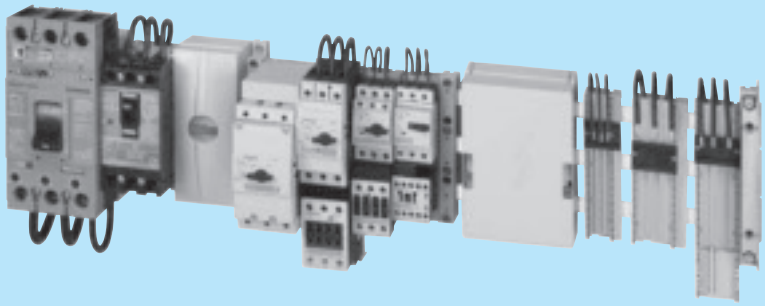
Contents

8US and Fast Bus busbar adapter system

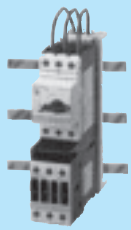


60 mm system Page

FBCB Fast Bus circuit breakers

FBCB Fast Bus main and feeder circuit breakers Page

Fast Bus combination starters

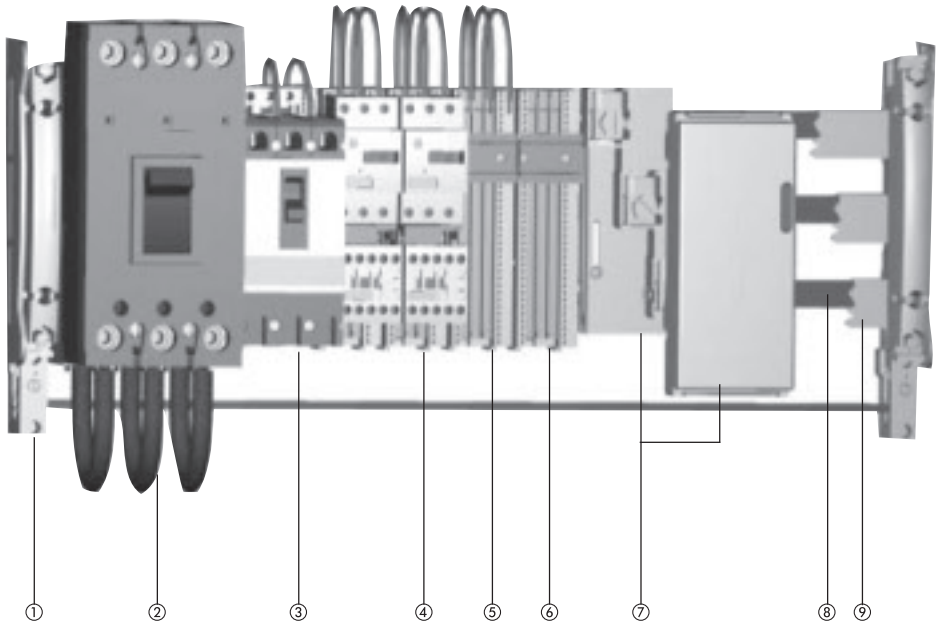


3RA1 Fast Bus combination starters
3RA6 Fast Bus compact starters

Overview

Busbar adapter systems

Busbar adapter systems
with busbar centerline spacing of 60 mm



60 mm busbar system

for sharp-edged copper busbars to DIN 46 433, width 20 mm to 30 mm, thickness 5 mm and 10 mm

General

The Fast Bus Multi-Motor Control system is a 3-phase insulated busbar system used to reduce wire connections and hole drilling when building control panels. SIRIUS 3RV/3RT starter combinations built from components and Siemens circuit breakers use Fast Bus for convenient mounting.

Fast Bus is not new to Siemens. However, due to the narrower SIRIUS starter components, more starters will fit on the same run of Fast Bus.

Features

- Simple economical installation
- Compact design
- Requires fewer mounting holes
- Domestic and International approvals
- Touch safe
- Modular design
- Provision for system expansion
- Clip-on shoes provide mechanical and electrical connections to panel mounted busbar
- Main and Feeder breakers mount to busbars

Benefits

- Saves installation time
- Reduces space requirements
- Minimizes layout time
- Allows flexibility for domestic and export business
- Protection for maintenance personnel
- Improves equipment mounting density
- Reduces time and costs associated with system expansion
- Reduces mounting and wiring time and provides trouble free connections
- Allows for quick retrofitting of breakers

How to Select Fast Bus

1) Determine the required load.

2) Select method to power Fastbus.

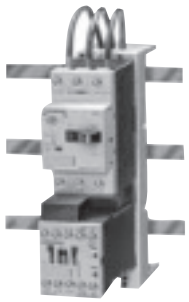
—Main lug up to 600A

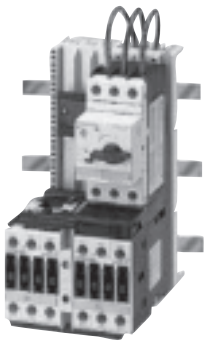
—Circuit breakers, 15A to 500A

If load exceeds 500A, the CB must be separately panel mounted.

3) Select 3RV MSP & 3RT contactor components and appropriate adapter shoe or select 3RA factory assemblies.

4) Select appropriate length busbar, busbar support kit, insulation covers and any other required components.





General Ratings of Fastbus System

	IEC	Domestic
Rated operating voltage	690V	600V
Rated insulation voltage, IEC VDE	AC 1000V	N/A
Temperature stability	Up to 105 degrees C	N/A
Busbar support and adapter shoe material	Glass-reinforced polyamide	Same
Color	RAL 7035, light gray	Same

Ampacity

Three single stack busbars		
5 x 20 mm	3/16" x 3/4"	362A
5 x 25 mm	3/16" x 1"	432A
5 x 30 mm	3/16" x 1 1/8"	500A
Three double stacked busbars		
10 x 20 mm	3/8" x 3/4"	564A
10 x 25 mm	3/8" x 1"	660A
10 x 30 mm	3/8" x 1 1/8"	756A

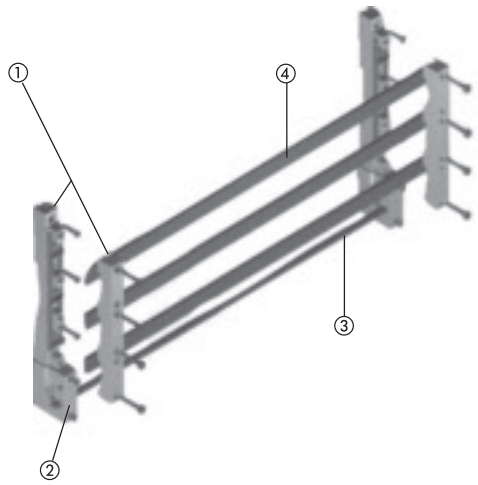
For technical information on E and F frame circuit breakers used as main and feeder breakers, see section 17

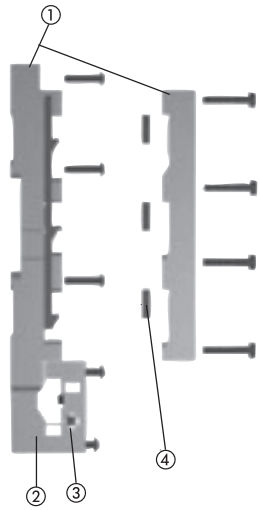
Thermal busbar currents, E-Cu, bare, at 35 °C ambient temperature in accordance with DIN 43 6711

Busbar dimensions	System	Thermal current at Busbar temperature 65 °C	85 °C	105 °C
mm	mm	A	A	A
20 x 5	60	274	362	430
25 x 5	60	327	432	513
30 x 5	60	379	500	595
20 x 10	60	427	564	670
30 x 10	60	573	756	900

8US and Fast Bus Busbar Adapter System

Introduction





Fast Bus set-up

The Fast Bus system is designed to be easy to use and to save set up time.

8US Busbar holders

Because the 8US Busbar holders are adjustable, they can be used with a number of different busbar sizes allowing you to standardize on one style of busbar holder for busbars with a width and thickness of 20 mm x 5 mm up to 30 mm x 10 mm thus providing a wide range of current carrying capability.

High *quality material*

Busbar supports and fuse bases are manufactured from glass-fiber reinforced, thermoplastic polyester with the color RAL 7035, light gray. The material ensures excellent mechanical, chemical and electrical properties. Furthermore, the material has an extremely low flammability and meets the requirements of UL 94 V0.

8WC Busbar and busbar systems

The most common size busbar for applications in the US is the 8WC5053 (20 mm x 5 mm), however there are other styles available depending on your application.

Busbar systems with 60 mm busbar center-to-center clearance have now become firmly established in the US market.

The permissible busbar temperature is a decisive factor when dimensioning the busbars. The busbar temperature is dependent on the current, the current distribution, the busbar cross-section, the busbar surface, the position of the busbar, the convection and the ambient temperature. The values stated in the table on page 5/3 can only be considered as reference values because the conditions vary with each location. The values are based on constant current over the whole busbar length.

The trend toward busbars proves most advantageous when the incoming supply is centrally located and the load is distributed symmetrically on both sides.

For the assemblies of a busbar system in the feeder circuit the UL directives specify components with large clearance in air and creepage distances (see the table below). Components of the 8US1 busbar system which meet this requirement can be found in this chapter.

Note:
The design of an 8US1 busbar system for use in the feeder circuit always presumes the use of the UL base plate (8US19 22-2UA01) so that the clearance in air and creepage distance requirements are met.

Feeder/branch circuit according to UL 508A

The feeder circuit is that part of a circuit which comes in front of the last short circuit protection device (SCPD). The branch circuit is that part of the circuit which follows after the last short circuit protection device. When the 8US1 busbar system is used in a switchgear which must comply with UL directives, it is important to establish whether it is to be used in the feeder circuit or the branch circuit. Components used in the feeder circuit require larger clearance in air and creepage distances than in the branch circuit.

Simple Fast Bus system

The two illustrations above show the very basic items needed when setting up a Fastbus system.

① 8US1 Busbar holder *(5/6)*

② 8US1 Ground busbar support *(shown attached however can be mounted separately 5/6)*

③ Ground busbar 6 mm x 6 mm also available in 5 x 20 mm to 10 x 30 mm

④ 8WC Busbar *(8WC5053 shown)* FBB36 Busbar (5/6)

Short-circuit strength

The short-circuit strength of the busbar system is dependent on the spacing of the busbar holders and on the busbar cross-section.

The short-circuit strength of the whole system is dependent on the short-circuit strength of the busbars and of the adapters with circuit protection.

Applications

The 8US Fast Bus distribution system is ideal for control panel builders with multiple motor applications. These applications are most common in the material handling, automotive, food processing, pharmaceutical and paper processing industries.

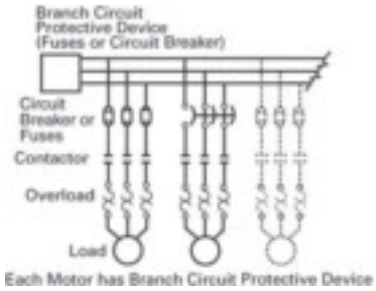
	Clearance in air	Creepage distance
Between live parts	25.4 mm (1 inch)	50.8 mm (2 inch)
Between live parts and grounded, non-insulated metal parts	25.4 mm (1 inch)	25.4 mm (1 inch)

Fast Bus combination starters and group installation assemblies

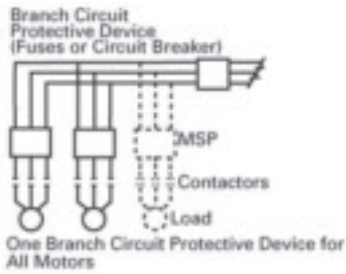
Ratings for Group Installations per NEC 430-53

Group Installation is an approach to building multiple motor control systems in accordance with Section 430-53 of the National Electrical Code. In Group installation, multiple motor starters can be grouped under one short circuit protective device. The 3RV MSP's have been UL listed for use in Group Installations both with and without 3RT contactors when mounted on the Fast Bus system. A 3RT contactor is added when remote operation of the motor is required.

Standard Installation, NEC 430-52



Group Installation, NEC 430-53



MSP Type	Through FLA range Amps	Maximum rating of Group Branch Circuit Protective Device		Short Circuit Current Ratings	
		Fuse	Circuit Breaker	480V	575V
3RV101	0, 11-12	The main fuse should be selected based on the FUSE selection procedure listed below.	The main CB should be selected based on the CIRCUIT BREAKER selection procedure listed below.	65kA	10kA
3RV102	0, 11-12.5			65kA	30kA
3RV102	11-25			65kA	10kA
3RV103	11-50			65kA	30kA
3RV104	28-100			65kA	30kA

The selection of components for Group Installation is a simple process of the following three steps:

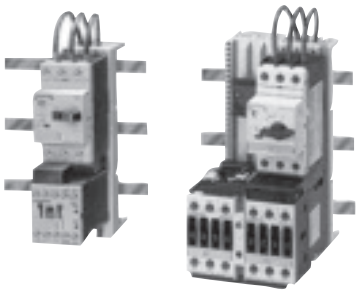
1. Selection of the Branch Circuit Protective Device, fuse or circuit breaker.
2. Selection of the Motor Starter protector based on the motor Full Load Amps.
3. Selection of the 3RT contactor based on the HP and voltage rating of the motor.

Circuit Breaker Selection

Select a circuit breaker (CB) between:
Minimum CB size (per NEC430-110): Sum of all motor FLC (per NEC table 430-150) x115%.
Maximum CB size (per NEC430-53c): 250% x FLC of the largest motor + FLC of all other motors.

Fuse Selection

Calculate the maximum fuse size per NEC430-53c.
Max Fuse Size =175% x FLC of largest motor + FLC of all other motors (FLC's from NEC table 430-150).



MSP Type	MSP Size	Through FLA range Amps	Short Circuit Current Ratings (Type E) [1]		
			240V	480Y/277V	600Y/347V
3RV102	S0	0, 11-12	65kA	65kA	30kA
3RV103	S2	11-50	65kA	65kA	25kA
3RV104	S3	28-100	65kA	65kA	30kA (up to 75A)

[1]) MSP sizes S0 and S3 require additional terminal kits for type E applications. See section 1

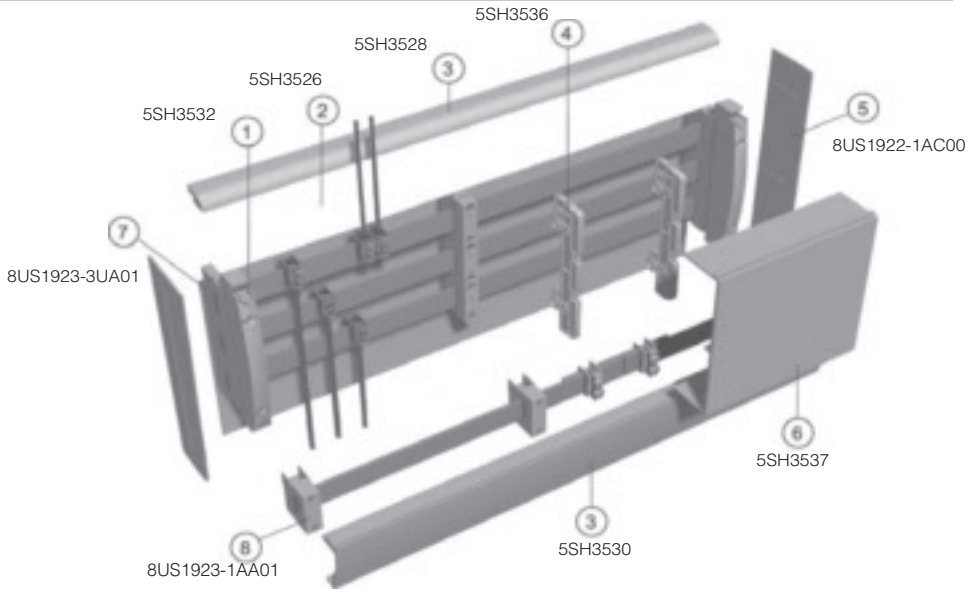
Fast Bus Busbar Adapter System

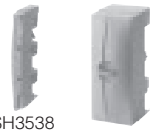
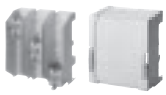
60 mm system

Selection and ordering data

for sharp-edged copper busbars to DIN 46 433, width 20 mm to 30 mm, thickness 5 mm and 10 mm

① Holder for end cover and edge profile
② Base plate
③ Edge profile
④ Holder for Reserve Space Cover
⑤ End cover
⑥ Reserve Space Cover
⑦ Busbar holder, 3-phase
⑧ Ground busbar holder



	Description		UL Current rating	UL508A Compliance[1]	Order No.	List Price $	Pack Units
 8US1922-2UA01	**Base plate ②**						
	3-pole system flat	230 mm x 1100 mm	-	required	**8US19 22-2UA01**		
 8WC5	**Copper Busbar (flat copper bars with tin plating)**						
	20 mm x 5 mm x 914 mm (36")	for 60 mm systems	362A	yes	**FBB36**		3 pcs
	20 mm x 5 mm x 1524 mm (60")	for 60 mm systems	362A	yes	**FBB60**		3 pcs
 8US1948-2AA00	20 mm x 5 mm x 2000 mm (78.74")	for 60 mm systems	362A	yes	**8WC5053**		
	25 mm x 5 mm x 2000 mm (78.74")	for 60 mm systems	432A	yes	**8WC5054**		
	30 mm x 5 mm x 2000 mm (78.74")	for 60 mm systems	500A	yes	**8WC5055**		
	20 mm x 10 mm x 2000 mm	for 60 mm systems	564A	yes	**8WC5063**		
	30 mm x 10 mm x 2000 mm	for 60 mm systems	756A	yes	**8WC5065**		
	720 mm² x 2400 mm (94.49")	Twin T (TT) Busbar	1400A	yes	**8US19 48-2AA00**		
  8US1922-1AC00 8US1923-3UA01	**Busbar holder (end and intermediate) ⑦**						
	3-pole with inside mounting	for 20 mm - 30 mm x 5 mm or 10 mm	-	yes	**8US19 23-3UA01**		
	3-pole with inside mounting	for Twin T (TT) w/ end cover	-	yes	**8US19 43-3AA00**		
	Busbar holder end cover ⑤						
	3-pole end cover	fits 8US19 23-3UA01	-	required	**8US19 22-1AC00**		
 8US1923-1AA01	**Ground Busbar holder ⑧**						
	1-pole with inside mounting	for 20 mm - 30 mm x 5 mm or 10 mm	[2]	n/a	**8US19 23-1AA01**		
		also for 6 mm x 6 mm	135A				
	Cover profiles for Busbars						
 8US1922-2AA00	for 5 mm busbars up to 30 mm wide	1 100 mm length	-	required	**8US19 22-2AA00**		
	for 10 mm busbas up to 30 mm	1 100 mm length	-	required	**8US19 22-2BA00**		
	for Twin T (TT) busbar	1000 mm length	-	required	**8US19 22-2DA00**		
	Reserve space cover ④⑥						
	holder for the Reserve Space Cover	for 60 mm systems	-	required	**5SH3536**		4 pcs
	Reserve Space Cover	1000 mm length	-	required	**5SH3537**		
 5SH3538 8US1921-1BA00	**Infeed for feeder circuit (accepts all busbar sizes on this page)**						
	3-pole terminal plate with cover	20 mm x 200 mm 16-4 AWG	80A	yes	**5SH3538**		
	3-pole terminal plate with cover	54 mm x 200 mm 10-2/0 AWG	300A	yes	**8US19 21-1BA00**		
	3-pole terminal plate with cover	81 mm x 200 mm 2 AWG-250 MCM	440A	yes	**8US19 21-1AA00**		
	3-pole terminal plate with cover	180 mm x 200 mm 250-600 MCM	560A	yes	**FBT600F**		
	3-pole terminal plate	154 mm x 184 mm 300-600 MCM	560A	yes	**8US19 41-2AA03**		
	3-pole terminal plate	160 mm x 184 mm for flat bars up to 32 mm x 20 mm	800A	yes	**8US19 41-2AA04**		
 FBT600F w/cover	cover for 8US19 41-2AA03 and 04	180 mm x 200 mm x 90 mm	-	yes	**8US19 22-1GC00**		

1) UL 508A labeled panels require the use of components that meet the creepage and air distances of 1" air clearance and 2" creepage distance. N/A = not applicable for given item.

2) Current rating dependent on size of busbar used. Refer to busbar selection data.

Selection and ordering data

Description

FBCB Fast Bus circuit breakers
Offer a full range of circuit breakers from 15A to 250A. All kits 90A and under are pre-assembled on 60 mm Fast Bus adaptor shoes and ready to place on the busbar. Circuit breakers 100A and higher are pre-packaged for fast assembly and must be torqued down to the busbar.
A full range of main circuit breakers from 50A to 250A come in pre-packaged kits that include the circuit breaker, Fast Bus adapter with mounting plate and mounting hardware.


FBCB030


FBCB100


FBCB250M

Design	UL Current rating	UL SCCR[1])	Breaker frame	Order No.	List Price $	Pack units
Circuit breakers						
Feeder 3 pole/600V with Fast Bus "snap on" adapter shoes. Wires from shoe to breaker on the line side.	15 amp	25kA	ED	**FBCB015**		
	20 amp	25kA	ED	**FBCB020**		
	25 amp	25kA	ED	**FBCB025**		
	30 amp	25kA	ED	**FBCB030**		
	35 amp	25kA	ED	**FBCB035**		
	40 amp	25kA	ED	**FBCB040**		
	45 amp	25kA	ED	**FBCB045**		
	50 amp	25kA	ED	**FBCB050**		
	60 amp	25kA	ED	**FBCB060**		
	70 amp	25kA	ED	**FBCB070**		
	80 amp	25kA	ED	**FBCB080**		
	90 amp	25kA	ED	**FBCB090**		
Circuit breakers with high interrupting						
Feeder 3 pole/600V with Fast Bus "snap on" adapter shoes. Wires from shoe to breaker on the line side.	20 amp	65kA	HHED	**FBCB020H**		
	25 amp	65kA	HHED	**FBCB025H**		
	30 amp	65kA	HHED	**FBCB030H**		
	35 amp	65kA	HHED	**FBCB035H**		
	40 amp	65kA	HHED	**FBCB040H**		
	45 amp	65kA	HHED	**FBCB045H**		
	50 amp	65kA	HHED	**FBCB050H**		
	60 amp	65kA	HHED	**FBCB060H**		
	80 amp	65kA	HHED	**FBCB080H**		
Feeder circuit breakers						
3 pole/600V with bolt on Fast Bus adapter shoes. Wires from shoe to breaker on the line side.	100 amp	25kA	ED	**FBCB100**		
	110 amp	25kA	ED	**FBCB110**		
	125 amp	25kA	ED	**FBCB125**		
	150 amp	35kA	FXD	**FBCB150**		
	175 amp	35kA	FXD	**FBCB175**		
	200 amp	35kA	FXD	**FBCB200**		
	225 amp	35kA	FXD	**FBCB225**		
	250 amp	35kA	FXD	**FBCB250**		
Main circuit breakers						
3 pole/600V with bolt on Fast Bus adapter shoes. Wires from shoe to breaker on the load side.	50 amp	25kA	ED	**FBCB050M**		
	60 amp	25kA	ED	**FBCB060M**		
	70 amp	25kA	ED	**FBCB070M**		
	90 amp	25kA	ED	**FBCB090M**		
	100 amp	25kA	ED	**FBCB100M**		
	125 amp	25kA	ED	**FBCB125M**		
	150 amp	65kA	FXD	**FBCB150M**		
	175 amp	65kA	FXD	**FBCB175M**		
	200 amp	65kA	FXD	**FBCB200M**		
	225 amp	65kA	FXD	**FBCB225M**		
	250 amp	65kA	FXD	**FBCB250M**		
Main circuit breakers with high interrupting						
3 pole/600V with bolt on Fast Bus adapter shoes. Wires from shoe to breaker on the load side.	100 amp	65kA	HHED	**FBCB100M-HB**		
	125 amp	65kA	HHED	**FBCB125M-HB**		
	150 amp	65kA	HFXD	**FBCB150M-HB**		
	175 amp	65kA	HFXD	**FBCB175M-HB**		
	200 amp	65kA	HFXD	**FBCB200M-HB**		
	225 amp	65kA	HFXD	**FBCB225M-HB**		
	250 amp	65kA	HFXD	**FBCB250M-HB**		

1) UL Short Circuit Current ratings are based on 480V. Contact Siemens for 600 V ratings.

Fast Bus Busbar Adapter System

60 mm system
Busbar adapters and device holders

Selection and ordering data

Busbar device adapters	Number of mounting rails (35 mm)	Rated current	Connecting cables	Adapter length	Adapter width	Rated voltage UL	UL508A[1]) compliance	Order No.	List Price $ per PU	Pack units	Weight per PU approx.
		A	AWG	mm	mm	V					kg
For SIRIUS											
Size S00/S0											
MSP's	1	25	12	182	45	600	yes	**8US12 51-5DM07**			0.183
Contactors + Overload relays	1	25	12	182	45	600	yes	**8US12 51-5DM07**			0.183
Direct start load feeders	1	25	12	182	45	600	yes	**8US12 51-5DM07**			0.183
Reversing feeders											
Busbar adapters	1	25	12	182	45	600	yes	**8US12 51-5DM07**			0.183
+ Device holders	1	--	--	182	45	600	yes	**8US12 50-5AM00**			0.158
+ Connecting plates	--	--	--	--	--	--	yes	**8US19 98-1AA00**		100 units	0.100
Size S00/S0 Cage Clamp											
Direct start load feeders	1	12	14	182	45	600	yes	**8US12 51-5CM47**			0.190
Size S2											
MSP's	1	50	8	182	55	600	yes	**8US12 61-5FM08**			0.263
Contactors + Overload relays	1	50	8	182	55	600	yes	**8US12 61-5FM08**			0.263
Direct start load feeders	1	50	8	245	55	600	yes	**8US12 61-5FP08**			0.292
Reversing feeders											
Busbar adapters	1	50	8	242	55	600	yes	**8US12 61-5FP08**			0.292
Busbar adapters	1	--	--	242	55	600	yes	**8US12 60-5AM00**			0.202
+ Device holders	--	--	--	242	55	600	yes	**8US12 60-5AP00**			0.243
+ Connecting plates	--	--	--	--	--	--	yes	**8US19 98-1AA00**		100 units	0.100
Size S3		70	4	215	72	600	yes	**8US12 11-4TR00**			0.470
	1	100	--	200	72	600	yes	**FBS10072**			0.530
For VL UL circuit breakers											
VL150 UL, DG frame	--	150	Tubular contacts	190	105	600	yes	**8US12 13-4AQ03**			1.020
VL250 UL, FG frame	--	250	Tubular contacts	190	105	600	yes	**8US12 13-4AQ03**			1.020
VL400 UL, JG frame	--	400	Tubular contacts	296	140	600	yes	**8US12 13-4AH00**			1.900
VL400X UL, LG frame	--	540	Tubular contacts	296	140	600	yes	**8US12 13-4AH00**			1.900

8US21 51-5DM07

8US21 60-5AM00

8US12 11-4TR00

8US12 13-4AQ03

8US12 13-4AH00

[1]) UL 508A labeled panels require the use of components that meet the creepage and air distances of 1" air clearance and 2" creepage distance.
N/A = not applicable for given item.

Selection and ordering data

	Description		Length	Width	UL508A Compliance[1]	Order No.	List Price $	Pack Units
	Terminals for round conductors							
	5 mm busbar thickness for 20 mm x 5 mm to 30 mm x 5 mm							3
 FBT	16 - 6 AWG		180 A		2)	**FBT166-1**		3
	12 - 2 AWG		270 A		2)	**FBT122-1**		3
	6 - 2/0 AWG		400 A		2)	**FBT620-1**		3
	6 AWG - 250 MCM		440 A		2)	**FBT6250-1**		3
	3/0 - 350 MCM		460 A		2)	**FBT30350**		3
	300 - 600 MCM		560 A		2)	**FBT300600**		3
	10 mm busbar thickness for 20 mm x 10 mm to 30 mm x 10 mm							3
	16 - 6 AWG		180 A		2)	**FBT166-2**		3
	12 - 2 AWG		270 A		2)	**FBT122-2**		3
	6 - 2/0 AWG		400 A		2)	**FBT620-2**		3
	6 AWG - 250 MCM		440 A		2)	**FBT6250-2**		3
	3/0 - 350 MCM		460 A		2)	**FBT30350**		3
	300 - 600 MCM		560 A		2)	**FBT300600**		3
 8US1922-1GA02	**Covering cap for FBT terminals**							
	Attaches to busbar	90 mm depth	200 mm	135 mm	required	**FBC135**		
	Attaches to busbar	90 mm depth	200 mm	270 mm	required	**8US1922-1GA02**		
 Mounting Rail	**Accessories for busbar adapters and device holders**							
	Mounting rail (35 mm) - plastic		45 mm		n/a	**8US1998-7CA15**		10
	complete with mounting screws		55 mm		n/a	**8US1998-7CA16**		10
			70 mm		n/a	**8US1998-4AA00**		10
			90 mm		n/a	**8US1998-7CA08**		10
			110 mm		n/a	**8US1998-7CA10**		10
 8US1998-1BA00	**Connection holder**		-		n/a	**8US1998-1DA00**		20
	(for vertical bubar assembly)							
	fixes the MSP to the mounting rail[3] (for SIRIUS sizes S00/S0)							
	Screw holder		-		n/a	**8US1998-1CA00**		20
	for supplementary screw fixing of the feeder							
	(for SIRIUS sizes S00/S0)							
 FBC20	**Spacer**		-		n/a	**8US1998-1BA00**		
	fixes the feeder to the busbar adapter							
	(for SIRIUS sizes S00/S0)							
 Load Side Terminal	**Connection wedges**		-		n/a	**FBC20**		20
	for mechanical linking of adapters and switching device holders							
	(2 units required per combination)							
	Outgoing terminal rail for busbar adapters							
	Plug-type terminal							
	(complete with supporting element for attaching to busbar adapter							
	and switching device holder. Spring loaded terminals.)							
	3 x 14 AWG (400 V) and 4 x 16AWG (250 V)		91 mm	45 mm	n/a	**8US1998-8AM07**		
	7 x 14 AWG (400 V)		91 mm	54 mm	n/a	**8US1998-8AA10**		
 8US1998-2BM00	**Accessories for busbar adapters and device holders**							
	Side module for busbar adapter expansion	For adapters w/182 mm	182 mm	10 mm	n/a	**8US1998-2BM00**		
	Side module for busbar adapter expansion	For adapters w/200 mm	200 mm	9 mm	n/a	**8US1998-2BJ10**		
	Accessories for busbar holder ①							
5SH3528	Top cover for 3-pole busbar holder when using Edge Profile				n/a	**5SH3532**		
	Side cover for 3-pole busbar holder when using Edge Profile				n/a	**5SH3533**		
 5SH3531	**Edge Profile** ③							
	Solid for top profile	17 mm x 36 mm x 1100 mm			n/a	**5SH3528**		
	Solid for bottom profile	77 mm x 36 mm x 1100 mm			n/a	**5SH3530**		
	Slotted	17 mm x 86 mm x 1100 mm			n/a	**5SH3531**		

1) UL508A labeled panels require the use of components that meet the creepage and air distances of 1" air clearance and 2" creepage distance. N/A = not applicable for given item.

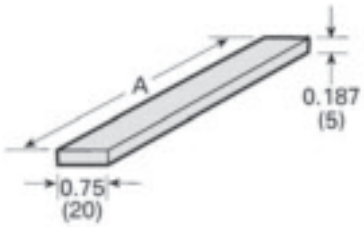
2) Terminals must be manually spaced on the busbar to comply with UL508A distances of 1" air clearance and 2" creepage distance.

3) For uses with 45 mm and 55 mm mounting rail.

60 mm system

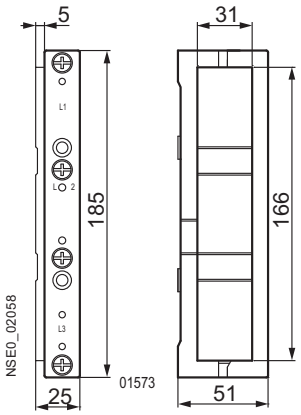
Dimension drawings

FBB36/FBB60 Copper Busbar

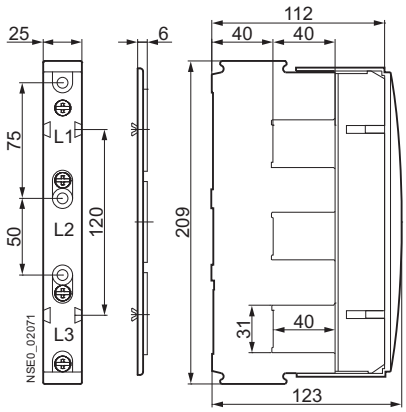


Dimension	A
FBB36	36 (914)
FBB60	60 (1524)

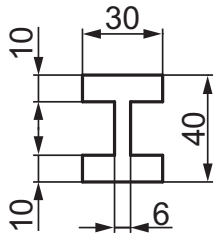
8US19 23-3UA01



8US19 43-3AA00

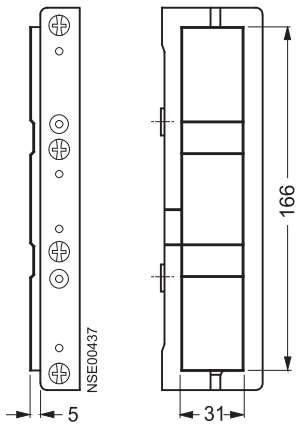


Copper Busbar/TT profile, 8US19 48-2AA00

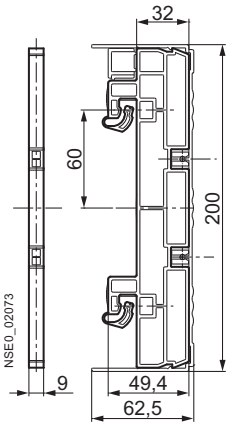


NSE0_02070

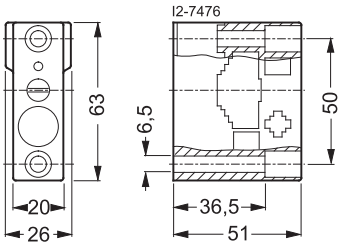
8US19 22-1AC00 with 8US19 23-3UA01



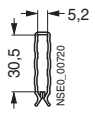
Support for blanking covers, 5SH3 536



8US19 23-1AA01

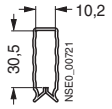


8US19 22-2AA00



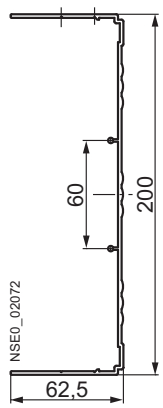
Length 1000 mm

8US19 22-2BA00

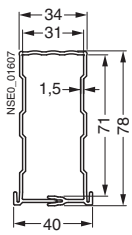


Length 1000 mm

Blanking cover, 5SH3 537

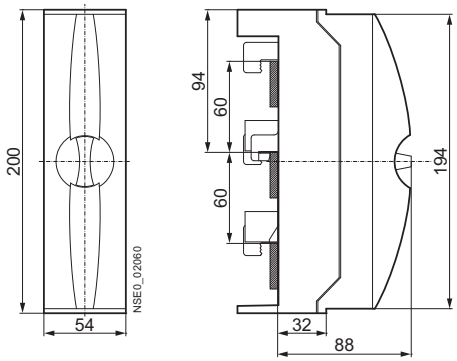


8US19 22-2DA00

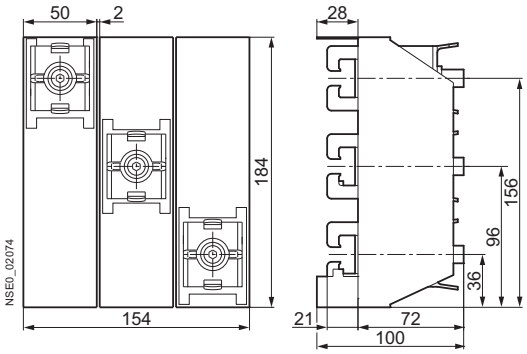


Dimension drawings

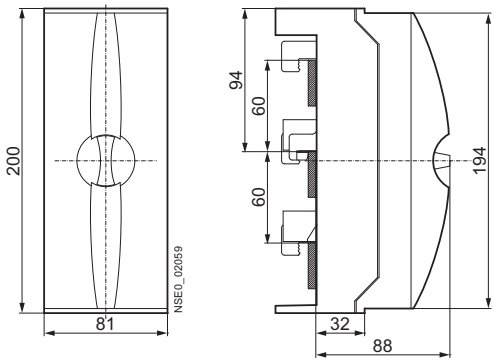
Infeed, 8US19 21-1BA00



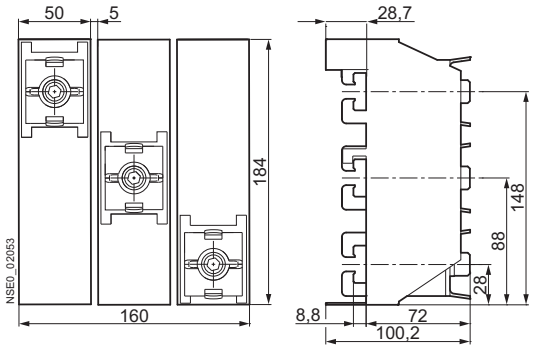
Infeed, 8US19 41-2AA03



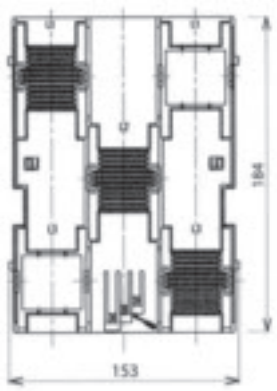
Infeed, 8US19 21-1AA00



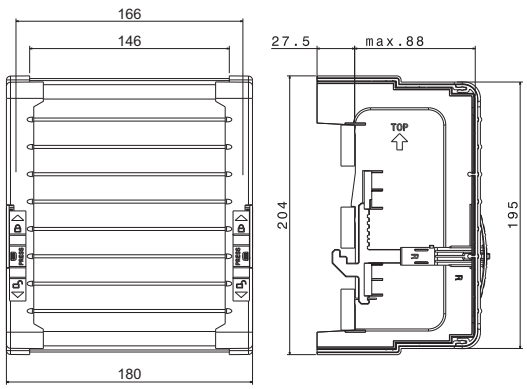
Infeed, 8US19 41-2AA04



FBT600F (supplied with cover)



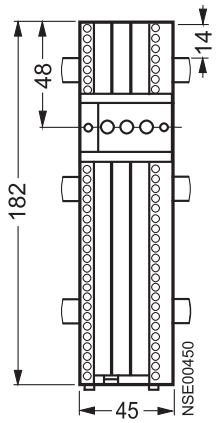
FBT600F Cover



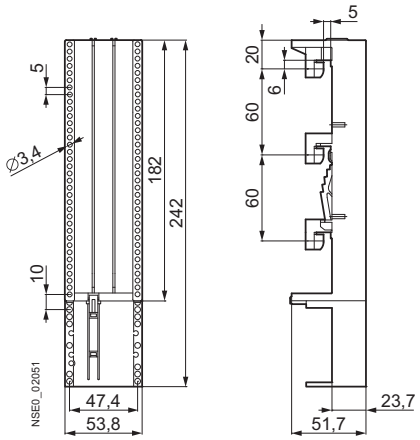
60 mm system

Dimension drawings

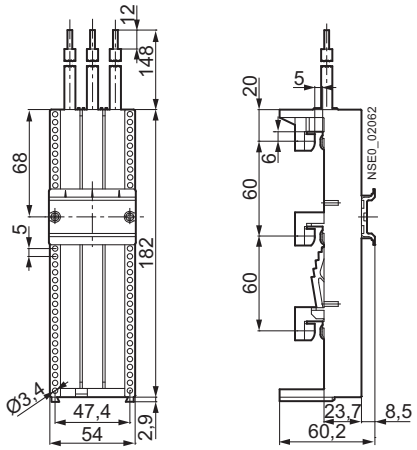
Busbar device adapter, 8US12 50-5AM00



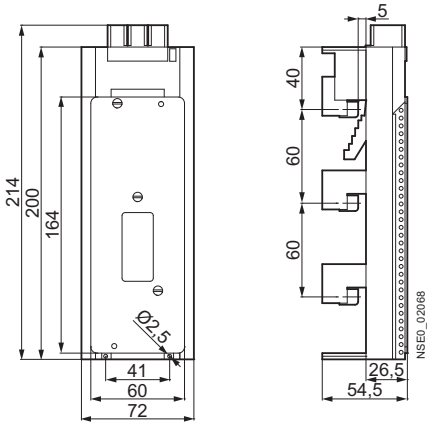
Busbar device adapter, 8US12 60-5AP00



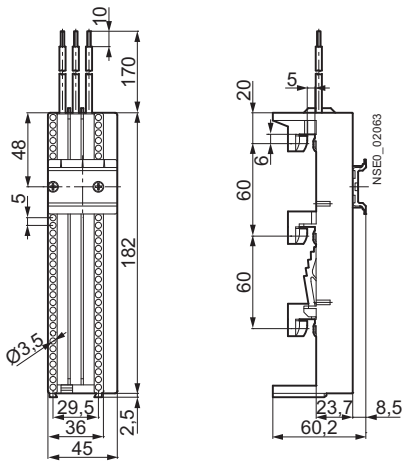
Busbar device adapter, 8US12 61-5FM08



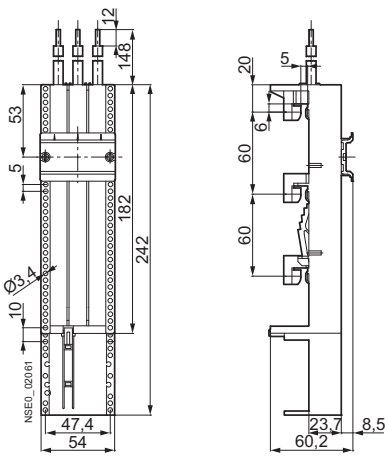
Busbar device adapter, 8US12 11-4TR00



Busbar device adapter, 8US12 51-5DM07

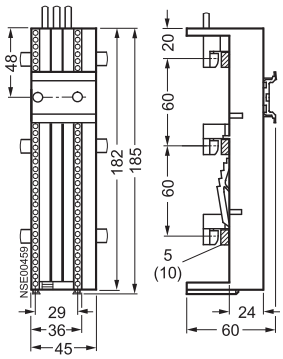


Busbar device adapter, 8US12 61-5FP08

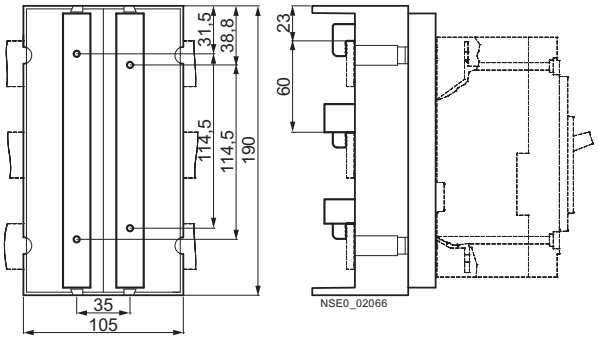


Dimension drawings

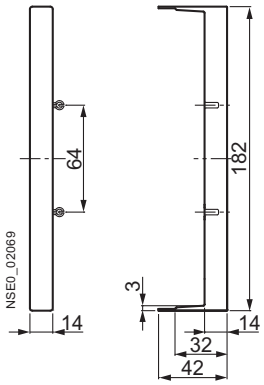
Busbar device adapter, 8US12 51-5CM47



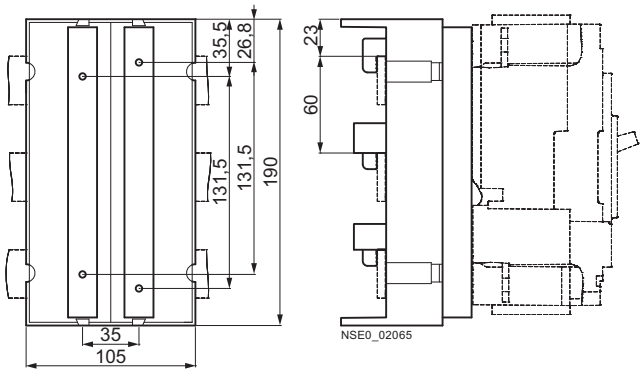
Busbar device adapter, 8US12 13-4AQ01



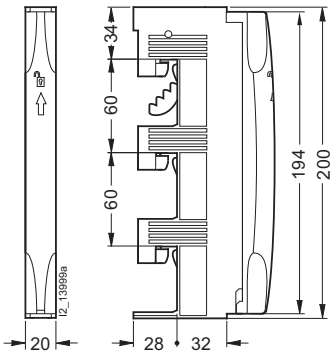
8US19 98-2BM00



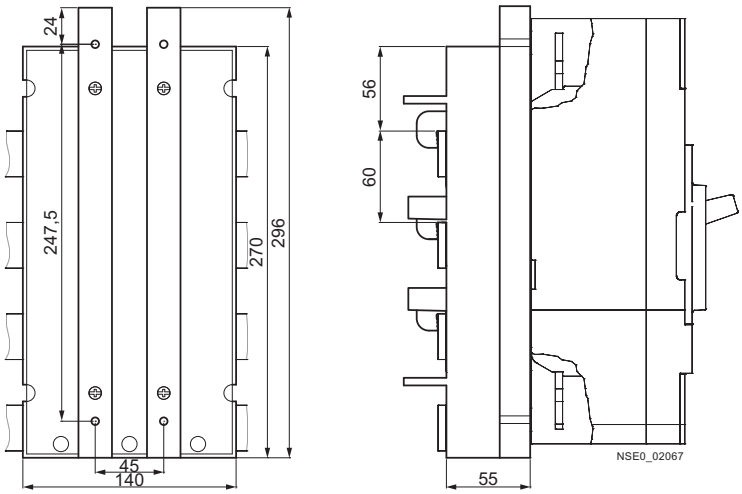
Busbar device adapter, 8US12 13-4AQ03



Infeed 5SH3538



Busbar device adapter, 8US12 13-4AH00

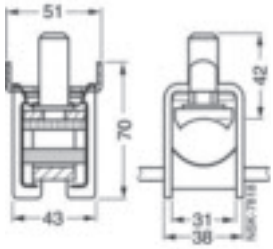


60 mm system

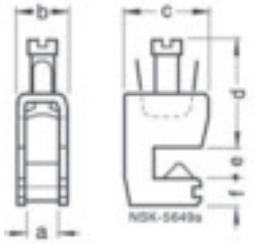
Dimension drawings

Type	a	b	c	d	e	f
FBT166-1	7.5	11.5	22.5	25	5	10
FBT122-1	10.5	15.5	29	35	5	10
FBT6250-1	17	23.5	36	55	5	12
FBT620-1	14.5	20.5	32	42	5	12
FBT166-2	7.5	11.5	22.5	25	10	10
FBT122-2	10.5	15.5	29	35	10	10
FBT6250-2	17	23.5	36	55	10	12
FBT620-2	14.5	20.5	32	42	10	12

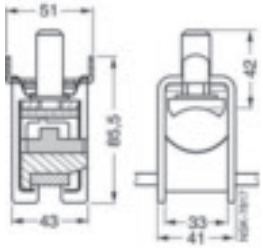
FBT30350



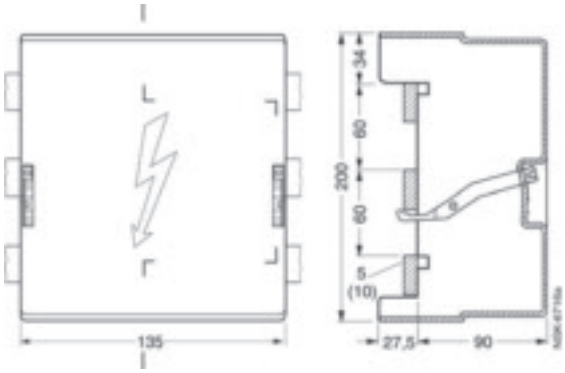
FBT



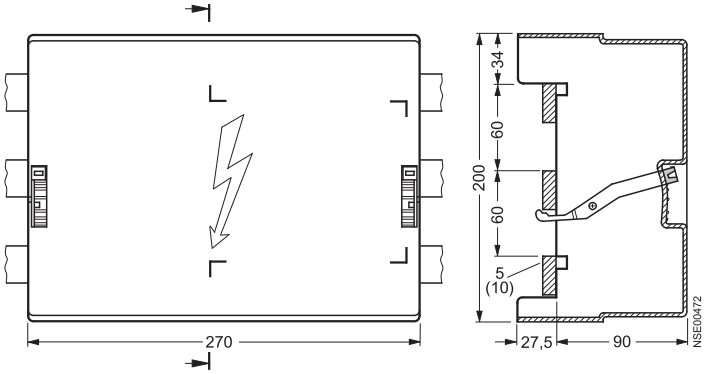
FBT300600



FBC135

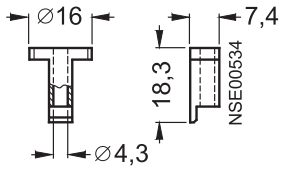


8US19 22-1GA02

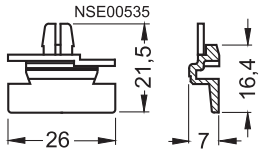


Dimension drawings

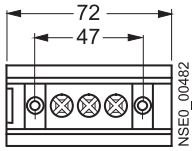
8US19 98-1CA00



8US19 98-1DA00



8US19 98-4AA00



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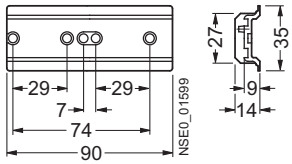
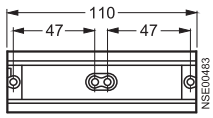
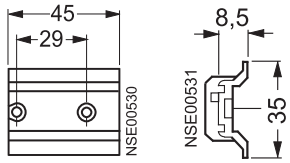


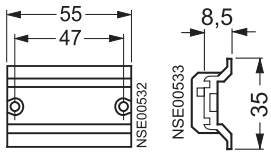
8US19 98-7CA10



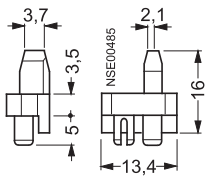
8US19 98-7CA15



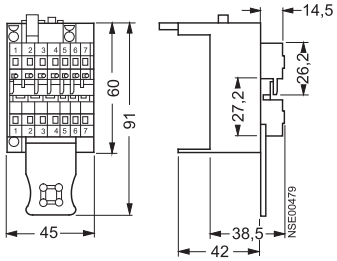
8US19 98-7CA16



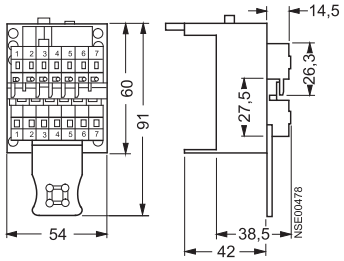
8US19 98-1BA00



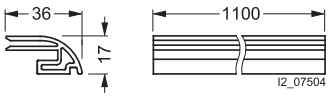
8US19 98-8AM07



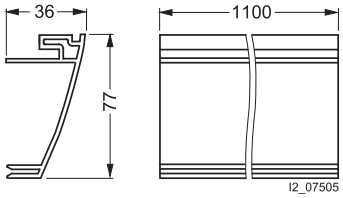
8US19 98-8AA10



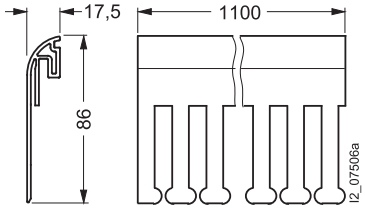
5SH3 528



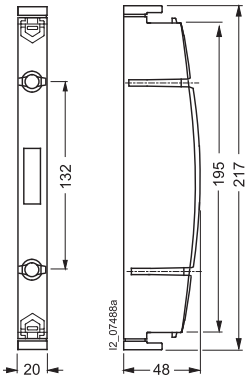
5SH3 530



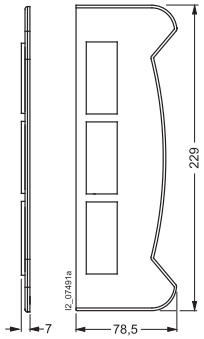
5SH3 531



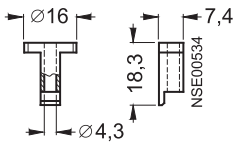
5SH3 532



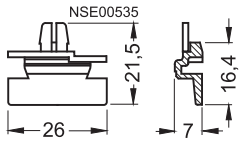
5SH3 353



8US19 98-1CA00



8US19 98-1DA00



SIRIUS 3R Fast Bus Combination Starters and Group Installation Assemblies

Selection

Required Components for Fast Bus Mounting

3RV101 with **3RT101**

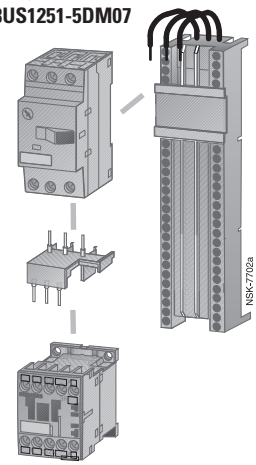
Adapter Shoe
8US1251-5DM07

MSP
3RV101

Link Module
3RA1911-1A

Contactor
3RT101

Spacer for Contactor
8US1998-1BA00



3RV102 with **3RT101**

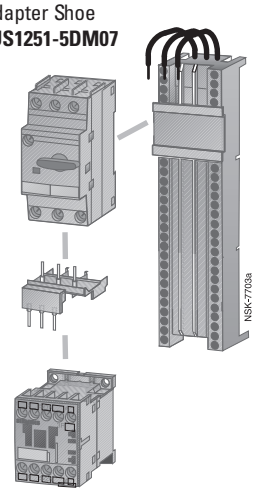
Adapter Shoe
8US1251-5DM07

MSP
3RV102

Link Module
3RA1921-1D

Contactor
3RT101

Spacer for Contactor
8US1998-1BA00



3RV102 with **3RT102**

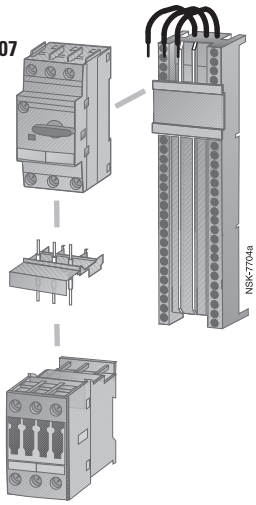
Adapter Shoe
8US1251-5DM07

MSP
3RV102

Link Module
for AC: **3RA1921-1A**
for DC: **3RA1921-1B**

Contactor
3RT102

Spacer for Contactor
8US1998-1BA00



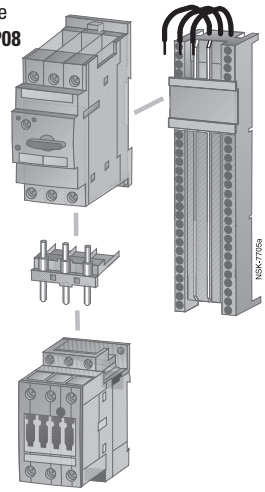
3RV103 with **3RT103**

Adapter Shoe
8US1261-5FP08

MSP
3RV103

Link Module
for AC: **3RA1931-1A**
for DC: **3RA1931-1B**

Contactor
3RT103



3RV104 with **3RT104**

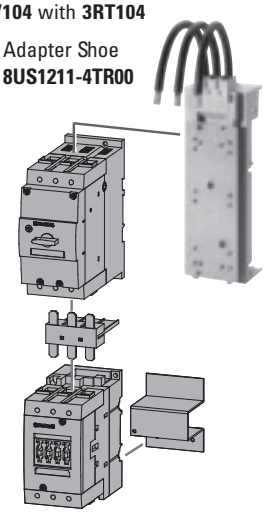
Adapter Shoe
8US1211-4TR00

MSP
3RV104

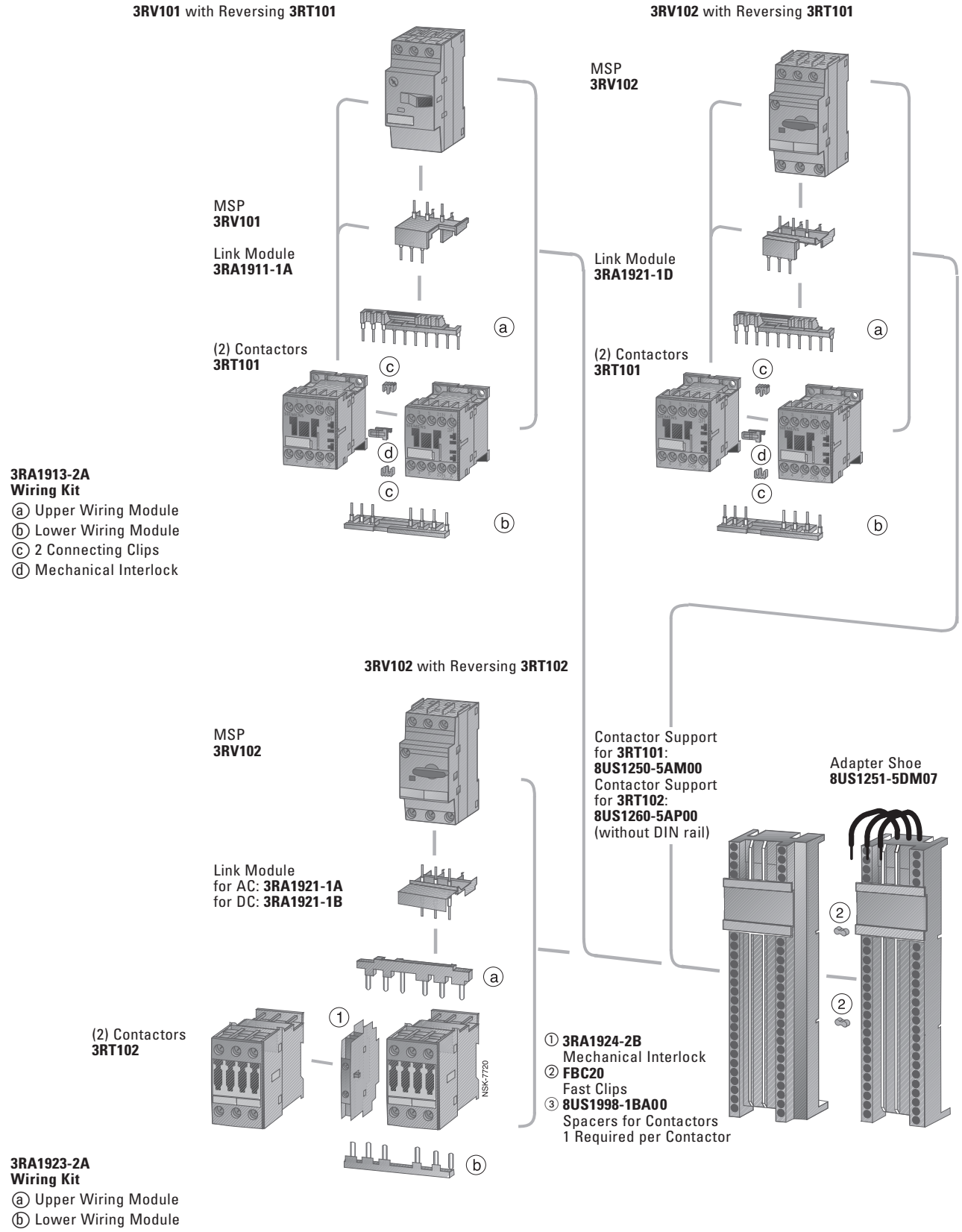
Link Module
for AC: **3RA1941-1A**
for DC: **3RA1941-1B**

Contactor
3RT104

Bracket
FBS0070B



Required Components for Fast Bus Mounting

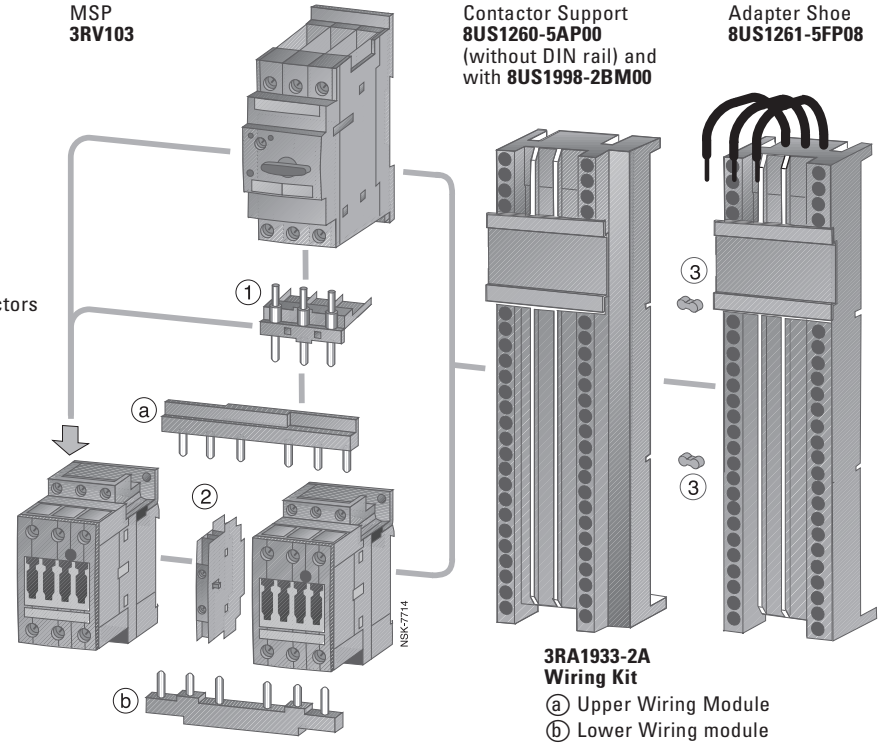


Selection

Required Components for Fast Bus Mounting

3RV103 with Reversing **3RT103**

① Link Module
for AC: **3RA1931-1A**
for DC: **3RA1931-1B**
② Mechanical Interlock
3RA1924-2B
③ Fast Clips
FBC20

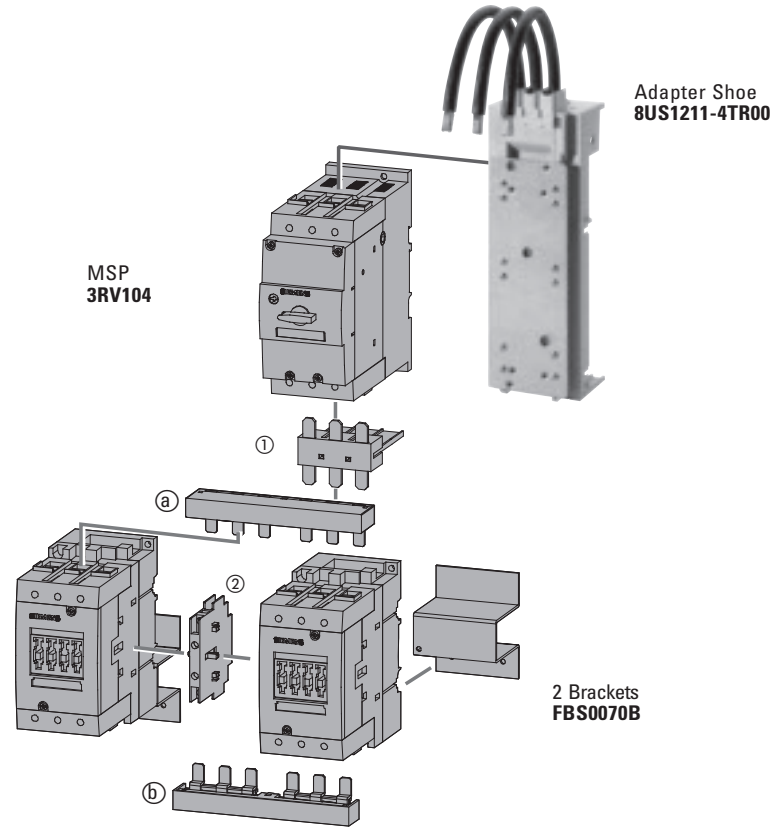


3RA1933-2A
Wiring Kit
ⓐ Upper Wiring Module
ⓑ Lower Wiring module

3RV104 with Reversing **3RT104**

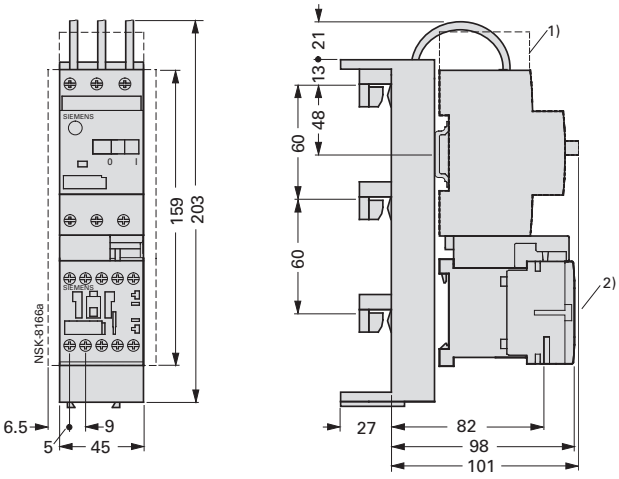
① Link Module
for AC: **3RA1941-1A**
for DC: **3RA1941-1B**

② Mechanical Interlock
3RA1924-2B

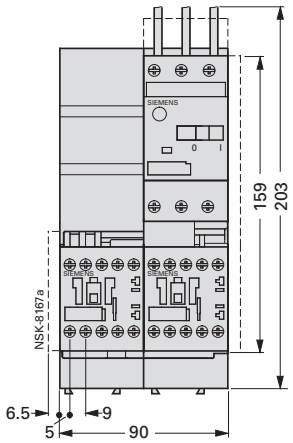


Dimensions, 3RV101 with 3RT101

3RA1110
Fast Bus Non-reversing



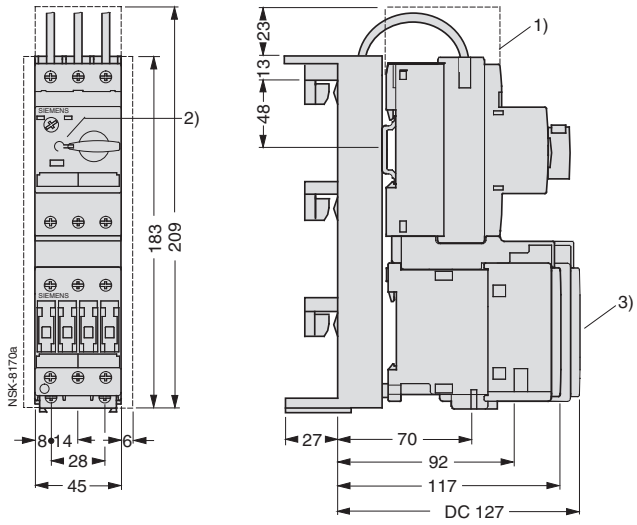
3RA1210
Fast Bus Reversing



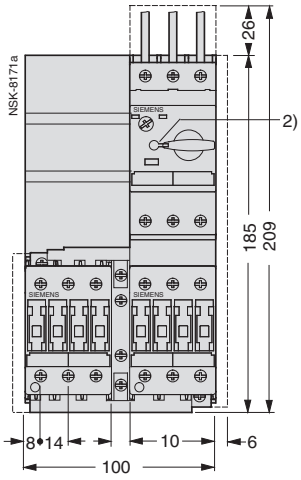
1) Arcing space
2) When a front auxiliary is installed on the contactor, add 39 mm to the depth of the contactor.

Dimensions, 3RV102 with 3RT101

3RA1120
Fast Bus Non-reversing



3RA1220
Fast Bus Reversing



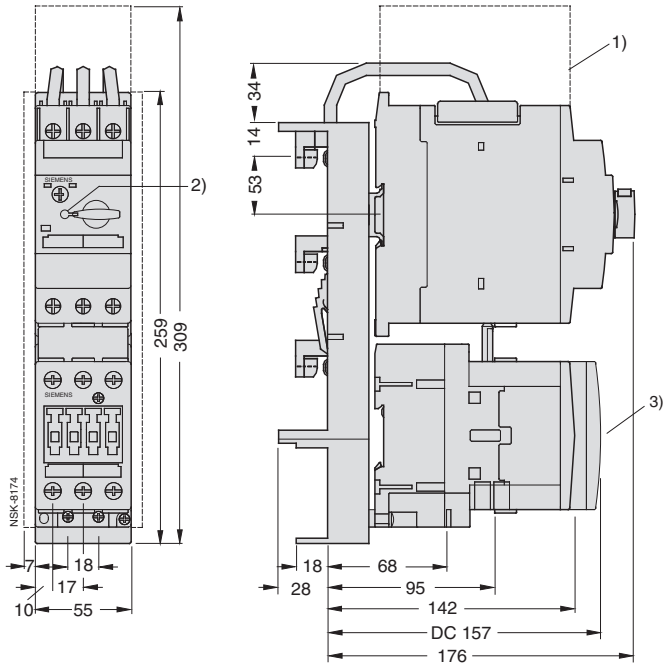
1) Arcing space
2) Lockable in OFF position. Padlock diameter 5 mm.
3) When a front mount auxiliary is installed on the contactor, add 49 mm to the depth of the contactor.

All dimensions shown in millimeters. For reference purposes only. Not to be used for design or construction purposes.

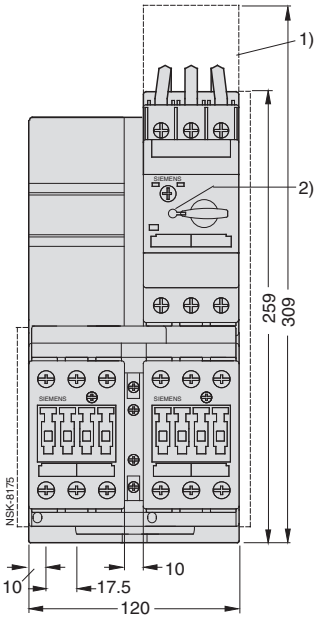
Dimensions

3RV103 with 3RT103

3RA1130
Fast Bus Non-reversing



3RA1230
Fast Bus Reversing



Lateral clearance to grounded components minimum 6 mm.

1) Arcing space
2) Lockable in OFF position with padlock diameter 5 mm.
3) When a front mount auxiliary is installed on the contactor, add 49 mm to the depth of the contactor.

All dimensions shown in millimeters. For reference purposes only. Not to be used for design or construction purposes.

3RV104 with 3RT104

Lateral clearance to grounded components minimum 6 mm.
1) Arcing space
2) Lockable in OFF position with padlock diameter 5 mm.
3) When a front mount auxiliary is installed on the contactor, add 49 mm to the depth of the contactor.

All dimensions shown in millimeters. For reference purposes only. Not to be used for design or construction purposes.

Notes