

Busbar Systems



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For further technical product information:

[Configuration Manual](#)

[8US Busbar Systems](#)

Article No.: 3ZW1012-8US10-0AC1

Siemens Industry Online Support:

www.siemens.com/lowvoltage/product-support

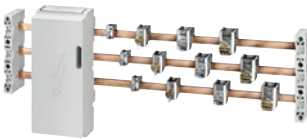
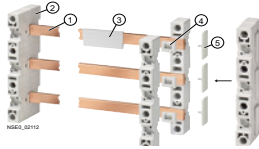







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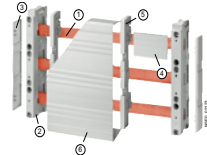
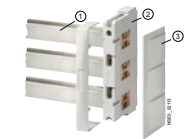


Busbar Systems

Introduction

System overview

Overview

Devices	Page	Application	Standards	Used in		
				Non-residential buildings	Residential buildings	Industry
	11/9	Basic assemblies up to 400 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2	✓	--	✓
	11/10	Basic assemblies up to 400 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2	✓	--	✓
	11/11		EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	11/12	Basic assemblies up to 360 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	11/13	Infeed for busbar systems, terminals	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	11/14	3-pole NEOZED bus-mounting bases	IEC 60947-3, EN 60947-3 (VDE 0660) IEC 60269, EN 60269 (VDE 0636)	✓	--	✓
	11/15	Busbar device adapters and device holders for the assembly of 3RV2/3RT2 load feeders	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	11/17	Infeed for busbar systems, terminals	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
	11/18	Busbar device adapters and device holders for the assembly of 3RV2/3RT2 load feeders	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓

Devices	Page	Application	Standards	Used in		
				Non-residential buildings	Residential buildings	Industry
 <p>8US 60 mm busbar systems up to 1600 A</p>	11/20		EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
 <p>Basic assemblies up to 630 A</p>	11/21	Basic assemblies up to 630 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
 <p>Basic assemblies up to 1600 A</p>	11/24	Basic assemblies up to 1600 A, busbar supports, busbars, touch protection covers	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
 <p>Infeeds and connection methods</p>	11/25	Infeed for busbar systems, terminals ...	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓
 <p>Built-in components</p>	11/28	3-pole NEOZED bus-mounting bases or DIAZED bus-mounting bases, NEOZED bus-mounting switch disconnectors, fuse switch disconnectors and busbar device adapters	IEC 60947-3, EN 60947-3 (VDE 0660) IEC 60269, EN 60269 (VDE 0636)	✓	--	✓
 <p>Device adapters and device holders</p>	11/34	Busbar device adapters and device holders for the assembly of 3RV2/3RT2 load feeders	EN 13601 IEC 61439-1, IEC 61439-2 UL 508 A	✓	--	✓

Busbar Systems

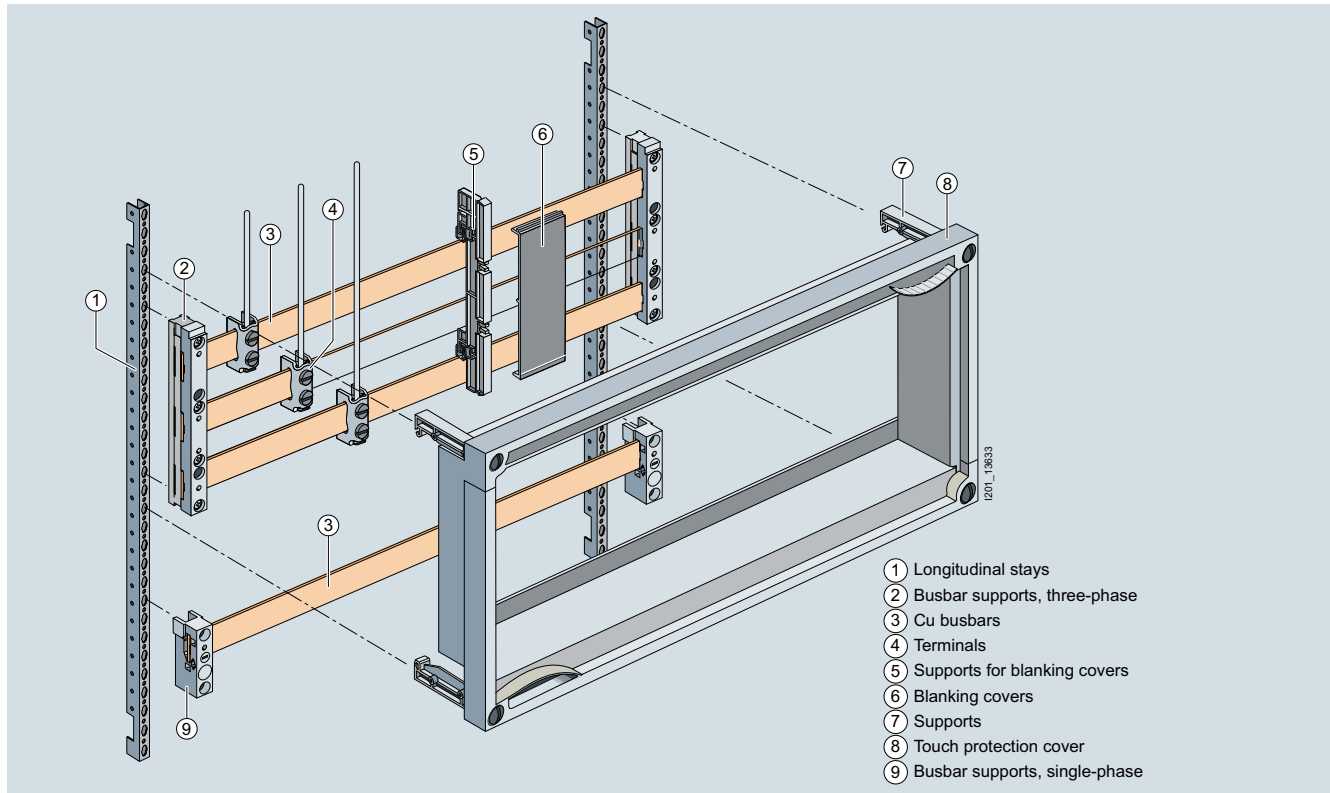
Introduction

General data

Overview

The use of busbar systems with their versatile rail-adaptable connection, switching and installation devices is an ideal and cost-effective electrotechnical enhancement of modern distribution boards thanks to their small footprint, compact design and

quick assembly contacts. Mounting is implemented on longitudinal stays. The standard busbar spacing is 60 mm. However, 40 mm, 100 mm and 185 mm systems are also in use.



Benefits

Notable cost reduction compared to conventional installation in switchgear and control cabinets due to the following reasons:

- Mechanical fixing and electrical contacting in a single step
- No access wiring and fewer busbar terminals used
- Double use of the busbar space
- Clear arrangement
- Straightforward replacement of individual devices or whole combinations
- High operational safety through finger-safe cover of the adapters and device holders

All the above advantages are felt especially in cases where many tap-off units of the same performance range are required.

Application

8US busbar systems are used for the direct busbar-mounting of current-limiting devices (protective devices) such as fuse switch disconnectors and circuit breakers as well as complete load feeders.

8US busbar systems are designed for horizontal mounting of the busbars.

Design

8US busbar systems with 60 mm busbar center-to-center spacing as well as flat copper profiles have become firmly established on the world market.

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

The busbar runs prove most advantageous when the infeed is centrally located and the load is distributed symmetrically on both sides.

Function

Short-circuit strength

The short-circuit strength of the busbar system is dependent on the distance of the busbar supports 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 breakers or switch disconnectors. If one of these values is lower than the prospective short-circuit current at the installation site, a current-limiting protective device has to be mounted upstream of the 8US busbar system. This may also be mounted as a feeder circuit breaker on the busbar system itself.

Technical specifications
Continuous current for busbars, E-Cu bare, at 35 °C ambient temperature according to DIN 43671

Busbar dimensions mm	System mm	Continuous current at a busbar temperature of		
		65 °C A	85 °C A	105 °C A
12 × 5	40 + 60	188	248	295
15 × 5	40 + 60	222	293	349
20 × 5	60	274	362	430
25 × 5	60	327	432	513
30 × 5	60	379	500	595
12 × 10	40 + 60	302	398	474
20 × 10	60	427	564	670
30 × 10	60	573	756	900
Special profile up to 1600 A	60	1020	1020	1600

General technical specifications

Rated insulation voltage U_i	V AC	1000
Short-circuit strength		
Of 8US1 busbar device adapter		Current limitation due to associated motor starter protectors/circuit breakers/load feeders up to 50 kA
Of the busbar systems		see "Characteristic curves as a function of rated peak withstand current"
Material of the 8US1 busbar supports, busbar device adapters and device holders		Glass-fiber reinforced polyamide
Color		RAL 7035, light gray
Thermal stability (minimum values)		
Busbar supports, busbar device adapters, device holders, infeed and caps	°C	120
AWG connecting cables	°C	105 / 150
Cover profiles	°C	110
Bases, partitions, edge profiles and blanking covers	°C	70
Machining of plastic profiles		Take care when machining that no cracks are formed. A cross-cut circular saw with the following characteristic values has proven successful in cutting cover profiles for busbars: <ul style="list-style-type: none"> • D = 300 mm, B = 2.2 mm, • T = 120 R (5° negative replaceable tooth at a cutting rate of 50 ... 60 m/s) • Tooth feed 0.05 ... 0.1 mm The plastic parts have to be secured so that vibration is ruled out.
Approvals		
Busbar supports, busbar device adapters, device holders and terminals		UR, CSA, c _{UL} us-listed

Technical specifications of the system components

Infeed, connection modules, three-phase		5SH3538	5SH3535	8US1921-1BA00	8US1921-1AA00
Busbar center-to-center spacing	mm	60	60	60	60
Current carrying capacity of the terminal points The specified current carrying capacities reflect the thermal load capability of the terminal points under favorable conditions (with the largest conductors it is possible to connect). This does not invalidate the assignment of conductor cross-sections and current carrying capacities as defined in national and international specifications.	A	80	560	300	440
Tightening torque	Nm	--	30	8 ... 10	12 ... 15
Clamping space W × H	mm	--	--	10 × 15	15 × 15
Conductors that can be used	mm ²	1.5 ... 16 Cu, re, rm, f, f+AE (reduction of the maximum conductor cross-sections may be required)	150 ... 300 Cu, Al (connections with aluminum conductors are not maintenance free), rm, sm, f	6 ... 50 (70) Cu, rm, f, f+AE (reduction of the maximum conductor cross-sections may be required), Cu 6 × 9 × 0.8	35 ... 120 Cu, rm, f, f+AE (reduction of the maximum conductor cross-sections may be required), Cu 6/10 × 15.5 × 0.8

Busbar Systems

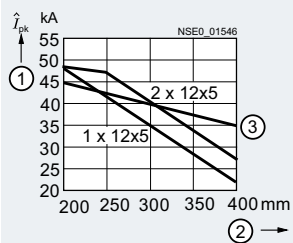
Introduction

General data

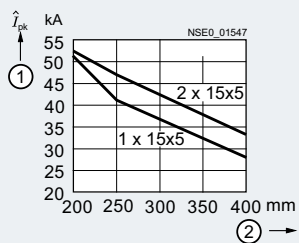
Characteristic curves

Characteristic curves as a function of rated peak withstand current

40 mm busbar systems

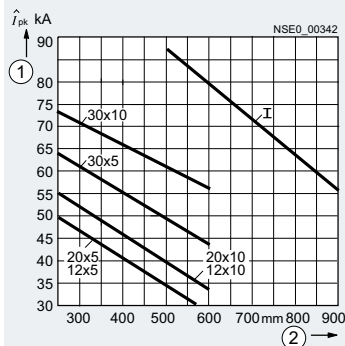


- ① Surge current I_{pk}
- ② Spacing of busbar supports
- ③ 5-pole busbar supports



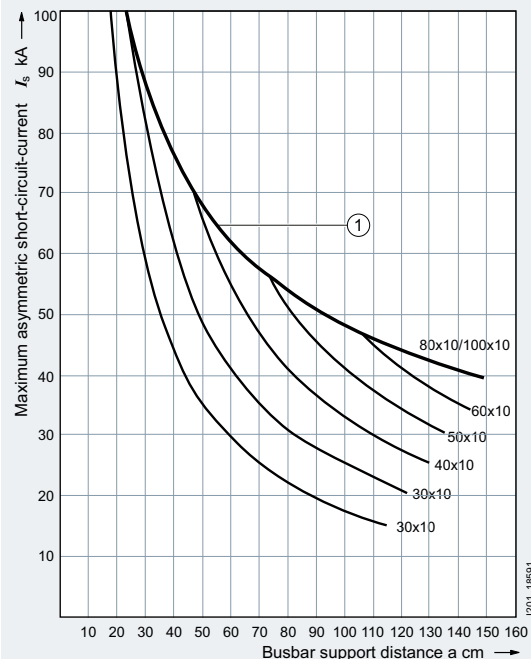
- ① Surge current I_{pk}
- ② Spacing of busbar supports

60 mm busbar systems



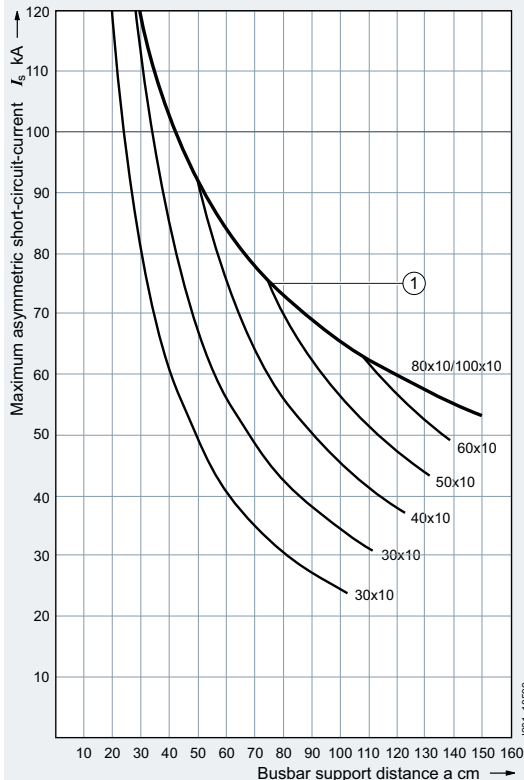
- ① Surge current I_{pk}
- ② Spacing of busbar supports

100 mm busbar system for 3NJ4/3NJ5



- ① Maximum limit load on busbar system

185 mm busbar system for 3NJ4/3NJ5



- ① Maximum limit load on busbar system

Current-carrying capacity values for flat bars acc. to DIN 43671

According to DIN 43671, current-carrying capacity values for flat bars are defined at 35 °C ambient temperature and 65 °C busbar temperature.

If a higher busbar temperature than 65 °C is possible, the busbars can be operated with higher current values according to the following formula: $I = I_n k_2$

Example

Under normal operating conditions (35 °C ambient temperature and 65 °C busbar temperature), a 30 x 10 mm busbar can handle loads up to 630 A. However, you want the busbar to handle a higher current, at the expense of an increased busbar temperature of max. 85 °C.

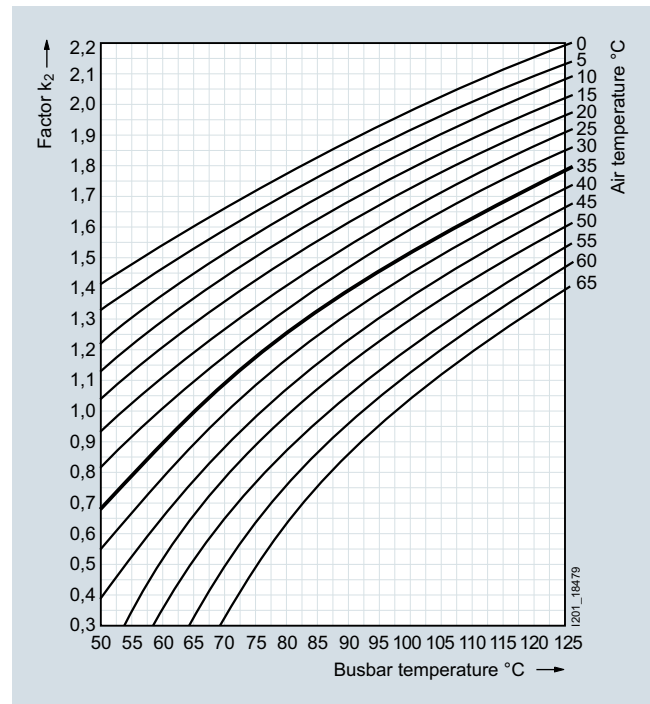
The following applies:

- Bar type: Busbar
- Busbar size: 30 x 10 mm
- Max. bar temperature: 85 °C
- Ambient temperature: 35 °C

The figure on the right shows the correction factor $k_2 = 1.3$ for the current-carrying capacity.

This results in a higher value of 630 A x 1.3 = 819 A.

If the 30 x 10 mm busbar is to be operated with a bar temperature of 85 °C, it may be loaded with maximum 819 A.



Current-carrying capacity values for 30 x 10 mm flat bars acc. to DIN 43671, depending on ambient and bar temperature

Busbar Systems

Introduction

UL applications

Overview

Short-circuit strength

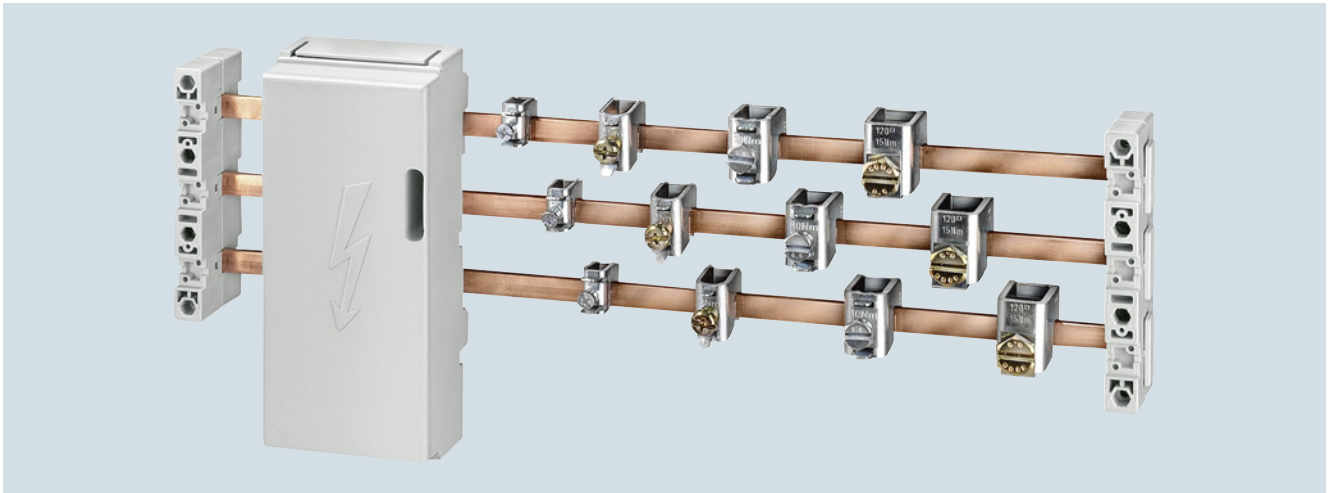
The short-circuit strength of the busbar system is dependent on the distance of the busbar supports and on the busbar cross-section.

The short-circuit strength of the whole system is dependent on the short-circuit strength of the busbars and of the adapters with circuit breakers or switch disconnectors. If one of these values is lower than the prospective short-circuit current at the installation site, a current-limiting protective device has to be mounted upstream of the 8US busbar system. This may also be mounted as a feeder circuit breaker on the busbar system itself. The table below provides a selection aid for this purpose.

Selection aid for UL applications

An updated roundup of all available busbar adapters can be found at

www.siemens.com/lowvoltage/8US-UL

Overview

The 40 mm busbar system for the lower performance range up to 400 A: Terminals and covers for infeed and connection methods

The 40 mm busbar system is used in machine engineering and distribution boards, in meter cabinets and in power distribution systems of the low performance range up to 400 A.

The busbar cross-sections are adapted to the rated currents and are available in the sizes 12 x 5 mm, 12 x 10 mm, 15 x 5 mm and 15 x 10 mm. The basic system is configured without covers. If touch protection is required, this is possible with busbar covers.

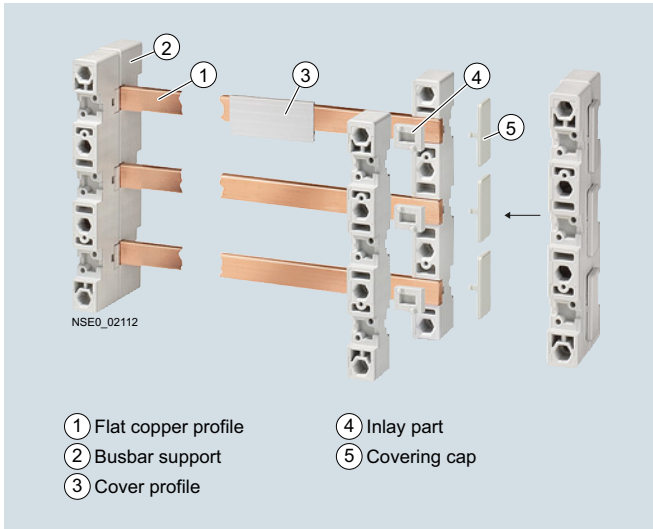
Terminals round off the product range of the 40 mm busbar system.

Busbar Systems

8US 40 mm Busbar Systems up to 400 A




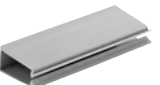
Basic assemblies

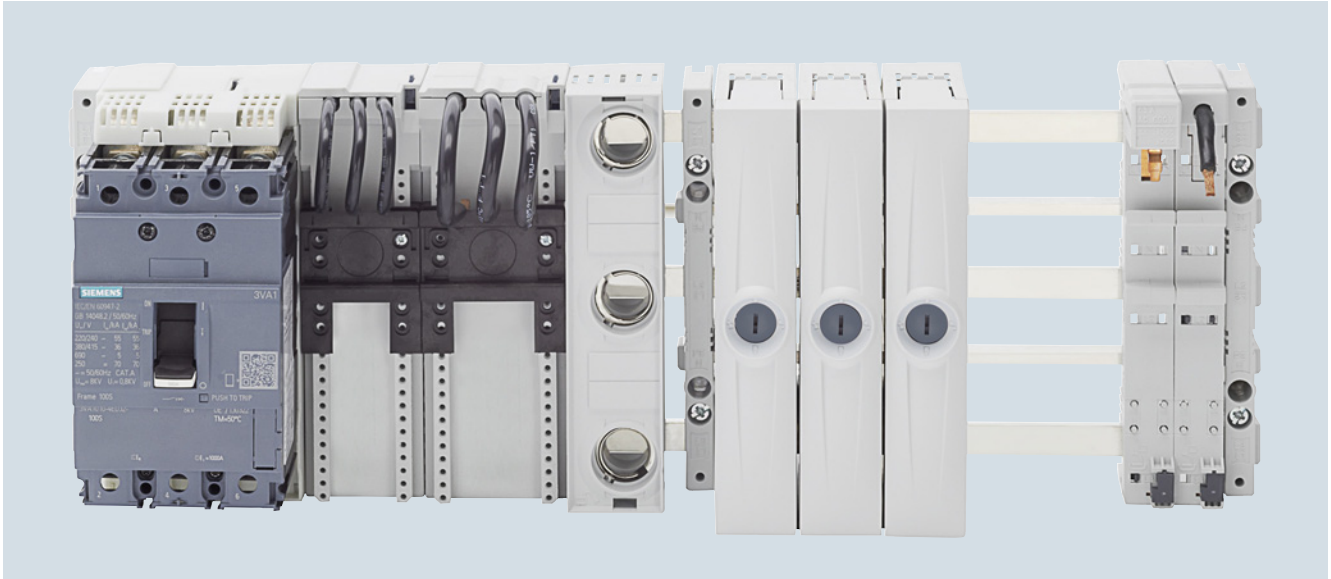
Overview



40 mm busbar system: Basic assembly up to 400 A

Selection and ordering data

Description	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
d						
<p>②④⑤ Busbar supports End and intermediate holders for flat copper profiles 12 x 5 mm, 12 x 10 mm, 15 x 5 mm, 15 x 10 mm 3-pole, with inside fixing (PU = 2 busbar supports including inlay parts for bar thickness 5 mm and lateral finger-safe covers)</p>  <p>8US1903-3AB00</p>		8US1903-3AB00		1	1 unit	1CU
<p>5-pole, 12 x 5 mm and 12 x 10 mm with inside fixing</p>  <p>8US1903-5AA00</p>	L1-L3 + N + PE/N	8US1903-5AA00		1	1 unit	1CU
<p>① Flat copper profiles (flat profile, approx. 2.4 m long, bare, according to EN 12167) 12 x 5 mm 15 x 5 mm</p>  <p>8WC5</p>		8WC5123 8WC5121		1 1	1 unit 1 unit	1CU 1CU
<p>③ Cover profiles for busbars 12 x 5 mm 15 x 5 mm</p>  <p>8US1922-2CA00</p>	1000 mm long 1000 mm long	8US1922-2CA00 8US1922-2AA00		1 1	10 units 10 units	1CU 1CU

Overview

The 60 mm compact busbar system for the lower performance range up to 360 A

The 60 mm compact busbar system is used especially as a space-saving solution in distribution boards with 12 x 5 or 12 x 10 mm busbars up to 360 A.

Thanks to its maximum height of 160 mm, it offers significant space benefits over other assemblies, and with the comparable dimensions of a 40 mm busbar system it offers an ideal alternative with the benefits of a 60 mm busbar system.

Another important benefit is provided by the option of combining with devices from the basic assemblies up to 400 A.

In addition, most components of the system in the 3-pole version meet the requirement regarding clearances in accordance with UL 508.

Another benefit is expansion to a 5-pole system with the same mounting height of 160 mm. The N and PE conductors are each arranged between the phases. The busbar supports are already prepared for a 5-pole system.

The 5-pole compact system is approved for 12 x 5 mm busbars and for applications up to a maximum of 200 A.

Benefits

- Significant space advantage compared to other assemblies
- Combination option with devices from the basic assemblies up to 400 A
- Comply with the clearances stipulated by UL 508
- Expansion to a 5-pole system up to 200 A possible

Busbar Systems

8US 60 mm Compact Busbar Systems up to 360 A

3-/5-pole

Basic assemblies





Overview



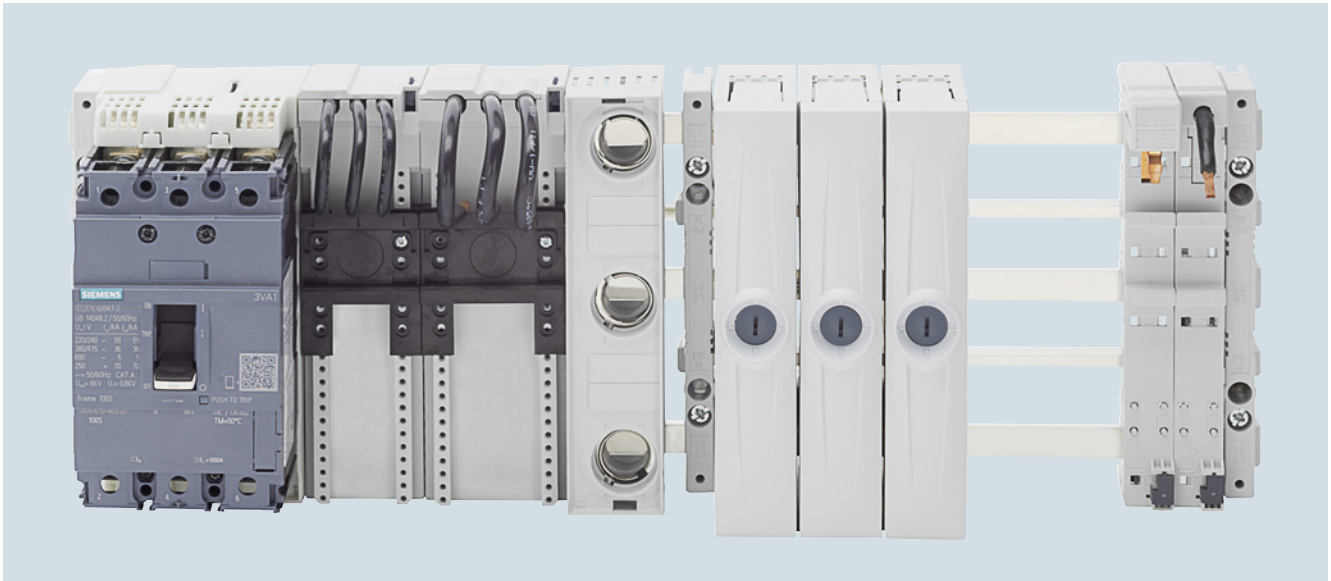
The 3-/5-pole 60 mm compact busbar system for the lower performance range up to 360 A; the 5-pole element is only designed for up to 200 A

Selection and ordering data

Assembly of 3-/5-pole 60 mm compact busbar systems (up to 200/360 A for 12 x 5/10 mm busbars)




	Description	Size	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm		d					
	Busbar supports, 3P+N+PE, with end cover <ul style="list-style-type: none"> Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications - 600 V AC for UL 508 SCCR for UL 508 <ul style="list-style-type: none"> - 5-pole: 22 kA - 3-pole: 36 kA Minimum order quantity 10 units 	12 x 160 x 45	UL 508		8US1923-5CA02		1 10 units	1CU	
	UL spacers, height 18 mm <ul style="list-style-type: none"> For use under 8US1923-5CA02 busbar support Minimum order quantity 10 units 	12 x 160 x 18			8US1922-1CA02		1 10 units	1CU	
	Stabilizing modules <ul style="list-style-type: none"> For protecting the N and PE busbars against bending. Minimum order quantity 10 units 	2 x 160 x 47			8US1928-5CA02		1 10 units	1CU	
	Cover profiles <ul style="list-style-type: none"> Minimum order quantity 2 units 	700 x 160 x 63			8US1922-2CB02		1 2 units	1CU	
	Holders <ul style="list-style-type: none"> For 8US1922-2CB02 cover profile Minimum order quantity 10 units 	5 x 156 x 55			8US1922-2CA02		1 10 units	1CU	

Overview



The 3-/5-pole 60 mm compact busbar system for the lower performance range up to 360 A: Infeeds and connection methods

Assembly of 3-pole 60 mm compact busbar systems (up to 200/360 A for 12 x 5/10 mm busbars)

Description	Size mm	Standard	SD d	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
 <p>Infeed system 3-pole for busbar 12 x 5 mm, 12 x 10 mm</p> <p>Connection modules 16 mm², 3-pole with spring terminal 1.5 ... 16 mm²</p> <ul style="list-style-type: none"> Rated current I_e <ul style="list-style-type: none"> - 80 A for IEC applications Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications Minimum order quantity 6 units 	20 x 160 x 91			8US1921-1BA02		1	6 units	1CU
 <p>Connecting terminal plates, 3-pole</p> <ul style="list-style-type: none"> Terminals 6 ... 50 mm² Rated current I_e <ul style="list-style-type: none"> - 300 A for IEC applications Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications - 600 V AC for UL 508 	54 x 160 x 115	UL 508		8US1921-1CB02		1	1 unit	1CU
 <p>Connecting terminal plates, 3-pole</p> <ul style="list-style-type: none"> Terminals 35 - 150 mm² Rated current I_e <ul style="list-style-type: none"> - 480 A for IEC applications Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications 	90 x 160 x 115			8US1921-1CC02		1	1 unit	1CU

Busbar Systems

8US 60 mm Compact Busbar Systems up to 360 A

3-pole

Built-in components

Overview



Bus-mounting base for 3-pole compact busbar systems

Melting fuses are capable of safely switching off faulty circuits. NEOZED fuses have a high short-circuit breaking capacity of 50 kA and a high short-circuit current limitation.

The NEOZED bus-mounting fuse bases in size D02 enable the direct use of 20 A to 63 A NEOZED fuse links. Adapter sleeves and a special retaining spring (5SH5400) are available for use with smaller rated currents up to 16 A.

Thanks to their 36-mm-wide design, NEOZED bus-mounting fuse bases are highly thermally emissive, thus enabling high operating currents under continuous load.

For more information on NEOZED fuse systems, see chapter "Fuse Systems"

Technical specifications

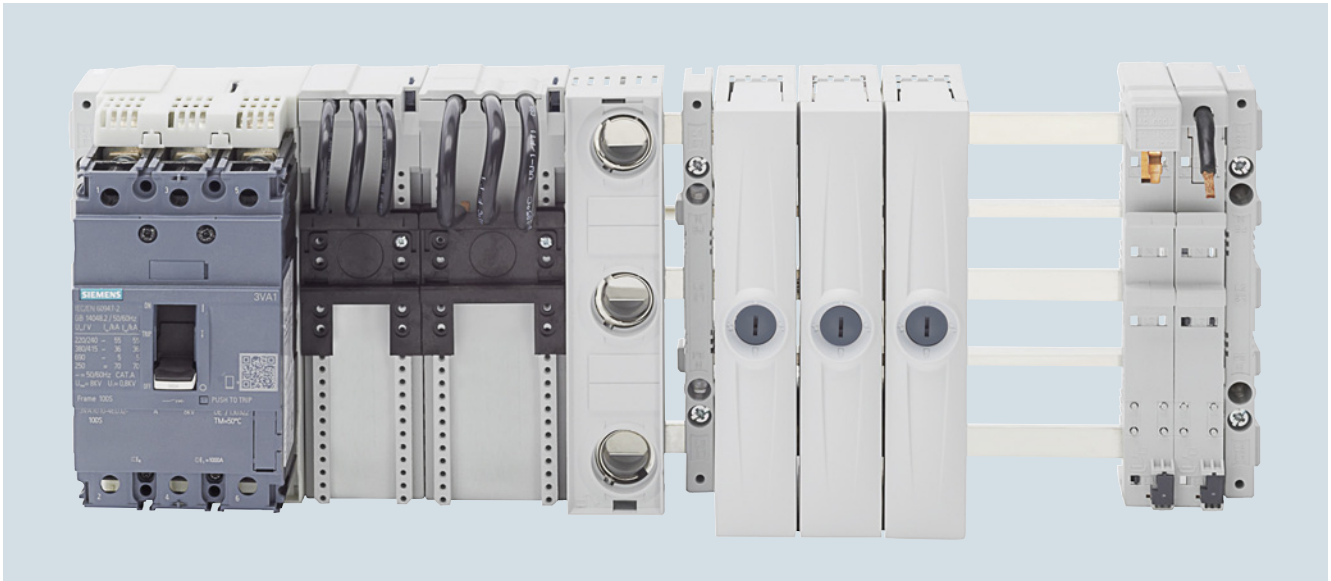
Bus-mounting bases

		NEOZED bus-mounting bases for 60 mm compact busbar systems 5SG6208	
Size		D02	
Standards		IEC 60269-3, DIN VDE 0636-3	
Rated voltage	V AC	400	
	V DC	250	
Rated frequency	Hz	50	
Rated current	A	63	
Rated conditional short-circuit current	kA AC	50	
	kA DC	8	
For fuse links with power losses per phase	W	5.5	
Busbar center-to-center spacing	mm	60	
Box terminals for wire connection	mm ²	Cu 1.5 ... 10 (re)	
	mm ²	Cu 1.5 ... 25 (f)	
	mm ²	Cu 1.5 ... 25 (f+AE)	
Tightening torque	Nm	3	
Material		Temperature-resistant up to min. 120 °C, self-extinguishing acc. to UL 94 min. CTI 200	

Selection and ordering data




Size	Rated current	Rated voltage	Mounting width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	A	V	MW	d					
	NEOZED bus-mounting bases with touch protection, 3P NEW				5SG6208		1	6 units	1CU
	<ul style="list-style-type: none"> For 5/10 mm busbars 36 mm wide D02 63 400 2 For NEOZED screw caps, NEOZED adapter sleeves and NEOZED fuse links, see chapter "Fuse Systems", "NEOZED fuse systems"								

Overview



The 3-/5-pole 60 mm compact busbar system for the lower performance range up to 360 A: Device adapters and device holders

Assembly of 3-pole 60 mm compact busbar systems (up to 200/360 A for 12 x 5/10 mm busbars)

Busbar device adapters for	Size (H x W x D) mm	Stand- ard	SD d	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
 Universal applications, 3-pole Adapters 32 A, 1 support rail <ul style="list-style-type: none"> Rated current I_e <ul style="list-style-type: none"> - 32 A for IEC applications - 25 A for UL 508 Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications - 600 V AC for UL 508 Minimum order quantity 4 units 	160 x 45 x 63	UL 508		8US1651-5DK02		1 4 units	1CU	
 Adapters 63 A, 1 support rail <ul style="list-style-type: none"> Rated current I_e <ul style="list-style-type: none"> - 63 A for IEC applications - 65 A for UL 508 Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications - 600 V AC for UL 508 Minimum order quantity 4 units 	160 x 54 x 63	UL 508		8US1661-5FK02		1 4 units	1CU	
 3VA10/11 molded case circuit breakers, 3-pole <ul style="list-style-type: none"> With latching function For rails 12 x 5 mm, 12 x 10 mm Rated current I_e <ul style="list-style-type: none"> - 144 A for IEC applications Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications 	200 x 77			8US1613-4AU01		1 1 unit	1CU	

Busbar Systems




8US 60 mm Compact Busbar Systems up to 360 A

3-pole

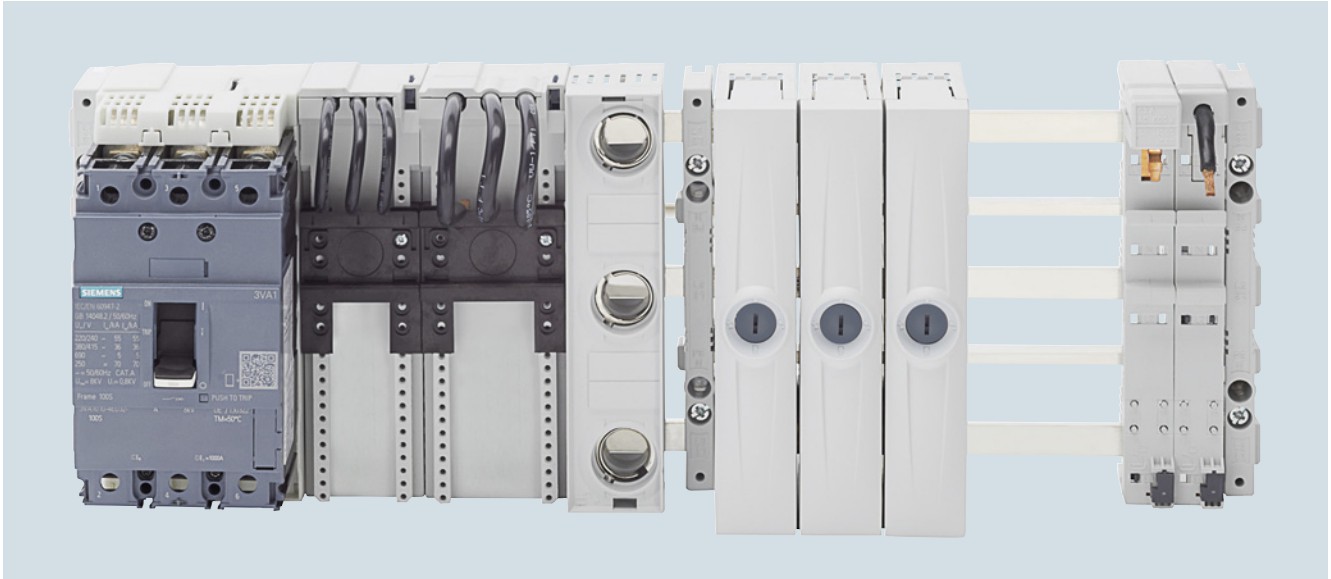
Accessories

Overview

For 12 x 5 mm busbars (up to 200 A)




	Description	Size	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm		d					
	Support modules • Minimum order quantity 6 units	18 x 160 x 54			8US1620-5AK02		1	6 units	1CU
8US1620-5AK02									
	Lateral modules • Minimum order quantity 12 units	9 x 160 x 47			8US1998-2BH02		1	12 units	1CU
8US1998-2BH02									
	Set of connectors • For connecting adapters	--			8US1998-1AA02		1	1 unit	1CU
8US1998-1AA02									

Overview



The 3-/5-pole 60 mm compact busbar system for the lower performance range up to 360 A: Infeed and connection methods

Assembly of 5-pole 60 mm compact busbar systems (up to 200 A for 12 x 5 mm busbars)

Description	Size	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	mm		d					
 <p>Infeed system 5-pole for busbar 12 x 5 mm</p> <p>Connecting terminal plates, 3-pole</p> <ul style="list-style-type: none"> • 10 ... 120 mm² • Rated current I_e <ul style="list-style-type: none"> - 250 A for IEC applications • Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications - 600 V AC for UL 508 	90 x 160 x 80			8US192-1CD02		1	1 unit	1CU
 <p>N connection modules</p> <ul style="list-style-type: none"> • Terminals 10 ... 120 mm² • Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications 	30 x 160 x 80			8US192-1CE02		1	1 unit	1CU
 <p>PE connection modules</p> <ul style="list-style-type: none"> • Terminals 10 ... 120 mm² • Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications 	30 x 160 x 80			8US192-1CF02		1	1 unit	1CU

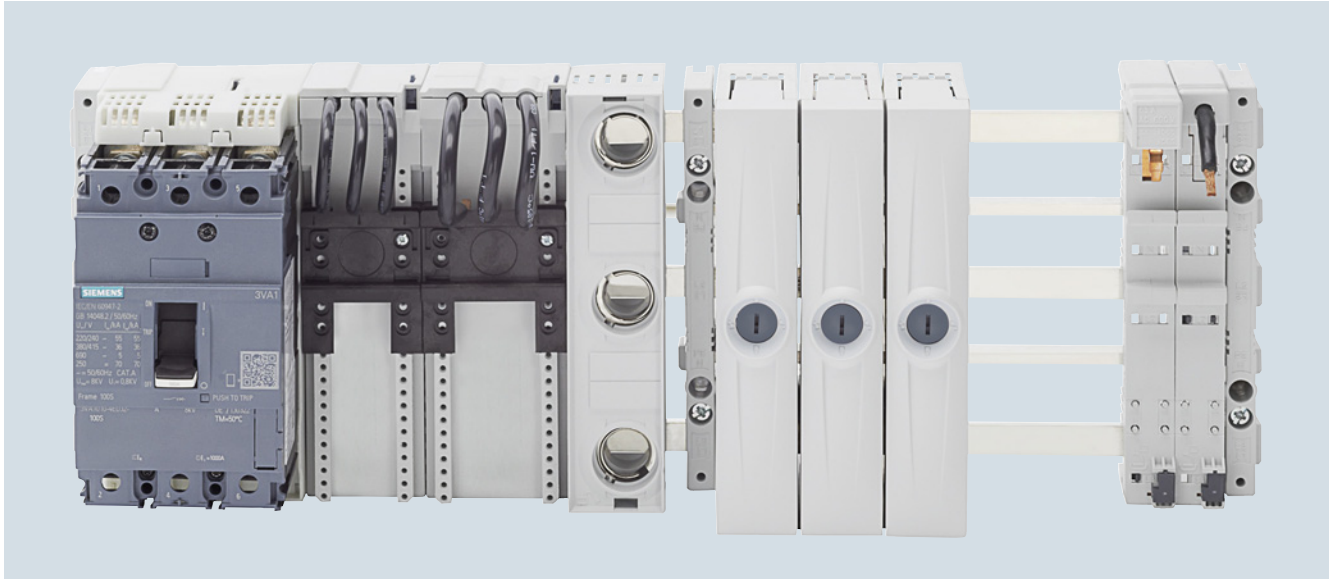
Busbar Systems

8US 60 mm Compact Busbar Systems up to 360 A

5-pole (up to 200 A)




Device adapters and device holders

Overview








The 3-/5-pole 60 mm compact busbar system for the lower performance range up to 360 A: Device adapters and device holders

Assembly of 5-pole 60 mm compact busbar systems (up to 200 A for 12 x 5 mm busbars)

Busbar device adapters for	Size mm	Standard	SD d	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Universal applications								
 Adapters, single-pole, 32 A <ul style="list-style-type: none"> • Standard version • Rated current I_e <ul style="list-style-type: none"> - 32 A for IEC applications • Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications • Minimum order quantity 12 units 	18 x 160 x 73			8US1621-2NJ02		1 12 units	1CU	
 Adapters, single-pole, 63 A <ul style="list-style-type: none"> • Standard version • Rated current I_e <ul style="list-style-type: none"> - 63 A for IEC applications • Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications • Minimum order quantity 12 units 	18 x 160 x 73			8US1621-2FK02		1 12 units	1CU	
 Adapters, single-pole, 63 A <ul style="list-style-type: none"> • For 5SY miniature circuit breakers • Rated current I_e <ul style="list-style-type: none"> - 63 A for IEC applications • Rated voltage U_e <ul style="list-style-type: none"> - 690 V AC for IEC applications • Minimum order quantity 12 units 	18 x 160 x 82			8US1624-2FK02		1 12 units	1CU	

Overview

For 12 x 5 mm busbars (up to 200 A)

	Description	Size	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm		d					
	N modules • Terminals 1.5 ... 16 mm ² • Rated voltage U_e - 690 V AC for IEC applications • Minimum order quantity 12 units	9 x 160 x 114			8US1600-0RE02		1 12 units	1CU	
8US1600-0RE02									
	PE modules • Terminals 1.5 ... 16 mm ² • Rated voltage U_e - 690 V AC for IEC applications • Minimum order quantity 12 units	9 x 160 x 114			8US1600-0RF02		1 12 units	1CU	
8US1600-0RF02									
	Support modules • Minimum order quantity 6 units	18 x 160 x 54			8US1620-5AK02		1 6 units	1CU	
8US1620-5AK02									
	Lateral modules • Minimum order quantity 12 units	9 x 160 x 47			8US1998-2BH02		1 12 units	1CU	
8US1998-2BH02									
	Module connectors (1 pack = 100 units) • For connecting adapters	--			8US1998-1AA02		1 1 unit	1CU	
8US1998-1AA02									

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Introduction

Overview



The 60 mm busbar system for the medium and top performance range up to 1600 A, here for example with the 3NP1 switch disconnecter, size 3

The 60 mm busbar system is used preferably in control cabinet installation, in motor control centers and in power distribution systems of the medium power range (630 A) and top performance range (1600 A, special profile).

The 60 mm busbar system can be configured as a basic system without covers. The busbar cross-sections are available in the sizes 12 x 5 mm to 30 x 10 mm and as a special profile.

Busbar adapters for SIRIUS devices, 3VL circuit breakers, 3KA and 3KL switch disconnectors, and 3NP1 and 3NP5 fuse switch disconnectors offer numerous options for configuring this busbar system. Infeed units, terminals and other accessories open up a large range of applications.

Busbars with a special profile are suitable for applications up to 1600 A. All components of the 60 mm busbar system can be fitted.

SIRIUS motor starter combinations

SIRIUS motor starter combinations can be configured with and without fuses.

The compact 3NW7 ... -1 cylindrical fuse holders for IEC fuses, size 10 x 38 mm, or 3NW7... -1HG cylindrical fuse holders for Class CC UL fuses are suitable for use with fused motor starter combinations.

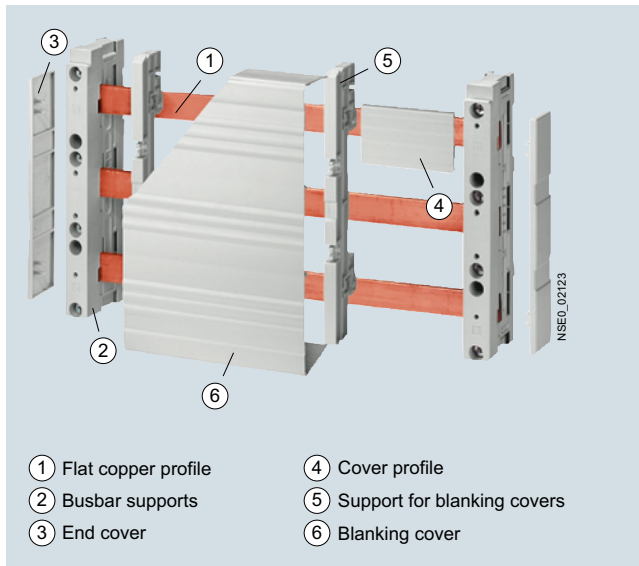
With a width of 45 mm, SIRIUS motor starter combinations are the same width as the majority of contactors.

For further information and accessories, see chapter "Fuse Systems" → Cylindrical fuse systems → Fuse holders in size 10 x 38 mm and Class CC



Installation configuration of a cylindrical fuse holder and a SIRIUS contactor on busbar device adapter for the 60 mm busbar system

Overview



60 mm busbar system: Basic assemblies up to 630 A

Selection and ordering data

Busbar support and end cover

Description	Connections	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
② Busbar supports								
End and intermediate holders for flat copper profiles 12, 15, 20, 25, 30 x 5, 10 mm								
3-pole, with outside fixing	L1-L3			8US1923-2AA01		1	10 units	1CU
3-pole, with inside fixing	L1-L3			8US1923-3AA01		1	10 units	1CU
4-pole, with inside fixing	L1-L3 + PE/N			8US1923-4AA00		1	10 units	1CU
2-pole, with outside fixing				8US1923-5AA00		1	10 units	1CU
N/PE busbar supports 12, 20, 30 x 5, 10 mm								
1-pole, for flat copper profile for 5/10 mm busbars	PE/N			5SH3540		1	1 unit	1CU



8US1923-3AA01



8US1923-5AA00






5SH3540





Busbar Systems






8US 60 mm Busbar Systems up to 1600 A

Basic assemblies up to 630 A

	Description	Connections	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	N/PE busbar supports, 6 x 6 mm 12, 15, 20, 25, 30 x 5, 10 mm 1-pole, for copper profiles for mounting on 8US1923-2AA01 3-pole busbar supports or free standing	PE/N	UL 508	d	8US1923-1AA01		1	1 unit	1CU
8US1923-1AA01									
	End and intermediate holders for flat copper profiles 5 x 20 mm, 10 x 20 mm, 10 x 30 mm 3-pole, with inside fixing	L1-L3	UL 508 ¹⁾		8US1923-3UA01		1	10 units	1CU
8US1923-3UA01									
	③ End covers For covering free busbar ends • For 8US1923-2AA01, 3AA01 and 3UA01	L1-L3	UL 508		8US1922-1AC00		1	10 units	1CU
8US1922-1AC00									
	¹⁾ Only with base plate 8US1922-2UA01								

Covers, supports for blanking covers, flat copper profiles and busbar connection parts

	Description	Length	Width	Depth	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	mm	mm		d					
	④ Cover profiles for busbars 12 x 5 mm	1000	15	10			8US1922-2CA00		1	10 units	1CU
8US1922-2CA00											
	15 x 5 mm, 20 x 5 mm, 25 x 5 mm, 30 x 5 mm	1000	40	9	UL 508		8US1922-2AA00		1	10 units	1CU
8US1922-2AA00											
	12 x 10 mm, 15 x 10 mm, 20 x 10 mm, 25 x 10 mm, 30 x 10 mm	1000	40	14	UL 508		8US1922-2BA00		1	10 units	1CU
	⑤ Supports for blanking covers Mounting on busbar, 32 mm depth (2 units per section of blanking cover)					UL 508	8US1922-2EA00		1	4 units	1CU
8US1922-2EA00											
	Mounting on busbar, 107 mm depth (2 units per section of blanking cover)					UL 508	8US1922-2EA01		1	8 units	1CU
	⑥ Blanking covers Mounting on 8US1922-2EA.. support for blanking covers Height 195 mm, Depth 63 mm, Length 700 mm					UL 508	8US1922-2EB00		1	2 units	1CU
8US1922-2EB00											

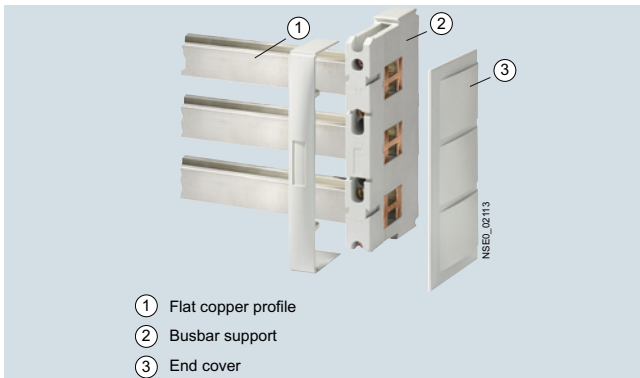
Description	Length	Cross-section	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	mm	mm ²		d					
 Base plates For 3-pole system, width 240 mm 8US1922-2UA01	1100	--	UL 508		8US1922-2UA01		1	2 units	1CU
 ① Flat copper profiles (flat profile, bare) Flat copper profiles for universal applications <ul style="list-style-type: none"> • 12 × 5 mm, current intensity 200 A • 15 × 5 mm, current intensity 250 A • 20 × 5 mm, current intensity 320 A • 25 × 5 mm, current intensity 400 A • 25 × 5 mm, current intensity 400 A • 30 × 5 mm, current intensity 447 A • 30 × 5 mm, current intensity 447 A • 20 × 10 mm, current intensity 520 A • 30 × 10 mm, current intensity 630 A 	2400	60	EN 12167		8WC5123		1	1 unit	1CU
	2400	75	EN 12167		8WC5121		1	1 unit	1CU
	2400	100	EN 12167		8WC5126		1	1 unit	1CU
	1100	125	EN 12167		8WC5031-1AA00		1	1 unit	1CU
	2400	125	EN 12167		8WC5131		1	1 unit	1CU
	1100	150	EN 12167		8WC5033-1AA00		1	1 unit	1CU
	2400	150	EN 12167		8WC5133		1	1 unit	1CU
	2400	200	EN 12167		8WC5128		1	1 unit	1CU
	2400	300	EN 12167		8WC5134		1	1 unit	1CU
① Flat copper profiles, tinned <ul style="list-style-type: none"> • 12 × 5 mm, current intensity 200 A • 15 × 5 mm, current intensity 250 A • 20 × 5 mm, current intensity 320 A • 25 × 5 mm, current intensity 400 A • 30 × 5 mm, current intensity 447 A • 20 × 10 mm, current intensity 520 A • 30 × 10 mm, current intensity 630 A For further flat copper profiles, see chapter "Power Distribution Boards / Distribution Boards"	2000	60	EN 12167		8WC5051		1	1 unit	1CU
	2000	75	EN 12167		8WC5052		1	1 unit	1CU
	2000	100	EN 12167		8WC5053		1	1 unit	1CU
	2000	125	EN 12167		8WC5054		1	1 unit	1CU
	2000	150	EN 12167		8WC5055		1	1 unit	1CU
	2000	200	EN 12167		8WC5063		1	1 unit	1CU
	2000	300	EN 12167		8WC5065		1	1 unit	1CU
 Extension terminals For busbars 12 × 5 mm, tightening torque 6.0 Nm (busbar not included in scope of supply, 1 set = 2 units) 8JK320	--	--	--		8JK3201		1	10 sets	1BR
 Busbar connection pieces for bars For flat profiles (max. 630 A) 20 × 5 mm, 20 × 10 mm, 25 × 5 mm, 25 × 10 mm, 30 × 5 mm, 30 × 10 mm 8US1921-2BE00	40	--	--		8US1921-2BE00		1	6 units	1CU
 For flat profiles (max. 630 A) 12 × 5 mm, 12 × 10 mm, 15 × 5 mm, 15 × 10 mm, 20 × 5 mm, 20 × 10 mm 8US1921-2BF00	55	--	--		8US1921-2BF00		1	12 units	1CU

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A





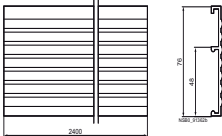


Basic assemblies up to 1600 A

Overview

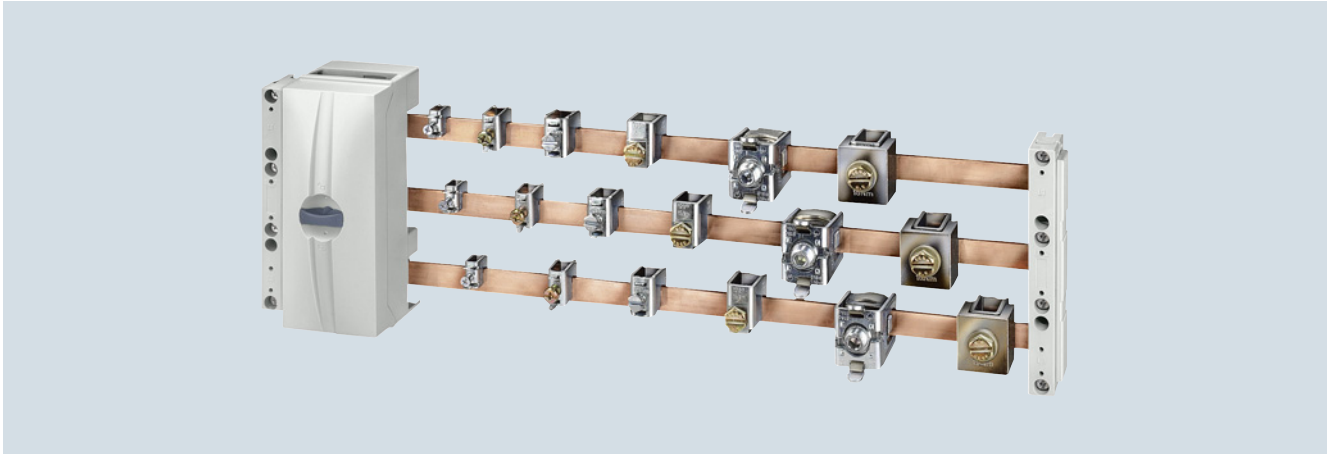


60 mm busbar system: Basic assembly up to 1600 A

Selection and ordering data





	Description	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	Busbar supports 3-pole, for TT special profiles End and intermediate holder with finger-safe busbar cover (1 pack = 2 busbar supports + finger-safe end covers)	L1-L3	UL 508	8US1943-3AA00		1	1 unit	1CU
	Flat copper profiles (approx. 2.4 m long, tinned) TT special profile up to 1600 A, cross-section 720 mm ²			8US1948-2AA00		1	1 unit	1CU
	Cover profiles For flat copper profiles, length 1000 mm			8US1922-2DA00		1	5 units	1CU
	Busbar connection pieces For special profiles/TT profiles up to 1600 A			8US1941-2BF01		1	6 units	1CU
	Partitions, closed 76 mm wide, 2400 mm long For additional lateral touch protection at the top/bottom			8US1922-1JA00		1	1 unit	1CU
	Supports (for blanking covers) Mounting on busbar, 32 mm depth (2 units per section of blanking cover)		UL 508	8US1922-2EA00		1	4 units	1CU
	Mounting on busbar, 107 mm depth (2 units per section of blanking cover)		UL 508	8US1922-2EA01		1	8 units	1CU
	Blanking covers Mounting on 8US1922-2EA.. support for blanking covers Height 195 mm, Depth 63 mm, Length 700 mm		UL 508	8US1922-2EB00		1	2 units	1CU

Overview



60 mm busbar system: Terminals and covers for infeed and connection methods







Selection and ordering data

	Description	Length	Width	Max. current	Conductor cross-section	Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	mm	A	mm ²		d					
 8US1921-1AA00	Infeed											
	Connecting terminal plate with cover											
	• 3-pole	200	20	80	1.5 ... 16	UL 508		5SH3538		1 5 units	1CU	
	• 3-pole	200	54	300	6 ... 50	UL 508		8US1921-1BA00		1 1 unit	1CU	
	• 3-pole	200	81	400	35 ... 120	UL 508		8US1921-1AA00		1 1 unit	1CU	
 8US1200-0AA00	Outgoing modules for PE/N											
	Connection module for 4th pole (PE/N) up to 16 mm, must be mounted onto adapter/device holder	242	18	--	--	--		8US1200-0AA00		1 1 unit	1CU	
 5SH3535	SR60 connecting terminal plates											
	3-pole with cover, suitable for aluminum conductors (shown without cover)			560	150 ... 300	--		5SH3535		1 1 unit	1CU	
 8US1941-2AA03	Terminal sets											
	3-pole without cover for round cables, suitable for aluminum conductors			560	95 ... 300	UL 508		8US1941-2AA03		1 1 unit	1CU	

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Infeeds and connection methods





	Description	Max. current	Conductor cross-section mm ²	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	Terminal sets 3-pole without cover for flat bars up to 32 x 20 mm	800	--	UL 508		8US1941-2AA04		1	1 unit	1CU
8US1941-2AA04										
	Covers for 8US1941-2AA03/04 terminal set	--	--	--		8US1922-1GC00		1	1 unit	1CU
8US1922-1GC00										
Terminals for circular conductors										
Busbar thickness 5 mm¹⁾										
12 x 5 mm, 15 x 5 mm, 20 x 5 mm, 25 x 5 mm, 30 x 5 mm										
		180	1.5 ... 16			8US1921-2AA00		100	100 units	1CU
		270	4 ... 35			8US1921-2AB00		100	50 units	1CU
		400	16 ... 70			8US1921-2AD00		1	50 units	1CU
		440	16 ... 120			8US1921-2AC00		1	50 units	1CU
Terminals		180	1.5 ... 16			8US1921-2AA01		1	15 units	1CU
		270	4 ... 35			8US1921-2AB01		1	15 units	1CU
		400	16 ... 70			8US1921-2AD01		1	15 units	1CU
		440	16 ... 120			8US1921-2AC01		1	15 units	1CU
10 mm busbar thickness										
12 x 10 mm, ¹⁾ 15 x 10 mm, ¹⁾ 20 x 10 mm, 25 x 10 mm, 30 x 10 mm										
		180	1.5 ... 16			8US1921-2BA00		1	100 units	1CU
		270	4 ... 35			8US1921-2BB00		1	50 units	1CU
		400	16 ... 70			8US1921-2BD00		1	50 units	1CU
		440	16 ... 120			8US1921-2BC00		1	50 units	1CU
Terminals		180	1.5 ... 16			8US1921-2BA01		1	15 units	1CU
		270	4 ... 35			8US1921-2BB01		1	15 units	1CU
		400	16 ... 70			8US1921-2BD01		1	15 units	1CU
		440	16 ... 120			8US1921-2BC01		1	15 units	1CU
	20 x 5 mm, 25 x 5 mm, 30 x 5 mm	500	95 ... 185			8US1941-2AA01		1	6 units	1CU
										
8US1941-2AA01										
		600	95 ... 300			8US1941-2AA02		1	3 units	1CU
										
8US1941-2AA02										

¹⁾ Cannot be used on a special profile up to 1600 A

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Infeeds and connection methods

	Description	Max. current	Conductor cross-section mm ²	Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
 8US1922-1GA00	Terminal covers for circular conductors (fixing to busbar) For terminals up to 120 mm ² 200 mm long, 84 mm wide	--	--	--		8US1922-1GA00		1	10 units	1CU
	For terminals up to 300 mm ² ¹⁾ 200 mm long, 270 mm wide	--	--	--		8US1922-1GA02		1	1 unit	1CU
 8US1941-2AC00  8US1941-2BB00  8US1941-2BA00	Terminals For cable lugs up to 240 mm ² , 10 mm bar thickness (threaded bolts M10)	630	--	--		8US1941-2AC00		1	6 units	1CU
	For copper bars or laminated conductors 20 x 5 mm, 20 x 10 mm, 25 x 5 mm, 25 x 10 mm, 30 x 5 mm, 30 x 10 mm	750	--	--		8US1941-2BB00		1	6 units	1CU
	For 2 x 40 x 10 mm, for TT flat copper profile 30 x 10 mm profile for flat bars up to 40 x 25 mm	1250	--	--		8US1941-2BA00		1	3 units	1CU

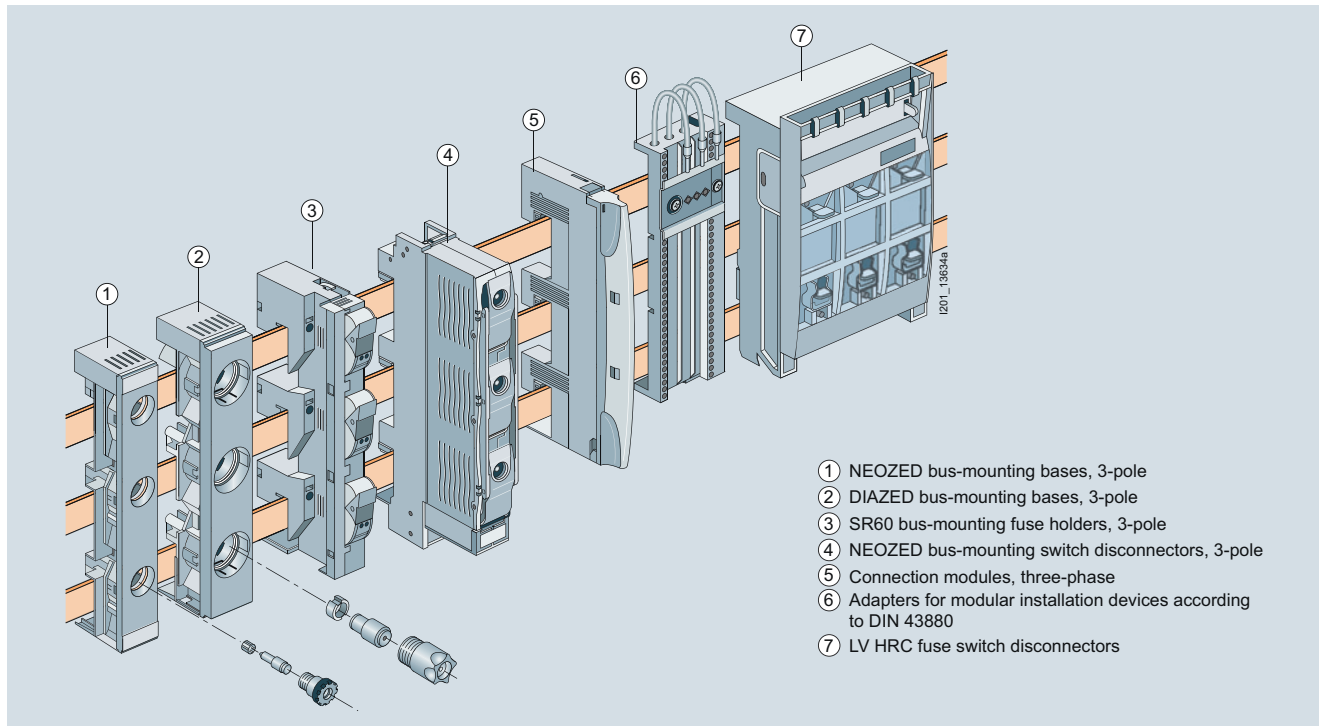
¹⁾ Only for 20 x 5 mm, 20 x 10 mm, 25 x 5 mm, 25 x 10 mm, 30 x 5 mm and 30 x 10 mm

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Built-in components

Overview



- ① NEOZED bus-mounting bases, 3-pole
- ② DIAZED bus-mounting bases, 3-pole
- ③ SR60 bus-mounting fuse holders, 3-pole
- ④ NEOZED bus-mounting switch disconnecters, 3-pole
- ⑤ Connection modules, three-phase
- ⑥ Adapters for modular installation devices according to DIN 43880
- ⑦ LV HRC fuse switch disconnecters

NEOZED and DIAZED built-in components

Rail-adaptable built-in components, such as NEOZED and DIAZED bus-mounting bases, adapters for modular installation devices, fuse switch disconnecters and NEOZED bus-mounting fuse switch disconnecters are made of glass-fiber reinforced, thermoplastic polyester. The material ensures the required mechanical, chemical and electrical properties.

Efficient power distribution up to 630 A.

Users have several options for mounting the SR60 busbar system:

1. Mounting in distribution boards

The busbar supports are mounted on longitudinal stays. Once the built-in components are mounted and connected, the touch protection cover (section cover) protects against accidental contact with live parts.

2. Mounting in industrial control panels

The demand for comprehensive touch protection has generated new solutions: Built-in components, such as busbar fuse bases have integrated reach-through guards, enable the implementation of cost-effective overall solutions.

Previously two optional solutions were provided, which can now be replaced using new technology: Touch protection via base and edges or touch protection via partitions.

Higher overall efficiency and cost savings in the plant engineering industry.

Fuse holders, fuse switch disconnecters, switch disconnecters with fuse and 16 mm² connection modules with screwless terminals are available; this offers users maximum safety and comfort.

Class CC and Class J fuse systems

Class CC and Class J fuse links acc. to the UL and CSA standards are used for "branch circuit protection" and in the "feeder circuit". Different characteristics are available for different applications.

The Class CC and Class J 30 A and 60 A fuse holders are modular installation devices for mounting on a DIN rail (standard mounting rail) that are available in one-, two- and three-pole versions. A three-pole device for mounting Class CC fuses on a 60 mm busbar system is also available.

The Class J 100 A, 200 A and 400 A fuse holders are available as versions either for screwing onto a mounting plate or for directly mounting on the 60 mm busbar system.

We do not currently offer any fuse holders for the 500 A and 600 A Class J fuse links. The fuse links can be optionally mounted on busbars.

The fuse holders for cylindrical fuses, size 10 x 38 and for American fuses, Class CC and Class J, can be used in the international plant engineering industry. In addition, Siemens offers a broad range of UL-approved components for the design of switchboards according to UL 508 A.

Advantages:

- For switchboard assemblies and machine manufacturers who export their switchboards to the USA or Canada.
- Easier export due to UL and CSA approvals
- Modern fuse holder design with touch protection to BGV A3 ensures safe installation.
- Fuse holders up to 200 A enable fuses to be changed in the de-energized state.
- Efficient power distribution thanks to mounting the devices on 60 mm busbar system.

For further information

For more information, see chapter "Fuse Systems".

Planning dimensions

	Width mm	Width MW
NEOZED bus-mounting bases D02		
Covers	27	1.5
Covers, extra wide	36	2.0
Covers, double width	54	3.0
DIAZED bus-mounting bases DII		
Covers	42	2.3
DIAZED bus-mounting bases DIII		
Covers	57	3.2
NEOZED bus-mounting switch disconnectors	27	1.5
LV HRC fuse switch disconnectors size 00	108	6
Bus-mounting fuse holders	27	1.5
Class J bus-mounting fuse holders		
100 A	106	5.9
200 A	184	10.2
400 A	256	14.2

Benefits

- The direct contact of the rail-adaptable switching and installation devices on the Cu busbars reduces distribution panels and mounting times
- Compared to conventional installation, the transfer resistance of the connections is drastically reduced. This prevents unnecessary temperature rise
- New built-in components with touch protection ensure comprehensive touch protection without the previously required partitions
- International application due to UL-approved components
- Enhanced effectiveness and increased safety due to screwless terminals

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A


Built-in components

Technical specifications

Bus-mounting bases

	NEOZED SR60 bus-mounting bases		DIAZED SR60 bus-mounting bases	
	5SG6202 5SG6206 5SG6207 D01	D02	5SF6014 5SF6015 5SF6020 DII	5SF6214 5SF6215 5SF6220 DIII
Standards	IEC 60269-3, DIN VDE 0636-3			
Rated voltage	V AC	400	500	690
	V DC	250	--	600
Rated frequency	Hz	50		
Rated current	A	16 (with 5SH5400 retaining springs)	25	63
Rated conditional short-circuit current	kA AC	50	50	
	kA DC	8	8	
For fuse links with power losses per phase	W	2.5	5.5	7
Busbar center-to-center spacing	mm	60		
Box terminals for wire connection	mm ²	1.5 ... 10 (re)		1.5 ... 10 (re)
	mm ²	1.5 ... 25 (f)		1.5 ... 35 (f)
	mm ²	1.5 ... 25 (f+AE)		1.5 ... 35 (f+AE)
Tightening torque	Nm	3		
Material		Temperature-resistant up to min. 125 °C, self-extinguishing acc. to UL 94, CTI 600		Temperature-resistant up to min. 125 °C, self-extinguishing acc. to UL 94, min. CTI 225

Bus-mounting fuse holders

	3NW7431	3NW7431-0HG
Standards	IEC 60269-2, IEC 60947-3 UL 512, CSA C22.2	UL 512, CSA C22.2
Approvals	 CSA	UL, CSA
Size	10 × 38	Class CC
Rated frequency	Hz	50/60
Max. rated voltage U_e		
• IEC/EN	V AC	690
• UL/CSA	V AC	600
Max. rated operating current I_e (When several devices are used next to each other, it is essential to comply with the rated load factor according to EN 60439-1 (VDE 0660-500), Table 1.)		
• IEC/EN	A	32
• UL/CSA	A	30
Utilization categories		
• IEC/EN	AC-22B (500 V) AC-21B (690 V, 30 A) Can only be used as fuse holder	
• UL/CSA		
Rated conditional short-circuit current (Type-tested with fuse links, operational class gG)		
• IEC/EN	kA	100 (400 V, 500 V, 690 V)
• UL/CSA	kA	50 (600 V)
For fuse links with power losses per phase	W	3
Screwless wire connections		
• IEC/EN	mm ²	Cu 1.5 ... 6 (f)
• UL/CSA	AWG	16 ... 10 (str)



Bus-mounting switch disconnectors with fuses

	5SG7230	5SG7234-1 5SG7234-2
Standards	HD 60269-3 (VDE 0636-3), IEC 60269-3, EN 60947-3 (VDE 0660-107), IEC 60947-3	
Approvals	VDE, EAC	
Size	D02 (D01)	D02
Rated frequency	Hz 50/60	50/60
Rated voltage U_e	V AC 400 V DC 110	400
Rated insulation voltage U_i	V 800	500
Rated impulse withstand voltage U_{imp}	kV 6	6
Rated current I_e	A 63 ¹⁾	63 ²⁾
Utilization categories (Type-tested with 3-pole, switchable version)	AC-23A (400 V) DC-21B (48 V), 1 pole DC-21B (110 V), 2 pole	AC-22 B (400 V)
Box terminals for wire connection	mm ² Cu 1.5 ... 6 (re) mm ² Cu 1.5 ... 16 (f) mm ² Cu 1.5 ... 16 (f+AE)	Cu 1.5 ... 6 (re) Cu 1.5 ... 16 (f) Cu 1.5 ... 16 (f+AE)
Signaling switches for the display of switching positions	1 CO	LED signal detector (5SG7234-2)
Cable terminals	Bottom	On side (right)
Busbar thickness	mm	Through combination foot for 5, 10 mm
Rated conditional short-circuit current (Type-tested with fuse links of operational class gG)	kA AC 50 kA DC 8	50
Permissible power loss of fuse links per phase For stand-alone operation without lateral modules or for group operation with lateral modules	W 5.5	5.5
Material	Temperature-resistant up to min. 125 °C, self-extinguishing acc. to UL 94, min. CTI 125	Temperature-resistant up to min. 120 °C, self-extinguishing according to UL 94, min. CTI 200

¹⁾ In the case of permanent load over 35 A, we recommend the use of 5SH5526 lateral modules. Please observe EN 60439-1, Table 1.

²⁾ In the case of permanent load over 35 A, we recommend the use of 5SH5533 lateral modules. Please observe EN 60439-1, Table 1.










Selection and ordering data

	Size	Rated current	Rated voltage	Mounting width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		A	V	MW/mm	d					
	NEOZED SR60 bus-mounting bases with touch protection, 3P For 5/10 mm busbars									
	27 mm wide									
	D02	63	400	1.5		5SG6206		1	4 units	1CU
	36 mm wide									
	D02	63	400	2		5SG6207		1	4 units	1CU
	NEOZED SR60 bus-mounting bases, 3P standard version For 5/10 mm busbars									
	D02	63	400	1.5		5SG6202		1	4 units	1CU

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A




Built-in components

	Size	Rated current A	Rated voltage V	Mount- ing width MW/ mm	SD d	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	NEOZED SR60 covers for standard version									
		D02			1.5	5SH5241		1	4 units	1CU
		D02, extra wide			2	5SH5242		1	4 units	1CU
	D02, with double width			3	5SH5243			1	4 units	1CU
	DIAZED SR60 bus-mounting bases with touch protection, 3P									
		For use with DIAZED screw adapters								
	DII	25	500	2.3	5SF6020		1	4 units	1CU	
	DIII	63	500 V AC/DC (according to DIN VDE 0636-3 also 690 V AC/600 V DC)	3.2	5SF6220		1	4 units	1CU	
	DIAZED SR60 bus-mounting bases, 3P standard version									
		For use with DIAZED screw adapters								
	DII	25	500	2.3	5SF6015		1	2 units	1CU	
	DIII	63	500 V AC/DC (according to DIN VDE 0636-3 also 690 V AC/600 V DC)	3.2	5SF6215		1	2 units	1CU	
	DIAZED SR60 covers for standard version									
		DII			2.3	5SH2042		1	2 units	1CU
	DIII			3.2	5SH2242		1	2 units	1CU	
	SR60 bus-mounting fuse holders, 3P									
		For 5/10 mm busbars with screwless terminals								
		For cylindrical fuses, 10 x 38 mm  								
	--	30	690	1.5	3NW7431		1	1 unit	1CU	
	For UL fuses, Class CC  									
	--	30	600	1.5	3NW7431-0HG		1	1 unit	1CU	
	For NEOZED screw caps, NEOZED adapter sleeves and NEOZED fuse links, see chapter "Fuse Systems", "NEOZED fuse systems"									





Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Built-in components

Size	Rated current	Rated voltage	Mounting width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
	A	V	MW/ mm	d						
	NEOZED SR60 bus-mounting switch disconnectors, 3P For 5/10 mm busbars									
	D02	63*	400	1.5		5SG7230		1	1 unit	1CU
* From 35 A load use 5SH5526 lateral module										
	NEOZED SR60 bus-mounting switch disconnectors, 3P NEW For 5/10 mm busbars, with screwless terminals									
	• without LED signal detector									
	D02	63*	400	1.5		5SG7234-1		1	1 unit	1CU
	• with LED signal detector									
D02	63*	400	1.5		5SG7234-2		1	1 unit	1BM	
* From 35 A load use 5SH5526 lateral module										
	Class J bus-mounting fuse holders, 3P NEW For 5/10 mm busbars, UL, CSA, cURus									
		100	600	106		3NW7431-6HG		1	1 unit	1DN
		200	600	184		3NW7431-7HG		1	1 unit	1DN
		400	600	256		3NW7431-8HG		1	1 unit	1DN
For Class J fuse links and more information on Class J fuse holders: see chapter "Fuse Systems"										

Other accessories

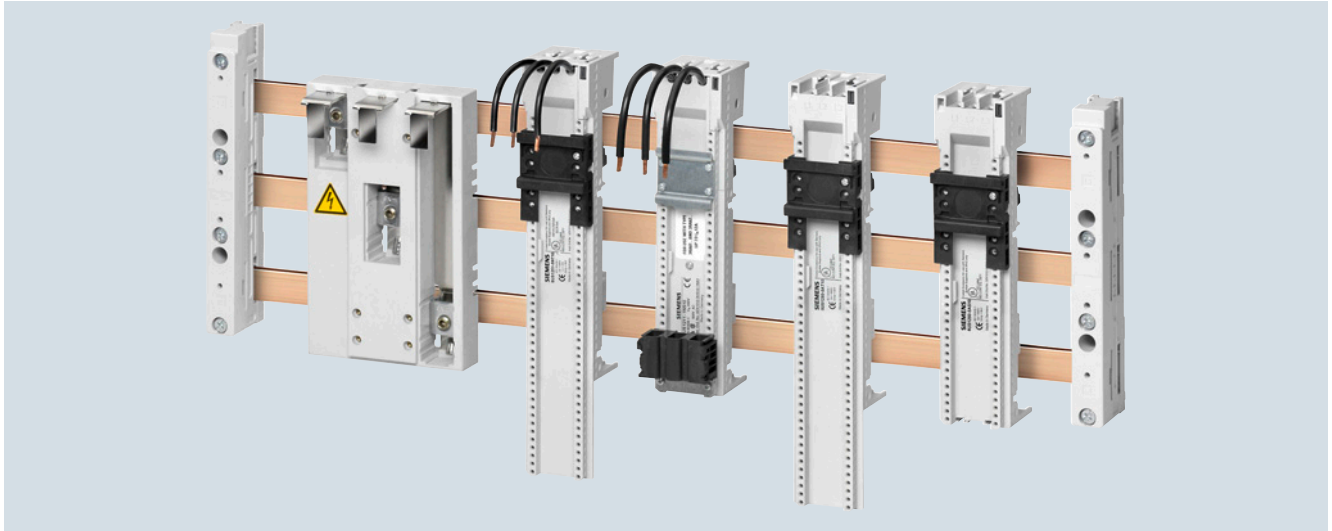
Version	Mounting width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	MW	d					
 5SH5525	Auxiliary switches for signaling the switching state for NEOZED SR60 bus-mounting switch disconnectors (5SH5525)						
	1 CO	0.5		5SH5525		1	1 unit
 5SH5526	Lateral modules For greater heat dissipation for loads from 35 A with 5SG7230 bus-mounting switch disconnectors						
		0.5		5SH5526		1	5 units
 5SH5533	Lateral modules NEW For greater heat dissipation for loads from 35 A with 5SG7 234-1 and 5SG7 234-2 bus-mounting switch disconnectors						
		0.5		5SH5533		1	5 units
 5SH5527	Reducers For NEOZED fuse links D01 in SR60 bus-mounting switch disconnectors						
		--		5SH5527		1	10 units

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Device adapters and device holders

Overview





60 mm busbar system: Busbar device adapters and device holders

All busbar device adapters and device holders are designed for copper busbars according to DIN 46433, width 12 to 30 mm, thickness 5 mm and 10 mm, and special profiles up to 1600 A.

Selection and ordering data






For SIRIUS 3RV2/3RT2 load feeders

Welded connecting cable resistant up to 150 °C

	Busbar device adapters for	Number of support rails (35 mm)	Adapters		Connecting cable			Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
			Length	Width	Cross-section	Temperature max.	Rated current							
			mm	mm	AWG	°C	A	V	d					
 Device holder with 3RA2120	Size S00 devices with screw connection													
	Circuit breakers	1	200	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DS10		1	1 unit	1CU
	Direct-on-line starters	1	200	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DS10		1	1 unit	1CU
	Reversing starters	1	260	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DT10		1	1 unit	1CU
	+	Device holders	1	200	45	--	--	--	UL 508	8US1250-5AS10		1	1 unit	1CU
 Device holder with 3RA2120	Size S00 devices with spring-type terminals													
	Circuit breakers	1	200	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DS11		1	1 unit	1CU
	Circuit breakers	1	260	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DT11		1	1 unit	1CU
	Direct-on-line starters	1	260	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DT11		1	1 unit	1CU
	Reversing starters	1	260	45	12	150	25	690/600 ¹⁾	UL 508	8US1251-5DT11		1	1 unit	1CU
	+	Device holders	1	260	45	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU

¹⁾ Value applies to UL 508

Device adapters and device holders

Busbar device adapters for	Number of support rails (35 mm)	Adapters		Connecting cable				Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		Length	Width	Cross-section	Temperature max.	Rated current	Rated voltage							
		mm	mm	AWG	°C	A	V		d					
Size S0 devices with screw connection														
 Device holder with 3RA2220	Circuit breakers	1	200	45	12	150	25	690 600 ¹⁾	UL 508	8US1251-5DS10		1	1 unit	1CU
	Circuit breakers NEW	1	200	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NS10		1	1 unit	1CU
	Circuit breakers	1	260	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NT10		1	1 unit	1CU
	Direct-on-line starters	1	260	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NT10		1	1 unit	1CU
	Reversing starters	1	260	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NT10		1	1 unit	1CU
	+ Device holders	1	260	45	--	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU
Size S0 devices with spring-type terminals														
 Device holder with 3RA2220	Circuit breakers NEW	1	200	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NS11		1	1 unit	1CU
	Circuit breakers	1	260	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NT11		1	1 unit	1CU
	Direct-on-line starters	1	260	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NT11		1	1 unit	1CU
	Reversing starters	1	260	45	10	150	32	690 600 ¹⁾	UL 508	8US1251-5NT11		1	1 unit	1CU
	+ Device holders	1	260	45	--	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU
	Size S2 devices													
  	Circuit breakers	1	200	54	4	150	80	690 600 ¹⁾	UL 508	8US1261-5MS13		1	1 unit	1CU
	Direct feeders	1	260	54	4	150	80	690 600 ¹⁾	UL 508	8US1261-6MT10		1	1 unit	1CU
	Reversing feeders	1	260	119	4	150	80	690 600 ¹⁾	UL 508	8US1211-6MT10		1	1 unit	1CU
Vibration & shock kit S2 NEW										8US1998-1DA10		1	1 unit	1CU


¹⁾ Value applies to UL 508

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A


Device adapters and device holders

For SIRIUS 3RV1/3RT1 load feeders



Busbar device adapters for	Number of support rails (35 mm)	Adapters		Connecting cable				Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		Length	Width	Cross-section	Temperature max.	Rated current	Rated voltage							
		mm	mm	AWG	°C	A	V		d					
Size S3 devices with screw connection Busbar device adapter with connecting cables for contact with busbars, welded connecting cable resistant up to 150 °C														
	Circuit breakers	--	215	72	4	150	80	600	UL 508	8US1211-4TR00		1	1 unit	1CU

Device holder

Lateral modules for busbar device adapters

Description	Length	Width	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
			d						
			mm	mm					
	Lateral modules For extending busbar device adapters and device holders of the same length	200	9	8US1998-2BJ10		1	10 units	1CU	

**For circuit breakers and switch disconnectors
which require busbar device adapters for mounting on busbars**




	Busbar device adapters for	Adapters		Connecting cable		Standard	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
		Length	Width	Type	Rated current								Rated voltage
		mm	mm		A								V
	3VA molded case circuit breakers, 3 pole NGG, HGG, LGG NEW	200	81	Screw connection, AWG 4	80	600	UL 508	8US1240-5MA00		1	1 unit	1CU	
8US1240-5MA00													
	3VA51, NGG, HGG, LGG NEW	200	90	Cu laminated 6 x 9 x 0.8 mm	125	600	UL 508	8US1211-4SS00		1	1 unit	1CU	
8US1211-4SS00													
	3VA10/11	200	77	Busbars	144	690		8US1213-4AU01		1	1 unit	1CU	
8US1213-4AU01													
	3VA12/20/21/22	240	105	Tubular contacts	250	690		8US1213-4AP03		1	1 unit	1CU	
	3VA52/61/62	240	105	Tubular contacts	250	600	UL 508	8US1213-4AP03		1	1 unit	1CU	
8US1213-4AP03													
	3VA23, 3VA24	300	140	Tubular contacts	590	690		8US1213-4AH04		1	1 unit	1CU	
	3VA63 3VA64	300	140	Tubular contacts	600	600	UL 508	8US1213-4AH04		1	1 unit	1CU	
8US1213-4AH04													
	3VL molded case circuit breakers¹⁾, 3-pole 3VL1 ²⁾ 3VL2 ²⁾ 3VL3 ³⁾ 3VL1 to 3VL4 and also with RCD module ²⁾ see chapter "Molded Case Circuit Breakers"	175	108	Busbars	160	690		8US1211-4SL01		1	1 unit	1CU	
		175	108	Busbars	160	690		8US1211-4SL01		1	1 unit	1CU	
		175	108	Busbars	250	690		8US1211-4SL00		1	1 unit	1CU	
		320	184	M10 pin connector	400	690		8US1210-4AF00 +		1	1 unit	1CU	
								8US1927-4AF01		1	1 unit	1CU	
8US1211-4SL01													
	3VL5	325	184	Tubular contacts	580	690		8US1213-4AF00		1	1 unit	1CU	

Footnotes, see next page.

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Device adapters and device holders

	Busbar device adapters for	Adapters		Connecting cable		Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG	
		Length	Width	Type	Rated current								Rated voltage
3VL UL circuit breakers, 3-pole													
 8US1213-4AQ01	VL150X UL CG frame	190	105	Tubular contacts	150	690 600 ⁴⁾	UL 508	8US1213-4AQ01		1	1 unit	1CU	
	VL150 UL DG frame	190	105	Tubular contacts	150	690 600 ⁴⁾	UL 508	8US1213-4AQ03		1	1 unit	1CU	
	VL250 UL FG frame	190	105	Tubular contacts	250	690 600 ⁴⁾	UL 508	8US1213-4AQ03		1	1 unit	1CU	
	VL400 UL JG frame	296	140	Tubular contacts	400	690 600 ⁴⁾	UL 508	8US1213-4AH00		1	1 unit	1CU	
	VL400X UL LG frame	296	140	Tubular contacts	540	690 600 ⁴⁾	UL 508	8US1213-4AH00		1	1 unit	1CU	
8US1213-4AH00													
3KA and 3KL switch disconnectors, 3-pole													
	3KA52 ⁵⁾ 3KA53 ⁵⁾ 3KL52 ⁵⁾ 3KL53 ⁵⁾	320	184	M10 pin connector	630	690		8US1210-4AF00		1	1 unit	1CU	
	3KA55 ⁵⁾ 3KA57 ⁵⁾ 3KA58 ⁵⁾ 3KL55 ⁵⁾ 3KL57 ⁵⁾	320	250	M10 pin connector	630	690		8US1210-4AG00		1	1 unit	1CU	
3NP5 fuse switch disconnectors, 3-pole													
	3NP5060 (NH00)	175	108	Busbars	160	690		8US1291-4SB00		1	1 unit	1CU	
	3NP52 3NP53 3NP54 ⁶⁾	320	250	M10 pin connector	630	690 600 ⁴⁾	UL 508	8US1210-4AG00		1	1 unit	1CU	
3VA molded case circuit breakers, 4-pole NEW													
 8US1313-4AH03	3VA12	270	140	Tubular contacts	250	690		8US1313-4AH03		1	1 unit	1CU	
	8US1313-4AM04												
 8US1313-4AM04	3VA23/24	300	185	Tubular contacts	590	690		8US1313-4AM04		1	1 unit	1CU	
	8US1313-4AM04												

1) Observe the short-circuit strength of the busbar system:
Short-circuit strength > 50 kA on request.

2) Usable only for 3VL circuit breakers with line-side box terminals.

3) Only for 3VL 250 A circuit breakers, for screw fixing with metric thread, for flat terminals.



4) Value applies to UL 508.

5) Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R with cable lug, or as a flat conductor for an M10 pin connector.

6) Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R, bared at both ends for tunnel terminals.

For SIRIUS 3RA6 compact starters according to IEC and UL

Welded connecting cable resistant up to 105 °C







Busbar device adapter for	Number of support rails (35 mm)	Adapters		Connecting cable				Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		Length	Width	Cross-section	Temperature max.	Rated current	Rated voltage							
		mm	mm	AWG	°C	A	V		d					
 Device holder	Size equivalent to 3RA61													
	Direct-on-line starters	1	200	45	10	105	32	690	UR, CSA		8US1211-1NS10		1	1 unit
 Device holder	Size equivalent to 3RA62													
	Reversing starters + Device holders	1	200	45	10	105	32	690	UR, CSA		8US1211-1NS10		1	1 unit
		1	200	45	--	--	--	UL 508		8US1250-1AA10		1	1 unit	1CU

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Device adapters and device holders

For universal device design

	Number of support rails (35 mm)	Adapters		Connecting cable				Standard	SD	Article No. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		Length	Width	Cross-section	Temperature max.	Length	Rated current							
		mm	mm	AWG	°C	mm	A	V	d					
Devices 45 mm wide														
Device holder for side mounting onto busbar device adapter, no electrical contact														
	1	200	45	--	--	--	--	--	UL 508	8US1250-1AA10		1	1 unit	1CU
8US1250-1AA10	1	200	45	--	--	--	--	--	UL 508	8US1250-5AS10		1	1 unit	1CU
	1	260	45	--	--	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU
8US1250-5AS10	1	260	45	--	--	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU
	1	260	45	--	--	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU
8US1250-5AT10	1	260	45	--	--	--	--	--	UL 508	8US1250-5AT10		1	1 unit	1CU
Devices 45 mm and 72 mm wide														
Busbar device adapter with connecting cables for contact with busbars, welded connecting cable resistant up to 150 °C														
	1	200	45	12	150	167	25	690/600 ¹⁾	UL 508	8US1251-5DS11		1	1 unit	1CU
	1	200	45	12	150	99	25	690/600 ¹⁾	UL 508	8US1251-5DS10		1	1 unit	1CU
	1	200	45	10	105	118	32	690/600 ¹⁾	UL 508	8US1211-1NS10		1	1 unit	1CU
	1 NEW	200	45	10	150	99	32	690/600 ¹⁾	UL 508	8US1251-5NS10		1	1 unit	1CU
	1 NEW	200	45	10	150	167	32	690/600 ¹⁾	UL 508	8US1251-5NS11		1	1 unit	1CU
8US1261-5MS13	1	200	54	4	150	150	80	690/600 ¹⁾	UL 508	8US1261-5MS13		1	1 unit	1CU
	--	215	72	4	105	210	100	690/600 ¹⁾	UL 508	8US1211-4TR00		1	1 unit	1CU
	1	260	45	12	150	99	25	690/600 ¹⁾	UL 508	8US1251-5DT10		1	1 unit	1CU
	1	260	45	12	150	167	25	690/600 ¹⁾	UL 508	8US1251-5DT11		1	1 unit	1CU
	1	260	45	10	150	99	32	690/600 ¹⁾	UL 508	8US1251-5NT10		1	1 unit	1CU
	1	260	45	10	150	167	32	690/600 ¹⁾	UL 508	8US1251-5NT11		1	1 unit	1CU
	1	260	54	4	150	150	80	690/600 ¹⁾	UL 508	8US1261-6MT10		1	1 unit	1CU
	1	260	119	4	150	150	80	690/600 ¹⁾	UL 508	8US1211-6MT10		1	1 unit	1CU
8US1261-6MT10	1	260	119	4	150	150	80	690/600 ¹⁾	UL 508	8US1211-6MT10		1	1 unit	1CU
Lateral modules														
For extending busbar device adapters and device holders of the same length														
	--	200	9	--	--	--	--	--		8US1998-2BJ10		1	10 units	1CU
8US1998-2BJ10	--	200	9	--	--	--	--	--		8US1998-2BJ10		1	10 units	1CU



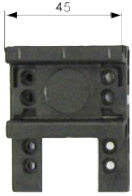

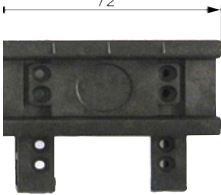
¹⁾ Value applies to UL 508.

Selection and ordering data

Accessories for SIRIUS 3RV2/3RT2 load feeders

Accessories for SIRIUS 3RV2/3RT2 load feeders are designed for:





- 60 mm 8US busbar system (Cu busbars according to DIN 46433)
- Width 12 to 30 mm, thickness 5 and 10 mm
- And special profiles of up to 1600 A

	Description	Length	Width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	mm	d					
	Busbar connection pieces for bars 20 x 5 mm, 20 x 10 mm, 25 x 5 mm, 25 x 10 mm, 30 x 5 mm, 30 x 10 mm	40	--		8US1921-2BE00		1	6 units	1CU
8US1921-2BE00									
	12 x 5 mm, 12 x 10 mm, 15 x 5 mm, 15 x 10 mm, 20 x 5 mm, 20 x 10 mm	55	--		8US1921-2BF00		1	12 units	1CU
8US1921-2BF00									
	Support rails (35 mm) Support rails made of plastic with fixing screws	--	45		8US1998-7CB45		1	10 units	1CU
	Support rails made of plastic with fixing screws	--	54		8US1998-7CB54		1	10 units	1CU
	Support rails made of plastic with fixing screws	--	72		8US1998-7CB72		1	10 units	1CU

Busbar Systems

8US 60 mm Busbar Systems up to 1600 A

Accessories

Description	Length	Width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	mm	mm	d					
Positioning pieces NEW For pushing on, secures the adaptable devices on the adapter • for 45 mm adapters	--	45		8US1998-1DA45		1	10 units	1CU
								
• for 54 mm adapters	--	54		8US1998-1DA54		1	10 units	1CU
								
Connecting elements For connecting busbar adapters and device holders	--	--		8US1998-1AA10		1	50 units	1CU
								
Spacers Fix the feeder to the busbar adapter	--	--		8US1998-1BA10		1	50 units	1CU
								
Vibration & shock kit				8US1998-1CA10		1	2 units	1CU
Lateral modules For extending busbar device adapters and device holders of the same length	200	9		8US1998-2BJ10		1	10 units	1CU
