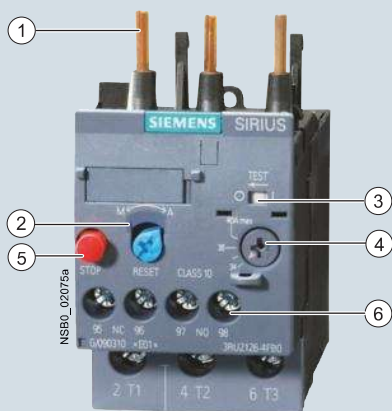


Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

**3RU2 up to 40 A
for standard applications**

Overview



- ① Connection for mounting onto contactors: Optimally adapted in electrical, mechanical and design terms to the contactors. The overload relay can be connected directly to the contactor using these pins. Stand-alone installation is possible as an alternative (in conjunction with a terminal bracket for stand-alone installation).
- ② Selector switch for manual/automatic RESET and RESET button: With this switch you can choose between manual and automatic RESET. A device set to manual RESET can be reset locally by pressing the RESET button. A remote RESET is possible using the RESET modules (accessories), which are independent of size.
- ③ Switch position indicator and TEST function of the wiring: Indicates a trip and enables the wiring test.
- ④ Motor current setting: Setting the device to the rated motor current is easy with the large rotary knob.
- ⑤ STOP button: If the STOP button is pressed, the NC contact is opened. This switches off the contactor downstream. The NC contact is closed again when the button is released.
- ⑥ Connecting terminals: Depending on the device version, the connecting terminals for screw, spring-type or ring terminal lug connection are configured for the main and auxiliary circuit.

A sealable transparent cover can be optionally mounted (accessory). It secures the motor current setting against adjustment.

SIRIUS 3RU2126-4FB0 thermal overload relay

The 3RU21 thermal overload relays up to 40 A have been designed for inverse-time delayed protection of loads with normal starting (for "Function" see manual "SIRIUS Innovations – SIRIUS 3RU2/3RB3 Overload Relays", <http://support.automation.siemens.com/WW/view/en/60298164>) against excessive temperature rises due to overload or phase failure.

An overload or phase failure results in an increase of the motor current beyond the set rated motor current. Via heating elements, this current rise heats up the bimetal strips inside the device which then bend and as a result trigger the auxiliary contacts by means of a tripping mechanism. The auxiliary contacts then switch off the load by means of a contactor. The break time depends on the ratio between the tripping current and current setting I_e and is stored in the form of a long-term stable tripping characteristic (see "Characteristic Curves" <http://support.automation.siemens.com/WW/view/en/34291410/134300>).

The "tripped" status is signaled by means of a switch position indicator. Resetting takes place either manually or automatically after a recovery time has elapsed (for "Function" see manual "SIRIUS Innovations – SIRIUS 3RU2/3RB3 Overload Relays", <http://support.automation.siemens.com/WW/view/en/60298164>).

The 3RU2 thermal overload relays are suitable for operation with frequency converters. Please follow the instructions in the manual "SIRIUS Innovations – 3RU2/3RB3 Overload Relays", see <http://support.automation.siemens.com/WW/view/en/60298164>.

The devices are manufactured in accordance with environmental guidelines and contain environmentally friendly and reusable materials. They comply with all important worldwide standards and approvals.

3RU11 overload relays in sizes S2 and S3 see page 7/105 onwards.

"Increased safety" type of protection EEx e according to ATEX directive 94/9/EC

The 3RU21 thermal overload relays are suitable for the overload protection of explosion-proof motors with "increased safety" type of protection EEx e.

The relays meet the requirements of IEC 60079-7 (Electrical apparatus for areas subject to explosion hazards – Increased safety "e").

EC type test certificate for Category (2) G/D exists. It has the number DMT 98 ATEX G001.

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th	
	□□□	□	□	□	□	-	□	□	□	
Thermal overload relays	3 R U									
SIRIUS 2nd generation	2									
Device series	□									
Size, rated operational current and power	□ □									
Setting range of the overload release	□ □									
Connection methods	□									
Installation type	□									
Example	3 R U	2	1	1	6	-	0	A	B	0

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

**3RU2 up to 40 A
for standard applications**

Benefits

The most important features and benefits of the 3RU21 thermal overload relays are listed in the overview table (see "General Data", page 7/82 onwards).

Application

Industries

The 3RU21 thermal overload relays are suitable for customers from all industries who want to guarantee optimum inverse-time delayed protection of their electrical loads (e.g. motors) under normal starting conditions (CLASS 10).

Application

The 3RU21 thermal overload relays have been designed for the protection of three-phase and single-phase AC and DC motors.

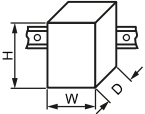

If single-phase AC or DC loads are to be protected by the 3RU21 thermal overload relays, all three bimetal strips must be heated. For this purpose, all main current paths of the relay must be connected in series.

Ambient conditions

The 3RU21 thermal overload relays have temperature compensation according to IEC 60947-4-1 for the temperature range of -40 to +60 °C. For temperatures from +60 to +70 °C, the upper set value of the setting range must be reduced by the factor listed in the table below.

Ambient temperature °C	Derating factor for the upper set value Current ranges	
	0.11 ... 20 A	17 ... 40 A
+60	1.0	1.0
+65	0.94	0.97
+70	0.87	0.94

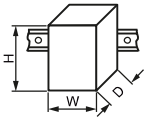
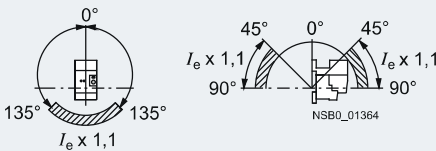
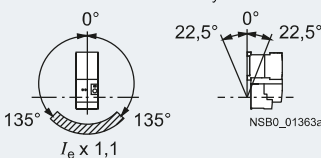
Technical specifications

Type		3RU2116	3RU2126
Size		S00	S0
Dimensions (W x H x D) (overload relay with stand-alone installation support)			
• Screw terminals	mm	45 x 89 x 80	45 x 97 x 95
• Spring-type terminals	mm	45 x 102 x 79	45 x 114 x 95
General data			
Trips in the event of		Overload and phase failure	
Trip class acc. to IEC 60947-4-1	CLASS	10	
Phase failure sensitivity		Yes	
Overload warning		No	
Reset and recovery		Manual, Automatic and Remote RESET (Remote RESET in combination with the corresponding accessories)	
• Reset options after tripping			
• Recovery time			
- For automatic RESET	min	Depends on the strength of the tripping current and characteristic	
- For manual RESET	min	Depends on the strength of the tripping current and characteristic	
- For remote RESET	min	Depends on the strength of the tripping current and characteristic	
Features			
• Display of operating state on device		Yes, by means of TEST function/switch position indicator slide	
• TEST function		Yes	
• RESET button		Yes	
• STOP button		Yes	
Safe operation of motors with "increased safety"			
type of protection			
EC type test certificate number according to directive 94/9/EC (ATEX)		DMT 98 ATEX G 001  II (2) GD, DMT 98 ATEX G 001 N1	
Ambient temperature			
• Storage/transport	°C	-55 ... +80	
• Operation	°C	-40 ... +70	
• Temperature compensation	°C	Up to 60	
• Permissible rated current at			
- Temperature inside control cabinet 60 °C	%	100 (over +60 °C current reduction is not required)	
- Temperature inside control cabinet 70 °C	%	87	
Repeat terminals			
• Coil repeat terminals		Yes	Not required
• Auxiliary contact repeat terminal		Yes	Not required
Degree of protection acc. to IEC 60529		IP20	
Touch protection acc. to IEC 61140		Screw terminals and spring-type terminals: Finger-safe for vertical contact from the front; ring terminal lug connection: Finger-safe only with optional terminal covers	
Shock resistance with sine acc. to IEC 60068-2-27	g/ms	15/11 (auxiliary contacts 95/96 and 97/98: 8 g/11 ms)	

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays




3RU2 up to 40 A
for standard applications

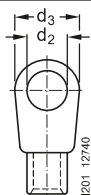
Type		3RU2116	3RU2126
Size		S00	S0
Dimensions (W x H x D) (overload relay with stand-alone installation support)			
• Screw terminals	mm	45 x 89 x 80	45 x 97 x 95
• Spring-type terminals	mm	45 x 102 x 79	45 x 114 x 95
General data (continued)			
Electromagnetic compatibility (EMC) – Interference immunity			
• Conductor-related interference			
- Burst acc. to IEC 61000-4-4 (corresponds to degree of severity 3)	kV	EMC interference immunity is not relevant for thermal overload relays.	
- Surge acc. to IEC 61000-4-5 (corresponds to degree of severity 3)	kV	EMC interference immunity is not relevant for thermal overload relays.	
• Electrostatic discharge according to IEC 61000-4-2 (corresponds to degree of severity 3)	kV	EMC interference immunity is not relevant for thermal overload relays.	
• Field-related interference according to IEC 61000-4-3 (corresponds to degree of severity 3)	V/m	EMC interference immunity is not relevant for thermal overload relays.	
Electromagnetic compatibility (EMC) – emitted interference		EMC interference immunity is not relevant for thermal overload relays.	
Resistance to extreme climates – air humidity	%	90	
Dimensions		"Dimensional drawings" see manual "SIRIUS Innovations – SIRIUS 3RU2/3RB3 Overload Relays", http://support.automation.siemens.com/WW/view/en/60298164 .	
Installation altitude above sea level	m	Up to 2 000; above this on request	
Mounting position		<p>The diagrams show the permissible mounting positions for mounting onto contactors and stand-alone installation. For mounting position in the hatched area, a setting correction of 10 % must be implemented.</p> <p>Stand-alone installation:</p>  <p>Contactor + overload relay:</p> 	
Type of mounting		Mounting onto contactor/stand-alone installation with terminal support (For screw and snap-on mounting onto TH 35 standard mounting rail. Technical specifications of the terminal supports see manual "SIRIUS Innovations – SIRIUS 3RU2/3RB3 Overload Relays", http://support.automation.siemens.com/WW/view/en/60298164 .)	

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications

Type		3RU2116	3RU2126
Size		S00	S0
Main circuit			
Rated insulation voltage U_i (pollution degree 3)	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Rated operational voltage U_e	V	690	
Type of current		Yes	
• Direct current		Yes	
• Alternating current		Yes, frequency range up to 400 Hz	
Current setting	A	0.11 ... 0.16 up to 11 ... 16	1.8 ... 2.5 up to 34 ... 40
Power loss per unit (max.)	W	4.1 ... 6.3	6.2 ... 7.5
Short-circuit protection		See "Selection and Ordering Data" on pages 7/95 and 7/96 "Short-Circuit Protection with Fuses/Motor Starter Protectors for Motor Feeders" see Configuration Manual "Configuring SIRIUS Innovations – Selection Data for Fuseless and Fused Load Feeders" http://support.automation.siemens.com/WW/view/en/50250599 .	
Protective separation between main and auxiliary current paths acc. to IEC 60947-1			
• Screw terminals or ring terminal lug connections	V	440	690: Setting ranges ≤ 25 A
• Spring-type terminals	V	440	440: Setting ranges > 25 A
Conductor cross-sections of main circuit			
Connection type		 Screw terminals	
Terminal screw		M3, Pozidriv size 2	M4, Pozidriv size 2
Operating devices	mm	∅ 5 ... 6	∅ 5 ... 6
Prescribed tightening torque	Nm	0.8 ... 1.2	2 ... 2.5
Conductor cross-sections (min./max.), 1 or 2 conductors can be connected			
• Solid	mm ²	2 x (0.5 ... 1.5) ¹⁾ , 2 x (0.75 ... 2.5) ¹⁾ , max. 2 x 4	2 x (1 ... 2.5) ¹⁾ , 2 x (2.5 ... 10) ¹⁾
• Finely stranded with end sleeves (DIN 46228-1)	mm ²	2 x (0.5 ... 1.5) ¹⁾ , 2 x (0.75 ... 2.5) ¹⁾	2 x (1 ... 2.5) ¹⁾ , 2 x (2.5 ... 6) ¹⁾ ; max. 1 x 10
• AWG cables, solid or stranded	AWG	2 x (20 ... 16) ¹⁾ , 2 x (18 ... 14) ¹⁾ , 2 x 12	2 x (16 ... 12) ¹⁾ , 2 x (14 ... 8) ¹⁾
Connection type		 Spring-type terminals	
Operating devices	mm	3.0 x 0.5 and 3.5 x 0.5	
Conductor cross-sections (min./max.)			
• Solid	mm ²	1 x (0.5 ... 4)	1 x (1 ... 10)
• Finely stranded without end sleeve	mm ²	1 x (0.5 ... 2.5)	1 x (1 ... 6)
• Finely stranded with end sleeves (DIN 46228-1)	mm ²	1 x (0.5 ... 2.5)	1 x (1 ... 6)
• AWG cables, solid or stranded	AWG	1 x (20 ... 12)	1 x (18 ... 8)
Connection type		 Ring terminal lug connections	
Terminal screw		M3, Pozidriv size 2	M4, Pozidriv size 2
Operating devices	mm	∅ 5 ... 6	∅ 5 ... 6
Prescribed tightening torque	Nm	0.8 ... 1.2	2 ... 2.5
Usable ring terminal lugs	mm	$d_2 = \text{min. } 3.2,$ $d_3 = \text{max. } 7.5$	$d_2 = \text{min. } 4.3,$ $d_3 = \text{max. } 12.2$
• DIN 46234 without insulation sleeve			
• DIN 46225 without insulation sleeve			
• DIN 46237 with insulation sleeve			
• JIS C2805 Type R without insulation sleeve			
• JIS C2805 Type RAV with insulation sleeve			
• JIS C2805 Type RAP with insulation sleeve			



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

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications




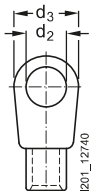
Type		3RU2116	3RU2126
Size		S00	S0
Auxiliary circuit			
Number of NO contacts		1	
Number of NC contacts		1	
Auxiliary contacts – assignment		1 NO for the signal "tripped"; 1 NC for disconnecting the contactor	
Rated insulation voltage U_i (pollution degree 3)	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Contact rating of the auxiliary contacts			
• NC contact with alternating current AC-14/AC-15, rated operational current I_e at U_e :			
- 24 V	A	4	
- 120 V	A	4	
- 125 V	A	4	
- 230 V	A	3	
- 400 V	A	2	
- 600 V	A	0.75	
- 690 V	A	0.75	
• NO contact with alternating current AC-14/AC-15, rated operational current I_e at U_e :			
- 24 V	A	3	
- 120 V	A	3	
- 125 V	A	3	
- 230 V	A	2	
- 400 V	A	1	
- 600 V	A	0.75	
- 690 V	A	0.75	
• NC contact, NO contact with direct current DC-13, rated operational current I_e at U_e :			
- 24 V	A	1	
- 60 V	A	On request	
- 110 V	A	0.22	
- 125 V	A	0.22	
- 220 V	A	0.11	
• Conventional thermal current I_{th}	A	6	
• Contact reliability (suitability for PLC control; 17 V, 5 mA)		Yes	
Short-circuit protection			
• With fuse			
- Operational class gG	A	6	
- Quick	A	10	
• With miniature circuit breaker (C characteristic)	A	6 ¹⁾	
Protective separation between auxiliary current paths acc. to IEC 60947-1	V	440	
CSA, UL, UR rated data			
Auxiliary circuit – switching capacity		B600, R300	

¹⁾ Up to $I_k \leq 0.5$ kA; $U \leq 260$ V.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications

Type	3RU2116	3RU2126
Size	S00	S0
Conductor cross-sections for auxiliary circuit		
Connection type	 Screw terminals	
Terminal screw	M3, Pozidriv size 2	
Operating devices	mm	∅ 5 ... 6
Prescribed tightening torque	Nm	0.8 ... 1.2
Conductor cross-sections (min./max.), 1 or 2 conductors can be connected		
• Solid	mm ²	2 x (0.5 ... 1.5) ¹⁾ , 2 x (0.75 ... 2.5) ¹⁾
• Finely stranded with end sleeves (DIN 46228-1)	mm ²	2 x (0.5 ... 1.5) ¹⁾ , 2 x (0.75 ... 2.5) ¹⁾
• AWG cables, solid or stranded	AWG	2 x (20 ... 16) ¹⁾ , 2 x (18 ... 14) ¹⁾
Connection type	 Spring-type terminals	
Operating devices	mm	3.0 x 0.5 and 3.5 x 0.5
Conductor cross-sections (min./max.)		
• Solid	mm ²	2 x (0.5 ... 2.5)
• Finely stranded without end sleeve	mm ²	2 x (0.5 ... 2.5)
• Finely stranded with end sleeve (DIN 46228-1)	mm ²	2 x (0.5 ... 1.5)
• AWG cables, solid or stranded	AWG	2 x (20 ... 14)
Connection type	 Ring terminal lug connections	
Terminal screw	M3, Pozidriv size 2	
Operating devices	mm	∅ 5 ... 6
Prescribed tightening torque	Nm	0.8 ... 1.2
Usable ring terminal lugs	mm	d ₂ = min. 3.2, d ₃ = max. 7.5
<ul style="list-style-type: none"> • DIN 46234 without insulation sleeve • DIN 46225 without insulation sleeve • DIN 46237 with insulation sleeve • JIS C2805 Type R without insulation sleeve • JIS C2805 Type RAV with insulation sleeve • JIS C2805 Type RAP with insulation sleeve 		

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

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications

Selection and ordering data

3RU21 thermal overload relays for mounting onto contactor¹⁾, CLASS 10

Features and technical specifications:

- Screw terminals, spring-type terminals or ring terminal lug connections²⁾
- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator

- TEST function
- STOP button
- Sealable covers (optional accessory)
- Terminal covers for devices with ring terminal lug connection (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41F



3RU2116-4AB0



3RU2116-4AC0



3RU2126-4FB0



3RU2126-4AC0

Size contactor ³⁾	Rating for three-phase motor, rated value ⁴⁾ kW	Current setting value of the inverse-time delayed overload release A	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁵⁾ A	DT	Screw terminals		DT	Spring-type terminals	
					Article No.	Price per PU		Article No.	Price per PU
Size S00									
S00	0.04	0.11 ... 0.16	0.5	▶	3RU2116-0AB0	B	3RU2116-0AC0		
	0.06	0.14 ... 0.2	1	▶	3RU2116-0BB0	B	3RU2116-0BC0		
	0.06	0.18 ... 0.25	1	▶	3RU2116-0CB0	B	3RU2116-0CC0		
	0.09	0.22 ... 0.32	1.6	▶	3RU2116-0DB0	B	3RU2116-0DC0		
	0.09	0.28 ... 0.4	2	▶	3RU2116-0EB0	B	3RU2116-0EC0		
	0.12	0.35 ... 0.5	2	▶	3RU2116-0FB0	B	3RU2116-0FC0		
	0.18	0.45 ... 0.63	2	▶	3RU2116-0GB0	B	3RU2116-0GC0		
	0.18	0.55 ... 0.8	4	▶	3RU2116-0HB0	B	3RU2116-0HC0		
	0.25	0.7 ... 1	4	▶	3RU2116-0JB0	B	3RU2116-0JC0		
	0.37	0.9 ... 1.25	4	▶	3RU2116-0KB0	B	3RU2116-0KC0		
	0.55	1.1 ... 1.6	6	▶	3RU2116-1AB0	B	3RU2116-1AC0		
	0.75	1.4 ... 2	6	▶	3RU2116-1BB0	B	3RU2116-1BC0		
	0.75	1.8 ... 2.5	10	▶	3RU2116-1CB0	B	3RU2116-1CC0		
	1.1	2.2 ... 3.2	10	▶	3RU2116-1DB0	B	3RU2116-1DC0		
	1.5	2.8 ... 4	16	▶	3RU2116-1EB0	B	3RU2116-1EC0		
	1.5	3.5 ... 5	20	▶	3RU2116-1FB0	B	3RU2116-1FC0		
2.2	4.5 ... 6.3	20	▶	3RU2116-1GB0	B	3RU2116-1GC0			
3	5.5 ... 8	25	▶	3RU2116-1HB0	B	3RU2116-1HC0			
4	7 ... 10	35	▶	3RU2116-1JB0	B	3RU2116-1JC0			
5.5	9 ... 12.5	35	▶	3RU2116-1KB0	B	3RU2116-1KC0			
7.5	11 ... 16	40	▶	3RU2116-4AB0	B	3RU2116-4AC0			
Size S0									
S0	0.75	1.8 ... 2.5	10	▶	3RU2126-1CB0	B	3RU2126-1CC0		
	1.1	2.2 ... 3.2	10	▶	3RU2126-1DB0	B	3RU2126-1DC0		
	1.5	2.8 ... 4	16	▶	3RU2126-1EB0	B	3RU2126-1EC0		
	1.5	3.5 ... 5	20	▶	3RU2126-1FB0	B	3RU2126-1FC0		
	2.2	4.5 ... 6.3	20	▶	3RU2126-1GB0	B	3RU2126-1GC0		
	3	5.5 ... 8	25	▶	3RU2126-1HB0	B	3RU2126-1HC0		
	4	7 ... 10	35	▶	3RU2126-1JB0	B	3RU2126-1JC0		
	5.5	9 ... 12.5	35	▶	3RU2126-1KB0	B	3RU2126-1KC0		
	7.5	11 ... 16	40	▶	3RU2126-4AB0	▶	3RU2126-4AC0		
	7.5	14 ... 20	50	▶	3RU2126-4BB0	▶	3RU2126-4BC0		
	11	17 ... 22	63	▶	3RU2126-4CB0	▶	3RU2126-4CC0		
	11	20 ... 25	63	▶	3RU2126-4DB0	▶	3RU2126-4DC0		
	15	23 ... 28	63	▶	3RU2126-4NB0	▶	3RU2126-4NC0		
	15	27 ... 32	80	▶	3RU2126-4EB0	▶	3RU2126-4EC0		
	18.5	30 ... 36	80	▶	3RU2126-4PB0	▶	3RU2126-4PC0		
	18.5	34 ... 40	80	▶	3RU2126-4FB0	▶	3RU2126-4FC0		

¹⁾ With the suitable terminal supports (see "Accessories", page 7/97), the 3RU2 overload relays for mounting on contactors can also be installed as stand-alone units.

²⁾ The 3RU21 overload relays are also available with ring terminal lug connection. The Article No. must be changed in the 10th digit to "J": e.g. 3RU2116-0AJ0.

³⁾ Observe maximum rated operational current of the devices.

⁴⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁵⁾ Maximum protection by fuse only for overload relay, type of coordination "2". Fuse values in connection with contactors see Configuration Manual "Configuring SIRIUS Innovations – Selection Data for Fuseless and Fused Load Feeders", <http://support.automation.siemens.com/WW/view/en/50250599>.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

**3RU2 up to 40 A
for standard applications**

3RU21 thermal overload relays for stand-alone installation¹⁾, CLASS 10

Features and technical specifications:

- Screw or spring-type terminals
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function
- STOP button
- Sealable covers (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41F



3RU2116-4AB1



3RU2116-4AC1



3RU2126-4FB1



3RU2126-4FC1

Size contactor ²⁾	Rating for three-phase motor, rated value ³⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals		Spring-type terminals	
					Article No.	Price per PU	Article No.	Price per PU
Size S00								
S00	0.04	0.11 ... 0.16	0.5	B	3RU2116-0AB1	B	3RU2116-0AC1	
	0.06	0.14 ... 0.2	1	B	3RU2116-0BB1	B	3RU2116-0BC1	
	0.06	0.18 ... 0.25	1	B	3RU2116-0CB1	B	3RU2116-0CC1	
	0.09	0.22 ... 0.32	1.6	B	3RU2116-0DB1	B	3RU2116-0DC1	
	0.09	0.28 ... 0.4	2	B	3RU2116-0EB1	B	3RU2116-0EC1	
	0.12	0.35 ... 0.5	2	B	3RU2116-0FB1	B	3RU2116-0FC1	
	0.18	0.45 ... 0.63	2	B	3RU2116-0GB1	B	3RU2116-0GC1	
	0.18	0.55 ... 0.8	4	B	3RU2116-0HB1	B	3RU2116-0HC1	
	0.25	0.7 ... 1	4	B	3RU2116-0JB1	B	3RU2116-0JC1	
	0.37	0.9 ... 1.25	4	B	3RU2116-0KB1	B	3RU2116-0KC1	
	0.55	1.1 ... 1.6	6	B	3RU2116-1AB1	B	3RU2116-1AC1	
	0.75	1.4 ... 2	6	B	3RU2116-1BB1	B	3RU2116-1BC1	
	0.75	1.8 ... 2.5	10	B	3RU2116-1CB1	B	3RU2116-1CC1	
	1.1	2.2 ... 3.2	10	B	3RU2116-1DB1	B	3RU2116-1DC1	
	1.5	2.8 ... 4	16	B	3RU2116-1EB1	B	3RU2116-1EC1	
	1.5	3.5 ... 5	20	B	3RU2116-1FB1	B	3RU2116-1FC1	
2.2	4.5 ... 6.3	20	B	3RU2116-1GB1	B	3RU2116-1GC1		
3	5.5 ... 8	25	B	3RU2116-1HB1	B	3RU2116-1HC1		
4	7 ... 10	35	B	3RU2116-1JB1	B	3RU2116-1JC1		
5.5	9 ... 12.5	35	B	3RU2116-1KB1	B	3RU2116-1KC1		
7.5	11 ... 16	40	B	3RU2116-4AB1	B	3RU2116-4AC1		
Size S0								
S0	7.5	14 ... 20	50	B	3RU2126-4BB1	B	3RU2126-4BC1	
	11	17 ... 22	63	B	3RU2126-4CB1	B	3RU2126-4CC1	
	11	20 ... 25	63	B	3RU2126-4DB1	B	3RU2126-4DC1	
	15	23 ... 28	63	B	3RU2126-4NB1	B	3RU2126-4NC1	
	15	27 ... 32	80	B	3RU2126-4EB1	B	3RU2126-4EC1	
	18.5	30 ... 36	80	B	3RU2126-4PB1	B	3RU2126-4PC1	
	18.5	34 ... 40	80	B	3RU2126-4FB1	B	3RU2126-4FC1	

¹⁾ Screw and snap-on mounting onto TH 35 standard mounting rail.

²⁾ Observe maximum rated operational current of the devices.

³⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁴⁾ Maximum protection by fuse only for overload relay, type of coordination "2". Fuse values in connection with contactors see Configuration Manual "Configuring SIRIUS Innovations – Selection Data for Fuseless and Fused Load Feeders", <http://support.automation.siemens.com/WWW/view/en/50250599>.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

Accessories









Overview

Overload relays for standard applications

The following optional accessories are available for the 3RU21 thermal overload relays:

- Terminal support for stand-alone installation with screw or spring-type terminals for every size
- Mechanical RESET (for all sizes)
- Cable release for resetting devices which are difficult to access (for all sizes)
- Electrical remote RESET module in three voltage variants (for all sizes)
- Sealable cover (for all sizes)
- Terminal covers for devices with ring terminal lug connection









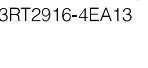
Selection and ordering data

Version	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Terminal supports for stand-alone installation								
 3RU2916-3AA01	Terminal supports for overload relays with screw terminals		Screw terminals 		1	1 unit	41F	
	For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail		S00	▶				3RU2916-3AA01
 3RU2926-3AA01	S0	▶	3RU2926-3AA01		1	1 unit	41F	
 3RU2916-3AC01	Terminal supports for overload relays with spring-type terminal		Spring-type terminals 		1	1 unit	41F	
	For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail		S00	B				3RU2916-3AC01
 3RU2926-3AC01	S0	B	3RU2926-3AC01		1	1 unit	41F	
Mechanical RESET								
 3RU2900-1A with pushbutton and extension plunger	Resetting plungers, holders and formers		S00, S0	▶	3RU2900-1A	1	1 unit	41F
	Pushbuttons with extended stroke (12 mm), IP65, ∅ 22 mm		S00, S0	B	3SB3000-0EA11	1	1 unit	41J
	Extension plungers For compensation of the distance between the pushbutton and the unlatching button of the relay		S00, S0	A	3SX1335	1	1 unit	41J
Cable releases with holder for RESET								
 3RU2900-1.	For ∅ 6.5 mm holes in the control panel; max. control panel thickness 8 mm							
	• Length 400 mm	S00, S0	▶	3RU2900-1B	1	1 unit	41F	
• Length 600 mm	S00, S0	▶	3RU2900-1C	1	1 unit	41F		

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

Accessories



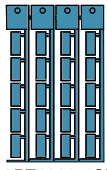
Version	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Modules for remote RESET, electrical								
 <p>3RU1900-2A.71</p>	Operating range 0.85 ... 1.1 × U_N , power consumption AC 80 VA, DC 70 W, ON period 0.2 ... 4 s, switching frequency 60/h							
	• 24 ... 30 V AC/DC	S00, S0	A	3RU1900-2AB71		1	1 unit	41F
	• 110 ... 127 V AC/DC	S00, S0	A	3RU1900-2AF71		1	1 unit	41F
	• 220 ... 250 V AC/DC	S00, S0	A	3RU1900-2AM71		1	1 unit	41F
Sealable covers								
 <p>3RV2908-0P</p>	For covering the setting knobs		S00, S0	▶	3RV2908-0P	100	10 units	41E
Terminal covers								
Covers for devices with ring terminal lug connection (ensure finger-safety)			Ring terminal lug connection 					
 <p>3RU2916-3BJ21</p>	<ul style="list-style-type: none"> • Main current level 							
	<ul style="list-style-type: none"> - Cover between contactor and overload relay for direct mounting of the overload relay 		S00	C	3RU2916-3BJ21	1	10 units	41F
 <p>3RU2926-3BJ21</p>	<ul style="list-style-type: none"> - Cover for overload relay on load side 		S00	C	3RU2916-3BJ20	1	10 units	41F
			S0	B	3RV2928-4AA00	1	1 unit	41E
 <p>3RU2926-3BJ21</p>	<ul style="list-style-type: none"> • Auxiliary current level 		S00, S0	B	3RT2916-4EA13	1	10 units	41B
 <p>3RU2916-3BJ20</p>								
 <p>3RV2928-4AA00</p>								
 <p>3RT2916-4EA13</p>								

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

Accessories

General accessories

Version	Size	Color	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Tools for opening spring-type terminals										
 3RA2908-1A	Screwdrivers For all SIRIUS devices with spring-type terminals	Length approx. 200 mm, 3.0 mm x 0.5 mm	Titanium gray/black, partially insulated	Main and auxiliary circuit connection: 3RU2	A	Spring-type terminals 		1	1 unit	41B
						3RA2908-1A				
Blank labels										
 3RT1900-1SB20	Unit labeling plates¹⁾ for SIRIUS devices	20 mm x 7 mm	Pastel turquoise	3RU2	D	3RT1900-1SB20		100	340 units	41B
		20 mm x 7 mm	Titanium gray	3RU2	D	3RT2900-1SB20		100	340 units	41B

¹⁾ PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systemtechnik GmbH (see Chapter 16, "Appendix" → "External Partners").