Table of Contents
SASY 60i Busbar System

System up to 630 A for flat busbars	Page xx
System up to 1250, 1600 A for profile busbars	Page xx
Covers for 630, 1250 and 1600 A systems	Page xx
Feeder circuit adapters for 630, 1250 and 1600 A systems	Page xx
Terminals for 630, 1250 and 1600 A systems	Page xx
Lengthwise busbar connections for 630, 1250 and 1600 A systems	Page xx
Busbar adaptors as single devices	Page xx
Busbar adaptors as complete units	Page xx
Slide fuse equipment, 3-pole	Page xx
Multi-layer copper band, insulated	Page xx
Line supports	Page xx

EATON
Powering Business Worldwide

SASY 60i Busbar System

- Components now also conforming to UL-standards for control systems
- 60 mm spacing between busbars
- 630, 1250 and 1600 A rated current
- Adapter technology for NZM1 to 3
- Adapter technology for xStart
- Slide fuse equipment
- Connection technique

Technical data as of page xx.

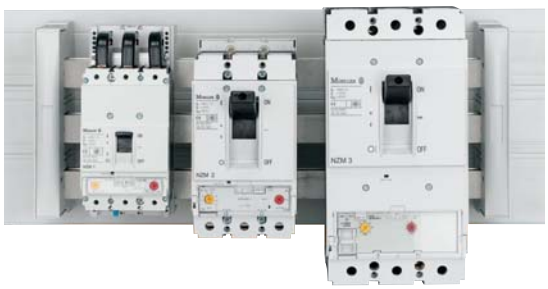
VT20106



VT20406



VT20706



VT20806



EATON
Powering Business Worldwide

Systems up to 630 A for Flat Busbars

Poles Number	Max. Rated Operational Current Ie (A)	Special Features	Utilisation	Designation	Notes Article No.	Units per Package
IEC Busbar Support						
VT12706  3	630	With snap-in slide for adapting to the respective size of the bar	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-3/FL** 107066	With pre-drilled holes inside for screw-fixing	10 units
UL Busbar Support						
VT12806  3	630	With snap-in slide for adapting to the respective size of the bar	12 x 5/10 20 x 5/10 30 x 5/10	**BBS-3/FL-NA** 107067	With pre-drilled holes inside for screw-fixing	10 units
If used in feeder circuits according to UL 508A up to 600 V, it is necessary use the BBC-BT-NA base plate in addition.						
End Cover						
VT14006 –	–	–	To cover the busbar ends for BBS-3/FL and BBS-3/FL-NA	**ES-BBS-3/FL** 107068		10 units
UL Base Plate						
VT19806  –	–	To be used when the air gap between fully equipped busbar systems and mounting plate is insufficient	Necessary for UL support BBS-3/FL-NA	**BBC-BT-NA** 107172	1100 mm long	2 units
PE/N Earth/Neutral Busbar Support						
VT13006  2	630	With snap-in slide for adapting to the respective size of the bar	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-2/FL** 107069	can be mounted individually	10 units
VT17106  1	630	With snap-in slide for adapting to the respective size of the bar	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10	**BBS-1/FL** 107161	can be mounted individually	10 units

xBoard

Powering Business Worldwide

Poles Number	Max. Rated Operational Current Ie (A)	Special Features	Utilisation	**Designation** Article No.	Notes	Units per Package
Busbar Covers						
VT19706 	–	–	–	12 x 5 15 x 5 20 x 5 25 x 5 30 x 5	**BBC-FL5** 107173	12-30x5 1000 mm long	10 units
VT19406 	–	–	–	12 x 10 15 x 10 20 x 10 25 x 10 30 x 10	**BBC-FL10** 107174	12-30x10 1000 mm long	10 units

Max. Rated Operational Current Ie (A)	Dimension (mm x mm)	Length (mm)	**Designation** Article No.	Notes	Units per Package
Copper Flat Rails					
wa_vt00408 					
160	12 x 5	1500	**CU12X5** 034121	tinned	10 units
		2250	**CU12X5-2250** 005093	tinned	10 units
250	20 x 5	1500	**CU20X5** 044092	tinned	10 units
		2250	**CU20X5-2250** 007466	tinned	10 units
460	20 x 10	1500	**CU20X10** 041719	tinned	10 units
		2250	**CU20X10-2250** 009839	tinned	10 units
wa_vt00308 					
630	30 x 10	1500	**CU30X10** 051211	untreatedly	10 units

Systems up to 1250, 1600 A for Profile Bars

Poles Number	Max. Rated Operational Current Ie (A)	Special Features	Utilisation	**Designation** Article No.	Notes	Units per Package
Busbar Support Double-T-Profile						
VT12906  3	1600	Suitable as lateral and central support	Double-T-Profile	**BBS-3/PR** 107162	With pre-drilled holes inside for screw-fixing	3 units
VT18606  1	1600	Suitable for setting up a PE or N bar	Double-T-Profile	**BBS-1/PR** 107165	With pre-drilled holes inside for scew-fixing	10 units
End Cover						
VT13906  –	–	–	For the BBS-3/PR support	**ES-BBS-3/PR** 107164		4 units
UL Base Plate						
VT19806  –	–	To be used when the air gap between fully equipped busbar systems and the mounting plate is insufficient	For UL508A-systems necessarily	**BBC-BT-NA** 107172	1100 mm long	2 units
Double-T-Profile Busbar						
VT19206  –	1250[1)]	Tin-plated Cross-section 500 mm^2	For BBS-3/PR and BBS-1/PR supports	**CU-BAR-500/T** 107166	2400 mm long	1 unit
VT19106  –	1600[1)]	Tin-plated Cross-section 720 mm^2	For BBS-3/PR and BBS-1/PR supports	**CU-BAR-720/T** 107167	2400 mm long	1 unit
Busbar Cover						
VT19506  –	–	–	Fór double-T-profile	**BBC-CU-BAR/PR** 107175	1000 mm long	5 units

[1)] At a busbar temperature of 87.5°C and an ambient temperature of 35°C, please refer to the current load diagram in the Technical Data section for further values.

xBoard

Covers for 630, 1250 and 1600 A Systems

Utilisation	Designation Article No.	Notes	Units per Package
Spare Section Cover - Modular			
VT19306  To cover the front of the 60 mm system	**BBC-RCOV1** 107178	1100 mm long. To be used with BBC-MRCOV1 support only	2 units
Support for Spare Section Cover			
VT17006  Suits any thickness of bars	**BBC-MRCOV1** 107179	To be used with spare section cover BBC-RCOV1 only	10 units
Cover complete			
VT12006  For 3-pole systems	**BBC-CS1** 107209	228 mm long	1 unit
System Cover - Kit			
Cover Profile - Front			
VT12006  For 3-pole systems	**BBC-CS2-F** 107180	1100 mm long	1 unit
Cover Profile - Top/Bottom			
–	**BBC-CS2-T/B** 107181	1100 mm long	2 units
Support Set for Cover Profile			
For 3-pole systems	**BBC-MCS2** 107182	1 set includes a right and left side support	1 unit
Single covers			
Compartment Section Double-T			
VT19006 For 3-pole systems with BBS-3/PR	**BBC-CS48/PR** 107176	48 mm high 2400 mm long To be fixed at the (profile) bar support	1 unit
VT18906  For 3-pole systems with BBS-3/PR	**BBC-CS76/PR** 107177	76 mm high 2400 mm long To be fixed at the (profile) bar support	1 unit
Front Plate Cover for front plate cut-out			
SG13506  Cover module for cut-out Height = 195 mm	**AM-195/54** 107963	54 mm width	15 units

Feeder Circuit Adapters for 630, 1250 and 1600 A Systems

Poles Number	Max. Rated Operational Current Ie (A)	Type of Conductor [1]	Utilisation	**Designation** Article No.	Notes	Units per Package
Connecting Terminal Plates						
VT05207  3	80	1.5 - 16 mm² AWG 16 - AWG 6. ⊛ ⊙	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10 Double-T-Profile	**BBA-TP3/16** 107183	20 mm wide. With spring-type terminal technology.	1 unit
VT12306  3	300	6 - 50 mm² AWG 10 - AWG 2/0. ⊛ ⊙ ▤ 6x9x0.8	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10 Double-T-Profile	**BBA-TP3/50** 107183	54 mm wide. Terminals can be removed for connecting non-cut conductors. Looping them through is possible.	1 unit
VT12206  3	440	35 - 120 mm² AWG 2 - MCM 250. ⊛ ⊙ ▤ 10x16x0.8	12x5/10 15x5/10 20x5/10 25x5/10 30x5/10 Double-T-Profile	**BBA-TP3/120** 107184	81 mm wide. Terminals can be removed for connecting non-cut conductors Looping them through is possible.	1 unit

[1] ◯ Round conductor, single-wired
⊛ Round conductor, fine-wired with expertly pressed wire end ferrule
⊙ Round conductor, multi-wired
◇ Sector conductor, single-wired
◈ Sector conductor, multi-wired
▤ Cu-Band
■ Cu-Bar

xBoard

Powering Business Worldwide

Feeder Circuit Adapters for 630, 1250 and 1600 A Systems

Poles Number	Max. Rated Operational Current Ie (A)	Type of Conductor [1]	Utilisation	**Designation** Article No.	Notes	Units per Package
Connecting Set with Cover						
VT19606  3 x 1	560	120 - 300 mm² MCM300 - MCM600. ⊛ ⊙ ◈	20x5/10 25x5/10 30x5/10 Double-T-Profile	**BBA-TP3/300** 107185	180 - 240 mm wide. Clearance between poles can be adjusted as required. To be fixed directly on top of the busbar terminal. Incl. cover cap in flexible width. 1 set includes 3 pole elements. Looping through is possible.	1 unit
VT12006 						
VT19606  3 x 1	800	Up to ▤ 10x32x1 ■ 30x25	20x5/10 25x5/10 30x5/10 Double-T-Profile	**BBA-TP3/CU-BAND** 107186	180 - 240 mm wide. Clearance between poles can be adjusted as required. To be fixed directly on top of the busbar terminal. Incl. cover cap in flexible width. 1 set includes 3 pole elements. Looping through is possible.	1 unit
VT12006 						
VT09408  3 x 1	1600	Up to ▤ (2x)10x50x1 Up to ■ (2x)50x10	30x10 Double-T-Profile	**BBA-TP3/1000** 107207	228 mm wide. Co-ordinated up for Moeller NZM4. To be fixed directly on top of the busbar terminal. Incl. cover cap. 1 set includes 3 pole elements. Looping through is possible.	1 unit
VT12006 						

[1] ◯ Round conductor, single-wired
⊛ Round conductor, fine-wired with expertly pressed wire end ferrule
⊙ Round conductor, multi-wired
◇ Sector conductor, single-wired
◈ Sector conductor, multi-wired
▤ Cu-Band
■ Cu-Bar

xBoard

Terminals for 630, 1250 and 1600 A Systems

	Max. Rated Operational Current Ie (A)	Type of [1] Conductor	Special Features	Utilisation	**Designation** Article No.	Notes	Units per Package
	Brace Terminals						
VT13306 	500	95 - 185mm², AWG3/0 - MCM350. directy terminated,	Connection method to busbars without drilling	20x5/10 25x5/10 30x5/10 Double-T-Profile	**AKS185** 107195	Contacting of wire and busbar via a cable bed	6 units
VT13406 	600	150 - 300mm², MCM300 - MCM600. directly terminated,	Connection method to busbars without drilling	20x5/10 25x5/10 30x5/10 Double-T-Profile	**AKS300** 107196	Contacting of wire and busbar via a cable bed	3 units
VT13206 	800	3x20x1 to 2x(10x32x1) 32x25	Connection method to busbars without drilling	20x5/10 25x5/10 30x5/10 Double-T-Profile	**AKS-CU-BAND** 107197	Contacting of wire and busbar via a contacting block	3 units
VT09408 	1600	Up to (2x)10x50x1 Up to (2x)50x10	Connection method to busbars without drilling	20x5/10 25x5/10 30x5/10 Double-T-Profile	**AKS1000** 107208	Contacting of wire and busbar via a contacting block	3 units
	Profile Terminals [2]						
VT17906 	1600	800 mm², Termination space 41 x 20-42	Connection method to busbars without drilling	Double-T-Profile	**AKP800** 107198	In case of parallel connection of multi-layer copper bars, please place spacers in between	3 units
VT17806 	1600	1000 mm², Termination space 51 x 20-42	Connection method to busbars without drilling	Double-T-Profile	**AKP1000** 107199	In case of parallel connection of two multi-layer copper bars, please place spacers in between	3 units

[1] Round conductor, single-wired
Round conductor, fine-wired with expertly pressed wire end ferrule
Round conductor, multi-wired
Sector conductor, single-wired
Sector conductor, multi-wired
Cu-Band
Cu-Bar

[2] For a UL508A system with profile terminals you need to use the UL base plate BBC-BT-NA and the busbar cover BBC-CU-BAR/PR.

xBoard

EATON Powering Business Worldwide

Terminals for 630, 1250 and 1600 A Systems

	Max. Rated Operational Current Ie (A)	Type of Conductor [1]	Special Features	Utilisation	**Designation** Article No.	Units per Package
	Universal Conductor Terminal 5 mm					
VT18406 	180	1.5 - 16mm^2, AWG 14 - AWG 6. directly terminated, 8x6x0.5	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 5 mm	**AKU16/5** 107187	100 units
VT18306 	270	4 - 35mm^2, AWG 10 - AWG 2. directly terminated, 3x9x0.8 or 6x9x0.8	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 5 mm	**AKU35/5** 107188	50 units
VT18206 	400	16 - 70mm^2, AWG 4 - AWG 2/0. directly terminated, 2x(3x9x0.8) or 6x9x0.8	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 5 mm	**AKU70/5** 107189	25 units
VT18106 	440	16 - 120mm^2, AWG 4 - MCM 250. directly terminated, 4x16x0.8 or 6x16x0.8 or 10x16x0.8	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 5 mm	**AKU120/5** 107190	25 units

[1] Round conductor, single-wired
Round conductor, fine-wired with expertly pressed wire end ferrule
Round conductor, multi-wired
Sector conductor, single-wired
Sector conductor, multi-wired
Cu-Band
Cu-Bar

xBoard

EATON Powering Business Worldwide

Terminals for 630, 1250 and 1600 A Systems

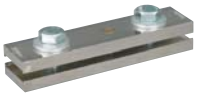
	Max. Rated Operational Current Ie (A)	Type of Conductor [1]	Special Features	Utilisation	**Designation** Article No.	Units per Package
	Universal Connection Terminal 10 mm					
VT13806 	180	1.5 - 16mm^2, AWG 14 - AWG 6. directly terminated, 8x6x0.5	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 10 mm	**AKU16/10** 107191	100 units
VT13706 	270	4 - 35mm^2, AWG 10 - AWG 2. directly terminated, 3x9x0.8 or 6x9x0.8	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 10 mm	**AKU35/10** 107192	50 units
VT13606 	400	16 - 70mm^2, AWG 4 - AWG 2/0. directly terminated, 2x(3x9x0.8) or 6x9x0.8	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 10 mm, double-T-profile	**AKU70/10** 107193	25 units
VT13506 	440	16 - 120mm^2, AWG 4 - MCM 250. directly terminated, 4x16x0.8 or 6x16x0.8 or 10x16x0.8	With integrated retaining spring, captive terminal screw	All flat busbars of a thickness of 10 mm, double-T-profile	**AKU120/10** 107194	25 units

[1] Round conductor, single-wired
Round conductor, fine-wired with expertly pressed wire end ferrule
Round conductor, multi-wired
Sector conductor, single-wired
Sector conductor, multi-wired
Cu-Band
Cu-Bar

xBoard

EATON Powering Business Worldwide

Lengthwise Bar Connections for 630, 1250 and 1600 A Systems

	Max. Rated Operational Current Ie (A)	Length (mm)	Special Features	Utilisation	**Designation** Article No.	Notes	Units per Package
Busbar Connecting Terminals							
VT18506 	630	150	For identically shaped, flat copper bars	12 x 5/10 15 x 5/10 20 x 5/10	**BBT-CU12-20X5/10-150** 107200	Spacing between systems up to 110 mm	3 units
VT17506 	630	95	For identically shaped, flat copper bars	20 x 5/10 25 x 5/10 30 x 5/10	**BBT-CU20-30X5/10-95** 107201	Spacing between systems 50 - 60 mm. Max. permissible mis-alignment of bars is 5 mm	3 units
VT17406 	630	150	For identically shaped, flat copper bars	20 x 5/10 25 x 5/10 30 x 5/10	**BBT-CU20-30X5/10-150** 107202	Spacing between systems 100 - 110 mm. Max. permissible mis-alignment of bars is 5 mm	3 units
VT17306 	1600	50	For different and identical types of double-T-profile bars	Double-T-profile	**BBT-CU-BAR500/720-50** 107203	Spacing between systems 9 - 20 mm. Max. permissible mis-alignment of bars is 2 mm	6 units
VT17206 	1600	150	For different and identical types of double-T-profile bars	Double-T-profile	**BBT-CU-BAR500/720-150** 107204	Spacing between systems 100 - 110 mm. Max. permissible mis-alignment of bars is 5 mm	3 units

NZM Busbar Adapter, 3-pole [1], for Copper Bars 12 - 30 x 5/10, Double-T-Profile

	Max. Rated Oper. Current Ie (A)	Rated Operational Voltage Ue (V)	Adapter Width (mm)	Adapter Length (mm)	Special Features	Utili-sation	**Designation** Article No.	Notes	Units per Package
Busbar Adapter NZM									
VT16206 	160	690	90	200	For connecting to the system **at the top** through fixed connection bars included in the scope of delivery[2]	NZM1 PN1 N1 NS1	**NZM1-XAD160** 104554	For switches with standard connection frame-type terminals. To be snapped onto the busbar by means of a combi-base.	1 unit
VT17706 	250	690	106	190	For connecting to the system **at the top/bottom** through a tube-type of connection at the rear. Tube included in the scope of delivery.	NZM2 PN2 NS2	**NZM2-XAD250** 104555 N2	Use only in combinatiion with auxiliary type (+)NZM2-XKR4. To be screwed onto the busbar by means of a claw-type of clamp.	1 unit
VT04008, VT17706 	630	690	140	300	For connecting to the system **at the top/bottom** through a tube-type of connection at the rear. Tube included in the scope of delivery.	NZM3 PN3 N3	**NZM3-XAD630** 107206	Use only in combination with auxiliary type (+)NZM3-XKR13. To be screwed onto the busbar by means of a claw-type of clamp.	1 unit
Terminal for device adadpter NZM									
VT18806 	250	690	–	–	To cover the connection to the system **at the top/bottom**	NZM2 PN2 N2 NS2	**NZM2-XKR4** 281666	For device combination NZM2 use with auxiliary type +NZM2-XKR4O or +NZM2-XKR4U	1 unit
VT18706 	550	690	–	–	To cover the connection to the system **at the top/bottom**	NZM3 PN3 N3	**NZM3-XKR13** 281668	For device combination NZM3 use with auxiliary type +NZM3-XKR13O or +NZM3-XKR13U	1 unit

[1] To be snapped onto the voltage-free busbar.
[2] Thanks to the combi-base it can be adjusted to a bar width of both 5 and 10 mm, cross-section of conductor 6 x 9 x 0.8.

Powering Business Worldwide

xStart Busbar Adaptor, 3-pole [1)]

Max. Rated Operational Current Ie (A)	Rated Operational Voltage Ue (V)	Wire Cross Section	Adapter Width (mm)	Adapter Length (mm)	Support Rails	Utilisation	Designation Article No.	Notes	Units per Package
xStart Busbar Adaptor 25 A									
VT15906  25	690	AWG12	45	200	1	PKZM0+ Contactor DIL M 7 Contactor DIL M 9 Contactor DIL M 12 Contactor DIL M 15 MSC-D-0.25-M7… to MSC-D-16-M15…	**BBA0-25** 101451	Direct starter set PKZM0-XDM12	4 units
VT14306  25	690	AWG12	90	200	1	PKZM0+ 2x Contactor DIL M 7-01 2x Contactor DIL M 9-01 2x Contactor DIL M 12-01 MSC-R-0.25-M7… to MSC-R-12-M12…	**BBA0R-25** 101453	Reversing starter set PKZM0-XRM12	2 units
xStart Busbar Adaptor 25 A, Universal Type									
VT15306  25	690	AWG12	45	200	2	Support rail adjustable on the 1.25 mm grid	**BBA0-25/2TS** 101481		4 units
xStart Busbar Adaptor 32 A									
VT15706  32	690	AWG10	45	200	2	PKZM0+ Contactor DIL M 17 Contactor DIL M 25 Contactor DIL M 32 MSC-D-16-M17… to MSC-D-32-M32…	**BBA0-32** 101452	Electrical contact module PKZM0-XM32 DE	4 units
VT14906  32	690	AWG10	90	200	3	PKZM0+ 2x Contactor DIL M 17-01 2x Contactor DIL M 25-01 2x Contactor DIL M 32-01 MSC-R-16-M17… to MSC-R-32-M32…	**BBA0R-32** 101454	Electrical contact module PKZM0-XM32 DE Reverse wiring set DILM32-XRL	2 units
xStart Busbar Adaptor 32 A, for Spring-type Terminal									
wa_vt00608  32	690	–	45	200	2	Support rail adjustable on the 1.25 mm grid	**BBA0-32/2TS-C** 116708	With spring-type terminal technology, up to 1.5-6 mm^2. For example for 1-phase applikations.	4 units

[1)] Can be used with all busbars in a 60 mm system. Thanks to the combi-base it is suitable for both 5 mm and 10 mm thickness of the bar as well as for double-T-profile bars.
To be snapped onto the voltage-free busbar.

xStart Busbar Adaptor, 3-pole [1)]

VT16406



VT16606



Max. Rated Operational Current Ie (A)	Rated Operational Voltage Ue (V)	Wire Cross Section	Adapter Width (mm)	Adapter Length (mm)	Support Rails	Utilisation	Designation Article No.	Notes	Units per Package
xStart Busbar Adaptor 63 A									
63	690	AWG8	72	260	2	PKZ2+ Contactor DIL M 7 Contactor DIL M 9 Contactor DIL M 12 Contactor DIL M 17 Contactor DIL M 25 Contactor DIL M 32 Contactor DIL M 40	**BBA2L-63** 101480		2 units
63	690	AWG8	72	200	1	PKZ2	**BBA2-63** 101458		4 units
63	690	AWG8	72	200	2	PKZ2+ Contactor DILM7 - DILM15 DILM17 - DILM38 DILM40 - DILM 65 Switch drive SE1A-PKZ2 and S-PKZ2 in connection with clipsplate C-PKZ2	**BBA2-63/2TS** 116900		4 units
63	690	AWG8	55	260	2	PKZM4+ Contactor DIL M 17 Contactor DIL M 25 Contactor DIL M 32 Contactor DIL M 40 Contactor DIL M 50 Contactor DIL M 65	**BBA4L-63** 101459	Electrical connector for PKZM4+DILM40...65: PKZM4-XM65 DE	4 units
63	690	AWG8	55	200	1	PKZM4	**BBA4-63** 101457		4 units
xStart Busbar Adaptor 80 A									
80	690	–	72	200	2	universal	**BBA2-80/2TS-S** 116901	with screw-type terminal technology up to AWG6, for example for 1-phase applications (not UL/CSA compatible without an additional component)	4 units

[1)] Can be used with all busbars in a 60 mm system. Thanks to the combi-base it is suitable for both 5 mm and 10 mm thickness of the bar as well as for double-T-profile bars.
To be snapped onto the voltage-free busbar.

xStart Busbar Adaptor, 3-pole [1)]

Max. Rated Operational Current Ie (A)	Rated Operational Voltage Ue (V)	Wire Cross Section	Adapter Width (mm)	Adapter Length (mm)	Support Rails	Utilisation	Designation Article No.	Notes	Units per Package
xStart Busbar Adaptor, Universal Type									
–	–	–	45	200	2	Support rail adjustable on the 1.25 mm grid	**BBA0/2TS-L** 101482	Without electrical contacting, auxiliary to BBA... for the setup of reversing starters, for example	4 units
–	–	–	54	260	2	Support rail adjustable on the 1.25 mm grid	**BBA4/2TS-L** 101483	Without electrical contacting, auxiliary to BBA... for the setup of reversing starters, for example	4 units
Side Module									
–	–	–	9	200	–		**BBA-XSM** 101484	Can be placed on both sides of BBA, to increase the add-on width	10 units

VT16106



VT16806



VT16906



Accessories

Width (mm)	Notes	Type Designation	Article No.	Units per package
Support rail				
45	Used for	PKZM0-XMR	239364	10 units
54	BBA...	PKZM0-XMR54	113911	10 units
72	adapter	PKZM0-XMR72	113912	10 units
Connecting cable				
	Used for BBA with screw-type or spring-type terminals	BBA-XLT-6-130	116902	30 units
		BBA-XLT-16-142	116903	30 units

wa_vt00508



Double adapter Z-SS-60-ADD/6

- Cross section 6 mm^2 - I_e = 35 A

Width (mm) / MU / Cross section	Type Designation	Article No.	Units per package
45 / 2,5 / 6mm^2	Z-SS-60-ADD/6-45	288790	1 / 10 units
54 / 3 / 6mm^2	Z-SS-60-ADD/6-54	288791	1 / 10 units
72 / 4 / 6mm^2	Z-SS-60-ADD/6-72	288792	1 / 10 units
81 / 4,5 / 6mm^2	Z-SS-60-ADD/6-81	288793	1 / 10 units

wa_sg09804



[1)] Can be used with all busbars in a 60 mm system. Thanks to the combi-base it is suitable for both 5 mm and 10 mm thickness of the bar as well as for double-T-profile bars.
To be snapped onto the voltage-free busbar.

xStart-Busbar Adaptor, 3-pole[1], MSC-D.../BBA

VT04608



Symbol photo

Motor data			Motorstarter Betätigungsspannung 230 V 50 Hz		Motorstarter Betätigungsspannung 24 V DC	
Rated Operational Power AC3 380 V 400 V 415 V P (kW)	Rated Operational Current 400 V Ie (A)	Components *)	**Designation** Article No.	Units per Package	**Designation** Article No.	Units per Package
0.06	0.21	PKZM0-0,25 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-0,25-M7(230V50Hz)/BBA** 102737	1 unit	**MSC-D-0,25-M7(24VDC)/BBA** 102964	1 unit
0.09	0.31	PKZM0-0,4 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-0,4-M7(230V50Hz)/BBA** 102738	1 unit	**MSC-D-0,4-M7(24VDC)/BBA** 102965	1 unit
0.12 0.18	0.41 0.6	PKZM0-0,63 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-0,63-M7(230V50Hz)/BBA** 102739	1 unit	**MSC-D-0,63-M7(24VDC)/BBA** 102966	1 unit
0.25	0.8	PKZM0-1 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-1-M7(230V50Hz)/BBA** 102950	1 unit	**MSC-D-1-M7(24VDC)/BBA** 102967	1 unit
0.37 0.55	1.1 1.5	PKZM0-1,6 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-1,6-M7(230V50Hz)/BBA** 102951	1 unit	**MSC-D-1,6-M7(24VDC)/BBA** 102968	1 unit
0.75	1.9	PKZM0-2,5 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-2,5-M7(230V50Hz)/BBA** 102952	1 unit	**MSC-D-2,5-M7(24VDC)/BBA** 102969	1 unit
1.1 1.5	2.6 3.6	PKZM0-4 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-4-M7(230V50Hz)/BBA** 102953	1 unit	**MSC-D-4-M7(24VDC)/BBA** 102970	1 unit
2.2	5	PKZM0-6,3 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-6,3-M7(230V50Hz)/BBA** 102954	1 unit	**MSC-D-6,3-M7(24VDC)/BBA** 102971	1 unit
3	6.6	PKZM0-10 +DILM7-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-10-M7(230V50Hz)/BBA** 102955	1 unit	**MSC-D-10-M7(24VDC)/BBA** 102972	1 unit
4	8.5	PKZM0-10 +DILM9-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-10-M9(230V50Hz)/BBA** 102956	1 unit	**MSC-D-10-M9(24VDC)/BBA** 102973	1 unit
5.5	11.3	PKZM0-12 +DILM12-10 +PKZM0-XDM12 +BBA0-25	**MSC-D-12-M12(230V50Hz)/BBA** 102957	1 unit	**MSC-D-12-M12(24VDC)/BBA** 102974	1 unit
7.5	15.2	PKZM0-16 +DILM17-10 +PKZM0-XM32 +BBA0-32	**MSC-D-16-M17(230V50Hz)/BBA** 102961	1 unit	**MSC-D-16-M17(24VDC)/BBA** 102978	1 unit
11	21.7	PKZM0-25 +DILM25-10 +PKZM0-XM32 +BBA0-32	**MSC-D-25-M25(230V50Hz)/BBA** 102962	1 unit	**MSC-D-25-M25(24VDC)/BBA** 102979	1 unit
15	29.3	PKZM0-32 +DILM32-10 +PKZM0-XM32 +BBA0-32	**MSC-D-32-M32(230V50Hz)/BBA** 102963	1 unit	**MSC-D-32-M32(24VDC)/BBA** 102980	1 unit

*) Technical details see Moeller main catalogue Industrial Switch Gear

[1] Can be used with all busbars in a 60 mm system. Thanks to the combi-base it is suitable for both 5 mm and 10 mm thickness of the bar as well as for double-T-profile bars.
To be snapped onto the voltage-free busbar.

xStart-Busbar Adaptor, 3-pole[1], MSC-R.../BBA

VT04508



Symbol photo

Motor data			Motorstarter Betätigungsspannung 230 V 50 Hz		Motorstarter Betätigungsspannung 24 V DC	
Rated Operational Power AC3 380 V 400 V 415 V P (kW)	Rated Operational Current 400 V Ie (A)	Components *)	**Designation** Article No.	Units per Package	**Designation** Article No.	Units per Package
0.06	0.21	PKZM0-0,25 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-0,25-M7(230V50Hz)/BBA** 102981	1 unit	**MSC-R-0,25-M7(24VDC)/BBA** 102997	1 unit
0.09	0.31	PKZM0-0,4 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-0,4-M7(230V50Hz)/BBA** 102982	1 unit	**MSC-R-0,4-M7(24VDC)/BBA** 102998	1 unit
0.12 0.18	0.41 0.6	PKZM0-0,63 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-0,63-M7(230V50Hz)/BBA** 102983	1 unit	**MSC-R-0,63-M7(24VDC)/BBA** 102999	1 unit
0.25	0.8	PKZM0-1 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-1-M7(230V50Hz)/BBA** 102984	1 unit	**MSC-R-1-M7(24VDC)/BBA** 103000	1 unit
0.37 0.55	1.1 1.5	PKZM0-1,6 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-1,6-M7(230V50Hz)/BBA** 102985	1 unit	**MSC-R-1,6-M7(24VDC)/BBA** 103001	1 unit
0.75	1.9	PKZM0-2,5 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-2,5-M7(230V50Hz)/BBA** 102986	1 unit	**MSC-R-2,5-M7(24VDC)/BBA** 103002	1 unit
1.1 1.5	2.6 3.6	PKZM0-4 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-4-M7(230V50Hz)/BBA** 102987	1 unit	**MSC-R-4-M7(24VDC)/BBA** 103003	1 unit
2.2	5	PKZM0-6,3 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-6,3-M7(230V50Hz)/BBA** 102988	1 unit	**MSC-R-6,3-M7(24VDC)/BBA** 103004	1 unit
3	6.6	PKZM0-10 +2xDILM7-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-10-M7(230V50Hz)/BBA** 102989	1 unit	**MSC-R-10-M7(24VDC)/BBA** 103005	1 unit
4	8.5	PKZM0-10 +2xDILM9-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-10-M9(230V50Hz)/BBA** 102990	1 unit	**MSC-R-10-M9(24VDC)/BBA** 103006	1 unit
5.5	11.3	PKZM0-12 +2xDILM12-01 +PKZM0-XMR12 +BBA0R-25	**MSC-R-12-M12(230V50Hz)/BBA** 102991	1 unit	**MSC-R-12-M12(24VDC)/BBA** 103007	1 unit
7.5	15.2	PKZM0-16 +2xDILM17-01 +PKZM0-XMR32 +DILM32-XRL	**MSC-R-16-M17(230V50Hz)/BBA** 102994	1 unit	**MSC-R-16-M17(24VDC)/BBA** 103010	1 unit
11	21.7	PKZM0-25 +2xDILM25-01 +PKZM0-XMR32 +DILM32-XRL	**MSC-R-25-M25(230V50Hz)/BBA** 102995	1 unit	**MSC-R-25-M25(24VDC)/BBA** 103011	1 unit
15	29.3	PKZM0-32 +2xDILM32-01 +PKZM0-XMR32 +DILM32-XRL	**MSC-R-32-M32(230V50Hz)/BBA** 102996	1 unit	**MSC-R-32-M32(24VDC)/BBA** 103012	1 unit

*) Technical details see Moeller main catalogue Industrial Switch Gear

[1] Can be used with all busbars in a 60 mm system. Thanks to the combi-base it is suitable for both 5 mm and 10 mm thickness of the bar as well as for double-T-profile bars.
To be snapped onto the voltage-free busbar.

Slide Fuse Equipment, 3-pole

Max. Rated Operational Current Ie (A)	Rated Voltage Ue (V AC)	Component Size	Width	Utilisation	**Designation** Article No.	Notes	Units per Package
D-Type Slide Fuse-Base							
• Incl. shock hazard protection cover with front and bottom plate and marking label • Delivered empty, without screw caps							
SG15007							
63	400	E18, D02	27	12 x 5/10 20 x 5/10 25 x 5/10	**D02-SO/63/3-R-27** 114315	Cartridge-ring adapter insert	10 units
			36	30 x 5/10 Double-T	**Z-D02/R/3-36** 100663	Cartridge-ring adapter insert	60 units
			54		**Z-D02/R/3-54** 100664	Cartridge-ring adapter insert	40 units
SG12506							
25	500	E27, D II	45	12 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**DII-SO/25/3-R** 107965	Gauge ring	10 units
					DII-SO/25/3-R-PS 110394	Screw-in gauge ring	10 units
SG12606							
63	690	E33, D III	54	12 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**DIII-SO/63/3-R** 107966	Gauge ring	10 units
					DIII-SO/63/3-R-PS 110395	Screw-in gauge ring	10 units
Covers							
SG15205 Set for covering busbar support			36	D02	**Z-D02-S-AB-SET** 100662	Suitable for D02-SO/63/3-R-27	10 units
SG04407 Side cover				DII.	**SBS-RS60** 060541	Suitable for DII.-SO/.../3-R	10 units
Screw Caps							
SG11205 63	400	E18, D02	–	D02-SO...	**Z-D02/SK** 100651	–	20/500
25	500	E27, D II	–	DII-SO...	**Z-DII/SK** 112148	–	50/600
63	500	E33, D III	–	DIII-SO...	**Z-DIII/SK** 112149	–	30/360
63	690	E33, D III	–	DIII-SO...	**Z-DIII/SK-690** 118904	–	3
Adapter Spring							
• to accommodate D01 fuse-links in Z-D02/SK screw caps							
Wa_sg02502 16	–	D02-D01	–	–	**Z-D02/SIKA-HF** 263149	–	50/3000

Accessories: For fuse-links, cartridge-ring adapter inserts, gauge rings and screw-in gauge rings see chapter Accessories Fuse Devices

Slide Fuse Equipment, 3-pole

Max. Rated Operational Current Ie (A)	Rated Voltage Ue (V AC)	Component Size	Width	Utilisation	Designation Article No.	Notes	Units per Package
D02 Switch-Disconnector-Fuse							
• Incl. shock hazard protection cover with front and bottom plate • Delivered empty, without screw caps							
SG18705 							
63	400	E18, D02	36	20 x 5/10 30 x 5/10 Double-T	**D02-S/63/3-RS** 284649	Cartridge-ring adapter insert	10 units
Screw Cap							
SG11205 							
63	400	E18, D02	–	D02-SO...	**Z-D02/SK** 100651	–	20/500
Adapter Spring							
• to accommodate D01 fuse-links in Z-D02/SK screw caps							
Wa_sg02502 							
16	–	D02-D01	–	–	**Z-D02/SIKA-HF** 263149	–	50/3000
Accessories: For fuse-links, cartridge-ring adapter inserts see chapter Accessories Fuse Devices							
D02 Switch-Disconnector-Fuse with visual tripping indicator							
• Visiual tripping indicator is flashing • Delivered empty, without cartridge-ring adapter inserts and fuse-links • Delivered with adapter springs for D01-fuse-links or cylindrical fuse-links 10x38 • Contact position indicator red - green • Plug-in technique without screw caps • All-pole and hand independent switching of load • Version D02-LTS/63/3-R-HK with incorporated auxliliary switch • seal- and lockable							
SG16007 							
63 32	400 400	E18, D02 C 10x38	27	12 x 5/10 15 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**D02-LTS/63/3-R** 114316	Cartridge-ring adapter insert without auxiliary switch	3 units
					D02-LTS/63/3-R-HK 114318	Cartridge-ring adapter insert with auxiliary switch	3 units
Accessories for D02-LTS/63/3-R..							
D0 fuse-links Z-D0./SE-... Cartridge-ring adapter inserts D01: Z-D02-D01/PE-... D02: Z-D02/PE-... Adapter spring Z-D02-LTS-HF (scope of delivery)							
C fuse-links Z-C10/SE-... Adapter spring Z-D02-LTS-HF (scope of delivery)							
See chapter Accessories Fuse Devices							
Adapter Spring							
• to accommodate D01 fuse-links or cylindrical fuse-links 10x38 in the switch-disconnector-fuse D02-LTS/63...							
SG18907 							
16 32	–	D02-D01 C 10x38	–	–	**Z-D02-LTS-HF** 114323	–	12 / 288
Accessories: For fuse-links, cartridge-ring adapter inserts see chapter Accessories Fuse Devices							

Powering Business Worldwide

Slide Fuse Equipment, 3-pole

Max. Rated Operational Current Ie (A)	Max. Fuse-link 500V (A)	690V (A)	Component Size	Utilisation	Designation Article No.	Notes	Units per Package
NH-Fuse-Switch-Disconnector							
• Incl. shock hazard protection at the top and bottom (except with GST-160-40-60-AOU) • Drill-free mounting							
SG10006 							
100	100	–	NH000	20 x 5/10 30 x 5/10 Double-T	**LTS-100/C00/3-R** 284690	Width 63 mm. Connection at the bottom. Lift terminal 1.5-50mm^2	1 unit
SG10106 							
160	160	100	NH00	20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**GST00-160-40-60-AOU** 224550	Connection at the top or bottom. Lift Terminal 1.5-50mm^2 No shock hazard	1 unit
For ordering information on shock hazard protection BS-SET-GST00 see “Accessories” protection.							
SG10306 							
250	250	200	NH1	20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**GST1-AO** 107250	Connection at the top. Screw M10.	1 unit
					GST1-AU 107251	Connection at the bottom. Screw M10.	1 unit
SG10406 							
400	400	315	NH2	20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**GST2-AO** 107252	Connection at the top. Screw M10	1 unit
					GST2-AU 107253	Connection at the bottom. Screw M10.	1 unit
SG10506 							
630	630	500	NH3	20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**GST3-AO** 107254	Connection at the top. Screw M10.	1 unit
					GST3-AU 107255	Connection at the bottom. Screw M10.	1 unit

Accessories for NH-Fuse-Switch-Disconnector

Shock Hazard Protection Set GST00

SG10206 							
–	–	–	–	GST00...	**BS-SET-GST00** 107955	1 set includes shock hazard protection at the top and bottom.	1 unit

For NH-fuse-links Z-NH... and solid-links Z-NH-../TR see chapter Accessories Fuse Devices.

Powering Business Worldwide

Slide Fuse Equipment, 3-pole

Rated Operational Voltage	Component Size	Utilisation	**Designation** Article No.	Notes	Units per Package

Switch cover with Fuse Monitoring for NH-Fuse-Switch-Disconnector

- Operating indication 1 green LED
  Error indication 3 red LEDs (F1, F2, F3)
- Error indication via relay contacts (potential-free)
  1 NO + 1 NC contact
  AC15: 24 V / 4 A, 230 V / 3 A
  AC13: 24 V / 1 A, 220 V / 0.5 A
  Terminal capacity: 0.25 - 1.5 mm²

SG12906



400-690 V / 50-60 Hz	00	GST00...	**GST00-DSI** 107956		1 unit
	1	GST1...	**GST1-DSI** 107957		1 unit
	2	GST2...	**GST2-DSI** 107958		1 unit
	3	GST3...	**GST3-DSI** 107959		1 unit

Terminal Capacity	Utilisation	**Designation** Article No.	Notes	Units per Package

Set of Prism Terminals

wa_vt00406



70-150 mm²	GST1...	**PSK1** 038734	One set includes 3 prism terminals	1 unit
120-240 mm²	GST2...	**PSK2** 043480	One set includes 3 prism terminals	1 unit
120-300 mm²	GST3...	**PSK3** 048226	One set includes 3 prism terminals	1 unit

Set of Double-Prism Terminals

wa_vt00506



2x(70-95) mm²	GST1...	**PSK12** 041107	One set includes 3 double-prism terminals	1 unit
2x(120-150) mm²	GST2...	**PSK22** 045853	One set includes 3 double-prism terminals	1 unit
2x(120-240) mm²	GST3...	**PSK32** 050599	One set includes 3 double-prism terminals	1 unit

Clamp-Type Terminal

wa_vt00306



25-150 mm² Cu-Band 6 x 16 x 0.8 mm	GST1...	**SK1-GS** 107960		3 units
25-240 mm² Cu-Band 10 x 16 x 0.8 mm	GST2...	**SK2-GS** 107961		3 units
25-300 mm² Cu-Band 11 x 21 x 1 mm	GST3...	**SK3-GS** 107962		3 units

Slide Fuse Equipment, 3-pole

Max. Rated Operational Current Ie (A)	Max. Fuse-link 400V (A)	690V (A)	Component Size	Utilisation	Designation Article No.	Notes	Units per Package
NH-Vertical Fuse-Switch-Disconnector							
• Incl. cover for termination space • Drill-free mounting • Clamp straps included in the delivery							
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	**NH-SLS-00/160-60** 106211	Connection at the top or bottom	1 / 182
With fuse monitoring							
160	160	–	00	12 x 5/10 20 x 5/10 25 x 5/10 30 x 5/10 Double-T	**NH-SLS-00/160-60-SI** 106216	Connection at the top or bottom	1 / 112

SG00406



Teminal Cover/Size Compensation for GST...

SG00606

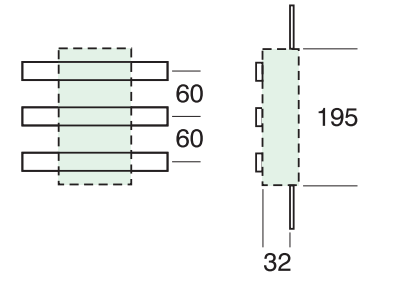


For NH-SLS-00/160-60	**Z-NH-SLS-KA** 106223	2 units

For NH-fuse-links Z-NH/00... and solid-links Z-NH-00/TR see chapter Accessories Fuse Devices

Coordination Table

• Combinations possible without bending the copper busbar





	Device	GST-00-160-40-60-AOU	LTS-100/C00/3-R	D02-S/63/3-RS	D02-LTS/63/3-R(-HK)	D02-SO/63/3-R-27 Z-D02/R/3-..	DII-SO/25/3-R(-PS)	DIII-SO/63/3-R(-PS)
	Accessory	BS-SET-GST00					SBS-RS60	SBS-RS60
Cu	12x5/10				X	X	X	X
	20x5/10	X	X	X	X	X	X	X
	25x5/10	X			X	X	X	X
	30x5/10	X	X	X	X	X	X	X
	Double-T	X	X	X	X	X	X	X

wa_vt04807



Multi-layer Copper Band, insulated

- E-Cu conductor, tin-plated
- Rated voltage 690 V AC
- UL-listed for max. 600 V AC
- Breakdown voltage 20 kV/mm
- Insulating material heat resistant up to +105° Celsius
- Self-extinguishing according to UL94VO
- 2000 mm long

Max. Rated Operational Current Ie (A)	Dimensions (Number of layers x width x thickness of layers) (mm)	Cross Section (mm^2)	**Designation** Article No.	Notes	Units per Package
100	3 x 9 x 0.8	21.6	**CU-BAND3X9X0,8-BK** 081167	black	20 units
	3 x 9 x 0.8	21.6	**CU-BAND3X9X0,8-BU** 080960	blue	20 units
	3 x 9 x 0.8	21.6	**CU-BAND3X9X0,8-GNYE** 081006	green/yellow	20 units
160	6 x 9 x 0.8	43.2	**CU-BAND6X9X0,8-BK** 081414	black	10 units
	6 x 9 x 0.8	43.2	**CU-BAND6X9X0,8-BU** 081344	blue	10 units
	6 x 9 x 0.8	43.2	**CU-BAND6X9X0,8-GNYE** 081367	green/yellow	10 units
200	9 x 9 x 0.8	64.8	**CU-BAND9X9X0,8-BK** 081515	black	10 units
	9 x 9 x 0.8	64.8	**CU-BAND9X9X0,8-BU** 081436	blue	10 units
	9 x 9 x 0.8	64.8	**CU-BAND9X9X0,8-GNYE** 081485	green/yellow	10 units
250	6 x 16 x 0.8	74.4	**CU-BAND6X16X0,8-BK** 081310	black	10 units
	6 x 16 x 0.8	74.4	**CU-BAND6X16X0,8-BU** 081222	blue	10 units
	6 x 16 x 0.8	74.4	**CU-BAND6X16X0,8-GNYE** 081275	green/yellow	10 units
400	10 x 16 x 0.8	124	**CU-BAND10X16X0,8-BK** 080739	black	5 units
	10 x 16 x 0.8	124	**CU-BAND10X16X0,8-BU** 079736	blue	5 units
	10 x 16 x 0.8	124	**CU-BAND10X16X0,8-GNYE** 080698	green/yellow	5 units
	5 x 24 x 1	120	**CU-BAND5X24X1-BK** 119032	black	5 units
630	11 x 21 x 1	231	**CU-BAND11X21X1-BK** 080923	black	5 units
	11 x 21 x 1	231	**CU-BAND11X21X1-BU** 080769	blue	5 units
	11 x 21 x 1	231	**CU-BAND11X21X1-GNYE** 080836	green/yellow	5 units
	8 x 24 x 1	192	**CU-BAND8X24X1-BK** 119033	black	5 units
	10 x 24 x 1	240	**CU-BAND10X24X1-BK** 119034	black	5 units
	5 x 32 x 1	160	**CU-BAND5X32X1-BK** 119035	black	5 units
800	10 x 32 x 1	320	**CU-BAND10X32X1-BK** 119036	black	3 units
1000	10 x 40 x 1	400	**CU-BAND10X40X1-BK** 119037	black	3 units
1250	10 x 50 x 1	500	**CU-BAND10X50X1-BK** 119038	black	2 units
1600	10 x 80 x 1	800	**CU-BAND10X80X1-BK** 119039	black	1 unit

VT04808



VT06008



	Used for	**Designation** Article No.	Notes	Units per Package
Line supports (Short-circuit strength diagrams see Technical Datas)				
Profile ledge	Clamp clips	**BZ248** 076516		10 units
Clamp clips	3 x 9 x 0.8 6 x 9 x 0.8	**BZ249** 078889		10 units
	4 x 16 x 0.8 6 x 16 x 0.8 10 x 16 x 0.8	**BZ251** 081262		10 units
	11 x 21 x 1	**BZ252** 083635		10 units