

## Motor Starter Protectors/Circuit Breakers

### SIRIUS 3RV2 Motor Starter Protectors/Circuit Breakers

#### Accessories

#### Busbar accessories

#### Overview

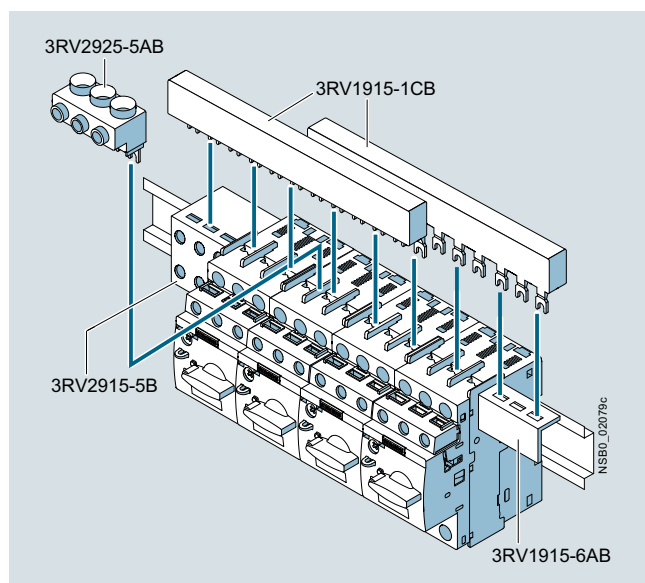
##### Insulated three-phase busbar system

Three-phase busbar systems provide an easy, time-saving and clearly arranged means of feeding 3RV2 motor starter protectors/circuit breakers with screw terminals. Different versions are available for sizes S00 to S2 and can be used for the various different types of motor starter protectors/circuit breakers (size S0 up to 32 A).

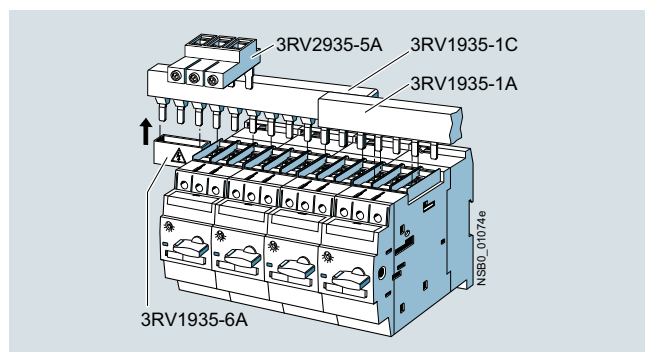
The 3RV1915 and 3RV1935 three-phase busbar systems are generally unsuitable for the 3RV21 motor starter protectors for motor protection with overload relay function and 3RV27 and 3RV28 circuit breakers according to UL 489/CSA C22.2 No. 5.

The busbars are suitable for between two and five motor starter protectors/circuit breakers. However, any kind of extension is possible by clamping the tags of an additional busbar (rotated by 180°) underneath the terminals of the respective last motor starter protector/circuit breaker.

A combination of motor starter protectors/circuit breakers of size S00 and S0 is possible. The motor starter protectors/circuit breakers are supplied by appropriate infeed terminals.



SIRIUS three-phase busbar system size S00/S0



SIRIUS three-phase busbar system size S2

The three-phase busbar systems are finger-safe. They are designed for any short-circuit stress which can occur at the output side of connected motor starter protectors/circuit breakers.

The three-phase busbar systems can also be used to construct "Type E Starters" according to UL/CSA. Special infeed terminals must be used for this purpose, however (see "Selection and ordering data", page 7/48).

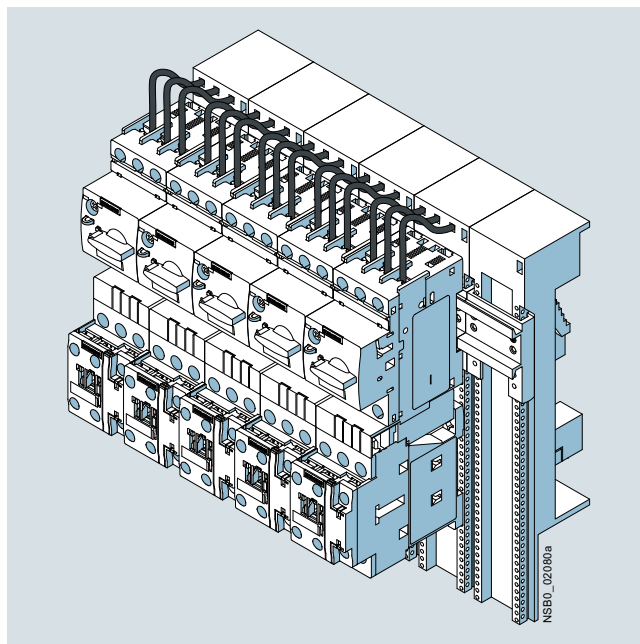
##### 8US busbar adapters for 60 mm systems

The motor starter protectors/circuit breakers are mounted directly with the aid of busbar adapters on busbar systems with 60 mm center-to-center clearance in order to save space and to reduce infeed times and costs.

Busbar adapters for busbar systems with 60 mm center-to-center clearance are suitable for copper busbars with a width of 12 mm to 30 mm. The busbars can be 5 mm or 10 mm thick.

The motor starter protectors/circuit breakers are snapped onto the adapter and connected on the line side. This prepared unit is then plugged directly onto the busbar system, and is thus connected both mechanically and electrically at the same time.

For further busbar adapters for snap-mounting direct-on-line starters and reversing starters as well as additional accessories such as line terminals and outgoing terminals, flat copper profile, etc., see [Catalog LV 10](#).



SIRIUS load feeders with busbar adapters snapped onto busbars

# Motor Starter Protectors/Circuit Breakers

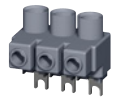
## SIRIUS 3RV2 Motor Starter Protectors/Circuit Breakers

### Accessories

#### Busbar accessories

Conductor cross-section		AWG cables, solid or stranded	Tightening torque	For motor starter protectors/circuit breakers	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Solid or stranded	Finely stranded with end sleeve									
mm <sup>2</sup>	mm <sup>2</sup>	AWG	Nm	Size	d					

#### Three-phase infeed terminals for constructing "Type E Starters"



3RV2925-5EB



3RV2935-5E

##### Connection from top

2.5 ... 25	2.5 ... 16	10 ... 4	3 ... 4	S00, S0	2
2 x	2 x	2 x	4 ... 6	S2	▶
(2.5 ... 50) <sup>1)</sup>	(2.5 ... 35) <sup>1)</sup>	(10 ... 1/0) <sup>1)</sup>			
1 x	1 x	1 x			
(2.5 ... 70) <sup>1)</sup>	(2.5 ... 50) <sup>1)</sup>	(10 ... 2/0) <sup>1)</sup>			

3RV2925-5EB

1

1 unit

41E

3RV2935-5E

1

1 unit

41E

<sup>1)</sup> If two different conductor cross-sections are connected to one clamping point, both cross-sections must be in the range specified.

Version	For motor starter protectors/circuit breakers	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Size	d					

#### Covers for connection tags



3RV1915-6AB

Touch protection for empty positions

S00, S0

▶

3RV1915-6AB

1

10 units

41E

S2

▶

3RV1935-6A

1

5 units

41E

## Load Feeders and Motor Starters for Use in the Control Cabinet

### SIRIUS 3RA2 Load Feeders

#### 3RV29 infeed system for load feeders

#### Overview

##### Types of infeed for 3RA2 fuseless load feeders

On the whole four different power infeed possibilities are available:

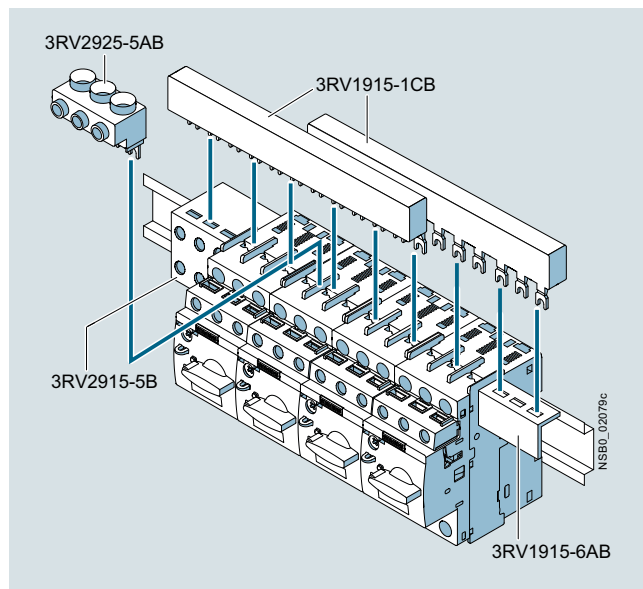
- Parallel wiring
- Use of three-phase busbars (combination with SIRIUS motor starter protectors and contactors possible)
- 8US busbar adapters
- SIRIUS 3RV29 infeed systems

##### Insulated three-phase busbar system

Three-phase busbar systems provide an easy, time-saving and clearly arranged means of feeding 3RA2 load feeders with screw terminals. Different versions are available for sizes S00 and S0 and can also be used for the various different types of motor starter protectors.

The busbars are suitable for between two and five feeders. However, any kind of extension is possible by clamping the tags of an additional busbar (rotated by 180°) underneath the terminals of the respective last motor starter protector.

A combination of feeders of different sizes is possible with sizes S00 and S0. Connecting pieces are available for this purpose. The motor starter protectors are supplied by appropriate infeed terminals.



SIRIUS three-phase busbar system size S00/S0

The three-phase busbar systems are finger-safe. They are designed for any short-circuit stress which can occur at the output side of connected motor starter protectors.

The three-phase busbar systems can also be used to construct "Type E Starters" of size S0 or S2 according to UL/CSA. However, special infeed terminals must be used for this purpose; see page 7/48.

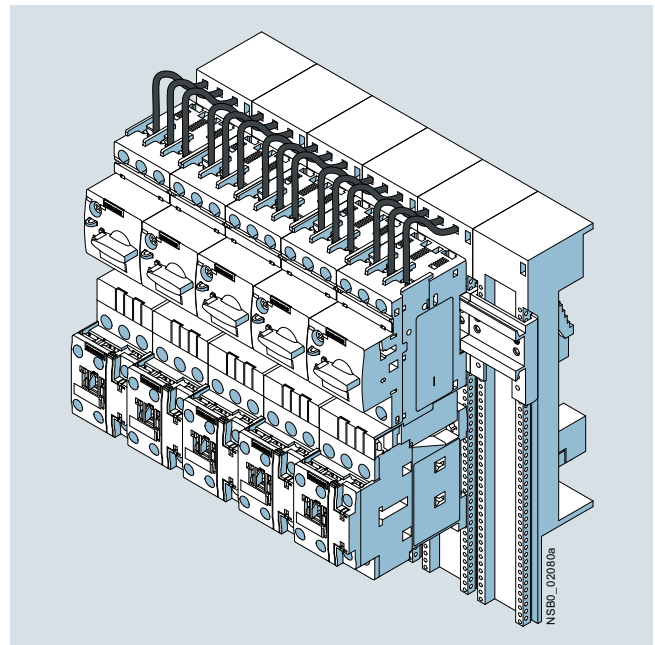
##### 8US busbar adapters for 60 mm systems

The load feeders are mounted directly with the aid of busbar adapters on busbar systems with 60 mm center-to-center clearance in order to save space and to reduce infeed times and costs.

The busbar adapters for busbar systems with 60 mm center-to-center clearance are suitable for copper busbars with a width of 12 to 30 mm. The busbars can be 4 to 5 mm or 10 mm thick.

The feeders are snapped onto the adapter and connected on the line side. This prepared unit is then plugged directly onto the busbar system, and is thus connected both mechanically and electrically at the same time.

For "Selection and ordering data", see page 8/52.



SIRIUS load feeders with busbar adapters snapped onto busbars

##### SIRIUS 3RV29 infeed system

The 3RV29 infeed system is a convenient means of energy supply and distribution for a group of several motor starter protectors or complete load feeders with a screw or spring-type terminal up to size S0.

The system is based on a basic module complete with a lateral incoming unit (three-phase busbar with infeed) which has two slots.

Expansion modules are available for extending the system (three-phase busbars for system expansion).

For the 3RV29 infeed system, see page 7/62.





## Load Feeders and Motor Starters for Use in the Control Cabinet

### SIRIUS 3RA6 Compact Starters

#### Accessories

Number of compact starters and motor starter protectors that can be connected Without lateral accessories	Modular spacing	Rated current $I_n$ at 690 V	For motor starter protectors	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG


#### Three-phase busbars for infeed with 3RA6

For feeding several compact starters and/or motor starter protectors with screw terminals, mounted side-by-side on standard mounting rails, insulated, with touch protection.													
	2	45	63	S00, S0 <sup>1)</sup>	▶	▶	▶	▶	▶				
3RV1915-1AB	3	45	63	S00, S0 <sup>1)</sup>						<b>3RV1915-1AB</b>	1	1 unit	41E
	4	45	63	S00, S0 <sup>1)</sup>						<b>3RV1915-1BB</b>	1	1 unit	41E
3RV1915-1BB	5	45	63	S00, S0 <sup>1)</sup>						<b>3RV1915-1CB</b>	1	1 unit	41E
										<b>3RV1915-1DB</b>	1	1 unit	41E
3RV1915-1CB													
													
3RV1915-1DB													

<sup>1)</sup> Not suitable for 3RV21 motor starter protectors for motor protection with overload relay function and for 3RV27 and 3RV28 circuit breakers according to UL 489/CSA C22.2 No. 5.


Version	Modular spacing	For motor starter protectors	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	mm		d					

#### Covers for connection tags of the three-phase busbars


	Touch protection for empty positions	--	S00, S0	▶	▶	▶	▶	▶
3RV1915-6AB								

Conductor cross-section			Tightening torque	For compact starters and motor starter protectors	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Solid or stranded	Finely stranded with end sleeve	AWG cables, solid or stranded								
mm <sup>2</sup>	mm <sup>2</sup>	AWG	Nm	Size	d					

#### Three-phase infeed terminals for three-phase busbars and for constructing "Type E Starters" according to UL 508

	<b>Connection from top</b>									
3RV2925-5EB	2.5 ... 25	2.5 ... 16	10 ... 4	3 ... 4	S00, S0	2	<b>3RV2925-5EB</b>	1	1 unit	41E

#### Three-phase infeed terminals for 3-phase busbars

	<b>Connection from below<sup>1)</sup></b>									
3RV2915-5B	2.5 ... 25	2.5 ... 16	10 ... 4	Input: 4; Output: 2 ... 2.5	S00, S0	▶	<b>3RV2915-5B</b>	1	1 unit	41E

<sup>1)</sup> This terminal is connected in place of a compact starter, please take the space requirement (45 mm) into account.