$\label{eq:system-based} \begin{tabular}{ll} Highly flexible system-based switching, protecting and starting. \\ SIRIUS\ Modular\ System \end{tabular}$ 

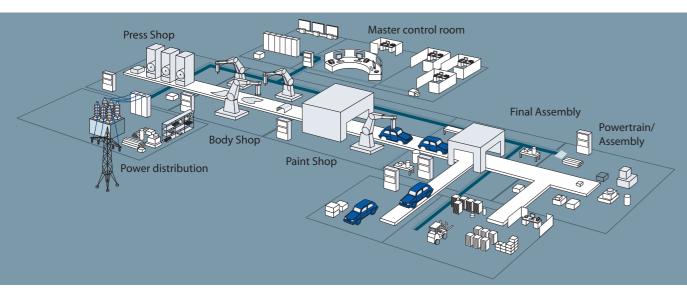


# **SIRIUS**

Answers for industry.



# Everything for the electrical cabinet: SIRIUS Modular System.



Pressing, equipping, transporting. These functions run in many automated production environments. You'll find everything that you need to switch, protect and start motors with the extensive portfolio of the modular SIRIUS system.

Everything. Easy. SIRIUS





## Contents

S00 structure
S00 selection and ordering data:

Circuit breakers, contactors, soft starters, overload relays

S0 structure

S0 selection and ordering data:

Circuit breakers, contactors/solid-state contactors and reversing contactors, soft starters, overload relays

S2 structure

S2 selection and ordering data:

Circuit breakers, contactors, soft starters, overload relays

S3 structure

S3 selection and ordering data:

Circuit breakers, contactors, soft starters, overload relays

S6, S10, S12 structure

S6, S10, S12 selection and ordering data:

Contactors, overload relays, soft starters

Fuseless load feeders Infeed system

Reversing combinations up to 45 kW Wye-delta\* combinations up to 75 kW Safety-related load feeders

Accessories

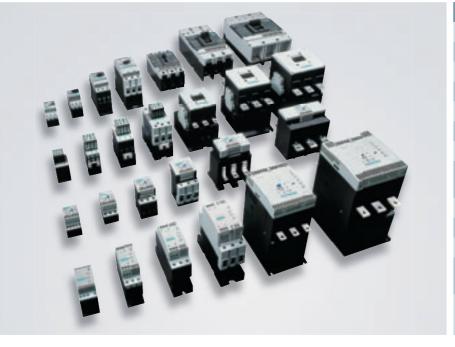
<sup>\*</sup> star-delta

# Everything. System-based. SIRIUS Modular System.

When configuring electrical cabinets everything must proceed quickly, simply, flexibly using minimum space. How can all of this be done? With our unique modular system. This offers you everything that you need to switch, protect and start motors and plants. This means a modular range of standard components up to 250 kW/400 V in just 7 sizes. All of the components are optimally harmonized with one another and can be combined easily. They also use the same range of accessories. Industrial controls really can be this simple!

Ongoing development and continuous innovation ensure that our customers – today and tomorrow – are best equipped with SIRIUS, and profit from cost-effective solutions. All of the components of the modular SIRIUS system distinguish themselves due to their space-saving design and high degree of flexibility. Engineering, mounting & installation, wiring and maintenance can be simply implemented and in a time-saving fashion. It doesn't make any difference if you wish to configure your load feeders with circuit breakers or overload relays, contactors or soft starters – SIRIUS always has the optimum product for your particular application.





The advantages of the S	IRIUS modular system at a glance
Load feeders	Up to 250 kW/400 V – can be simply realized using standard device
Modular design	Everything fits together and can be combined as necessary
Versions and sizes	Cost-effective and flexible with 7 compact sizes
Accessories	Optimum degree of variance using standard accessories for all devices
Design	Fast commissioning, short equipping times, simple wiring
Communication	Can be connected to AS-Interface and PROFIBUS DP
Service/maintenance	Extremely long service life, reliable and low maintenance
Approvals	Approved and certified worldwide – e.g. IEC, UL, CSA, CCC, marine engineering
Mounting	Screwed or snapped-on for permanent, safe and reliable mounting
Spring-loaded terminals	Fast, safe reliable connection, vibration-proof and maintenance-free
Service	Short delivery times include spare parts due to the global logistical network
Environmental issues	Environmentally-compatible production and materials, can be recycled, low power loss
Design	Clear, ergonomic and has received the iF Product Design Award

# An overview of the SIRIUS Modular System.



<sup>\*</sup> With high switching frequencies, we recommend application of the solid-state contactors / reversing contactors

# Switching. Protecting. Starting. The components of the SIRIUS Modular System.









## Far more than ON/OFF: SIRIUS 3RV circuit breakers

SIRIUS 3RV circuit breakers (MSP) are compact, current-limiting circuit breakers. They guarantee safe reliable shutdown when short circuits occur and protect loads and plants against overload. Furthermore, they are suitable for operationally switching load feeders with a low operating frequency and safely disconnecting the plant or system from the line supply when service is been carried out or changes are being made. SENTRON 3VL circuit breakers are suitable for applications above 100 A. As infeed and load feeder breaker, they protect plants and motors against short circuit and overload.

## Rugged and reliable: SIRIUS 3RT contactors

Due to their extremely high ruggedness and optimum contact reliability, our contactors switch with supreme confidence. Furthermore, compact electrical cabinets can be configured with high packing densities. The reason for this is that the auxiliary switch blocks and solenoid protective circuitry are located within the envelope contours of the contactors. This makes it easier to expand the system and saves considerable space in the electrical cabinet.

# Competently mastering high switching frequencies: SIRIUS 3RF solid-state contactors

SIRIUS solid-state contactors (size S0) for motor switching are characterized by their virtually unlimited service life – even under harsh conditions and with high switching frequencies. The three-phase solid-state contactors switch motors up to 7.5 kW. A special reversing contactor version facilitates a continuous reversal of the rotational direction of motors up to 3 kW. The compact devices in 45 or 90 mm width can be combined with our circuit breakers (MSP) or solidstate overload relays – for the fast and easy assembly of fuseless and fused motor feeders.

# Tripping when things get tough: SIRIUS 3RU and 3RB overload relays

The overload relays of the SIRIUS family, available as either thermal or solid-state versions, protect loads connected to the main circuit, as a function of the current, and also protect other switching and protective devices in the particular load feeder. The solid-state SIRIUS 3RB2 overload relays guarantee seamless motor and plant protection from 0.1 A to 630 A. Due to the wide setting ranges, the current range is covered with a minimum number of versions.

#### Gentle starting: SIRIUS 3RW soft starters

SIRIUS 3RW soft starters offer a seamless range that covers all standard and high-feature motor starting applications. They can be used in the widest range of applications to exploit the advantages of soft starting for the easy and efficient realization of optimum machine concepts. The compact two-phase-controlled 3RW30 facilitates efficient and space-saving soft starting up to 55 kW (with 400 V). The 3RW40 additionally offers soft stopping as well as integrated intrinsic device and motor protection functions, thanks to which an additional overload relav is unnecessary. Device versions up to a rating of 55 kW (with 400 V) are available: Thermistor motor protection evaluation, 400-600 V.

## More about the SIRIUS Modular System.





#### Fast, reliable and user-friendly: spring-loaded technology

You will have a completely new experience with state-of-the-art spring-loaded technology as it relates to simplicity and speed. These screwless terminals reduce connection times by up to 75%, and eliminate wiring mistakes. They can stand up to the toughest conditions due to the vibration- and shockproof design. And they are virtually maintenance-free. It is no surprise that we are already using innovative spring-loaded technology for most of the SIRIUS modular system.



Straight ahead: The 3RA11 direct starter

Phases interchanged: The 3RA12 reversing starter

Two stages – one start: The 3RA14 star-delta combination

#### Ready for immediate use: Pre-wired SIRIUS load feeders

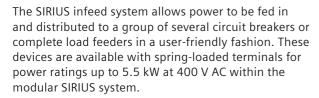
Load feeders start loads using a combination of protective and switching functions. Generally, a multiple number of components is required to implement every type of starter. In order to reduce time and costs – and especially to minimize downtimes – we offer you a wide range of pre-wired starter solutions:

- Direct starters up to 22 kW the optimum starter combination for all motors. For high switching frequencies with solid-state contactors up to 7.5 kW.
- Reversing starters up to 11 kW the matching combination for reversing motors. Solid-state reversing contactors can be used for applications with high switching frequencies up to 3 kW.
- Wye-delta\* combinations up to 75 kW the solution for running-up motors in stages.
- Soft starters when soft starting and stopping is required (soft ramp-down as of 3RW40).
- Safe 3RA71 load feeders pre-mounted, wired and certified for the highest safety categories. Real stars that reduce time and wiring mistakes.

<sup>\*</sup> star-delta

# User-friendly power infeed and distribution: SIRIUS infeed system 3RV19





If you prefer devices with classic screw terminals, then circuit-breakers and contactors are even available up to sizes S00 and S0. This means that the SIRIUS infeed system can be used for all motor feeders up to 11 kW. Using a terminal block, in addition to the SIRIUS circuit-breakers, additional 1/2/3-pole components – such as relays and miniature circuit-breakers – can be integrated.





#### At a glance: The highlights of the SIRIUS infeed system

- Can be configured and expanded in a modular fashion as required
- Integration of motor feeders in screw-type and spring-loaded technology
- Maximum current capacity of 80 A
- Additional 1/2/3-pole components can be integrated using a terminal block
- Infeed, either from the right or left with max. 25 mm<sup>2</sup> for an increased degree of flexibility in the electrical cabinet
- Simple plug-in connection system saves time when mounting and installing
- Space-saving configuration thanks to the extremely compact design
- High vibration resistance, particularly with switching devices in spring-loaded technology
- Optional wiring duct between the feeders

## **Design Versions**

#### Line- and feeder-orientated structure





Line-orientated structure: circuit breaker and contactor are mounted separately from one another.

Feeder-orientated structure: circuit breaker and contactor are mounted as a single unit.

## Mounting option, wiring duct



Wiring duct between the modules.
Using the wider extension plug, a cable duct of 10 mm can be formed between the modules.

The circuit breakers and contactors can be connected from below so that a cable duct above the system is not necessary.

#### Mounting option with SIRIUS 3RA6 infeed system



The SIRIUS 3RA6 infeed system, which is mainly used for SIRIUS 3RA6 compact starters, can be connected with the SIRIUS 3RV19 infeed system via an expansion plug. This way, the advantages of both systems can be utilized.

More information on the SIRIUS 3RA6 compact starter and the 3RA6 infeed system is available at www.siemens.com/compactstarter

#### Configuring reversing feeders





Reversing feeder, size S00, 90 mm wide

Reversing feeder, size S00, 45 mm wide

#### Versions with terminal block



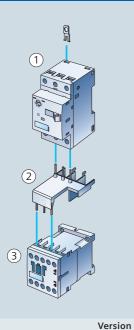
The terminal block is located at the end of the system. The cover is required in order to avoid arcing.



The terminal block is integrated in the slot for the extension plug in the middle of the system. The cover cap has been removed, the busbars are jumpered using the lyreshaped contacts of the terminal block.

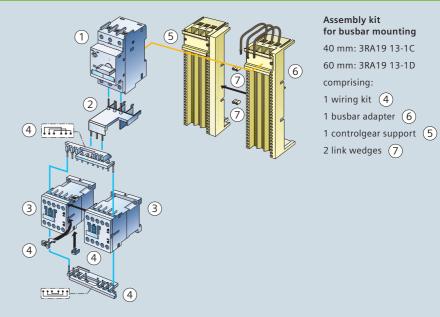
## S00 design

## **Direct start**



	Version	Order No.
1 Size S00 circuit breaker		
2 Link module	AC	3RA1911-1AA00
3 Size S00 contactor		
For busbar mounting (alternat	ive)	
Busbar adapter	40 mm 60 mm	8US10 51-5DM07 8US12 51-5DM07
For rail mounting (diagram)		
Directly snapped onto a mounting i	rail without adapte	er

## Reversing start



	Version	Order No.
1) Size S00 circuit breaker		
2 Connector		3RA19 11-1AA00
3 2 Size S00 contactors		
Wiring kit: upper link module, lower link module, 2 connecting clips, mechanical interlock (these can be eliminated)		3RA19 13-2A
For busbar mounting (diagram)	)	
5 Controlgear support	40 mm 60 mm	8US10 50-5AM00 8US12 50-5AM00
6 Busbar adapter	40 mm 60 mm	8US10 51-5DM07 8US12 51-5DM07
7) Link wedges (1 Order No. = 100 wedges)		8US19 98-1AA00
For rail mounting (alternative)		
Directly snapped onto mounting	rails without a	adapter

## S00 selection and ordering data









		Circuit br	eakers (MSP)	Contactors				
3-phase motor AC-3/40 [kW]		Setting range CLASS 10 [A]	Order No.		Control supply voltage	Aux- iliary switch	Order No. nes	
			201/10/11/04/10					
0.04	0.14	0.11 – 0.16	3RV10 11-0AA10					
0.06	0.2	0.14 - 0.2	3RV10 11-0BA10					
0.06	0.2	0.18 – 0.25	3RV10 11-0CA10					
0.09	0.3	0.22 - 0.32	3RV10 11-0DA10					
0.09	0.3	0.28 – 0.4	3RV10 11-0EA10					
0.12	0.4	0.35 - 0.5	3RV10 11-0FA10					
0.18	0.6	0.45 – 0.63	3RV10 11-0GA10					
0.18	0.6	0.55 – 0.8	3RV10 11-0HA10					
0.25	0.8	0.7 – 1	3RV10 11-0JA10		230 V AC, 50/60 Hz		3RT10 15-1AP02	
0.37	1.1	0.9 – 1.25	3RV10 11-0KA10			1NO	3RT10 15-1AP01	
0.55	1.5	1.1 – 1.6	3RV10 11-1AA10		24 V DC	1NC	3RT10 15-1BB42	
0.75	1.9	1.4 – 2	3RV10 11-1BA10			1NO	3RT10 15-1BB41	
0.75	1.9	1.8 – 2.5	3RV10 11-1CA10					
1.1	2.7	2.2 – 3.2	3RV10 11-1DA10					
1.5	3.6	2.8 – 4	3RV10 11-1EA10					
1.5	3.6	3.5 – 5	3RV10 11-1FA10					
2.2	5.2	4.5 – 6.3	3RV10 11-1GA10					
3	6.8	5.5 – 8	3RV10 11-1HA10					
4	9	7 – 10	3RV10 11-1JA10		230 V AC, 50/60 Hz	1NC	3RT10 16-1AP02	
						1NO	3RT10 16-1AP01	
					24 V DC	1NC	3RT10 16-1BB42	
						1NO	3RT10 16-1BB41	
5.5	11.5	9 – 12	3RV10 11-1KA10		230 V AC, 50/60 Hz	1NC	3RT10 17-1AP02	
						1NO	3RT10 17-1AP01	
					24 V DC	1NC	3RT10 17-1BB42	
						1NO	3RT10 17-1BB41	

44	
ALL ST	
	М
10	~

Control supply voltage	Rated operat- ing current I	Order No. e [A]
110 220 / 4	CIDC	
110–230 V A		3RW30 13-1BB14
24 V AC/DC	3.6	3KW3U 13-1BB14
24 V ACIDC	3.6	3RW30 13-1BB04
110–230 V A	.C/DC	
	6.5	3RW30 14-1BB14
24 V AC/DC		
	6.5	3RW30 14-1BB04
110–230 V A	.C/DC	
	9	3RW30 16-1BB14
24 V AC/DC		
	9	3RW30 16-1BB04
110–230 V A	.C/DC	
	12.5	3RW30 17-1BB14
24 V AC/DC		
	12.5	3RW30 17-1BB04

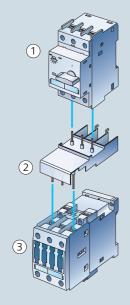


- 2) For using tripping CLASS 20, please refer to the information contained in the "SIRIUS Engineering – Fuseless Load Feeders" configuration brochure and in the catalog
- 5) For the suitable circuit breaker connection module, please refer to the catalog

	Overload	l relays		
er No.	Setting range CLASS 10 [A]	Thermal Order No.	Setting range [A]	Electronic Order No. <sup>2)</sup>
	0.11 – 0.16	3RU11 16-0AB0		
	0.14 - 0.2	3RU11 16-0BB0		
V30 13-1BB14	0.18 – 0.25	3RU11 16-0CB0	0.1 - 0.4	3RB2□1□-□RB0
	0.22 - 0.32	3RU11 16-0DB0		
V30 13-1BB04	0.28 - 0.4	3RU11 16-0EB0		
	0.35 - 0.5	3RU11 16-0FB0		
	0.45 – 0.63	3RU11 16-0GB0		
	0.55 - 0.8	3RU11 16-0HB0	0.32 – 1.25	3RB2□1□-□NB0
V30 14-1BB14	0.7 – 1	3RU11 16-0JB0		
	0.9 – 1.25	3RU11 16-0KB0		
V30 14-1BB04	1.1 – 1.6	3RU11 16-1AB0		
	1.4 – 2	3RU11 16-1BB0		
	1.8 – 2.5	3RU11 16-1CB0	1 – 4	3RB2□1□-□PB0
	2.2 – 3.2	3RU11 16-1DB0		
V30 16-1BB14	2.8 – 4	3RU11 16-1EB0		
	3.5 – 5	3RU11 16-1FB0		
V30 16-1BB04	4.5 – 6.3	3RU11 16-1GB0		
	5.5 – 8	3RU11 16-1HB0		
	7 – 10	3RU11 16-1JB0	3 –12	3RB2□1□-□SB0
V30 17-1BB14				
			CLA	ASS 10 0 6 1 ASS 20 0 6 2
V30 17-1BB04	9 – 12	3RU11 16-1KB0		ASS 530* 1 3 4
			(ac	Vith ground-fault detection tivatable) and electrical note reset

## S0 design

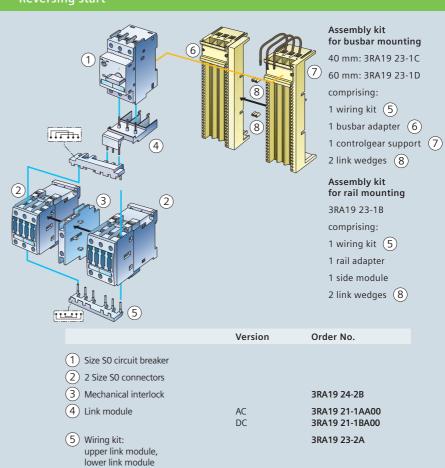
#### **Direct start**



	Version	Order No.
1 Size S0 circuit breaker		
2 Link module	AC DC	3RA19 21-1AA00 3RA19 21-1BA00
3 Size S0 contactor, solid-state contactor, solid-state reversing contactor; soft starter		
For busbar mounting (alternat	ive)	
Busbar adapter	40 mm 60 mm	8US10 51-5DM07 8US12 51-5DM07
For rail mounting (diagram)		

Directly snapped onto a mounting rail without adapter

## **Reversing start**



(5) Wiring kit: upper link module, lower link module		3RA19 23-2A
For busbar mounting (diagram)	)	
6 Controlgear support	40 mm 60 mm	8US10 60-5AM00 8US12 60-5AM00
7 Busbar adapter	40 mm 60 mm	8US10 51-5DM07 8US12 51-5DM07
8 Link wedges (1 Order No. = 100	wedges)	8US19 98-1AA00
For rail mounting (alternative	/e)	
Rail adapter		3RA19 22-1AA00
Side module (1 Order No. = 10 m	nodules)	3RA19 02-1B

8US19 98-1AA00

Link wedges (1 Order No. = 100 wedges)

## S0 selection and ordering data















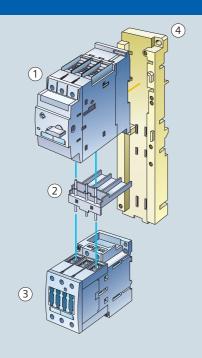


- 1) With 3RW40: for rated device operating voltage Ue: 200–480 V (see catalog for Ue: 400–600 V)
- 2) For using tripping CLASS 20, please refer to the information contained in the "SIRIUS Engineering – Fuseless Load Feeders" configuration brochure and in the catalog
- 3) Fan available as accessory
- 4) Mounting on circuit breaker (MSP) by means of 3RA 19 21-1AA00 connection module
- 5) For the suitable circuit breaker connection module, please refer to the catalog

											piec	ise refer to the ca	talog
		Circuit k	oreakers (MSP)	Contactors			Soft sta	rters <sup>5)</sup>		Overloa	d relays		
3-phase motor AC-3/40		Setting range CLASS 10	Order No.	Control supply voltage	Aux- iliary conta	Order No.	Control- supply voltage	Rated operating current	Order No.	Setting range CLASS 10	Thermal Order No.	Setting range	Electronic Order No. <sup>2)</sup>
[kW]	[A]	[A]						le [A]		[A]		[A]	
5.5	11.5	9 – 12.5	3RV10 21-1KA10	230 V AC, 50/60 24 V DC	Hz – –	3RT10 24-1AL20 3RT10 24-1BB40	110-230 \	12.5	3RW40 24-1BB14 <sup>1)</sup>	9 – 12.5	3RU11 26-1KB0		CLASS 10 0 6 1 CLASS 20 0 6 2 CLASS 530*1 3 4
7.5	15.5	11 – 16	3RV10 21-4AA10				24 V <sup>3)</sup> AC/D	)C 12.5	3RW40 24-1BB04 <sup>1)</sup>	11 – 16	3RU11 26-4AB0		CLASS 530*1 3 4  * With ground-fault detection
			3	230 V AC, 50/60		3RT10 25-1AL20	110-230 V	/ AC/DC		11 – 10	3KU11 20-4ABU		(activatable) and electrical remote reset
7.5	15.5	14 – 20	3RV10 21-4BA10	24 V DC	-	3RT10 25-1BB40	24 V AC/D0	25	3RW30 26-1BB14	14 – 20	3RU11 26-4BB0		
		20					24 V ACIDO	25	3RW30 26-1BB04	14 – 20	3KO 1 1 20-4BB0	6 – 25	3RB2□2□-□QB0
				230 V AC, 50/60	Hz –	3RT10 26-1AL20	110-230 V	/ <sup>3)</sup> AC/DC					
11	22	17 – 22	3RV10 21-4CA10	24 V DC	_	3RT10 26-1BB40	2410) 460	25	3RW40 26-1BB14 <sup>1)</sup>	17 – 22	3RU11 26-4CB0		
							24 V <sup>3)</sup> AC/D	25	3RW40 26-1BB04 <sup>1)</sup>				
11	22	20 – 25	3RV10 21-4DA10					23	SKI 10 20 1550 1	20 – 25	3RU11 26-4DB0		
				Solid-state	conta	actors	Solid-st	ate revers	sing contactors				
1.5	3.8	2.8 – 4	3RV10 21-1EA10	1			110–230 V z 24 V DC	AC	3RF24 03-1BD24 <sup>4)</sup> 3RF24 03-1BD04 <sup>4)</sup>			1 – 4	3RB2□2□-□P B0
							21100		3111 21 03 18501				
2.2	5.2	4.5 – 6.3	3RV10 21-1GA10	110-230 V AC	-	3RF24 05-1BB24 <sup>4)</sup>	110–230 V	AC	3RF24 05-1BD24 <sup>4)</sup>				
				24 V DC	-	3RF24 05-1BB04 <sup>4)</sup>	24 V DC		3RF24 05-1BD04 <sup>4)</sup>				
3	7.4	5.5 – 8	3RV10 21-1HA10				110-230 V	AC	3RF24 10-1BD24 <sup>4)</sup>				
							24 V DC		3RF24 10-1BD04 <sup>4)</sup>			3 – 12	3RB2□2□-□SB0
4	9.2	7 – 10	3RV10 21-1JA10	110–230 V AC		3RF24 10-1BB24 <sup>4)</sup>							
4	9.2	7 – 10	3KV 10 21-1JA 10	24 V DC	_	3RF24 10-1BB24*/							
5.5	12.5	9 – 12.5	3RV10 21-1KA10	110–230 V AC	-	3RF24 12-1BB24 <sup>4</sup> )							
				24 V DC	_	3RF24 12-1BB04 <sup>4)</sup>						6 – 25	3RB2□2□-□QB0
7.5	16	11 – 16	3RV10 21-4AA10	110-230 V AC	-	3RF24 16-1BB24 <sup>4)</sup>							
				24 V DC	-	3RF24 16-1BB04 <sup>4)</sup>							

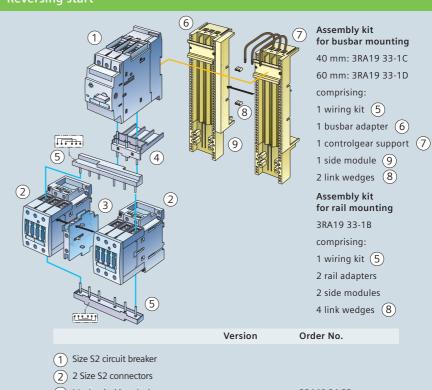
## S2 design

#### **Direct start**



	Version	Order No.
<ol> <li>Size S2 circuit breaker</li> <li>Link module</li> <li>Size S2 contactor</li> </ol>	AC DC	3RA19 31-1AA00 3RA19 31-1BA00
For busbar mounting (altern	native)	
Busbar adapter	40 mm 60 mm	8US10 61-5FP08 8US12 61-5FP08
For rail mounting (diagram)		
4 Rail adapter		3RA19 32-1AA00

## **Reversing start**



(3) Mechanical interlock 3RA19 24-2B

(4) Link module AC 3RA19 31-1AA00 DC 3RA19 31-1BA00 3RA19 33-2A

Wiring kit: upper link module, lower link module

## For busbar mounting (diagram)

6 Controlgear support	40 mm 60 mm	8US10 60-5AP00 8US12 60-5AP00
7 Busbar adapter	40 mm 60 mm	8US10 61-5FP08 8US12 61-5FP08
8) Link wedges (1 Order No.:	= 100 wedges)	811519 98-14400

9 Side module

8US19 98-2MB00

#### For rail mounting (alternative)

Rail adapter 3RA19 32-1AA00 Link wedges (1 Order No. = 100 wedges) 8US19 98-1AA00

## S2 selection and ordering data





	Circuit breakers (MSP)		reakers (MSP)	Contactors		
3-phase motor AC-3/400 \	,	Setting range CLASS 10	Order No.	Control supply voltage	Aux- iliary contac	Order No.
[kW]	[A]	[A]				
15	29	22 – 32	3RV10 31-4EA10	230 V AC, 50/60	Hz –	3RT10 34-1AL20
				24 V DC	_	3RT10 34-1BB40
18.5	35	28 – 40	3RV10 31-4FA10			
				230 V AC, 50/60	Hz –	3RT10 35-1AL20
				24 V DC	_	3RT10 35-1BB40
22	41	36 – 45	3RV10 31-4GA10			
				230 V AC, 50/60	Hz –	3RT10 36-1AL20
22	41	40 – 50	3RV10 31-4HA10	24 V DC	_	3RT10 36-1BB40





Soft starters <sup>5)</sup>					
		Order No.			
	le [A]				
110–230 V	AC/DC				
	45	3RW30 36-1BB14			
24 V AC/D0	_				
	45	3RW30 36-1BB04			
110-230 V	<sup>(3)</sup> AC/DC				
	45	3RW40 36-1BB14 <sup>1)</sup>			
24 V <sup>3)</sup> AC/D	OC .				
	45	3RW40 36-1BB04 <sup>1)</sup>			
	Control supply voltage  110–230 V  24 V AC/DO	Control supply voltage Current le [A]  110–230 V AC/DC 45  24 V AC/DC 45  110–230 V³) AC/DC 45  24 V³) AC/DC			

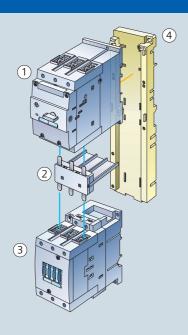


- 1) With 3RW40: for rated device operating voltage Ue: 200–480 V (see catalog for Ue: 400–600 V)
- For using tripping CLASS 20, please refer to the information contained in the "SIRIUS Engineering – Fuseless Load Feeders" configuration brochure and in the catalog
- 3) Fan available as accessory
- 5) For the suitable circuit breaker connection module, please refer to the catalog

Channel of			
Overload	d relays		
Setting range CLASS 10 [A]	Thermal Order No.	Setting range	Electronic Order No. <sup>2)</sup>
22 – 32	3RU11 36-4EB0		
28 – 40	3RU11 36-4FB0		
		12,5 – 50	3RB2□3□-□UB0
36 – 45	3RU11 36-4GB0	CLA	ASS 10 0 6 1 ASS 20 0 6 2 ASS 530*1 3 4
			rith ground-fault detection
40 – 50	3RU11 36-4HB0		ivatable) and electrical note reset

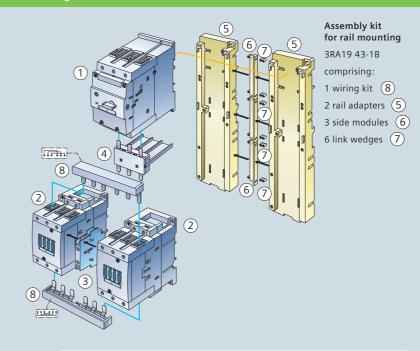
## S3 design

## **Direct start**



	Version	Order No.
Size S3 circuit breaker     Link module	AC	3RA19 41-1AA00
③ Size S3 contactor	DC	3RA19 41-1BA00
For rail mounting (diagram)		
4 Rail adapter		3RA19 42-1A

## Reversing start



		Version	Order No.
(	1) Size S3 circuit breaker		
(	2 Size S3 connectors		
(	3 Mechanical interlock		3RA19 24-2B
(	4 Link module	AC DC	3RA19 41-1AA00 3RA19 41-1BA00
(	5) Rail adapter		3RA19 42-1AA00
(	6 Side modules for rail adapters (1 Order No. = 10 adapters)		3RA19 02-1B
(	7 Link wedges (1 Order No. = 100 wed	ges)	8US19 98-1AA00
(	8) Wiring kit: upper link module, lower link module		3RA19 43-2A

## S3 selection and ordering data





		Circuit k	oreakers (MSP)		Contactors		
3-phase motor AC-3/400 \	/	Setting range CLASS 10	Order No.		Control supply voltage	Aux- iliary switch	Order No. es
[kW]	[A]	[A]					
30	55	42 – 63	3RV10 41-4JA10		230 V AC, 50/60	Hz –	3RT10 44-1AL20
					24 V DC	-	3RT10 44-1BB40
37	67	57 – 75	3RV10 41-4KA10				
					230 V AC, 50/60	Hz –	3RT10 45-1AL20
					24 V DC	-	3RT10 45-1BB40
45	80	70 – 90	3RV10 41-4LA10				
				N			
					230 V AC, 50/60	Hz –	3RT10 46-1AL20
45	80	80 – 100	3RV10 41-4MA10		24 V DC	-	3RT10 46-1BB40





Soft sta	Soft starters <sup>5)</sup>					
Control supply voltage	Rated operating current le [A]	Order No.				
110-230	/ AC/DC					
	80	3RW30 46-1BB14				
24 V AC/D	С					
	80	3RW30 46-1BB04				
110-230 \	/³) AC/DC					
	80	3RW40 46-1BB14 <sup>1)</sup>				
24 V <sup>3)</sup> AC/[	OC .					
	80	3RW40 46-1BB04 <sup>1)</sup>				



- 1) With 3RW40: for rated device operating voltage Ue: 200–480 V (see catalog for Ue: 400–600 V)
- For using tripping CLASS 20, please refer to the information contained in the "SIRIUS Engineering – Fuseless Load Feeders" configuration brochure and in the catalog
- 3) Fan available as accessory
- 5) For the suitable circuit breaker connection module, please refer to the catalog

Continue (III)			
Overload	d relays		
Setting range CLASS 10 [A]	Thermal Order No.	Setting range [A]	Electronic Order No. <sup>2)</sup>
45 – 63	3RU11 46-4JB0		
57 – 75	3RU11 46-4KB0		
		25 – 100	3RB2□4□-□EB0
70 – 90	3RU11 46-4LB0	CLA	ASS 10 0 6 1 ASS 20 0 6 2 ASS 530*1 3 4
80 – 100	3RU11 46-4MB0	(act	lith ground-fault detection tivatable) and electrical note reset

## S6, S10, S12 selection and ordering data





S6		Contactors				
3-phase motor AC-3/40		Electromagnetic operating mechanism	Control supply voltage	Auxiliary switches	Contactor Order No.	Vacuum contactor Order No.
[kW]	[A]		[V AC/DC]			
55	115	Conventional	220-240	2NO + 2NC	3RT1054-1AP36	-
		Electronic				
		– for 24 V DC PLC output	200-277	2NO + 2NC	3RT1054-1NP36	_
		– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200–277	1NO + 1NC	3RT1054-1PP35	-
		– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC	3RT1054-1QP35	-
75	150	Conventional	220-240	2NO + 2NC	3RT1055-6AP36	-
		Electronic				
		– for 24 V DC PLC output	200-277	2NO + 2NC	3RT1055-6NP36	-
		– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200–277	1NO + 1NC	3RT1055-6PP35	_
		– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC	3RT1055-6QP35	_
90	185	Conventional	220-240	2NO + 2NC	3RT1056-6AP36	_
		Electronic				
		– for 24 V DC PLC output	200–277	2NO + 2NC	3RT1056-6NP36	-
		– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200–277	1NO + 1NC	3RT1056-6PP35	-
		– with AS-i interface and RLT <sup>3)</sup>	200–277	1NO + 1NC	3RT1056-6QP35	-



Overload relays<sup>2)</sup>

Setting	Electronic	Version
range	Order No.	TOTSION
[A]		
50 – 200	3RB2□5□-□FW2	with straight- through transformer
50 – 200	3RB2□5□-□FC2	with busbar connection
CLAS	S 10 0 6 1	
CLAS	S 10 0 6 1 S 20 0 6 2 S 530*1 3 4	
	th ground-fault detection	



Soft sta	rters	
Control supply voltage	Rated opera curre le [A	ating ent <sup>1)</sup>
230 V AC	134	3RW40 55-6BB44
115 V AC	134	3RW40 55-6BB34
230 V AC	162	3RW40 56-6BB44
230 V / (C	102	3111110 30 00011
115 V AC	162	3RW40 56-6BB34





(activatable) and electrical



#### © Siemens AG 2008

S10					
110	110 225	Conventional	220-240	2NO + 2NC <b>3RT1064-6AP36 3RT1264-6AP</b>	36
	Electronic				
		– for 24 V DC PLC output	200-277	2NO + 2NC <b>3RT1064-6NP36 3RT1264-6NP</b>	36
		– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1064-6PP35</b> –	
		– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1064-6QP35</b> –	
132	265	Conventional	220-240	2NO + 2NC <b>3RT1065-6AP36 3RT1265-6AP</b> 3	36
132	203	Electronic			
		– for 24 V DC PLC output	200-277	2NO + 2NC <b>3RT1065-6NP36 3RT1265-6NP</b>	36
		– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1065-6PP35</b> –	
		– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1065-6QP35</b> -	
160	300	Conventional	220-240	2NO + 2NC <b>3RT1066-6AP36 3RT1266-6AP</b> 3	36
100	100 300	Electronic			
		– for 24 V DC PLC output	200-277	2NO + 2NC <b>3RT1066-6NP36 3RT1266-6NP</b>	36
		– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1066-6PP35</b> –	
		– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1066-6QP35</b> –	

55 – 250	3RB2□6□-□GC2	with busbar connection
160 – 630	3RB2□6□-□MC2	with busbar

connection

230 V AC	230	3RW40 73-6BB44
115 V AC	230	3RW40 73-6BB34
230 V AC	280	3RW40 74-6BB44
115 V AC	280	3RW40 74-6BB34



		á
	班 明 遊	
		٩
S12		

400

500

200

250

Conventional	220-240	2NO + 2NC <b>3RT1075-6AP36</b>	3RT1275-6AP36
Electronic			
– for 24 V DC PLC output	200-277	2NO + 2NC <b>3RT1075-6NP36</b>	3RT1275-6NP36
– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1075-6PP35</b>	-
– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1075-6QP35</b>	-
Conventional	220-240	2NO + 2NC <b>3RT1076-6AP36</b>	3RT1276-6AP36
Electronic			
– for 24 V DC PLC output	200-277	2NO + 2NC <b>3RT1076-6NP36</b>	3RT1276-6NP36
– for 24 V DC PLC output w/ RLT <sup>3)</sup>	200-277	1NO + 1NC <b>3RT1076-6PP35</b>	-
– with AS-i interface and RLT <sup>3)</sup>	200-277	1NO + 1NC 3RT1076-6QP35	_

For applications above 100 A, SIRIUS contactors can be combined with SENTRON 3VL circuit breakers. For more detailed information please refer to the engineering brochure "Engineering SIRIUS fuseless load feeders."



160 − 630 **3RB2**□**6**□-□**MC2** with busbar connection

CLASS 10 0 6 1 CLASS 20 0 6 2 CLASS 5...30\*1 3 4

\* With ground-fault detection (activatable) and electrical remote reset

- 1) For rated device operating voltage Ue: 200-460 V (see catalog for Ue: 400–600 V)
- 2) For using tripping CLASS 20, please refer to the information contained in the "SIRIUS Engineering – Fuseless Load Feeders" configuration brochure and in the catalog
- 3) RLT: Remaining lifetime indication



230 V AC	356	3RW40 75-6BB44
115 V AC	356	3RW40 75-6BB34
230 V AC	432	3RW40 76-6BB44
115 V AC	432	3RW40 76-6BB34

SENTRON 3VL circuit breakers are suitable for the fuseless short-circuit and overload protection of soft starters of size S6 or larger. For further information, please refer to the catalog.

## Completely mounted/assembled load feeders

## Fuseless load feeders

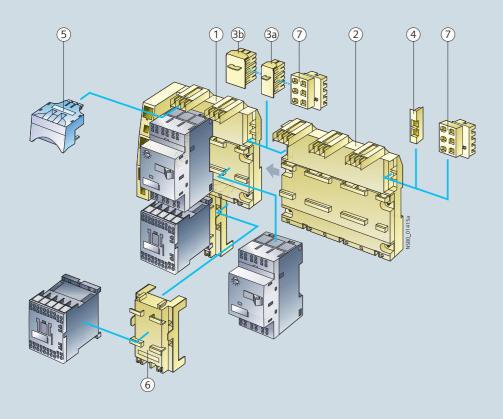
3-phase AC-3/400		Setting range, thermal overload	3RA coordination type 2 230 V AC direct	3RA coordination type 2 230 V AC reversing	Size	3RA coordination type 1 230 V AC direct	3RA coordination type 1 230 V AC reversing	Size
[kW]	[A]	release						
0.06	0.2	0.14 – 0.2	3RA11 10-0BA15-1AP0	3RA12 10-0BA15-0AP0				
.06	0.2	0.18 – 0.25	3RA11 10-0CA15-1AP0	3RA12 10-0CA15-0AP0				
.09	0.3	0.22 - 0.32	3RA11 10-0DA15-1AP0	3RA12 10-0DA15-0AP0				
.09	0.3	0.28 – 0.4	3RA11 10-0EA15-1AP0	3RA12 10-0EA15-0AP0				
.12	0.4	0.35 – 0.5	3RA11 10-0FA15-1AP0	3RA12 10-0FA15- 0AP0		Coordination type 2	Coordination type 2	
.18	0.6	0.45 – 0.63	3RA11 10-0GA15-1AP0	3RA12 10-0GA15-0AP0	S00	also fulfills coordination type 1	also fulfills coordination type 1	
.18	0.6	0.55 – 0.8	3RA11 10-0HA15-1AP0	3RA12 10-0HA15-0AP0		coordination type I	coordination type i	
).25	0.6	0.7 – 1	3RA11 10-0JA15 -1AP0	3RA12 10-0JA15- 0AP0				
.37	1.1	0.9 – 1.25	3RA11 10-0KA15-1AP0	3RA12 10-0KA15-0AP0				
).55	1.5	1.1 – 1.6	3RA11 10-1AA15-1AP0	3RA12 10-1AA15-0AP0				
).75	1.9	1.4 – 2	3RA11 10-1BA15-1AP0	3RA12 10-1BA15-0AP0				
.75	1.9	1.8 – 2.5	3RA11 20-1CA24-0AP0	3RA12 20-1CB24-0AP0		3RA11 10-1CA15-1AP0	3RA12 10-1CA15-0AP0	
.1	2.7	2.2 – 3.2	3RA11 20-1DA24-0AP0	3RA12 20-1DB24-0AP0		3RA11 10-1DA15-1AP0	3RA12 10-1DA15-0AP0	
.5	3.6	2.8 – 4	3RA11 20-1EA24-0AP0	3RA12 20-1EB24- 0AP0		3RA11 10-1EA15-1AP0	3RA12 10-1EA15-0AP0	
.5	3.6	3.5 – 5	3RA11 20-1FA24 -0AP0	3RA12 20-1FB24- 0AP0		3RA11 10-1FA15- 1AP0	3RA12 10-1FA15-0AP0	
2.2	5.2	4.5 – 6.3	3RA11 20-1GA24-0AP0	3RA12 20-1GB24-0AP0		3RA11 10-1GA15-1AP0	3RA12 10-1GA15-0AP0	S00
	6.8	5.5 – 8	3RA11 20-1HA24-0AP0	3RA12 20-1HB24-0AP0	S0	3RA11 10-1HA15-1AP0	3RA12 10-1HA15-0AP0	
	9	7 – 10	3RA11 20-1JA26 -0AP0	3RA12 20-1JB26- 0AP0		3RA11 10-1JA16- 1AP0	3RA12 10-1JA16- 0AP0	
.5	11.5	9 – 12,5	3RA11 20-1KA26-0AP0	3RA12 20-1KB26-0AP0		3RA11 10-1KA17-1AP0	3RA12 10-1KA17-0AP0	
.5	15.5	11 – 16	3RA11 20-4AA26-0AP0	3RA12 20-4AB26-0AP0		3RA11 20-4AA25-0AP0	3RA12 20-4AB25-0AP0	
'.5	15.5	14 – 20	3RA11 20-4BA26-0 AP0	3RA12 20-4BB26- 0AP0		3RA11 20-4BA25-0AP0	3RA12 20-4BB25-0AP0	50
1	22	17 – 22	3RA11 20-4CA26-0AP0	3RA12 20-4CB26- 0AP0		3RA11 20-4CA26-0AP0	3RA12 20-4CA26-0AP0	S0
1	22	20 – 25				3RA11 20-4DA26-0AP0	3RA12 20-4DB26-0AP0	
1	22	18 – 25	3RA11 30-4DB34-0AP0			5.2 25 .525 <i>0</i> /11 0	31110	
5	29	22 – 32	3RA11 30-4EB34 -0AP0					
8.5	35	28 – 40	3RA11 30-4FB35 -0AP0		S2			
2	41	36 – 45	3RA11 30-4GB36-0AP0					
2	41	40 – 50	3RA11 30-4HB36-0AP0					

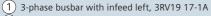






## Infeed system





<sup>(2) 3-</sup>phase busbar to expand the system, 3RV19 17-4B

- (3b) Broadened expansion plug, 3RV19 17-SE
- (4) End cover, 3RV19 17-6A
- (5) Connection plug, 3RV19 17-5AA00
- (6) Contactor socket, 3RV19 17-AA00
- 7 Terminal block, 3RV19 17-5D



3-r 1 2	Dhase busbars  3-phase busbars with infeed left incl. 3RV19 17-6A end cover  3-phase busbars with infeed right incl. 3RV19 17-6A end cover	for 2 switches	3RV19 17-1A 3RV19 17-1E
de la constante de la constant	3-phase busbars to expand the system incl. 3RV19 17-5BA00 expansion connector 3-phase busbars to expand the system incl. 3RV19 17-5BA00 expansion connector	for 2 switches	3RV19 17-4A 3RV19 17-4B

## **Connection plug**



(5) Connection plug to connect to the circuit breaker S00, screw 1 unit 3RV19 17-5CA00 10 units **3RV19 17-5C** S00, spring-loaded terminals 1 unit 3RV19 17-5AA00 10 units 3RV19 17-5A

1 unit 3RV19 27-5AA00 S0, screw 10 units 3RV19 27-5A

Version

Order No.

#### Accessories

(6) Contactor socket to configure direct or reversing starters 1 unit 3RV19 17-7AA00 10 units 3RV19 17-7A

7 Terminal block to integrate 1- 2- or 3-pole components

3RV19 17-5D

Mounting rail to integrate other devices into the system, e.g. 5SY cable protection circuit breakers

> (3b) Wider expansion plug 3RV19 17-5E



## Spare parts

(3a) Expansion plug as spare part

3RV19 17-5BA00

3RV19 17-7B



4 End cover as spare part

3RV19 17-6A

<sup>(3</sup>a) Expansion connector, 3RV19 17-5BA00

## Reversing combinations and Wye-delta\* combinations

Reversing combinations up to 45 kW



S00

Reversing combinations					
3-phase motor AC-3/400 V		Size	Pre-wired and tested for 230 V AC, 50/60 Hz		
[kW]	[A]		Order No.		
5.5	7	S00	3RA13 15-8XB30-1AP0		
	12	S0	3RA13 24-8XB30-1AL2		
7.5	9	S00	3RA13 16-8XB30-1AP0		
	17	S0	3RA13 25-8XB30-1AL2		
11	12	S00	3RA13 17-8XB30-1AP0		
	25	S0	3RA13 26-8XB30-1AL2		
15	32	S2	3RA13 34-8XB30-1AL2		
18.5	40	S2	3RA13 35-8XB30-1AL2		
22	50	S2	3RA13 36-8XB30-1AL2		
30	65	S3	3RA13 44-8XB30-1AL2		
37	37	S3	3RA13 45-8XB30-1AL2		
45	95	S3	3RA13 46-8XB30-1AL2		

## Wye-delta\* combinations up to 75 kW



S00

Contactors combinations					
3-phase mo AC-3/400 V [kW]		Size	Pre-wired and tested for 230 V AC, 50/60 Hz Order No.		
5.5	12	S00-S00-S00	3RA14 15-8XB31-1AP0		
7.5	17	S00-S00-S00	3RA14 16-8XB31-1AP0		
11	25	S0-S0-S0	3RA14 23-8XC21-1AL2		
15/18.5	32/40	S0-S0-S0	3RA14 25-8XC21-1AL2		
22/30	50/65	S2-S2-S0	3RA14 34-8XC21-1AL2		
37	80	S2-S2-S2	3RA14 35-8XC21-1AL2		
45	86	S2-S2-S2	3RA14 36-8XC21-1AL2		
55	115	S3-S3-S2	3RA14 44-8XC21-1AL2		
75	150	S3-S3-S2	3RA14 45-8XC21-1AL2		

## Safety-related load feeders

3-phase AC-3/400		Setting range, thermal overload release	Coordination type 2 230 V AC Category 3 according to EN 954-1	Coordination type 2 24 V DC
[kW]	[A]			
0.04	0.16	0.11 – 0.16	3RA71 01-0AA17-0AL2	3RA71□1-0AA17-0AB4
0.06	0.2	0.14 - 0.2	3RA71 01-0BA17-0AL2	3RA71□1-0BA17-0AB4
0.06	0.2	0.18 – 0.25	3RA71 01-0BA17-0AL2	3RA71□1-0BA17-0AB4
0.09	0.3	0.22 - 0.32	3RA71 01-0DA17-0AL2	3RA71 □1-0DA17-0AB4
0.09	0.3	0.28 - 0.4	3RA71 01-0EA17-0AL2	3RA71□1-0EA17-0AB4
0.12	0.4	0.35 – 0.5	3RA71 01-0FA17-0AL2	3RA71□1-0FA17-0AB4
0.18	0.6	0.45 – 0.63	3RA71 01-0GA17-0AL2	3RA71 □1-0GA17-0AB4
0.18	0.6	0.55 – 0.8	3RA71 01-0HA17-0AL2	3RA71 □1-0HA17-0AB4
0.25	0.8	0.7 – 1	3RA71 01-0JA17-0AL2	3RA71□1-0JA17-0AB4
0.37	1.1	0.9 – 1.25	3RA71 01-0KA17-0AL2	3RA71 □1-0KA17-0AB4
0.55	1.5	1.1 – 1.6	3RA71 01-1AA17-0AL2	3RA71 □1-1AA17-0AB4
0.75	1.9	1.4 – 2	3RA71 01-1BA17-0AL2	3RA71□1-1BA17-0AB4
0.75	1.9	1.8 – 2.5	3RA71 02-1CA26-0AL2	3RA71 □2-1CA26-0AB4
1.1	2.7	2.2 – 3.2	3RA71 02-1DA26-0AL2	3RA71 □2-1DA26-0AB4
1.5	3.6	2.8 – 4	3RA71 02-1EA26-0AL2	3RA71□2-1EA26-0AB4
1.5	3.6	3.5 – 5	3RA71 02-1FA26-0AL2	3RA71□2-1FA26-0AB4
2.2	5.2	4.5 – 6.3	3RA71 02-1GA26-0AL2	3RA71 □2-1GA26-0AB4
3	6.8	5.5 – 8	3RA71 02-1HA26-0AL2	3RA71 □2-1HA26-0AB4
4	9	7 – 10	3RA71 02-1JA26-0AL2	3RA71□2-1JA26-0AB4
5.5	11.5	9 – 12.5	3RA71 02-1KA26-0AL2	3RA71 □2-1KA26-0AB4
7.5	15.5	11 – 16	3RA71 02-4AA26-0AL2	3RA71 □2-4AA26-0AB4
7.5	15.5	14 – 20	3RA71 02-4BA26-0AL2	3RA71□2-4BA26-0AB4
11	22	17 – 22	3RA71 02-4CA26-0AL2	3RA71□2-4CA26-0AB4
11		without	3RA71 00-5AA26-0AL2	3RA71□0-5AA26-0AB4
		Circuit brooker		

Size

S00



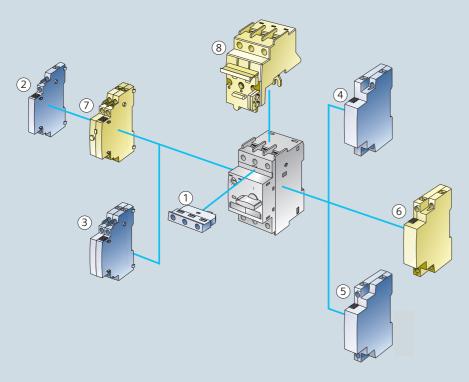
S0

Circuit breaker (contactor-safety combination)

Safety electronics as basic unit up to Category 3
 Safety electronics as basic unit up to Category 4
 Safety electronics as expansion unit
 Safety electronics as expansion unit, time delay 0.05–3 s
 Safety electronics as expansion unit, time delay 0.5–30s

## Accessories

## Circuit breakers



	Version	For Size	Order No.
1 Transverse auxiliary switch	1W 1NO + 1NC 2NO	S00, S0, S2, S3	3RV19 01-1D 3RV19 01-1E 3RV19 01-1F
2 Transverse auxiliary switch with 2 contacts	1NO + 1NC 2NO 2NC	S00, S0, S2, S3	3RV19 01-1A 3RV19 01-1B 3RV19 01-1C
3 Transverse auxiliary switch with 4 contacts	2NO + 2NC	S00, S0, S2, S3	3RV19 01-1J
4 Shunt release	230 V AC	S00, S0, S2, S3	3RV19 02-1DP0
5 Undervoltage release	230 V AC	S00, S0, S2, S3	3RV19 02-1AP0
6 Undervoltage release with leading auxiliary switches	230 V AC	S00 S0, S2, S3	3RV19 12-1CP0 3RV19 22-1CP0
7 Signaling switch 8 Isolator module		S0, S2, S3 S0 S2	3RV19 21-1M 3RV19 28-1A 3RV19 38-1A

	Version	For Size	Order No.
Insulated 3-phas	e busbar systems		
AAA AAA	<b>3-phase busbars, modular spacing 45 mm</b> for 2 switches for 3 switches for 4 switches for 5 switches	S00, S0	3RV19 15-1AB 3RV19 15-1BB 3RV19 15-1CB 3RV19 15-1DB
	Connector from S0 to S00	S00, S0	3RV19 15-5DB
abababababa	<b>3-phase busbars, modular spacing 55 mm</b> for 2 switches for 3 switches for 4 switches	S2	3RV19 35-1A 3RV19 35-1B 3RV19 35-1C
nnn	<b>3-phase line-side terminal,</b> connection from the top	\$00 \$0 \$2	3RV19 15-5A 3RV19 25-5AB 3RV19 35-5A
Door-coupling ro	otary operating mechanisms		
	Black		

## Moulded-plastic enclosure for wall mounting

Extension shaft

Extension shaft with support bracket





With actuator diaphragm	500	20140 42 46400
width 54 mm (e.g. switch + transverse auxiliary switch)	S00	3RV19 13-1CA00
(e.g. switch + transverse auxiliary switch + auxiliary release)	S00	3RV19 13-1DA00
With rotary operating mechanism		
width 54 mm	S0	3RV19 23-1CA00
(e.g. switch + transverse auxiliary switch) width 72 mm	S0	3RV19 23-1DA00
(e.g. switch + transverse auxiliary switch + auxiliary release)		

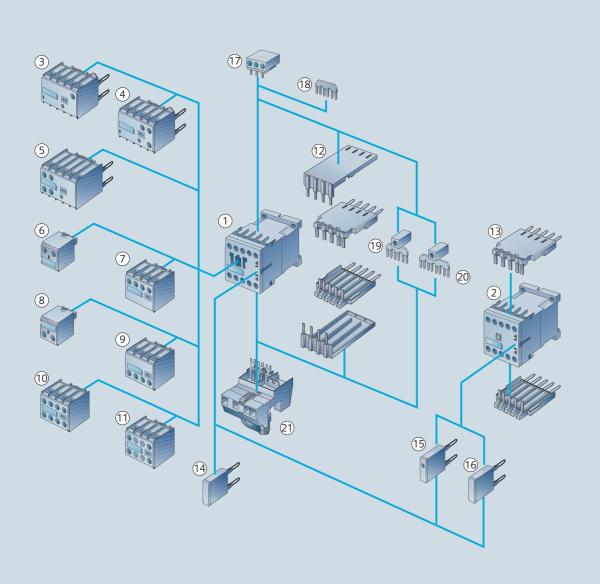
130 mm

330 mm

S0, S2, S3

3RV19 26-0B

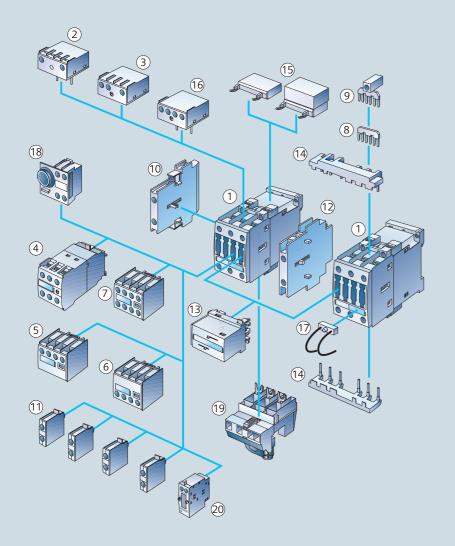
3RV19 26-0K



		Version	Order No.
1	Contactor (example) control supply voltage	4 kW/400 V, 1NO 230 V, 50/60 Hz	3RT10 16-1AP01
2	Contactor relay (example) control supply voltage	4 kW/400 V, 1NO 230 V, 50/60 Hz	3RT10 16-1HB41
3	Solid-state time-delay block ON delay	0.5 – 10 s	3RT19 16-2CH21
4	Solid-state time delay block OFF delay	0.5 – 10 s	3RT19 16-2DH21
5	Auxiliary switch block, solid-state time-delay ON delay OFF delay	0.5 – 10 s 0.5 – 10 s	3RT19 16-2ED21 3RT19 16-2FL21
6	1-pole auxiliary switch block, cable entry from above	1NO 1NC	3RH19 11-1AA10 3RH19 11-1AA01
7	2-pole auxiliary switch block, cable entry from above	1NO + 1NC	3RH19 11-1LA11
8	1-pole auxiliary switch block, cable entry from below	1NO 1NC	3RH19 11-1BA10 3RH19 11-1BA01
9	2-pole auxiliary switch block, cable entry from below	1NO + 1NC	3RH19 11-1MA11
10	4-pole auxiliary switch block, (terminal designations acc. to DIN EN 50 012)	2NO + 2NC	3RH19 11-1HA22
11)	2-pole auxiliary switch block, solid-state compatible design (acc. to DIN EN 50 005)	1NO + 1NC	3RH19 11-1NF11
12	Solder pin adapter for contactor with 4-pole auxiliary switch block	for 4 contactors (package)	3RT19 16-4KA2
13	Solder pin adapter for contactor and contactor relay	for 4 contactors (package)	3RT19 16-4KA1
14	Additional load module, for an increase of the permissible residual current	180–255 V AC, 50/60 Hz	3RT19 16-1GA00
15)	Surge suppressor with LED (varistor)	127–240 V AC 12–24 V DC	3RT19 16-1JL00 3RT19 16-1JJ00
16	Surge suppressor without LED (varistor)	127–240 V AC 24–70 V DC	3RT19 16-1BD00 3RT19 16-1BB00
17	3-phase infeed terminal connection cross-section:	6 mm²	3RA19 13-3K
18	Link for paralleling, (star jumper), 3-pole, without terminal	-	3RT19 16-4BA31
19	Link for paralleling, 3-pole, with terminal	-	3RT19 16-4BB31
20	Link for paralleling, 4-pole, with terminal	-	3RT19 16-4BB41
21)	Connection module (adapter and plug) for contactor with screw-type connection	AC-3/400 V: 20 A	3RT19 16-4RD01

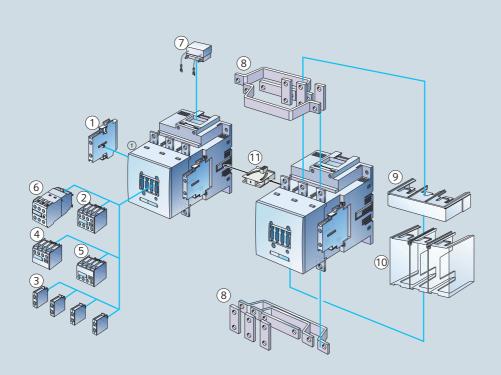
## Accessories

## Contactors S0 – S3



		Version	For Size	Order No.
1	Contactor, size SO (example) control supply voltage	7.5 kW/400 V 230 V, 50 Hz		3RT10 25-1AP00
	For sizes S0 to S3:			
2	Solid-state time-delay block, ON delay	0.5 – 10 s		3RT19 26-2CH21
(3)	Solid-state time-delay block, OFF delay	0.5 – 10 s		3RT19 26-2DH21
4	Auxiliary switch block, solid-state time-delay ON delay OFF delay	0.5 – 10 s 0.5 – 10 s		3RT19 26-2ED21 3RT19 26-2FL21
5	2-pole auxiliary switch block, cable entry from above	1NO + 1NC		3RH19 21-1LA11
6	2-pole auxiliary switch block, cable entry from below	1NO + 1NC		3RH19 21-1MA11
7	4-pole auxiliary switch block (terminal designations acc. to DIN EN 50 012 or DIN EN 50 005)	2NO + 2NC		3RH19 21-1HA22
8	Link for paralleling (star jumper), 3-pole, without terminal	-	S0 S2 S3	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31
9	Link for paralleling, 3-pole, with terminal	-	S0 S2 S3	3RT19 26-4BB31 3RT19 36-4BB31 3RT19 46-4BB31
10	2-pole auxiliary switch block, can be laterally mounted (left or right) (terminal designations acc. to DIN EN 50 012 or DIN EN 50 005)	1NO + 1NC	S0 – S3	3RH19 21-1DA11
11	1-pole auxiliary switch block (up to 4 can be snapped on)	1NO 1NC	S0 – S3 S0 – S3	3RH19 21-1CA10 3RH19 21-1CA01
(12)	Mechanical interlock, can be laterally mounted	_	S0 – S3	3RA19 24-2B
(13)	Mechanical interlock, can be mounted at the front	-	S0 – S3	3RA19 24-1A
14	Wiring connectors at the top and bottom (reversing operation)	-	S0 S2 S3	3RA19 23-2A 3RA19 33-2A 3RA19 43-2A
15	Surge suppressor (varistor, RC coupling, diode combination), can be mounted at the top or bottom	-	S0 – S3	3RT19 26-1BD00
16	Interface for mounting directly onto the contactor coil	-	S0 – S3	3RT19 26-3AB31
17)	LED module to indicate contactor operation	-	S0 – S3	3RT19 26-1QT00
18	Pneumatic delay block ON delay	0.1 – 30 s 1 – 60 s	S0 S0	3RT19 26-2PA01 3RT19 26-2PA11
	OFF delay	0.1 – 30 s 1 – 60 s	SO SO	3RT19 26-2PR01 3RT19 26-2PR11
19	Connection module (adapter and connector) for contactor with screw-type connection	AC-3/400 V: 25 A	S0	3RT19 26-4RD01
20	Mechanical latching	24 AC/DC 110 AC/DC 230 AC/DC	S0, S2 S0, S2 S0, S2	3RT19 26-3AB31 3RT19 26-3AF31 3RT19 26-3AP31

#### Contactors S6 - S12



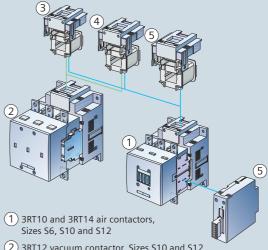
		Version	Order No.
1	2-pole auxiliary switch block, can be laterally – 2nd block (left/right), DIN EN 50 012 – 2nd block (left/right), DIN EN 50 005	1NO + 1NC	3RH19 21-1JA11 3RH19 21-1KA11 3RH19 21-1KA20
2	4-pole auxiliary switch block, can be mount – with classification No. 58, DIN EN 50 012 – with classification No. 14, DIN EN 50 012	2NO + 2NC	3RH19 21-1XA22-0MA0
3	1-pole auxiliary switch block, can be mounted at the front	1NO 1NC	3RH19 21-1CA10 3RH19 21-1CA01
4	2-pole auxiliary switch block, can be mounted at the front cable entry from above, DIN EN 50 005	1NO + 1NC	3RH19 21-1LA11
5	2-pole auxiliary switch block can be mounted at the front cable entry from below, DIN EN 50 005	1NO + 1NC	3RH19 21-1MA11
6	Auxiliary switch block, solid-state time-delay  – ON delay 200–240 V AC	1NO + 1NC 0 10 s	3RH19 26-2FD21

0.5 ... 10 s 3RH19 26-2FL21

- OFF delay, 200-240 V AC

			Version	Order No.
_ D _	7	RC element, 127 240 V AC		3RT19 56-1CD00
	8	Wiring connectors, top and bottom	for S6 for S10 for S12	3RA19 53-2M 3RA19 63-2A 3RA19 73-2A
	9	Connection cover for box terminals	for S6 for S10/S12	3RT19 56-4EA2 3RT19 66-4EA2
	10	Terminal cover for cable lug and busbar connection	for S6 for S10/S12	3RT19 56-4EA2 3RT19 66-4EA2
	11)	Mechanical interlock		3RA19 54-2A

## **Operating mechanism types**



- 2 3RT12 vacuum contactor, Sizes S10 and S12
- (3) Withdrawable coils for contactors with conventional operating mechanism
- 4 Withdrawable coils for contactors with electronic operating mechanism
- (5) Withdrawable coils and laterally mounted module (can be plugged in) for contactors with electronic operating mechanism and remaining lifetime signal 3RT1...-.P.. and 2RT1...-.Q

Size	3-phase motor AC-3/400 V	Contactor without coil	Withdrawable coil for conventional control supply voltage 220 240 V AC/DC	electronic
	kW	Order No.	Order No.	Order No.
S6	55	3RT10 54-1LA06	3RT19 55-5AP31	3RT19 55-5NP31
	75	3RT10 55-6LA06		
	90	3RT10 56-6LA06		
S10	110	3RT10 64-6LA06	3RT19 65-5AP31	3RT19 65-5NP31
	132	3RT10 65-6LA06		
	160	3RT10 66-6LA06		
S12	200	3RT10 75-6LA06	3RT19 75-5AP31	3RT19 75-5NP31
	250	3RT10 76-6LA06		

## Accessories

## Accessories for 3RU11 thermal overload relays and 3RB20/21 electronic overload relays





Version	For Size	Order No.
Adapter for stand-alone assembly for 3RB20/21 for separately mounting the overload relays, screw-type and snap-on fastening on TH 35 DIN rails	S00 S0	3RB29 13-0AA1 3RB29 23-0AA1
Terminal support for stand-alone assembly for for separately mounting the overload relays, screw-type and snap-on fastening on TH 35 DIN rails, size S3 also for TH 75 DIN rails	S00	3RU19 16-3AA01 3RU19 26-3AA01 3RU19 36-3AA01 3RU19 46-3AA01





Mechanical RESET for 3RU1 comprising:	1 and 3RB20/21		
	Resetting plunger, holder and former  Pushbutton with extended stroke (12 mm),  IP65, Ø 22 mm		
of the distance between a pu	Extension plunger for compensation of the distance between a pushbutton and the relay's release button		3SX1335
Cable release with holder for for holes 6.5 mm diameter in the panel; max. panel thickness, 8 mm	or RESET 3RU11 an length 400 mm length 600 mm	d 3RB20/21 S00 to S10/S12 S00 to S10/S12	3RU19 00-1B 3RU19 00-1C

Version	For Size	Order No.
Sealable cover, transparent for 3RB20/21 to cover the setting elements	S00 to S10/S12	3RB29 84-0
Terminal covers for 3RU11 and 3RB20/21 Cover for cable luq	S3	3RT19 46-4EA1
and busbar connection	S6 S10/S12	3RT19 56-4EA1 3RT19 66-4EA1
Cover for box terminals	S2 S3 S6 S10/S12	3RT19 36-4EA2 3RT19 46-4EA2 3RT19 56-4EA2 3RT19 66-4EA2
Cover for the screw connection	S6	3RT19 56-4EA3
between the contactor and overload relay without box terminals (1x is required for each combination)	S10/S12	3RT19 66-4EA3
Box terminal block for round and ribbon cables to 70 mm <sup>2</sup>	S6	3RT19 55-4G

to 120 mm<sup>2</sup>

to 240 mm<sup>2</sup>

S6

S10/S12

3RT19 56-4G

3RT19 66-4G



3-phase motor AC-3/400 V [kW]	Enclosure for direct starters	Size	Order No.	Components required		Qty.
5.5	Moulded-plastic enclosure for wall mounting IP65 degree of protection with actuator elements	S00	3RE1913-1CB1	Contactor with integrated auxiliary switch 1NO	3RT10 11	1
				Thermal or electronic overload relay	3RU11 16 resp. 3RB10 16	1
11	Moulded-plastic enclosure	S0	3RE1923-1CB2	Contactor	3RT10 2	1
	for wall mounting IP65 degree of protection with actuator elements			Thermal or electronic overload relay	3RU11 26 resp. 3RB10 26	1
				Lateral auxiliary switch 1NO/1NC	3RH19 21-1DA11	1
22	Moulded-plastic enclosure S2 for wall mounting IP65 degree of protection with actuator elements	S2	3RE1933-1CB3	Contactor	3RT10 3	1
				Thermal or electronic overload relay	3RU11 36 resp. 3RB10 36	1
				Lateral auxiliary switch 1NO/1NC	3RH19 21-1DA11	1
3-phase motor AC-3/400 V [kW]	Enclosure for reversing starters	Size	Order No.	Components required		Qty.
5.5	Moulded-plastic enclosure	S00/S0	0/S0 <b>3RE1913-2CB3</b>	Contactor	3RT10 1	2
	for wall mounting IP65 degree of protection with actuator elements			Wiring kit for reversing combination	3RH19 13-2A	1
				Thermal or electronic overload relay	3RU11 16 resp. 3RB10 16	1
				Auxiliary switch 1NO at the front	3RH19 11-1BA10	2
11	Moulded-plastic enclosure for wall mounting	S00/S0	3RE1913-2CB3	Contactor	3RT10 2	2
	IP65 degree of protection with actuator elements			Wiring kit for reversing combination	3RH19 23-2A	1
				Mechanical interlock	3RH19 24-2B	1
				Thermal or electronic overload relay	3RU11 26 resp. 3RB10 26	1
				Auxiliary switch 1NO at the front	3RH19 21-1CA10	2





Direct and reversing starters in enclosures are also available pre-configured. These include all of the necessary components and are pre-wired – with the exception of the overload relay. The overload relay should be selected corresponding to the application and must be separately ordered. For more detailed information, please refer to the catalog.

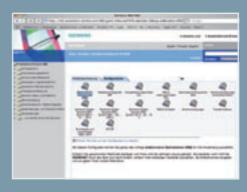
## Service and Support

## Information





## **Planning**





## Easy download of catalogs and information material

The latest catalogs, customer magazines, brochures, demo software and special bargain packages are available for ordering or download from our Information and Download Center:

www.siemens.com/lowvoltage/catalogs

## Newsletter

Always up to date: Our regular newsletter provides you with topical information on our industrial controls and power distribution products. Simply register at: www.siemens.com/lowvoltage/newsletter

## Configurators for ease of handling

Our configurator selection is available at: www.siemens.com/lowvoltage/configurators

## Online support

Reports and technical data sheets on our products can be found at: www.siemens.com/lowvoltage/support

## **Ordering**

# SCENES ON THE PROPERTY OF THE

## Commissioning / operation



## **Service**



## **Training**



#### E-business

24/7-access to a comprehensive information and ordering platform for products and systems of the low-voltage controls and distribution portfolio? Comprehensive information on our complete portfolio? Product selection, order tracking, service, support and training information? All this can be conveniently found at our A&D Mall at: www.siemens.com/lowvoltage/mall

#### Online support

Detailed technical information on our products and systems of the low-voltage controls and distribution portfolio, product support and further services and support based on helpful support tools can be found at:

www.siemens.com/lowvoltage/ support

#### **Technical Assistance**

You are looking for the right product suiting your application? You have technical questions, require spare parts or want to localize a regional expert? Our experienced team of engineers and technicians will be pleased to assist you:

- Personally from Monday to Friday, 8.00 am to 5.00 pm (CET) via telephone support: +49 911 895-5900
- Via e-mail: technical-assistance@siemens.com
- Via fax: **+49 911 895-5907**

Αt

www.siemens.com/lowvoltage/technical-assistance you can also access the Siemens Service & Support Internet platform for Industry Automation and Drive Technologies. Here, you can search the FAQ database for information and solutions matching your task or directly send your questions to our technical consultants via the support request.

#### **Training**

Our training centers at numerous sites worldwide offer individual training programs covering all fields of automation and industrial solutions. Moreover, with the help of our online courses and various learning software, you can acquire new know-how even more time- and cost-efficiently. More information on our comprehensive SITRAIN training program is available on the Internet at

www.siemens.com/sitrain-cd

Or contact us personally:

- via information hotline: 01805/25 36 11
- or Fax: +49 1805 23 56 12

O	Ordering by fax +49/911/978-3321 CD/Z1226							
		Please send the selected information		MONITORING AND CONTROLLING				
			to the following address:  Company/Department  Name		☐ SIRIUS Motor manager system SIMOCODE pro			
					☐ SIRIUS Relays	☐ SIRIUS Safety Relays		
		Company/Department			SIRIUS Position switches			
	vsletter ays up to date:	Name			r osition switches			
Our regular newsletter provides you with topical information on all sub-			SING	SIRIUS Pushbuttons an				
jects of industrial controls and power			COMMANDING AND SIGNALING	indicator lights  SIRIUS Cable-operated	integrated signal lamps switches			
	ribution. Simply register at w.siemens.com/lowvoltage/	Telephone/Fax		ANI	·			
nev	vsletter	E-mail			☐ SIVENT Fans	☐ SIDAC Reactors and filters		
	SIRIUS Industrial Controls			SUPPLYING	☐ SIDAC and SIVENT Solu	itions		
1				ENGINEERING	☐ Motor Starter ES			
HING	SIRIUS Solid-state				☐ Soft Starter ES			
SWITCHING	switching devices			_	☐ SIRIUS Safety Integrate	ed AS-Interface		
	☐ SIRIUS Soft starter	SIRIUS Engineering	SIRIUS Compact starter	₩	☐ ECOFAST	☐ AS-i News		
STARTING	☐ SIRIUS Infeed system	load feeders US Infeed system ☐ SIMATIC ET 200pro ☐ SIRIUS Motor starter	SIRIUS Motor starter	SIRIUS AND MORE	SIRIUS Connection syst	•		
STAF			SIRI	☐ The Secrets of UL – You	u have our support			

Siemens AG Industry Sector Low-Voltage Controls and Distribution P.O. Box 48 48 90327 NÜRNBERG GERMANY

www.siemens.com/sirius

Subject to change without prior notice 04/08 Order No. E20001-A380-P302-V5-7600 Dispo 27601 21/10836 SGSR.52.8.03 PA 040810.0 Printed in Germany © Siemens AG 2008

The information provided in this brochure contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.