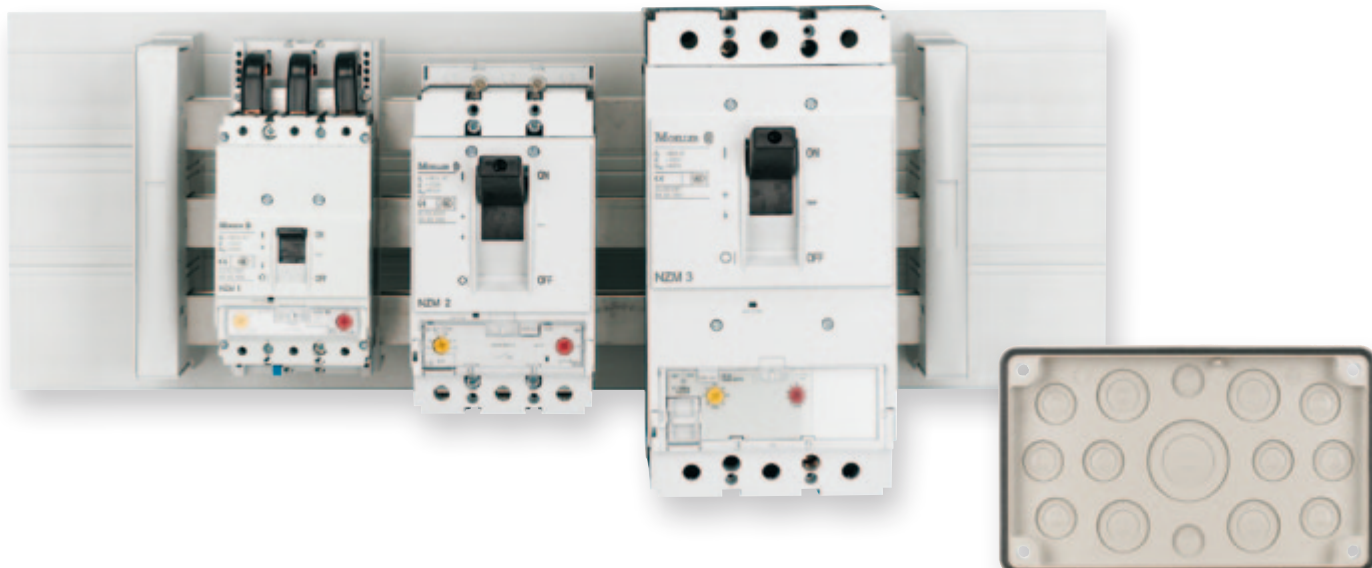




SASY busbars system

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

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SASY busbars system, accessories for control panel building

SASY busbar system

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Ordering

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Engineering

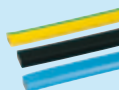
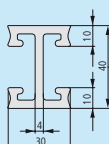
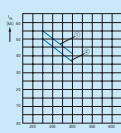
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Technical data

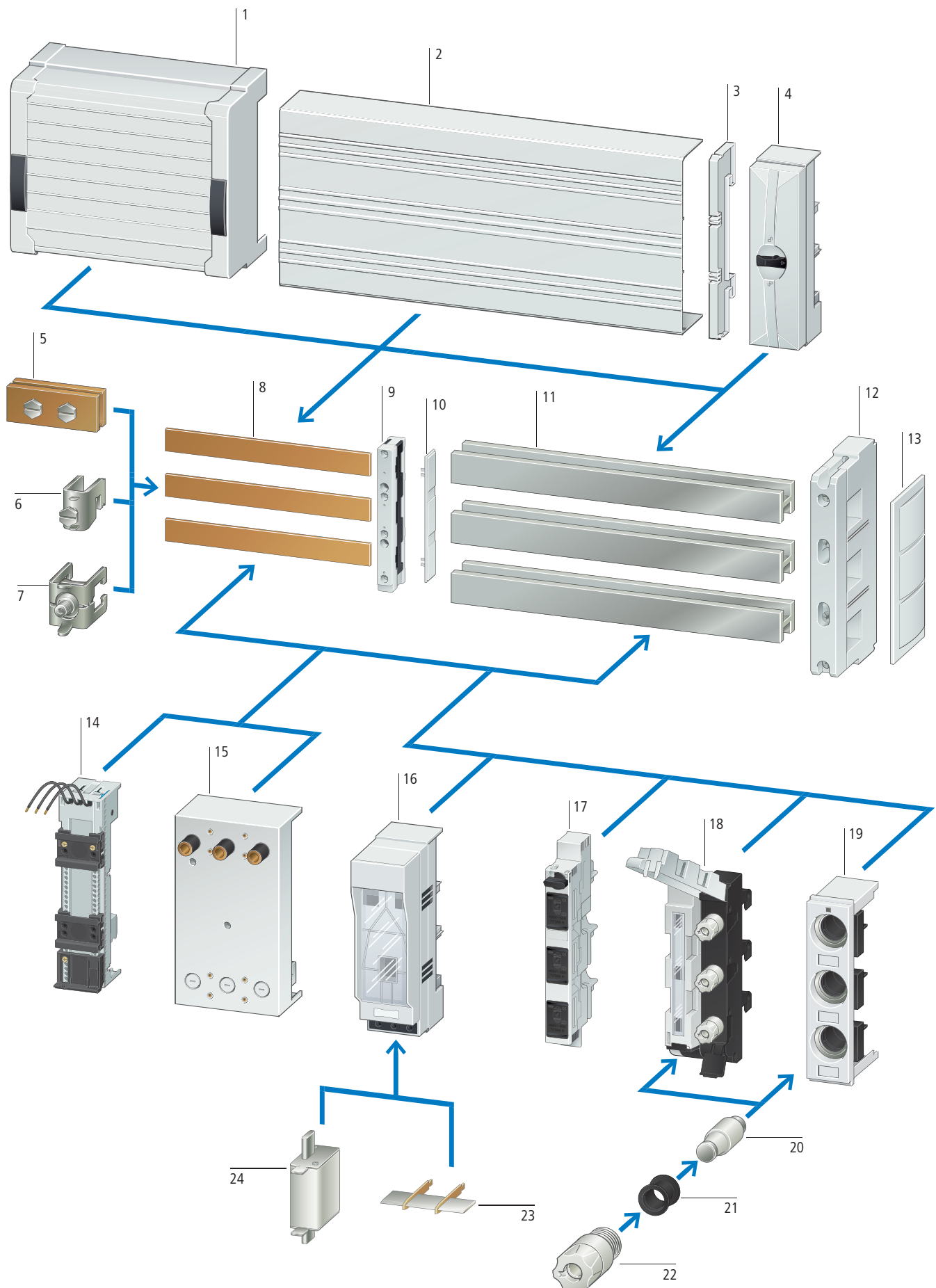
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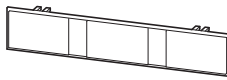
System overview



System covers	1	Double T profile busbar supports	9	LV h.b.c. fuse switch-disconnectors	16
Partitioning of busbars or terminals for increased personal safety.		Cross-sections 500 mm ² (1250 A) and 720 mm ² (1600 A)		Switching devices NH000, NH00, NH1, NH2 and NH3 up to 630 A.	
Different versions, for individual customization or ready to install in defined dimensions.		Very high short-circuit rating for greater system safety.		→ Page 16/16	
For 3- and 4 pole systems.		Fewer supports required.			
→ Page 16/8		Spacing between busbar centers 60 mm.		D fuse switch-disconnectors without flashing function	17
		→ Page 16/6		Switch-disconnectors for D02 screw fuses.	
Cover for empty sections, modular	2	Terminal shroud	10	Clear contact position indication.	
Spare section cover can be cut to length.		For covering the copper busbar ends for increased contact protection.		Screw caps available as accessories.	
Clipped on simply and quickly to the support provided.		→ Page 16/6		→ Page 16/21	
For 3- and 4 pole systems		Flat busbars	8	D fuse switch-disconnectors with flashing function	17
→ Page 16/7		12 x 5 up to 30 x 10 mm, Cu.		Flashing function indicates blown fuse link.	
Cover for empty sections support	3	→ Page 16/24		Switches the load on all poles and without touching by hand.	
Simple push-fit, for all copper busbars.		Busbar supports	12	With fuse plug, therefore no new screw caps required.	
For 3- and 4 pole systems		For all commonly available flat busbars.		Low heat dissipation.	
→ Page 16/7		Can be fitted to all busbar sizes using concertina system.		With contact position indicator.	
Terminal plates	4	For 3- and 4 pole systems		→ Page 16/21	
Terminal modules protected against direct contact, lockable.		Versions for IEC and UL/CSA.			
For commonly available connection cables and busbars.		Spacing between busbar centers 60 mm.		D busbar mounting fuse devices	19
For 3- and 4 pole systems		→ Page 16/4		D02, DII and DIII with front and bottom plate supplied.	
→ Page 16/7		Terminal shroud	13	→ Page 16/20	
Busbar end-to-end connectors	5	For covering the ends of flat copper busbars		Fuse links	20
For interconnecting busbar systems.		→ Page 16/4		D01, D02, DII, DIII and C10.	
For flat and profiled busbars.		Busbar adapters for PKZ and PKE	14	→ Page 19/47	
→ Page 16/13		Mounting rails and connection cables prepared for motor starter combinations with PKZ, PKE or DILM.		Fuse adapters	21
Universal conductor terminals	6	With combi-base suitable for 5 and 10 mm thick flat and profiled busbars.		D01, D02 cartridge ring adaptes, DII and DIII gage rings.	
With integrated retaining spring.		Versions with connection cables for spring-loaded terminals or without electrical contact.		→ Page 19/47	
Captive fixing screw.		→ Page 7/22		Screw caps	22
Suitable for all copper, flat and profiled busbars.		Two-row double adapter for specific applications, e.g. with fuses.		D01, D02, DII and DIII.	
→ Page 16/12		→ Page 16/21		→ Page 19/44	
Expansion terminals	7	Complete devices prefitted and wired for DOL starters.		Disconnecting blades	23
For fitting to busbars without drilling		→ Page 8/26		Can be used instead of LV h.b.c. fuse links.	
Cables can be inserted from the top simply and quickly.		Complete devices prefitted and wired for reversing starters.		Full contact blades.	
→ Page 16/10		→ Page 8/28		LV h.b.c. fuse links	24
Profiled busbars	11	Busbar adapters for NZM	15	Compact construction size up to 100 A; NH00 fuses can also used in NH000 devices.	
Cross-sections 500, 720 and 1140 mm ² .		Innovative terminal design for rear connetion.		Fuse links NH00, NH1, NH2 and NH3 up to 630 A.	
Tin-plated surface for low contact resistance		For all commonly available flat busbars and for double T profile.		High breaking capacity 120 kA.	
Tin-plated copper busbars cut time needed to prepare contact points.		For 3- and 4 pole systems.		→ Page 19/53	
→ Page 16/11		Conductors completely embedded for maximum safety.			
		Easy mounting and terminal connection			
		→ Page 16/14			



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  

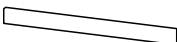
Notes

1) Current load → Page 16/39

2) Current load → Page 16/39

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

				Poles	Rated operational current I_e A	For use with	Part no. Article no.	Price See price list	Std. pack			
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  
								—	—	12 x 10 15 x 10 20 x 10 25 x 10 30 x 10	BBC-FL10 107174	10 off  
				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	
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	
				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	

Notes¹⁾ Calculation of material surcharge → Chapter 23**Information relevant for export to North America**

Product Standards

UL File No.

UL CCN

CSA File No.

CSA Class No.

NA Certification

Conditions of Acceptability

Specially designed for NA

Suitable for

Max. Voltage Rating

UL508A; CSA-C22.2 No. 14;

IEC 60439-1; CE marking

E300273

NMTR, NMTR7

236217

3211-37

UL Listed, CSA certified

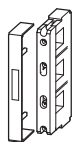
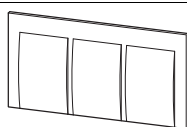
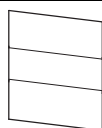
Refer to approbation report

✓

Feeder circuits

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 mm ² , 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 mm ² , 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  

Notes¹⁾ Current load → Page 16/39²⁾ Current load → Page 16/39

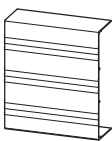
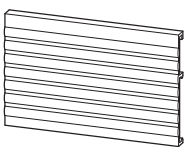
Calculation of material surcharge → Chapter 23

Information relevant for export to North America³⁾

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

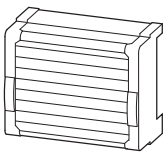
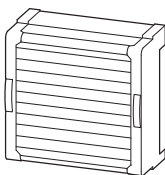
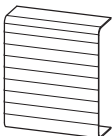
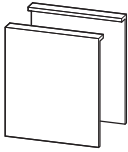
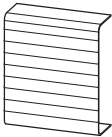
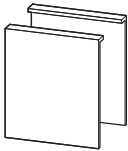
Width	Poles	Rated operating current	Terminal capacity	For use with	Cu factor ¹⁾	Part no. Article no.	Price See price list	Std. pack
mm		I _e A	mm					
○ Round conductor, solid ⊙ Round conductor, flexible, with correctly crimped ferrule ⊖ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▨ Copper strip ■ Copper bar								
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 mm ² 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 mm ² 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 mm ² 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



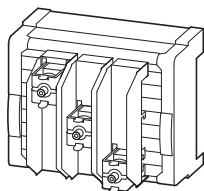
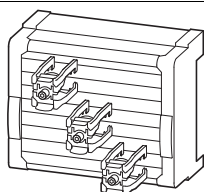
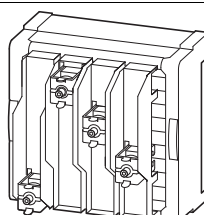
Description			Part no. Article no.	Price See price list	Std. pack
System cover, complete					
	For 3 pole systems	228 mm long.	BBC-CS1 107209		1 off  
		270 mm long.	BBC-CS3 138377		1 off
	For 4 pole systems	228 mm long.	BBC-CS4 138387		1 off
System cover, modular					
• Silicone-free, chlorine-free • 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

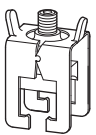
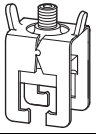
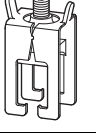
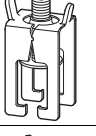
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V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

HPL16009EN

BBA-TP...

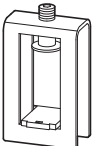
	Terminal area W × H	Width	Poles	Rated operating current	Terminal capacity	For use with	Cu factor	Part no. Article no.	Price See price list	Std. pack
	mm	mm		I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▨ Copper strip ■ Copper bar 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 mm ² MCM 300 - MCM 600. ⊗ ⊙ ▽	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile		BBA-TP3/300¹⁾ 107185		1 off
	32 x 25	180 - 240		800	Up to ▨ 10 x 32 x 1 ■ 30 x 25			BBA-TP3/ CU-BAND¹⁾ 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-TP3/1000²⁾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 mm ² MCM 300 - MCM 600. ⊗ ⊙ ▽	20 x 5/10 25 x 5/10 30 x 5/10 Double T profile		BBA-TP4/300³⁾ 138385		1 off
	32 x 25	180 - 228		800	Up to ▨ 10 x 32 x 1 ■ 30 x 25			BBA-TP4/ Copper strip³⁾ 138386		1 off

Notes¹⁾ 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 mm ² AWG2/0 - MCM 300. ⊗ Directly clamped ⊙ ▽	12 x 5/10 20 x 5/10		AKS150 138374	6 off
		—	38	500	95 - 185 mm ² 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 mm ² 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 x 1) ■ 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		AKS1200 138375	3 off
		105 x 28	122	1600	Up to ■ (2 x) 100 x 10	Triple T profile		AKS2000 138376	3 off

Notes¹⁾ Calculation of material surcharge → Chapter 23**Information relevant for export to North America**

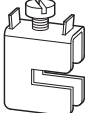
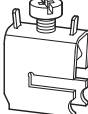
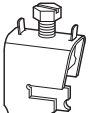
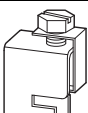
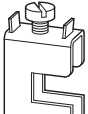
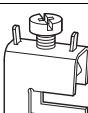
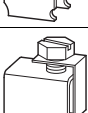
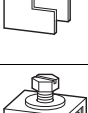
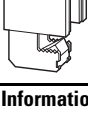
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	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 mm ² , terminal area 51 x 5 - 28 ■ ≡	Double T profile		AKP750 138364		3 off
		72	1600	800 mm ² , terminal area 41 x 20 - 42 ■ ≡			AKP800 107198		3 off  
		94	1600	900 mm ² , terminal area 64 x 5 - 28 ■ ≡			AKP900 138365		3 off
		94	1600	1000 mm ² , terminal area 51 x 20 - 42 ■ ≡			AKP1000 107199		3 off  
		94	2000	1200 mm ² , terminal area 64 x 20-42 ■ ≡			AKP1200 138366		3 off
		112	2500	1600 mm ² , terminal area 81 x 20 - 42 ■ ≡			AKP1600 138367		3 off
		132	3000	2000 mm ² , terminal area 101 x 20 - 42 ■ ≡			AKP2000 138368		3 off
		132	3200	3600 mm ² , terminal area 101 x 23 - 45 ■ ≡			AKP3600 138369		3 off

Notes¹⁾ 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



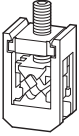
Terminal area W × H	Width	Rated operating current	Terminal capacity	For use with	Part no. Article no.	Price See price list	Std. pack
mm	mm	I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor, stranded ≡ Copper strip ■ Copper bar				
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 mm ² 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 mm ² 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 mm ² 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 mm ² 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 mm ² 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 mm ² 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 mm ² 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 mm ² 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	AKU-M8/10 138362	20 off
	M10 x 10 bolts	38	630	Cable lugs M10	Double T profile	AKU-M10/10 138361	6 off

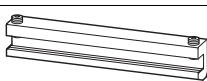
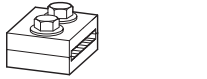
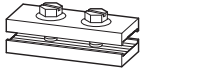
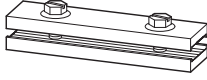
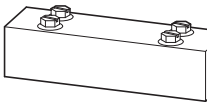
Information relevant for export to North America

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

HPL16013EN

BBT-CU...

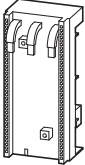
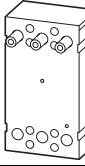
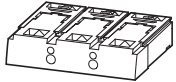
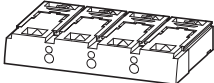
Terminal area W × H	Width	Rated operating current	Terminal capacity	For use with	Part no. Article no.	Price See price list	Std. pack
mm	mm	I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▨ Copper strip ■ Copper bar				
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 mm ²	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

Notes¹⁾ 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



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

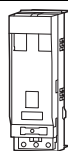
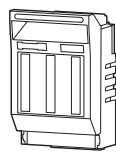
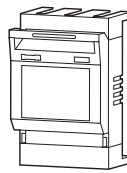
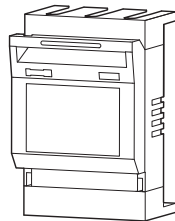
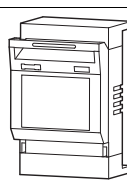
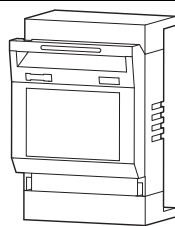
9)
Calculation of material surcharge → Chapter 23

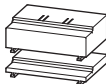
	Rated operational voltage U_e V AC	Conductor cross-section	Adapter width mm	For use with	Support rail Number	Part no. Article no.	Price See price list	Std. pack
Busbar adapters for PKZ and PKE								
Complete range → Chapter 7 For surface mounting to flat copper busbars with 60 mm between busbar centers, 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 mm ²)	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 mm ²)	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 mm ²)	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 mm ²)	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 mm	Rated operational current I _e A	Max. fuse link			For use with	Part no. Article no.	Price See price list	Std. pack
				500 V	690 V	Size				
				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 mm ² 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 mm ² 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
										
										

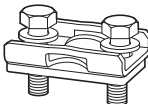
	Size	Rated operating voltage U_e V	For use with	Part no. Article no.	Price See price list	Std. pack	Notes
Handguard for switch-disconnectors							
Provides additional protection for operator during actuation of fuse switch-disconnector							
	00	—	GST00-160-...	BS-SET-GST00 107955		1 off	One set contains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

Notes

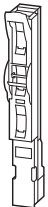
¹⁾ Without handguard.
Order optional handguard BS-SET-GST00 → Page 16/16
LV h.b.c. fuse links → Page 19/53

	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	–

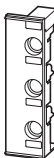
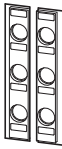


	Terminal range	For use with	Part no. Article no.	Price See price list	Std. pack	Notes
Sets of prism terminals						
	1 x (70 - 150) mm² Cu/Al	GSU1, GST...1	PSK1 038734		1 off	One set contains 3 prism terminals.
	1 x (120 - 240) mm² Cu/Al	GSU2, GST...2	PSK2 043480			
	1 x (120 - 300) mm² Cu/Al	GSU3, GST...3	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 I_e A	Max. fuse link 400 V A	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 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-00/160-60¹⁾ 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-SI¹⁾ 106216		1 off
Terminal shroud/size adapter for GST...									
For NH-SLS-00/160-60 Size 00									
							Z-NH-SLS-KA 106223		2 off

Notes²⁾ 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-S0/63/3-R-27¹⁾ 114315	10 off	
	Cartridge ring adapter			E18, D 02	36		Z-D02/R/3-36¹⁾ 100663	60 off	
	Cartridge ring adapter			E18, D 02	54		Z-D02/R/3-54¹⁾ 100664	40 off	
	Gage ring	25	500	E 27, D II	45		DII-S0/25/3-R²⁾ 107965	10 off	
	Gage screw	25	500	E 27, D II	45		DII-S0/25/3-R-PS²⁾ 110394	10 off	
	Gage ring	63	690	E 33, D III	54		DIII-S0/63/3-R³⁾ 107966	10 off	
	Gage screw	63	690	E 33, D III	54		DIII-S0/63/3-R-PS³⁾ 110395	10 off	
Side cover									
Can be fitted on right or left Can be fitted to D....-S0/.../3-R(-PS)									
	–	–	–	–	–	DII-S0/.../3-R(-PS)	SBS-RS60 060541	10 off	
Kit for fitting over busbar supports Can be fitted to D02-S0/63/3-R-27									
	–	–	–	–	36	D02-S0/63/3-R-27	Z-D02-S-AB-SET 100662	10 off	

Notes

¹⁾ A complete and functional fuse element consists of the basic unit

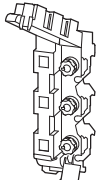
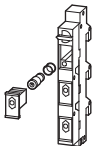
- Fuse link → Page 19/47
- Fuse adapter → Page 19/47
- Screw cap → Page 19/47

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 opera- tional 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-RS¹⁾ 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

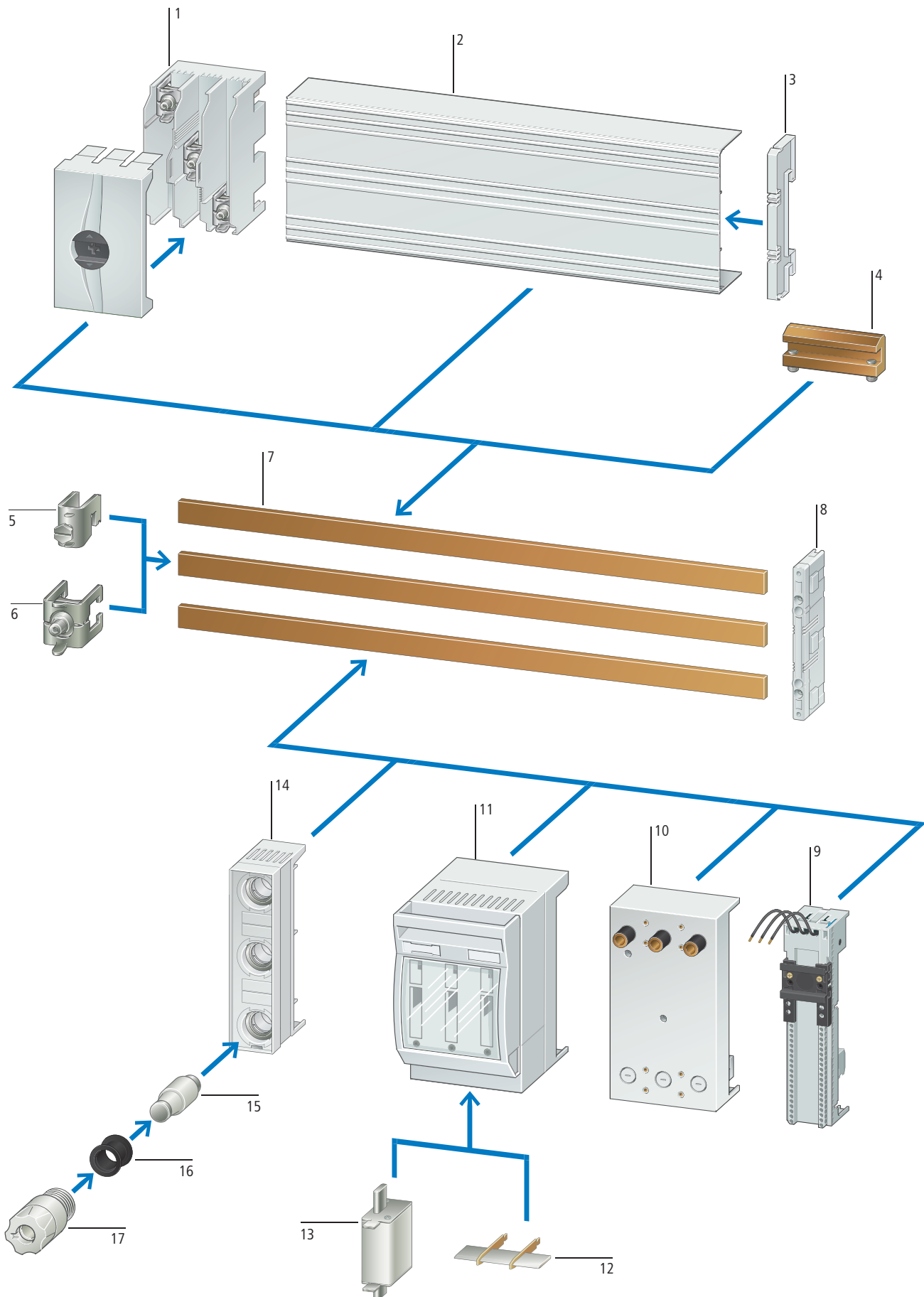
Notes

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



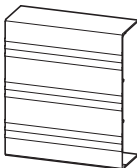
System overview



Terminal plates	1	Expansion terminals	6	Disconnecting blades	12
Simple connection by contacting the conductor.		For fitting to busbars without drilling		Can be used instead of LV h.b.c. fuse links.	
Full contact protection.		Cables can be inserted from the top simply and quickly.		Full contact blades.	
→ Page 16/25		→ Page 16/25			
Cover for empty sections, modular	2	Flat busbars	7	LV h.b.c. fuse links	13
Spare section cover can be cut to length.		12 x 5 and 12 x 10 mm, Cu.		Compact construction size up to 100 A, NH00 fuses can also be used in NH000 devices.	
Clipped on simply and quickly to the support provided.		→ Page 16/24		→ Page 19/53	
Compact height.		Busbar supports	8	D busbar mounting fuse devices	14
For 3 pole systems.		Suitable for use with flat busbars 12 x 5/10.		D02, compact height.	
→ Page 16/24		Compact height.		Box terminal for connecting cables up to 25 mm ² .	
Empty sections cover support	3	For 3 pole systems.		Integrated protection against direct contact	
Simple push-fit, for busbars 12 x 5/10.		Spacing between busbar centers 60 mm.		→ Page 16/20	
For 3 pole systems.		→ Page 16/24		Fuse links	15
→ Page 16/24		Busbar adapters for PKZ and PKE	9	D.02	
Busbar end-to-end connectors	4	Mounting rails and connection cables prepared for motor starter combinations with PKZ, PKE or DILM.		→ Page 19/47	
For interconnecting busbar systems.		Compact height.		Gage pieces	16
For flat busbars.		→ Page 7/23		Gage rings D02.	
→ Page 16/26		Busbar adapters for NZM	10	→ Page 19/47	
Universal conductor Connection terminals	5	Safe termination.		Screw cap	17
With integrated retaining spring.		For 3 pole systems		D.02	
Captive fixing screw.		Conductors completely embedded for maximum safety.		→ Page 19/47	
Suitable for all copper, flat and profiled busbars.		Easy mounting and terminal connection		LV h.b.c. fuse switch-disconnectors	11
→ Page 16/26		→ Page 16/27		Switching device NH000 up to 100 A.	
		LV h.b.c. fuse switch-disconnectors	11	Simple changing of termination direction bottom/top.	
		Compact height.		→ Page 16/27	



Ordering

		Poles	Rated opera- tional 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

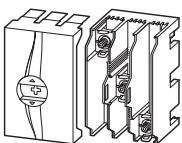
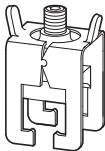
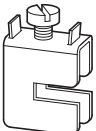
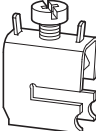
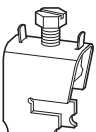
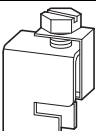
Notes

¹⁾ Short-circuit strength → Page 16/40²⁾ Calculation of material surcharge → Chapter 23

Information relevant for export to North America



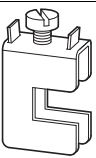
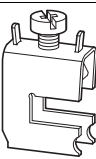
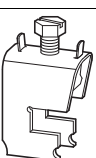
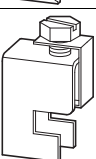
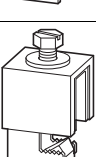
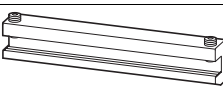
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V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

	Terminal area W x H	Width	Poles	Rated operating current	Terminal capacity	For use with	Part no. Article no.	Price See price list	Std. pack
	mm	mm		I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ○ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ≡ Copper strip ■ Copper bar				
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 mm ² 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 mm ² 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 mm ² 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 mm ² 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 mm ² 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 mm ² 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

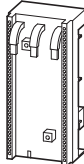
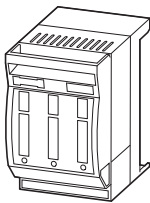
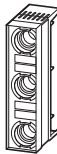
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating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



	Terminal area W x H	Width	Poles	Rated opera- tional current	Terminal capacity	For use with	Part no. Article no.	Price See price list	Std. pack
	mm	mm		I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ∇ Sectoral conductor, solid ∇ Sectoral conductor,, stranded ≡ Copper strip ■ Copper bar				
Universal conductor connection terminals									
	7.5 x 7.5	11.5	—	180	1.5 - 16 mm ² 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 mm ² 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 mm ² 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 mm ² 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	AKU-M8/10 138362		20 off
	M10 x 10 bolts	38	—	630	Cable lugs M10	Double T profile	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 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

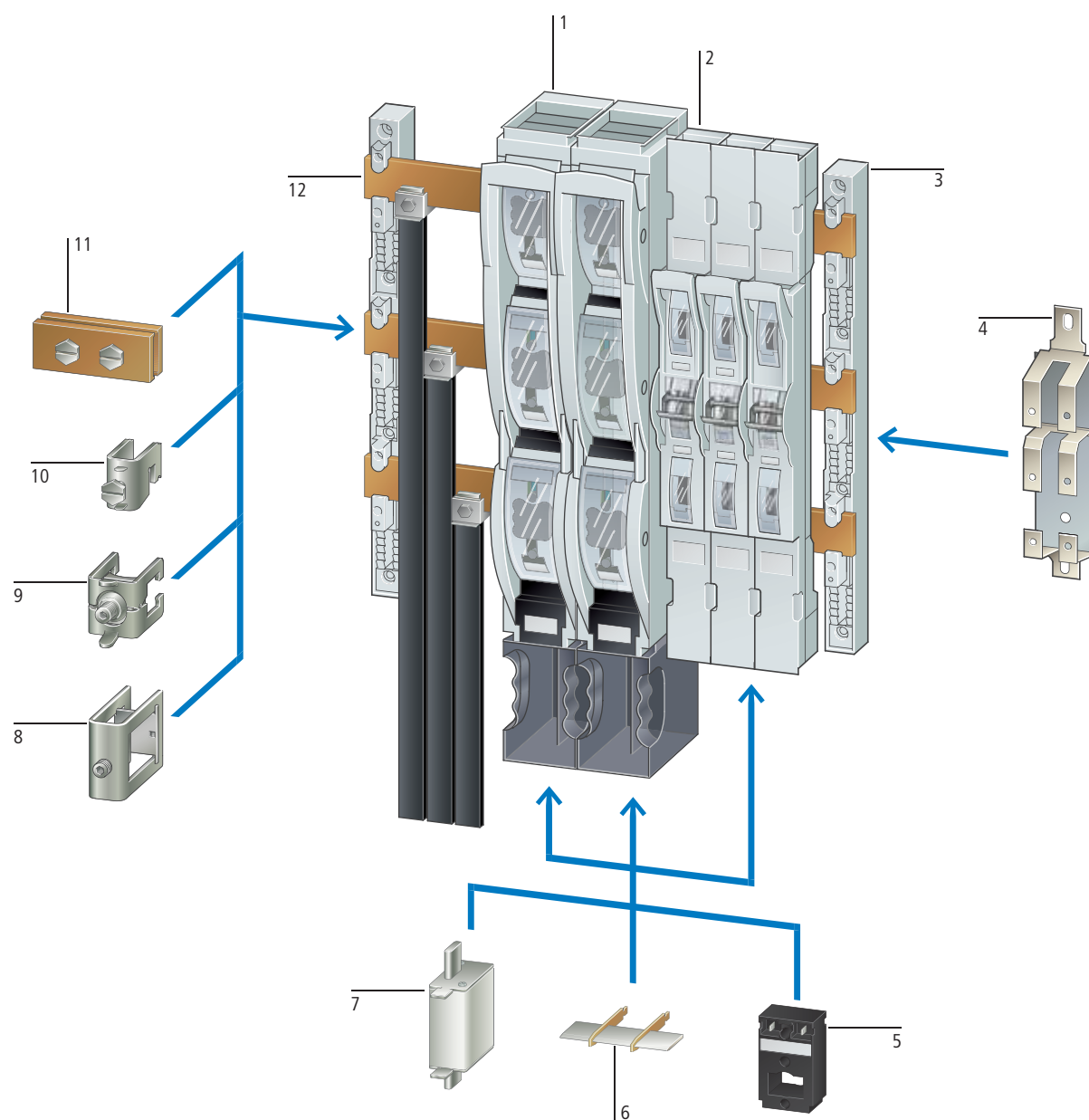
- ¹⁾ For switches with standard box terminal connection.
Connection to the system at top using supplied connection cable.
In conjunction with IP2X protection against contact with a finger
Enhanced contact protection on the switch output end possible.
Latch fitting to busbar using combination fixing base
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 → chapter 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



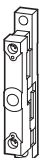
System overview



LV h.b.c. fuse switches 250 up to 630 A	1	Disconnecting blades	6	End-to-end busbar connectors	11
Spacing between busbar centers 185 mm.		Can be used instead of LV h.b.c. fuse links.		For interconnecting busbar systems.	
Prepared for current transformer.		Full contact blades.		For flat and profiled busbars.	
Top or bottom outgoer possible.				→ Page 16/37	
With/without electronic fuse monitoring.		LV h.b.c. fuse links	7	Flat busbars, profiled busbars	12
→ Page 16/32		High breaking capacity 120 kA.		Profiled busbars with cross-sections 500, 720 and 1140 mm ² , and flat copper busbars up to 30 x 10 mm.	
		Fuse links NH00, NH1, NH2 and NH3 up to 630 A.		Tin-plated copper busbars cut time needed to prepare contact points.	
LV h.b.c. fuse switches 160 A	2	→ Page 19/53		Flat busbars	
Spacing between busbar centers 100 mm.		Profile terminals	8	→ Page 16/24	
Adaptable for 185 mm system.		Safe connection of flat copper busbars or multi-layer copper strip to profiled busbars.			
With/without electronic fuse monitoring.		8 different construction sizes from 750 to 3600 mm ² terminal area.		Profiled busbars	
Top or bottom outgoer possible.		→ Page 16/35		→ Page 16/31	
→ Page 16/32		Expansion terminals	9		
Busbar supports	3	For fitting to busbars without drilling.			
Spacing between busbar centers 185 mm.		Cables can be inserted from the top simply and quickly.			
Hole-less mounting of 30, 40, 50, to 120 x 10 mm flat busbars, double T and triple T profiled busbars.		→ Page 16/34			
→ Page 16/31		Universal conductor terminals	10		
Adapters	4	With integrated retaining spring.			
Adapts NH00 fuse combination units to the 185 mm system.		Captive fixing screw.			
Single or double adapters.		Suitable for all copper, flat and profiled busbars.			
Prepared for current transformer.		→ Page 16/36			
→ 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					



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

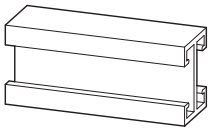
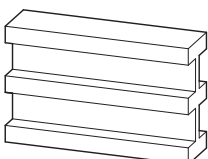
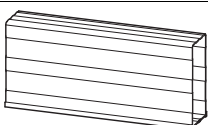
Refer to approbation report

Suitable for

Feeder circuits

Max. Voltage Rating

600 V AC

		Poles	Rated opera- tional 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/T¹⁾ 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/T¹⁾ 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  

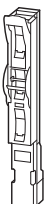
Notes

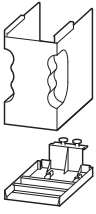
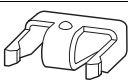
¹⁾ Current load → Page 16/39
Calculation of material surcharge → Chapter 23

Information relevant for export to North America

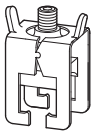
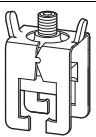
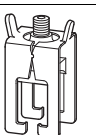
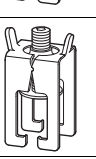
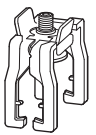
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E300273
UL CCN	NMTR, NMTR7
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Listed, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating	600 V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



	Rated operational current I_e A	Max. fuse link 400 V A	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		

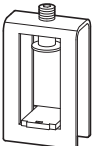
		For use with/ transformer ratio K_N A	Part no. Article no.	Price See price list	Std. pack
Adapters					
	Single adapter 100/185	30 x 10 40 x 10	Z-NH-SLS-00-SAD 106220		1 off
	Single adapter 100/185 for mounting without holes	50 x 10 60 x 10 80 x 10 100 x 10 120 x 10	Z-NH-SLS-00-SAD-KR 106222		1 off
	Double adapter 100/185	Double T profile Triple T profile	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 mm ² for stranded sectoral conductor, up to 300 mm ² 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	150/5	Z-WAS-150/5A-1 106232		3 off
	• Fit to Z-NH-SLS-00-SAD... with fixing clip Z-NH-SLS-00BC.	200/5	Z-WAS-200/5A-1 106233		
	NH-SLS size 1, 2, 3	250/5	Z-WAS-250/5A-1 106234		
	• Swing into the standard rail, no additional space requirement.	300/5	Z-WAS-300/5A-1 106235		
	• Mounting of claw-type terminals still possible	400/5	Z-WAS-400/5A-1 106236		
	• Fix current transformer cables with fixing clips Z-NH-SLS--1+2+3-BC.	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	For use with	Copper factor ¹⁾	Part no. Article no.	Price See price list	Std. pack
	mm	mm	I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ∇ Sectoral conductor, solid ∇ Sectoral conductor,, stranded ▨ Copper strip ■ Copper bar					
Expansion terminals									
For fitting to busbars without drilling									
	Contacting of cable with busbar via cable bedding.	—	38	480	35 - 150 mm ² AWG2/0 - MCM 300. ⊗ Directly clamped ⊙ ∇	12 x 5/10 20 x 5/10	0.00	AKS150 138374	6 off
		—	38	500	95 - 185 mm ² AWG3/0 - MCM 350. ⊗ Directly clamped ⊙ ∇	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 mm ² MCM300 - MCM 600. ⊗ Directly clamped ⊙ ∇		0.00	AKS300 107196	3 off  
	Contacting of cable with busbar via contact block.	32 x 25	41	800	▨ 3 x 20 x 1 to 2 x (10 x 32 x1) ■ 32 x 25		0.00	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		0.20	AKS1000 107208	1 off  
		68 x 28	122	1600	Up to ■ (2 x) 60 x 10	30 x 10 Double T profile	0.00	AKS1200 138375	3 off
		105 x 28	122	1600	Up to ■ (2 x) 100 x 10	Triple T profile	0.00	AKS2000 138376	3 off

Notes¹⁾ Calculation of material surcharge → Chapter 23**Information relevant for export to North America**

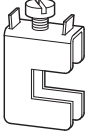
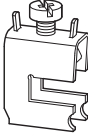
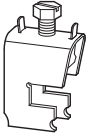
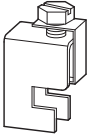
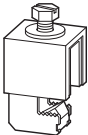
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
UL CCN	NMTR2, NMTR8
CSA File No.	236217
CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage Rating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

	Terminal area W × H	Width	Rated operating current	Terminal capacity ○ Round conductor, solid ⊙ Round conductor, flexible, with correctly crimped ferule ⊖ 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 mm ² , terminal area 51 x 5 - 28 ■ ≡	Double T profile	AKP750 138364		3 off
		–	72	1600	800 mm ² , terminal area 41 x 20 - 42 ■ ≡		AKP800 107198		3 off  
		–	94	1600	900 mm ² , terminal area 64 x 5 - 28 ■ ≡		AKP900 138365		3 off
		–	94	1600	1000 mm ² , terminal area 51 x 20 - 42 ■ ≡		AKP1000 107199		3 off  
		–	94	2000	1200 mm ² , terminal area 64 x 20-42 ■ ≡		AKP1200 138366		3 off
		–	112	2500	1600 mm ² , terminal area 81 x 20 - 42 ■ ≡		AKP1600 138367		3 off
		–	132	3000	2000 mm ² , terminal area 101 x 20 - 42 ■ ≡		AKP2000 138368		3 off
		–	132	3200	3600 mm ² , terminal area 101 x 23 - 45 ■ ≡		AKP3600 138369		3 off

Notes¹⁾ Calculation of material surcharge → Chapter 23**Information relevant for export to North America**

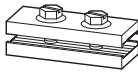
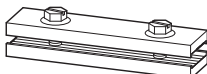
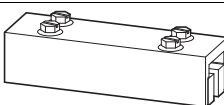
Product Standards	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking
UL File No.	E307559
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CSA Class No.	3211-37
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Refer to approbation report
Suitable for	Feeder circuits
Max. Voltage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



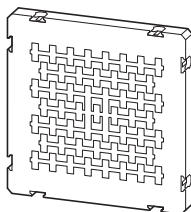
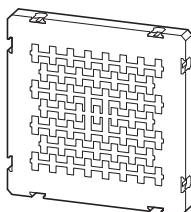
Terminal area W × H	Width	Rated operating current	Terminal capacity	For use with	Part no. Article no.	Price See price list	Std. pack
mm	mm	I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor, stranded ≡ Copper strip ■ Copper bar				
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 mm ² 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 mm ² 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 mm ² 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 mm ² 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;
UL File No.	CE marking
UL CCN	E307559
CSA File No.	NMTR2, NMTR8
CSA Class No.	236217
NA Certification	3211-37
Conditions of Acceptability	UL Recognized, CSA certified
Suitable for	Refer to approbation report
Max. Voltage Rating	Feeder circuits
	600 V AC

	Terminal area W × H	Width	Rated operating current	Terminal capacity	For use with	Part no. Article no.	Price See price list	Std. pack
	mm	mm	I _e A	○ Round conductor, solid ⊗ Round conductor, flexible, with correctly crimped ferrule ⊙ Round conductor, stranded ▽ Sectoral conductor, solid ▽ Sectoral conductor,, stranded ▨ Copper strip ■ Copper bar				
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

Notes¹⁾ 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.

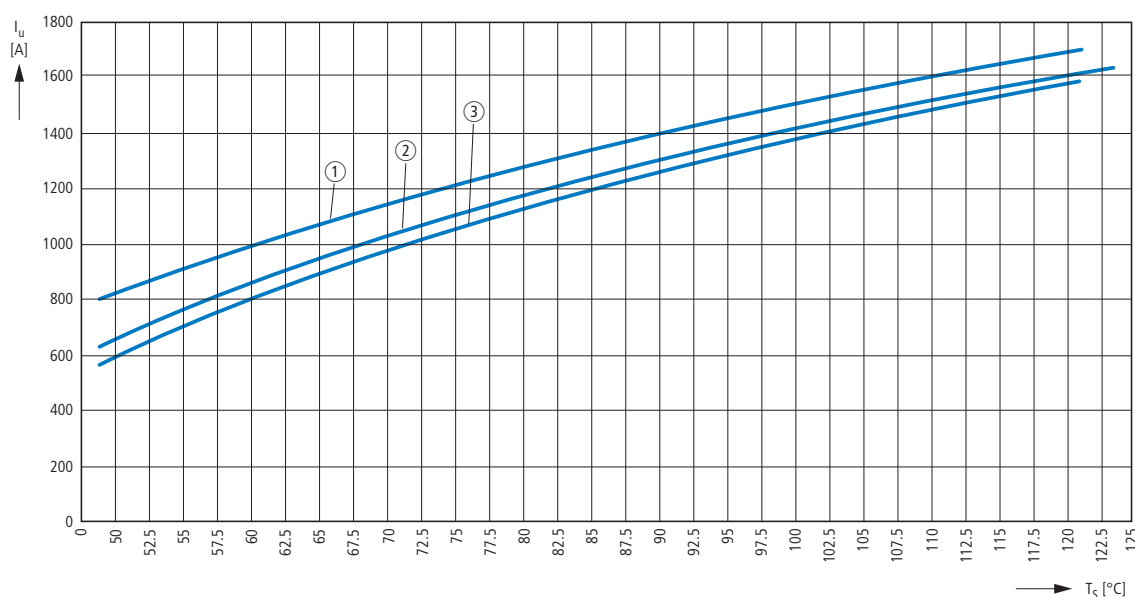
The temperature of the busbars is normally favorably influenced by the fitting of busbar supports and the air circulation within the system.

A correction factor k_2 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 k_2 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:

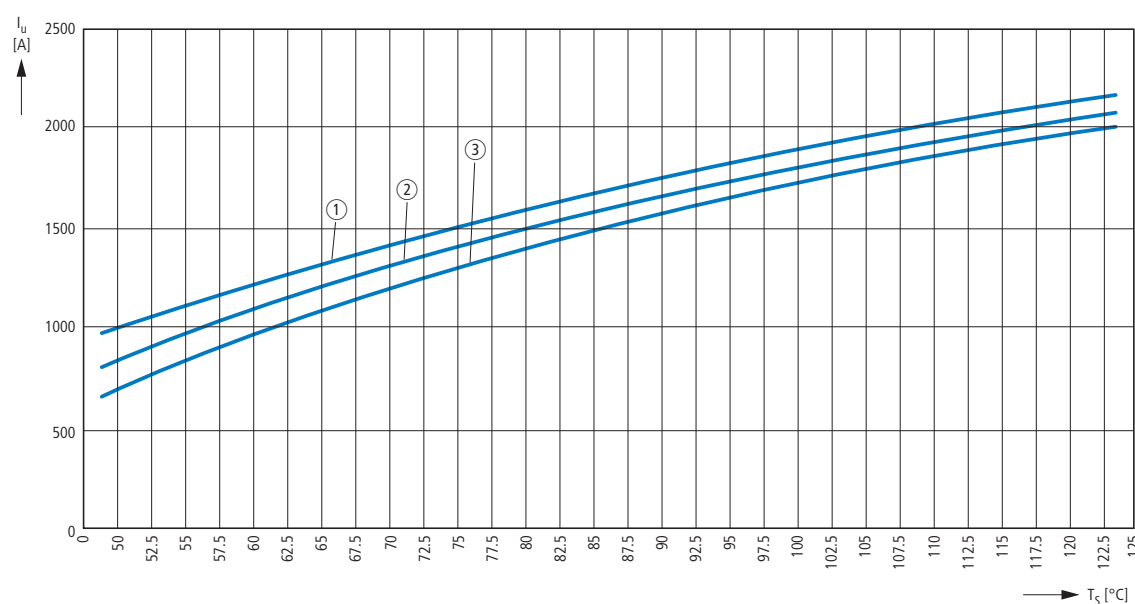
① 30 °C

② 35 °C

③ 40 °C

 I_u = rated uninterrupted current T_s = busbar temperature

CU-BAR-720/T



Ambient temperature:

① 30 °C

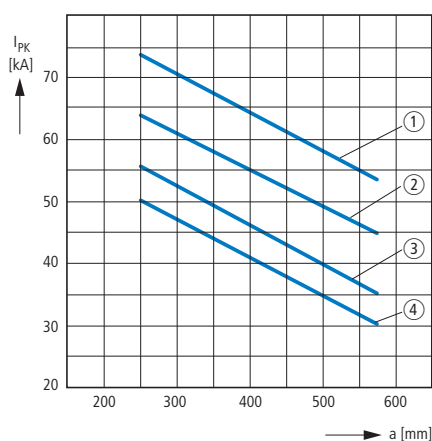
② 35 °C

③ 40 °C

 I_u = rated uninterrupted current T_s = busbar temperature

Short-circuit rating to IEC/EN 60439-1

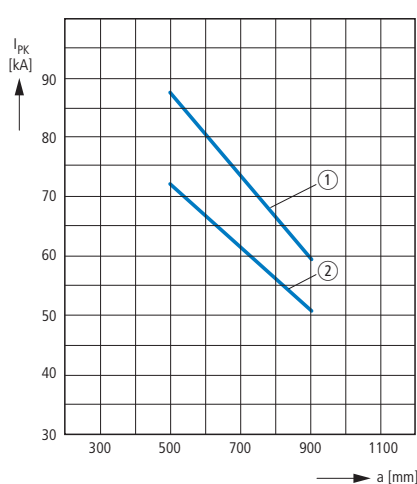
BBS-3/FL



- ① 30 x 10 mm
- ② 30 x 5 mm
- ③ 12 x 10 mm
- ④ 12 x 5 mm

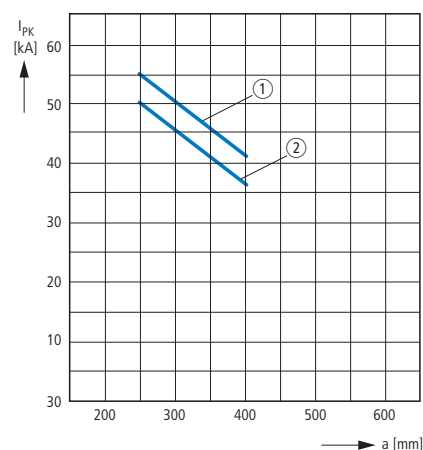
I_{pk} = Rated peak withstand current
 a = Busbar support spacing

BBS-3/PR



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

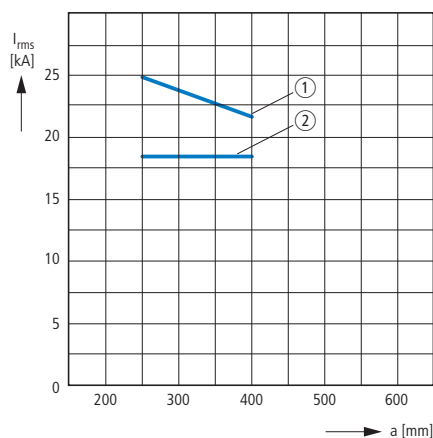
BBS-3/FL-C



- 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

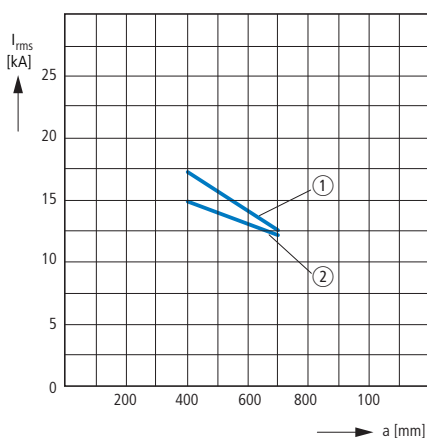
BBS-3/FL-NA



- ① 30 x 5 mm
- ② 12 x 5 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

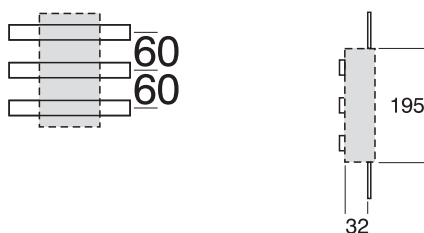
Reduction of rated operating current

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 I_e ?
 At 50 °C the derating coefficient is 0.88, which means that $I_e = 630 \text{ A} \times 0.88 = 554.40 \text{ A}$.
 The NZM...3-...630... can therefore be used at an ambient temperature of 50 °C with a maximum $I_e = 554.40 \text{ A}$.

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-S0/63/3-R-27 Z-D02/R/3-...	DII-S0/25/3-R...	DIII-S0/63/3-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
	25 x 5/10	x	-	x	x	x	x
	30 x 5/10	x	x	x	x	x	x
	Double T	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 busbar	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 busbar	I_u	A	687	687	—	—	630
with 500 mm ²	I_u	A	—	—	1003	—	950
with 720 mm ²	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 busbar	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 busbar	I_{pk}	kA	73	73	—	—	100
with 500 mm ²	I_{pk}	kA	—	—	72	—	100
with 720 mm ²	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 characteristics, → 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.		
$T_u = 35\text{ °C}$ and $T_s = 65\text{ °C}$					
with 12 × 5 mm busbar	I_u	A	200	—	—
with 20 × 5 mm busbar	I_u	A	320	—	—
with 30 × 5 mm busbar	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 busbar	I_u	A	630	—	—
with 500 mm ²	I_u	A	—	950	—
with 720 mm ²	I_u	A	—	1200	—
1140 mm ²	I_u	A	—	—	2500

LTS-100..., GST...

				LTS-100/C00/3-R	GST...00-160-40-60-A0U	GST1-A0(AU)	GST2-A0(AU)	GST3-A0(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
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			<i>f</i> Hz	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Rated insulation voltage			<i>U_i</i> V	1000	1000	1000	1000	1000
Rated operating mode				Continuous operation; with continuous operation of several adjoined devices the rated diversity factor to VDE 0660 part 500 / EN 60439-1, table 1 must be observed.				
Rated impulse withstand voltage			<i>U_{imp}</i> kV	8	8	12	12	12
Rated conditional short-circuit current AC			<i>I_q</i> kA _{rms}	50	50	100	100	100
Utilization category AC-23B								
Rated operational voltage AC			<i>U_e</i> V AC	500/400	500/400	500	500	500
Rated operational current			<i>I_e</i> A	125/160	125/160	250	400	630
Utilization category AC-22B								
Rated operational voltage AC			<i>U_e</i> V AC	690	690	690	690	690
Rated operational current			<i>I_e</i> A	160	160	250	400	630
Utilization category AC-21B								
Rated operational voltage AC			<i>U_e</i> V AC	690	690	690	690	690
Rated operational current			<i>I_e</i> A	160	160	250	400	630
Heat dissipation at <i>I_{th}</i> 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			<i>P_V</i> 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, GST...-DSI

				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		1.5×10^5
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		80×10^3 (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	$\times 10^6$	> 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-S0/63/3-R-27 Z-D02/R/3...	DII-S0/25/3-R(-PS)	DIII-S0/63/3-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			—	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			—	—



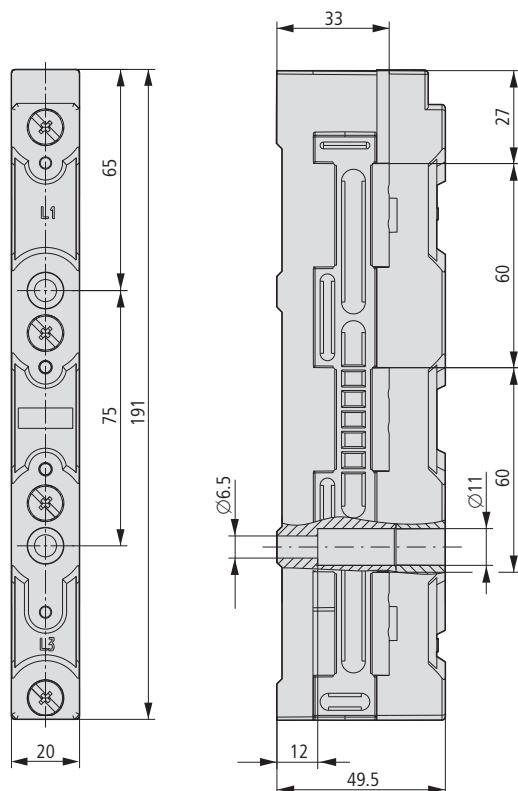
					FCFSDNH000BBC60-3
General					
Standards					IEC/EN 60947-3
Climatic proofing					Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature				°C	
Installation altitude				m	Max. 2000
Mounting position					Vertical or horizontal
Overvoltage category/pollution degree					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

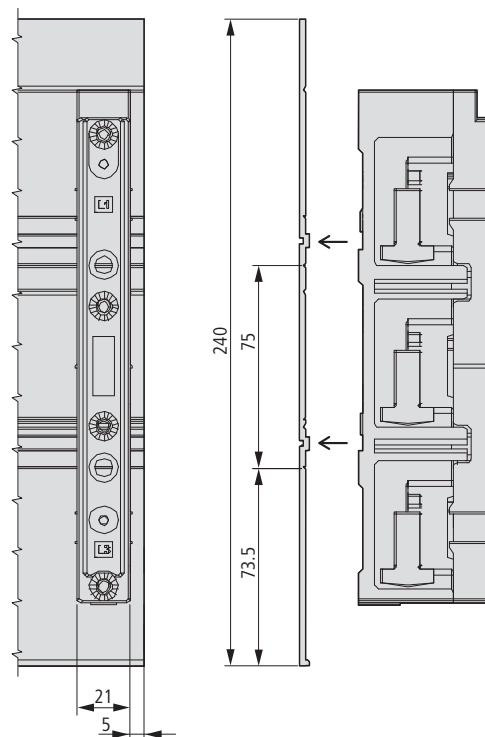
Dimensions

Busbar supports

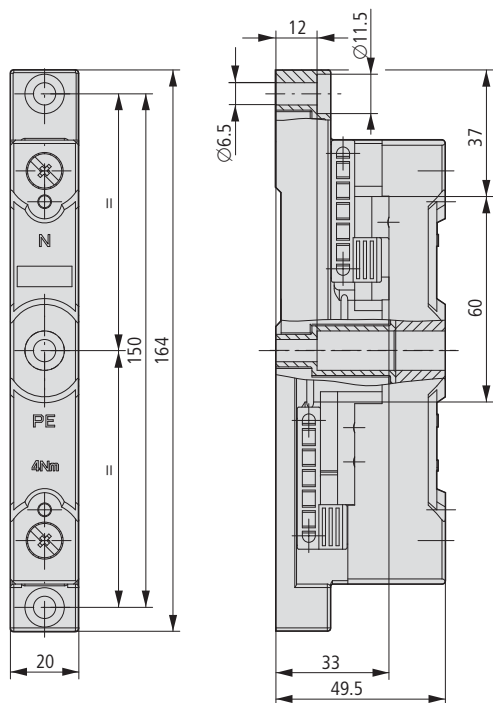
BBS-3/FL



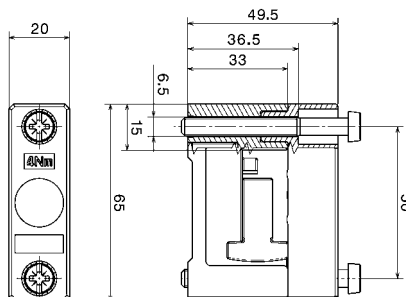
BBS-3/FL-NA



BBS-2/FL



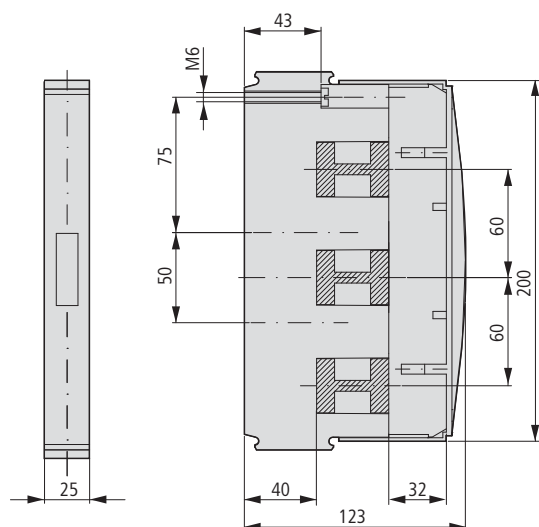
BBS-1/FL



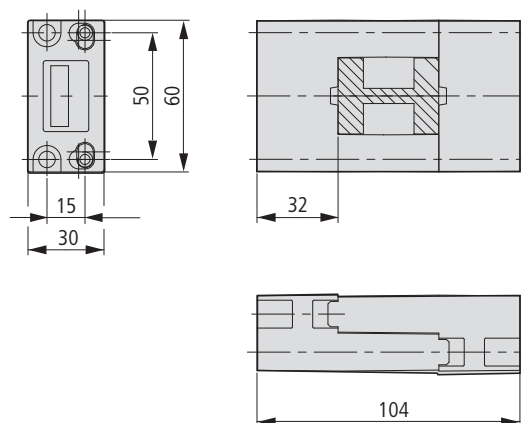
BBS, ES-BBS, BBC

Busbar supports

BBS-3/PR

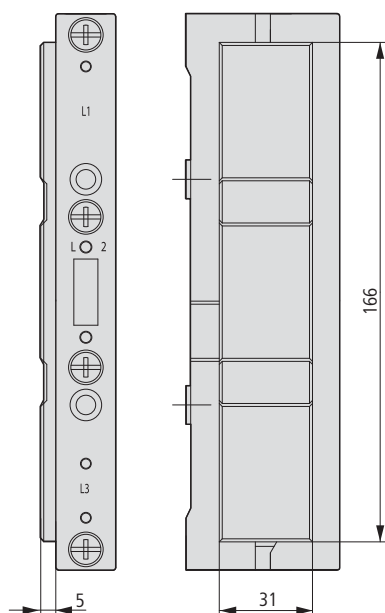


BBS-1/PR

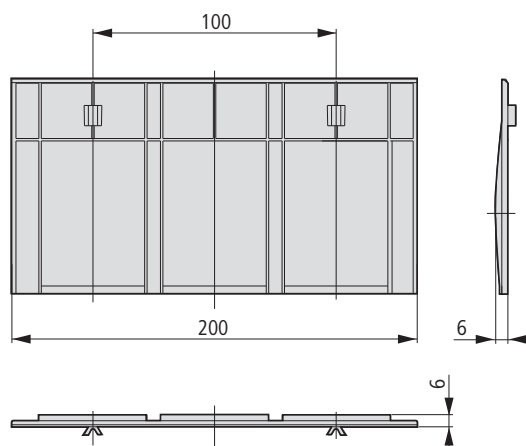


Terminal shroud

ES-BBS-3/FL

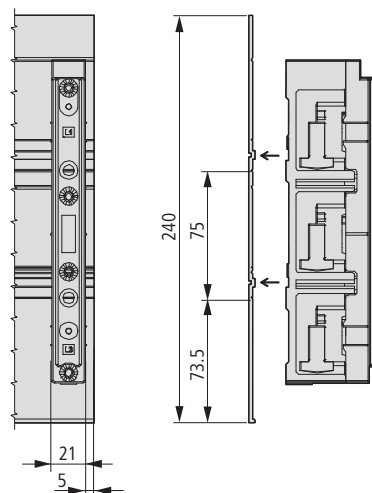


ES-BBS-3/PR



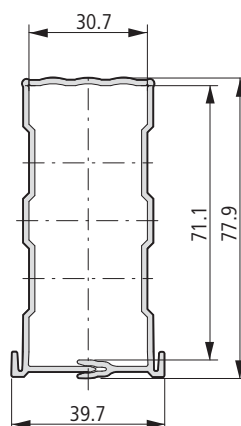
UL bottom plate

BBC-BT-NA



Busbar shroud

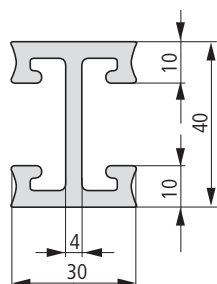
BBC-CU-BAR/PR



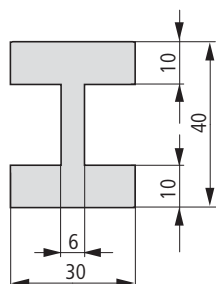
CU-BAR, AM, BBC-CS

Profiled busbars

CU-BAR-500/T

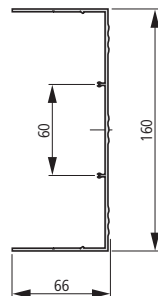


CU-BAR-720/T

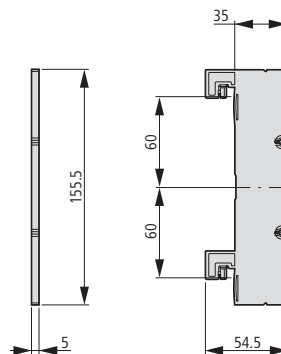


Spare covers

BBC-RCOV1

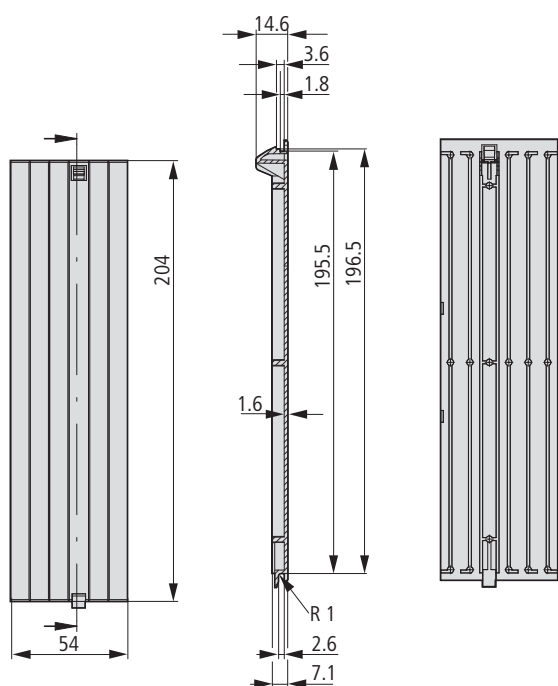


BBC-MRCOV1



Spare covers

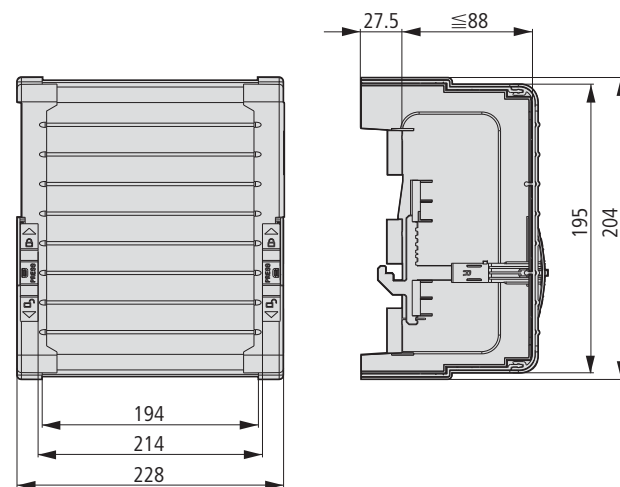
AM-195/54



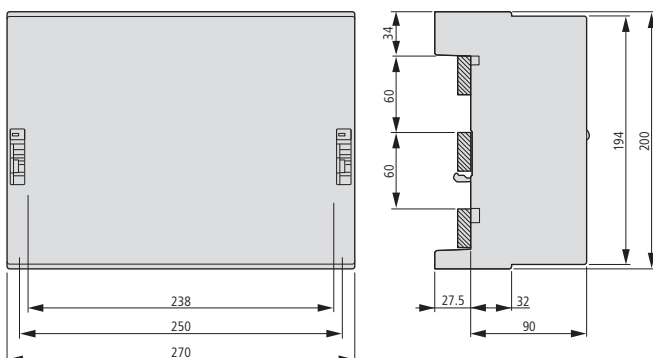
System covers

BBC-CS1

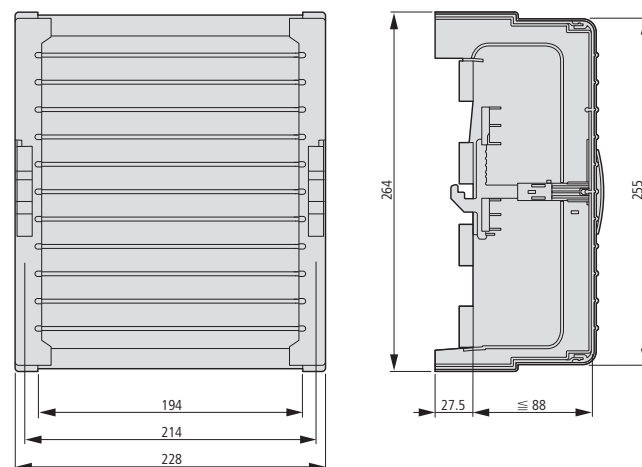
BBC-CS2-...

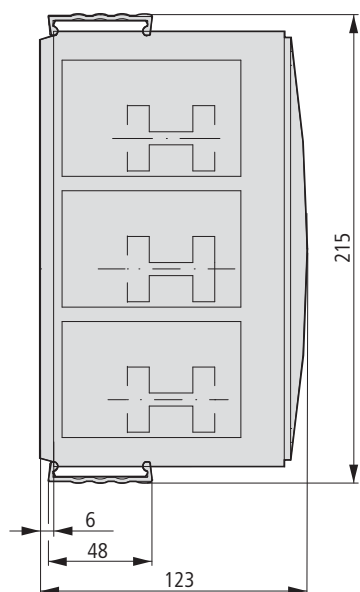
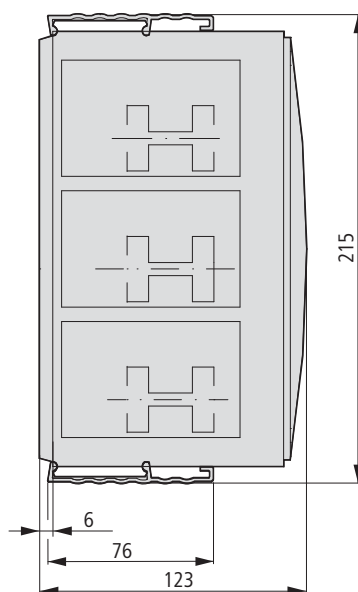
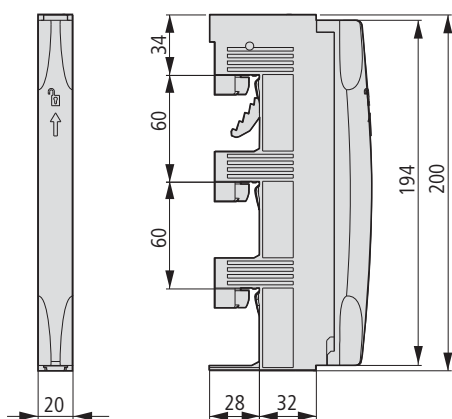
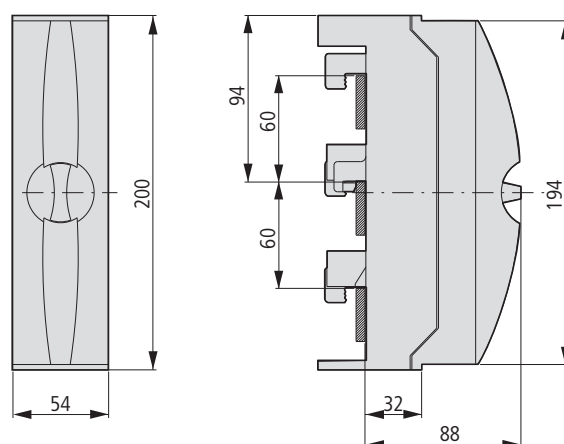
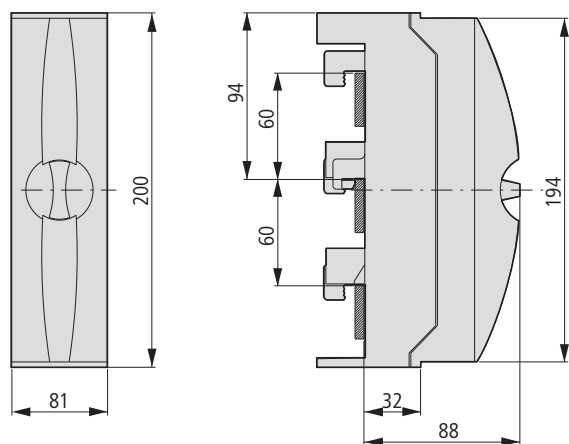


BBC-CS3



BBC-CS4



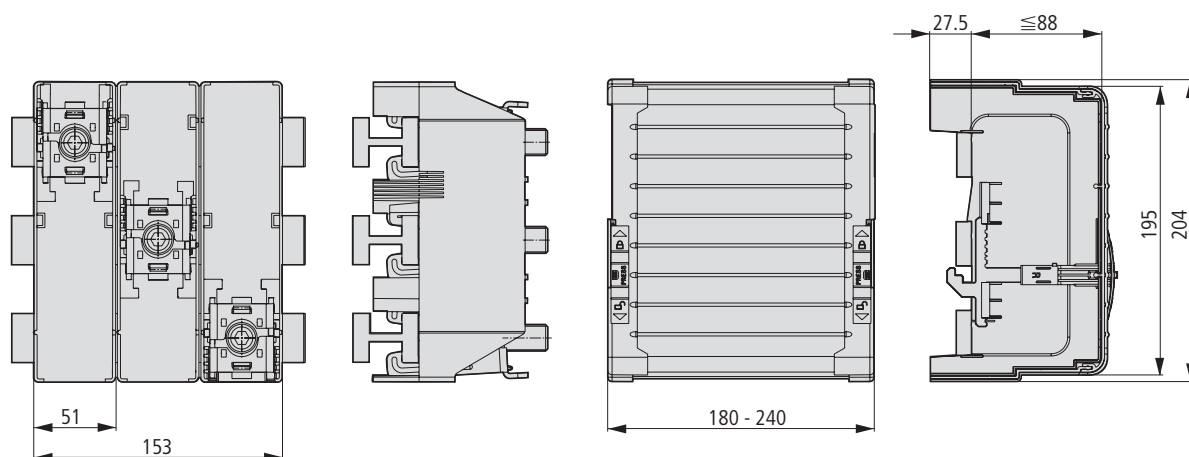
BBC-CS, BBA-TP**System covers****BBC-CS48/PR****BBC-CS76/PR****Terminal plates****BBA-TP3/16****BBA-TP3/50****BBA-TP3/120**

BBA-TP

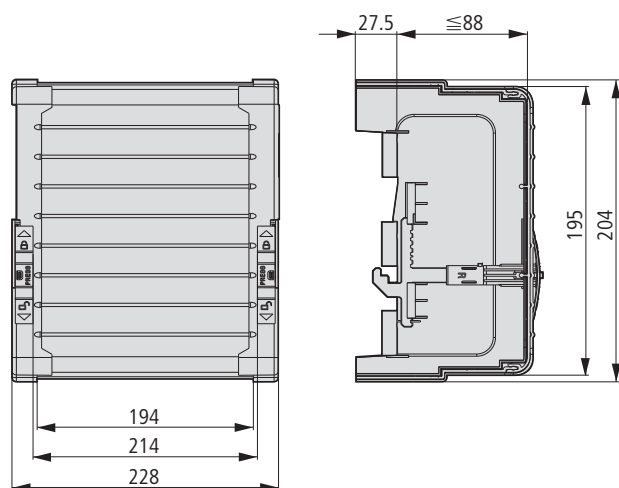
Terminal kits

BBA-TP3/300

BBA-TP3/CU-BAND

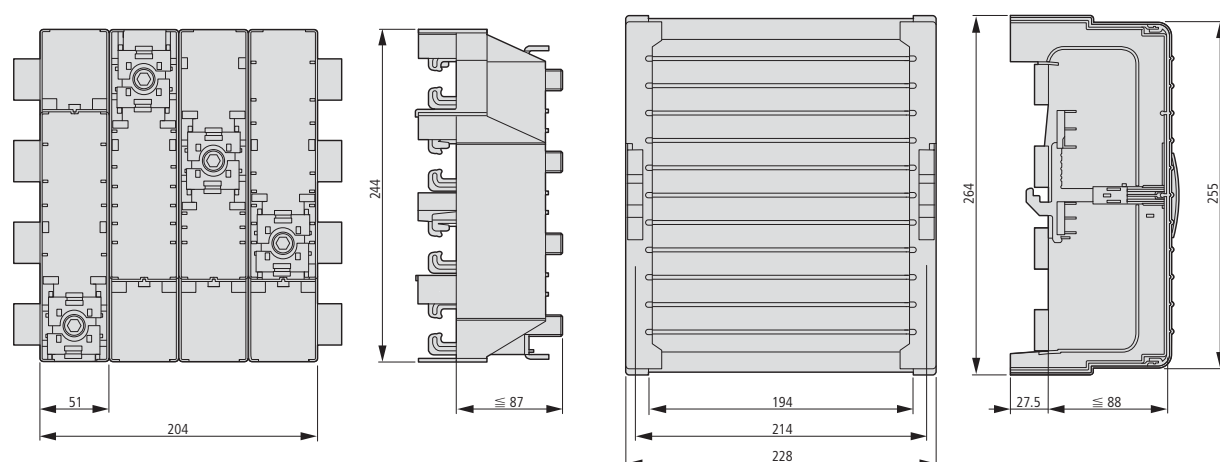


CU-BAND BBA-TP3/1000



BBA-TP4/300

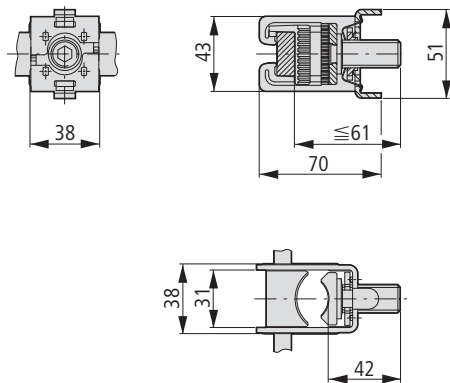
BBA-TP4/CU-BAND



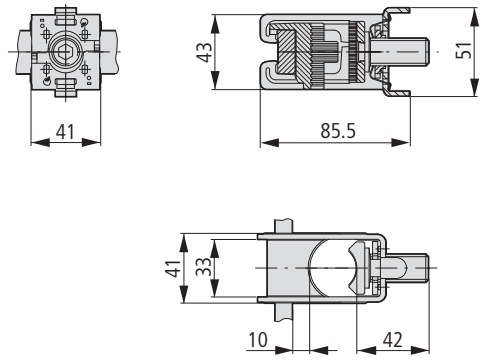
AKS, AKP

Expansion terminals

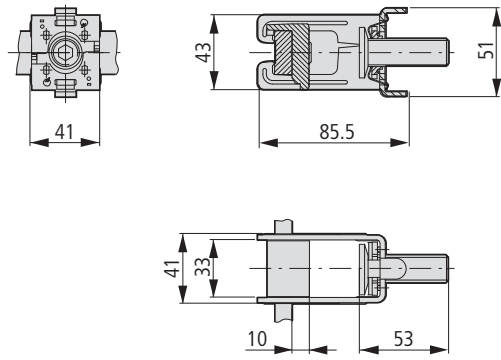
AKS185



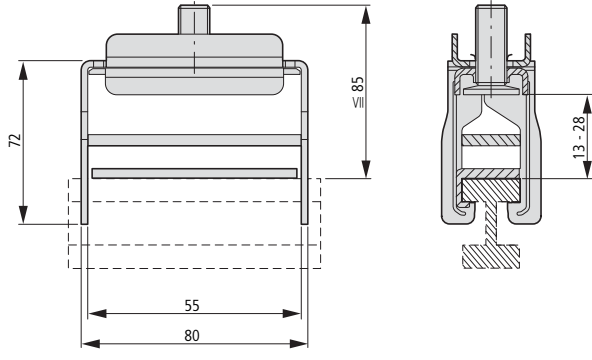
AKS300



AKS CU-BAND

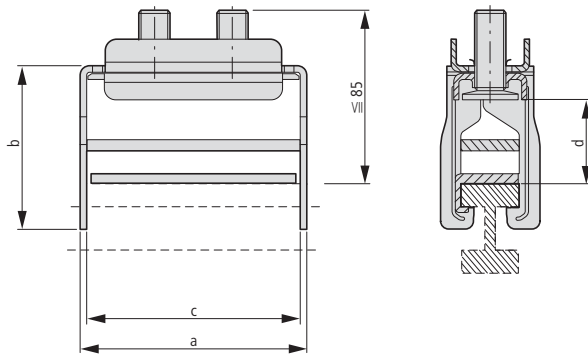


AKS1000



AKS1200

AKS2000

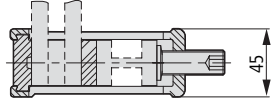


Part no.	a	b	c	d
AKS1200	85	80	68	13-38
AKS2000	122	80	105	13-38

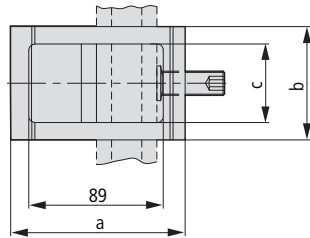
Profile terminals

AKP800

AKP1000

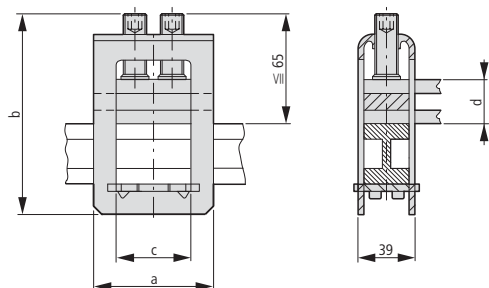


Part no.	a	b	c
AKP800	118	72	41
AKP1000	103	94	64



Profile terminals

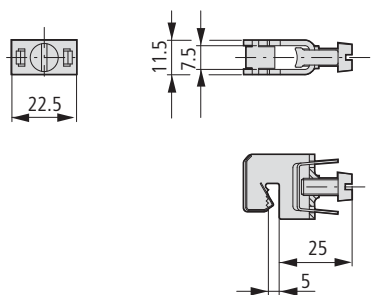
AKP750
AKP900
AKP1200
AKP1600
AKP2000
AKP3600



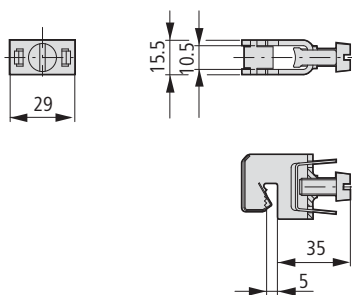
Part no.	a	b	c	d
AKP750	82	103	51	5-28
AKP900	94	103	64	5-28
AKP1200	94	118	64	20-42
AKP1600	112	118	81	20-42
AKP2000	132	118	101	20-42
AKP3600	132	154	101	23-45

Universal conductor connection terminals

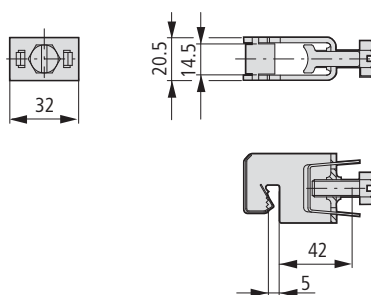
AKU16/5



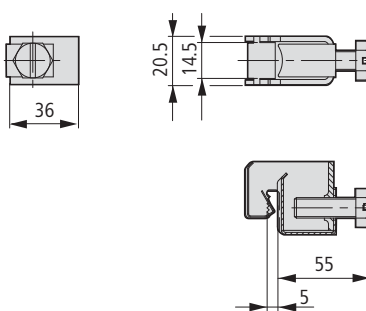
AKU35/5



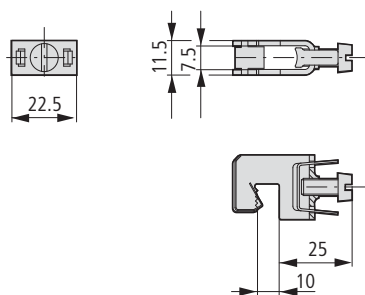
AKU70/5



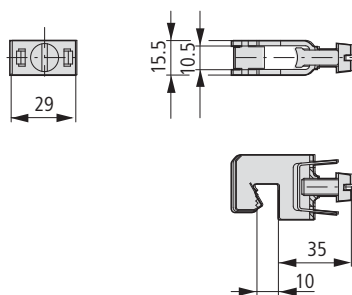
AKU120/5



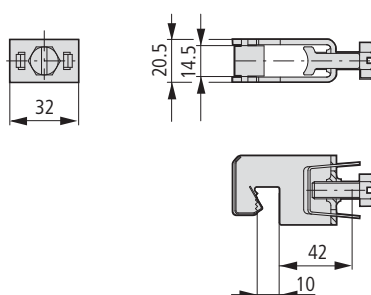
AKU16/10



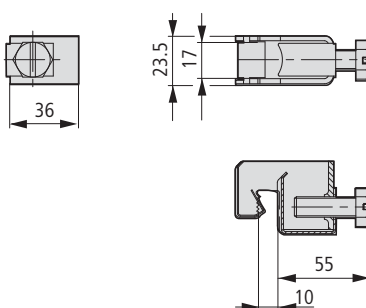
AKU35/10



AKU70/10

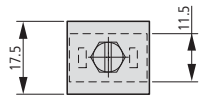
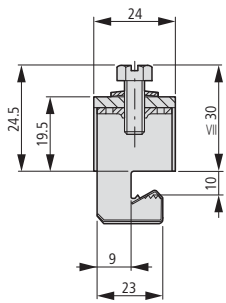


AKU120/10

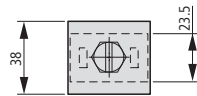
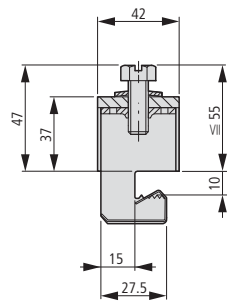


BBT-CU**Universal conductor connection terminals**

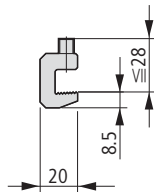
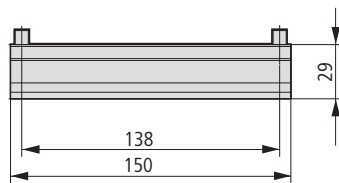
AKUM8/10



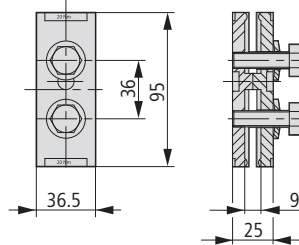
AKUM10/10

**End-to-end busbar connectors**

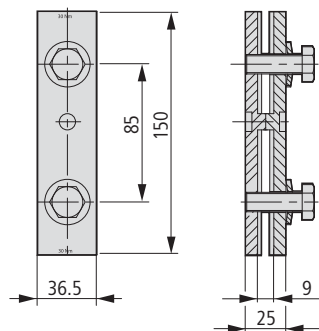
BBT-CU12-20X5/10-150



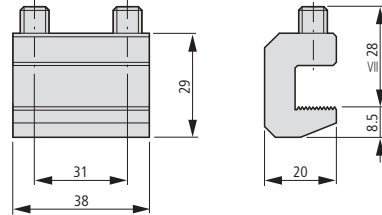
BBT-CU20-30X5/10-95



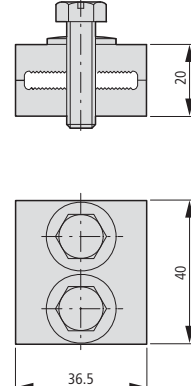
BBT-CU20-30X5/10-150



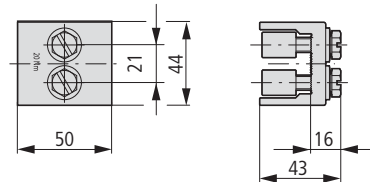
BBT-CU12-20X5/10-38



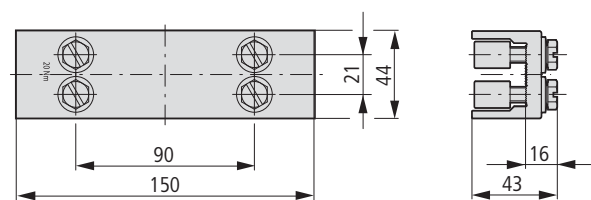
BBT-CU20-30X5/10-40



BBT-CU-BAR500/720-50



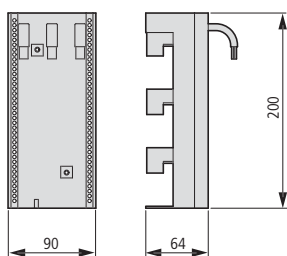
BBT-CU-BAR500/720-150



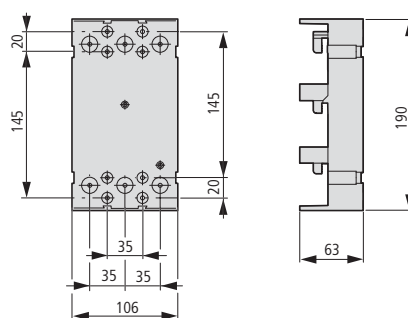
NZM...-XAD...

Component adapters for circuit-breakers and switch-disconnectors

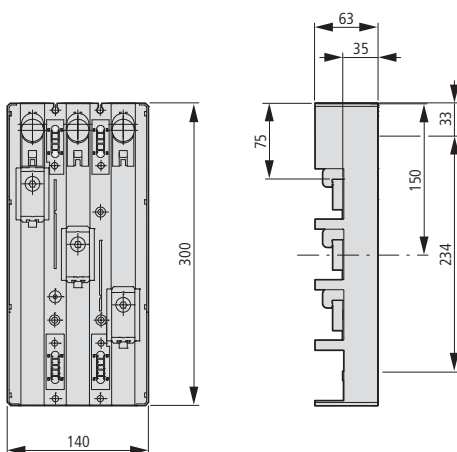
NZM1-XAD160



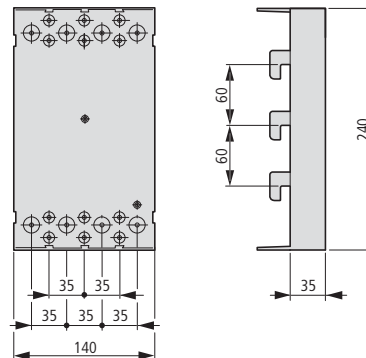
NZM2-XAD250



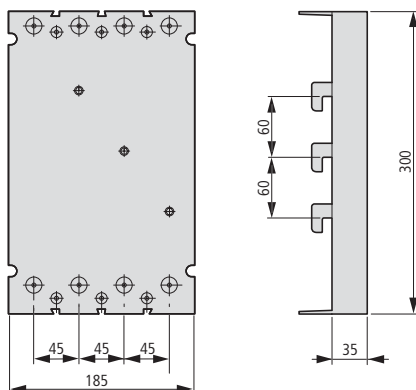
NZM3-XAD630



NZM2-4-XAD250

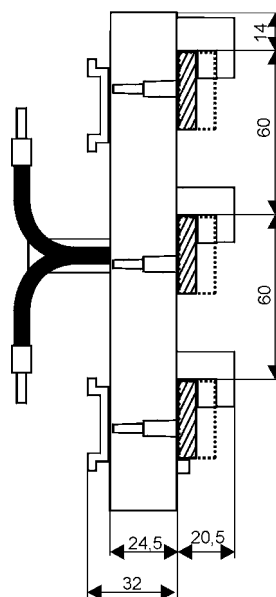


NZM3-4-XAD630



Double adapters

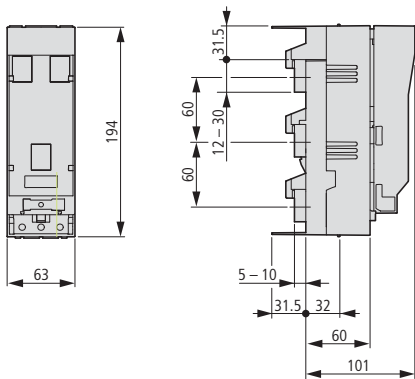
Z-SS-60-ADD/6...



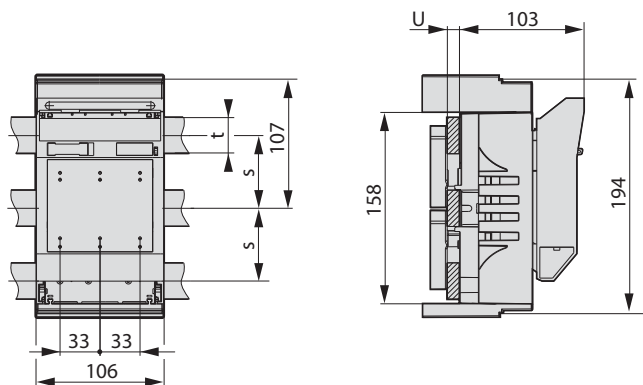
LTS, GST

LV h.b.c. fuse switch-disconnectors

LTS-100/C00/3-R



GST00-160-40-60-AOU

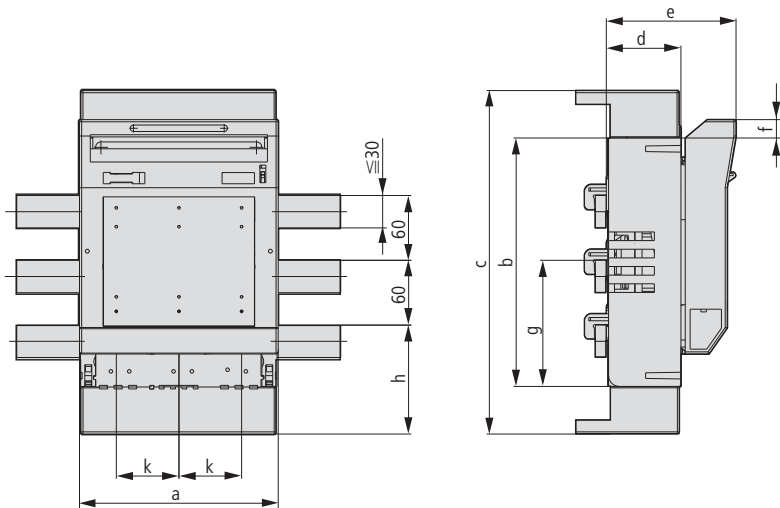


Part no.	s	t	u
GST0-160-40-60-AOU	40	12	5-10
	50	20	5-15
	60	20-30	5-10

GST1-A...

GST2-A...

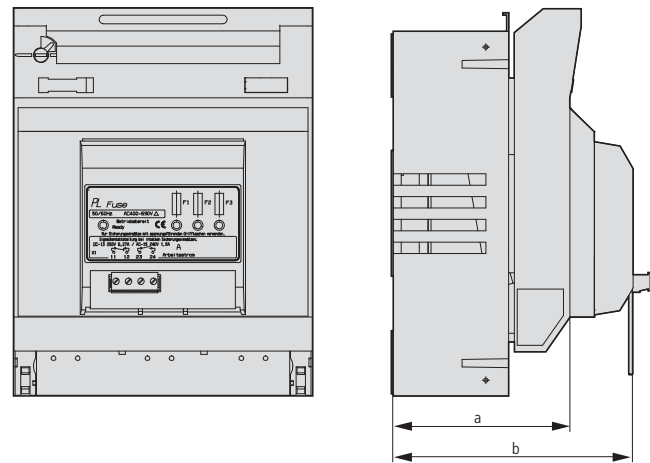
GST3-A...



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

NH-SLS

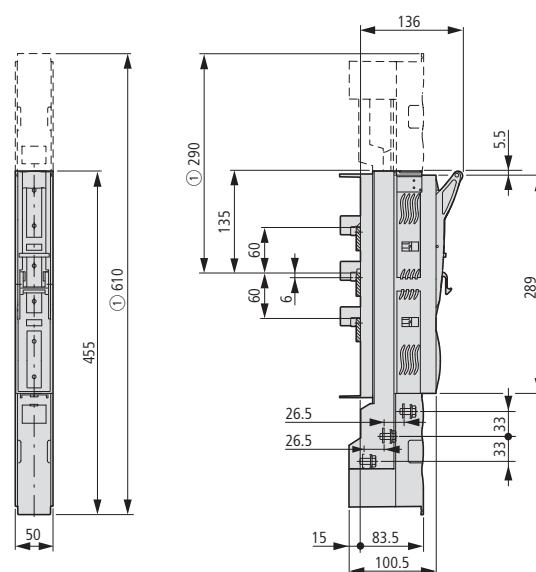
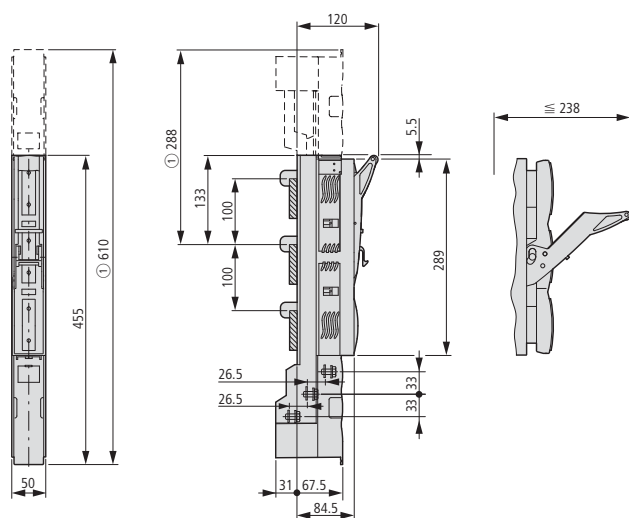
LV h.b.c. fuse switches

NH-SLS-00/160

NH-SLS-00/160-SI

NH-SLS-00/160-60

NH-SLS-00/160-60-SI



NH-SLS-1/250

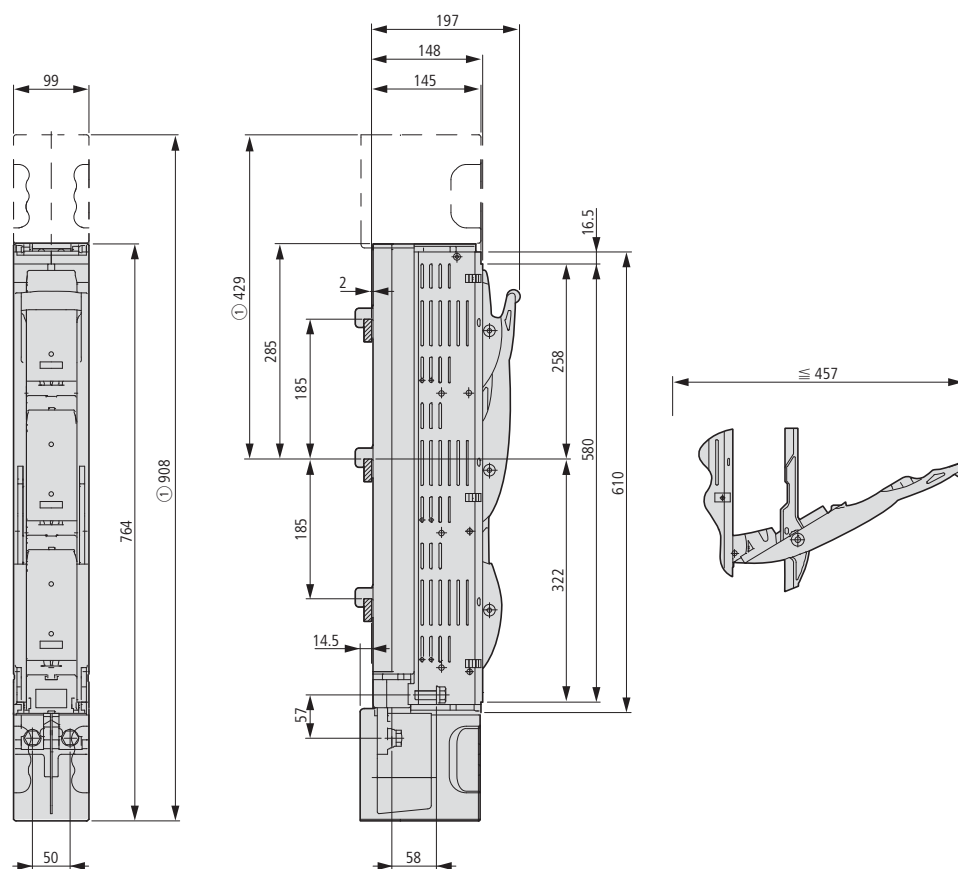
NH-SLS-1/250-SI

NH-SLS-2/400

NH-SLS-2/400-SI

NH-SLS-3/630

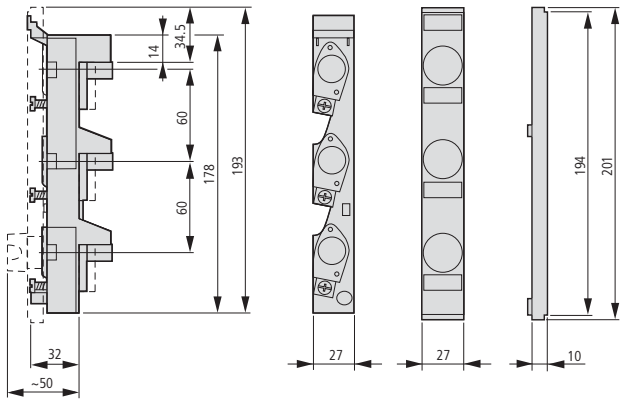
NH-SLS-3/630-SI

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

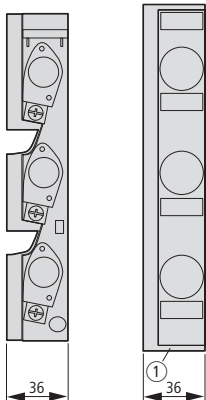
D02, DII, DIII

D busbar mounting fuse devices

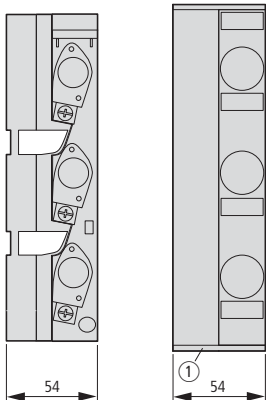
D02-S0/63/3-R-27



Z-D02/R/3-36



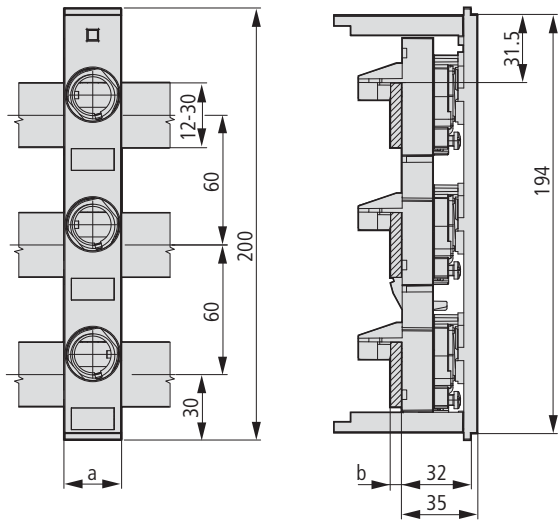
Z-D02/R/3-54



① Front plate support

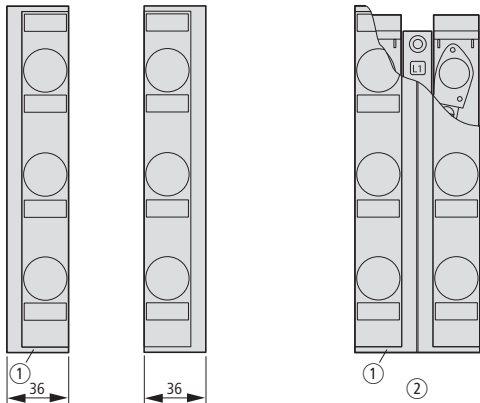
DII-S0/25/3-R(-PS)

DIII-S0/63/3-R(-PS)



Part no.	a	b
DII-S0/25/3-R(-PS)	45	5-10
DIII-S0/63/3-R(-PS)	54	5-10

Z-D02-S-AB-SET

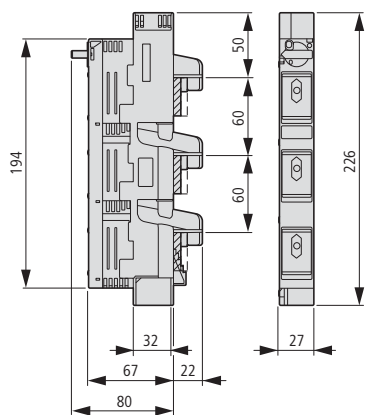


① Front plate support
② Covered busbar support

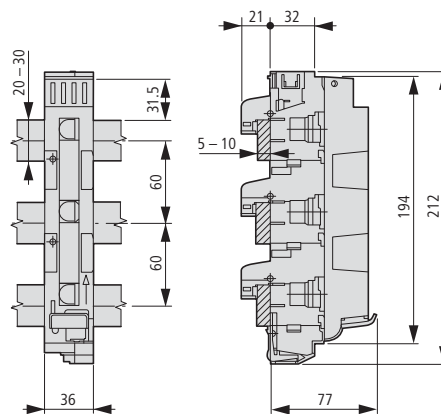
D02, KSX

D fuse switch-disconnector

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

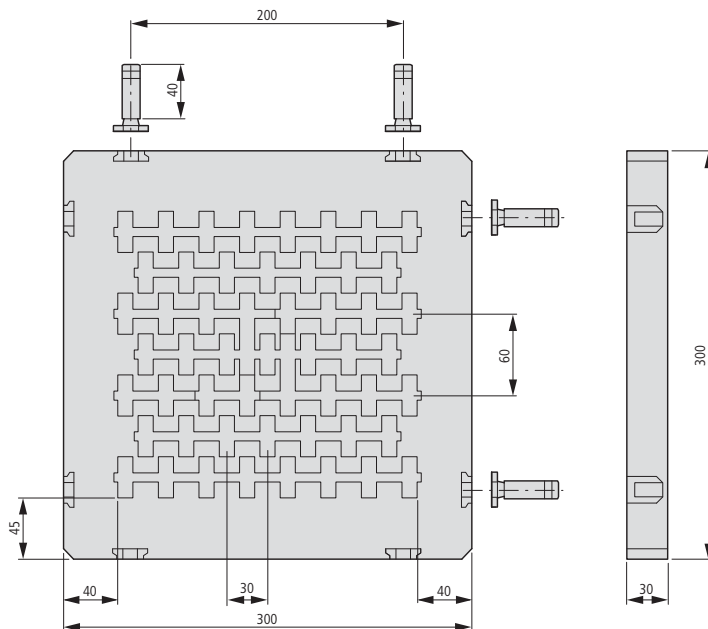


D02-S/63/3-RS

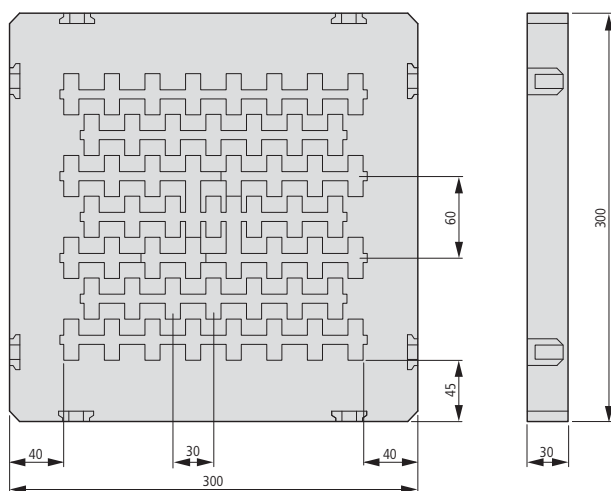


Busbar supports

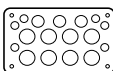
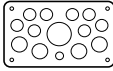
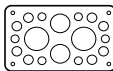
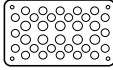
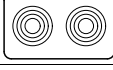
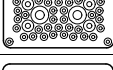
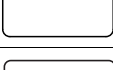
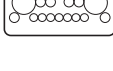
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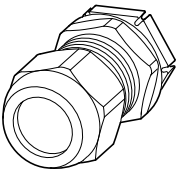


KSX-34P-MID



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 Ø	F3A-KTD 083674		5 off
	Insulating material	Sponge-rubber flange	40 cables, 10 – 13 mm Ø 4 cables, 17 - 21 mm Ø 2 cables, 27 - 30 mm Ø	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 Ø 8 x 15 mm Ø 2 x 28 mm Ø	ZSD-2K/FLA 272166		1 off

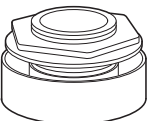
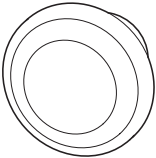
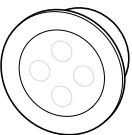
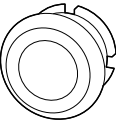
	Cable entry	Drilling dimensions mm	External diameter of cable mm	For use with NYM/NYY cables, 4-core mm ²	Part no. Article no.	Price See price list	Std. pack
Metric cable glands to EN 50262							
- With lock nut and built-in strain relief - IP68 up to 5 bar, polyamide, halogen-free - Flammability classification V2 according to UL94 - Color RAL 7035							
Cable screw gland							
	M12	12.5	3 - 7	H03VV-F3 x 0.75 mm ² , NYM 1 x 2.5 mm ²	V-M12 215078		20 off
	M16	16.5	4.5 - 10	H05VV-F3 x 1.5 mm ² , NYM 1 x 16/3 x 1.5 mm ²	V-M16 215077		20 off
	M20	20.5	6 - 13	H05VV-F4 x 2.5/3 x 4 mm ² , NYM 5 x 1.5/5 x 2.5 mm ²	V-M20 206910		20 off
	M25	25.5	9 - 17	H05VV-F5 x 2.5/5 x 4 mm ² , NYM 5 x 2.5/5 x 6 mm ²	V-M25 206911		20 off
	M32	32.5	13 - 21	NYM 5 x 10 mm ²	V-M32 206912		10 off
	M40	40.5	16 - 28	NYM 5 x 16 mm ²	V-M40 209668		10 off
	M50	50.5	21 - 35	NYM 4 x 35/5 x 25 mm ²	V-M50 206913		5 off
	M63	63.5	34 - 48	NYM 4 x 35 mm ²	V-M63 214835		3 off

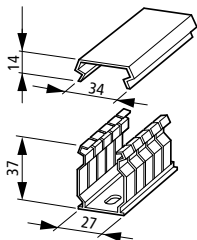
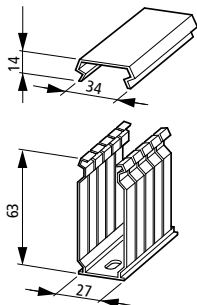
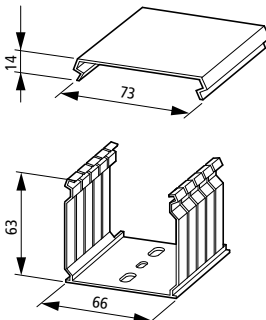
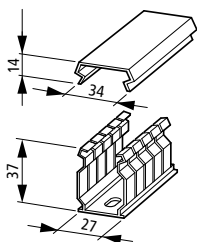
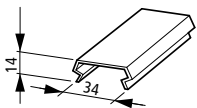
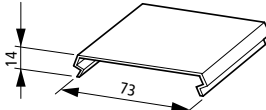
Cable entry	External diameter of cable mm	For use with NYM/NYY cables, 4-core mm ²	Part no. Article no.	Price See price list	Std. pack
Multiple gaskets for cable glands V-M... , metric					
	M25	4 x 5 - 6	H03VV-F2 x 0.75/3 x 0.75 mm ²	MFD25 215451	50 off
	M32	4 x 3.5 - 7	H03VV-F4 x 0.75 mm ²	MFD32 215452	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 grounding screw - Suitable for standard commercial conduit - Suitable for all enclosures CI...-NA → Page 20/9				
1/2 "	STB1/2ZOLL 045878		1 off 	Product Standards UL File No. UL 467; UL 514B; CSA-C22.2 No. 18 UL CCN E23018, E3060 CSA File No. DWTT, KDER CSA Class No. LR 2884 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
3/4 "	STB3/4ZOLL 060116			
1 "	STB1ZOLL 052997			
1 1/4 "	STB1-1/4ZOLL 043505			
1 1/2 "	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 mm ²	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 mm ² , NYM 5 x 1.5/5 x 2.5 mm ²	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 mm ²	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 mm ² , NYM 1 x 16/3 x 1.5 mm ²	KT-M16 216983		100 off
	M20	20.5	1 - 13	H03VV-F3 x 0.75 mm ² , NYM 5 x 1.5/5 x 2.5 mm ²	KT-M20 207602		100 off
	M25	25.5	1 - 18	H03VV-F3 x 0.75 mm ² , NYM 4 x 10 mm ²	KT-M25 207603		100 off
	M32	32.5	1 - 25	H03VV-F3 x 0.75 mm ² , NYM 4 x 16/5 x 10 mm ²	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						
	mm		H 0... V-K mm ²	H 0... V-K 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
	650	60 40 25 15	0.75 1.5 2.5 4	- 16 14 12									
Self-adhesive Max. ambient temperature +55 °C													
	1500	–	–	–	KD25 019649		200 off						
	1500	–	–	–				KD60 024395		100 off			

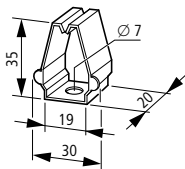
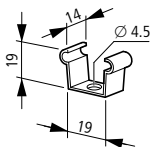
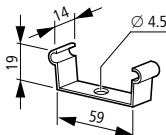


16/66 Accessories for control panel building

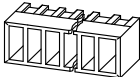
Cable ducts and accessories

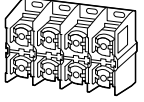
KH, KK, ITB, BZ

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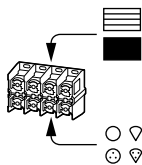
	Length	Capacity: max. no. of cables (approx.)	Type and cross-section		Part no. Article no.	Price See price list	Std. pack
	mm		H 0... V-K mm ²	H 0... V-K AWG			
Cable support brackets for cable ducts							
• Can be used in cable ducts KL25/35 (K) • Screw-fitting							
	–	15	4	–	KH25/35 078974		20 off
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	BZ249 078889		10 off
	6 x 9 x 0.8 + BZ248			
	4 x 16 x 0.8 + BZ248	BZ251 081262		10 off
	6 x 16 x 0.8 + BZ248			
	10 x 16 x 0.8 + BZ248			
	11 x 21 x 1 + BZ248	BZ252 083635		10 off

Rated operational current I_e A	Poles	Terminal capacities ¹⁾		Terminal capacities ¹⁾		Part no. Article no.	Price See price list	Std. pack
		Cu    	Al  	 Copper strip	 Copper bar			
		Al  		mm	mm			
Terminals 160 - 1000 A								
Includes labels for terminal marking U, V, W - X, Y, Z - L 1, L 2, L 3 - T 1, T 2, T 3 - PE, N, PEN, 								
$U_i = 1000 \text{ V AC}$								
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	
		1			—	—		
	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	
		1			—	—		
	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	
		1			—	—		
	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					K2X240/1/BR 019455	
		1			—	18 x 4		

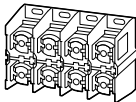
Notes



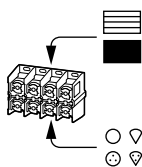
- ¹⁾  Copper strip
 Copper bar
 Round conductor, solid
 Round conductor, stranded
 Sectoral conductor, solid
 Sectoral conductor, stranded

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

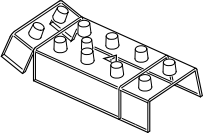
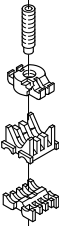


	Rated opera- tional current I_e A	Poles	Terminal capacities ¹⁾		Terminal capacities ¹⁾		Part no. Article no.	Price See price list	Std. pack
			Cu ○▽○▽ Al ○▽	Al ▽	 Copper strip mm	 Copper bar mm			
Terminals 160 - 1000 A									
Includes labels for terminal marking U, V, W - X, Y, Z - L 1, L 2, L 3 - 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		

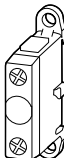
Notes



- ¹⁾  Copper strip
 Copper bar
○ Round conductor, solid
⊙ Round conductor, stranded
▽ Sectoral conductor, solid
▽ Sectoral conductor, stranded

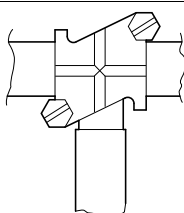
	For use with	Rated uninterrupted current I_u A	Part no. Article no.	Price See price list	Std. pack
Terminal shrouds, 5 pole					
Including warning label To DIN (lightning symbol) Break off end sections for 3- and 4 pole terminal shrouds					
	K95/3, K95/4, K95/5	—	H-K95/5 036888		4 off
	K150/3, K150/4, 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 mm ²					
	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⁾		Part no. Article no.	Price See price list	Std. pack
		Terminal capacities for round conductors mm ²	Terminal capacities for flat conductors mm			
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

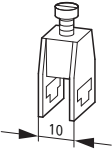
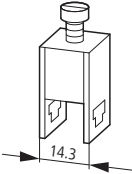
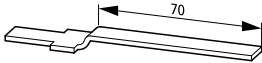
Notes

- ¹⁾ ○ Solid
⊗ Stranded
⊗ Flexible with ferrule
 Copper strip

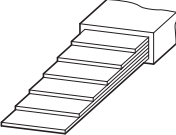
For use with busbars	Terminal capacities for flat conductors	Rated operational current, flat conductor I_e A	Terminal capacities, round conductors Type: ○ solid ⊗ flexible with ferrule mm ²	Part no. Article no.	Price See price list	Std. pack
mm	mm					
Ultra-flat busbar terminals 100 - 800 A						
	Cu 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

HPL16071EN

AK, L-KL-R

	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	mm ²			
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



	Rated operational current ¹⁾ I _e A	Dimensions (number of layers × width × layer thickness) mm	Cross- section ²⁾ mm ²	Cu factor ³⁾	Color	Part no. Article no.	Price See price list	Std. pack
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).								
	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-GNYP 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-GNYP 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-GNYP 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-GNYP 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-GNYP 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-GNYP 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 0281²⁾ 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 File No.

UL CCN

CSA File No.

CSA Class No.

NA Certification

Conditions of Acceptability

Suitable for

Max. Voltage Rating

UL 758; EN 60439-1, -3; CE marking

E248096

AVLV2

UL report applies to both US and Canada

–

UL Listed, certified by UL for use in Canada

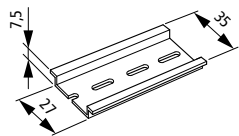
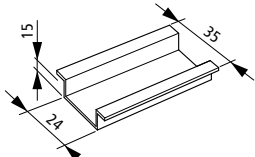
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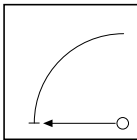
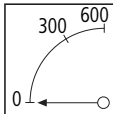
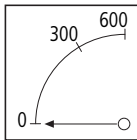
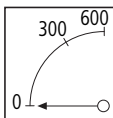
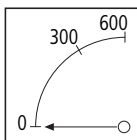
Appliance Wiring Material - Component

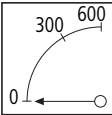
600 V AC, 750 V DC

		Rated operational current I_e A	Dimensions mm	Part no. Article no.	Price See price list	Std. pack
Flat copper bars						
	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

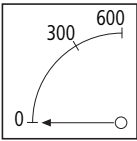
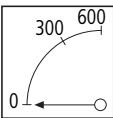
	Rated operational current I_e A	Thread	Dimensions mm	Part no. Article no.	Price See price list	Std. pack
Flat copper busbars, predrilled						
	218	M6	15 x 5 x supplied in lengths of 1000	BPZ-BB/T-15/5/1000 289861		4 off
	274	M6	20 x 5 x supplied in lengths of 1000	BPZ-BB/T-20/5/1000 289862		4 off
	400	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

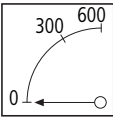
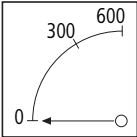
	Part no. Article no.	Price See price list	Std. pack
DIN-rails			
 To IEC/EN 60715 35 x 7.5 mm Short-circuit rating as PE conductor corresponds to 16 mm² copper conductor to IEC/EN 60439-1 Supplied in lengths of 2 m	TS35X7.5 053030		20 off
	TS35X15 050657		10 off
 To IEC/EN 60715 35 x 15 mm Short-circuit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

	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

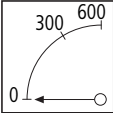
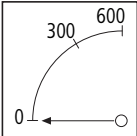
	Measuring range A	Part no. Article no.	Price See price list	Std. pack
Ammeters, class 1.5				
- To DIN 43780 and VDE 410 - Enclosure to DIN 43700 - Narrow version to DIN 43718 - Quadrant scale DIN 43802 (dual scale) - Terminals protected against accidental contact - Vertical operating position - Snap 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		

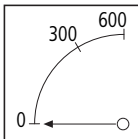
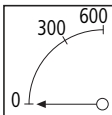
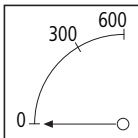
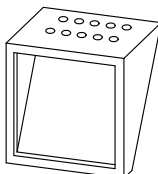
	Measuring range A	Part no. Article no.	Price See price list	Std. pack
EQ72 • 72 x 72 mm 	0 - 800	EQ72S-800/5 074118		1 off
	0 - 1000	EQ72S-1000/5 074119		1 off
	0 - 1250	EQ72S-1250/5 074301		1 off
	0 - 1600	EQ72S-1600/5 074302		1 off
	0 - 2000	EQ72S-2000/5 074303		1 off
	0 - 2500	EQ72S-2500/5 074304		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

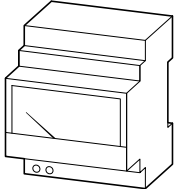
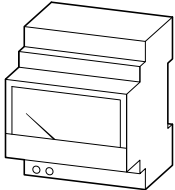
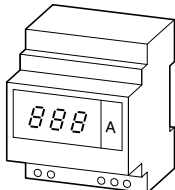
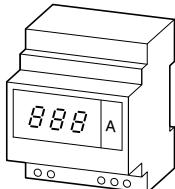
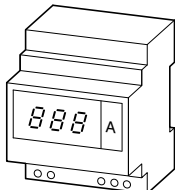


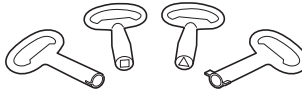
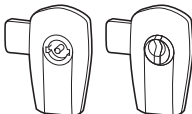
	Measuring range A	Part no. Article no.	Price See price list	Std. pack
Maximum demand (bimetal) ammeters for C.T. connection, class 3				
• With maximum-demand indicator • With instantaneous value indication (moving-iron measuring element) • Class 3 • Moving-iron ammeter accuracy class 1.5 • Overload 1.2 times • Power consumption 4.8 VA • Time setting of bimetal: 8 min				
Unshielded				
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		

HPL16079EN

BIEQ

	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

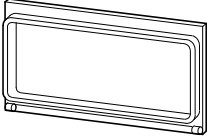
	Features	Measuring range A	Measuring range V	Part no. Article no.	Price See price list	Std. pack
Meters for DIN-rail, analog						
- For measuring single-phase AC voltages and currents - Moving-iron measuring element						
Voltmeters						
	—	—	0 - 250	Z-MG/VA-250 248223	—	1 off
	—	—	0 - 500	Z-MG/VA-500 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

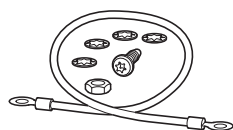
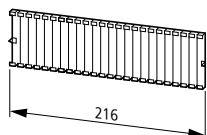
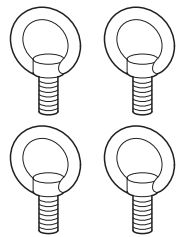
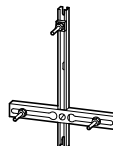
Description		For lock mechanism	Features	Part no. Article no.	Price See price list	Std. pack
Closing and locking systems						
Comfort hinged handle						
- Lever made from high-grade, impact-resistant pressure-cast zinc - Ergonomically designed lever - For XVTL, Profi Plus floor standing distribution 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 profile 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

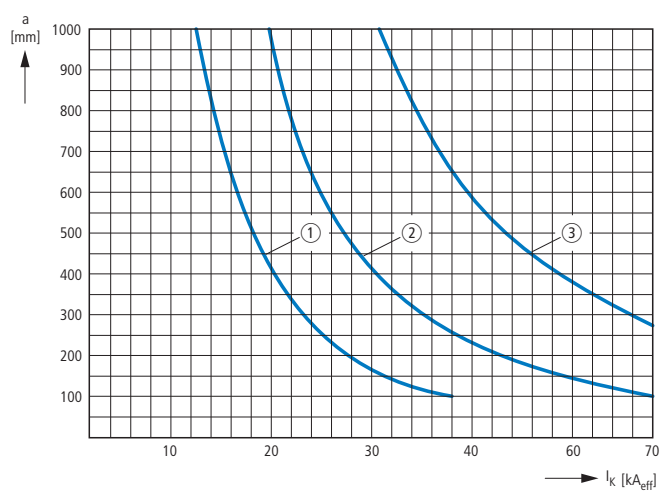
Features	Description	Part no. Article no.	Price See price list	Std. pack
Door grounding set				
• Cross-section 6 mm² • Includes installation accessories 	—	—	BFZ-DES 101665	1 off
Touch-up paint				
• Brush bottle • For repairing paint damage	RAL 7035	—	BPZ-CPS-7035 286771	1 off
	RAL 9010	—	PAINT-RAL9010 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



16/86 Accessories for control panel building

Meters for DIN-rails

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
Auxiliary 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

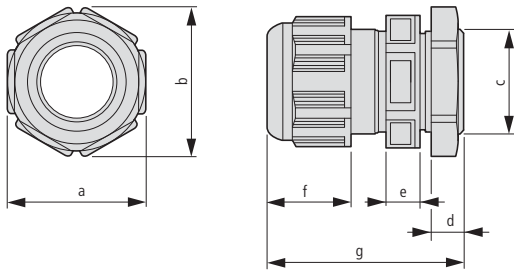


	Z-MG/VD+AD Z-MG/VD+AD+S													
Measuring range, resolution														
Range	–	–	–	–	–	–	–	–	5 A	–	–	–	–	
Indication	–	–	–	–	–	–	–	–	5.00	–	–	–	–	
Resolution	10 mA													
Range	10 A	–	15 A	–	20 A	25 A	30 A	40 A	50 A	60 A	70 A	75 A	80 A	
Indication	10.0	–	15.0	–	20.0	25.0	30.0	40.0	50.0	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

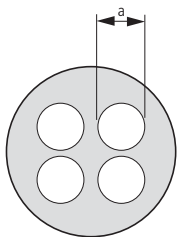
V-M...



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

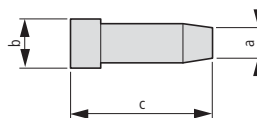
MFD...



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

Sealing plugs

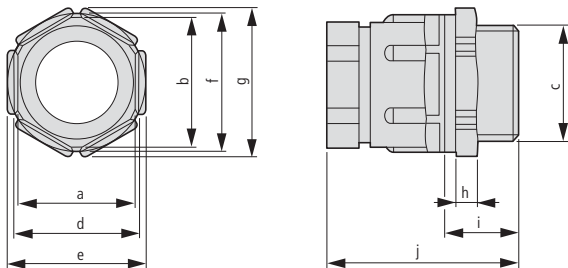
MFV...



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

Cable screw glands

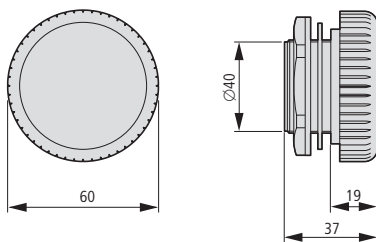
STB-M...F



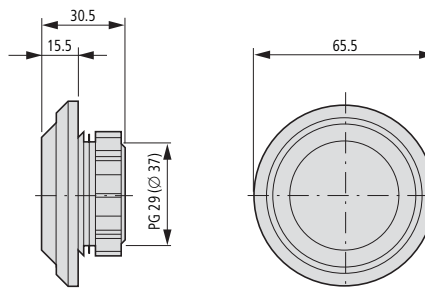
Part no.	c	h	l	j	g	f	b	a	d	e
STB-M20F	20	5	15	40	29	27	23	21	24	27
STB-M25F	25	6	15	45	35.5	35.5	33.4	30	33	32

Pressure compensating plugs

DAV-M40

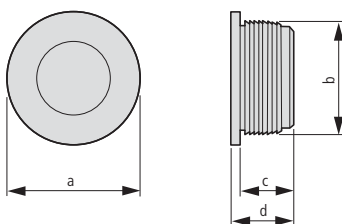


DA412



Diaphragm grommets, metric

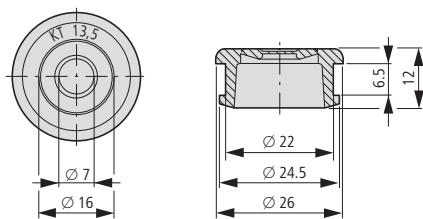
KT-M...



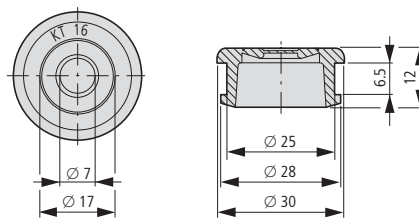
Part no.	a	b	c	d
KT-M16	21.2	16	9.5	11
KT-M20	25.2	20	9.5	11
KT-M25	30.2	25	9.5	11
KT-M32	37.2	32	9.5	11

PG cable grommets

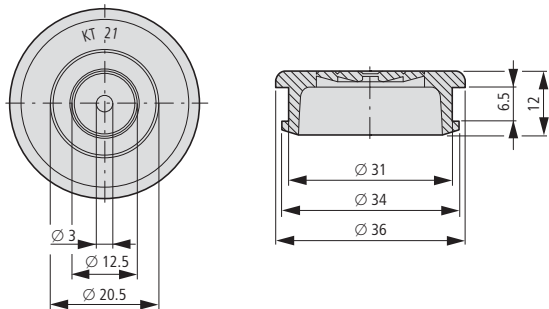
KT13.5



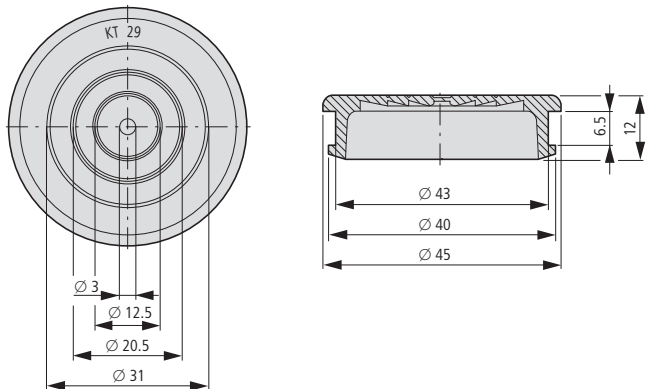
KT16



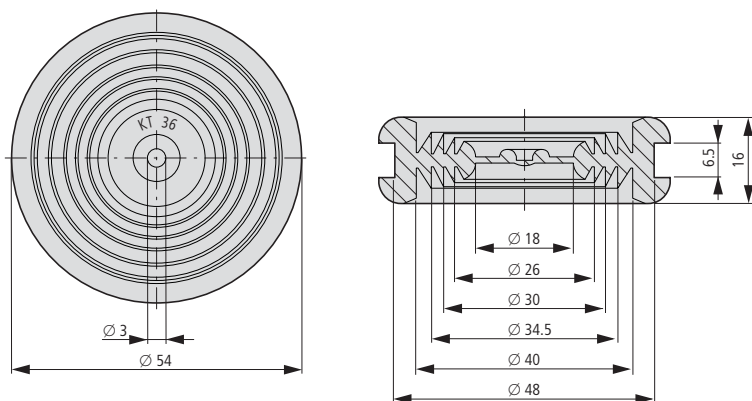
KT21



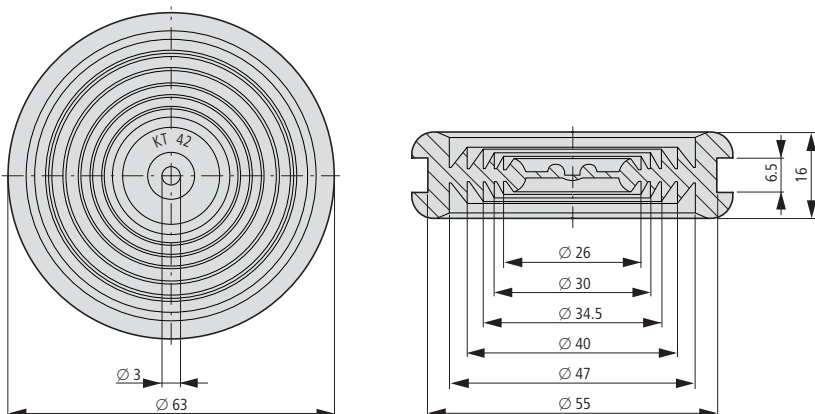
KT29



KT36

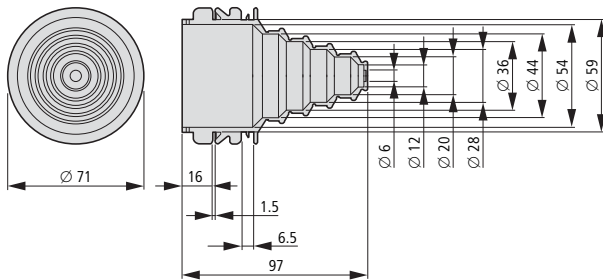


KT42

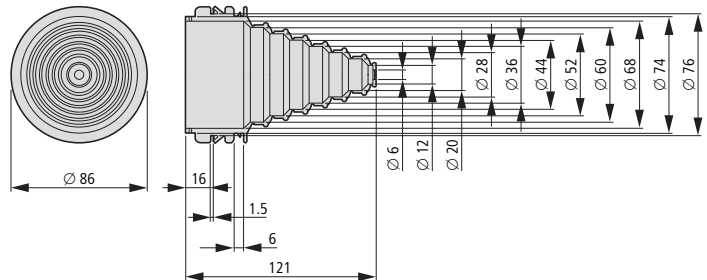


Stepped cable grommets

KT3

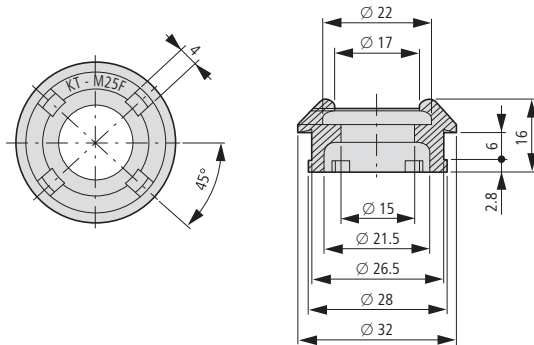


KT4

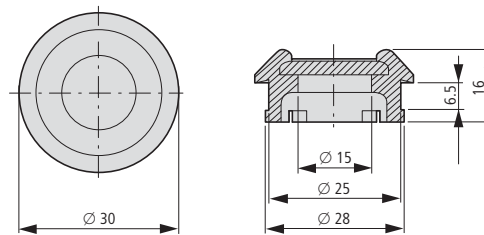


Pressure compensating grommets

KT-M25F

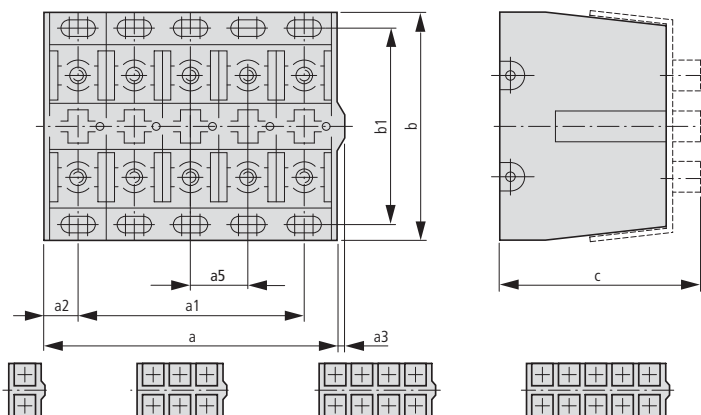


KT16F



Terminals 160 - 1000 A

K...

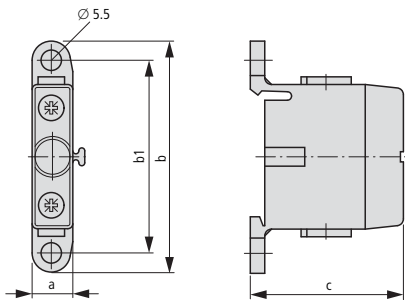


Part no.	a	a1	a2	a3	b	b1	c	a5	l
K95/1	37	-	18.5	3	115	100	88	-	13
K95/3	99	75	12					31	
K95/4	130	100	15						
K95/5	161	125	18						
K150/1	37	-	18.5				105	-	13
K150/3	99	75	12					31	
K150/4	130	100	15						
K150/5	161	125	18						
K240/1	52	-	26				120	-	12
K240/3	144	100	22					46	
K240/4	190	150	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

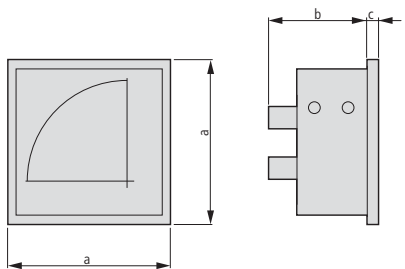


Part no.	a	b	b1	c
K10/1	11	60	50	30
K25/1	14	60	50	33
K50/1	18	60	50	36

Ammeters, voltmeters

EQ

BIEQ

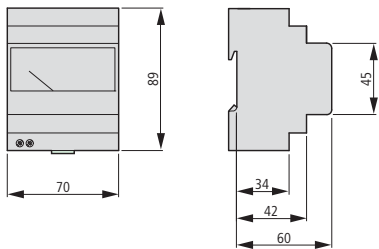


		a	b	c
EQ		45	45	47
EQ	48 DIN	48	53	5
EQ, BIEQ		72	64	5
EQ, BIEQ		96	64	5

Meters for DIN rails, analog

Z-MG/VA...

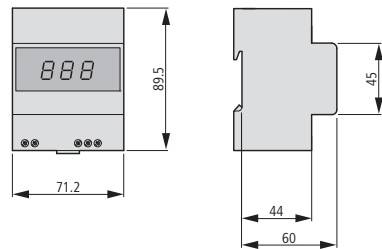
Z-MG/AA...



Meters for DIN rails, digital

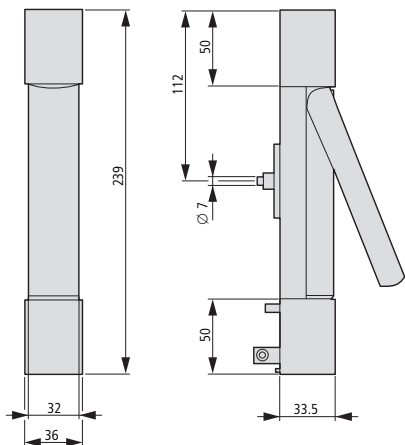
Z-MG/VD...

Z-MG/AD...

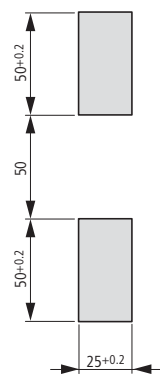


Comfort hinged handle

DH-COMF

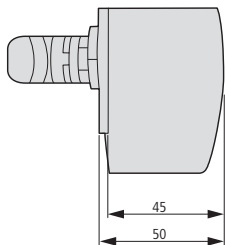


Mounting hole



Comfort rotary handles

PHZ-A...



Mounting hole

