

SASY busbars system
Accessories for control panel building

The innovative accessory for control panel construction is optimally matched to the Eaton control and distribution systems. Whether cable management systems, connection and interconnection technology or locking systems, Eaton accessories help you to realize your applications easily and without wasting time.

SASY busbar system
Interval between busbar centers of 60 or 185 mm conforms to market requirements +++ Devices and adapter mount directly to rail without bore holes +++ System covering for optimal protection against accidental contact +++ For application worldwide +++ Type-tested in Eaton control panel systems

D fuse switch-disconnector with flashing function - D02-LTS/63/3-R
Blink function signals tripped fuse link+++ Snap-action drive switches the load all-pole and hand-autonomous+++ Available with/without integrated auxiliary contact → Page 16/21

LV h.b.c. fuse switch-disconnectors - GST
Construction sizes 000, 00, 1, 2, 3 to 630 A +++ Easy, fast mounting to 60 mm systems +++ Comprehensive device accessories and fuse inserts LV h.b.c. → Page 16/16

K connecting terminals
For cross sections from 16 to 4 x 185 mm² +++ Accepts round and ribbon cables +++ Conductor mounts easily from front → Page 16/67

F3A flanges, ZSD-2K, DH-COMF comfort hinged handle
Insulating material or steel plate +++ Metric cable entry knockouts or cable grommets +++ Version with sponge rubber for direct cable inlet +++ Simple handling +++ Halogen-free +++ Hinge comfort grip for control panels +++ Fold instead of swing +++ Ergonomically formed grip from cast zinc +++ For all market-typical profile semi-cylinders → Pages 16/62, 16/81

Cable grommets and cable glands
For cable external diameters from 1 to 68 mm +++ Simple handling, high protection type +++ PG or metric → Page 16/62

Accessories for control panel building
Optimally matched to busbar systems SASY, Chapter 16 +++ CI insulation material housing, Chapter 20 +++ Steel plate wall housing CS, Chapter 21 +++ Installation distributor IVS, Chapter 22 +++ Add-on board XVTL, Chapter 22 +++ Universal application in other control panels

Prefabricated energy and control distribution
Our system partner switchgear systems operate prefabricated energy and control distributions worldwide.
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SASY busbars system, accessories for control panel building

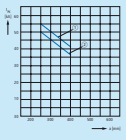


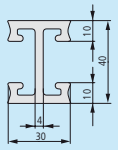












SASY busbar system

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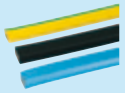
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Accessories for control panel building

Ordering

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Engineering

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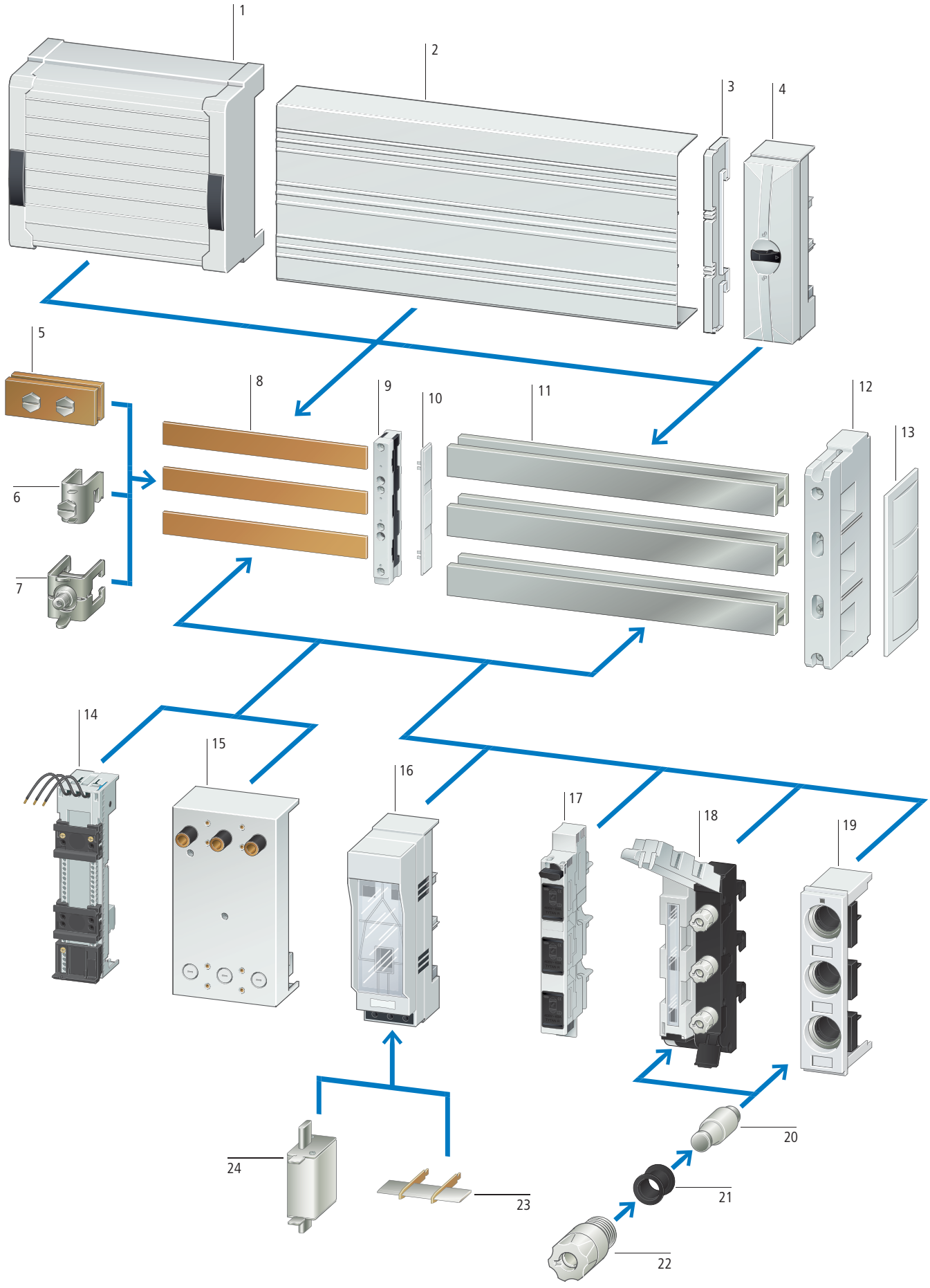
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Dimensions

Cable glands 16/87
Connecting terminals 16/89
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Closing and locking systems 16/90

System overview



System covers 1
Partitioning of busbars or terminals for increased personal safety.
Different versions, for individual customization or ready to install in defined dimensions.
For 3- and 4 pole systems.
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Cover for empty sections, modular 2
Spare section cover can be cut to length.
Clipped on simply and quickly to the support provided.
For 3- and 4 pole systems
→ Page 16/7

Cover for empty sections support 3
Simple push-fit, for all copper busbars.
For 3- and 4 pole systems
→ Page 16/7

Terminal plates 4
Terminal modules protected against direct contact, lockable.
For commonly available connection cables and busbars.
For 3- and 4 pole systems
→ Page 16/7

Busbar end-to-end connectors 5
For interconnecting busbar systems.
For flat and profiled busbars.
→ Page 16/13

Universal conductor terminals 6
With integrated retaining spring.
Captive fixing screw.
Suitable for all copper, flat and profiled busbars.
→ Page 16/12

Expansion terminals 7
For fitting to busbars without drilling
Cables can be inserted from the top simply and quickly.
→ Page 16/10

Profiled busbars 11
Cross-sections 500, 720 and 1140 mm^2.
Tin-plated surface for low contact resistance
Tin-plated copper busbars cut time needed to prepare contact points.
→ Page 16/11

Double T profile busbar supports 9
Cross-sections 500 mm^2 (1250 A) and 720 mm^2 (1600 A)
Very high short-circuit rating for greater system safety.
Fewer supports required.
Spacing between busbar centers 60 mm.
→ Page 16/6

Terminal shroud 10
For covering the copper busbar ends for increased contact protection.
→ Page 16/6

Flat busbars 8
12 x 5 up to 30 x 10 mm, Cu.
→ Page 16/24

Busbar supports 12
For all commonly available flat busbars.
Can be fitted to all busbar sizes using concertina system.
For 3- and 4 pole systems
Versions for IEC and UL/CSA.
Spacing between busbar centers 60 mm.
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Terminal shroud 13
For covering the ends of flat copper busbars
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Busbar adapters for PKZ and PKE 14
Mounting rails and connection cables prepared for motor starter combinations with PKZ, PKE or DILM.
With combi-base suitable for 5 and 10 mm thick flat and profiled busbars.
Versions with connection cables for spring-loaded terminals or without electrical contact.
→ Page 7/22
Two-row double adapter for specific applications, e.g. with fuses.
→ Page 16/21
Complete devices prefitted and wired for DOL starters.
→ Page 8/26
Complete devices prefitted and wired for reversing starters.
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Busbar adapters for NZM 15
Innovative terminal design for rear connetion.
For all commonly available flat busbars and for double T profile.
For 3- and 4 pole systems.
Conductors completely embedded for maximum safety.
Easy mounting and terminal connection
→ Page 16/14

LV h.b.c. fuse switch-disconnectors 16
Switching devices NH000, NH00, NH1, NH2 and NH3 up to 630 A.
→ Page 16/16

D fuse switch-disconnectors without flashing function 17
Switch-disconnectors for D02 screw fuses.
Clear contact position indication.
Screw caps available as accessories.
→ Page 16/21

D fuse switch-disconnectors with flashing function 17
Flashing function indicates blown fuse link.
Switches the load on all poles and without touching by hand.
With fuse plug, therefore no new screw caps required.
Low heat dissipation.
With contact position indicator.
→ Page 16/21

D busbar mounting fuse devices 19
D02, DII and DIII with front and bottom plate supplied.
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Fuse links 20
D01, D02, DII, DIII and C10.
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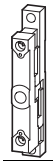
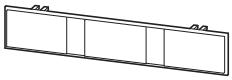
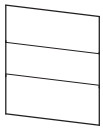
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D01, D02 cartridge ring adaptes, DII and DIII gage rings.
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Screw caps 22
D01, D02, DII and DIII.
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Disconnecting blades 23
Can be used instead of LV h.b.c. fuse links.
Full contact blades.

LV h.b.c. fuse links 24
Compact construction size up to 100 A; NH00 fuses can also used in NH000 devices.
Fuse links NH00, NH1, NH2 and NH3 up to 630 A.
High breaking capacity 120 kA.
→ Page 19/53

Ordering

		Poles	Rated operational current I_e A	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Busbar supports							
• Thermoplast, silicone-free, chlorine-free • Halogen-free • Self-extinguishing to UL 94 • RAL 7035 • Creepage resistance CTI 200 • Temperature-resistant up to 120 °C							
IEC busbar supports							
	Can be fitted to all busbar sizes using concertina system. With internal screw holes.	3	630	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-3/FL**[1) 2)] 107066		10 off
		4	630		**BBS-4/FL** 138381		10 off
UL busbar supports							
	Can be fitted to all busbar sizes using concertina system. With internal screw holes.	3	630	12 x 5/10 20 x 5/10 30 x 5/10	**BBS-3/FL-NA**[1) 2)3)] 107067		10 off
PE/N busbar supports							
	Can be fitted to all busbar sizes using concertina system. Can be mounted individually.	2	630	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-2/FL** 107069		10 off
		1	630		**BBS-1/FL** 107161		10 off
Terminal shroud							
	For covering busbars.	–	–	BBS-3/FL BBS-3/FL-NA	**ES-BBS-3/FL**[1) 2)3)] 107068		10 off
UL bottom plate							
• Silicone-free, chlorine-free • Temperature-resistant up to 110 °C • Self-extinguishing to UL 94							
	For use when air gap between busbars and mounting plate is not sufficient. 1100 mm long.	–	–	BBS-3/FL BBS-3/FL-NA	**BBC-BT-NA**[1) 2)] 107172		2 off

Notes

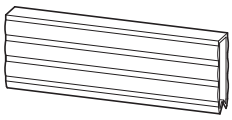
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Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Specially designed for NA	No Yes[3)]
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

Busbar shrouds

- Silicone-free, chlorine-free
- Temperature-resistant up to 110 °C
- Self-extinguishing to UL 94



	Poles	Rated operational current I_e A	For use with	Part no. Article no.	Price See price list	Std. pack
1000 mm long.	–	–	12 x 5 15 x 5 20 x 5 25 x 5 30 x 5	**BBC-FL5** 107173		10 off
	–	–	12 x 10 15 x 10 20 x 10 25 x 10 30 x 10	**BBC-FL10** 107174		10 off

Flat busbars



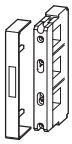
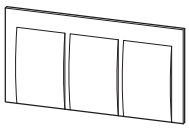
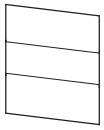
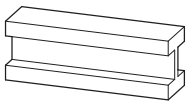
Rated operational current I_e A	Copper bars mm	Length mm	Copper factor[1]	Material	Part no. Article no.	Price See price list	Std. pack
160	12 x 5	1500		Copper, tinned	**CU12X5** 034121		10 off
160	12 x 5	2250		Copper, tinned	**CU12X5-2250** 005093		10 off
250	20 x 5	1500		Copper, tinned	**CU20X5** 044092		10 off
250	20 x 5	2250		Copper, tinned	**CU20X5-2250** 007466		10 off
460	20 x 10	1500		Copper, tinned	**CU20X10** 041719		5 off
460	20 x 10	2250		Copper, tinned	**CU20X10-2250** 009839		5 off
630	30 x 10	1500		Copper, blank	**CU30X10** 051211		1 off

Notes

[1] Calculation of material surcharge → Chapter 23

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Specially designed for NA	✓
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

		Poles	Rated operational current I_e A	For use with	Copper factor	**Part no.** Article no.	**Price** See price list	Std. pack
Busbar supports								
Double T profile busbar supports • Thermoplast, silicone-free, chlorine-free • Halogen-free • Self-extinguishing to UL 94 • RAL 7035 • Creepage resistance CTI 200 • Temperature-resistant up to 120 °C								
	For use as outer or center support. With internal screw holes.	3	1600	Double T profile		**BBS-3/PR**[1) 4)] 107162		3 off
	Suitable for assembly of PE or N bar. With internal screw holes.	1	1600	Double T profile		**BBS-1/PR**[3)] 107165		10 off
Terminal shroud								
	For shrouding busbar systems.	–	–	BBS-3/PR		**ES-BBS-3/PR**[4)] 107164		4 off
UL bottom plate								
• Silicone-free, chlorine-free • Temperature-resistant up to 110 °C • Self-extinguishing to UL 94								
	For use when air gap between busbars and mounting plate is not sufficient. 1100 mm long.	–	–	BBS-3/PR		**BBC-BT-NA**[4)] 107172		2 off
Busbar shrouds								
• Silicone-free, chlorine-free • Temperature-resistant up to 110°C • Self-extinguishing to UL 94								
	1000 mm long.	–	–	Double T profile		**BBC-CU-BAR/PR**[4)] 107175		5 off
Profiled busbars								
E-CU double T profile busbar								
	Tinned, cross-section 500 mm², 2400 mm long.	–	1250	For supports BBS-3/PR, BBS-1/PR, BBS-3/FL-185		**CU-BAR-500/T**[2) 4)] 107166		32 off
	Tinned, cross-section 720 mm², 2400 mm long.	–	1600	For supports BBS-3/PR, BBS-1/PR, BBS-3/FL-185		**CU-BAR-720/T**[2) 4)] 107167		32 off

Notes

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Calculation of material surcharge → Chapter 23

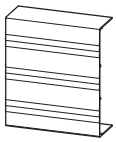
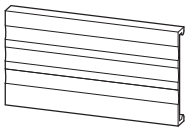
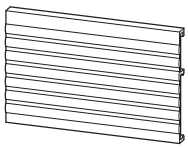
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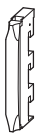
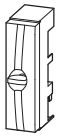
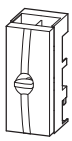
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Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

4)

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Specially designed for NA	Yes
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

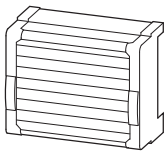
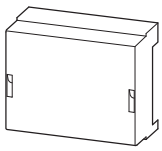
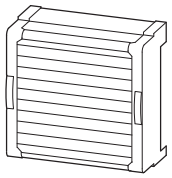
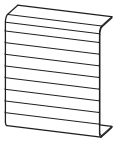
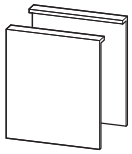
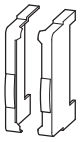
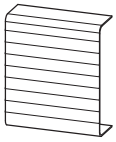
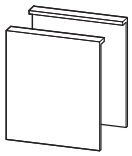
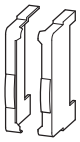
		Description	**Part no.** Article no.	**Price** See price list	Std. pack
Spare covers					
Cover for empty sections, modular					
	To cover the 60 mm system from the front Can only be used with BBC-MRCOV1.	1100 mm long.	**BBC-RCOV1** 107178		2 off
Empty sections cover support					
	Suitable for all busbar thicknesses. Can only be used with BBC-RCOV1.	–	**BBC-MRCOV1** 107179		10 off
Empty sections cover for front panel cutouts					
	Cover module for cutouts	54 mm wide. 194 mm high.	**AM-195/54** 107963		15 off
Separation profiles double T					
	For 3 pole systems with BBS-3/PR	48 mm high. 2400 mm long. Fixing on (profile) busbar support.	**BBC-CS48/PR** 107176		1 off
		76 mm high. 2400 mm long. Fixing on (profile) busbar support.	**BBC-CS76/PR** 107177		1 off

		Width	Poles	Rated operating current	Terminal capacity ⊙ Round conductor, solid ⊛ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▤ Copper strip ■ Copper bar	For use with	Cu factor[1]	**Part no.** Article no.	**Price** See price list	Std. pack
		mm		I_e A	mm					
Terminal plates • Silicone-free, chlorine-free • Temperature-resistant up to 120°C • Self-extinguishing to UL 94 • Creepage resistance CTI 200										
	Spring-type terminal design.	20	3	80	1.5 - 16 mm² AWG 16 - AWG 6. ⊛ ⊙	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double T profile		**BBA-TP3/16** 107205		1 off
	The terminal can be removed for the connection of uncut conductors. Terminal area W x H 10 x 15 mm . Loop-through is possible.	54		300	6 - 50 mm² AWG 10 - AWG 2/0. ⊛ ⊙ ▤ 6 x 9 x 0.8			**BBA-TP3/50** 107183		1 off
	The terminal can be removed for the connection of uncut conductors. Terminal area W x H 15 x 15 mm. Loop-through is possible.	81		440	35 - 120 mm² AWG 2 - MCM 250. ⊛ ⊙ ▤ 10 x 16 x 0.8			**BBA-TP3/120** 107184		1 off

Notes [1] Calculation of material surcharge → Chapter 23

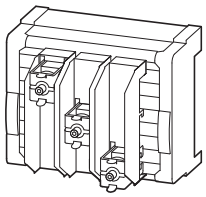
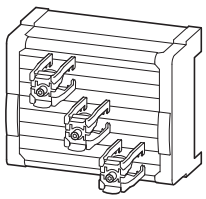
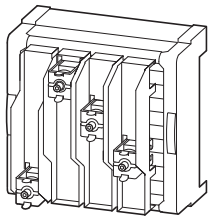
Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

		Description	Part no. Article no.	Price See price list	Std. pack
System cover, complete					
	For 3 pole systems	228 mm long.	**BBC-CS1** 107209		1 off
		270 mm long.	**BBC-CS3** 138377		1 off
	For 4 pole systems	228 mm long.	**BBC-CS4** 138387		1 off
System cover, modular					
• Silicone-free, chlorine-free • Temperature-resistant up to 120 °C • Self-extinguishing to UL 94					
	For 3 pole systems	Cover for empty sections, front. 1100 mm long.	**BBC-CS2-F** 107180		1 off
		Cover for empty sections, top/bottom 1100 mm long.	**BBC-CS2-T/B** 107181		2 off
		Support for cover for empty sections. Each set contains one left and one right support bracket.	**BBC-MCS2** 107182		1 off
	For 4 pole systems	Cover for empty sections, front. 1100 mm long.	**BBC-CS4-F** 138384		1 off
		Cover for empty sections, top/bottom 1100 mm long.	**BBC-CS4-T/B** 138383		2 off
		Support for cover for empty sections. Each set contains one left and one right support bracket.	**BBC-MCS4** 138382		1 off

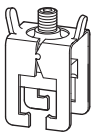
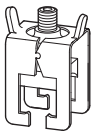
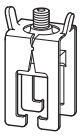
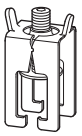
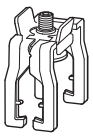
Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Terminal area W × H	Width	Poles	Rated operating current	Terminal capacity Round conductor, solid Round conductor, flexible, with correctly crimped ferrule Round conductor, stranded Sectoral conductor, solid Sectoral conductor,, stranded Copper strip Copper bar	For use with	Cu factor	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm		I_e A	mm					
Connection kit										
• Silicone-free, chlorine-free • Temperature-resistant up to 120°C • Self-extinguishing to UL 94 • Creepage resistance CTI 200										
Pole spacing adjustable. Fixing direct over busbar terminal. Includes shroud with adjustable width. Loop-through is possible.										
	–	180 - 240	3	560	120 - 300 mm² MCM 300 - MCM 600. ⊛ ⊙ ▽	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile		**BBA-TP3/300**[1] 107185		1 off
	32 x 25	180 - 240		800	Up to 10 x 32 x 1 30 x 25			**BBA-TP3/ CU-BAND**[1] 107186		1 off
Adapted to Eaton NZM4. Fixing direct over busbar terminal. Loop-through is possible.										
	5 x 28	228	3	1600	Up to (2 x) 10 x 50 x 1 Up to (2 x) 50 x 10	30 x 10 Double T profile		**CU-BAND** **BBA-TP3/1000**[2][4] 107207		1 off
Pole spacing adjustable. Fixing direct over busbar terminal. Includes shroud with adjustable width. Loop-through is possible.										
	–	180 - 228	4	560	120 - 300 mm² MCM 300 - MCM 600. ⊛ ⊙ ▽	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile		**BBA-TP4/300**[3] 138385		1 off
	32 x 25	180 - 228		800	Up to 10 x 32 x 1 30 x 25			**BBA-TP4/ Copper strip**[3] 138386		1 off

Notes

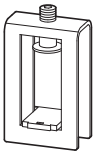
[1] Each set contains 3 pole pieces.
[2] Equipment supplied: 1 x BBC-CS1, 3 x AKS1000.
[3] Each set contains 3 pole pieces.
[4] Calculation of material surcharge → Chapter 23

		Terminal area W × H	Width	Rated operating current	Terminal capacity Round conductor, solid Round conductor, flexible, with correctly crimped ferrule Round conductor, stranded Sectoral conductor, solid Sectoral conductor,, stranded Copper strip Copper bar	For use with	Copper factor[1]	**Part no.** Article no.	**Price** See price list	Std. pack
		mm	mm	I_e A	mm					
Expansion terminals										
Connects onto busbars without drilling										
	Contacting of cable with busbar via cable bedding.	–	38	480	35 - 150 mm² AWG2/0 - MCM 300. Directly clamped	12 x 5/10 20 x 5/10		**AKS150** 138374		6 off
		–	38	500	95 - 185 mm² AWG3/0 - MCM 350. Directly clamped	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile		**AKS185** 107195		6 off
		–	41	600	150 - 300 mm² MCM300 - MCM 600. Directly clamped			**AKS300** 107196		3 off
	Contacting of cable with busbar via contact block.	32 x 25	41	800	3 x 20 x 1 up to 2 x (10 x 32 x1) 32 x 25			**AKS-CU-BAND** 107197		3 off
		55 x 28	72	1600	Up to (2 x) 10 x 50 x 1 Up to (2 x) 50 x 10			**AKS1000** 107208		1 off
		68 x 28	122	1600	Up to (2 x) 60 x 10	30 x 10 Double T profile Triple T profile		**AKS1200** 138375		3 off
		105 x 28	122	1600	Up to (2 x) 100 x 10			**AKS2000** 138376		3 off

Notes [1] Calculation of material surcharge → Chapter 23

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

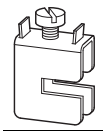
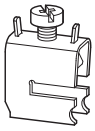
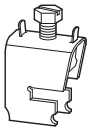
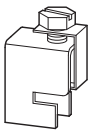
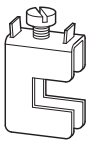
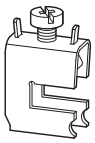
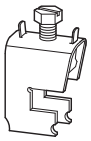
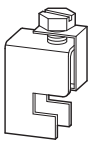
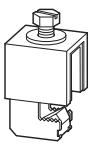
	Terminal area W × H	Width	Rated operating current	Terminal capacity Round conductor, solid Round conductor, flexible, with correctly crimped ferrule Round conductor, stranded Sectoral conductor, solid Sectoral conductor,, stranded Copper strip Copper bar	For use with	Copper factor[1]	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm	I_e A	mm					
Profile terminals									
Connects onto busbars without drilling									
 When connecting laminated busbars in parallel, fit a spacer.	–	82	1600	750 mm², terminal area 51 x 5 - 28	Double T profile		**AKP750** 138364		3 off
	–	72	1600	800 mm², terminal area 41 x 20 - 42			**AKP800** 107198		3 off
	–	94	1600	900 mm², terminal area 64 x 5 - 28			**AKP900** 138365		3 off
	–	94	1600	1000 mm², terminal area 51 x 20 - 42			**AKP1000** 107199		3 off
	–	94	2000	1200 mm², terminal area 64 x 20-42			**AKP1200** 138366		3 off
	–	112	2500	1600 mm², terminal area 81 x 20 - 42			**AKP1600** 138367		3 off
	–	132	3000	2000 mm², terminal area 101 x 20 - 42			**AKP2000** 138368		3 off
	–	132	3200	3600 mm², terminal area 101 x 23 - 45			**AKP3600** 138369		3 off

Notes

[1] Calculation of material surcharge → Chapter 23

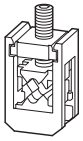
Information relevant for export to North America

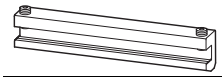
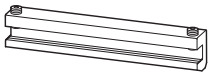
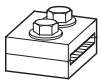
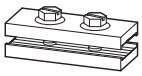
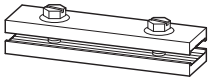
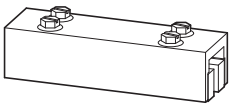
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Terminal area W × H	Width	Rated operating current	Terminal capacity ○ Round conductor, solid ⊜ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▤ Copper strip ■ Copper bar	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm	I_e A	mm				
Universal conductor Connection terminals								
With integrated retaining spring, open clamping area and captive terminal screw.								
	7.5 x 7.5	11.5	180	1.5 - 16 mm² AWG 14 - AWG 6. ⊜ Directly clamped ○ ⊙ ▤ 8 x 6 x 0.5	All 5 mm thick flat busbars	**AKU16/5** 107187		100 off
	10.5 x 11	15.5	270	4 - 35 mm² AWG 10 - AWG 2. ⊜ Directly clamped ○ ⊙ ▤ 3 x 9 x 0.8 or 6 x 9 x 0.8		**AKU35/5** 107188		50 off
	14 x 14	20.5	400	16 - 70 mm² AWG 4 - AWG 2/0. ⊜ Directly clamped ⊙ ▤ 2 x (3 x 9 x 0.8) or 6 x 9 x 0.8		**AKU70/5** 107189		25 off
	17 x 1	23.5	440	16 - 120 mm² AWG 4 - MCM 250. ⊜ Directly clamped ⊙ ▤ 4 x 16 x 0.8 or 6 x 16 x 0.8 or 10 x 16 x 0.8		**AKU120/5** 107190		25 off
	7.5 x 7.5	11.5	180	1.5 - 16 mm² AWG 14 - AWG 6. ⊜ Directly clamped ○ ⊙ ▤ 8 x 6 x 0.5	All 10 mm thick flat busbars	**AKU16/10** 107191		100 off
	10.5 x 11	15.5	270	4 - 35 mm² AWG 10 - AWG 2. ⊜ Directly clamped ○ ⊙ ▤ 3 x 9 x 0.8 or 6 x 9 x 0.8		**AKU35/10** 107192		50 off
	14 x 14	20.5	400	16 - 70 mm² AWG 4 - AWG 2/0. ⊜ Directly clamped ⊙ ▤ 2 x (3 x 9 x 0.8) or 6 x 9 x 0.8		**AKU70/10** 107193		25 off
	17 x 15	23.5	440	16 - 120 mm² AWG 4 - MCM 250. ⊜ Directly clamped ⊙ ▤ 4 x 16 x 0.8 or 6 x 16 x 0.8 or 10 x 16 x 0.8		**AKU120/10** 107194		25 off
	M8 x 8 bolts	30	490	Cable lugs M8	All 10 mm thick flat busbars Double T profile	**AKU-M8/10** 138362		20 off
	M10 x 10 bolts	38	630	Cable lugs M10		**AKU-M10/10** 138361		6 off

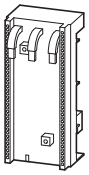
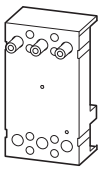
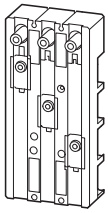
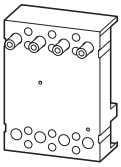
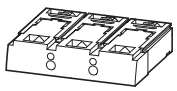
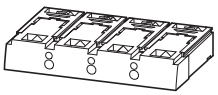
Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Terminal area W × H	Width	Rated operating current	Terminal capacity ○ Round conductor, solid ⦾ Round conductor, flexible, with correctly crimped ferrule ⦾ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded Copper strip Copper bar	For use with	Part no. Article no.	Price See price list	Std. pack
	mm	mm	I_e A	mm				
Plate terminals								
	–	50	630	–	All 10 mm thick flat busbars	**PK900** 138378		3 off
Connection terminals								
	Contacting of cable with busbar via cable bedding.	48	630	95 - 300 mm²	30 x 10 Double T profile Triple T profile	**AK300** 138363		3 off

		Width	For use with	Copper factor[1]	Part no. Article no.	Price See price list	Std. pack
		mm					
Busbar end-to-end connectors							
For hole-less connection of identical busbars.							
For the same flat copper bars Rated operating current 630 A							
	System spacing 100 - 110 mm. Max. permissible busbar offset 1 mm.	38	12 x 5/10 15 x 5/10 20 x 5/10		**BBT-CU12-20X5/10-38** 138379		12 off
		150			**BBT-CU12-20X5/10-150** 107200		3 off
	System spacing 50 - 60 mm. Max. permissible busbar offset 5 mm.	40			**BBT-CU20-30X5/10-40** 138380		6 off
		95			**BBT-CU20-30X5/10-95** 107201		3 off
	System spacing 100 - 110 mm. Max. permissible busbar offset 5 mm.	150			**BBT-CU20-30X5/10-150** 107202		3 off
For differing and same double T profile busbars. Rated operating current 1600 A							
	System spacing 9 - 20 mm. Max. permissible busbar offset 2 mm.	50	Double T profile		**BBT-CU-BAR500/720-50** 107203		6 off
	System spacing 100 - 110 mm. Max. permissible busbar offset 5 mm.	150			**BBT-CU-BAR500/720-150** 107204		3 off

Notes [1] Calculation of material surcharge → Chapter 23

	Number of poles	Rated operational current I_e A	Adapter width mm	For use with	Copper factor[9]	**Part no.** Article no.	**Price** See price list	Std. pack	
Component adapters for circuit-breakers and switch-disconnectors									
For installation on flat copper busbars 12 – 30 x 5 – 10, double T and triple T profile Rated operating voltage U_e: 690 V • Temperature-resistant up to 120 °C • Self-extinguishing to UL 94 • Creepage resistance CTI 200									
	3 pole	160	90	NZM1, PN1, N(S)1		**NZM1-XAD160**[7] 104554		1 off	1)
		250	106	NZM2, PN2, N(S)2		**NZM2-XAD250**[7] 104555		1 off	2)
		630	140	NZM3, PN3, N3		**NZM3-XAD630** 107206		1 off	3)
	4 pole	250	140	NZM2, PN2, N(S)2 NZM2(-4), PN2(-4), N(S)2(-4)		**NZM2-4-XAD250** 138388		1 off	5)
		630	185	NZM3, PN3, N(S)3 NZM3(-4), PN3(-4), N3(-4)		**NZM3-4-XAD630** 138389		1 off	4)
Connection blocks for component adapters									
For NZM2, NZM3 circuit-breakers									
	3 pole	250		NZM2, PN2, N(S)2		**NZM2-XKR4**[8] 281666		1 off	6)
	3 pole	630		NZM3, PN3, N(S)3		**NZM3-XKR13**[8] 281668		1 off	
	4 pole	250		NZM2-4, PN2-4, N(S)2-4		**NZM2-4-XKR4** 118907		1 off	
	4 pole	630		NZM3-4, PN3-4, N(S)3-4		**NZM3-4-XKR13** 119020		1 off	

Notes

1) For switches with standard box terminal connection.
Connection to the system at top using supplied connection cable.
In conjunction with IP2X protection against contact with a finger
Enhanced contact protection on the switch output end possible.
Latch fitting to busbar using combination fixing base
Combination fixing base for adjustment to 5 and 10 mm rail thickness, terminal capacity 6 x 9 x 0.8.
Rated short-circuit switching capacity 35 kA at 480 V.
Busbar must be de-energized for mounting.

2) Connection to the system from above or below through rear connection (+)NZM2-XKR4…
Mounted with clamp and screw fixing.
Rated short-circuit switching capacity 65 kA at 480 V, 50 kA at 600 V.
Busbar must be de-energized for mounting.

3) Connection to the system from above or below through rear connection (+)NZM3-XKR13…
Mounted with claw-type terminal.
Rated short-circuit switching capacity 65 kA at 480 V, 50 kA at 600 V.
Busbar must be de-energized for mounting. Reduction of rated operating current → Page 16/41

4) Connection to the system from above or below through rear connection (+)NZM3-4-XKR13…
Mounted with clamp and screw fixing.

5) Connection to the system from above or below through rear connection (+)NZM2-4-XKR4…
Mounted with clamp and screw fixing.

6) Part no. and part no. suffix include parts for one switch side at top or bottom (with NZM...-4-... top only).
Required for component adapters NZM2-XAD and NZM3-XAD
O = for fitting at the top
U = for fitting at the bottom

Information relevant for export to North America

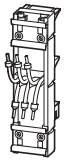
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Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

8)

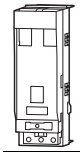
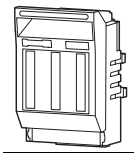
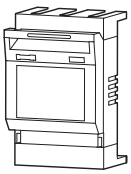
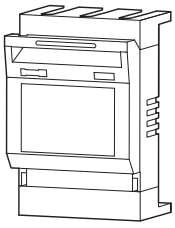
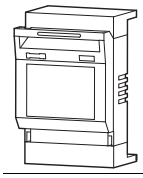
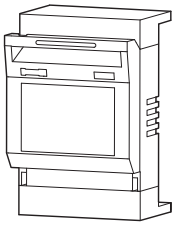
Product Standards	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
NA Certification	Request filed for UL and CSA
Suitable for	Refer to main component information

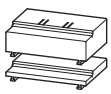
9) Calculation of material surcharge → Chapter 23

	Rated operational voltage U_e V AC	Conductor cross-section	Adapter width mm	For use with	Support rail Number	**Part no.** Article no.	**Price** See price list	Std. pack
Busbar adapters for PKZ and PKE								
Complete range → Chapter 7 For surface mounting to flat copper busbars with 60 mm between busbar centers, suitable for 5 mm and 10 mm busbar thickness and also double T profile. Mounted by latching onto de-energized busbar.								
Connecting cables								
–	–	–	–	BBA…	–	**BBA-XLT-6-130** 116902		30 off
–	–	–	–	BBA…	–	**BBA-XLT-16-142** 116903		30 off
Double adapters Rated operational current 35 A								
	690	AWG 10 (6 mm²)	45	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10	2	**Z-SS-60-ADD/6-45** 288790		1 off
	690	AWG 10 (6 mm²)	54	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10	2	**Z-SS-60-ADD/6-54** 288791		1 off
	690	AWG 10 (6 mm²)	72	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10	2	**Z-SS-60-ADD/6-72** 288792		1 off
	690	AWG 10 (6 mm²)	81	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10	2	**Z-SS-60-ADD/6-81** 288793		1 off

Information relevant for export to North America

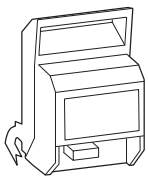
Product Standards	UL 508A; CSA-C22.2 No. 14; IEC60439-1; CE marking
UL File No.	On request
UL CCN	On request
CSA File No.	On request
CSA Class No.	On request
NA Certification	UL Recognized, CSA certified

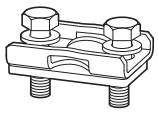
	Connection	Spacing between busbar centers	Rated operational current	Max. fuse link			For use with	**Part no.** Article no.	**Price** See price list	Std. pack
			I_e	500 V	690 V	Size				
		mm	A	A	A					
LV h.b.c. fuse switch-disconnectors										
• Includes handguard top and bottom (except GST-160-40-60-AOU) • Mounting without holes • For surface mounting on busbars 3 pole										
	Box terminal 1.5 - 50 mm² Bottom	60	100	100	–	NH000	20 x 5/10 30 x 5/10 Double T profile	**LTS-100/C00/3-R** 284690		1 off
	Box terminal 1.5 - 70 mm² Top or bottom	40 50 60	160	160	100	NH00	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile	**GST00-160-40-60-AOU**[1] 224550		1 off
	Screw M10 Top	60	250	250	200	NH1	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile	**GST1-AO** 107250		1 off
		60	400	400	315	NH2		**GST2-AO** 107252		1 off
		60	630	630	500	NH3		**GST3-AO** 107254		1 off
	Screw M10 Bottom	60	250	250	200	NH1	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile	**GST1-AU** 107251		1 off
		60	400	400	315	NH2		**GST2-AU** 107253		1 off
		60	630	630	500	NH3		**GST3-AU** 107255		1 off

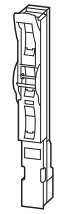
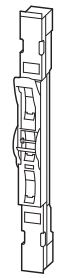
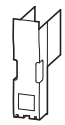
	Size	Rated operating voltage U_e V	For use with	**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
Handguard for switch-disconnectors							
Provides additional protection for operator during actuation of fuse switch-disconnector							
	00	–	GST00-160-…	**BS-SET-GST00** 107955		1 off	One set contains handguard top and bottom.

Notes

[1] Without handguard.
Order optional handguard BS-SET-GST00 → Page 16/16
LV h.b.c. fuse links → Page 19/53

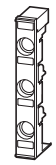
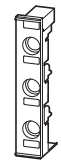
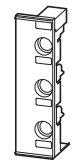
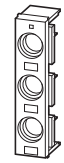
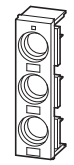
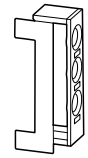
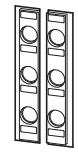
	Size	Rated operating voltage U_e V	For use with	**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
Cover with fuse monitoring for fuse switch-disconnectors							
• Operation indicator 1 green LED • Fuse failure indication 3 red LEDs (F1, F2, F3) • Fault indication through relay contacts (floating) • Not for 1-phase application.							
	00	400 - 690	GST00...-A...	**GST00-DSI** 107956		1 off	–
	1	400 - 690	GST1-A...	**GST1-DSI** 107957		1 off	–
	2	400 - 690	GST2-A...	**GST2-DSI** 107958		1 off	–
	3	400 - 690	GST3-A...	**GST3-DSI** 107959		1 off	–

	Terminal range	For use with	**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
Sets of prism terminals						
	1 x (70 - 150) mm² Cu/Al	GSU1, GST…1	**PSK1** 038734		1 off	One set contains 3 prism terminals.
	1 x (120 - 240) mm² Cu/Al	GSU2, GST…2	**PSK2** 043480			
	1 x (120 - 300) mm² Cu/Al	GSU3, GST…3	**PSK3** 048226			
Sets of double prism terminals						
	2 x (70 - 95) mm² Cu/Al	GSU1, GST…1	**PSK12** 041107		1 off	One set contains 3 double prism terminals
	2 x (120 - 150) mm² Cu/Al	GSU2, GST…2	**PSK22** 045853			
	2 x (120-240) mm² Cu/Al	GSU3, GST…3	**PSK32** 050599			
Box terminals						
	25 - 150 mm² Copper strip 6 x 16 x 0.8 mm	GST…1	**SK1-GS** 107960		3 off	3 required for each GST....
	25 - 240 mm² Copper strip 10 x 16 x 0.8 mm	GST…2	**SK2-GS** 107961			
	25 - 300 mm² Copper strip 11 x 21 x 1 mm	GST…3	**SK3-GS** 107962			

	Rated operational current	Max. fuse link		Size	For use with	Connection	**Part no.** Article no.	**Price** See price list	Std. pack
	I_e	400 V	690 V						
	A	A	A						
LV h.b.c. fuse switches									
• With terminal compartment cover • Mounting without holes with spike type terminal Components supplied • NH-SLS-00/160-60(-SI): with box terminals Busbar mounting • NH-SLS-00/160-60(-SI) 60 mm spacing between busbar centers									
Without fuse monitoring									
	160	160	160	00	12 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double-T-profiles	Top or bottom	**NH-SLS-00/160-60**[1] 106211		1 off
With fuse monitoring									
	160	160	–	00	12 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double-T-profiles	Top or bottom	**NH-SLS-00/160-60-SI**[1] 106216		1 off
Terminal shroud/size adapter for GST…									
For NH-SLS-00/160-60 Size 00									
							**Z-NH-SLS-KA** 106223		2 off

Notes

[2] LV h.b.c. fuse links → Page 19/53

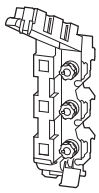
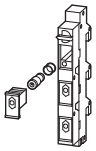
		Rated operational current I_e A	Rated operating voltage U_e V AC	Size	Mounting width mm	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
D busbar mounting fuse devices									
Basic units									
• Includes contact protection shroud with front and bottom plate and designation label • Supplied empty without screw cap									
	Cartridge ring adapter	63	400	E18, D 02	27	12 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double T profile	**D02-SO/63/3-R-27**[1] 114315		10 off
	Cartridge ring adapter			E18, D 02	36		**Z-D02/R/3-36**[1] 100663		60 off
	Cartridge ring adapter			E18, D 02	54		**Z-D02/R/3-54**[1] 100664		40 off
	Gage ring	25	500	E 27, D II	45		**DII-SO/25/3-R**[2] 107965		10 off
	Gage screw	25	500	E 27, D II	45		**DII-SO/25/3-R-PS**[2] 110394		10 off
	Gage ring	63	690	E 33, D III	54		**DIII-SO/63/3-R**[3] 107966		10 off
	Gage screw	63	690	E 33, D III	54		**DIII-SO/63/3-R-PS**[3] 110395		10 off
Side cover Can be fitted on right or left Can be fitted to D…-SO/…/3-R(-PS)									
	–	–	–	–	–	DII-SO/…/3-R(-PS)	**SBS-RS60** 060541		10 off
Kit for fitting over busbar supports Can be fitted to D02-SO/63/3-R-27									
	–	–	–	–	36	D02-SO/63/3-R-27	**Z-D02-S-AB-SET** 100662		10 off

Notes

[1] A complete and functional fuse element consists of the basic unit
- Fuse link → Page 19/47
- Fuse adapter → Page 19/47
- Screw cap → Page 19/47

[2] A complete and functional fuse element consists of the basic unit
- Fuse link → Page 19/43
- Fuse adapter → Page 19/44
- Screw cap → Page 19/44

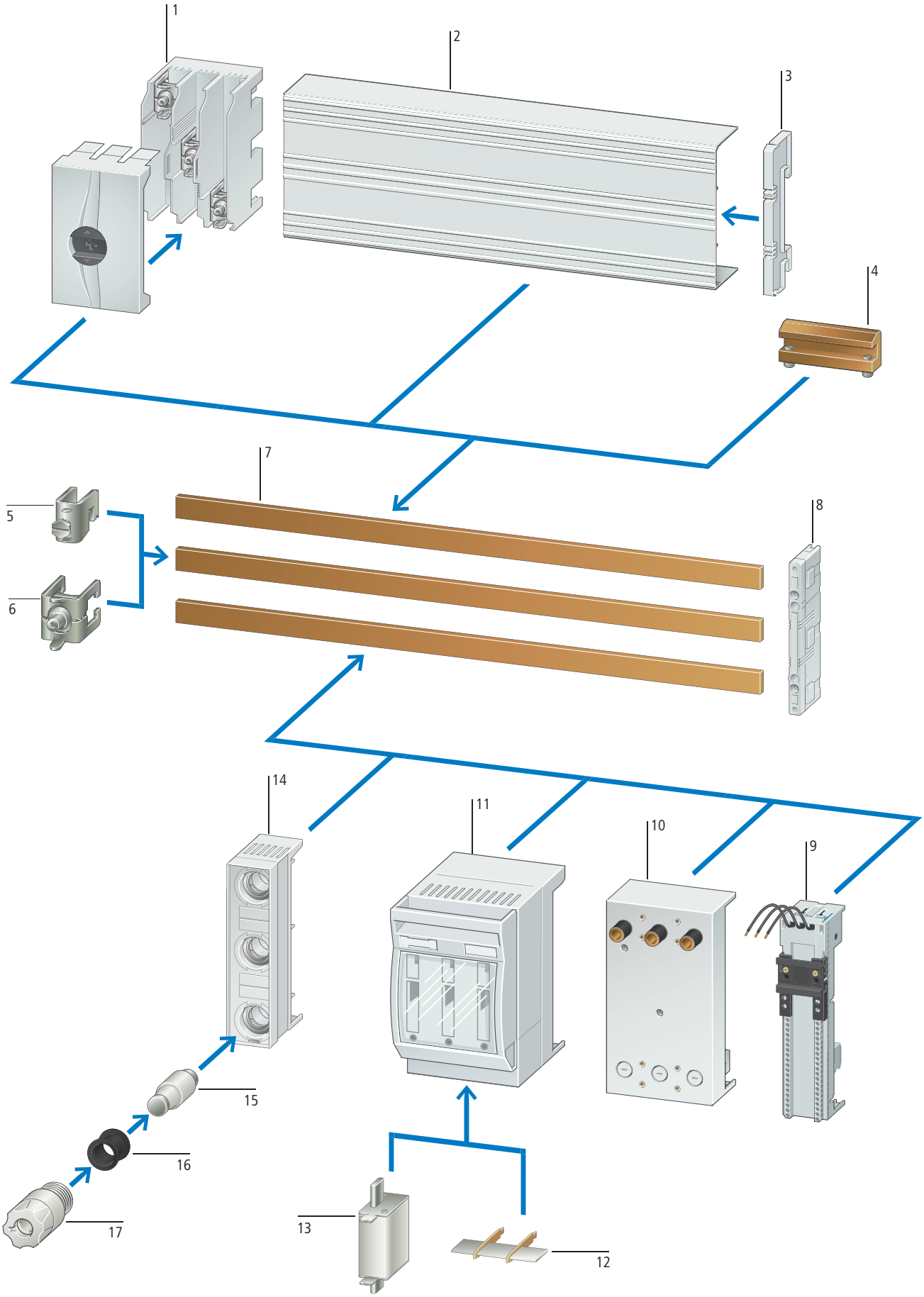
[3] A complete and functional fuse element consists of the basic unit
- Fuse link → Page 19/43
- Fuse adapter → Page 19/44
- Screw cap → Page 19/44

		Rated operational current I_e A	Rated operational voltage U_e V AC	Size	Mounting width mm	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
D fuse switch-disconnectors without flashing function									
• 3 pole • Including contact protective shroud with front and bottom plate • Delivered empty and without screw cap									
	Gage ring	63	400	E18, D 02	36	20 x 5/10 30 x 5/10 Double T profile	**D02-S/63/3-RS**[1] 284649		1 off
D fuse switch-disconnectors with flashing function									
• The flashing function indicates a blown fuse link • Supplied empty, without cartridge ring adapters and fuse links • Retaining springs for D01 fuse links or 10x38 cylindrical fuse links supplied • Contact position indicator • Fuse plug without screw cap • Switches the load on all poles and without touching by hand • D02-LTS/63/3-R-HK with integrated auxiliary contact • Sealable and lockable									
	–	32	400	C10x38	27	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double T profile	**D02-LTS/63/3-R** 114316		3 off
	–	63	400	E18, D02	27		**D02-LTS/63/3-R-HK** 114318		3 off

Notes

[1] A complete and functional fuse element consists of the basic unit
- Fuse link → Page 19/47
- Fuse adapter → Page 19/47
- Screw cap → Page 19/47

System overview



Terminal plates 1
Simple connection by contacting the conductor.
Full contact protection.
→ Page 16/25

Cover for empty sections, modular 2
Spare section cover can be cut to length.
Clipped on simply and quickly to the support provided.
Compact height.
For 3 pole systems.
→ Page 16/24

Empty sections cover support 3
Simple push-fit, for busbars 12 x 5/10.
For 3 pole systems.
→ Page 16/24

Busbar end-to-end connectors 4
For interconnecting busbar systems.
For flat busbars.
→ Page 16/26

Universal conductor Connection terminals 5
With integrated retaining spring.
Captive fixing screw.
Suitable for all copper, flat and profiled busbars.
→ Page 16/26

Expansion terminals 6
For fitting to busbars without drilling
Cables can be inserted from the top simply and quickly.
→ Page 16/25

Flat busbars 7
12 x 5 and 12 x 10 mm, Cu.
→ Page 16/24

Busbar supports 8
Suitable for use with flat busbars 12 x 5/10.
Compact height.
For 3 pole systems.
Spacing between busbar centers 60 mm.
→ Page 16/24

Busbar adapters for PKZ and PKE 9
Mounting rails and connection cables prepared for motor starter combinations with PKZ, PKE or DILM.
Compact height.
→ Page 7/23

Busbar adapters for NZM 10
Safe termination.
For 3 pole systems
Conductors completely embedded for maximum safety.
Easy mounting and terminal connection
→ Page 16/27

LV h.b.c. fuse switch-disconnectors 11
Switching device NH000 up to 100 A.
Simple changing of termination direction bottom/top.
Compact height.
→ Page 16/27

Disconnecting blades 12
Can be used instead of LV h.b.c. fuse links.
Full contact blades.

LV h.b.c. fuse links 13
Compact construction size up to 100 A, NH00 fuses can also be used in NH000 devices.
→ Page 19/53

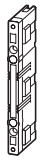
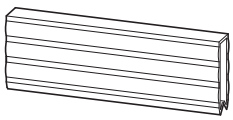
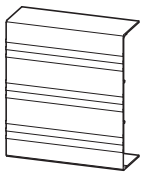
D busbar mounting fuse devices 14
D02, compact height.
Box terminal for connecting cables up to 25 mm^2.
Integrated protection against direct contact
→ Page 16/20

Fuse links 15
D.02
→ Page 19/47

Gage pieces 16
Gage rings D02.
→ Page 19/47

Screw cap 17
D.02
→ Page 19/47

Ordering

		Poles	Rated operational current I_e A	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Busbar supports							
Compact busbar support							
	With removable contact element for adapting to the busbar size. With screw holes on inside and integrated end cover.	3	360	12 x 5/10	**BBS-3/FL-C**[1] 138370		10 off
Busbar shrouds							
• Silicone-free, chlorine-free • Temperature-resistant up to 110 °C • Self-extinguishing to UL 94							
	1000 mm long.	–	–	12 x 5 15 x 5 20 x 5 25 x 5 30 x 5	**BBC-FL5** 107173		10 off
	1000 mm long.	–	–	12 x 10 15 x 10 20 x 10 25 x 10 30 x 10	**BBC-FL10** 107174		10 off
System covers							
Cover for empty sections, modular For covering the Compact System from the front. Can only be used with BBC-MRCOV3-C.							
	1100 mm long.	–	–		**BBC-RCOV3-C** 138371		2 off
Empty sections cover support Suitable for 5 and 10 mm busbar thickness. Can only be used with BBBC-RCOV3-C.							
	–	–	–	12 x 5/10	**BBC-MRCOV3-C** 138372		10 off

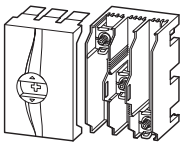
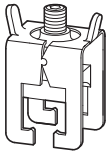
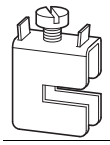
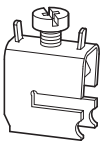
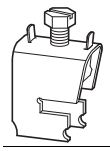
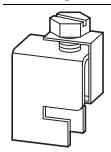
	Rated operational current I_e A	Copper bars mm	Length mm	Copper factor[2]	Material	**Part no.** Article no.	**Price** See price list	Std. pack
Flat busbars								
	160	12 x 5	1500		Copper, tinned	**CU12X5** 034121		10 off
	160	12 x 5	2250		Copper, tinned	**CU12X5-2250** 005093		10 off

Notes

[1] Short-circuit strength → Page 16/40
[2] Calculation of material surcharge → Chapter 23

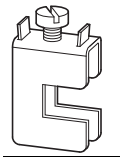
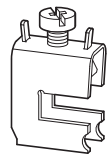
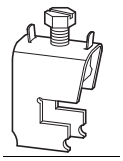
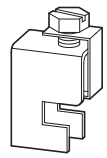
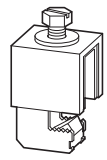
Information relevant for export to North America

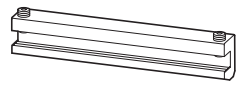
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Terminal area W x H	Width	Poles	Rated operating current	Terminal capacity ○ **Round conductor, solid** ⊜ Round conductor, flexible, with correctly crimped ferrule ○ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▤ Copper strip ■ **Copper bar**	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm		I_e A	mm				
Terminal plates									
The terminal can be removed for the connection of uncut conductors. Contacting of cable with busbar via cable bedding.									
	–	90	3	480	35 - 150 mm² AWG 2 - MCM 300. ⊜ ○ ▤ 10 x 20 x 1	12 x 5/10 15 x 5/10 20 x 5/10	**BBA-TP3/100-C** 138373		1 off
Expansion terminals									
Contacting of cable with busbar via cable bedding.									
	–	38	–	480	35 - 150 mm² AWG2/0 - MCM 300. ⊜ Directly clamped ○ ▽	12 x 5/10 20 x 5/10	**AKS150** 138374		6 off
Universal conductor Connection terminals									
	7.5 x 7.5	11.5	–	180	1.5 - 16 mm² AWG 14 - AWG 6. ⊜ Directly clamped ○ ○ ▤ 8 x 6 x 0.5	All 5 mm thick flat busbars	**AKU16/5** 107187		100 off
	10.5 x 11	15.5	–	270	4 - 35 mm² AWG 10 - AWG 2. ⊜ Directly clamped ○ ○ ▤ 3 x 9 x 0.8 or 6 x 9 x 0.8		**AKU35/5** 107188		50 off
	14 x 14	20.5	–	400	16 - 70 mm² AWG 4 - AWG 2/0. ⊜ Directly clamped ○ ▤ 2 x (3 x 9 x 0.8) or 6 x 9 x 0.8		**AKU70/5** 107189		25 off
	17 x 15	23.5	–	440	16 - 120 mm² AWG 4 - MCM 250. ⊜ Directly clamped ○ ▤ 4 x 16 x 0.8 or 6 x 16 x 0.8 or 10 x 16 x 0.8		**AKU120/5** 107190		25 off

Information relevant for export to North America

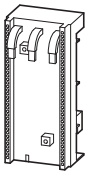
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

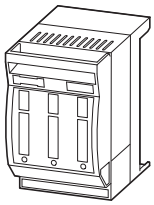
	Terminal area W x H	Width	Poles	Rated operational current	Terminal capacity ○ Round conductor, solid ⊛ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▤ Copper strip ■ Copper bar	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm		I_e A	mm				
Universal conductor connection terminals									
	7.5 x 7.5	11.5	–	180	1.5 - 16 mm² AWG 14 - AWG 6. ⊛ Directly clamped ○ ⊙ ▤ 8 x 6 x 0.5	All 10 mm thick flat busbars	**AKU16/10** 107191		100 off
	10.5 x 11	15.5	–	270	4 - 35 mm² AWG 10 - AWG 2. ⊛ Directly clamped ○ ⊙ ▤ 3 x 9 x 0.8 or 6 x 9 x 0.8		**AKU35/10** 107192		50 off
	14 x 14	20.5	–	400	16 - 70 mm² AWG 4 - AWG 2/0. ⊛ Directly clamped ⊙ ▤ 2 x (3 x 9 x 0.8) or 6 x 9 x 0.8		**AKU70/10** 107193		25 off
	17 x 15	23.5	–	440	16 - 120 mm² AWG 4 - MCM 250. ⊛ Directly clamped ⊙ ▤ 4 x 16 x 0.8 or 6 x 16 x 0.8 or 10 x 16 x 0.8		**AKU120/10** 107194		25 off
	M8 x 8 bolts	30	–	490	Cable lugs M8	All 10 mm thick flat busbars Double T profile	**AKU-M8/10** 138362		20 off
	M10 x 10 bolts	38	–	630	Cable lugs M10		**AKU-M10/10** 138361		6 off

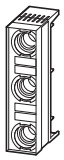
		Width	Rated operating current	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
		mm	I_e A				
End-to-end busbar econnectors							
For hole-less connection of identical busbars.							
	For the same flat copper bars. System spacing 100 - 110 mm. Max. permissible busbar offset 1 mm.	38	630	12 x 5/10 15 x 5/10 20 x 5/10	**BBT-CU12-20X5/10-38** 138379		12 off
		150			**BBT-CU12-20X5/10-150** 107200		3 off

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Poles	Rated operational current I_e A	Adapter width mm	For use with	Copper factor[2]	Part no. Article no.	Price See price list	Std. pack
Component adapters for circuit-breakers and switch-disconnectors								
For surface mounting on flat copper busbars 12 – 30 x 5 – 10, double T and triple T profile Rated operating voltage U_e: 690 V • Temperature-resistant up to 120 °C • Self-extinguishing to UL 94 • Creepage resistance CTI 200								
	3 pole	160	90	NZM1, PN1, N(S)1	0.23	**NZM1-XAD160**[1)2)] 104554		1 off

	Poles	Spacing between busbar centers mm	Rated operational current I_e A	Max. fuse link 500 V A	Max. fuse link 690 V A	Size	For use with	Part no. Article no.	Price See price list	Std. pack
LV h.b.c. fuse switch-disconnectors										
 For surface mounting on busbars	3 pole	60	100	100	100	NH00(0) (max. 21 mm width)	–	**FCFSDNH000BBC60-3**[4)] 139533		1 off

	Rated operational current I_e A	Rated operational voltage U_e V AC	Size	Width mm	For use with	Part no. Article no.	Price See price list	Std. pack
D busbar mounting fuse devices								
Basic units								
 Latch mechanism for push-fitting on busbar. Gage ring	63	400	E18 D02	36	12 x 5/10	**FCFBD02BBC60-3-36**[3)] 139532		6 off

Notes

[1)] For switches with standard box terminal connection.
Connection to the system at top using supplied connection cable.
In conjunction with IP2X protection against contact with a finger
Enhanced contact protection on the switch output end possible.
Latch fitting to busbar using combination fixing base
Combination fixing base for adjustment to 5 and 10 mm rail thickness, terminal capacity 6 x 9 x 0.8.
Rated short-circuit switching capacity 35 kA at 480 V.
Busbar must be de-energized for mounting.

[2)] Calculation of material surcharge → hapter 23

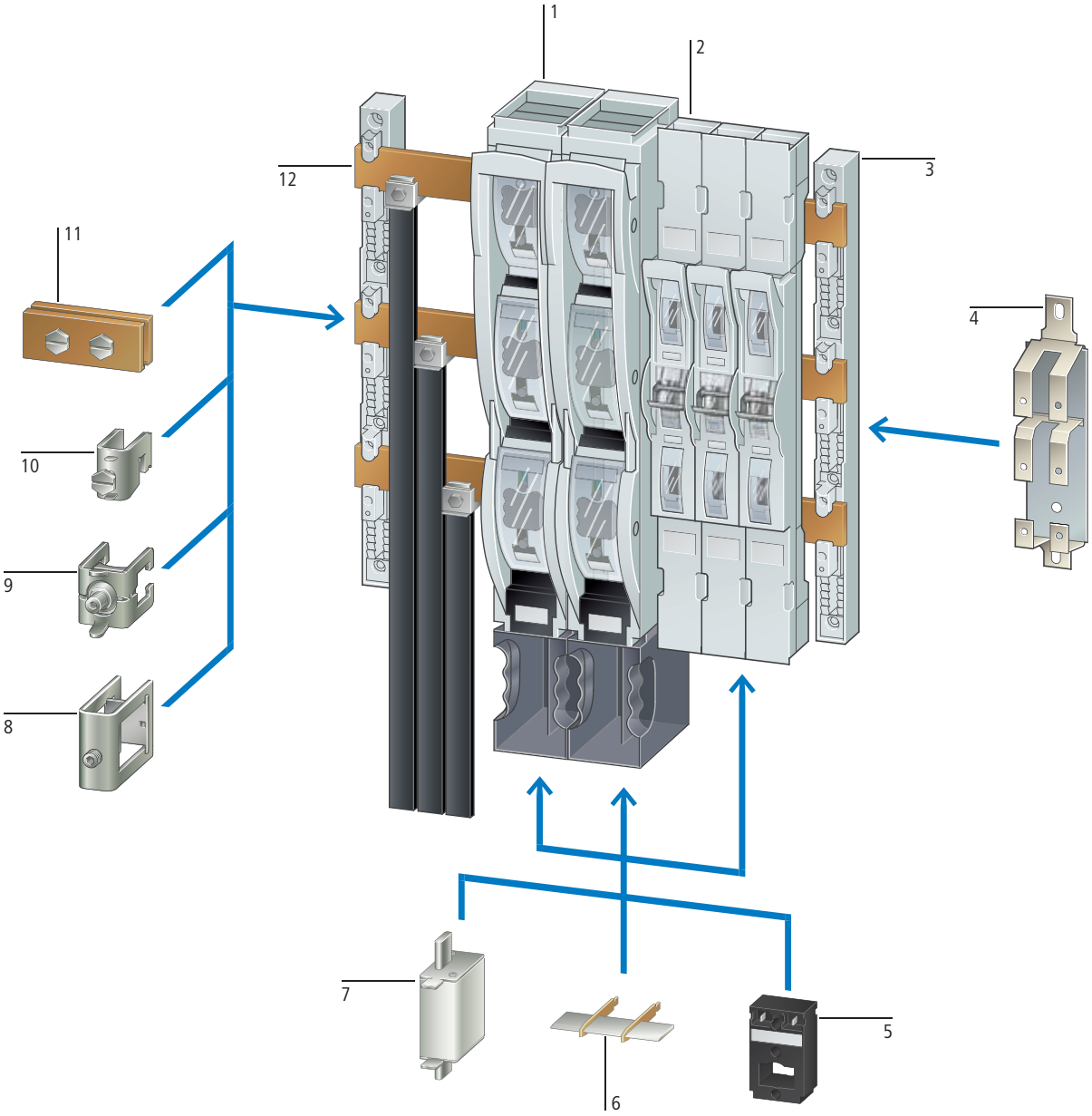
[3)] A complete and functional fuse element consists of the basic unit
- Fuse link → Page 19/47
- Fuse adapter → Page 19/47
- Screw cap → Page 19/47

[4)] LV h.b.c. fuse links → Page 19/53

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

System overview



LV h.b.c. fuse switches 250 up to 630 A 1

Spacing between busbar centers 185 mm.

Prepared for current transformer.

Top or bottom outgoer possible.

With/without electronic fuse monitoring.

→ Page 16/32

LV h.b.c. fuse switches 160 A 2

Spacing between busbar centers 100 mm.

Adaptable for 185 mm system.

With/without electronic fuse monitoring.

Top or bottom outgoer possible.

→ Page 16/32

Busbar supports 3

Spacing between busbar centers 185 mm.

Hole-less mounting of 30, 40, 50, to 120 x 10 mm flat busbars, double T and triple T profiled busbars.

→ Page 16/31

Adapters 4

Adapts NH00 fuse combination units to the 185 mm system.

Single or double adapters.

Prepared for current transformer.

→ Page 16/33

Current transformer 5

Can be retrofitted at any time with all fuse combination units.

No additional space required, simply swing in.

→ Page 16/33

Disconnecting blades 6

Can be used instead of LV h.b.c. fuse links.

Full contact blades.

LV h.b.c. fuse links 7

High breaking capacity 120 kA.

Fuse links NH00, NH1, NH2 and NH3 up to 630 A.

→ Page 19/53

Profile terminals 8

Safe connection of flat copper busbars or multi-layer copper strip to profiled busbars.

8 different construction sizes from 750 to 3600 mm² terminal area.

→ Page 16/35

Expansion terminals 9

For fitting to busbars without drilling.

Cables can be inserted from the top simply and quickly.

→ Page 16/34

Universal conductor terminals 10

With integrated retaining spring.

Captive fixing screw.

Suitable for all copper, flat and profiled busbars.

→ Page 16/36

End-to-end busbar connectors 11

For interconnecting busbar systems.

For flat and profiled busbars.

→ Page 16/37

Flat busbars, profiled busbars 12

Profiled busbars with cross-sections 500, 720 and 1140 mm², and flat copper busbars up to 30 x 10 mm.

Tin-plated copper busbars cut time needed to prepare contact points.

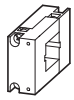
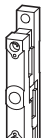
Flat busbars

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Profiled busbars

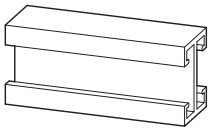
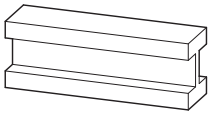
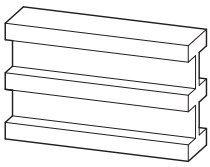
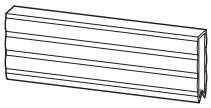
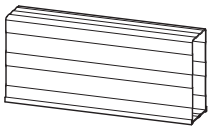
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Ordering

		Poles	Rated operational current I_e A	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Busbar supports							
Double T/Triple T profile busbar supports • Thermoplast, silicone-free, chlorine-free • Halogen-free • Self-extinguishing to UL 94 • RAL 7035 • Creepage resistance CTI 200 • Temperature-resistant up to 120 °C							
	Can be fitted with NH-SLS… Hole-less mounting of busbars.	3	2500	30 x 10 40 x 10 50 x 10 60 x 10 80 x 10 100 x 10 120 x 10 Double T profile Triple T profile	**BBS-3/FL-185** 107210		1 off
Double T profile busbar supports • Thermoplast, silicone-free, chlorine-free • Halogen-free • Self-extinguishing to UL 94 • RAL 7035 • Creepage resistance CTI 200 • Temperature-resistant up to 120 °C							
	Suitable for surface mounting of PE or N bar. With internal screw holes.	1	1600	Double T profile	**BBS-1/PR** 107165		10 off
PE/N busbar supports • Thermoplast, silicone-free, chlorine-free • Halogen-free • Self-extinguishing to UL 94 • RAL 7035 • Creepage resistance CTI 200 • Temperature-resistant up to 120 °C							
	Can be fitted to all busbar sizes using concertina system. Can be mounted individually.	2	630	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-2/FL** 107069		10 off
	Can be fitted to all busbar sizes using concertina system. Can be mounted individually.	1	630	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-1/FL** 107161		10 off

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

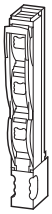
		Poles	Rated operational current I_e A	For use with	Cu factor	**Part no.** Article no.	**Price** See price list	Std. pack
Profiled busbars								
E-CU double T profile busbar								
	Tinned, cross-section 500 mm², 2400 mm long.	–	1250	For supports BBS-3/PR, BBS-1/PR, BBS-3/FL-185		**CU-BAR-500/T**[1] 107166		32 off
	Tinned, cross-section 720 mm², 2400 mm long.	–	1600	For supports BBS-3/PR, BBS-1/PR, BBS-3/FL-185		**CU-BAR-720/T**[1] 107167		32 off
E-CU triple T profiled busbars								
	Tinned, cross-section 1140 mm², 2400 mm long.	–	2500	For supports BBS-3/FL-185, KSX-3….		**CU-BAR-1140/T** 107168		10 off
Busbar shrouds								
• Silicone-free, chlorine-free • Temperature-resistant up to 110 °C • Self-extinguishing to UL 94								
	1000 mm long.	–	–	12 x 10 15 x 10 20 x 10 25 x 10 30 x 10		**BBC-FL10** 107174		10 off
	1000 mm long.	–	–	For double T profile		**BBC-CU-BAR/PR** 107175		5 off

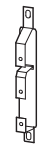
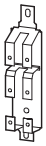
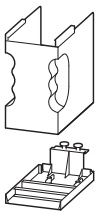
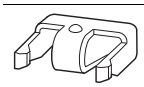
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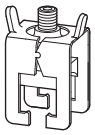
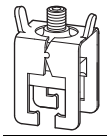
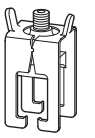
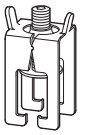
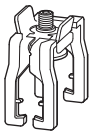
[1] Current load → Page 16/39
Calculation of material surcharge → Chapter 23

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Rated operational current I_e A	Max. fuse link 400 V A	Max. fuse link 690 V A	Size	For use with	Connection	**Part no.** Article no.	**Price** See price list	Std. pack
LV h.b.c. fuse switches									
• With terminal compartment cover • Mounting without holes with spike type terminal Equipment supplied • NH-SLS-00/160(-SI): with claw-type and box terminals • NH-SLS sizes 1, 2, 3: without claw-type and box terminals Busbar mounting • For size 00: • NH-SLS-00/160-60(-SI) 100 mm spacing between busbar centers, hole-less or screw fixing • Sizes 1, 2, 3: 185 mm space between busbar centers, hole-less or screw fixing									
Without fuse monitoring									
	160	160	160	00	30 x 10 40 x 10 50 x 10 60 x 10 80 x 10 100 x 10 120 x 10 Double T profile Triple T profile	Top or bottom	**NH-SLS-00/160** 106210		1 off
	250	250	250	1			**NH-SLS-1/250** 106212		
	400	400	400	2			**NH-SLS-2/400** 106213		
	630	630	630	3			**NH-SLS-3/630** 106214		
With fuse monitoring									
	160	160	160	00	30 x 10 40 x 10 50 x 10 60 x 10 80 x 10 100 x 10 120 x 10 Double T profile Triple T profile	Top or bottom	**NH-SLS-00/160-SI** 106215		1 off
	250	250	250	1			**NH-SLS-1/250-SI** 106217		
	400	400	400	2			**NH-SLS-2/400-SI** 106218		
	630	630	630	3			**NH-SLS-3/630-SI** 106219		

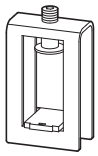
		For use with/ transformer ratio K_N A	**Part no.** Article no.	**Price** See price list	Std. pack
Adapters					
	Single adapter 100/185	30 x 10 40 x 10 50 x 10 60 x 10 80 x 10 100 x 10 120 x 10 Double T profile Triple T profile	**Z-NH-SLS-00-SAD** 106220		1 off
	Single adapter 100/185 for mounting without holes		**Z-NH-SLS-00-SAD-KR** 106222		1 off
	Double adapter 100/185		**Z-NH-SLS-00-SADD** 106221		1 off
Terminal shroud/size adapter for NH-SLS					
	Size 00	for NH-SLS-00/160	**Z-NH-SLS-KA** 106223		2 off
Claw-type terminals					
	For connection at bottom	NH-SLS, size 1, 2, 3	**Z-NH-SLS-KRU** 106224		3 off
	For connection at top	NH-SLS, size 1, 2, 3	**Z-NH-SLS-KRO** 106225		3 off
V-terminals					
Up to 240 mm² for stranded sectoral conductor, up to 300 mm² for solid sectoral conductor					
	For size 1, 2	NH-SLS, size 1, 2	**Z-NH-SLS-1+2-VAK** 106226		3 off
	For size 3	NH-SLS, size 3	**Z-NH-SLS--3VAK** 106227		3 off
Terminal expansion for 2 cable lugs					
	For size 1, 2	–	**Z-NH-SLS-1+2-AE** 106239		1 off
	For size 3		**Z-NH-SLS--3AE** 106240		
Device support with DIN rail for terminals etc.					
	Cover	–	**Z-NH-SLS-1+2+3-GTAB** 106231		1 off
	Lower section		**Z-NH-SLS-1+2+3-GT** 106230		
Current transformer					
	NH-SLS-00 • Fit to Z-NH-SLS-00-SAD… with fixing clip Z-NH-SLS-00BC. NH-SLS size 1, 2, 3 • Swing into the standard rail, no additional space requirement. • Mounting of claw-type terminals still possible • Fix current transformer cables with fixing clips Z-NH-SLS--1+2+3-BC.	150/5	**Z-WAS-150/5A-1** 106232		3 off
		200/5	**Z-WAS-200/5A-1** 106233		
		250/5	**Z-WAS-250/5A-1** 106234		
		300/5	**Z-WAS-300/5A-1** 106235		
		400/5	**Z-WAS-400/5A-1** 106236		
		500/5	**Z-WAS-500/5A-1** 106237		
		600/5	**Z-WAS-600/5A-1** 106238		
Fixing clip					
	For fixing current transformer to adapter in 185 mm busbar system (size 00)	–	**Z-NH-SLS-00-BC** 106229		3 off
	For fixing (current transformer) cables to rear of the LV h.b.c. rails of sizes 1, 2, 3		**Z-NH-SLS-1+2+3-BC** 106228		100 off

		Terminal area W × H	Width	Rated operating current	Terminal capacity Round conductor, solid Round conductor, flexible, with correctly crimped ferrule Round conductor, stranded Sectoral conductor, solid Sectoral conductor,, stranded Copper strip Copper bar	For use with	Copper factor[1]	**Part no.** Article no.	**Price** See price list	Std. pack
		mm	mm	I_e A	mm					
Expansion terminals										
For fitting to busbars without drilling										
	Contacting of cable with busbar via cable bedding.	–	38	480	35 - 150 mm² AWG2/0 - MCM 300. Directly clamped Round conductor, solid Sectoral conductor, solid	12 x 5/10 20 x 5/10	0.00	**AKS150** 138374		6 off
		–	38	500	95 - 185 mm² AWG3/0 - MCM 350. Directly clamped Round conductor, solid Sectoral conductor, solid	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile	0.00	**AKS185** 107195		6 off
		–	41	600	150 - 300 mm² MCM300 - MCM 600. Directly clamped Round conductor, solid Sectoral conductor, solid		0.00	**AKS300** 107196		3 off
	Contacting of cable with busbar via contact block.	32 x 25	41	800	Copper strip 3 x 20 x 1 to 2 x (10 x 32 x1) Copper bar 32 x 25		0.00	**AKS-CU-BAND** 107197		3 off
		55 x 28	72	1600	Up to Copper strip (2 x) 10 x 50 x 1 Up to Copper bar (2 x) 50 x 10		0.20	**AKS1000** 107208		1 off
		68 x 28	122	1600	Up to Copper bar (2 x) 60 x 10	30 x 10 Double T profile Triple T profile	0.00	**AKS1200** 138375		3 off
		105 x 28	122	1600	Up to Copper bar (2 x) 100 x 10		0.00	**AKS2000** 138376		3 off

Notes [1] Calculation of material surcharge → Chapter 23

Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

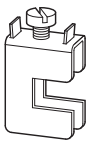
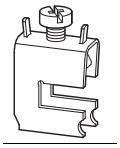
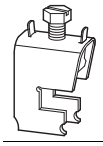
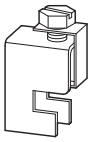
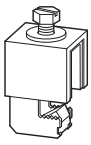
	Terminal area W × H	Width	Rated operating current	Terminal capacity Round conductor, solid Round conductor, flexible, with correctly crimped ferrule Round conductor, stranded Sectoral conductor, solid Sectoral conductor,, stranded Copper strip Copper bar	For use with	Copper factor[1]	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm	I_e A	mm					
Profile terminals									
For fitting to busbars without drilling									
	When connecting laminated busbars in parallel, fit a spacer.	–	82	1600	750 mm², terminal area 51 x 5 - 28	Double T profile		**AKP750** 138364		3 off
		–	72	1600	800 mm², terminal area 41 x 20 - 42			**AKP800** 107198		3 off
		–	94	1600	900 mm², terminal area 64 x 5 - 28			**AKP900** 138365		3 off
		–	94	1600	1000 mm², terminal area 51 x 20 - 42			**AKP1000** 107199		3 off
		–	94	2000	1200 mm², terminal area 64 x 20-42			**AKP1200** 138366		3 off
		–	112	2500	1600 mm², terminal area 81 x 20 - 42			**AKP1600** 138367		3 off
		–	132	3000	2000 mm², terminal area 101 x 20 - 42			**AKP2000** 138368		3 off
		–	132	3200	3600 mm², terminal area 101 x 23 - 45			**AKP3600** 138369		3 off

Notes

[1] Calculation of material surcharge → Chapter 23

Information relevant for export to North America

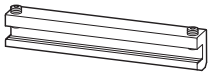
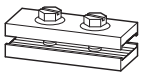
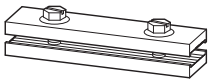
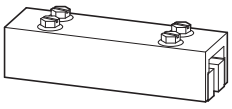
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Terminal area W × H	Width	Rated operating current	Terminal capacity ○ Round conductor, solid ⊜ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▤ Copper strip ■ Copper bar	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm	I_e A	mm				
Universal conductor connection terminals								
With integrated retaining spring, open clamping area and captive terminal screw.								
	7.5 x 7.5	11.5	180	1.5 - 16 mm² AWG 14 - AWG 6. ⊜ Directly clamped ○ ⊙ ▤ 8 x 6 x 0.5	All 10 mm thick flat busbars	**AKU16/10** 107191		100 off
	10.5 x 11	15.5	270	4 - 35 mm² AWG 10 - AWG 2. ⊜ Directly clamped ○ ⊙ ▤ 3 x 9 x 0.8 or 6 x 9 x 0.8		**AKU35/10** 107192		50 off
	14 x 14	20.5	400	16 - 70 mm² AWG 4 - AWG 2/0. ⊜ Directly clamped ⊙ ▤ 2 x (3 x 9 x 0.8) or 6 x 9 x 0.8		**AKU70/10** 107193		25 off
	17 x 15	23.5	440	16 - 120 mm² AWG 4 - MCM 250. ⊜ Directly clamped ⊙ ▤ 4 x 16 x 0.8 or 6 x 16 x 0.8 or 10 x 16 x 0.8		**AKU120/10** 107194		25 off
	M8 x 8 bolts	30	490	Cable lugs M8	All 10 mm thick flat busbars Double T profile	**AKU-M8/10** 138362		20 off
	M10 x 10 bolts	38	630	Cable lugs M10		**AKU-M10/10** 138361		6 off

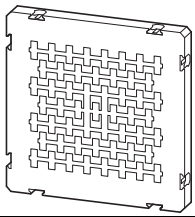
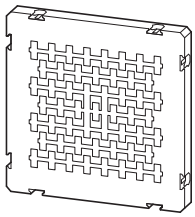
Information relevant for export to North America

Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V AC

	Terminal area W × H	Width	Rated operating current	Terminal capacity ○ Round conductor, solid ⦾ Round conductor, flexible, with correctly crimped ferrule ⦾ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded Copper strip Copper bar	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm	I_e A	mm				
Plate terminals								
	–	50	630	–	All 10 mm thick flat busbars	**PK900** 138378		3 off

		Width	For use with	Copper factor[1]	**Part no.** Article no.	**Price** See price list	Std. pack
		mm					
End-to-end busbar onnectors							
For hole-less connection of identical busbars.							
For the same flat copper bars. Rated operating current 630 A							
	System spacing 100 - 110 mm. Max. permissible busbar offset 1 mm.	150	12 x 5/10 15 x 5/10 20 x 5/10		**BBT-CU12-20X5/10-150** 107200		3 off
	System spacing 50 - 60 mm. Max. permissible busbar offset 5 mm.	95			**BBT-CU20-30X5/10-95** 107201		3 off
	System spacing 100 - 110 mm. Max. permissible busbar offset 5 mm.	150			**BBT-CU20-30X5/10-150** 107202		3 off
For differing and same double T profile busbars. Rated operating current 1600 A							
	System spacing 9 - 20 mm. Max. permissible busbar offset 2 mm.	50	Double T profile		**BBT-CU-BAR500/720-50** 107203		6 off
	System spacing 100 - 110 mm. Max. permissible busbar offset 5 mm.	150			**BBT-CU-BAR500/720-150** 107204		3 off

Notes [1] Calculation of material surcharge → Chapter 23

		Poles	Rated operational current I_e A	For use with	**Part no.** Article no.	**Price** See price list	Std. pack
Busbar supports							
KSX busbar support, end universal							
	For use in type-tested power distribution systems xEnergy and distribution panels XVTL. Impulse withstand current 110 kA Includes fixing bracket, fixing screws and supports for covers.	3/4	3200	30 x 10 Double T profile Triple T profile	**KSX-34P-EXT** 138268		2 off
KSX busbar support, center support							
	For use in type-tested power distribution systems xEnergy and distribution panels XVTL. Includes fixing material.	3/4	2000	30 x 10 Double T profile Triple T profile	**KSX-34P-MID** 138269		1 off
		3	3200	Triple T profile	**KSX-3P-MID** 138360		1 off

Engineering

Electrical load

BBS-3/FL..., BBS-3/BR

UL 508A

For untested busbar supports UL 508A stipulates a current-carrying capacity of 1000 A/inch² (1.55 A/mm²) unless tests were carried out.
This value can be higher if the product or application was tested accordingly.
Eaton has carried out extensive tests in this area in order to provide the user with maximum benefits when using the 60 mm system.

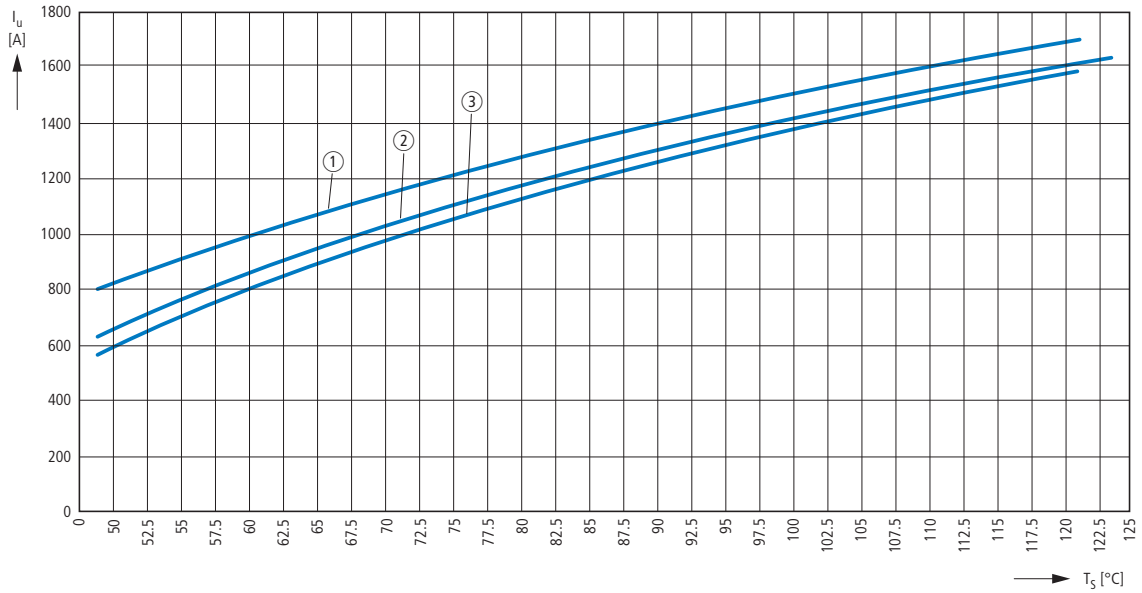
The 60 mm system can be used with higher rated operational currents than permitted by the default value. For example, a busbar support with the dimensions 30 x 10 can be loaded with 630 A instead of 465 A.

DIN EN 13601

The current carrying capacity values that exceed DIN 43671 specifications have been determined under normal operating conditions.
The temperature of the busbars is normally favorably influenced by the fitting of busbar supports and the air circulation within the system.
A correction factor k2 according to DIN 43671 can be determined, depending on the respective ambient air temperature. The correction factor must be taken into account when conditions change or when the load is continuous.

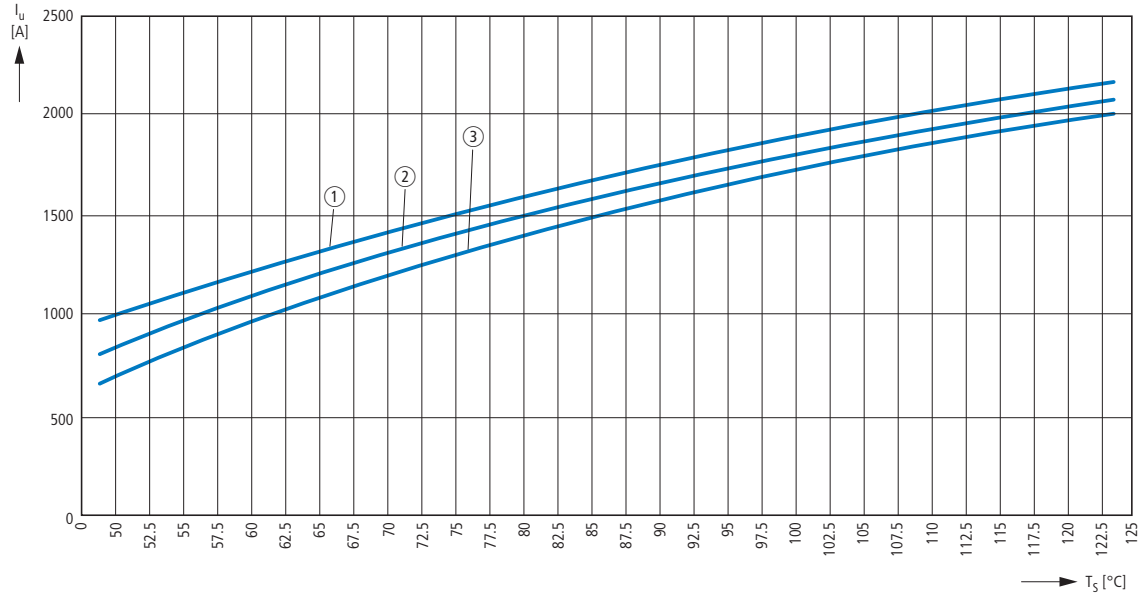
Otherwise, a higher load is possible if the components have a suitable temperature resistance.
A 30 x 10 tinned busbar can be loaded to 630 A. At a load of 800 A, for example, a correction factor k2 of 1.3 is required. The graph shows that with this factor, and at an air temperature of 35°C, the busbars temperature rises to 85°C.

CU-BAR-500/T



Ambient temperature:
① 30 °C
② 35 °C
③ 40 °C
I_U = rated uninterrupted current
T_S = busbar temperature

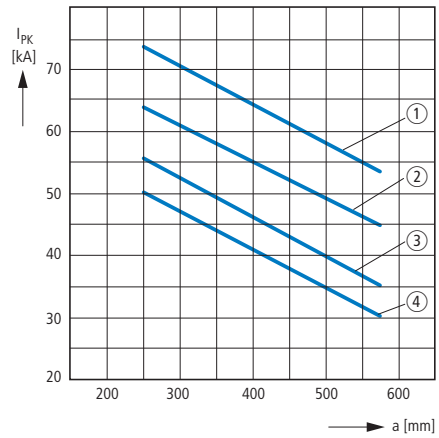
CU-BAR-720/T



Ambient temperature:
① 30 °C
② 35 °C
③ 40 °C
I_U = rated uninterrupted current
T_S = busbar temperature

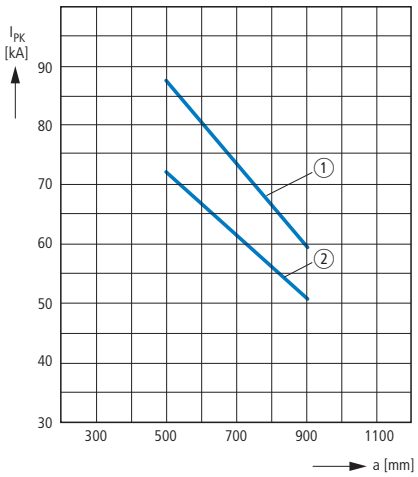
Short-circuit rating to IEC/EN 60439-1

BBS-3/FL



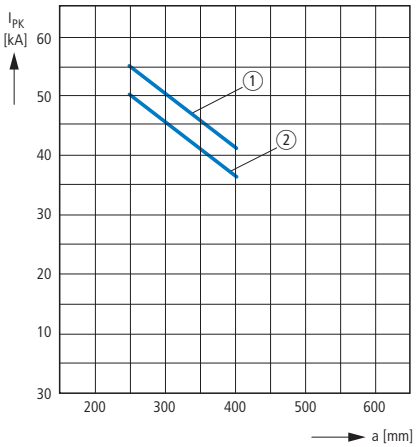
① 30 x 10 mm
② 30 x 5 mm
③ 12 x 10 mm
20 x 10 mm
④ 12 x 5 mm
20 x 5 mm
I_{pk} = Rated peak withstand current
a = Busbar support spacing

BBS-3/PR



① 720 mm²
② 500 mm²
I_{pk} = Rated peak withstand current
a = Busbar support spacing

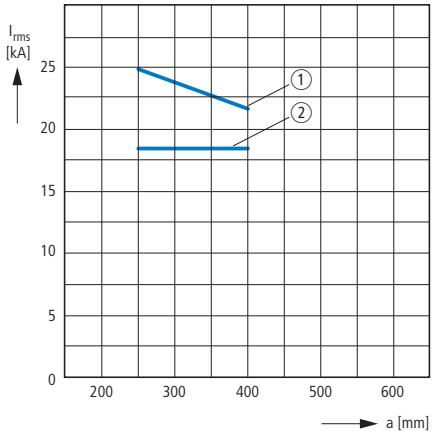
BBS-3/FL-C



① 12 x 10 mm
② 12 x 5 mm
I_{pk} = Rated peak withstand current
a = Busbar support spacing

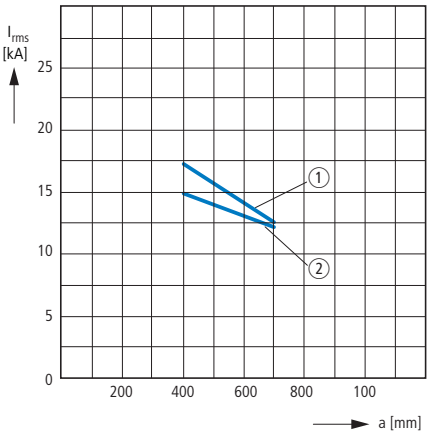
Short-circuit strength to UL 845

BBS-3/FL-NA



① 30 x 5 mm
30 x 10 mm
② 12 x 5 mm
20 x 5 mm
12 x 10 mm
20 x 10 mm
I_{rms} = surge current (RMS)
a = Busbar support spacing

BBS-3/PR



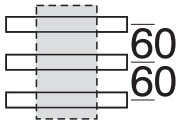
① 500 mm²
② 720 mm²
I_{rms} = surge current (RMS)
a = Busbar support spacing

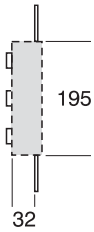
Reduction of rated operating current

Device part no.	Release type	Reduction of the rated operational current (derating) under particular ambient conditions (according to IEC 947) Derating coefficient						
		20 °C	30 °C	40 °C	50 °C	60 °C	65 °C	70 °C
Device adapter for circuit-breakers and switch-disconnectors (reference temperature 40 °C)								
NZM…3-630…+NZM3-XAD630	with XAD…	1	0.96	0.92	0.88	0.84	0.82	0.8

Notes To determine the maximum permissible current load at different ambient temperatures, refer to the derating coefficients shown in the table.
Example: An NZM…3-…630… with a component adapter is to be used at an ambient temperature of 50 °C.
What is the highest permissible rated operating current Ie?
At 50 °C the derating coefficient is 0.88, which means that Ie = 630 A x 0.88 = 554.40 A.
The NZM…3-…630… can therefore be used at an ambient temperature of 50 °C with a maximum Ie = 554.40 A.

Possible combinations without bending the flat busbars





	Device	GST00-160-40-60-AOU	LTS-100/C00/3-R	D02-S/63/3-RS	D02-LTS/63/3-R(-HK)	D02-SO/63/3-R-27 Z-D02/R/3-…	DII-SO/25/3-R…	DIII-SO/63/3-R(-PS)
	Accessories	BS-SET-GST00	-	-	-	-	SBS-RS60	SBS-RS60
CU	12 x 5/10	-	-	-	x	x	x	x
	20 x 5/10	x	x	x	x	x	x	x
	25 x 5/10	x	-	-	x	x	x	x
	30 x 5/10	x	x	x	x	x	x	x
	Double T	x	x	x	x	x	x	x
	Width mm	106	63	36	27	27 36 - 54	45	54

Technical data

			BBS-3/FL(-NA)	BBS-4/FL	BBS-3/PR	BBS-3/FL-C	BBS-3/FL-185
General							
Standards			Type-tested to VDE 0660 Part 500, IEC/EN 60439-1				
Mounting position			Vertical, horizontal				
Material							
Material			Thermoplast, silicone-free, chlorine-free				
Halogen-free			Yes	Yes	Yes	Yes	Yes
Flammability characteristics			Self-extinguishing to UL 94				
Color			RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 7035
Creepage resistance			CTI 200	CTI 200	CTI 200	CTI 200	CTI 200
Temperature resistance		°C	120	120	120	120	120
Contacts							
Rated insulation voltage	U_i	V	3000	3000	3000	3000	3000
Rated operating voltage	U_e	V	690	690	690	690	690
Rated frequency	*f*	Hz	50/60	50/60	50/60	50/60	50/60
Spacing between busbar centers		mm	60	60	60	60	185
Rated uninterrupted current			With temperature deviations, DIN 43671 stipulates that a correction factor k2 must be taken into account.				
with 12 × 5 mm busbar	I_u	A	218	218	–	200	–
with 15 × 5 mm busbar	I_u	A	273	273	–	–	–
with 20 × 5 mm busbar	I_u	A	349	349	–	–	–
with 25 × 5 mm busbar	I_u	A	436	436	–	–	–
with 30 × 5 mm basbar	I_u	A	491	491	–	–	–
with 12 × 10 mm busbar	I_u	A	392	392	–	360	–
with 20 × 10 mm busbar	I_u	A	567	567	–	–	–
with 30 × 10 mm basbar	I_u	A	687	687	–	–	630
with 500 mm²	I_u	A	–	–	1003	–	950
with 720 mm²	I_u	A	–	–	1281	–	1200
Ambient temperature		°C	35	35	35	35	35
Busbar temperature		°C	70	70	70	70	70
Rated peak withstand current							
with 12 × 5 mm busbar	I_{pk}	kA	50	50	–	50	–
with 20 × 5 mm busbar	I_{pk}	kA	50	50	–	–	–
with 25 × 5 mm busbar	I_{pk}	kA	50	50	–	–	–
with 30 × 5 mm basbar	I_{pk}	kA	64	64	–	–	–
with 12 × 10 mm busbar	I_{pk}	A	56	56	–	55	–
with 20 × 10 mm busbar	I_{pk}	kA	56	56	–	–	–
with 30 × 10 mm basbar	I_{pk}	kA	73	73	–	–	100
with 500 mm²	I_{pk}	kA	–	–	72	–	100
with 720 mm²	I_{pk}	kA	–	–	87	–	100
Short-circuit duration	t	ms	20	20	20	20	20
Distance between busbar supports	a	mm	250	250	500	250	400
For other intervals between busbar supports			See Short-circuit rating characterstics, → Page 16/40				–

			CU...	CU-BAR-500-T CU-BAR-720-T	CU-BAR-1140/T
General					
Standards			EN 13061, UL 508	EN 13061, UL 508	EN 13061, UL 508
Contacts					
Rated uninterrupted current			With temperature deviations, DIN 43671 stipulates that a correction factor k2 must be taken into account.		
T_u = 35 °C and T_s = 65 °C					
with 12 × 5 mm busbar	I_u	A	200	–	–
with 20 × 5 mm busbar	I_u	A	320	–	–
with 30 × 5 mm basbar	I_u	A	450	–	–
with 12 × 10 mm busbar	I_u	A	360	–	–
with 20 × 10 mm busbar	I_u	A	520	–	–
with 30 × 10 mm basbar	I_u	A	630	–	–
with 500 mm²	I_u	A	–	950	–
with 720 mm²	I_u	A	–	1200	–
1140 mm²	I_u	A	–	–	2500

				LTS-100/C00/3-R	GST…00-160-40-60-AOU	GST1-AO(AU)	GST2-AO(AU)	GST3-AO(AU)
General								
Standards				IEC/EN 60947-3				
Climatic proofing				Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclical to IEC 60068-2-30				
Ambient temperature			°C	-25 - +55	-25 - +55	-25 - +55	-25 - +55	-25 - +55
Installation altitude			m	Max. 2000	Max. 2000	Max. 2000	Max. 2000	Max. 2000
Distance between busbar centers			m	60	60	60	60	60
Mounting position				Vertical or horizontal				
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3
Touch protection at the front								
Operational status				IP20	IP20	IP20	IP20	IP20
Front cover open				IP10	IP10	IP10	IP10	IP10
Direction of incoming supply				Any				
Lifespan, mechanical	Operations			1700	1700	1700	1700	1700
Weight			kg	0.57	0.93	4.4	5.3	6.6
Contacts								
Rated operational current								
	500 V AC/220 V DC	I_e	A	100	160	250	400	630
	690 V AC / 440 V DC	I_e	A	–	100	200	315	500
Rated frequency			Hz	40 - 60	40 - 60	40 - 60	40 - 60	40 - 60
Rated conditional short-circuit current								
	AC	I_q	kA_{rms}	50	50	50	50	50
	DC	I_q	kA_{rms}	25	25	25	25	25
Utilization category AC-22B								
Rated making capacity								
	500 V AC		A	300	480	750	1200	1890
	690 V AC		A	–	300	600	945	1500
Rated breaking capacity								
	500 V AC		A	300	480	750	1200	1890
	690 V AC		A	–	300	600	945	1500
Utilization category DC-21B								
Rated making capacity								
	220 V DC/440 V DC		A	400	150	300	475	750
Rated breaking capacity								
	220 V DC/440 V DC		A	400	150	300	475	750
Lifespan, electrical	Operations			300	300	200	200	200
Heat dissipation at I_{th}, without fuse link								
	500 V AC		W	11.5	6.9	12.9	27	52
	690 V AC		W	–	2.7	8.3	16.7	32.8
	220 V DC		W	7.7	4.6	8.6	18	34.7
	440 V DC		W	–	1.8	5.5	11.2	21.8
Rated insulation voltage		U_i	V	500	750	750	750	750
Max. fuse link								
Construction size				NH000	NH00	NH1	NH2	NH3
Max. rated operational current, gL/gG			A	100	160	250	400	630
Max. permissible heat dissipation fuse link		P_v	W	7.5	12	23	34	48
Terminal capacities								
Box terminal								
Stranded			mm^2	1.5 - 50	1.5 - 70	–	–	–
Copper strip	Number of segments x width x thickness		mm	6 x 9 x 0.8	6 x 9 x 0.8	–	–	–
Flange connection								
Bolt diameter		d	mm	–	–	M10	M10	M10
Cable lug			mm^2	–	–	1 x 25 - 100	1 x 25 - 100	1 x 25 - 100
Flat rail		max.	mm	–	–	30 x 10	30 x 10	30 x 10
Box terminal								
Stranded copper			mm^2	–	–	25 - 150	25 - 240	25 - 300
Copper strip	Number of segments x width x thickness		mm	–	–	6 x 16 x 0.8	10 x 16 x 0.8	11 x 21 x 1
Cable clamp								
Stranded aluminium/copper			mm^2	–	–	70 - 150	120 - 240	120 - 300
Double cable clamp								
Stranded aluminium/copper			mm^2	–	–	2 x (70 - 95)	2 x (120 - 150)	2 x (120 - 240)

					NH-SLS-00/ 160-60	NH-SLS-00/160	NH-SLS-1/250	NH-SLS-2/400	NH-SLS-3/630
General									
Standards					IEC/EN 60947-3				
Climatic proofing					Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30				
Ambient temperature				°C	-5 - +40	-5 - +40	-5 - +40	-5 - +40	-5 - +40
Installation altitude				m	Max. 2000	Max. 2000	Max. 2000	Max. 2000	Max. 2000
Distance between busbar centers				mm	60	100	185	185	185
Number of poles/phases				n	3	3	3	3	3
Mounting position					Vertical, horizontal				
Overvoltage category/pollution degree					III/3	III/3	III/3	III/3	III/3
Contact protection shroud at the front	Operational status				IP30	IP30	IP30	IP30	IP30
	Front cover open				IP10	IP10	IP10	IP10	IP10
Direction of incoming supply					Any				
Lifespan, mechanical		Operations			1400	1400	1400	800	800
Weight				kg	1.46	1.37	5.2	6.3	7.0
Contacts									
Rated frequency			f	Hz	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Rated insulation voltage			U_i	V	1000	1000	1000	1000	1000
Rated operating mode					Continuous operation; with continuous operation of several adjaced devices the rated diversity factor to VDE 0660 part 500 / EN 60439-1, table 1 must be observed.				
Rated impulse withstand voltage			U_{imp}	kV	8	8	12	12	12
Rated conditional short-circuit current AC			I_q	kA_{rms}	50	50	100	100	100
Utilization category AC-23B									
Rated operational voltage AC			U_e	V AC	500/400	500/400	500	500	500
Rated operational current			I_e	A	125/160	125/160	250	400	630
Utilization category AC-22B									
Rated operational voltage AC			U_e	V AC	690	690	690	690	690
Rated operational current			I_e	A	160	160	250	400	630
Utilization category AC-21B									
Rated operational voltage AC			U_e	V AC	690	690	690	690	690
Rated operational current			I_e	A	160	160	250	400	630
Heat dissipation at I_{th} AC, without fuse link				W	20	20	30	67	116
Lifespan, electrical		Operations			200	200	200	200	200
Max. fuse link									
Construction size				NH	00	00	1	2	3
Max. rated operational current gL/gG				A	160	160	250	400	630
Max. permissible heat dissipation without fuse link			P_v	W	12	12	23	34	48
Mechanical data									
Mounting on busbars									
Adapter for busbars					–	Z-...SAD Z-...SADD	–	–	–
Combination base for busbars					Directly on 12 - 30 x 5/10 Double T profile Triple T profile	–	–	–	–
Screw connection for busbars					–	M8 ... x 5/10 mm	M12... x 10 mm	M12 ... x 10 mm	M12 ... x 10 mm
Terminal capacities									
Flange connection	Bolt diameter		d	mm	M8	M8	M10	M10	M12
	Cable lug			mm^2	1 x 70	1 x 70	1 x 120	1 x 240	2 x 185
	Flat rail		max.	mm	20 x 8	20 x 10	30 x 10	30 x 10	30 x 10
Box terminal	Stranded			mm^2	1.5 - 70	1.5 - 70	–	–	–
	Flexible with ferrule[1)]			mm^2	1.5 - 70	1.5 - 70	–	–	–
Copper strip	Number of segments x width x thickness				6 x 9 x 0.8	6 x 9 x 0.8	–	–	–
V-terminals	Stranded			mm^2		–	50 - 185	50 - 185	120 - 300
	Sectoral conductor, stranded			mm^2	–	–	70 - 240	70 - 240	120 - 240
	Sectoral conductor, solid			mm^2	–		95 - 300	95 - 300	150 - 300
Terminal expansion	Cable lugs			n	–	–	max.2	max.2	max.2

Notes The clearance to grounded parts must be at least 50/100 mm at the top and 25/50 mm on the sides with construction sizes 00/1-3.
Technical data for fuse monitoring → Page 16/45

[1)] Ferrule with maximum cross-section with a correctly crimped ferrule.

				NH-SLS-…-SI
General				
Standards				IEC/EN 60255, VDE 0435 part 303
Climatic proofing				Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			°C	-5 - +40
Installation altitude			m	Max. 2000
Contacts				
Rated operating voltage		U_e	V	3 x 400 AC
Voltage range			V AC	0.8 … 1.1 x U_e
Rated frequency		*f*	Hz	50 - 60
Intrinsic consumption per phase (conductor)			VA	2 (L2/L3)
Rated insulation voltage		U_i	V	400
Overvoltage category				III
Rated operating mode				Continuous operation
Rated impulse withstand voltage		U_{imp}	kV	4
Relay contacts				
Standards				EN 60947-5-1
Rated voltage		U_e	V AC	250
Conventional thermal current		I_{th}	A	4
Utilization category AC-15				
Rated operating voltage		U_e	V AC	230
Rated operational current	AC-15 at 230 V	I_e	A	1
Lifespan, electrical		Operations		1.5 x 10^5
Lifespan, mechanical		Operations		> 10^8
Max. admissible back-up fuse			A gL	4
Terminal capacities				
Box terminal	Solid		mm^2	2 x 2.5
	Flexible		mm^2	2 x 1.5
Response/reset time			ms	< 500

				GST…-DSI
Electrical data				
Standards				IEC/EN 60255, VDE 0435 part 303
Rated operating voltage		U_e	V AC	3 x 400 - 690
Voltage range			V AC	0.9 … 1.1 x U_e
Rated frequency		*f*	Hz	50 - 60
Energy consumption		P	VA	1.5 (L2/L3)
Rated insulation voltage		U_i	V	690
Overvoltage category				III
Rated impulse withstand voltage		U_{imp}	kV	6
Rated voltage		U_e	V AC	250
Rated operational current		I_e	A	8 A DC
Inrush current			A	≦ 15
Minimum switching load				5 V AC/DC, 300 mW, 5mA
Max. switching power	AC 1		VA	2000
	250 V AC 15		VA	400
	250 V AC 3		W	300
Lifespan, electrical		Operations		80 x 10^3 (AC 1)
Max. admissible back-up fuse				4 A gL/gG / PLSM-B4…-HS
Mechanical data				
Terminals				Lift terminals
Terminal cross-section, flexible			mm^2	0.25 - 1.5
Tightening torque of terminal screws			Nm	0.5 - 0.6
Lifespan, mechanical		Operations	x 10^6	> 10
Response/reset time			ms	< 500
Degree of protection				IP20
Temperature range			°C	-10 … +55
Pollution degree				3
Terminal capacity			mm^2	0.25 - 1.5

			D02-SO/63/3-R-27 Z-D02/R/3…	DII-SO/25/3-R(-PS)	DIII-SO/63/3-R(-PS)
General					
Standards			Design according to IEC/EN 60269-1, VDE 0636 Part 301		
Climatic proofing			Damp heat, constant, to IEC 60068-2-78, Damp heat, cyclical to IEC 60068-2-30		
Ambient temperature		°C	-25 - +55	-25 - +55 35 normal temperature, at 55 with reduced operating current	
Mounting position			Vertical or horizontal		
Electrical data					
Poles			3	3	3
Rated operating voltage	U_e	V AC	400	500	690
	U_e	V DC	–	–	–
Conditional rated short-circuit current tested with fuse links	I_q	kA	50	50	50
Rated frequency	f	Hz	40-60	40-60	40-60
Rated operational current	I_e	A	63	25	63
Conventional thermal current with fuse links	I_{th}	A	63	25	63
Rated operating mode			Continuous operation		
Overvoltage category			IV	III	III
Utilization category			–	–	–
Rated impulse withstand voltage	U_{imp}	kV	6	4	4
Current heat dissipation per contact at I_e		W	0.5	0.4	3.34
Heat dissipation					
Heat dissipation per contact with fuse link at I_e		W	1.5	1.2	10
Max. permissible heat dissipation of fuse links		W	5.5	4	7
Operating category			–	–	–
Mechanical data					
Standard front dimension		mm	194	194	194
Enclosure width		mm	201	200	200
Built-in width		mm	27	45	54
Weight		g	150	140	150
Electric thread			E18	E27	E33
Mounting			–	–	–
Degree of protection Integrated			IP20	IP20	IP20
Terminals			Lift terminals	Lift terminals	Lift terminals
Terminal capacity					
Solid		mm^2	1.5 - 35	1.5 - 25	1.5 - 25
Pollution degree			3	3	3
Creepage resistance			–	–	–

			D02-S/63/3-RS	D02-LTS/63/3-R(-HK)
General				
Standards			Design according to IEC/EN 60947-3	
Climatic proofing			Damp heat, constant, to IEC 60068-2-78, Damp heat, cyclical to IEC 60068-2-30	
Ambient temperature		°C	-25 - +55	-25 - +55
Mounting position			Vertical or horizontal	
Electrical data				
Poles			3	3
Rated operating voltage	U_e	V AC	400	400
	U_e	V DC	–	–
Rated short-circuit current, tested with fuse links	I_q	kA	50	63
Rated frequency	*f*	Hz	40-60	40-60
Rated operational current	I_e	A	63	63
Conventional thermal current with fuse links	I_{th}	A	63	63
Rated operating mode			Continuous operation	
Rated short-circuit switching capacity	I_{cn}	kA	–	50
Overvoltage category			III	IV
Utilization category			AC 23 B	AC 22 B
Rated impulse withstand voltage	U_{imp}	kV	8	6
Current heat dissipation per contact at I_e		W	2	1.5
Heat dissipation				
Heat dissipation per contact with fuse link at I_e		W	7.5	7
Max. permissible heat dissipation of fuse links		W	5.5	5.5
Auxiliary contacts				
Changeover contacts		Number	–	5A/250 V AC
Back-up fuse		A gL	–	2 A gL PLSM-B4/…-HS/CLS6-B4/…-HS
Connection			–	Blade terminal sleeve 2.8 x 0.5 mm
Mechanical data				
Standard front dimension		mm	194	194
Enclosure width		mm	212	226
Built-in width		mm	36	27
Weight		g	260	340
Electric thread			E18	–
Mounting			Busbar with 60 mm clearance	
Degree of protection Integrated			IP30	IP20/IP40
Terminals			Lift terminals	Lift terminals
Terminal capacity				
Solid		mm^2	1.5 - 25	1.5 - 35
Pollution degree			3	3
Creepage resistance			–	–

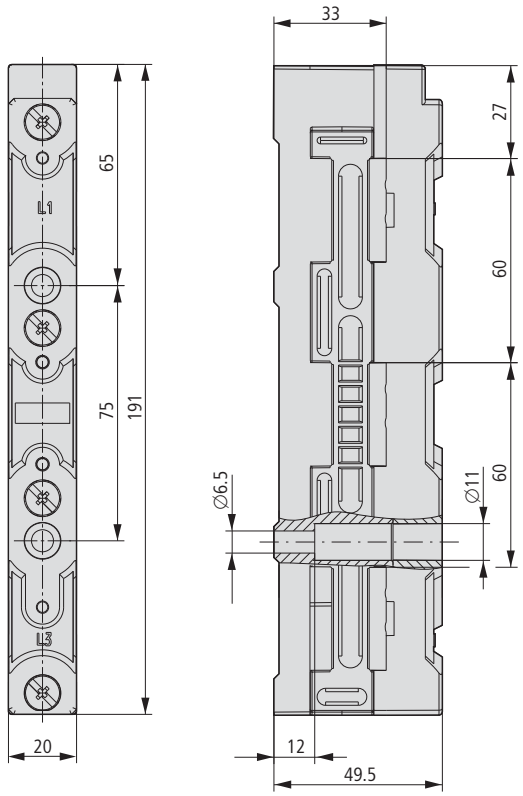
					FCFSDNH000BBC60-3
General					
Standards					IEC/EN 60947-3
Climatic proofing					Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature				°C	
Installation altitude				m	Max. 2000
Mounting position					Vertical or horizontal
Overvoltage category/pollution degree					III/3
Contact protection shroud at the front	Operational status				IP20
	Front cover open				IP10
Direction of incoming supply					any
Lifespan, mechanical		Operations			1700
Weight				kg	0.93
Contacts					
Rated operational current		690 V AC / 440 V DC	I_e	A	100
Rated frequency			f	Hz	40 - 60
Rated conditional short-circuit current		690 V AC	I_q	kA_{rms}	50
		440 V DC	I_q	kA_{rms}	25
Utilization category AC-22B	Rated making capacity			A	100
	Rated breaking capacity			A	100
Utilization category DC-21B	Rated making capacity			A	80
	Rated breaking capacity			A	80
Lifespan, electrical		Operations			300
Heat dissipation at I_{th}, without fuse link		690 V AC	W	W	2.7
		440 V DC		W	1.8
Rated insulation voltage			U_{imp}	V	750
Max. fuse link					
Construction size	Number of segments x width x thickness				NH00(0) (max. 21 mm width)
Max. rated operational current gL/gG				A	100
Max. permissible heat dissipation of fuse link			P_v	W	9
Terminal capacity					
Box terminal	Flexible			mm^2	2.5 - 50
	Flexible with ferrule			mm^2	1.5 - 50 (ferrule with maximum cross-section may not be possible)
	Solid			mm^2	1.5 - 10
	Stranded			mm^2	16 - 50
Copper strip	Number of segments x width x thickness			mm	6 x 9 x 0.8; 9 x 9 x 0.8

				FCFBD02BBC60-3-36
General				
Standards				Type according to IEC/EN 60269-1, VDE 0636 Part 301
Climatic proofing				Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			°C	-25 - +55
Mounting position				Vertical or horizontal
Contacts				
Poles				3
Rated operational voltage		U_e	V AC	400 V AC
Rated short-circuit current, tested with fuse links		I_q	kA_{rms}	50
Rated frequency		f	Hz	40 - 60
Rated operational current		I_e	A	63
Conventional thermal current with fuse links		I_{th}	A	63
Rated operating mode				Uninterrupted operation
Overvoltage category				IV
Rated impulse withstand voltage		U_{imp}	kV	6
Current heat dissipation per contact at I_e			W	0.5
Heat dissipation per contact with fuse link at I_e			W	1.5
Max. permissible heat dissipation of fuse links		P_v	W	5.5
Mechanical data				
Enclosure width			mm	160
Built-in width			mm	36
Weight		g	g	130
Electric thread				E18
Degree of protection	Integrated			IP20
Terminals				Lift terminals
Terminal capacity	Solid		mm^2	1.5 - 25
Pollution degree				3

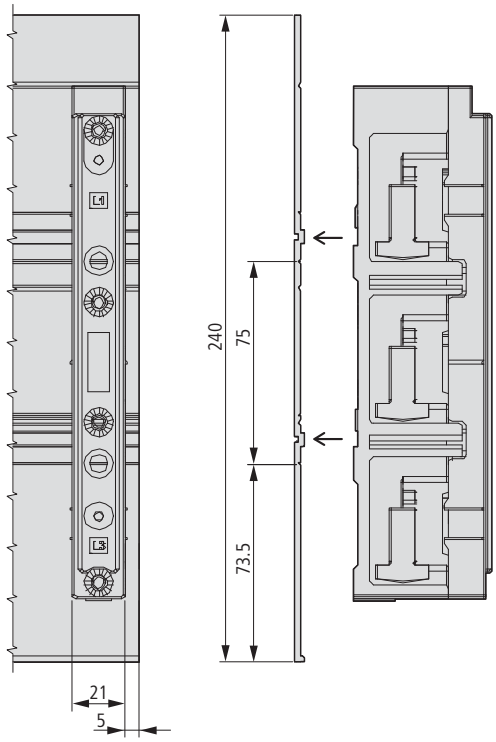
Dimensions

Busbar supports

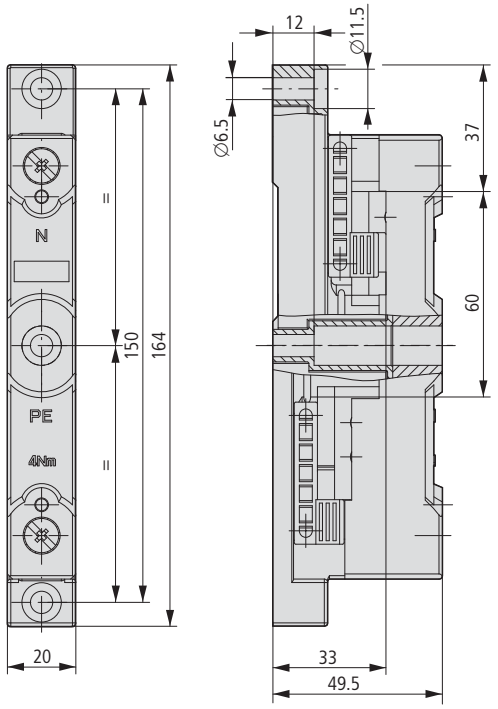
BBS-3/FL



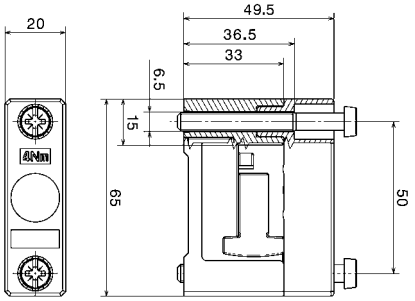
BBS-3/FL-NA



BBS-2/FL



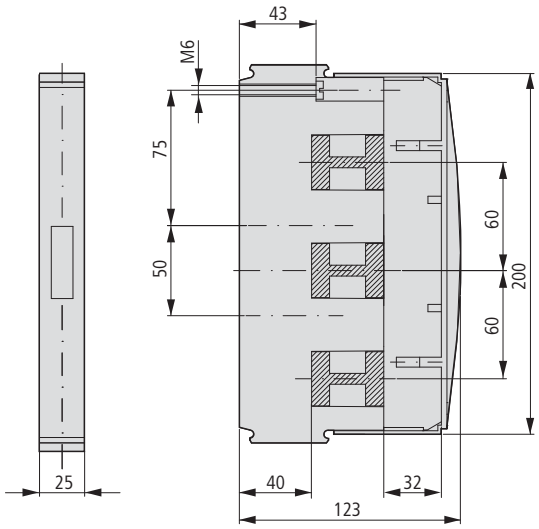
BBS-1/FL



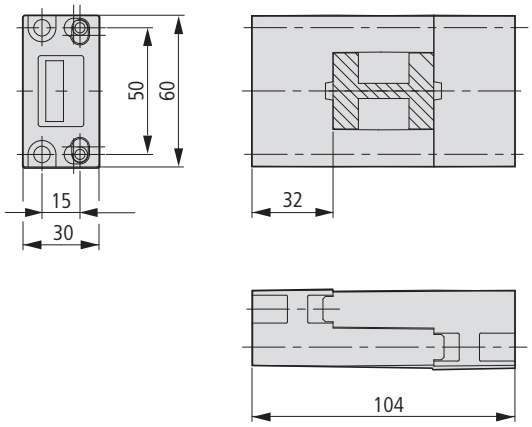
BBS, ES-BBS, BBC

Busbar supports

BBS-3/PR

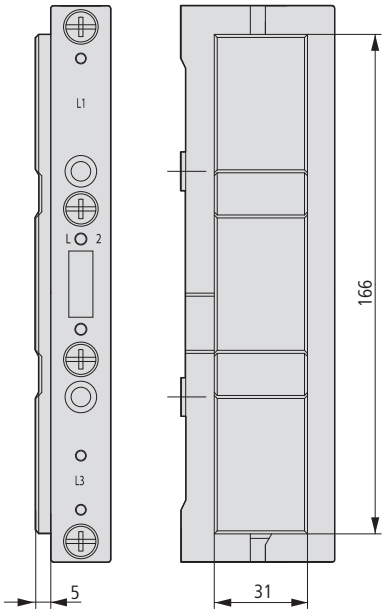


BBS-1/PR

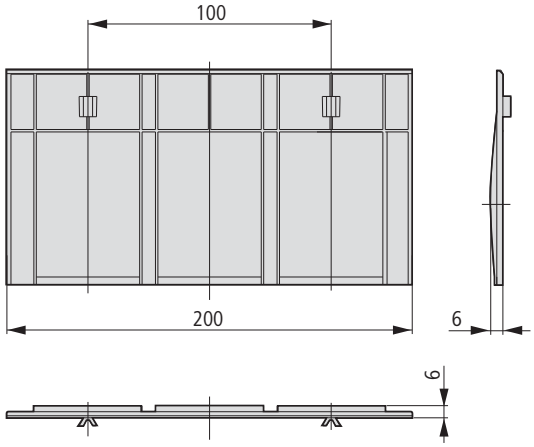


Terminal shroud

ES-BBS-3/FL

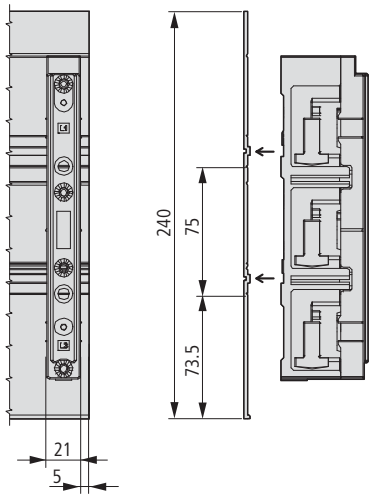


ES-BBS-3/PR



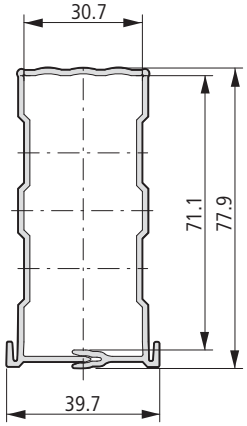
UL bottom plate

BBC-BT-NA



Busbar shroud

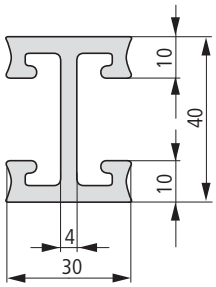
BBC-CU-BAR/PR



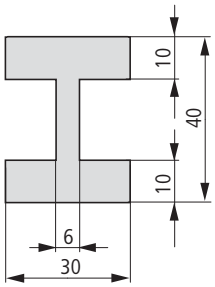
CU-BAR, AM, BBC-CS

Profiled busbars

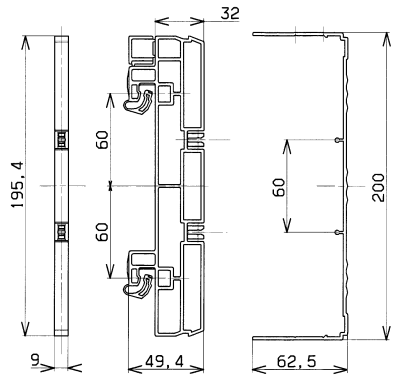
CU-BAR-500/T



CU-BAR-720/T

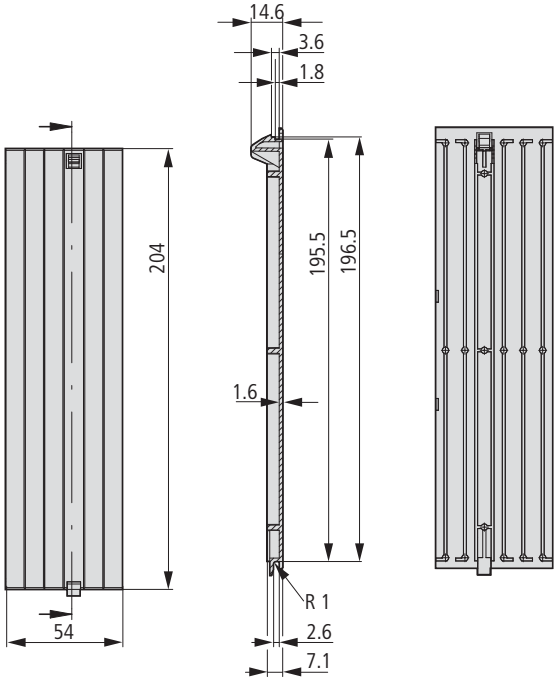


BBC-MRCOV1 BBC-RCOV1



Spare covers

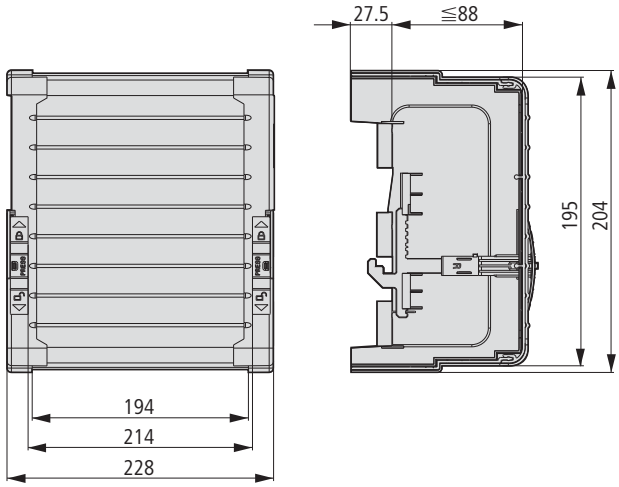
AM-195/54



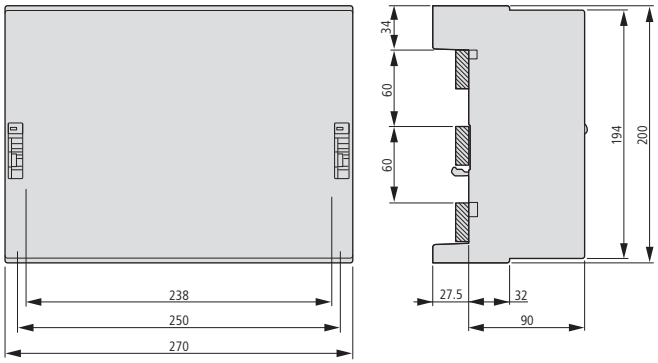
System covers

BBC-CS1

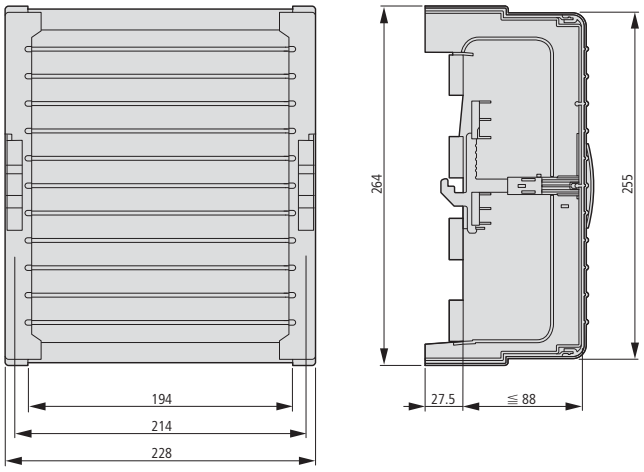
BBC-CS2-...



BBC-CS3



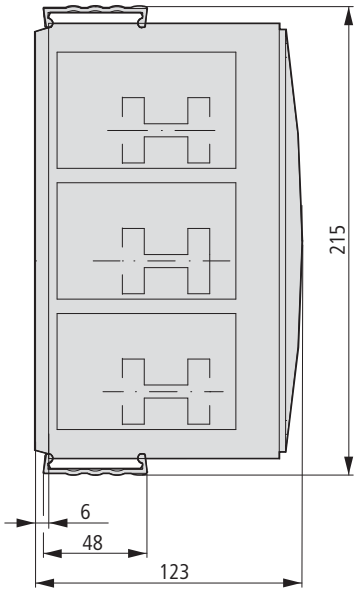
BBC-CS4



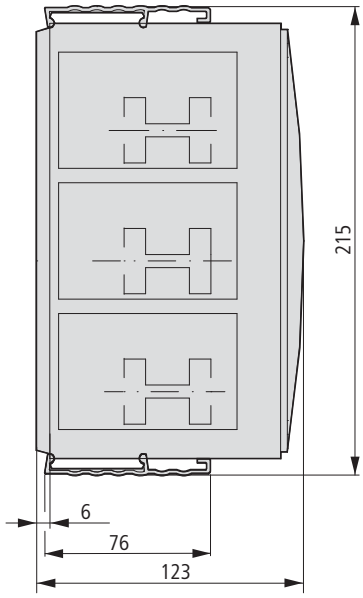
BBC-CS, BBA-TP

System covers

BBC-CS48/PR

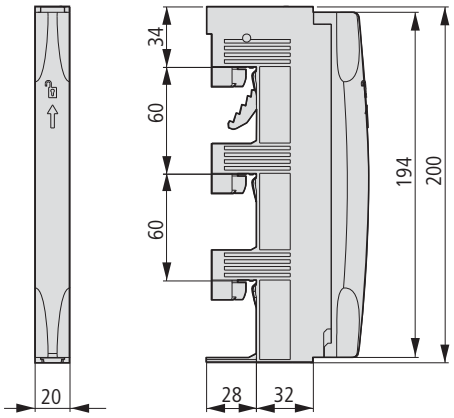


BBC-CS76/PR

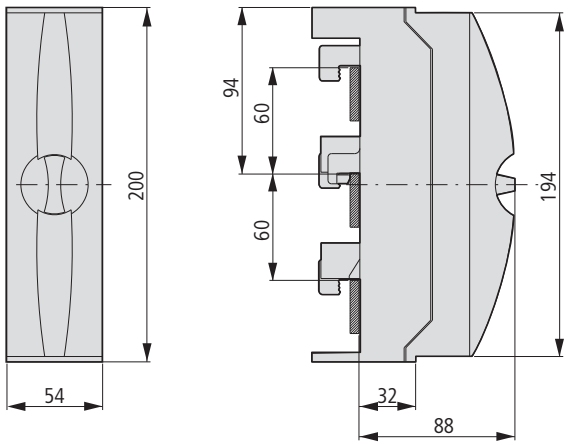


Terminal plates

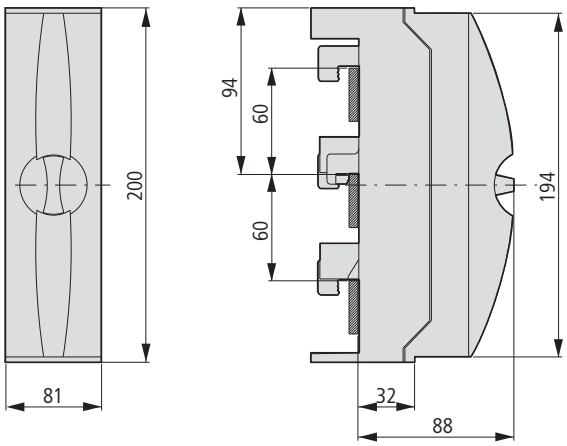
BBA-TP3/16



BBA-TP3/50



BBA-TP3/120

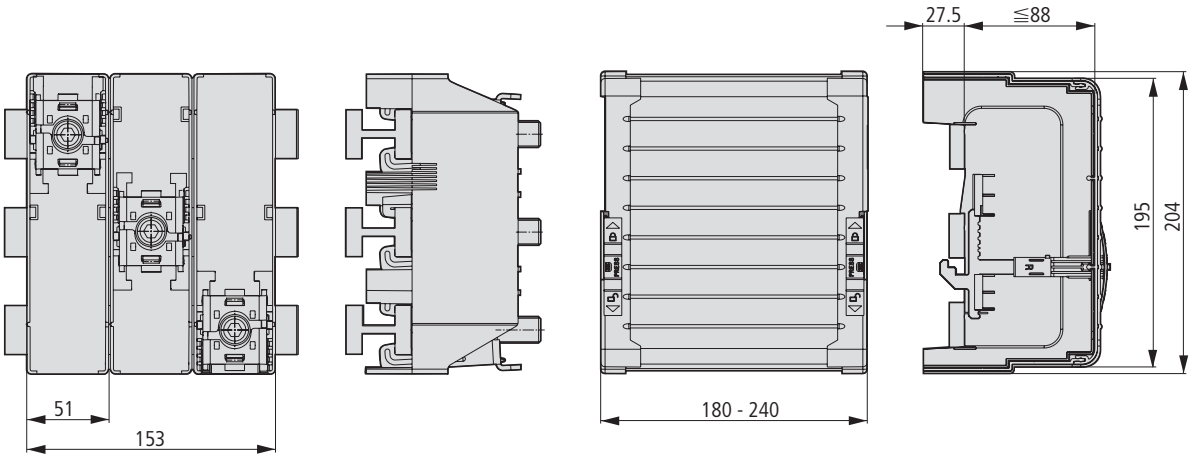


BBA-TP

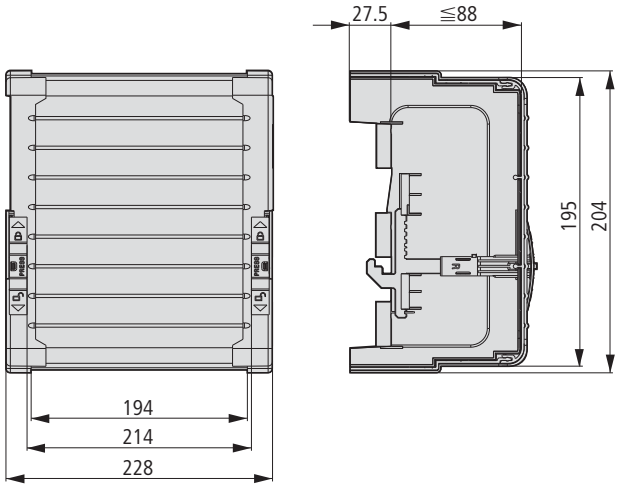
Terminal kits

BBA-TP3/300

BBA-TP3/CU-BAND

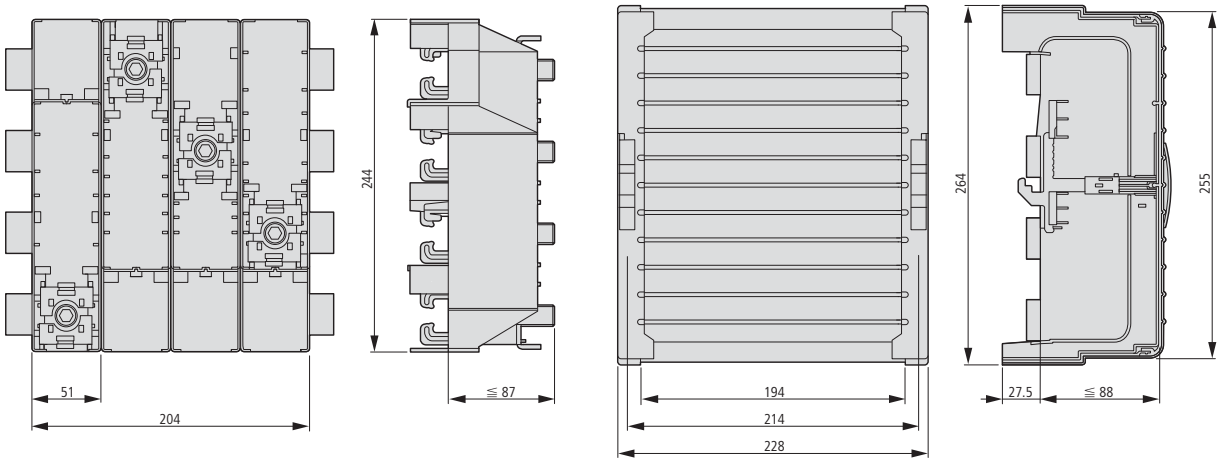


CU-BAND BBA-TP3/1000



BBA-TP4/300

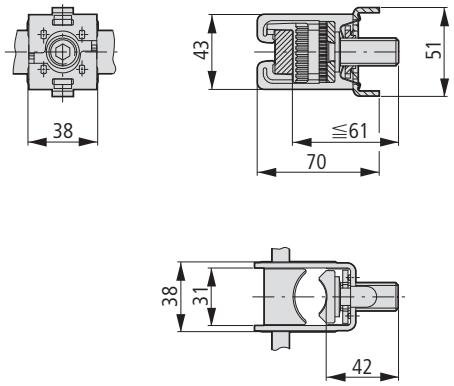
BBA-TP4/CU-BAND



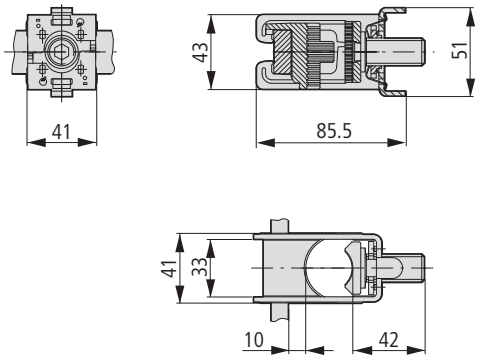
AKS, AKP

Expansion terminals

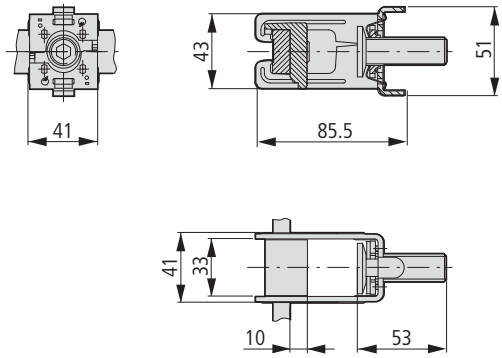
AKS185



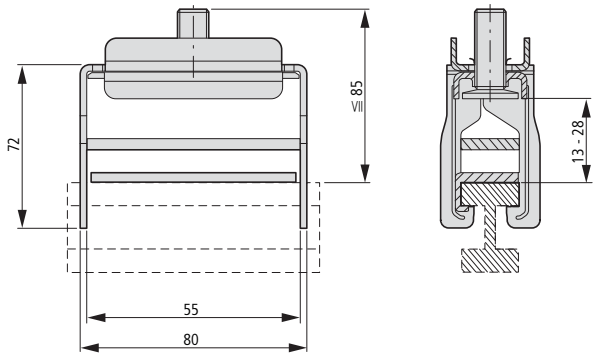
AKS300



AKS CU-BAND

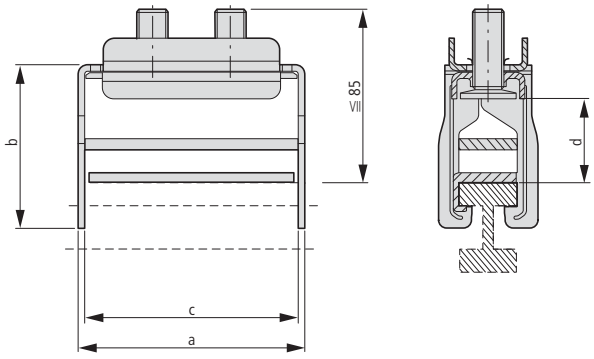


AKS1000



AKS1200

AKS2000

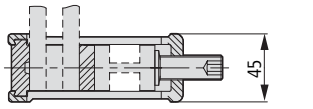


Part no.	a	b	c	d
AKS1200	85	80	68	13-38
AKS2000	122	80	105	13-38

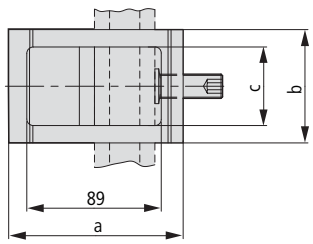
Profile terminals

AKP800

AKP1000



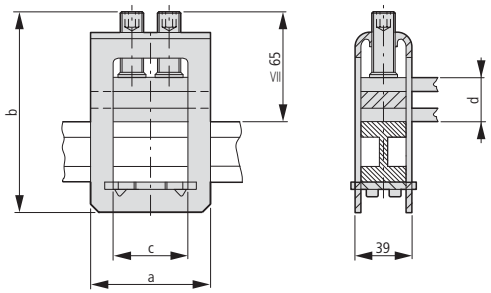
Part no.	a	b	c
AKP800	118	72	41
AKP1000	103	94	64



AKP, AKU

Profile terminals

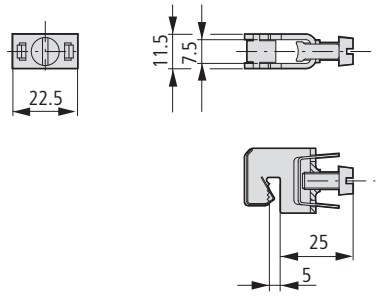
AKP750
AKP900
AKP1200
AKP1600
AKP2000
AKP3600



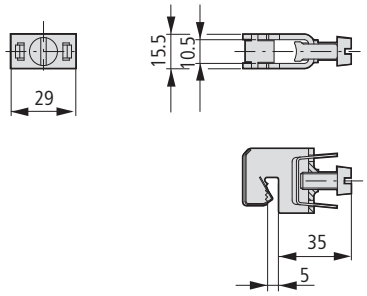
Part no.	a	b	c	d
AKP750	82	103	51	5-28
AKP900	94	103	64	5-28
AKP1200	94	118	64	20-42
AKP1600	112	118	81	20-42
AKP2000	132	118	101	20-42
AKP3600	132	154	101	23-45

Universal conductor connection terminals

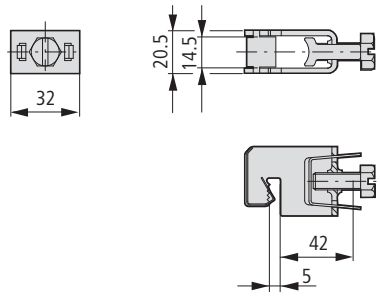
AKU16/5



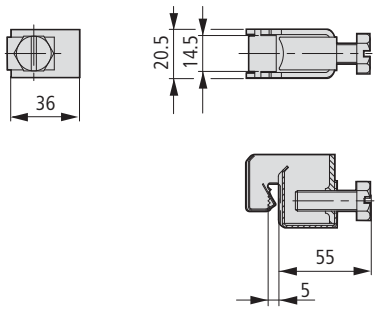
AKU35/5



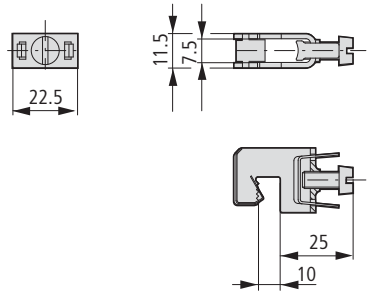
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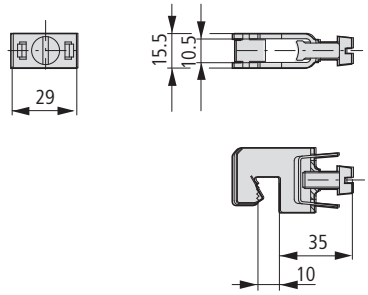
AKU120/5



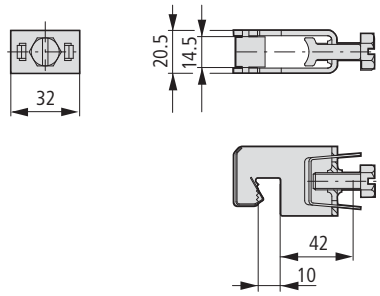
AKU16/10



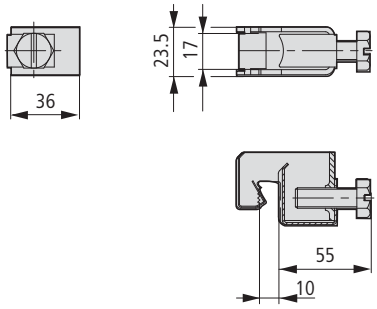
AKU35/10



AKU70/10



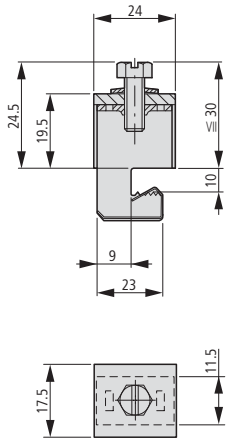
AKU120/10



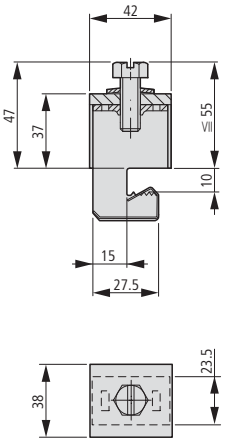
BBT-CU

Universal conductor connection terminals

AKUM8/10

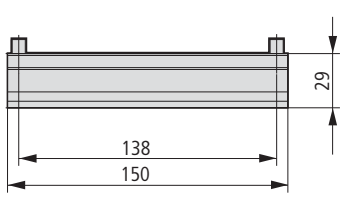


AKUM10/10

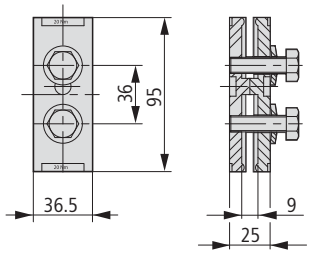


End-to-end busbar connectors

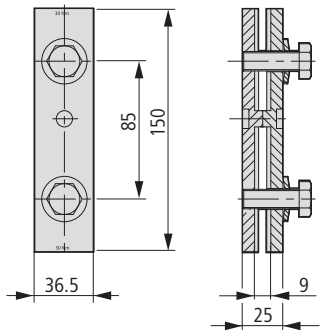
BBT-CU12-20X5/10-150



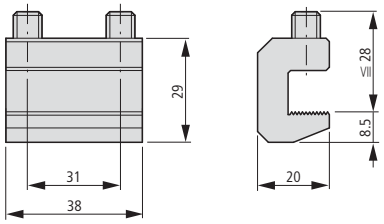
BBT-CU20-30X5/10-95



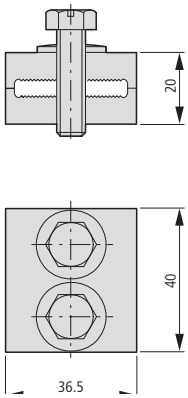
BBT-CU20-30X5/10-150



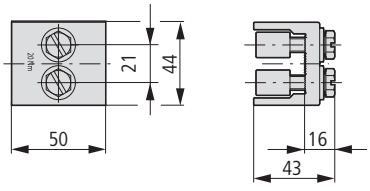
BBT-CU12-20X5/10-38



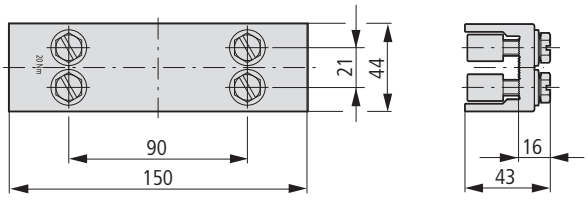
BBT-CU20-30X5/10-40



BBT-CU-BAR500/720-50



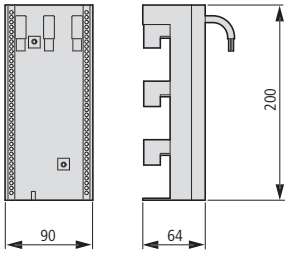
BBT-CU-BAR500/720-150



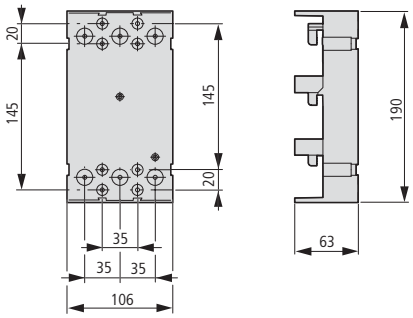
NZM...-XAD...

Component adapters for circuit-breakers and switch-disconnectors

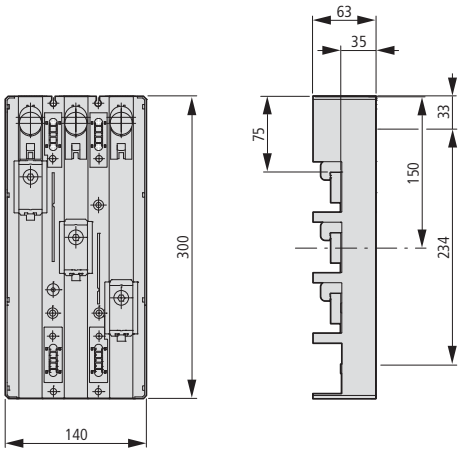
NZM1-XAD160



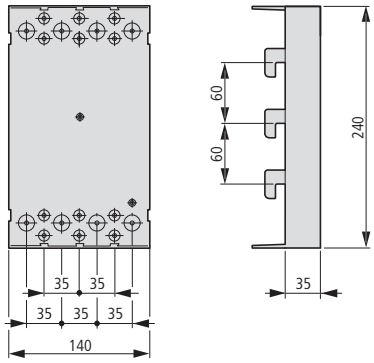
NZM2-XAD250



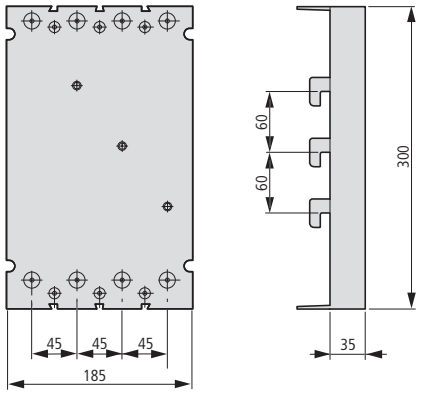
NZM3-XAD630



NZM2-4-XAD250

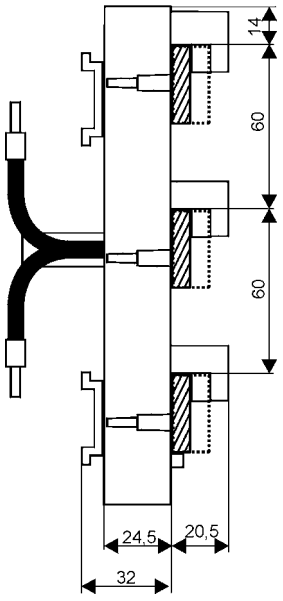


NZM3-4-XAD630



Double adapters

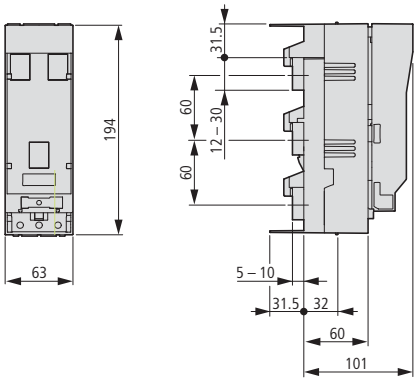
Z-SS-60-ADD/6...



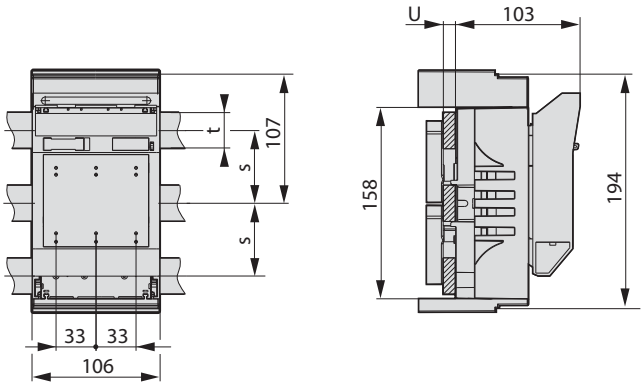
LTS, GST

LV h.b.c. fuse switch-disconnectors

LTS-100/C00/3-R

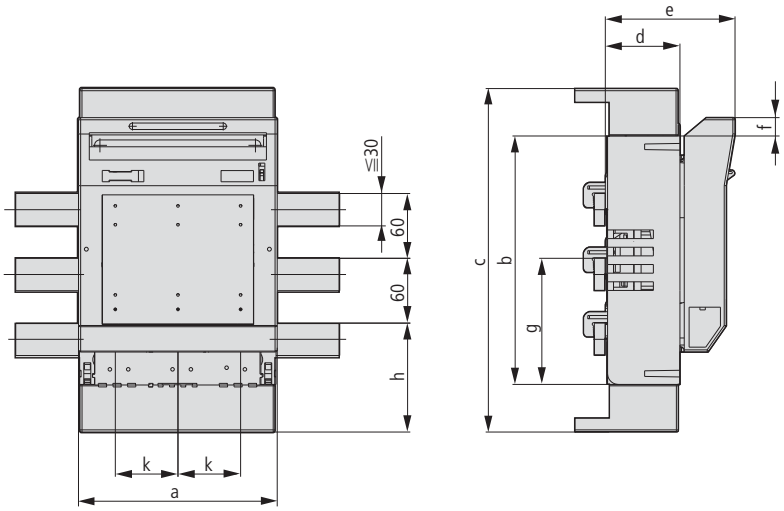


GST00-160-40-60-AOU



Part no.	s	t	u
GST0-160-40-60-AOU	40	12	5-10
	50	20	5-15
	60	20-30	5-10

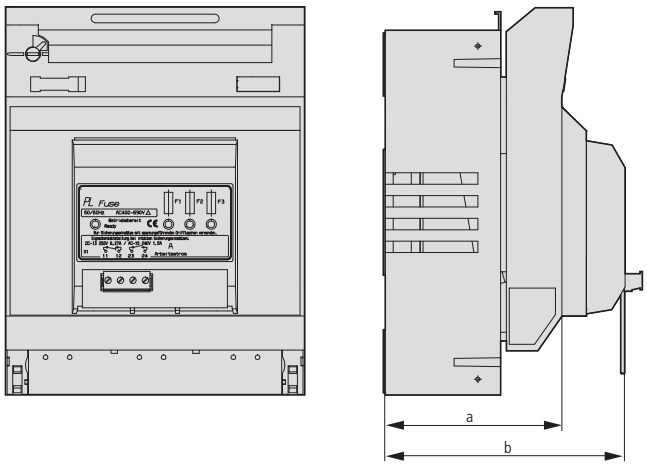
GST1-A...
GST2-A...
GST3-A...



Part no.	a	b	c	d	e	f	g	h	k
GST1-A...	184	230	322	70	121	16.5	115	104	58
GST2-A...	210	256	408	83	135	16.5	128	145	66
GST3-A...	254	270	434	98	149	9	135	156	82

Cover with fuse monitoring for fuse switch-disconnectors

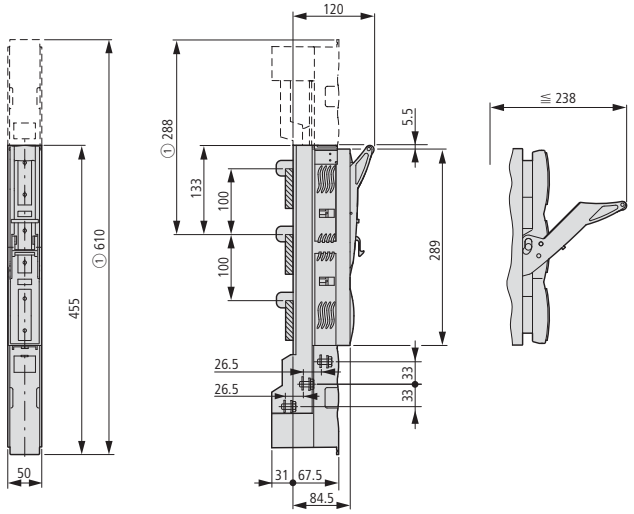
GST...-DSI



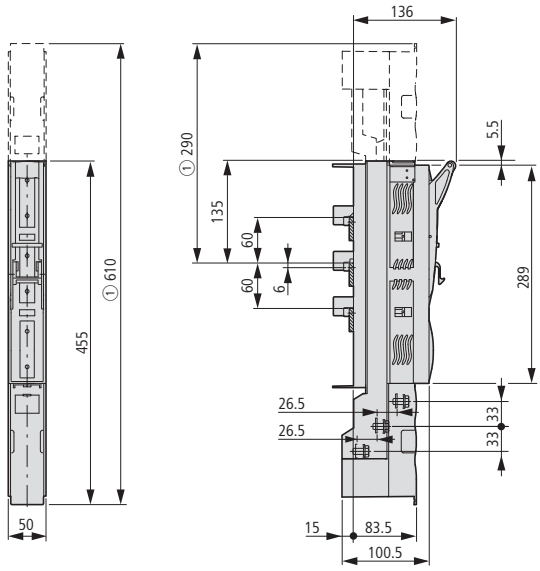
Part no.	Size	a	b
GST00...	NH00	90	123
GST1...	NH1	120	151
GST2...	NH2	135	166
GST3...	NH3	145	176

LV h.b.c. fuse switches

NH-SLS-00/160
NH-SLS-00/160-SI

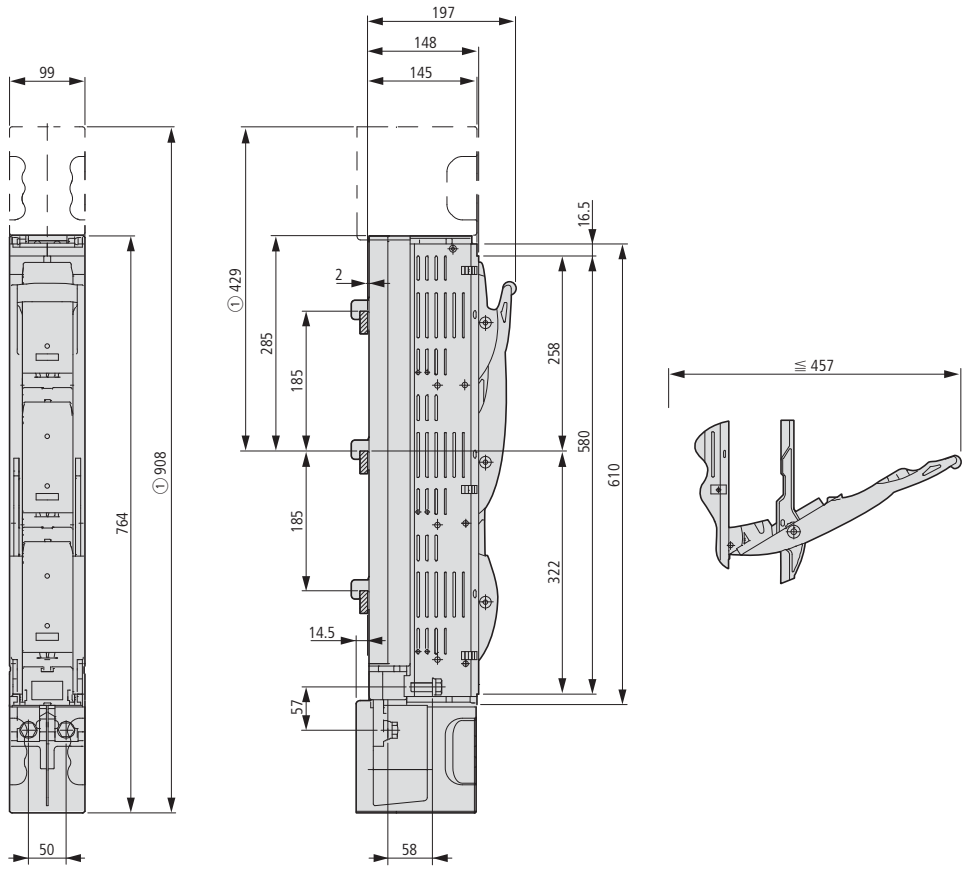


NH-SLS-00/160-60
NH-SLS-00/160-60-SI



NH-SLS-1/250
NH-SLS-1/250-SI
NH-SLS-2/400
NH-SLS-2/400-SI
NH-SLS-3/630
NH-SLS-3/630-SI

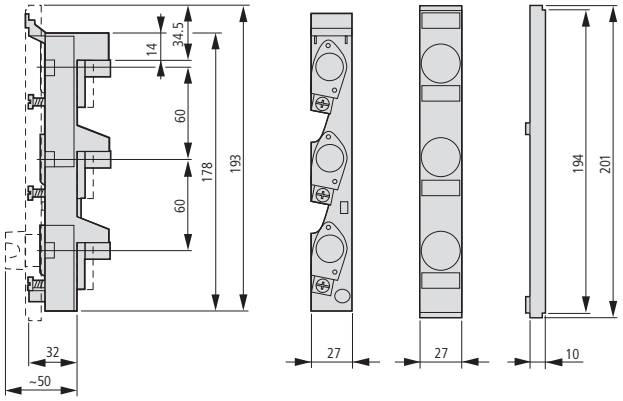
① NH-SLS-...-SI
(with fuse monitoring)



D02, DII, DIII

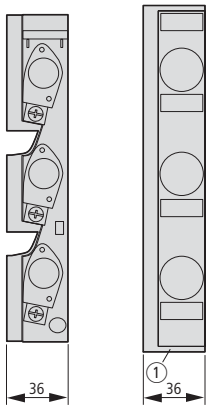
D busbar mounting fuse devices

D02-SO/63/3-R-27

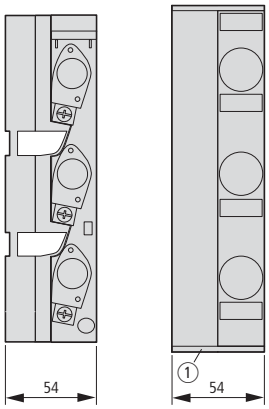


① Front plate support

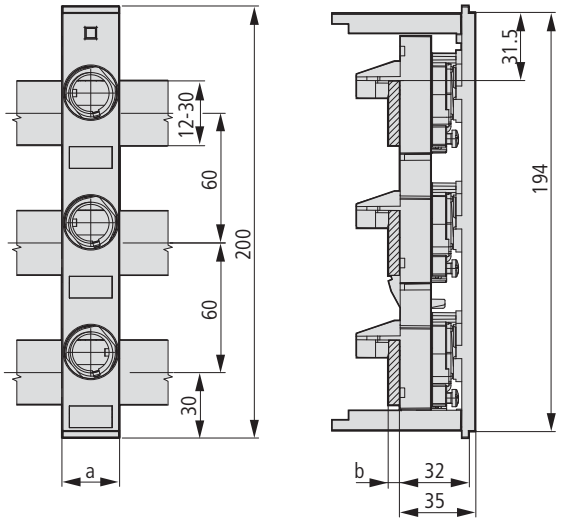
Z-D02/R/3-36



Z-D02/R/3-54

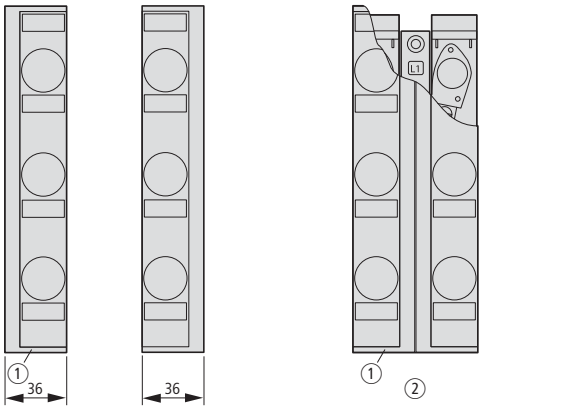


DII-SO/25/3-R(-PS)
DIII-SO/63/3-R(-PS)



Part no.	a	b
DII-SO/25/3-R(-PS)	45	5-10
DIII-SO/63/3-R(-PS)	54	5-10

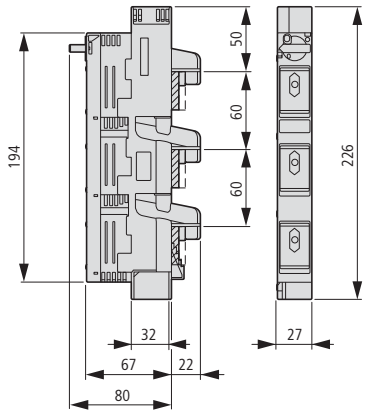
Z-D02-S-AB-SET



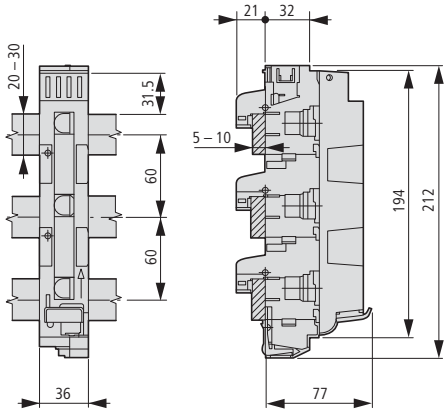
① Front plate support
② Covered busbar support

D fuse switch-disconnector

D02-LTS/63/3-R(-HK)

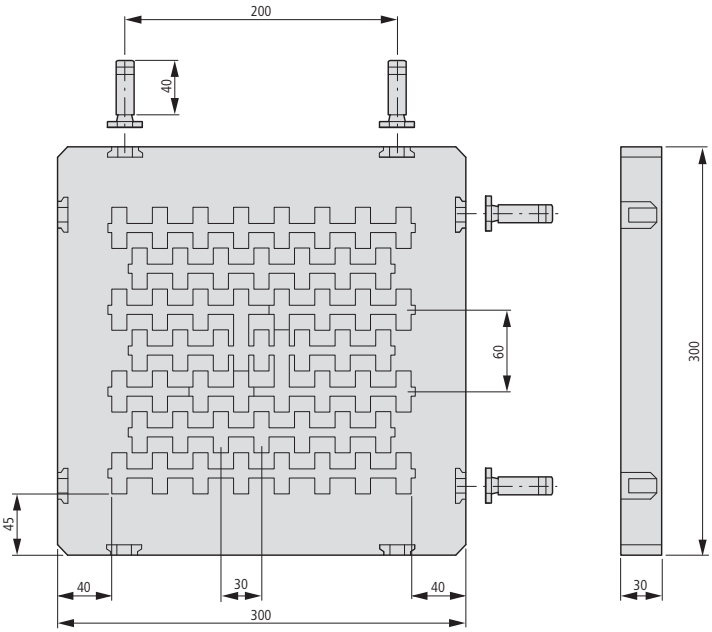


D02-S/63/3-RS

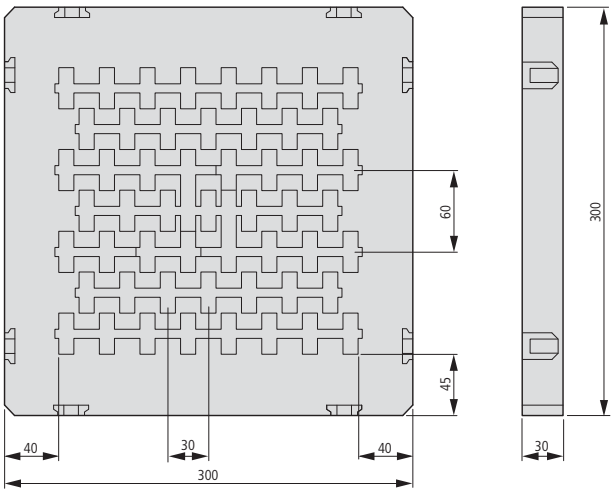


Busbar supports

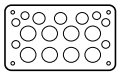
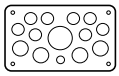
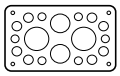
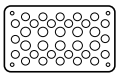
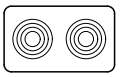
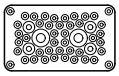
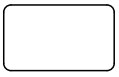
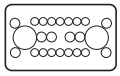
KSX-34P-EXT

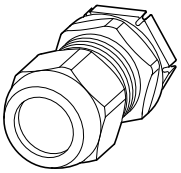


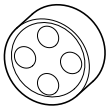
KSX-34P-MID



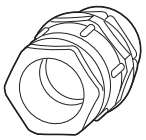
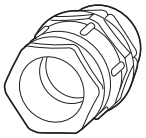
Ordering

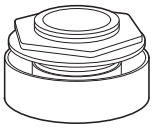
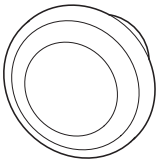
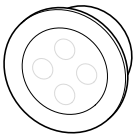
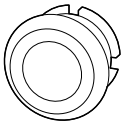
	Material	Features	Cable entry	**Part no.** Article no.	**Price** See price list	Std. pack
Flanges						
• With captive, sponge-rubber gasket • RAL 7035						
	Insulating material	Blank plate	-	**F3A-0** 074182		10 off
	Insulating material	With metric cable entry knockouts	6 x M25/16 8 x M32/20, 4 x M16	**F3A-4** 081301		10 off
	Insulating material	With metric cable entry knockouts	2 x M20 8 x M25/16 4 x M32/20 1 x M50/32	**F3A-8** 091468		10 off
	Insulating material	With metric cable entry knockouts	12 x M20, 2 x M16 2 x M40/25 2 x M50/32	**F3A-12** 076555		10 off
	Insulating material	With metric cable entry knockouts	24 x M16 13 x M20	**F3A-34** 078928		10 off
	Insulating material	With cable grommets	2 cables up to 70 mm ∅	**F3A-KTD** 083674		5 off
	Insulating material	Sponge-rubber flange	40 cables, 10 – 13 mm ∅ 4 cables, 17 - 21 mm ∅ 2 cables, 27 - 30 mm ∅	**F3A-D** 010145		10 off
	Sheet steel	Blank plate 2 mm, powder-spray painted RAL 7035	-	**F3A-XP** 113426		1 off
	Insulating material	Diaphragm flange for push-fitting cables, base RAL 9016, white For cutouts 195 x 64 mm	14 x 11 mm ∅ 8 x 15 mm ∅ 2 x 28 mm ∅	**ZSD-2K/FLA** 272166		1 off

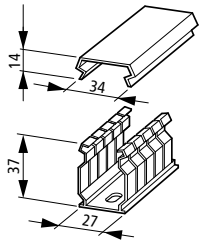
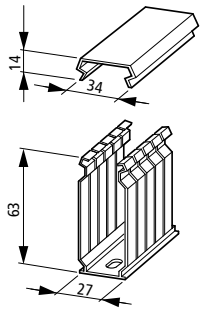
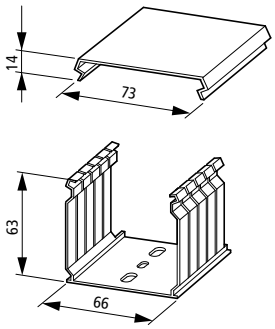
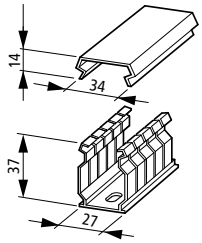
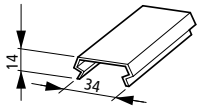
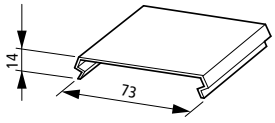
	Cable entry	Drilling dimensions mm	External diameter of cable mm	For use with NYM/NYY cables, 4-core mm²	**Part no.** Article no.	**Price** See price list	Std. pack
Metric cable glands to EN 50262							
• With lock nut and built-in strain relief • IP68 up to 5 bar, polyamide, halogen-free • Flammability classification V2 according to UL94 • Color RAL 7035							
Cable screw gland							
	M12	12.5	3 - 7	H03VV-F3 x 0.75 mm², NYM 1 x 2.5 mm²	**V-M12** 215078		20 off
	M16	16.5	4.5 - 10	H05VV-F3 x 1.5 mm², NYM 1 x 16/3 x 1.5 mm²	**V-M16** 215077		20 off
	M20	20.5	6 - 13	H05VV-F4 x 2.5/3 x 4 mm², NYM 5 x 1.5/5 x 2.5 mm²	**V-M20** 206910		20 off
	M25	25.5	9 - 17	H05VV-F5 x 2.5/5 x 4 mm², NYM 5 x 2.5/5 x 6 mm²	**V-M25** 206911		20 off
	M32	32.5	13 - 21	NYM 5 x 10 mm²	**V-M32** 206912		10 off
	M40	40.5	16 - 28	NYM 5 x 16 mm²	**V-M40** 209668		10 off
	M50	50.5	21 - 35	NYM 4 x 35/5 x 25 mm²	**V-M50** 206913		5 off
	M63	63.5	34 - 48	NYM 4 x 35 mm²	**V-M63** 214835		3 off

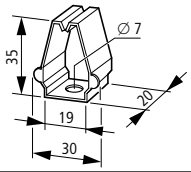
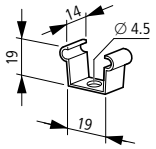
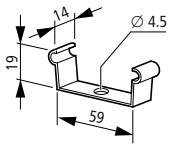
	Cable entry	External diameter of cable mm	For use with NYM/NYY cables, 4-core mm²	**Part no.** Article no.	**Price** See price list	Std. pack
Multiple gaskets for cable glands V-M... , metric						
	M25	4 x 5 - 6	H03VV-F2 x 0.75/3 x 0.75 mm²	**MFD25** 215451		50 off
	M32	4 x 3.5 - 7	H03VV-F4 x 0.75 mm²	**MFD32** 215452		25 off
Stoppers for unused openings in multiple gaskets MFD...						
	M25	6	–	**MFV25-6** 215453		50 off
	M32	7	–	**MFV32-7** 215454		50 off

	Part no. Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**
PG cable glands • Conduit union and lock nut with grouding screw • Suitable for standard commercial conduit • Suitable for all enclosures CI…-NA → Page 20/9				
½ "	**STB1/2ZOLL** 045878		1 off	Product Standards: UL 467; UL 514B; CSA-C22.2 No. 18 UL File No.: E23018, E3060 UL CCN: DWTT, KDER CSA File No.: LR 2884 CSA Class No.: 4412-03, 4414-04 NA Certification: UL Listed, CSA certified Conditions of Acceptability: Only used in combination with CI-…-NA enclosures Specially designed for NA: Yes Suitable for: Conduit, Tubing, and Cable Fittings, Grounding and Bonding Equipment Degree of Protection: Refer to main component information See also: Refer to basic component information
¾ "	**STB3/4ZOLL** 060116			
1 "	**STB1ZOLL** 052997			
1 ¼ "	**STB1-1/4ZOLL** 043505			
1 ½ "	**STB1-1/2ZOLL** 041132			
2 "	**STB2ZOLL** 002203			

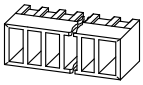
	Cable entry	Drilling dimensions mm	External diameter of cable mm	For use with NYM/NYY cables, 4-core mm²	**Part no.** Article no.	**Price** See price list	Std. pack
Ventilation cable glands • Color RAL 7035							
Ventilation cable gland IP69							
	M20	20.5	6 - 13	H05VV-F 4 x 2.5/3 x 4 mm², NYM 5 x 1.5/5 x 2.5 mm2	**V-M20-VENT** 120814		1 off
Ventilation cable glands IP56 • Permeable to air, impermeable to dust • For the prevention of condensation For use in the enclosure bottom or sides, polyamide, halogen-free							
	M20	20.5	–	–	**STB-M20F** 224557		20 off
	M25	25.5	–	–	**STB-M25F** 224558		20 off

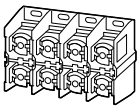
	Cable entry	Drilling dimensions mm	External diameter of cable mm	For use with NYM/NYY cables, 4-core mm²	**Part no.** Article no.	**Price** See price list	Std. pack
Pressure compensating plug							
Pressure compensating plug, IP66, metric Color RAL 7035							
	M40 x 1.5	–	–	–	**DAV-M40** 107225		2 off
Pressure compensating plug, IP66, PG Color RAL 7032							
	PG29	–	–	–	**DA412** 079219		2 off
Cable grommets, metric							
• IP66, with integrated push-through diaphragm • PE and thermoplastic elastomer, halogen-free • Color RAL 7035							
	M16	16.5	1 - 9	H03VV-F3 x 0.75 mm², NYM 1 x 16/3 x 1.5 mm²	**KT-M16** 216983		100 off
	M20	20.5	1 - 13	H03VV-F3 x 0.75 mm², NYM 5 x 1.5/5 x 2.5 mm²	**KT-M20** 207602		100 off
	M25	25.5	1 - 18	H03VV-F3 x 0.75 mm², NYM 4 x 10 mm²	**KT-M25** 207603		100 off
	M32	32.5	1 - 25	H03VV-F3 x 0.75 mm², NYM 4 x 16/5 x 10 mm²	**KT-M32** 207604		100 off
PG cable grommets							
• For wall thickness 2 - 8 mm • Soft PVC, cadmium- and lead-free • Color similar to RAL 7035							
	PG13.5	21.5	7 - 16	1.5 - 4	**KT13.5** 019658		100 off
	PG16	23.5	7 - 17	1.5 - 10	**KT16** 022031		100 off
	PG21	29.5	12.5 - 20	1.5 - 16	**KT21** 026777		100 off
	PG29	38	12.5 - 31	1.5 - 35	**KT29** 029150		50 off
	PG36	48	18 - 40	10 - 70	**KT36** 033896		20 off
	PG42	55	18 - 47	10 - 95	**KT42** 038642		10 off
Stepped cable grommets							
• For wall thickness 2 - 3 mm, • PVC • Color RAL 7035							
	–	58	14 - 54	–	**KT3** 031523		2 off
	–	75	14 - 68	–	**KT4** 036269		3 off
Pressure compensating grommets							
• Ventilation grommet with filter disc • Fitting below or on side of enclosure • PE and PVC • Color RAL 7035 • Metric and P6							
	M25	25.5	–	–	**KT-M25F** 224556		100 off
	PG16	23.5	–	–	**KT16F** 024404		100 off

	Length	Capacity: max. no. of cables (approx.)	Type and cross-section		Part no. Article no.	Price See price list	Std. pack
			H 0… V-K	H 0… V-K			
	mm		mm²	AWG			
Cable ducts							
For screw-fitting							
	1500	60 40 25 15	0.75 1.5 2.5 4	- 16 14 12	**KL25/35** 012531		60 off
	1500	100 70 45 30 25	0.75 1.5 2.5 4 6	- 16 14 12 10	**KL25/60** 017277		40 off
	1500	260 180 120 80 65	0.75 1.5 2.5 4 6	- 16 14 12 10	**KL60/60** 029142		20 off
Self-adhesive Max. ambient temperature +55 °C							
	650	60 40 25 15	0.75 1.5 2.5 4	- 16 14 12	**KL25/35K** 014904		50 off
Cable duct cover Supplied as spares							
	1500	–	–	–	**KD25** 019649		200 off
	1500	–	–	–	**KD60** 024395		100 off

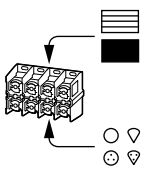
	Length	Capacity: max. no. of cables (approx.)	Type and cross-section		Part no. Article no.	Price See price list	Std. pack
			H 0… V-K	H 0… V-K			
	mm		mm^2	AWG			
Cable support brackets for cable ducts							
• Can be used in cable ducts KL25/35 (K) • Screw-fitting							
	–	15	4	–	**KH25/35** 078974		20 off
Clamping brackets for cable ducts							
KL25/...: fixing interval: ≦ 500 mm							
	–	–	–	–	**KK25** 081347		100 off
K60/60: fixing interval: ≦ 300 mm							
	–	–	–	–	**KK60** 083720		100 off

	Features	Length	Width	Bundle area	Tensile strength	Part no. Article no.	Price See price list	Std. pack
		mm	mm	mm	N			
ITB Industrial cable binders								
• For bundling and fastening cables, cable looms, hoses, pipes etc. • Continuous ribbing up to tip • Temperature-resistant from -40 to +85 °C • Material PO 6.6, color natural, flame resistant to UL 94 V2 • Resistant to oils, petrol/gasoline, salt water, solvent, mold								
	1000 off	98	2.5	21	8	**ITB1** 083550		1 off
	1000 off	140	3.6	35	13	**ITB2** 085923		1 off
	With 4.8 mm fixing eyelet 100 off	205	4.2	60	220	**ITB3** 088296		1 off

	For use with	Part no. Article no.	Price See price list	Std. pack
Conductor supports for copper strip, insulated				
Section strip				
	Latch fastener	**BZ248** 076516		10 off
Latch fastener for section strip				
	3 x 9 x 0.8 + BZ248 6 x 9 x 0.8 + BZ248	**BZ249** 078889		10 off
	4 x 16 x 0.8 + BZ248 6 x 16 x 0.8 + BZ248 10 x 16 x 0.8 + BZ248	**BZ251** 081262		10 off
	11 x 21 x 1 + BZ248	**BZ252** 083635		10 off

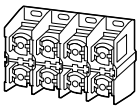
	Rated operational current I_e A	Poles	Terminal capacities[1] Cu ⊙▽○▽ Al ▽ Al ○▽		Terminal capacities[1] Copper strip mm	Copper bar mm	**Part no.** Article no.	**Price** See price list	Std. pack
Terminals 160 - 1000 A									
Includes labels for terminal marking U, V, W - X, Y, Z - L 1, L 2, L3 - T 1, T 2, T 3 - PE, N, PEN, ⏚ U_i = 1000 V AC Assignment of rated current → Terminal capacities to IEC/EN 60439, VDE 0660 Part 500 or EN 50021 Outer terminal for round or sectoral conductor, other side for copper strip. Conversion kits for converting flat strip terminal to cable terminal → Page 16/69, terminal shroud → Page 16/69									
	160	1	1 x 16 - 95	1 x 35 - 70	3 x 9 x 0.8 - 6 x 9 x 0.8	18 x 4	**K95/1N** 010773		1 off
		3					**K95/3** 025017		
		4					**K95/4** 027390		
		5					**K95/5** 029763		
		1			–	–	**K95/1N/BR** 012336		
	250	1	1 x 35 - 150 2 x 16 - 70	1 x 50 - 120 2 x 35 - 50	1 x 4 x 16 x 0.8 - 2 x 6 x 16 x 0.8	18 x 4	**K150/1** 089085		1 off
		3					**K150/3** 032136		
		4					**K150/4** 034509		
		5					**K150/5** 036882		
		1			–	–	**K150/1/BR** 014709		
	400	1	1 x 50 - 240 2 x 25 - 120	1 x 95 - 185 2 x 50 - 95	6 x 16 x 0.8 - 10 x 16 x 0.8	25 x 15	**K240/1** 091458		1 off
		3					**K240/3** 039255		
		4					**K240/4** 041628		
		5					**K240/5** 044001		
		1			–	–	**K240/1/BR** 017082		
	630	1	1 x 150 - 300 2 x 50 - 240	1 x 150 - 240 2 x 95 - 185	10 x 16 x 0.8 - 11 x 21 x 1	40 x 15	**K2X240/1** 093831		1 off
		3					**K2X240/3** 046374		
		4					**K2X240/4** 048747		
		5					**K2X240/5** 051120		
		1			–	18 x 4	**K2X240/1/BR** 019455		

Notes

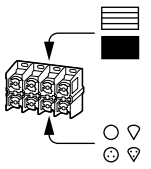


[1] ▬ Copper strip
■ Copper bar
○ Round conductor, solid
⊙ Round conductor, stranded
▽ Sectoral conductor, solid
▽ Sectoral conductor, stranded

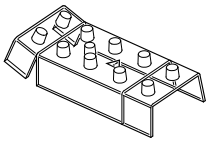
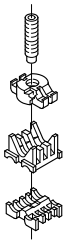
Part nos. K95/1N/BR, K150/1/BR, K240/1/BR and K2X240/1/BR
= suitable for connection of round and sectoral conductors at both sides

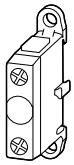
	Rated operational current I_e A	Poles	Terminal capacities[1] Cu ⊙▽○▽ Al ▽ Al ○▽	Terminal capacities[1] Copper strip mm	Copper bar mm	**Part no.** Article no.	**Price** See price list	Std. pack
Terminals 160 - 1000 A								
Includes labels for terminal marking U, V, W - X, Y, Z - L 1, L 2, L3 - T 1, T 2, T 3 - PE, N, PEN, ⏚ U_i = 1000 V AC Assignment of rated current → Terminal capacities to IEC/EN 60439, VDE 0660 Part 500 or EN 50021 Outer terminal for round or sectoral conductor, other side for copper strip. Conversion kits for converting flat strip terminal to cable terminal → Page 16/69, terminal shroud → Page 16/69								
	800	1	2 x 120 - 240 3 x 50 - 185	2 x 150 - 185 3 x 95 - 150	2 x (11 x 21 x 1)	50 x 20	**K3X185/1** 062985	1 off
		3					**K3X185/3** 065358	
		4					**K3X185/4** 067731	
		5					**K3X185/5** 070104	
	1000	1	2 x 150 - 300 3 x 50 - 240	2 x 150 - 240 3 x 150 - 185	2 x 150 - 240 3 x 150 - 185	60 x 15	**K3X240/1** 060612	1 off
		3					**K3X240/3** 058239	
		4					**K3X240/4** 055866	
		5					**K3X240/5** 053493	
		1	2 x 150 - 300 4 x 50 - 185	2 x 240 4 x 120 - 150	2 x 240 4 x 120 - 150		**K4X185/1** 079596	
		3					**K4X185/3** 077223	
		4					**K4X185/4** 074850	
		5					**K4X185/5** 072477	

Notes

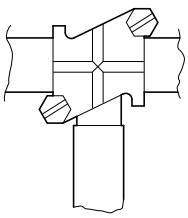


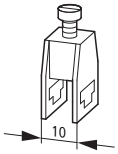
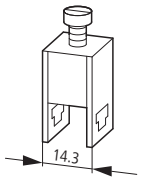
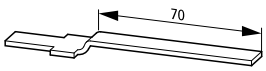
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▽ Sectoral conductor, solid
▽ Sectoral conductor, stranded

	For use with	Rated uninterrupted current I_u A	**Part no.** Article no.	**Price** See price list	Std. pack
Terminal shrouds, 5 pole					
Including warning label To DIN (lightning symbol) Break off end sections for 3- and 4 pole terminal shrouds					
	K95/3, K95/4, K95/5	–	**H-K95/5** 036888		4 off
	K150/3, K150/4, K150/5	–	**H-K150/5** 039261		1 off
	K240/3, K240/4, K240/5	–	**H-K240/5** 041634		
	K2X240/3, K2X240/4, K2X240/5	–	**H-K2X240/5** 044007		
	K3X185/3, K3X185/4, K3X185/5	–	**H-K3X185/5** 048753		
	K3X240/3, K3X240/4, K3X240/5	–	**H-K3X240/5** 046380		
	K4X185/3, K4X185/4, K4X185/5	–	**H-K4X185/5** 051126		
Conversion kits for terminals 160 – 1000 A					
For one conductor To convert from flat strip terminal to cable terminal					
	K95/…	160	**D-K95** 020277		1 off
	K150/…	250	**D-K150** 022650		
	K240/…	400	**D-K240** 025023		
	K2X240/…	630	**D-K2X240** 027396		
	K3X185/…	800	**D-K3X185** 032142		
	K3X240/…	1000	**D-K3X240** 029769		
	K4X185/…	1000	**D-K4X185** 034515		
For one control circuit cable M4 screw with pressure plate Terminal capacity 0.5 - 2.5 mm²					
	K95/... + K150/...	–	**HK-K95-K150** 001916		1 off
	K240/…	–	**HK-K240** 098585		
	K2X240/…	–	**HK-K2X240** 010785		
	K3X185/…	–	**HK-K3X185** 015531		
	K3X240/…	–	**HK-K3X240** 013158		
	K3X240/... + K4X185/...	–	**HK-K3X240-K4X185** 001917		

	Circuit	Rated uninterrupted current I_u A	Terminal capacities[1] Terminal capacities for round conductors mm²	Terminal capacities for flat conductors mm	**Part no.** Article no.	**Price** See price list	Std. pack
Insulated individual terminals 32 - 100 A							
• With adhesive labels • Can be screwed onto mounting plates and stacking mandrels of enclosures CI and CI-K • For snap-fitting to mounting rails to IEC/EN 60715 • Terminal capacities to IEC/EN 60947-1, VDE 0609 Part 1 • Rated insulation voltage U_i = 1000 V AC							
With two connections							
		32	○ 1.5 - 10 ⊜ 1.5 - 6	–	**K10/1** 093827		10 off
		63	○ 4 - 16 ⊙ 16 - 25 ⊜ 6 - 16	–	**K25/1** 096200		10 off
		100	○ 10 - 16 ⊙ 16 - 50 ⊜ 10 - 35	▤ 3 x 9 x 0.8	**K50/1** 098573		10 off

Notes [1] ⊙ Solid
⊙ Stranded
⊜ Flexible with ferrule
▤ Copper strip

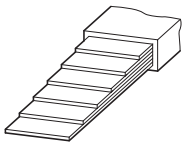
	For use with busbars mm	Terminal capacities for flat conductors mm	Rated operational current, flat conductor I_e A	Terminal capacities, round conductors Type: ○ solid ⊜ flexible with ferrule mm²	**Part no.** Article no.	**Price** See price list	Std. pack
Ultra-flat busbar terminals 100 - 800 A							
	Cu 12 x 5	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8	100 160 200 250	○ 1.5 - 10 ⊜ 1.5 - 6	**K12X5/25** 002324		10 off
	Cu 20 x 5	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8	100 160 200 250	○ 1.5 - 10 ⊜ 1.5 - 6	**K20X5/25** 002327		10 off
	Cu 20 x 5 Cu 20 x 10	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8	100 160 200 250 400	○ 1.5 - 10 ⊜ 1.5 - 6	**K20X10/35** 002325		10 off
	Cu 20 x 5 Cu 20 x 10	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8	100 160 200 250 400	○ 1.5 - 10 ⊜ 1.5 - 6	**K20X15/40** 002285		10 off
	Cu 20 x 10 Cu 20 x 15	3 x 9 x 0.8 6 x 9 x 0.8 4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8 11 x 21 x 1	100 160 200 250 400 630	○ 1.5 - 10 ⊜ 1.5 - 6			
	Cu 20 x 15	11 x 21 x 1 2 x (11 x 21 x 1)	630 800	○ 1.5 - 10 ⊜ 1.5 - 6	**K20X15/50** 002326		5 off

	For use with busbars	Terminal capacities for flat conductors	Terminal capacities, round conductors Type: ○ solid ⊙ stranded ⊛ flexible with ferrule	**Part no.** Article no.	**Price** See price list	Std. pack
	mm	mm	mm²			
Terminal expansions for ultra-flat busbar terminals						
Expansion terminals for tongue						
	Cu 10 x 3	–	○ ⊙ 1.5 - 16 ⊛ 0.75 - 16	**AK16** 079336		50 off
	Cu 10 x 3	–	○ 6 - 16 ⊙ 6 - 25 ⊛ 4 - 25	**AK35** 079614		50 off
Tongue for expansion terminal AK… in conjunction with busbar terminals K…						
	–	–	–	**L-KL-R** 079269		50 off

Copper strip

Copper strip insulated

- Laminated E-Cu conductor, tin-plated
- Rated operating voltage 690 V AC
- UL approved up to 600 V AC
- Dielectric strength 20 kV/mm
- Insulating material heat resistant up to +105 °C
- Self-extinguishing to UL 94 V 0
- 2000 mm long, black (BK), blue (BU) and green/yellow (GNYE).



Rated operational current[1] I_e A	Dimensions (number of layers × width × layer thickness) mm	Cross-section[2] mm²	Cu factor[3]	Color	**Part no.** Article no.	**Price** See price list	Std. pack
100	3 x 9 x 0.8	21.6	0.41	Black	**CU-BAND3X9X0.8-BK** 081167		20 off
100	3 x 9 x 0.8	21.6	0.41	Yellow/green	**CU-BAND3X9X0.8-GNYE** 081006		20 off
100	3 x 9 x 0.8	21.6	0.41	Blue	**CU-BAND3X9X0.8-BU** 080960		20 off
160	6 x 9 x 0.8	43.2	0.83	Black	**CU-BAND6X9X0.8-BK** 081414		10 off
160	6 x 9 x 0.8	43.2	0.83	Yellow/green	**CU-BAND6X9X0.8-GNYE** 081367		10 off
160	6 x 9 x 0.8	43.2	0.83	Blue	**CU-BAND6X9X0.8-BU** 081344		10 off
200	9 x 9 x 0.8	64.8	1.24	Black	**CU-BAND9X9X0.8-BK** 081515		10 off
200	9 x 9 x 0.8	64.8	1.24	Yellow/green	**CU-BAND9X9X0.8-GNYE** 081485		10 off
200	9 x 9 x 0.8	64.8	1.24	Blue	**CU-BAND9X9X0.8-BU** 081436		10 off
250	6 x 16 x 0.8	74.4	1.43	Black	**CU-BAND6X16X0.8-BK** 081310		10 off
250	6 x 16 x 0.8	74.4	1.43	Yellow/green	**CU-BAND6X16X0.8-GNYE** 081275		10 off
250	6 x 16 x 0.8	74.4	1.43	Blue	**CU-BAND6X16X0.8-BU** 081222		10 off
400	5 x 24 x 1	120	2.14	Black	**CU-BAND5X24X1-BK** 119032		5 off
400	10 x 16 x 0.8	124	2.38	Black	**CU-BAND10X16X0,8-BK** 080739		5 off
400	10 x 16 x 0.8	124	2.38	Yellow/green	**CU-BAND10X16X0,8-GNYE** 080698		5 off
400	10 x 16 x 0.8	124	2.38	Blue	**CU-BAND10X16X0,8-BU** 079736		5 off
630	5 x 32 x 1	160	2.85	Black	**CU-BAND5X32X1-BK** 119035		5 off
630	8 x 24 x 1	192	3.42	Black	**CU-BAND8X24X1-BK** 119033		5 off
630	10 x 24 x 1	240	4.28	Black	**CU-BAND10X24X1-BK** 119034		5 off
630	11 x 21 x 1	231	4.44	Black	**CU-BAND11X21X1-BK** 080923		5 off
630	11 x 21 x 1	231	4.44	Yellow/green	**CU-BAND11X21X1-GNYE** 080836		5 off
630	11 x 21 x 1	231	4.44	Blue	**CU-BAND11X21X1-BU** 080769		5 off
800	10 x 32 x 1	320	5.70	Black	**CU-BAND10X32X1-BK** 119036		3 off
1000	10 x 40 x 1	400	7.12	Black	**CU-BAND10X40X1-BK** 119037		3 off
1250	10 x 50 x 1	500	8.90	Black	**CU-BAND10X50X1-BK** 119038		2 off
1600	10 x 80 x 1	800	14.25	Black	**CU-BAND10X80X1-BK** 119039		1 off

Notes

[1] Rated operational current: conforms to VDE 0281
[2] Observe component wiring instructions (e.g. min. terminal capacities in mm²)
[3] Calculation of material surcharge → Page 23/3

Information relevant for export to North America

Product Standards	UL 758; EN 60439-1, -3; CE marking
UL File No.	E248096
UL CCN	AVLV2
CSA File No.	UL report applies to both US and Canada
CSA Class No.	–
NA Certification	UL Listed, certified by UL for use in Canada
Conditions of Acceptability	max. 105 °C
Suitable for	Appliance Wiring Material - Component
Max. Voltage Rating	600 V AC, 750 V DC

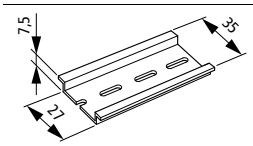
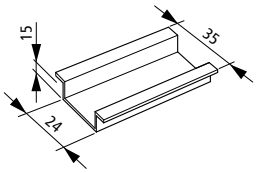
Flat copper bars

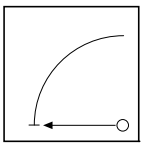
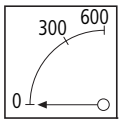
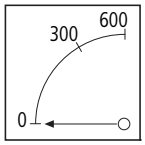
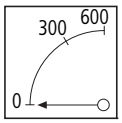
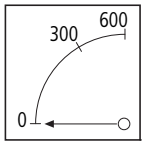
		Rated operational current I_e A	Dimensions mm		**Part no.** Article no.	**Price** See price list	Std. pack
	Tinned	160	12 x 5 x supplied in lengths of 1500		**CU12X5** 034121		10 off
	Tinned	160	12x 5 x supplied in lengths of 2250		**CU12X5-2250** 005093		10 off
	Tinned	240	12 x 10 x supplied in lengths of 1500		**CU12X10** 215269		5 off
	Tinned	310	15 x 5 x supplied in lengths of 1500		**CU15X5** 215270		10 off
	Tinned	360	15 x 10 x supplied in lengths of 1500		**CU15X10** 215271		5 off
	Tinned	250	20 x 5 x supplied in lengths of 1500		**CU20X5** 044092		10 off
	Tinned	250	20 x 5 x supplied in lengths of 2250		**CU20X5-2250** 007466		10 off
	Tinned	250	20 x 5 x supplied in lengths of 2500		**CU20X5-2500** 032703		1 off
	Tinned	400	12 x 10 x supplied in lengths of 1500		**CU20X10** 041719		5 off
	Tinned	400	20 x 10 x supplied in lengths of 2250		**CU20X10-2250** 009839		5 off
	Untreated	630	30 x 10 x supplied in lengths of 1500		**CU30X10** 051211		1 off
	Untreated	850	40 x 10 x supplied in lengths of 1500		**CU40X10** 063076		3 off

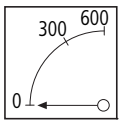
Flat copper busbars, predrilled

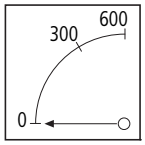
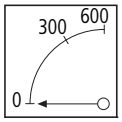
	Rated operational current I_e A	Thread	Dimensions mm	**Part no.** Article no.	**Price** See price list	Std. pack
	218	M6	15 x 5 x supplied in lengths of 1000	**BPZ-BB/T-15/5/1000** 289861		4 off
	274	M6	20 x 5 x supplied in lengths of 1000	**BPZ-BB/T-20/5/1000** 289862		4 off
	400	M6	32 x 5 x supplied in lengths of 1000	**BPZ-BB/T-32/5/1000** 289863		1 off
	218	M6	15 x 5 x supplied in lengths of 2000	**BPZ-BB/T-15/5/2000** 289864		1 off
	274	M6	20 x 5 x supplied in lengths of 2000	**BPZ-BB/T-20/5/2000** 289865		1 off
	427	M8	20 x 10 x supplied in lengths of 1000	**BPZ-BB/T-20/10/1000** 289866		1 off
	573	M8	30 x 10 x supplied in lengths of 1000	**BPZ-BB/T-30/10/1000** 289867		1 off

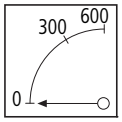
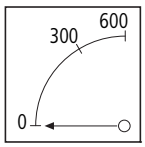
DIN-rails

		Part no. Article no.	**Price** See price list	Std. pack
	To IEC/EN 60715 35 x 7.5 mm Short-circuit rating as PE conductor corresponds to 16 mm² copper conductor to IEC/EN 60439-1 Supplied in lengths of 2 m	**TS35X7.5** 053030		20 off
	To IEC/EN 60715 35 x 15 mm Short-circuit rating as PE conductor corresponds to 50 mm² copper conductor to IEC/EN 60439-1 Supplied in lengths of 2 m	**TS35X15** 050657		10 off

	Measuring range A	Measuring range V	**Part no.** Article no.	**Price** See price list	Std. pack
Power factor (p. f.) meters					
• Rated operational voltage 3 × 400 V AC • Current through transformer secondary winding 5 A/VA • Scale division 0.5 capacitive - 1 - 0.5 inductive					
	0 - 10/20	–	**LWQ96** 086856		1 off
Voltmeters, class 1.5					
• To DIN 43780 and VDE 410 • Enclosure to DIN 43700 • Narrow version to DIN 43718 • Quadrant scale DIN 43802 (dual scale) • Terminals protected against accidental contact • Vertical operating position • Snap fitting for EQ72 and EQ96 • Class 1.5 • Direct connection					
Unshielded					
EQ45 • 45 x 45 mm 	–	0 - 250	**EQ45C-250V** 057968		1 off
	–	0 - 500	**EQ45C-500V** 060341		1 off
EQ72 • 72 x 72 mm 	–	0 - 250	**EQ72-250V** 033051		1 off
	–	0 - 500	**EQ72-500V** 033052		
	–	0 - 600	**EQ72-600V** 033053		
	–	0 - 800	**EQ72-800V** 033054		
EQ96 • 96 x 96 mm 	–	0 - 250	**EQ96-250V** 033047		1 off
	–	0 - 500	**EQ96-500V** 033048		
	–	0 - 600	**EQ96-600V** 033049		
	–	0 - 800	**EQ96-800V** 033050		
Shielded 4 mT					
EQ72 • 72 x 72 mm 	–	0 - 250	**EQ72S-250V** 038581		1 off
	–	0 - 500	**EQ72S-500V** 045700		4 off
	–	0 - 600	**EQ72S-600V** 052819		1 off
EQ96 • 96 x 96 mm 	–	0 - 250	**EQ96S-250V** 071803		1 off
	–	0 - 500	**EQ96S-500V** 078922		4 off
	–	0 - 600	**EQ96S-600V** 086041		1 off
	–	0 - 800	**EQ96S-800V** 088414		1 off

	Measuring range A	Part no. Article no.	Price See price list	Std. pack
Ammeters, class 1.5				
• To DIN 43780 and VDE 410 • Enclosure to DIN 43700 • Narrow version to DIN 43718 • Quadrant scale DIN 43802 (dual scale) • Terminals protected against accidental contact • Vertical operating position • Snap fitting for EQ72 and EQ96 • Class 1.5 • For 5 A transformer connection • Power consumption 0.7 VA				
Unshielded				
EQ45 • 45 x 45 mm 	0 - 50	**EQ45C-50/5** 043730		1 off
	0 - 100	**EQ45C-100/5** 046103		
	0 - 200	**EQ45C-200/5** 048476		
	0 - 250	**EQ45C-250/5** 050849		
	0 - 400	**EQ45C-400/5** 053222		
	0 - 600	**EQ45C-600/5** 055595		
EQ48 • 48 x 48 mm 	0 - 10	**EQ48-10-5** 033006		
	0 - 50	**EQ48-50-5** 033007		
	0 - 150	**EQ48-150-5** 033008		
	0 - 200	**EQ48-200-5** 033009		
	0 - 250	**EQ48-250-5** 033010		
	0 - 400	**EQ48-400-5** 033011		
	0 - 600	**EQ48-600-5** 033012		
EQ72 • 72 x 72 mm 	0 - 50	**EQ72-50-5** 032989		1 off
	0 - 100	**EQ72-100-5** 032990		
	0 - 200	**EQ72-200-5** 032991		
	0 - 250	**EQ72-250-5** 032992		
	0 - 400	**EQ72-400-5** 032993		
	0 - 600	**EQ72-600-5** 032994		
	0 - 800	**EQ72-800-5** 032995		
	0 - 1000	**EQ72-1000-5** 032996		
	0 - 1250	**EQ72-1250-5** 032997		
	0 - 1600	**EQ72-1600-5** 032998		
	0 - 2000	**EQ72-2000-5** 032999		
	0 - 2500	**EQ72-2500-5** 033000		
	0 - 3000	**EQ72-3000-5** 033001		
	0 - 3200	**EQ72-3200-5** 033002		
	0 - 4000	**EQ72-4000-5** 033003		
	0 - 5000	**EQ72-5000-5** 033004		
	0 - 6300	**EQ72-6300-5** 209675		

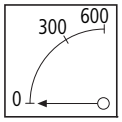
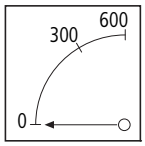
	Measuring range A	**Part no.** Article no.	**Price** See price list	Std. pack
EQ96 • 96 x 96 mm 	0 - 50	**EQ96-50-5** 032972		1 off
	0 - 100	**EQ96-100-5** 032973		
	0 - 200	**EQ96-200-5** 032974		
	0 - 250	**EQ96-250-5** 032975		
	0 - 400	**EQ96-400-5** 032976		
	0 - 600	**EQ96-600-5** 032977		
	0 - 800	**EQ96-800-5** 032978		
	0 - 1000	**EQ96-1000-5** 032979		
	0 - 1250	**EQ96-1250-5** 032980		
	0 - 1600	**EQ96-1600-5** 032981		
	0 - 2000	**EQ96-2000-5** 032982		
	0 - 2500	**EQ96-2500-5** 032983		
	0 - 3000	**EQ96-3000-5** 032984		
	0 - 3200	**EQ96-3200-5** 032985		
	0 - 4000	**EQ96-4000-5** 032986		
	0 - 5000	**EQ96-5000-5** 032987		
	0 - 6300	**EQ96-6300-5** 209676		
Shielded 4 mT				
EQ48 • 48 x 48 mm 	0 - 10	**EQ48S-10/5** 076469		1 off
	0 - 50	**EQ48S-50/5** 076489		
	0 - 100	**EQ48S-100/5** 076490		
	0 - 200	**EQ48S-200/5** 076491		
	0 - 250	**EQ48S-250/5** 076492		
	0 - 400	**EQ48S-400/5** 076532		
	0 - 600	**EQ48S-600/5** 076583		
EQ72 • 72 x 72 mm 	0 - 10	**EQ72S-10** 024343		1 off
	0 - 15	**EQ72S-15** 029089		
	0 - 25	**EQ72S-25** 033835		
	0 - 40	**EQ72S-40** 040954		
	0 - 60	**EQ72S-60** 048073		
	0 - 50	**EQ72S-50/5** 033567		
	0 - 100	**EQ72S-100/5** 026716		
	0 - 200	**EQ72S-200/5** 031462		
	0 - 250	**EQ72S-250/5** 036208		
	0 - 400	**EQ72S-400/5** 043327		
	0 - 600	**EQ72S-600/5** 050446		

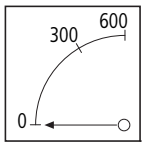
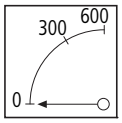
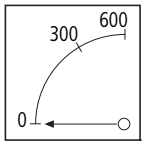
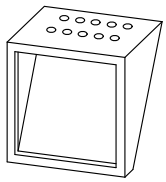
	Measuring range A	Part no. Article no.	Price See price list	Std. pack
EQ72 • 72 x 72 mm 	0 - 800	**EQ72S-800/5** 074118		1 off
	0 - 1000	**EQ72S-1000/5** 074119		1 off
	0 - 1250	**EQ72S-1250/5** 074301		1 off
	0 - 1600	**EQ72S-1600/5** 074302		1 off
	0 - 2000	**EQ72S-2000/5** 074303		1 off
	0 - 2500	**EQ72S-2500/5** 074304		1 off
	0 - 3200	**EQ72S-3200/5** 074405		1 off
	0 - 4000	**EQ72S-4000/5** 074562		1 off
	0 - 5000	**EQ72S-5000/5** 074563		1 off
	0 - 6300	**EQ72S-6300/5** 209671		1 off
EQ96 • 96 x 96 mm 	0 - 10	**EQ96S-10** 057565		1 off
	0 - 15	**EQ96S-15** 062311		1 off
	0 - 25	**EQ96S-25** 067057		1 off
	0 - 40	**EQ96S-40** 074176		1 off
	0 - 50	**EQ96S-50/5** 038984		1 off
	0 - 60	**EQ96S-60** 081295		1 off
	0 - 100	**EQ96S-100/5** 059938		1 off
	0 - 200	**EQ96S-200/5** 064684		1 off
	0 - 250	**EQ96S-250/5** 069430		1 off
	0 - 400	**EQ96S-400/5** 076549		6 off
	0 - 600	**EQ96S-600/5** 083668		1 off
	0 - 800	**EQ96S-800/5** 067460		1 off
	0 - 1000	**EQ96S-1000/5** 069833		1 off
	0 - 1250	**EQ96S-1250/5** 072206		1 off
	0 - 1600	**EQ96S-1600/5** 074579		1 off
	0 - 2000	**EQ96S-2000/5** 076952		1 off
	0 - 2500	**EQ96S-2500/5** 079325		1 off
	0 - 3000	**EQ96S-3000/5** 081698		1 off
	0 - 3200	**EQ96S-3200/5** 098920		1 off
	0 - 4000	**EQ96S-4000/5** 084071		1 off
	0 - 5000	**EQ96S-5000/5** 076621		1 off
	0 - 6300	**EQ96S-6300/5** 209672		1 off

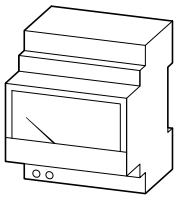
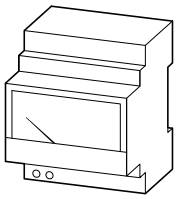
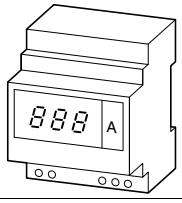
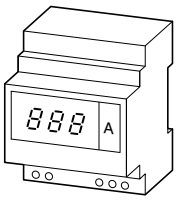
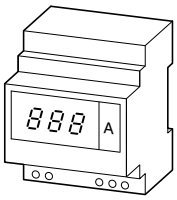
Maximum demand (bimetal) ammeters for C.T. connection, class 3

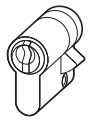
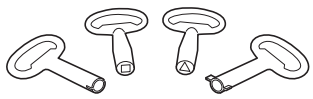
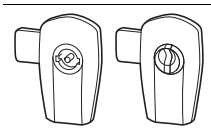
- With maximum-demand indicator
- With instantaneous value indication (moving-iron measuring element)
- Class 3
- Moving-iron ammeter accuracy class 1.5
- Overload 1.2 times
- Power consumption 4.8 VA
- Time setting of bimetal: 8 min

Unshielded

	Measuring range A	Part no. Article no.	Price See price list	Std. pack
BIEQ72 • 72 x 72 mm 	0 - 50	**BIEQ72-50-5** 033030		1 off
	0 - 100	**BIEQ72-100-5** 033031		
	0 - 200	**BIEQ72-200-5** 033032		
	0 - 250	**BIEQ72-250-5** 033033		
	0 - 400	**BIEQ72-400-5** 033034		
	0 - 600	**BIEQ72-600-5** 033035		
	0 - 800	**BIEQ72-800-5** 033036		
	0 - 1000	**BIEQ72-1000-5** 033037		
	0 - 1250	**BIEQ72-1250-5** 033038		
	0 - 1600	**BIEQ72-1600-5** 033039		
	0 - 2000	**BIEQ72-2000-5** 033040		
	0 - 2500	**BIEQ72-2500-5** 033041		
	0 - 3000	**BIEQ72-3000-5** 033042		
	0 - 3200	**BIEQ72-3200-5** 033043		
	0 - 4000	**BIEQ72-4000-5** 033044		
	0 - 5000	**BIEQ72-5000-5** 033045		
	0 - 6300	**BIEQ72-6300-5** 209677		
BIEQ96 • 96 x 96 mm 	0 - 50	**BIEQ96-50-5** 033013		1 off
	0 - 100	**BIEQ96-100-5** 033014		
	0 - 200	**BIEQ96-200-5** 033015		
	0 - 250	**BIEQ96-250-5** 033016		
	0 - 400	**BIEQ96-400-5** 033017		
	0 - 600	**BIEQ96-600-5** 033018		
	0 - 800	**BIEQ96-800-5** 033019		
	0 - 1000	**BIEQ96-1000-5** 033020		
	0 - 1250	**BIEQ96-1250-5** 033021		
	0 - 1600	**BIEQ96-1600-5** 033022		
	0 - 2000	**BIEQ96-2000-5** 033023		
	0 - 2500	**BIEQ96-2500-5** 033024		
	0 - 3000	**BIEQ96-3000-5** 033025		
	0 - 3200	**BIEQ96-3200-5** 033026		

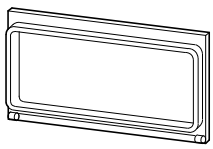
	For use with	Measuring range A	Part no. Article no.	Price See price list	Std. pack
BIEQ96 • 96 x 96 mm 		0 - 4000	**BIEQ96-4000-5** 033027		1 off
		0 - 5000	**BIEQ96-5000-5** 033028		
		0 - 6300	**BIEQ96-6300-5** 209678		
Shielded 4 mT					
BIEQ72 • 72 x 72 mm 		0 - 800	**BIEQ72S-800/5** 074565		1 off
		0 - 1000	**BIEQ72S-1000/5** 074566		
		0 - 1250	**BIEQ72S-1250/5** 074567		
		0 - 1600	**BIEQ72S-1600/5** 074568		
		0 - 2000	**BIEQ72S-2000/5** 074569		
		0 - 2500	**BIEQ72S-2500/5** 074988		
		0 - 3200	**BIEQ72S-3200/5** 076098		
		0 - 4000	**BIEQ72S-4000/5** 076195		
		0 - 5000	**BIEQ72S-5000/5** 076261		
		0 - 6300	**BIEQ72S-6300/5** 209673		
BIEQ96 • 96 x 96 mm 		0 - 100	**BIEQ96S-100/5** 098308		1 off
		0 - 200	**BIEQ96S-200/5** 010508		
		0 - 250	**BIEQ96S-250/5** 012881		
		0 - 400	**BIEQ96S-400/5** 015254		
		0 - 600	**BIEQ96S-600/5** 017627		
		0 - 800	**BIEQ96S-800/5** 020000		
		0 - 1000	**BIEQ96S-1000/5** 022373		
		0 - 1250	**BIEQ96S-1250/5** 024746		
		0 - 1600	**BIEQ96S-1600/5** 027119		
		0 - 2000	**BIEQ96S-2000/5** 029492		
		0 - 2500	**BIEQ96S-2500/5** 031865		
		0 - 3000	**BIEQ96S-3000/5** 034238		
		0 - 3200	**BIEQ96S-3200/5** 098921		
		0 - 4000	**BIEQ96S-4000/5** 036611		
		0 - 5000	**BIEQ96S-5000/5** 076692		
		0 - 6300	**BIEQ96S-6300/5** 209674		
Retaining frames					
• For measuring instruments EQ • For door mounted devices • Color RAL 7035 	EQ72 (72 x 72 mm)		**BT434** 088379		10 off
	EQ96 (96 x 96 mm)		**BT435** 090752		10 off

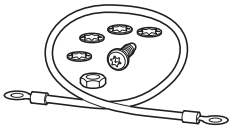
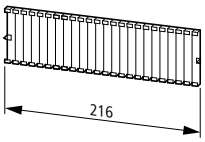
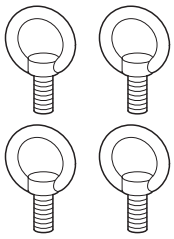
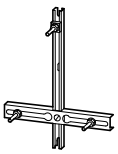
	Features	Measuring range A	Measuring range V	**Part no.** Article no.	**Price** See price list	Std. pack
Meters for DIN-rail, analog						
• For measuring single-phase AC voltages and currents • Moving-iron measuring element						
Voltmeters						
	–	–	0 - 250	**Z-MG/VA-250** 248223		1 off
	–	–	0 - 500	**Z-MG/VA-500** 248224		1 off
Ammeters						
	–	0 - 10	–	**Z-MG/AA-10** 248228		1 off
	–	0 - 40	–	**Z-MG/AA-40** 248229		1 off
Meters for DIN-rail, digital						
• For measuring single-phase AC voltages and currents • Digital display, green LEDs • LED overload indication						
Voltmeters						
	–	–	0 - 600	**Z-MG/VD-600** 248222		1 off
Ammeters						
	–	0 - 20	–	**Z-MG/AD-20** 248225		1 off
	12 adjustable transformer ratios	0 - 999 A, x/5A	–	**Z-MG/AD-999** 248226		1 off
Voltmeters and ammeter						
	–	0 - 8 kA, x/5 A	0 - 600	**Z-MG/VD+AD** 263140		1 off
	With 2 programmable switch contacts	0 - 8 kA, x/5 A	0 - 600	**Z-MG/VD+AD+S** 263141		1 off

	Description	For lock mechanism	Features	Part no. Article no.	Price See price list	Std. pack
Closing and locking systems						
Comfort hinged handle						
• Lever made from high-grade, impact-resistant pressure-cast zinc • Ergonomically designed lever • For XVTL, Profi Plus floor standing distribution boards • Color black, powder-spray painted						
	–	Europrofile single cylinder lock	With pushbutton	**DH-COMF** 133107		1 off
Comfort rotary handle						
• Rotary handle for taking europrofile cylinders • With integrated “locked” indication • As retrofitting or complete kit • Handle made from high-grade, impact-resistant pressure-cast zinc • Suitable for all universal locks LC-... • For standardized door cutouts 22.5 × 20.4 mm • Color dusty grey RAL 7037, powder-coated • Order lock cylinders separately						
	Complete kit	Europrofile single cylinder lock	–	**PHZ-A-COMP** 133105		1 off
	Retrofitting kit	Europrofile single cylinder lock	–	**PHZ-A-ADD-ON** 133106		1 off
Cylinder locks for comfort handles						
• For comfort rotary and hinged handles • Lock cylinder designed to DIN 18252 and DIN EN 1303 • Cylinder locks 10/30 with nickel silver pin tumblers • Lock bit with eight adjustment positions, five pin pairs • Keyed alike or individually keyed mechanism • One key included per cylinder						
	Keyed alike	–	–	**PHZ-E10/30-GS** 138574		1 off
	Individually keyed mechanism	–	–	**PHZ-E10/30-VS** 138575		1 off
Spare keys for cylinder locks						
• For cylinder locks PHZ-E…-GS						
	Keyed alike	Europrofile single cylinder lock	–	**KEY-E10/30-GS** 138576		4 off
Key for lock mechanisms						
	–	–	3 mm double ward key	**NWS-SL/DLB/3** 255317		1 off
	–	–	5 mm double ward key	**NWS-SL/DLB/5** 255318		1 off
Universal locks						
• Escutcheon made from high-grade, impact-resistant pressure-cast zinc • Metal lock mechanisms and bolts • Color dusty grey RAL 7037, powder-coated • For indoor and outdoor use • Metal lock nut, notched • Compatible with standard bolts • For standardized door cutouts 22.5 × 20.4 mm						
	–	–	3 mm double ward key	**LC-DBIT3-CS** 133102		1 off
	–	–	5 mm double ward key	**LC-DBIT5-CS** 133103		
	Keyed alike	–	Cylinder lock with two keys	**LC-ZSBIT-CS** 133104		

	Features	Part no. Article no.	Price See price list	Std. pack
Circuit diagram pockets, insulating material				
• Made of plastic with self-adhesive back • RAL 7035 light grey				
	DIN A4 landscape	**SPT4** 002275		10 off
	DIN A5 landscape	**SPT5** 002276		10 off
	DIN A6 landscape	**SPT6** 002277		10 off
Circuit diagram pocket, metal				
• For fitting to door porfile with M5 bolts				
	DIN A6 landscape	**XVTL-SPT6** 115247		1 off

	Description	Part no. Article no.	Price See price list	Std. pack
Control panel illumination				
Control panel lights				
	–	**XVTL-SRL/S** 116892		1 off
	With switches, socket and magnetic holder	**NWS-SRL/S/ST/MG** 255355		1 off
Door contact switches				
	–	**NWS-TKT** 255420		1 off
	Mounted on retaining bracket	**NWS-TKT/M** 285046		

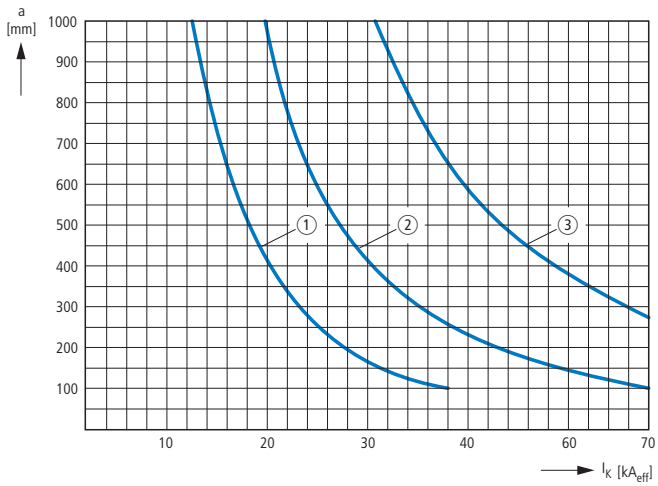
	For use with	Part no. Article no.	Price See price list	Std. pack
Hinged flaps				
• For positioning on cover, change as required • Degree of protection IP55 • Opening angle up to 180° • Hinge on one side cannot be changed • Transparent				
	145 x 80 mm	**K-A** 043372		1 off
	185 x 90 mm	**KG-A** 055244		1 off

	Features	Description	**Part no.** Article no.	**Price** See price list	Std. pack
Door grouding set					
• Cross-section 6 mm² • Includes installation accessories					
	–	–	**BFZ-DES** 101665		1 off
Touch-up paint					
• Brush bottle • For repairing paint damage					
	RAL 7035	–	**BPZ-CPS-7035** 286771		1 off
	RAL 9010	–	**PAINT-RAL9010** 288947		
	RAL 9016	–	**PAINT-RAL9016** 288948		
Spray	RAL 7035	–	**BPZ-SPRAY-7035** 116678		
Blanking strips					
For blanking off unused slots					
	For 12 space units	–	**VST12** 002322		10 off
Eye bolts					
One set consists of 4 lifting eyelets					
	–	M10	**XAT** 283855		1 off
Meter rail					
	To DIN 43853, Including 3 fixing screws with nuts to DIN 46300. For fixing on mounting plates, tamper seal, → Page 20/22 → Page 20/28	–	**ZK1** 001892		5 off

Engineering

Conductor supports for insulated copper strip, with section strip and latch fastener

BZ249, BZ251, BZ252



① BZ249
② BZ251
③ BZ252
I_K = short-circuit current
a = busbar support spacing

Technical data

	KT-M...	V-M...	MFD...	MFV...	KT-M25F	STB-M...F
Material	Polyethylene and thermoplastic elastomer	Polyamide, halogen-free	Thermoplastic elastomer	Polyamide	PVC and polyethylene	Glass-fiber reinforced polyamide with flame retardant, self-extinguishing
Color	Gray, RAL 7035	Gray, RAL 7035	Black, similar to RAL 9005	Red	Grey, RAL 7032 + white	Gray, RAL 7035
Degree of protection	Up to IP66	IP68 up to 5 bar (30 min)	IP66	–	Up to IP50	IP56, mounting only on enclosure underside
Chemical resistance	Resistant to: alcohol, animal and plant fats, weak alkalis, light acids, water	Resistant to: acetone, petrol, paraffin, diesel oil, greases, oils, paint solvents	–	–	Resistant to: diluted non-oxidizing acids, alkalis and salt, alcohol, aromatic and halogenated hydrocarbons, surfactants.	Resistant to: acetone, petrol/gasoline, paraffin, diesel oil, greases, oils, paint solvents
Danger of stress fracture	Relatively high	Low	–	–	Relatively high	Low
Temperature resistance	-40 °C - 80 °C, up to about 100 °C for short periods	-20 °C - 100 °C, up to about 120 °C for short periods	-25 °C - 100 °C, up to about 120 °C for short periods	-25 °C - 80 °C, up to about 120 °C for short periods	0 °C - 60 °C, up to about 80 °C for short periods	-40 °C - 100 °C, up to about 150 °C for short periods
Flame resistance	–	Glow wire test 750 °C according to EN 60695-2-11	–	–	–	Glow wire test 750 °C according to EN 60695-2-11
Flammability to UL94	–	V2	–	–	–	–

Analog devices			Z-MG/VA-250	Z-MG/VA-500	Z-MG/AA-10	Z-MG/AA-40
Electrical						
Rated voltage	U_n	V AC	250	500	–	–
Rated current	I_n	A	–	–	10	40
Input signal			Symmetrical, sinusoidal, harmonic factor 1.11			
Rated frequency		Hz	50	50	50	50
Operating frequency		Hz	45 - 65	45 - 65	45 - 65	45 - 65
Measuring accuracy class			1.5	1.5	1.5	1.5
Measuring range			0 - U_n	0 - U_n	0 - I_n	0 - I_n
Intrinsic consumption		VA	< 3	< 3	< 1.1	< 1.1
Measuring range overshoot						
Continuous			1.2 x U_n	1.2 x U_n	1.2 x I_n	1.2 x I_n
Momentary			2 x U_n/5 s	2 x U_n/5 s	10 x I_n/5 s	10 x I_n/5 s
Rated insulation voltage		kV	0.6	0.6	0.6	0.6
Test voltage 50 Hz/1 min.		kV	2	2	2	2
Mechanical						
Standard front dimension		mm	45	45	45	45
Size of device base		mm	89	89	89	89
Built-in width		mm	70	70	70	70
Weight		kg	0.13	0.13	0.13	0.13
Mounting			Quick attachment for top-hat rail IEC/EN 60715			
Degree of protection when fitted			IP50	IP50	IP50	IP50
Terminals top and bottom			Lift terminals	Lift terminals	Lift terminals	Lift terminals
Terminal capacity		mm^2	4	4	4	8
Tightening torque of terminal screws		Nm	1	1	1	1.8
Admissible relative humidity		%	65	65	65	65
Temperature range		°C	-25 - +50	-25 - +50	-25 - +50	-25 - +50
Flammability classification according to UL94			V1	V1	V1	V1

Z-MG

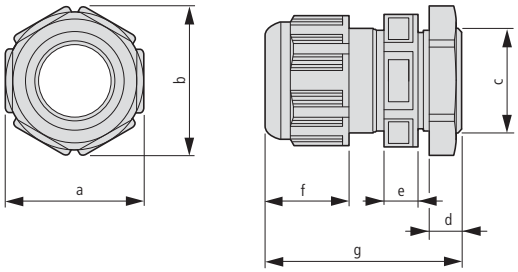
Digital devices				Z-MG/VD-600	Z-MG/AD-20	Z-MG/AD-999	Z-MG/VD+AD	Z-MG/VD+AD+S
Electrical								
Rated voltage		U_n	V AC	600	–	–	500	500
Rated current		I_n	A	–	20	5	5	5
Auxilliary voltage				230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz	230 V, 50 Hz
Intrinsic consumption, auxiliary voltage input			VA	< 4.5	< 4.5	< 4.5	≤ 2.5	≤ 2.5
Input signal				Symmetrical, sinusoidal, harmonic factor 1.11				
Rated frequency			Hz	50	50	50	50	50
Operating frequency			Hz	45 - 65	45 - 65	45 - 65	47 - 63	47 - 63
Measuring accuracy				± 1 % + 1 digit	± 1 % + 1 digit	± 1 % + 1 digit	± 1 % + 1 digit	± 1 % + 1 digit
Resolution				1 digit	1 digit	1 digit	1 V/0.01 - 10 A	1 V/0.01 - 10 A
Number of measurements per second				3	3	3	0.67	0.67
Measuring range				0 - U_n	0 - I_n	0 - I_n	0 - 500 V/01 - 6 A	0 - 500 V/01 - 6 A
Intrinsic consumption								
Voltage input			VA	–	–	–	≤ 0.1	≤ 0.1
Current input			VA	–	< 1.1	< 1.1	≤ 0.6	≤ 0.6
Input impedance				> 1 MΩ	–	–	–	–
Measuring range overshoot								
Continuous				1.1 x U_n	2 x I_n	2 x I_n	1.2 x U_n/1.2 x I_n	1.2 x U_n/1.2 x I_n
Momentary				–	2.5 x I_n/5 s	10 x I_n/5 s	2 x I_n/5 s	2 x I_n/5 s
Insulation voltage			kV	0.66	0.66	0.66	0.66	0.66
Test voltage 50 Hz/1 min.			kV	2	2	2	3	3
Alarm contacts				–	–	–	–	2, programmable
Type				–	–	–	–	Min. and/or max.
Setpoint				–	–	–	–	0 - 120 %
Hysteresis				–	–	–	–	0 - setpoint value
Delay				–	–	–	–	0 - 60 s (1 s steps)
Relay position				–	–	–	–	Active/passive
Contact rating				–	–	–	–	5 A/250 V AC
Mechanical								
Standard front dimension			mm	45	45	45	45	45
Size of device base			mm	89.5	89.5	89.5	89.5	89.5
Built-in width			mm	71.2	71.2	71.2	71.2	71.2
Maximum display				999	999	999	999	999
Digit height			mm	14	14	14	14	14
Weight			kg	0.3	0.3	0.3	0.25	0.27
Mounting				Quick attachment for top-hat rail IEC/EN 60715				
Degree of protection when fitted				IP50	IP50	IP50	IP50	IP50
Terminals top and bottom				Lift terminals	Lift terminals	Lift terminals	Lift terminals	Lift terminals
Terminal capacity			mm^2	4	4	4	4	4
Tightening torque of terminal screws			Nm	0.6	0.6	0.6	0.6	0.6
Admissible relative humidity			%	95	95	95	20 - 80	20 - 80
Temperature range			°C	-10 - +55	-10 - +55	-10 - +55	-5 - +55	-5 - +55
Flammability classification according to UL94				V1	V1	V1	V1	V1

	Z-MG/VD+AD Z-MG/VD+AD+S												
Measuring range, resolution													
Range	–	–	–	–	–	–	–	–	5 A	–	–	–	–
Indication	–	–	–	–	–	–	–	–	5.00	–	–	–	–
Resolution	10 mA												
Range	10 A	–	15 A	–	20 A	25 A	30 A	40 A	50 A	60 A	70 A	75 A	80 A
Indication	10.0	–	15.0	–	20.0	25.0	30.0	40.0	50.0	60.0	70.0	75.0	80.0
Resolution	100 mA												
Range	100 A	120 A	150 A	160 A	200 A	250 A	300 A	400 A	500 A	600 A	700 A	750 A	800 A
Indication	100	120	150	160	200	250	300	400	500	600	700	750	800
Resolution	1 A												
Range	1 kA	1.2 kA	1.5 kA	1.6 kA	2 kA	2.5 kA	3 kA	4 kA	5 kA	6 kA	7 kA	7.5 kA	8 kA
Indication	1.00	1.20	1.50	1.60	2.00	2.50	3.00	4.00	5.00	6.00	7.00	7.50	8.00
Resolution	10 A												

Dimensions

Cable glands, metric

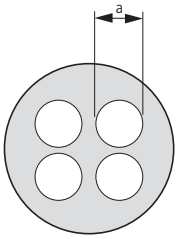
V-M…



Part no.	a	b	c	d	e	f	g
V-M12	16	18	M12x1.5	9	5.3	14	29 … 34
V-M16	20	22	M16x1.5	9	5.5	16.5	31 … 37
V-M20	24	27	M20x1.5	10	6.1	20	36 … 45
V-M25	29	32	M25x1.5	10	8.1	20	38 … 47
V-M32	36	40	M32x1.5	12	10.1	20	42 … 51
V-M40	46	51	M40x1.5	12	11.1	29	52 … 65
V-M50	55	61	M50x1.5	14	12.1	33	59 … 72
V-M63	68	75	M63x1.5	15	12.1	36.5	64 … 78

Multiple gaskets

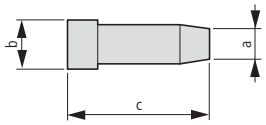
MFD…



Part no.	a
MFD25	5.0 - 6.0
MFD32	3.5 - 7.0

Sealing plugs

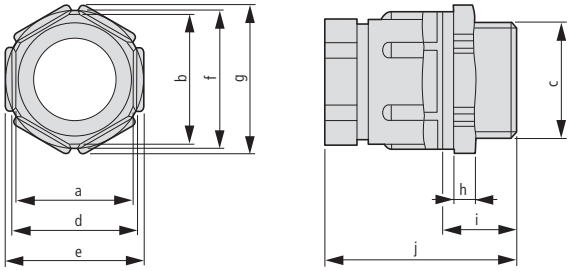
MFV…



Part no.	a	b	c
MFV25-6	5.5	6	20
MFV32-7	7	8	20

Cable screw glands

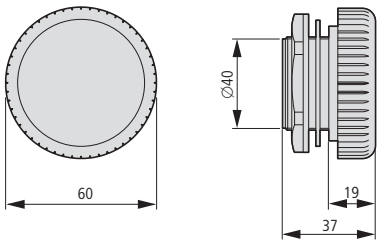
STB-M…F



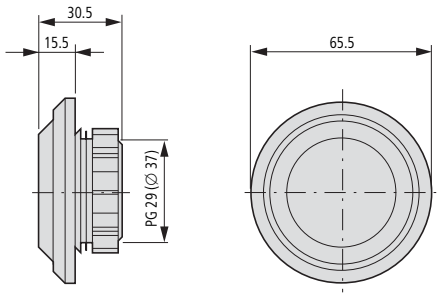
Part no.	c	h	l	j	g	f	b	a	d	e
STB-M20F	20	5	15	40	29	27	23	21	24	27
STB-M25F	25	6	15	45	35.5	35.5	33.4	30	33	32

Pressure compensating plugs

DAV-M40

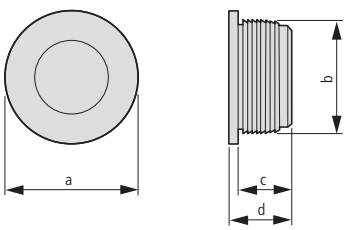


DA412



Diaphragm grommets, metric

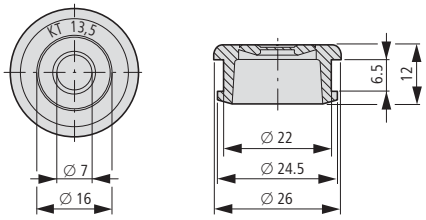
KT-M…



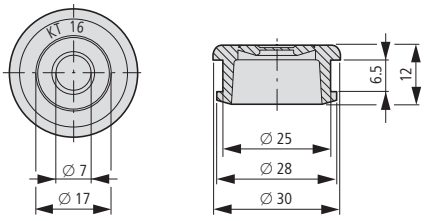
Part no.	a	b	c	d
KT-M16	21.2	16	9.5	11
KT-M20	25.2	20	9.5	11
KT-M25	30.2	25	9.5	11
KT-M32	37.2	32	9.5	11

PG cable grommets

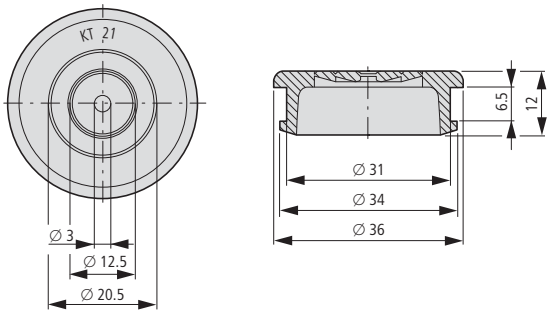
KT13.5



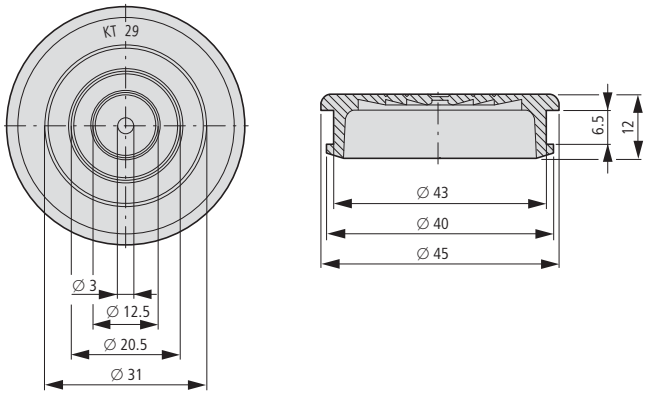
KT16



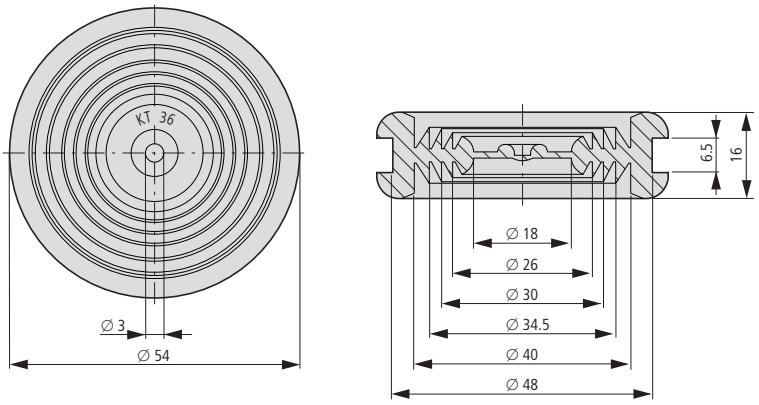
KT21



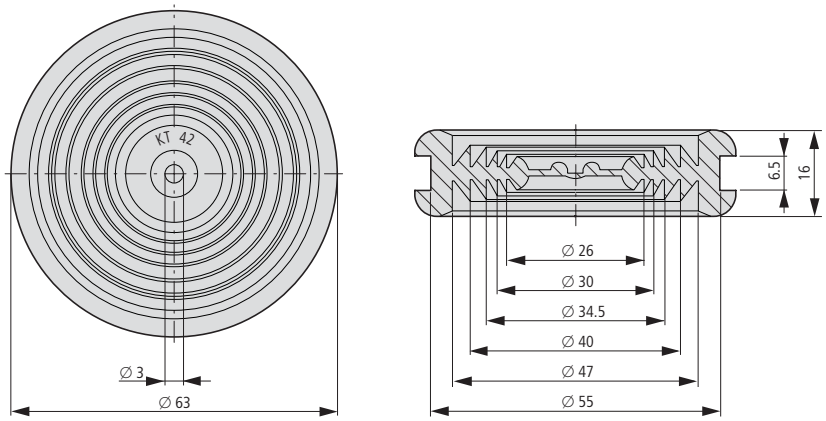
KT29



KT36

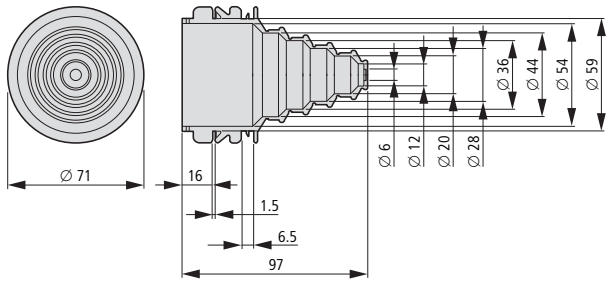


KT42

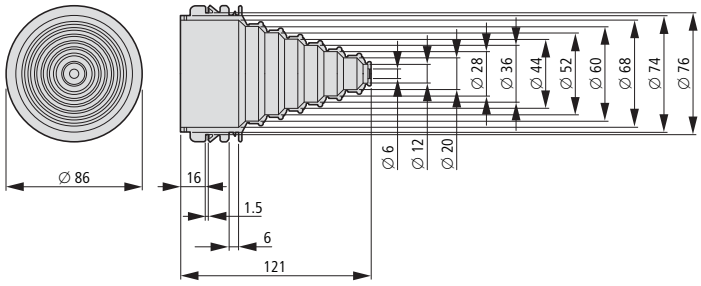


Stepped cable grommets

KT3

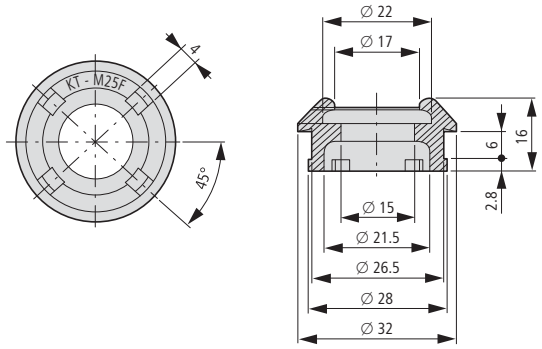


KT4

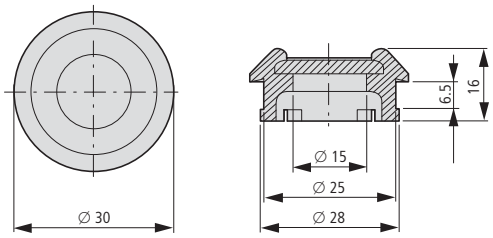


Pressure compensating grommets

KT-M25F

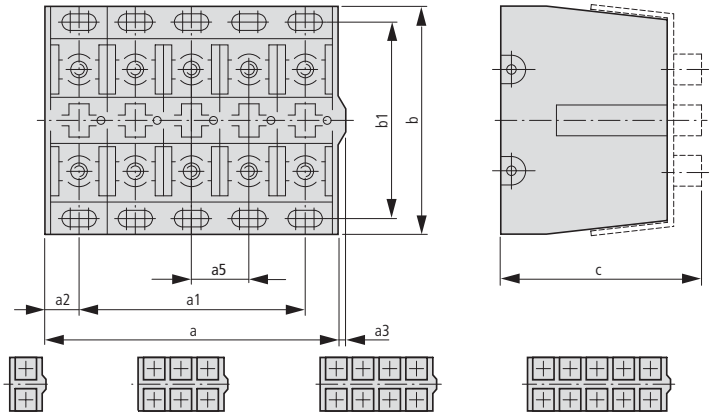


KT16F



Terminals 160 - 1000 A

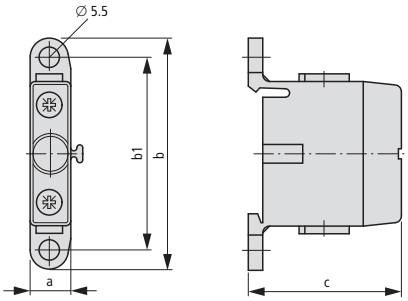
K...



Part no.	a	a1	a2	a3	b	b1	c	a5	l
K95/1	37	-	18.5	3	115	100	88	-	13
K95/3	99	75	12					31	
K95/4	130	100	15						
K95/5	161	125	18						
K150/1	37	-	18.5				105	-	13
K150/3	99	75	12					31	
K150/4	130	100	15						
K150/5	161	125	18						
K240/1	52	-	26				120	-	12
K240/3	144	100	22					46	
K240/4	190	150	20						
K240/5	236	175	30.5						
K2X240/1	68	-	34	4	140	125	127	-	15
K2X240/3	192	125	33.5					62	
K2X240/4	254	200	27						
K2X240/5	316	250	33						
K3X185/1	78	-	39				166	-	15
K3X185/3	222	150	36					72	
K3X185/4	294	225	34.5						
K3X185/5	366	300	33						
K3X240/1	88	-	44	4	165	150	196	-	20
K3X240/3	252	175	39					82	
K3X240/4	334	250	42						
K3X240/5	416	325	45.5						
K4X185/1	88	-	44					-	20
K4X185/3	252	175	39					82	
K4X185/4	334	250	42						
K4X185/5	416	325	45.5						

Insulated individual terminals 32 - 100 A

K…/1

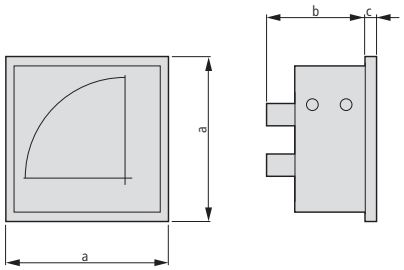


Part no.	a	b	b1	c
K10/1	11	60	50	30
K25/1	14	60	50	33
K50/1	18	60	50	36

Ammeters, voltmeters

EQ

BIEQ

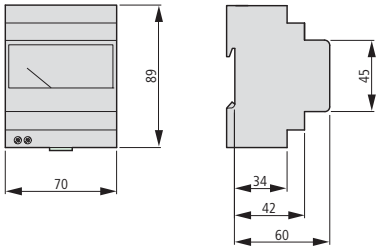


		a	b	c
EQ	45	45	47	5
EQ	48 DIN	48	53	5
EQ, BIEQ	72	72	64	5
EQ, BIEQ	96	96	64	5

Meters for DIN rails, analog

Z-MG/VA...

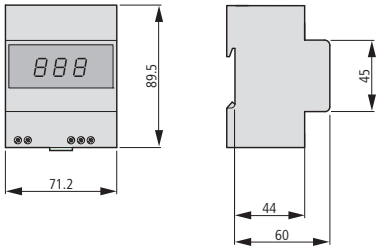
Z-MG/AA...



Meters for DIN rails, digital

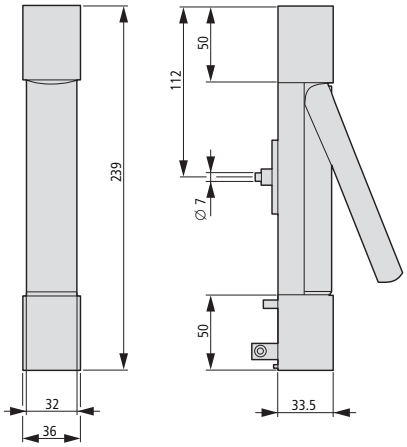
Z-MG/VD...

Z-MG/AD...

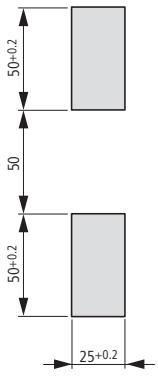


Comfort hinged handle

DH-COMF

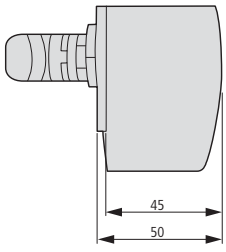


Mounting hole

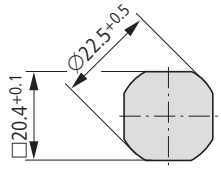


Comfort rotary handles

PHZ-A-...



Mounting hole



Notes

