_u [A]	4000	5000	6300
I_n [A]			
2000		+IZM-RP633-2000	
2500		+IZM-RP633-2500	
3200		+IZM-RP633-3200	
4000	Standard	+IZM-RP633-4000	
5000		Standard	+IZM-RP633-5000
6300			Standard

Rating plugs (plus types, 4 pole)

I_u [A]	4000	5000	6300
I_n [A]			
2000		+IZM-RP634-2000	
2500		+IZM-RP634-2500	
3200		+IZM-RP634-3200	
4000	Standard	+IZM-RP634-4000	
5000		Standard	+IZM-RP634-5000
6300			Standard



I_n: Rated operational current
I_u: Rated uninterrupted current
I_{cu}: Rated short-circuit breaking capacity
I_i: Set value non-delayed short-circuit releases

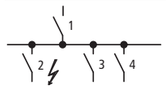
Selectivity 415 V AC
between circuit-breakers enables the separate isolation of faulty system sections.
Selectivity exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing circuit-breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 remain operational.

Selection:
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$).
These details represent the limits of selectivity.
Both circuit-breakers will switch off with higher short-circuit currents.
On IZM circuit-breakers with V, U, P releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

	Incoming circuit-breaker (1)		**IZM...20-A**										**IZM...20-V**						
		I_n [A]	800	800	1000	1000	1250	1250	1600	1600	2000	2000	800	800	1000	1000	1250	1250	1600
		I_{cu} [kA]	50	65	50	65	50	65	50	65	50	65	50	65	50	65	50	65	50
		I_i [A]	8000	8000	10000	10000	12500	12500	16000	16000	20000	20000	11200	11200	14000	14000	17500	17500	19200
Outgoing circuit-breaker (2)	I_u [A]	$I_{cu2(415V)}$ [kA]	B	N	B	N	B	N	B	N	B	N	B	N	B	N	B	N	B
			Prospective short-circuit current ($I_{cc\ rms}$ in kA)										Prospective short-circuit current ($I_{cc\ rms}$ in kA)						
NZMB(C)(N)(H)1-A(M)…	20	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	25	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	32	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	40	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	50	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	63	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	80	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	100	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	125	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
	160	25 - 100	9	9	15	15	T(25)	T(25)	T	T(50)	T	T	T	T	T	T	T	T	T
NZMB(C)(N)(H) 2-A(M)(V)…	20	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	25	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	32	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	40	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	50	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	63	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	80	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	90	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	100	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	125	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	140	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	160	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	200	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	220	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	250	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
	300	25 - 150	10	10	18	18	T(30)	T(30)	T	T	T	T	T	T	T	T	T	T	T
NZMC(N)(H)3-A(M)(V)…	220	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	250	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	320	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	350	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	400	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	450	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	500	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
	630	36 - 150	7	7	9	9	12	12	18	18	25	25	T	T	T	T	T	T	T
NZMN(H)4-A(M)(V)…	550	50 - 100	7	7	9	9	12	12	15	15	18	18	T	T	T	T	T	T	T
	630	50 - 100	7	7	9	9	12	12	15	15	18	18	T	T	T	T	T	T	T
	800	50 - 100	-	-	9	9	12	12	15	15	18	18	-	-	T	T	T	T	T
	875	50 - 100	-	-	9	9	12	12	15	15	18	18	-	-	T	T	T	T	T
	1000	50 - 100	-	-	-	-	12	12	15	15	18	18	-	-	-	-	T	T	T
	1250	50 - 100	-	-	-	-	-	-	15	15	18	18	-	-	-	-	-	-	T
	1400	50 - 100	-	-	-	-	-	-	15	15	18	18	-	-	-	-	-	-	T
	1600	50 - 100	-	-	-	-	-	-	-	-	18	18	-	-	-	-	-	-	-

Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

	IZM...20-U												**IZM20...-P**									
	1600	2000	2000	800	800	1000	1000	1250	1250	1600	1600	2000	2000	800	800	1000	1000	1250	1250	1600	1600	2000	2000
	65	50	65	50	65	50	65	50	65	50	65	50	65	50	65	50	65	50	65	50	65	50	65
	19200	24000	24000	11200	11200	14000	14000	17500	17500	19200	19200	24000	24000	11200	11200	14000	14000	17500	17500	19200	19200	24000	24000
	N	B	N	B	N	B	N	B	N	B	N	B	N	B	N	B	N	B	N	B	N	B	N
				Prospective short-circuit current ($I_{cc\ rms}$ in kA)										Prospective short-circuit current ($I_{cc\ rms}$ in kA)									
	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T



I_n: Rated operational current
I_u: Rated uninterrupted current
I_{cu}: Rated short-circuit breaking capacity
I_i: Set value non-delayed short-circuit releases

Selectivity 415 V AC
between circuit-breakers enables the separate isolation of faulty system sections.
Selectivity exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 continue to operate.

Selection:
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$).
These details represent the limits of selectivity.
Both circuit-breakers will switch off with higher short-circuit currents.
On IZM circuit-breakers with V, U, P releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

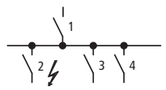
			Incoming circuit-breaker (1)	**IZM...32-A**																			
			I_n [A]	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	2000	2000	2000	2500	2500	2500	3200
			I_{cu} [kA]	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65
			I_i [A]	8000	8000	8000	10000	10000	10000	12500	12500	12500	16000	16000	16000	20000	20000	20000	25000	25000	25000	32000
Outgoing circuit-breaker (2)	I_u [A]	$I_{cu2(415V)}$ [kA]	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B

			Prospective short-circuit current ($I_{cc\ rms}$ in kA)																		
NZMB(C)(N)(H)1-A(M)…	20	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	25	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	32	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	40	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	50	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	63	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	80	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	100	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	125	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
	160	25 - 100	9	9	9	15	15	15	T(25)	T(25)	T(25)	T(50)	T(50)	T(50)	T	T	T(85)	T	T	T	T
NZMB(C)(N)(H)2-A(M)(V)…	20	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	25	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	32	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	40	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	50	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	63	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	80	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	90	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	100	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	125	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	140	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	160	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	200	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	220	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	250	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
	300	25 - 150	10	10	10	18	18	18	T(30)	T(30)	T(30)	T	T	T(85)	T	T	T	T	T	T	T
NZMC(N)(H)3-A(M)(V)…	220	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	250	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	320	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	350	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	400	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	450	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	500	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
	630	36 - 150	7	7	7	9	9	9	12	12	12	18	18	18	20	20	20	T(40)	T(40)	T(40)	T(60)
NZMN(H)4-A(M)(V)…	550	50 - 100	7	7	7	9	9	9	12	12	12	15	15	15	18	18	18	22	22	22	29
	630	50 - 100	7	7	7	9	9	9	12	12	12	15	15	15	18	18	18	22	22	22	29
	800	50 - 100	–	–	–	9	9	9	12	12	12	15	15	15	18	18	18	22	22	22	29
	875	50 - 100	–	–	–	9	9	9	12	12	12	15	15	15	18	18	18	22	22	22	29
	1000	50 - 100	–	–	–	–	–	–	12	12	12	15	15	15	18	18	18	22	22	22	29
	1250	50 - 100	–	–	–	–	–	–	–	–	–	15	15	15	18	18	18	22	22	22	29
	1400	50 - 100	–	–	–	–	–	–	–	–	–	15	15	15	18	18	18	22	22	22	29
	1600	50 - 100	–	–	–	–	–	–	–	–	–	–	–	–	18	18	18	22	22	22	29

Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

				IZM...32-V																			
3200	3200	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	2000	2000	2000	2500	2500	2500	3200	3200	3200	
85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	
32000	32000	11200	11200	11200	14000	14000	14000	17500	17500	17500	19200	19200	19200	24000	24000	24000	30000	30000	30000	32000	32000	32000	
N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	

T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T



I_n: Rated operational current
I_u: Rated uninterrupted current
I_{cu}: Rated short-circuit breaking capacity
I_i: Set value non-delayed short-circuit releases

Selectivity 415 V AC
between circuit-breakers enables the separate isolation of faulty system sections.
Selectivity exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 continue to operate.

Selection:
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$).
These details represent the limits of selectivity.
Both circuit-breakers will switch off with higher short-circuit currents.
On IZM circuit-breakers with V, U, P releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

		Incoming circuit-breaker (1)	**IZM...32-U**																			
		I_n [A]	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	2000	2000	2000	2500	2500	2500	3200
		I_{cu} [kA]	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65
		I_i [A]	11200	11200	11200	14000	14000	14000	17500	17500	17500	19200	19200	19200	24000	24000	24000	30000	30000	30000	32000
Outgoing circuit-breaker (2)	I_u [A]	$I_{cu2(415V)}$ [kA]	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B

			Prospective short-circuit current ($I_{cc\ rms}$ in kA)																		
NZMB(C)(N)(H)1-A(M)…	20	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	25	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	160	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
NZMB(C)(N)(H)2-A(M)(V)…	20	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	25	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	90	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	140	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	160	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	200	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	220	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	250	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	300	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
NZMC(N)(H)3-A(M)(V)…	220	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	250	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	320	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	350	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	400	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	450	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	500	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	630	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
NZMN(H)4-A(M)(V)…	550	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	630	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	800	50 - 100	–	–	–	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	875	50 - 100	–	–	–	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	1000	50 - 100	–	–	–	–	–	–	T	T	T	T	T	T	T	T	T	T	T	T	T
	1250	50 - 100	–	–	–	–	–	–	–	–	–	T	T	T	T	T	T	T	T	T	T
	1400	50 - 100	–	–	–	–	–	–	–	–	–	T	T	T	T	T	T	T	T	T	T
	1600	50 - 100	–	–	–	–	–	–	–	–	–	–	–	–	T	T	T	T	T	T	T

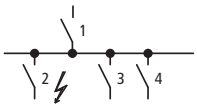
Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

			IZM32...-P																			
3200	3200		800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	2000	2000	2000	2500	2500	2500	3200	3200	3200
85	100		65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100	65	85	100
32000	32000		11200	11200	11200	14000	14000	14000	17500	17500	17500	19200	19200	19200	24000	24000	24000	30000	30000	30000	32000	32000	32000
N	H		B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H

					Prospective short-circuit current ($I_{cc\ rms}$ in kA)																		
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
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T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
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T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T		–	–	–	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
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T	T		–	–	–	–	–	–	–	–	–	T	T	T	T	T	T	T	T	T	T	T	T
T	T		–	–	–	–	–	–	–	–	–	T	T	T	T	T	T	T	T	T	T	T	T
T	T		–	–	–	–	–	–	–	–	–	–	–	–	T	T	T	T	T	T	T	T	T

Selectivity: incoming circuit-breaker, outgoing circuit-breaker

IZM40...



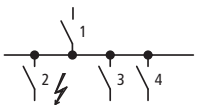
I_n: Rated operational current
I_u: Rated uninterrupted current
I_{cu}: Rated short-circuit breaking capacity
I_i: Set value non-delayed short-circuit release

Selectivity 415 V AC
between circuit-breakers enables the separate isolation of faulty system sections.
Selectivity exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 remain operational.

Selection:
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$).
These details represent the limits of selectivity.
Both circuit-breakers will switch off with higher short-circuit currents.
On IZM circuit-breakers with V, U, P releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

	Incoming circuit-breaker		**IZM...40-V**		**IZM...40-U**		**IZM40...-P**	
	I_n [A]		4000	4000	4000	4000	4000	4000
	I_{cu} [kA]		85	100	85	100	85	100
	I_i [A]		48000	48000	48000	48000	48000	48000
Outgoing circuit-breaker (2)	I_u [A]	$I_{cu2(415V)}$ [kA]	N	H	N	H	N	H
			Prospective short-circuit current ($I_{cc\ rms}$ in kA)					
NZMB(C)(N)(H)1-A(M)…	20	25 - 100	T	T	T	T	T	T
	25	25 - 100	T	T	T	T	T	T
	32	25 - 100	T	T	T	T	T	T
	40	25 - 100	T	T	T	T	T	T
	50	25 - 100	T	T	T	T	T	T
	63	25 - 100	T	T	T	T	T	T
	80	25 - 100	T	T	T	T	T	T
	100	25 - 100	T	T	T	T	T	T
	125	25 - 100	T	T	T	T	T	T
	160	25 - 100	T	T	T	T	T	T
NZMB(C)(N)(H)2-A(M)(V)…	20	25 - 150	T	T	T	T	T	T
	25	25 - 150	T	T	T	T	T	T
	32	25 - 150	T	T	T	T	T	T
	40	25 - 150	T	T	T	T	T	T
	50	25 - 150	T	T	T	T	T	T
	63	25 - 150	T	T	T	T	T	T
	80	25 - 150	T	T	T	T	T	T
	90	25 - 150	T	T	T	T	T	T
	100	25 - 150	T	T	T	T	T	T
	125	25 - 150	T	T	T	T	T	T
	140	25 - 150	T	T	T	T	T	T
	160	25 - 150	T	T	T	T	T	T
	200	25 - 150	T	T	T	T	T	T
	220	25 - 150	T	T	T	T	T	T
	250	25 - 150	T	T	T	T	T	T
	300	25 - 150	T	T	T	T	T	T
NZMC(N)(H)3-A(M)(V)…	220	36 - 150	T	T	T	T	T	T
	250	36 - 150	T	T	T	T	T	T
	320	36 - 150	T	T	T	T	T	T
	350	36 - 150	T	T	T	T	T	T
	400	36 - 150	T	T	T	T	T	T
	450	36 - 150	T	T	T	T	T	T
	500	36 - 150	T	T	T	T	T	T
	630	36 - 150	T	T	T	T	T	T
NZMN(H)4-A(M)(V)…	550	50 - 100	T	T	T	T	T	T
	630	50 - 100	T	T	T	T	T	T
	800	50 - 100	T	T	T	T	T	T
	875	50 - 100	T	T	T	T	T	T
	1000	50 - 100	T	T	T	T	T	T
	1250	50 - 100	T	T	T	T	T	T
	1400	50 - 100	T	T	T	T	T	T
	1600	50 - 100	T	T	T	T	T	T

Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity



I_n: Rated operational current
I_u: Rated uninterrupted current
I_{cu}: Rated short-circuit breaking capacity
I_i: Set value non-delayed short-circuit releases

Selectivity 415 V AC
between circuit-breakers enables the separate isolation of faulty system sections.
Selectivity exists between incoming circuit-breaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 continue to operate.

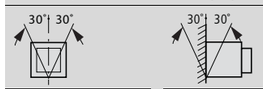
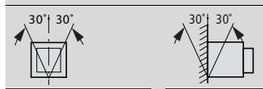
Selection:
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$).
These details represent the limits of selectivity.
Both circuit-breakers will switch off with higher short-circuit currents.
On IZM circuit-breakers with V, U, P releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

	Incoming circuit-breaker (1)		**IZM...63-V**						**IZM...63-U**						**IZM63...-P**					
	I_n [A]		4000	4000	5000	5000	6300	6300	4000	4000	5000	5000	6300	6300	4000	4000	5000	5000	6300	6300
	I_{cu} [kA]		85	100	85	100	85	100	85	100	85	100	85	100	85	100	85	100	85	100
	I_i [A]		48000	48000	60000	60000	63000	63000	48000	48000	60000	60000	63000	63000	48000	48000	60000	60000	63000	63000
Outgoing circuit-breaker (2)	I_u [A]	$I_{cu2(415V)}$ [kA]	N	H	N	H	N	H	N	H	N	H	N	H	N	H	N	H	N	H
			Prospective short-circuit current ($I_{cc\ rms}$ in kA)																	
NZMB(C)(N)(H) 1-A(M)…	20	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	25	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	160	25 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
NZMB(C)(N)(H) 2-A(M)(V)…	20	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	25	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	90	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	140	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	160	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	200	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	220	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	250	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	300	25 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
NZMC(N)(H) 3-A(M)(V)…	220	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	250	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	320	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	350	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	400	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	450	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	500	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	630	36 - 150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
NZMN(H) 4-A(M)(V)…	550	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	630	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	800	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	875	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	1000	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	1250	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	1400	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	1600	50 - 100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T

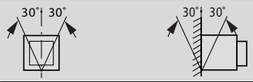
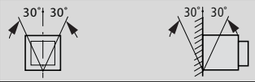
Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

				IZM20B…08…	IZM20B…10…	IZM20B…12…	IZM20B…16…	IZM20B…20…	IZM20N…08…	IZM20N…10…	IZM20N…12…	IZM20N…16…	IZM20N…20…
General													
Standards				IEC/EN 60947			IEC/EN 60947						
Ambient temperature	Storage		°C	-40 - +70 (Devices with LCD display -20 - +70)			-40 - +70 (Devices with LCD display -20 - +70)						
	Operation (open)		°C	-25 - +70 (Devices with LCD display -20 - +70)			-25 - +70 (Devices with LCD display -20 - +70)						
Built-in position													
Utility category				B	B	B	B	B	B	B	B	B	B
Protection type				IP20, IP54 with protective cover			IP20, IP54 with protective cover						
Direction of incoming supply				Any			Any						
Main contacts													
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	800	1000	1250	1600	2000	800	1000	1250	1600	2000
Rated uninterrupted current at 50 °C[1)]		I_u	A	800	1000	1250	1600	2000	800	1000	1250	1600	2000
Rated uninterrupted current at 60 °C[1)]		I_u	A	800	1000	1100	1500	1800	800	1000	1100	1500	1800
Rated uninterrupted current at 70 °C[1)]		I_u	A	800	1000	1000	1350	1650	800	1000	1000	1350	1650
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Rated operational voltage		U_e	V AC	690	690	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V		I_{IT}	kA	21	21	21	23	32	21	21	21	23	32
Use in IT electrical power networks up to U = 690 V		I_{IT}	kA	–	–	–	–	–	–	–	–	–	–
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage		U_i	V	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Switching capacity													
Rated short-circuit making capacity	Up to 440 V 50/60 Hz	I_{cm}	kA	105	105	105	105	105	137	137	137	137	137
	Up to 690 V 50/60 Hz	I_{cm}	kA	105	105	105	105	105	137	137	137	137	137
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	50	50	50	50	50	65	65	65	65	65
	t = 3 s	I_{cw}	kA	–	–	–	–	30	40	40	40	40	40
Rated short-circuit breaking capacity I_{cn}													
IEC/EN 60947 Operating sequence I_{cu} O-t-CO-t-CO													
Up to 240 V 50/60 Hz		I_{cu}	kA	50	50	50	50	50	65	65	65	65	65
Up to 440 V 50/60 Hz		I_{cu}	kA	50	50	50	50	50	65	65	65	65	65
Up to 690 V 50/60 Hz		I_{cu}	kA	50	50	50	50	50	65	65	65	65	65
Up to 1100 V 50/60 Hz		I_{cu}	kA	–	–	–	–	–	–	–	–	–	–
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO													
Up to 240 V 50/60 Hz		I_{cs}	kA	50	50	50	50	50	65	65	65	65	65
Up to 440 V 50/60 Hz		I_{cs}	kA	50	50	50	50	50	65	65	65	65	65
Up to 690 V 50/60 Hz		I_{cs}	kA	50	50	50	50	50	65	65	65	65	65
Up to 1100 V 50/60 Hz		I_{cs}	kA	–	–	–	–	–	–	–	–	–	–
Switching times													
Total opening delay			ms	30	30	30	30	30	30	30	30	30	30
Closing delay			ms	35	35	35	35	35	35	35	35	35	35
Closing delay electrical (via closing release)			ms	40	40	40	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)			ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Opening delay via trip electronics (non-delayed short-circuit release)			ms	35	35	35	35	35	35	35	35	35	35
Durability													
Mechanical, without maintenance		Operations		12500	12500	12500	12500	10000	12500	12500	12500	12500	10000
Mechanical, with maintenance		Operations		20000	20000	20000	20000	16000	20000	20000	20000	20000	16000
Electrical, without maintenance		Operations		10000	10000	10000	10000	8000	10000	10000	10000	10000	8000
Electrical, with maintenance		Operations		10000	10000	10000	10000	8000	10000	10000	10000	10000	8000
Maximum operating frequency		Operations/h		60	60	60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading	Fixed		W	60	95	150	240	280	45	70	110	180	280
	Withdrawable		W	110	170	260	420	560	90	140	220	360	560
Weight													
Fixed	3 pole		kg	43	43	43	43	43	43	43	43	43	43
	4 pole		kg	54	54	54	54	54	54	54	54	54	54
Withdrawable	3 pole		kg	48	48	48	48	48	48	48	48	48	48
	4 pole		kg	62	62	62	62	62	62	62	62	62	62
Empty cassette	3 pole		kg	34	34	34	34	34	34	34	34	34	34
	4 pole		kg	38	38	38	38	38	38	38	38	38	38

Notes [1)] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

				IZM32B…08…	IZM32B…10…	IZM32B…12…	IZM32B…16…	IZM32B…20…	IZM32B…25…	IZM32B…32…	IZM32N…08…	IZM32N…10…	IZM32N…12…
General													
Standards				IEC/EN 60947			IEC/EN 60947						
Ambient temperature	Storage		°C	-40 - +70 (Devices with LCD display -20 - +70)			-40 - +70 (Devices with LCD display -20 - +70)						
	Operation (open)		°C	-25 - +70 (Devices with LCD display -20 - +70)			-25 - +70 (Devices with LCD display -20 - +70)						
Built-in position													
Utility category				B	B	B	B	B	B	B	B	B	B
Protection type				IP20, IP54 with protective cover			IP20, IP54 with protective cover						
Direction of incoming supply				Any			Any						
Main contacts													
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	800	1000	1250	1600	2000	2500	3200	800	1000	1250
Rated uninterrupted current at 50 °C[1)]		I_u	A	800	1000	1250	1600	2000	2500	3100	800	1000	1250
Rated uninterrupted current at 60 °C[1)]		I_u	A	800	1000	1250	1600	2000	2500	2800	800	1000	1250
Rated uninterrupted current at 70 °C[1)]		I_u	A	800	1000	1250	1600	2000	2500	2550	800	1000	1250
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Rated operational voltage		U_e	V AC	690	690	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V		I_{IT}	kA	13	13	13	23	28	39	39	13	13	13
Use in IT electrical power networks up to U = 690 V		I_{IT}	kA	13	13	13	23	28	39	39	13	13	13
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage		U_i	V	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Switching capacity													
Rated short-circuit making capacity	Up to 440 V 50/60 Hz	I_{cm}	kA	137	137	137	137	137	137	137	179	179	179
	Up to 690 V 50/60 Hz	I_{cm}	kA	137	137	137	137	137	137	137	179	179	179
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	65	65	65	65	65	65	65	85	85	85
	t = 3 s	I_{cw}	kA	–	–	–	–	50	50	50	65	65	65
Rated short-circuit breaking capacity I_{cn}													
IEC/EN 60947 Operating sequence I_{cu} O-t-CO													
	Up to 240 V 50/60 Hz	I_{cu}	kA	65	65	65	65	65	65	65	85	85	85
	Up to 440 V 50/60 Hz	I_{cu}	kA	65	65	65	65	65	65	65	85	85	85
	Up to 690 V 50/60 Hz	I_{cu}	kA	65	65	65	65	65	65	65	85	85	85
	Up to 1100 V 50/60 Hz	I_{cu}	kA	–	–	–	–	–	–	–	–	–	–
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO													
	Up to 240 V 50/60 Hz	I_{cs}	kA	65	65	65	65	65	65	65	85	85	85
	Up to 440 V 50/60 Hz	I_{cs}	kA	65	65	65	65	65	65	65	85	85	85
	Up to 690 V 50/60 Hz	I_{cs}	kA	65	65	65	65	65	65	65	85	85	85
	Up to 1100 V 50/60 Hz	I_{cs}	kA	–	–	–	–	–	–	–	–	–	–
Switching times													
Total opening delay			ms	30	30	30	30	30	30	30	30	30	30
Closing delay			ms	35	35	35	35	35	35	35	35	35	35
Closing delay electrical (via closing release)			ms	40	40	40	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)			ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Opening delay via trip electronics (non-delayed short-circuit release)			ms	35	35	35	35	35	35	35	35	35	35
Durability													
Mechanical, without maintenance		Operations		12500	12500	12500	12500	10000	8000	8000	10000	10000	10000
Mechanical, with maintenance		Operations		20000	20000	20000	20000	16000	12800	12800	16000	16000	16000
Electrical, without maintenance		Operations		10000	10000	10000	10000	10000	8000	8000	10000	10000	10000
Electrical, with maintenance		Operations		10000	10000	10000	10000	10000	8000	8000	10000	10000	10000
Maximum operating frequency		Operations/h		60	60	60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading	Fixed		W	40	60	90	150	190	200	320	35	50	70
	Withdrawable		W	85	130	200	330	330	500	800	70	95	140
Weight													
Fixed	3 pole		kg	58	58	58	58	63	68	68	68	68	68
	4 pole		kg	72	72	72	72	78	86	86	86	86	86
Withdrawable	3 pole		kg	70	70	70	70	75	86	86	80	80	80
	4 pole		kg	88	88	88	88	94	112	112	102	102	102
Empty cassette	3 pole		kg	34	34	34	34	58	58	60	34	34	34
	4 pole		kg	38	38	38	38	60	60	73	38	38	38

Notes [1)] Permissible continuous current for circuit-breakers used at different temperatures within switchgear.
The expected internal temperatures can be estimated according to the applicable IEC regulations.

				IZM32N…16…	IZM32N…20…	IZM32N…25…	IZM32N…32…	IZM32H…08…	IZM32H…10…	IZM32H…12…	IZM32H…16…	IZM32H…20…	IZM32H…25…
General													
Standards				IEC/EN 60947			IEC/EN 60947						
Ambient temperature	Storage		°C	-40 - +70 (Devices with LCD display -20 - +70)			-40 - +70 (Devices with LCD display -20 - +70)						
	Operation (open)		°C	-25 - +70 (Devices with LCD display -20 - +70)			-25 - +70 (Devices with LCD display -20 - +70)						
Built-in position													
Utility category				B	B	B	B	B	B	B	B	B	B
Protection type				IP20, IP54 with protective cover			IP20, IP54 with protective cover						
Direction of incoming supply				Any			Any						
Main contacts													
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	1600	2000	2500	3200	800	1000	1250	1600	2000	2500
Rated uninterrupted current at 50 °C[1)]		I_u	A	1600	2000	2500	3100	800	1000	1250	1600	2000	2500
Rated uninterrupted current at 60 °C[1)]		I_u	A	1600	2000	2500	2800	800	1000	1250	1600	2000	2500
Rated uninterrupted current at 70 °C[1)]		I_u	A	1600	2000	2500	2550	800	1000	1250	1600	2000	2500
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Rated operational voltage		U_e	V AC	690	690	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V		I_{IT}	kA	23	28	39	39	13	13	13	23	28	39
Use in IT electrical power networks up to U = 690 V		I_{IT}	kA	23	28	39	39	13	13	13	23	28	39
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage		U_i	V	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Switching capacity													
Rated short-circuit making capacity	Up to 440 V 50/60 Hz	I_{cm}	kA	179	179	179	179	210	210	210	210	210	210
	Up to 690 V 50/60 Hz	I_{cm}	kA	179	179	179	179	179	179	179	179	179	179
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	85	85	85	85	85	85	85	85	85	85
	t = 3 s	I_{cw}	kA	65	65	65	65	65	65	65	65	65	65
Rated short-circuit breaking capacity I_{cn}													
IEC/EN 60947 Operating sequence I_{cu} O-t-CO													
Up to 240 V 50/60 Hz		I_{cu}	kA	85	85	85	85	100	100	100	100	100	100
Up to 440 V 50/60 Hz		I_{cu}	kA	85	85	85	85	100	100	100	100	100	100
Up to 690 V 50/60 Hz		I_{cu}	kA	85	85	85	85	85	85	85	85	85	85
Up to 1100 V 50/60 Hz		I_{cu}	kA	–	–	–	–	–	–	–	–	–	–
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO													
Up to 240 V 50/60 Hz		I_{cs}	kA	85	85	85	85	100	100	100	100	100	100
Up to 440 V 50/60 Hz		I_{cs}	kA	85	85	85	85	100	100	100	100	100	100
Up to 690 V 50/60 Hz		I_{cs}	kA	85	85	85	85	85	85	85	85	85	85
Up to 1100 V 50/60 Hz		I_{cs}	kA	–	–	–	–	–	–	–	–	–	–
Switching times													
Total opening delay			ms	30	30	30	30	30	30	30	30	30	30
Closing delay			ms	35	35	35	35	35	35	35	35	35	35
Closing delay electrical (via closing release)			ms	40	40	40	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)			ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Opening delay via trip electronics (non-delayed short-circuit release)			ms	35	35	35	35	35	35	35	35	35	35
Durability													
Mechanical, without maintenance		Operations		10000	10000	8000	8000	10000	10000	10000	10000	10000	8000
Mechanical, with maintenance		Operations		16000	16000	12800	12800	16000	16000	16000	16000	16000	12800
Electrical, without maintenance		Operations		10000	10000	8000	8000	10000	10000	10000	10000	10000	8000
Electrical, with maintenance		Operations		10000	10000	8000	8000	10000	10000	10000	10000	10000	8000
Maximum operating frequency		Operations/h		60	60	60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading	Fixed		W	120	190	200	320	30	50	70	120	190	200
	Withdrawable		W	240	380	500	800	60	95	140	240	380	500
Weight													
Fixed	3 pole		kg	68	68	70	70	68	68	68	68	68	70,
	4 pole		kg	86	86	89	89	86	86	86	86	86	89
Withdrawable	3 pole		kg	80	80	88	88	80	80	80	80	80	88
	4 pole		kg	102	102	115	115	102	102	102	102	102	115
Empty cassette	3 pole		kg	34	34	58	60	34	34	34	34	58	58
	4 pole		kg	38	38	60	73	38	38	38	38	60	60

Notes

[1)] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

				IZM32H…32…	IZM32S…	IZM40N…40…	IZM40H…40…	IZM63N…40…	IZM63N…50…	IZM63N…63…	IZM63H…40…	IZM63H…50…	IZM63H…63…
General													
Standards				IEC/EN 60947			IEC/EN 60947						
Ambient temperature	Storage		°C	-40 - +70 (Devices with LCD display -20 - +70)			-40 - +70 (Devices with LCD display -20 - +70)						
	Operation (open)		°C	-25 - +70 (Devices with LCD display -20 - +70)			-25 - +70 (Devices with LCD display -20 - +70)						
Built-in position													
Utility category				B	B	B	B	B	B	B	B	B	B
Protection type				IP20, IP54 with protective cover			IP20, IP54 with protective cover						
Direction of incoming supply				Any			Any						
Main contacts													
Rated operational current = Rated uninterrupted current		$I_n = I_u$	A	3200	3200	4000	4000	4000	5000	6300	4000	5000	6300
Rated uninterrupted current at 50 °C[1)]		I_u	A	3100	3100	4000	4000	4000	5000	6200	4000	5000	6200
Rated uninterrupted current at 60 °C[1)]		I_u	A	2800	2800	4000	4000	4000	5000	5600	4000	5000	5600
Rated uninterrupted current at 70 °C[1)]		I_u	A	2550	2550	3776	3776	4000	5000	5100	4000	5000	5100
Rated impulse withstand voltage		U_{imp}	V AC	8000	8000	12000	12000	8000	8000	8000	8000	8000	8000
Rated operational voltage		U_e	V AC	690	1100	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V		I_{IT}	kA	39	–	48	48	–	–	–	–	–	–
Use in IT electrical power networks up to U = 690 V		I_{IT}	kA	39	39	–	–	–	–	–	–	–	–
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage		U_i	V	1000	1100	1000	1000	1000	1000	1000	1000	1000	1000
Switching capacity													
Rated short-circuit making capacity	Up to 440 V 50/60 Hz	I_{cm}	kA	210	210	179	210	179	179	179	210	210	210
	Up to 690 V 50/60 Hz	I_{cm}	kA	179	210	137	137	179	179	179	210	210	210
Rated short-time withstand current 50/60 Hz	t = 1 s	I_{cw}	kA	85	–	85	100	85	85	85	100	100	100
	t = 3 s	I_{cw}	kA	65	–	65	65	65	65	65	65	65	65
Rated short-circuit breaking capacity I_{cn}													
IEC/EN 60947 Operating sequence I_{cu} O-t-CO													
	Up to 240 V 50/60 Hz	I_{cu}	kA	100	–	85	100	85	85	85	100	100	100
	Up to 440 V 50/60 Hz	I_{cu}	kA	100	–	85	100	85	85	85	100	100	100
	Up to 690 V 50/60 Hz	I_{cu}	kA	85	–	65	65	85	85	85	100	100	100
	Up to 1100 V 50/60 Hz	I_{cu}	kA	–	25	–	–	–	–	–	–	–	–
IEC/EN 60947 Operating sequence I_{cs} O-t-CO-t-CO													
	Up to 240 V 50/60 Hz	I_{cs}	kA	100	–	85	100	85	85	85	100	100	100
	Up to 440 V 50/60 Hz	I_{cs}	kA	100	–	85	100	85	85	85	100	100	100
	Up to 690 V 50/60 Hz	I_{cs}	kA	85	–	65	65	85	85	85	100	100	100
	Up to 1100 V 50/60 Hz	I_{cs}	kA	–	25	–	–	–	–	–	–	–	–
Switching times													
Total opening delay			ms	30	30	30	30	40	40	40	40	40	40
Closing delay			ms	35	35	35	35	35	35	35	35	35	35
Closing delay electrical (via closing release)			ms	40	40	40	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)			ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Opening delay via trip electronics (non-delayed short-circuit release)			ms	35	35	35	35	35	35	35	35	35	35
Durability													
Mechanical, without maintenance		Operations		8000	8000	5000	5000	5000	5000	5000	5000	5000	5000
Mechanical, with maintenance		Operations		12800	12800	8000	8000	8000	8000	8000	8000	8000	8000
Electrical, without maintenance		Operations		8000	8000	3000	3000	3000	3000	3000	3000	3000	3000
Electrical, with maintenance		Operations		8000	8000	3000	3000	3000	3000	3000	3000	3000	3000
Maximum operating frequency		Operations/h		60	60	60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading	Fixed		W	320	320	560	560	380	400	620	380	400	620
	Withdrawable		W	800	800	1100	1100	750	1000	1550	750	1000	1550
Weight													
Fixed	3 pole		kg	70	70	83	83	108	125	125	108	125	125
	4 pole		kg	89	89	105	105	145	163	163	145	163	163
Withdrawable	3 pole		kg	88,	88	98	98	139	157	157	139	157	157
	4 pole		kg	115	115	121	121	166	200	200	166	200	200
Empty cassette	3 pole		kg	60	60	60	60	60	60	60	60	60	60
	4 pole		kg	73	73	73	73	73	73	73	73	73	73

Notes

[1)] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

				IN20B…08…	IN20B…10…	IN20B…12…
General						
Standards				IEC/EN 60947		
Ambient temperature						
Storage			°C	-40 - +70		
Operation (open)			°C	-25 - +70		
Built-in position						
Utility category				B	B	B
Protection type				IP20, IP54 with protective cover		
Direction of incoming supply				Any		
Main contacts						
Rated operational current = Rated uninterrupted current	$I_n = I_u$		A	800	1000	1250
Rated uninterrupted current at 50 °C [1]	I_u		A	800	1000	1250
Rated uninterrupted current at 60 °C [1]	I_u		A	800	1000	1100
Rated uninterrupted current at 70 °C [1]	I_u		A	800	1000	1000
Rated impulse withstand voltage	U_{imp}		V AC	8000	8000	8000
Rated operational voltage	U_e		V AC	690	690	690
Use in IT electrical power networks up to U = 440 V	I_{IT}		kA	21	21	21
Use in IT electrical power networks up to U = 690 V	I_{IT}		kA	–	–	–
Overvoltage category/pollution degree				III/3	III/3	III/3
Rated insulation voltage	U_i		V	1000	1000	1000
Switching capacity						
Rated short-circuit making capacity						
Up to 440 V 50/60 Hz	I_{cm}		kA	105	105	105
Up to 690 V 50/60 Hz	I_{cm}		kA	105	105	105
Rated short-time withstand current 50/60 Hz						
t = 1 s	I_{cw}		kA	50	50	50
t = 3 s	I_{cw}		kA	–	–	–
Switching times						
Total opening delay			ms	30	30	30
Closing delay			ms	35	35	35
Closing delay electrical (via closing release)			ms	40	40	40
Opening delay electrical (via shunt release / undervoltage release)			ms	35/70	35/70	35/70
Durability						
Mechanical, without maintenance		Operations		12500	12500	12500
Mechanical, with maintenance		Operations		20000	20000	20000
Electrical, without maintenance		Operations		10000	10000	10000
Electrical, with maintenance		Operations		10000	10000	10000
Maximum operating frequency		Operations/h		60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading						
Fixed			W	60	95	150
Withdrawable			W	110	170	260
Weight						
Fixed						
3 pole			kg	43	43	43
4 pole			kg	54	54	54
Withdrawable						
3 pole			kg	48	48	48
4 pole			kg	62	62	62
Empty cassette						
3 pole			kg	34	34	34
4 pole			kg	38	38	38

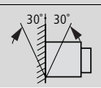
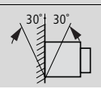
Notes [1] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

	IN20B…16…	IN20B…20…	IN20N…08…	IN20N…10…	IN20N…12…	IN20N…16…	IN20N…20…
	IEC/EN 60947						
	-40 - +70						
	-25 - +70						
							
	B	B	B	B	B	B	B
	IP20, IP54 with protective cover						
	Any						
	1600	2000	800	1000	1250	1600	2000
	1600	2000	800	1000	1250	1600	2000
	1500	1800	800	1000	1100	1500	1800
	1350	1650	800	1000	1000	1350	1650
	8000	8000	8000	8000	8000	8000	8000
	690	690	690	690	690	690	690
	23	32	21	21	21	23	32
	–	–	–	–	–	–	–
	III/3	III/3	III/3	III/3	III/3	III/3	III/3
	1000	1000	1000	1000	1000	1000	1000
	105	105	143	143	143	143	143
	105	105	143	143	143	143	143
	50	50	65	65	65	65	65
	–	30	40	40	40	40	40
	30	30	30	30	30	30	30
	35	35	35	35	35	35	35
	40	40	40	40	40	40	40
	35/70	35/70	35/70	35/70	35/70	35/70	35/70
	12500	10000	12500	12500	12500	12500	10000
	20000	16000	20000	20000	20000	20000	16000
	10000	8000	10000	10000	10000	10000	8000
	10000	8000	10000	10000	10000	10000	8000
	60	60	60	60	60	60	60
	240	280	45	70	110	180	280
	420	560	90	140	220	360	560
	43	43	43	43	43	43	43
	54	54	54	54	54	54	54
	48	48	48	48	48	48	48
	62	62	62	62	62	62	62
	34	34	34	34	34	34	34
	38	38	38	38	38	38	38

			IN32B…08…	IN32B…10…	IN32B…12…	IN32B…16…	IN32B…20…	IN32B…25…	IN32B…32…
General									
Standards			IEC/EN 60947			IEC/EN 60947			
Ambient temperature									
Storage		°C	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70
Operation (open)		°C	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70
Built-in position									
Utility category			B	B	B	B	B	B	B
Protection type			IP20, IP54 with protective cover			IP20, IP54 with protective cover			
Direction of incoming supply			Any			Any			
Main contacts									
Rated operational current = Rated uninterrupted current	$I_n = I_u$	A	800	1000	1250	1600	2000	2500	3200
Rated uninterrupted current at 50 °C [1]	I_u	A	800	1000	1250	1600	2000	2500	3100
Rated uninterrupted current at 60 °C [1]	I_u	A	800	1000	1250	1600	2000	2500	2800
Rated uninterrupted current at 70 °C [1]	I_u	A	800	1000	1250	1600	2000	2500	2550
Rated impulse withstand voltage	U_{imp}	V AC	8000	8000	8000	8000	8000	8000	8000
Rated operational voltage	U_e	V AC	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V	I_{IT}	kA	13	13	13	23	28	39	39
Use in IT electrical power networks up to U = 690 V	I_{IT}	kA	13	13	13	23	28	39	39
Overvoltage category/pollution degree			III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage	U_i	V	1000	1000	1000	1000	1000	1000	1000
Switching capacity									
Rated short-circuit making capacity									
Up to 440 V 50/60 Hz	I_{cm}	kA	143	143	143	143	143	143	143
Up to 690 V 50/60 Hz	I_{cm}	kA	143	143	143	143	143	143	143
Rated short-time withstand current 50/60 Hz									
t = 1 s	I_{cw}	kA	65	65	65	65	65	65	65
t = 3 s	I_{cw}	kA	–	–	–	–	50	50	50
Switching times									
Total opening delay		ms	30	30	30	30	30	30	30
Closing delay		ms	35	35	35	35	35	35	35
Closing delay electrical (via closing release)		ms	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)		ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Durability									
Mechanical, without maintenance	Operations		12500	12500	12500	12500	10000	8000	8000
Mechanical, with maintenance	Operations		20000	20000	20000	20000	16000	12800	12800
Electrical, without maintenance	Operations		10000	10000	10000	10000	10000	8000	8000
Electrical, with maintenance	Operations		10000	10000	10000	10000	10000	8000	8000
Maximum operating frequency	Operations/h		60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading									
Fixed		W	40	60	90	150	190	200	320
Withdrawable		W	85	130	200	330	330	500	800
Weight									
Fixed									
3 pole		kg	58	58	58	58	63	68	68
4 pole		kg	72	72	72	72	78	86	86
Withdrawable									
3 pole		kg	70	70	70	70	75	86	86
4 pole		kg	88	88	88	88	94	112	112
Empty cassette									
3 pole		kg	34	34	34	34	58	58	60
4 pole		kg	38	38	38	38	60	60	73

Notes

[1] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

			IN32N…08…	IN32N…10…	IN32N…12…	IN32N…16…	IN32N…20…	IN32N…25…	IN32N…32…	IN32S…
General										
Standards			IEC/EN 60947			IEC/EN 60947				
Ambient temperature										
Storage		°C	-40 - +70			-40 - +70				
Operation (open)		°C	-25 - +70			-25 - +70				
Built-in position										
Utility category			B			B				
Protection type			IP20, IP54 with protective cover			IP20, IP54 with protective cover				
Direction of incoming supply			Any			Any				
Main contacts										
Rated operational current = Rated uninterrupted current	$I_n = I_u$	A	800	1000	1250	1600	2000	2500	3200	3200
Rated uninterrupted current at 50 °C [1]	I_u	A	800	1000	1250	1600	2000	2500	3100	3100
Rated uninterrupted current at 60 °C [1]	I_u	A	800	1000	1250	1600	2000	2500	2800	2800
Rated uninterrupted current at 70 °C [1]	I_u	A	800	1000	1250	1600	2000	2500	2550	2550
Rated impulse withstand voltage	U_{imp}	V AC	8000	8000	8000	8000	8000	8000	8000	8000
Rated operational voltage	U_e	V AC	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V	I_{IT}	kA	13	13	13	23	28	39	39	39
Use in IT electrical power networks up to U = 690 V	I_{IT}	kA	13	13	13	23	28	39	39	39
Overvoltage category/degree of pollution			III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage	U_i	V	1000	1000	1000	1000	1000	1000	1000	1100
Switching capacity										
Rated short-circuit making capacity										
Up to 440 V 50/60 Hz	I_{cm}	kA	187	187	187	187	187	187	187	53
Up to 690 V 50/60 Hz	I_{cm}	kA	187	187	187	187	187	187	187	53
Rated short-time withstand current 50/60 Hz										
t = 1 s	I_{cw}	kA	85	85	85	85	85	85	85	–
t = 3 s	I_{cw}	kA	65	65	65	65	65	65	65	–
Switching times										
Total opening delay		ms	30	30	30	30	30	30	30	30
Closing delay		ms	35	35	35	35	35	35	35	35
Closing delay electrical (via closing release)		ms	40	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)		ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Durability										
Mechanical, without maintenance	Operations		10000	10000	10000	10000	10000	8000	8000	8000
Mechanical, with maintenance	Operations		16000	16000	16000	16000	16000	12800	12800	12800
Electrical, without maintenance	Operations		10000	10000	10000	10000	10000	8000	8000	8000
Electrical, with maintenance	Operations		10000	10000	10000	10000	10000	8000	8000	8000
Maximum operating frequency	Operations/h		60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading										
Fixed		W	35	50	70	120	190	200	320	320
Withdrawable		W	70	95	140	240	380	500	800	800
Weight										
Fixed										
3 pole		kg	68	68	68	68	68	70	70	70
4 pole		kg	86	86	86	86	86	89	89	89
Withdrawable										
3 pole		kg	80	80	80	80	80	88	88	88
4 pole		kg	102	102	102	102	102	115	115	115
Empty cassette										
3 pole		kg	34	34	34	34	58	58	60	60
4 pole		kg	38	38	38	38	60	60	73	73

Notes [1] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

				IN40N…40…	IN40H…40…	IN63N…40…	IN63N…50…	IN63N…63…	IN63H…40…	IN63H…50…	IN63H…63…
General											
Standards				IEC/EN 60947			IEC/EN 60947				
Ambient temperature											
Storage			°C	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70	-40 - +70
Operation (open)			°C	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70	-25 - +70
Built-in position											
Utility category				B			B				
Protection type				IP20, IP54 with protective cover			IP20, IP54 with protective cover				
Direction of incoming supply				Any			Any				
Main contacts											
Rated operational current = Rated uninterrupted current	$I_n = I_u$		A	4000	4000	4000	5000	6300	4000	5000	6300
Rated uninterrupted current at 50 °C [1]	I_u		A	4000	4000	4000	5000	6200	4000	5000	6200
Rated uninterrupted current at 60 °C [1]	I_u		A	4000	4000	4000	5000	5600	4000	5000	5600
Rated uninterrupted current at 70 °C [1]	I_u		A	3776	3776	4000	5000	5100	4000	5000	5100
Rated impulse withstand voltage	U_{imp}		V AC	12000	12000	8000	8000	8000	8000	8000	8000
Rated operational voltage	U_e		V AC	690	690	690	690	690	690	690	690
Use in IT electrical power networks up to U = 440 V	I_{IT}		kA	48	48	–	–	–	–	–	–
Use in IT electrical power networks up to U = 690 V	I_{IT}		kA	–	–	–	–	–	–	–	–
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage	U_i		V	1000	1000	1000	1000	1000	1000	1000	1000
Switching capacity											
Rated short-circuit making capacity											
Up to 440 V 50/60 Hz	I_{cm}		kA	187	220	187	187	187	220	220	220
Up to 690 V 50/60 Hz	I_{cm}		kA	187	220	187	187	187	220	220	220
Rated short-time withstand current 50/60 Hz											
t = 1 s	I_{cw}		kA	85	100	85	85	85	100	100	100
t = 3 s	I_{cw}		kA	65	65	65	65	65	65	65	65
Switching times											
Total opening delay			ms	30	30	40	40	40	40	40	40
Closing delay			ms	35	35	35	35	35	35	35	35
Closing delay electrical (via closing release)			ms	40	40	40	40	40	40	40	40
Opening delay electrical (via shunt release / undervoltage release)			ms	35/70	35/70	35/70	35/70	35/70	35/70	35/70	35/70
Durability											
Mechanical, without maintenance		Operations		5000	5000	5000	5000	5000	5000	5000	5000
Mechanical, with maintenance		Operations		8000	8000	8000	8000	8000	8000	8000	8000
Electrical, without maintenance		Operations		3000	3000	3000	3000	3000	3000	3000	3000
Electrical, with maintenance		Operations		3000	3000	3000	3000	3000	3000	3000	3000
Maximum operating frequency		Operations/h		60	60	60	60	60	60	60	60
Heat dissipation at rated operational current I_n 3-phase symmetric loading											
Fixed			W	560	560	380	400	620	380	400	620
Withdrawable			W	1100	1100	750	1000	1550	750	1000	1550
Weight											
Fixed											
3 pole			kg	83	83	108	125	125	108	125	125
4 pole			kg	105	105	145	163	163	145	163	163
Withdrawable											
3 pole			kg	98	98	139	157	157	139	157	157
4 pole			kg	121	121	166	200	200	166	200	200
Empty cassette											
3 pole			kg	55	55	103	103	103	103	103	103
4 pole			kg	64	64	103	103	103	103	103	103

Notes

[1] Permissible continuous current for circuit-breakers used at different temperatures within switchgear. The expected internal temperatures can be estimated according to the applicable IEC regulations.

IZM-AS, IZM-OTS, IZM-CS, IZM-S...

			Auxiliary contact, overload trip switch and cell signalling switch		
			IZM-AS…	IZM-OTS	IZM-CS…
Rated breaking capacity					
Inductive load					
250 V AC		A	10	10	10
125 V DC		A	0.5	0.5	0.5
250 V DC		A	0.25	0.25	0.25

			Voltage releases				
			IZM-ST24DC IZM-STS24DC	IZM-ST48DC IZM-STS48DC	IZM-ST60DC	IZM-ST110AD IZM-STS110AD	IZM-ST230AD IZM-STS230AD
Rated control voltage							
AC 50/60 Hz	U_s	V	–	–	–	110 - 127	208 - 240
DC	U_s	V	24	48	60	110 - 125	220 - 250
Power consumption							
AC		VA	–	–	–	(pick-up 450)	(pick-up 450)
DC		W	(pick-up 250)	(pick-up 250)	(pick-up 250)	(pick-up 450)	(pick-up 450)
Response time of the circuit-breaker with U_s		ms	35	35	35	35	35
Operating range							
Drop-out voltage							
AC operated 50/60 Hz	Drop-out	x U_c	–	–	–	–	–
pick-up voltage							
	pick-up	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard

			Closing releases				
			IZM-SR24DC	IZM-SR48DC	IZM-SR60DC	IZM-SR110AD	IZM-SR230AD
Rated control voltage							
AC 50/60 Hz	U_s	V	–	–	–	110 - 127	208 - 240
DC	U_s	V	24	48	60	110 - 125	220 - 250
Power consumption							
AC		VA	–	–	–	(pick-up 450)	(pick-up 450)
DC		W	(pick-up 250)	(pick-up 250)	(pick-up 250)	(pick-up 450)	(pick-up 450)
Response time of the circuit-breaker with U_s		ms	40	40	40	40	40
Operating range							
Drop-out voltage							
AC operated 50/60 Hz	Drop-out	x U_c	–	–	–	–	–
pick-up voltage							
	pick-up	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard

			Under-voltage releases			
			IZM-UVR24DC	**IZM-UVR32DC**	**IZM-UVR48DC**	**IZM-UVR60DC**
Rated control voltage						
AC 50/60 Hz	U_s	V	–	–	–	–
DC	U_s	V	24	32	48	60
Power consumption						
AC		VA	–	–	–	–
DC		W	18 (pick-up 250)	15 (pick-up 275)	18 (pick-up 275)	18 (pick-up 275)
Response time of the circuit-breaker with U_s		ms	70	70	70	70
Operating range						
Drop-out voltage						
AC operated 50/60 Hz	Drop-out	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard
pick-up voltage						
	pick-up	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard

			Under-voltage releases				
			IZM-UVR110AC	**IZM-UVR110DC**	**IZM-UVR220DC**	**IZM-UVR230AC**	**IZM-UVR400AC**
Rated control voltage							
AC 50/60 Hz	U_s	V	110 - 127	–	–	208 - 240	380 - 415
DC	U_s	V	–	110 - 125	220 - 250	–	–
Power consumption							
AC		VA	10 (pick-up 450)	–	–	10 (pick-up 400)	10 (pick-up 480)
DC		W	–	10 (pick-up 450)	10 (pick-up 450)	–	–
Response time of the circuit-breaker with U_s		ms	70	70	70	70	70
Operating range							
Drop-out voltage							
AC operated 50/60 Hz	Drop-out	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard
pick-up voltage							
	pick-up	x U_c	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard	Acc. to IEC standard

			Motor operator						
			IZM-M24DC	**IZM-M48DC**	**IZM-M60DC**	**IZM-M110DC**	**IZM-M220DC**	**IZM-M110AC**	**IZM-M230AC**
Rated control voltage									
AC 50/60 Hz	U_s	V	–	–	–	–	–	110 - 127	208 - 240
DC	U_s	V	24	48	60	110 - 125	220 - 250	–	–
Necessary time required for charging of the spring-operated stored energy mechanism at 1 x U_s		s	5	5	5	5	5	5	5
Rated operational current	I_n	A	12	5	5	2	1	2	1
Starting current		A	36	25	25	12	6	12	6
Power consumption									
AC 50/60 Hz		VA	300	250	250	250	250	250	250
DC		W	300	250	250	250	250	250	250

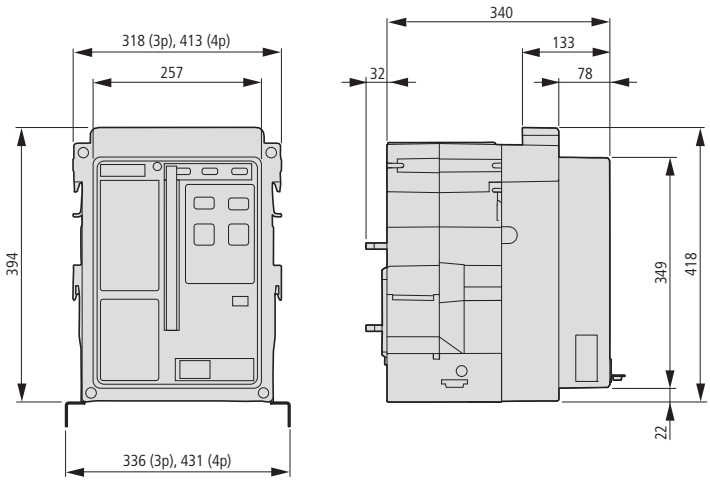
IZMX-PCAM, IZMX-MCAM, IZM-PMINT, IZM-MMINT

	IZMX-PCAM	IZMX-MCAM	IZM-PMINT	IZM-MMINT
General				
Dimensions (W x H x D)	24 x 105 x 80 mm	24 x 105 x 80 mm	91 x 111 x 88 mm	92 x 111 x 88 mm
Mounting	Auxiliary contact strip or 35 mm top-hat rail	Auxiliary contact strip or 35 mm top-hat rail	DIN rail (top hat rail) 35 mm	DIN rail (top hat rail) 35 mm
Protection type	IP20	IP20	IP20	IP20
Mounting position	–	–	horizontal	horizontal
Power supply	24 V DC	24 V DC	24 - 150 V DC or 100 - 240 V AC (50/60 Hz)	24 - 125 V DC or 120 V AC (50/60 Hz)
LED indicators	DP Tx Rx Status	Modbus Tx Rx Status	DP Status INCOM Rx Tx Status	Modbus Tx Rx INCOM Rx Tx Status
Network				
INCOM	–	–	Plug-in screw terminals	Plug-in screw terminals
PROFIBUS	SUB-D 9-pole, socket	–	SUB-D 9-pole, socket	–
Modbus	–	Plug-in screw terminals	–	Plug-in screw terminals
Function	Slave	Slave	Slave	Slave
Interface	RS484	RS485	RS484	RS485
Protocol	PROFIBUS-DP	Modbus-RTU	PROFIBUS-DP	Modbus-RTU
Baud rate	Automatic search up to 12 MBit/s	1200/4800/9600/19200 Bit/s, adjustable via Digitrip	Automatic search up to 12 MBit/s	1200/9600/19200 bits/s, adjustable through coding switch
Bus terminating resistors	In plug as required	121 Ω, externally switch-able	In plug as required	121 Ω, activated through coding switch
INCOM[1)]	–	–	100 Ω, activated through coding switch	100 Ω, activated through coding switch
Bus addresses	1 - 127, can be set through Digitrip	1 - 247, can be set through Digitrip	1 - 127	1 - 127
Number of IZM26 devices on INCOM	–	–	1	32
Maximum distance	2.4 km	1.2 km	2.4 km	1.2 km
INCOM	–	–	3	3
Supported functions	Cyclical data transfer	Function code: 03 = read register 04 = read word variables 08 = connection test, 16 = write register	Cyclical data transfer	Function code: 03 = read register 04 = read word variables 08 = connection test, 16 = write register

Notes [1)] INCOM = system bus (communication connection between Digitrip and fieldbus module)

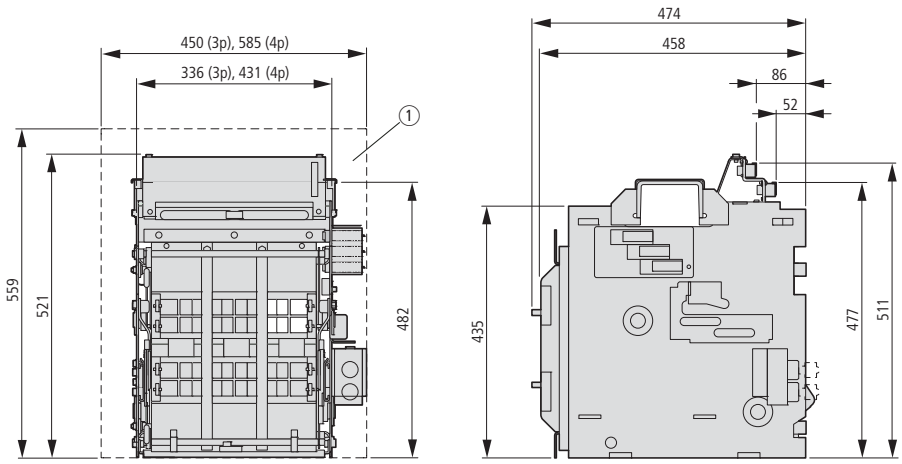
IN20, IZM20 Fixed mounted

IN20…F, IZM20…F



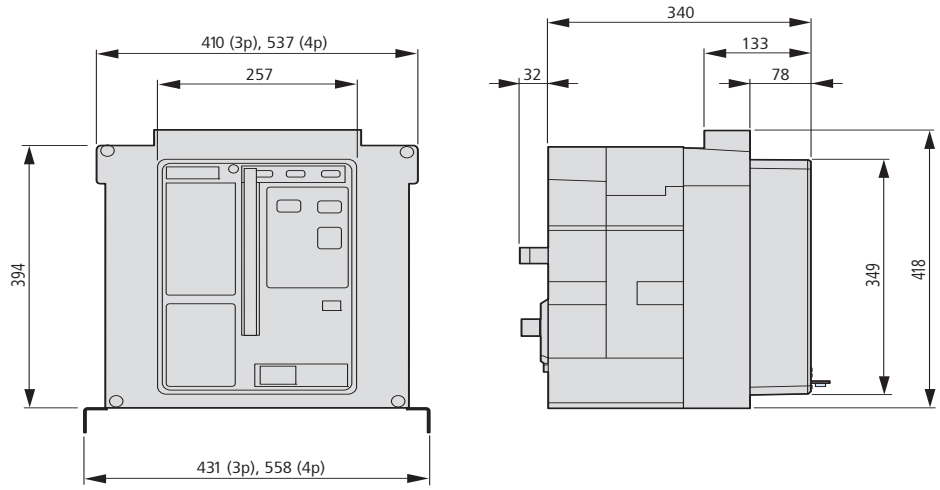
IN20, IZM20 Withdrawable units

IN20…W, IZM20…W



IN32, IZM32 Fixed mounted

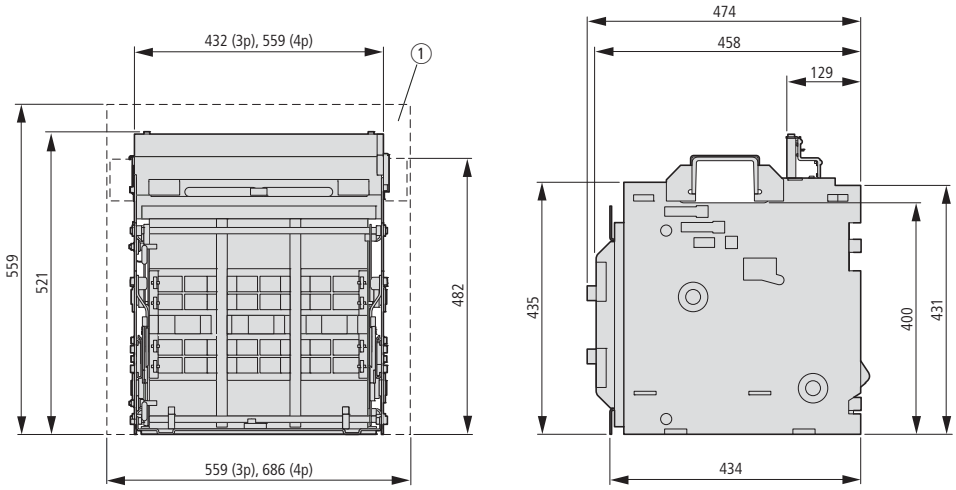
IN32…F, IZM32…F…



① Recommended minimum enclosure size (not shown to scale)

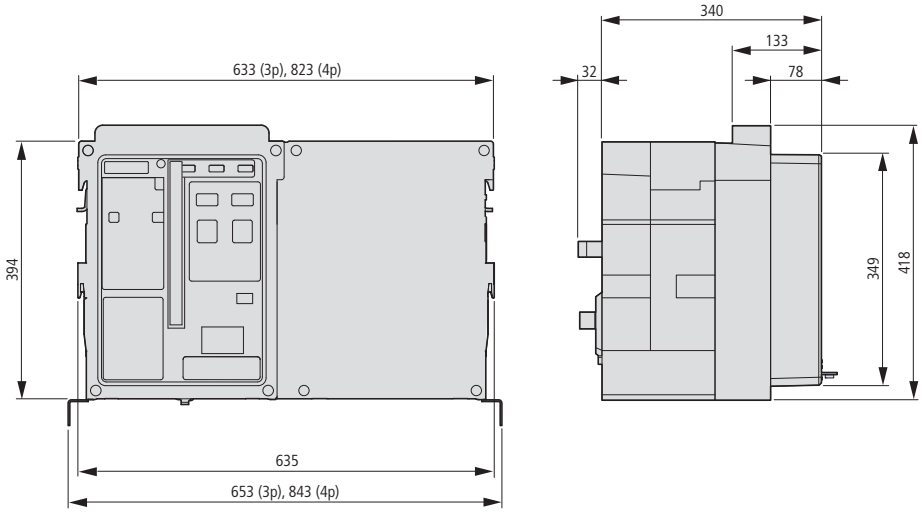
IN32, IZM32 Withdrawable units

IN32…W, IZM32…W…



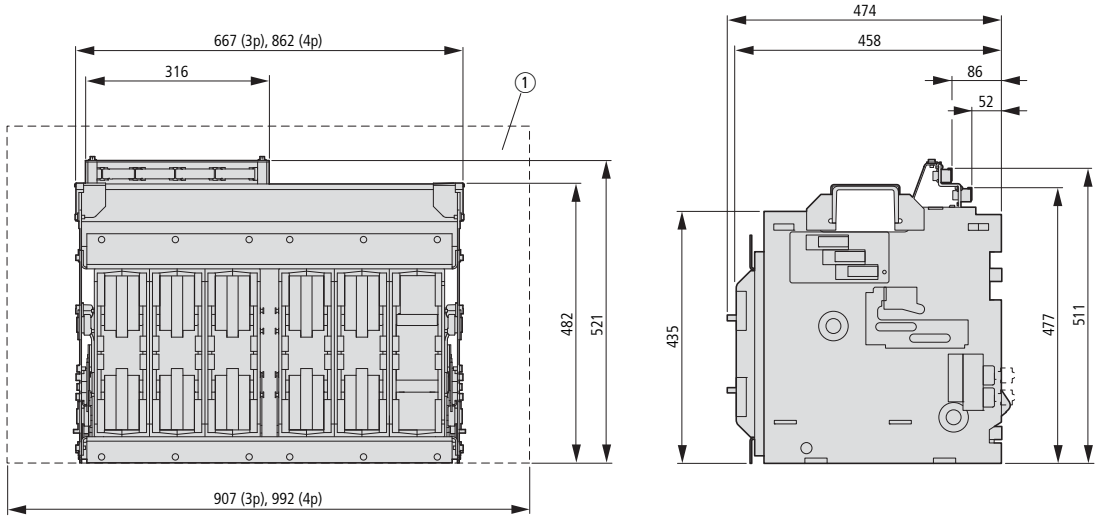
IN40, IZM40 Fixed mounted

IN40…F, IZM40…F



IN40, IZM40 Withdrawable units

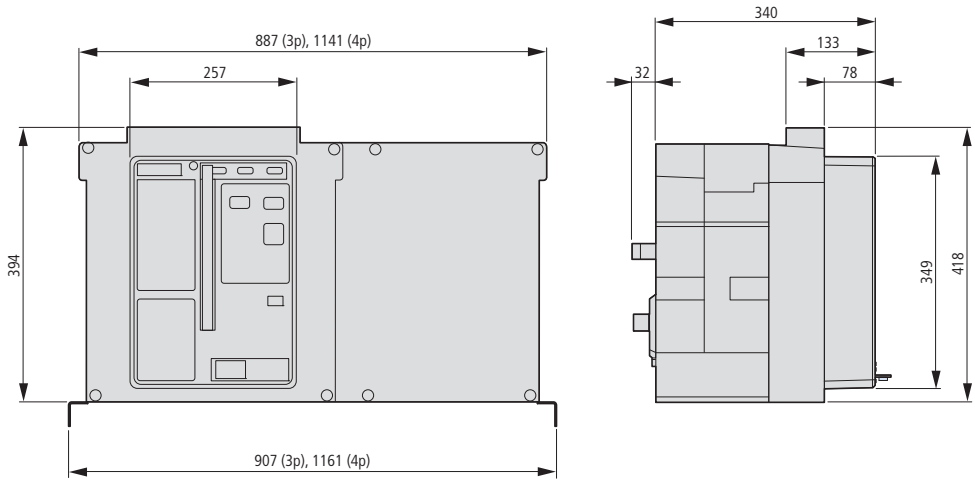
IN40…W, IZM40…W



① Recommended minimum enclosure size (not shown to scale)

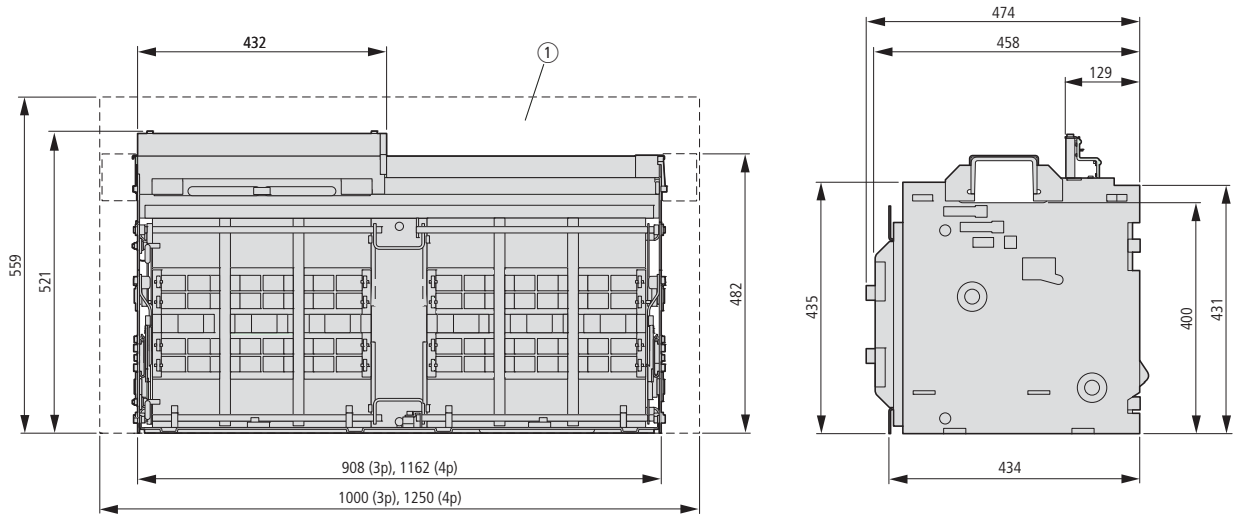
IN63, IZM63 Fixed mounted

IN63…F, IZM63…F



IN63, IZM63 Withdrawable units

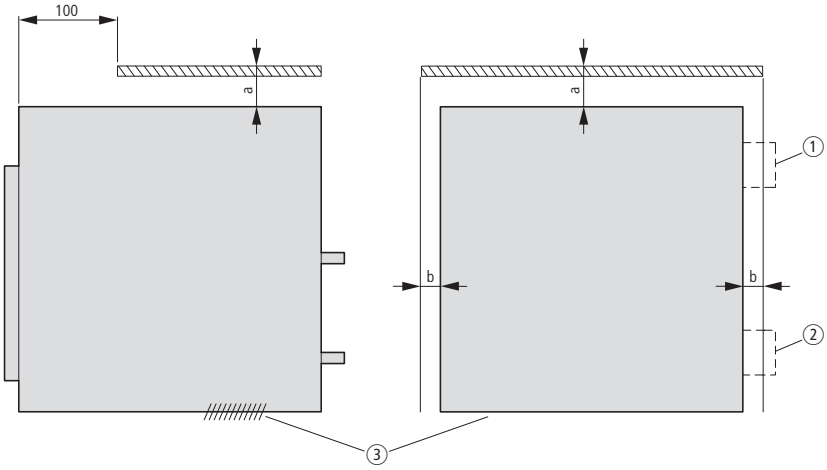
IN63…W, IZM63…W



① Recommended minimum enclosure size (not shown to scale)

Recommended safety clearances

The following information about safety distances is intended to provide a guideline for the installation of circuit-breakers in an enclosure.

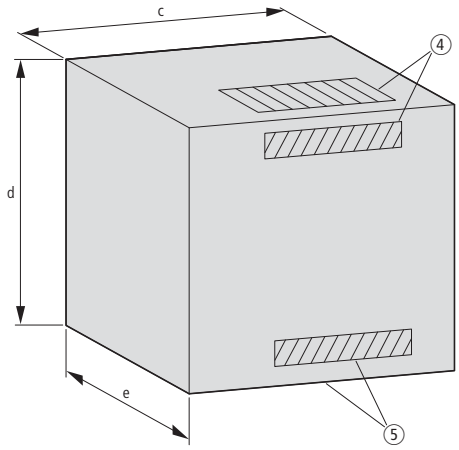


① Cell switch (optional)
② Locking facilities (optional)
③ Ventilation openings (do not cover!)

	Enclosure clearance	To insulated surface	To grounded metal surface	With cell switch or locking facilities
		mm	mm	mm
Withdrawable units	a	0	0	0
	b	25	25	25/75
Fixed mounted	a	150	250	–
	b	30	70	–

Recommended enclosure clearance and ventilation

The illustration shows a typical enclosure.
The table below lists the associated minimum distances between enclosures and ventilation openings.
This information is intended as a guideline for constructing a suitable circuit-breaker enclosure.



Width	Width of cassette + 75 mm
Height	550 mm
Depth	450 mm (front control panel bay)
Ventilation holes	160 cm² (800 - 3200 A) 320 cm² (4000 - 6300 A)

④ Top or rear vent
⑤ Rear or lower vent

