Introduction

Overview



Size			**S00**			**S0**				**S2**		
Type			3RT10 1			3RT10 2				3RT10 3		
3RT10 contactors												
Type			**3RT10 15**	**3RT10 16**	**3RT10 17**	**3RT10 23**	**3RT10 24**	**3RT10 25**	**3RT10 26**	**3RT10 34**	**3RT10 35**	**3RT10 36**
AC, DC operation			(p. 3/14, 3/18)			(p. 3/15, 3/19)				(p. 3/16, 3/20)		
AC-3												
I_e/AC-3/400 V		A	7	9	12	9	12	17	25	32	40	50
400 V		**kW**	**3**	**4**	**5.5**	**4**	**5.5**	**7.5**	**11**	**15**	**18.5**	**22**
230 V		kW	2.2	3	3	3	3	4	5.5	7.5	11	15
500 V		kW	3.5	4.5	5.5	4.5	7.5	10	11	18.5	22	30
690 V	3RT10/12	kW	4	5.5	5.5	5.5	7.5	11	11	18.5	22	22
1 000 V	3RT10/12	kW	--	--	--	--	--	--	--	--	--	--
AC-4 (for I_a = 6 x I_e)												
400 V		**kW**	**3**	**4**	**4**	**4**	**5.5**	**7.5**	**7.5**	**15**	**18.5**	**22**
400 V	3RT10/12	kW	1.15	2	2	2	2.6	3.5	4.4	8.2	9.5	12.6
(200 000 operating cycles)												
AC-1 (40 °C, ≤ 690 V)												
I_e	3RT10/12	**A**	**18**	**22**	**22**	**40**	**40**	**40**	**40**	**50**	**60**	**60**
3RT14 AC-1 contactors												
Type						**--**				**--**		
I_e/AC-1/40 °C/≤ 690 V		**A**				**--**				**--**		
Accessories for contactors												
Auxiliary switch blocks	On front		**3RH19 11**		(p. 3/34)	**3RH19 21**		(p. 3/34)		**3RH19 21**		(p. 3/34)
	Lateral		**--**		(p. 3/38)	**3RH19 21**		(p. 3/38)		**3RH19 21**		(p. 3/38)
Terminal covers			**--**			**--**				**3RT19 36-4EA2**		(p. 3/46)
Box terminal blocks			**--**			**--**				**--**		
Surge suppressors			**3RT19 16**		(p. 3/42)	**3RT19 26**		(p. 3/42)		**3RT19 26/36**		(p. 3/43)
3RU1 and 3RB2 overload relays (Protection Equipment → Overload Relays)												
3RU11, thermal, CLASS 10			**3RU11 16**	0.1 ... 12 A	(Chap. 7)	**3RU11 26**	1.8 ... 25 A	(Chap. 7)		**3RU11 36**	5.5 ... 50 A	(Chap. 7)
3RB20/21, solid-state, CLASS 5, 10, 20 and 30			**3RB20 16** **3RB21 16**	0.1 ... 12 A	(Chap. 7)	**3RB20 26** **3RB21 26**	3 ... 25 A	(Chap. 7)		**3RB20 36** **3RB21 36**	6 ... 50 A	(Chap. 7)
3RB22/23, solid-state, CLASS 5, 10, 20 and 30			**3RB2. 83 + 3RB29 06**	10 ... 100 A	(Chap. 7)	**3RB2. 83 + 3RB29 06**	10 ... 100 A	(Chap. 7)		**3RB2. 83 + 3RB29 06**	10 ... 100 A	(Chap. 7)
3RV10 motor starter protectors (Protection Equipment → Motor Starter Protectors)												
Type			**3RV10 11**	0.18 ... 12 A	(Chap. 5)	**3RV10 21**	9 ... 25 A	(Chap. 7)		**3RV10 31**	22 ... 50 A	(Chap. 7)
Link modules			**3RA19 11**		(Chap. 5)	**3RA19 21**		(Chap. 7)		**3RA19 31**		(Chap. 7)
3RA13 Reversing Contactor Assemblies												
Complete units	Type		**3RA13 15**	**3RA13 16**	**3RA13 17**		**3RA13 24**	**3RA13 25**	**3RA13 26**	**3RA13 34**	**3RA13 35**	**3RA13 36**
			(p. 3/59)				(p. 3/60)			(p. 3/61)		
400 V		**kW**	**3**	**4**	**5.5**		**5.5**	**7.5**	**11**	**15**	**18.5**	**22**
Assembly kits/wiring modules			**3RA19 13-2A**		(p. 3/64)	**3RA19 23-2A**		(p. 3/64)		**3RA19 33-2A**		(p. 3/64)
Mechanical interlocks			**3RA19 12-2H**		(p. 3/63)	**3RA19 24-1A/-2B**		(p. 3/63)	3/63	**3RA19 24-1A/-2B**		(p. 3/63)
3RA14 Contactor Assemblies for Wye-Delta Starting												
Complete units	Type		**3RA14 15**	**3RA14 16**		**3RA14 23**		**3RA14 25**		**3RA14 34**	**3RA14 35**	**3RA14 36**
			(p. 3/68)			(p. 3/69)				(p. 3/70)	(p. 3/71)	
400 V		**kW**	**5.5**	**7.5**		**11**		**15/18.5**		**22/30**	**37**	**45**
Assembly kits/wiring modules			**3RA19 13-2B**		(p. 3/73)	**3RA19 23-2B**		(p. 3/73)		**3RA19 33-2B/-2C**		(p. 3/73)

Introduction

Note:

Safety characteristics for contactors see Chapter 16, "Appendix" → "Standards and Approvals" → "Overview".

Connection methods

The contactors are available with screw terminals (box terminals or flat connectors) or with spring-type terminals.

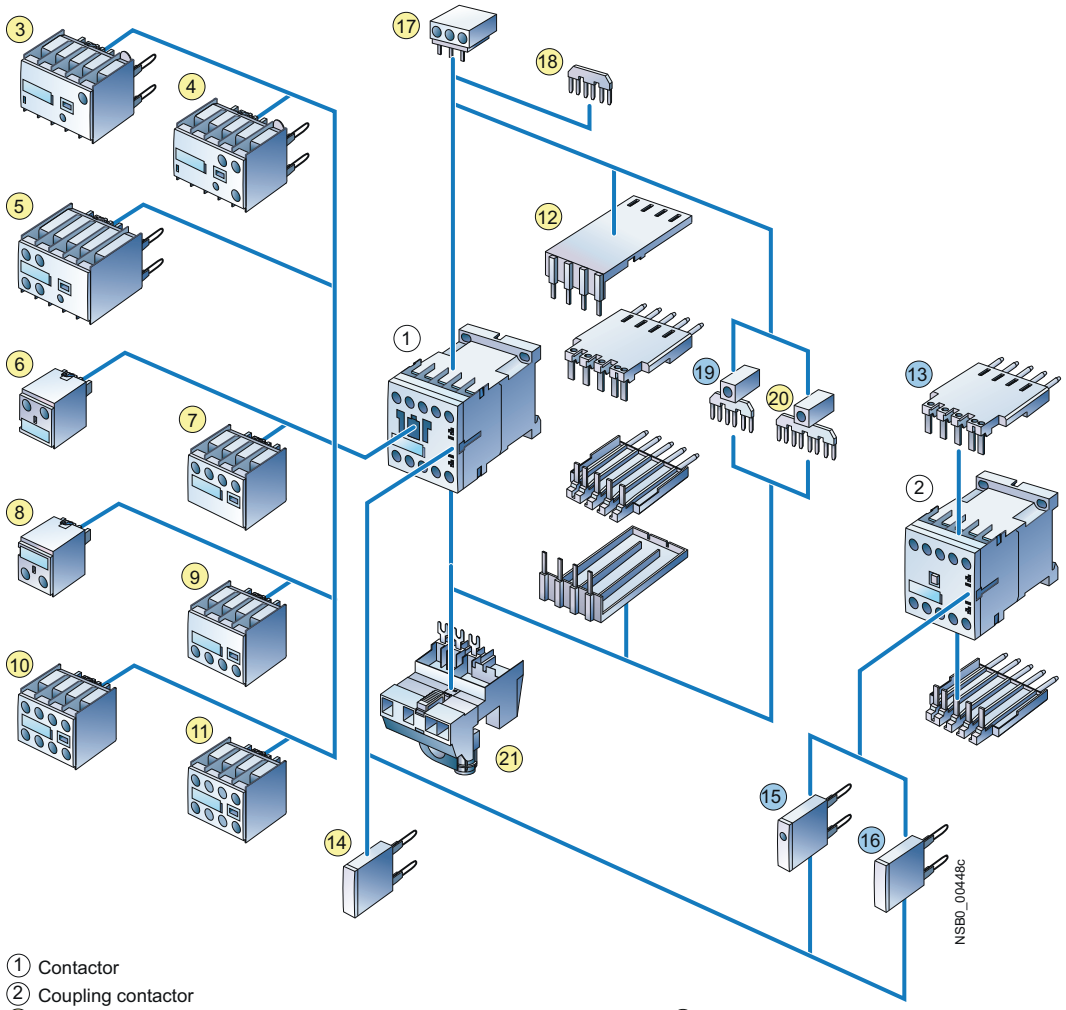
	Screw terminals
	Spring-type terminals
	The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Overview

The SIRIUS family of controls

The SIRIUS modular system with its components for the switching, starting, protection and monitoring of motors and industrial systems stands for the fast, flexible and space-saving construction of control cabinets.

3RT1 contactors and coupling relays
Size S00 with mountable accessories



1. Contactor
2. Coupling contactor
3. Solid-state timing relay block, ON-delay
4. Solid-state timing relay block, OFF-delay
5. Auxiliary switch block with solid-state time delay (ON or OFF-delay or wye-delta function)
6. 1-pole auxiliary switch block, cable entry from above
7. 2-pole auxiliary switch block, cable entry from above
8. 1-pole auxiliary switch block, cable entry from below
9. 2-pole auxiliary switch block, cable entry from below
10. 4-pole auxiliary switch block (terminal designations according to EN 50012 or EN 50005)
11. 2-pole auxiliary switch block, standard version or solid-state compatible version (terminal designations according to EN 50005)
12. Solder pin adapter for contactors with 4-pole auxiliary switch block
13. Solder pin adapter for contactors and coupling contactors
14. Additional load module for increasing the permissible residual current
15. Surge suppressor with LED
16. Surge suppressor without LED
17. Three-phase feeder terminal
18. Link for paralleling (star jumper), 3-pole, without connection terminal
19. Link for paralleling, 3-pole, with terminal
20. Link for paralleling, 4-pole, with terminal
21. Connection module (adapter and plug) for contactors with screw-type connection

For contactors

For contactors and coupling contactors (interface)

Accessories see pages 3/34 to 3/48.

Reversing contactor assemblies, see page 3/59.

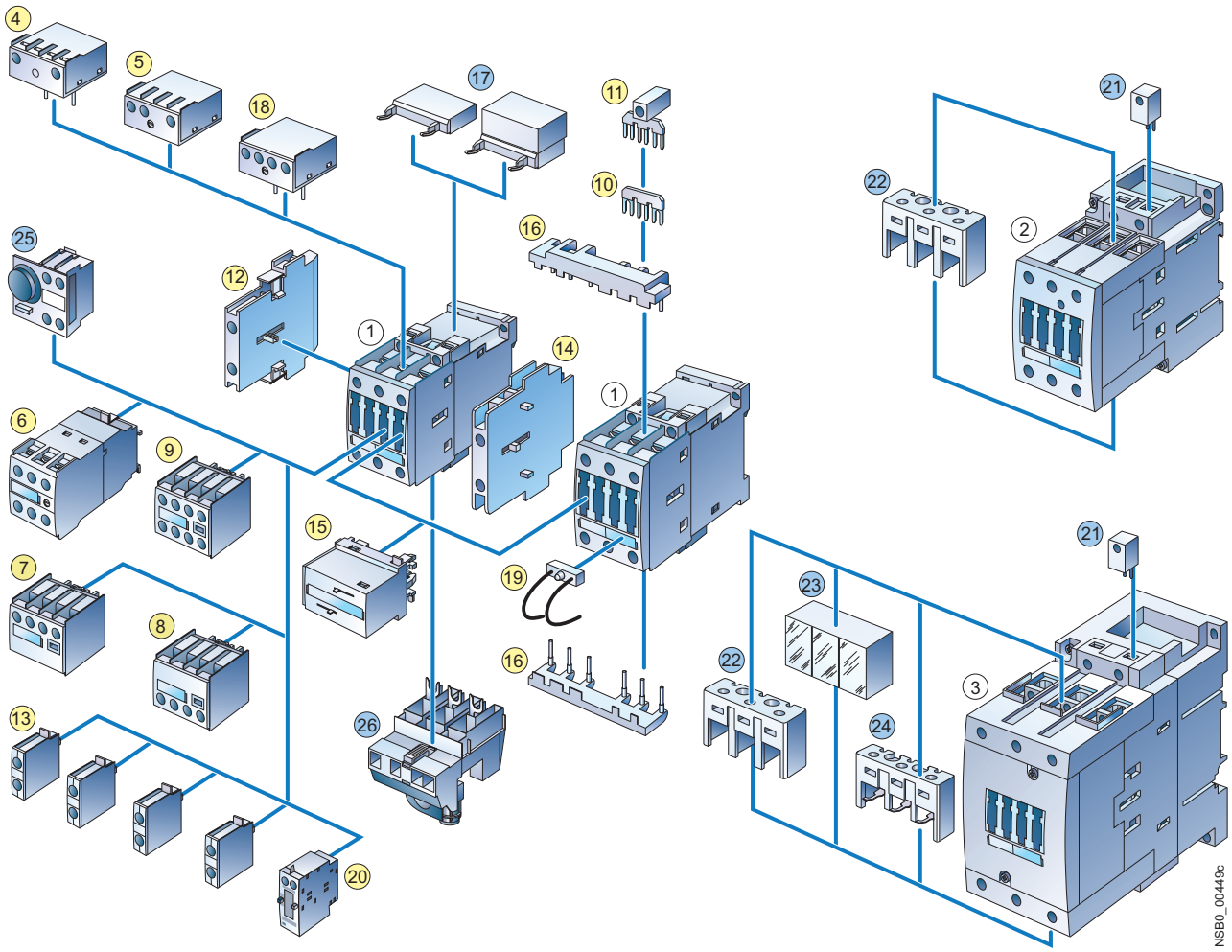
Assembly kit for reversing contactor assemblies (mech. interlocking, wiring modules) see page 3/65.

Mountable overload relays see Chapter 7, "Protection Equipment" → "Overload Relays".

Fuseless load feeders see Chapter 8, "Load Feeders and Motor Starters" → "3RA Fuseless Load Feeders".

General data

3RT1 contactors
Sizes S0 to S3 with mountable accessories



① Contactor, size S0
② Contactor, size S2
③ Contactor, size S3

For sizes S0 to S3:

④ Solid-state time-delay block, ON-delay
⑤ Solid-state time-delay block, OFF-delay
⑥ Auxiliary switch block, solid-state time-delay (ON or OFF-delay or star-delta function)
⑦ 2-pole auxiliary switch block, cable entry from above
⑧ 2-pole auxiliary switch block, cable entry from below
⑨ 4-pole auxiliary switch block (terminal designations according to DIN EN 50,012 or DIN EN 50,005)
⑩ Link for paralleling (star jumper), 3-pole, without terminal
⑪ Link for paralleling, 3-pole, with terminal
⑫ 2-pole auxiliary switch block, laterally mountable left or right (terminal designations according to DIN EN 50012 or DIN EN 50005)
⑬ Single-pole auxiliary switch block (up to 4 can be snapped on)
⑭ Mechanical interlock, laterally mountable
⑮ Mechanical interlock, mountable to the front
⑯ Wiring connectors on the top and bottom (reversing duty)
⑰ Surge suppressors (page 3/186) (varistor, RC element, diode assembly), can be mounted on the top or bottom (different for S0 and S2/S3)
⑱ Coupling link (interface) for mounting directly onto contactor coil
⑲ LED module for indicating contactor operation

Only for size S0:

㉕ Pneumatic delay block
㉖ Connection module (adapter and connector)

Only for sizes S0 and S2:

⑳ Mechanical latching block

Only for sizes S2 to S3:

㉑ Coil repeat terminal for making contactor assemblies
㉒ Terminal cover for box terminal

Only for sizes S3:

㉓ Terminal cover for cable lug and bar connection
㉔ Auxiliary conductor terminal, 3-pole

Accessories identical for sizes S0 to S3
Accessories differ according to size

Accessories see pages 3/34 to 3/48.

Reversing contactor assemblies see pages 3/60 to 3/62.

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

The 3RT1 contactors are climate-proof. They are finger-safe according to EN 50274.

Connection methods

The 3RT1 contactors are available with screw terminals (box terminals) or spring-type terminals.

The size S3 contactors have removable box terminals for the main conductor connections. This permits connection of ring terminal lugs or busbars.

Contact reliability

If voltages ≤ 110 V and currents ≤ 100 mA are to be switched, the auxiliary contacts of the 3RT1 contactor or 3RH11 contactor relay should be used as they guarantee a high level of contact reliability.

These auxiliary contacts are particularly suitable for solid-state circuits with currents ≥ 1 mA at a voltage ≥ 17 V.

Short-circuit protection of the contactors

Short-circuit protection of the contactors without overload relay see Technical Specifications. For short-circuit protection of the contactors with overload relay, see Configuration Manual "SIRIUS Configuration":

http://support.automation.siemens.com/WW/view/de/40625241

To assemble fuseless motor feeders you must select combinations of motor starter protector and contactor as explained in "Fuseless Load Feeders".

Motor protection

3RU11 thermal overload relays or 3RB20/3RB21 solid-state overload relays can be fitted to the 3RT1 contactors for protection against overload. The overload relays must be ordered separately.

Ratings of induction motors

The quoted rating (in kW) refers to the output power on the motor shaft (according to the nameplate).

Surge suppression

3RT1 contactors can be retrofitted with RC elements, varistors, diodes or diode assemblies (assembly of diode and Zener diode for short break times) for damping opening surges in the coil.

Note:

The OFF-delay of the NO contact and the ON-delay of the NC contact are increased if the contactor coils are attenuated against voltage peaks (noise suppression diode 6 to 10 times; diode assembly 2 to 6 times, varistor +2 to 5 ms).

Sizes S00 to S3, up to 45 kW

Auxiliary contact complement

Size S00 contactors have an auxiliary contact integrated in the basic unit. The basic units of sizes S0 to S3 are delivered only with the main contacts and can be extended with auxiliary switch blocks.

For sizes S0 to S3, there are also complete units with fitted auxiliary switch blocks 2 NO + 2 NC (terminal designation according to EN 50012); the auxiliary switch block can be removed (for further information see Accessories, page 3/28).

Note:

Auxiliary contact complement according to SUVA: Contactors with permanently mounted auxiliary switch block 2 NO + 2 NC are available for safety applications according to SUVA.

Surge suppression

The surge suppressors are plugged onto the front of size S00 contactors. Space is provided for them next to a snap-on auxiliary switch block.

For size S0 to S3 contactors, varistors and RC elements can be snapped on either on the top or directly below the coil terminals. Diode assemblies are available in 2 different versions on account of their polarity. Depending on the application they can be connected either only at the bottom (assembly with motor starter protector) or only at the top (assembly with overload relay).

The plug-in direction of the diodes and diode assemblies is specified by coding.
Exceptions:
3RT19 26-1T.00 and 3RT19 36-1T.00,
in this case the plug-in direction is marked with "+" and "-".

Coupling contactors are supplied either without overvoltage damping or with a varistor or diode connected as standard, according to the version.

Sizes S6 to S12, > 45 to 250 kW

- 3RT10, contactors for switching motors
- 3RT12 vacuum contactors for switching motors
- 3RT14, contactors for AC-1 applications (see Chapter 4)

Operating mechanism types

Two types of solenoid operation are available:

- Conventional operating mechanisms
- Solid-state operating mechanism (with 2 performance levels)

Control supply voltage

The contactors have a UC operating mechanism which can be operated with AC (50 to 60 Hz) as well as with DC.

Withdrawable coils

For simple coil replacement, e.g. if the application is replaced, the solenoid coil can be pulled out upwards after the release mechanism has been actuated and can be replaced by any other coil of the same size.

Auxiliary contact complement

Contactor sizes S6 to S12 are supplied with mounted auxiliary switch blocks.

Detailed information about the fitting of auxiliary switches see "Accessories", page 3/28.

- 3RT10 and 3RT14 contactors:
  Auxiliary contacts mounted laterally and on front
- 3RT12 vacuum contactors:
  Auxiliary contacts mounted laterally

Contactors with conventional operating mechanism

Version 3RT1. ..-.A:

The solenoid coil is switched directly on and off with the control supply voltage U_S by way of terminals A1/A2.

Multi-voltage range for the control supply voltage U_S:

Only one coil covers several close-lying control supply voltages which are used worldwide,
e.g. 110–115–120–127 V AC/DC or 220–230–240 V AC/DC. Allowance is made in addition for am operating range of 0.8 times the lower ($U_{S\,min}$) and 1.1 times the upper ($U_{S\,max}$) rated control supply voltage within which the contactor switches reliably and no thermal overload occurs.

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

Contactors with solid-state operating mechanism

The solenoid coil is supplied selectively with the power required for reliable switching and holding by upstream control electronics.

- Wide voltage range for the control supply voltage U_S: Compared with the conventional operating mechanism, the solid-state operating mechanism covers an even broader range of control supply voltages used worldwide within one coil variant. For example, the coil for 200 to 277 V AC/DC ($U_{S\,min}$ to $U_{S\,max}$) covers the voltages 200-208-220-230-240-254-277 V used worldwide.
- Extended operating range 0.7 to 1.25 x U_S: The wide range for the rated control supply voltage and the additionally allowed coil operating range of 0.8 x $U_{S\,min}$ to 1.1 x $U_{S\,max}$ results in an extended coil operating range of at least 0.7 to 1.25 x U_S, within which the contactors will operate reliably, for the most common control supply voltages of 24, 110 and 230 V.
- Bridging temporary voltage dips: Control voltage failures dipping to 0 V (at A1/A2) are bridged for up to approx. 25 ms to avoid unintentional tripping.
- Defined ON and OFF thresholds: For voltages above 0.8 x $U_{S\,min}$ the electronics will reliably switch the contactor ON, and for voltages below the value 0.5 x $U_{S\,min}$ it is reliably switched OFF. The hysteresis in the switching thresholds prevents the main contacts from chattering as well as increased wear or welding when operated in weak, unstable networks. This also prevents thermal overloading of the contactor coil if the voltage applied is too low (contactor does not close properly and is continuously operated with overexcitation).
- Low control power consumption when closing and in the closed state.

Electromagnetic compatibility (EMC)

The contactors with solid-state operating mechanism conform to the requirements for operation in industrial plants:

- Interference immunity
  - Burst (IEC 61000-4-4): 4 kV
  - Surge (IEC 61000-4-5): 4 kV
  - Electrostatic discharge, ESD (IEC 61000-4-2): 8/15 kV
  - Electromagnetic field (IEC 61000-4-3): 10 V/m
- Emitted interference
  - Limit value class A according to EN 55011

Note:

In connection with converters, the control cables must be routed separately from the load cables to the converter.

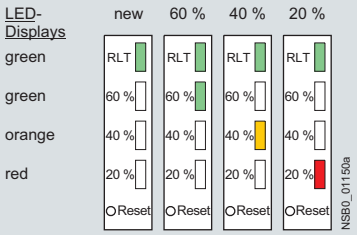
Indication of remaining lifetime (RLT) remaining life time)

Main contactor contacts are working parts which therefore must be replaced in good time when the end of their service life has been reached. The degree of contact erosion and thus the electrical endurance (= number of operating cycles) depends on the loading, utilization category, operating mode, etc. Up to now, routine checks/visual inspections by the maintenance personnel were needed in order to gain an insight into the state of the main contacts.

The remaining lifetime indication function now takes over this task. It does not count the number of operating cycles – which does not provide information about contact erosion – but instead electronically identifies, evaluates and stores the actual progress of erosion of each one of the three main contacts, and outputs a warning when specified limits are reached. The stored data are not lost even if the control supply voltage for A1/A2 fails. After replacement of the main contacts, measurement the remaining lifetime must be reset using the "RESET" button (hold down RESET button for about 2 seconds using a pen or similar tool).

Advantages:

- Additional visual display of various levels of erosion by means of LEDs on the laterally mounted solid-state module when remaining lifetime is 60 % (green), 40 % (orange) and 20 % (red).

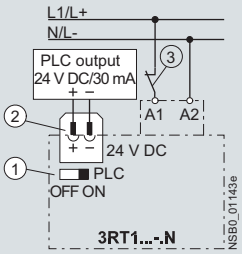


- Early warning to replace contacts
- Optimum utilization of contact material
- Visual inspection of the condition of contacts no longer necessary
- Reduction of ongoing operating costs
- Optimum planning of maintenance measures
- Avoidance of unforeseen plant downtimes

Version 3RT1. ..-.N: for 24 V DC PLC output

2 control options:

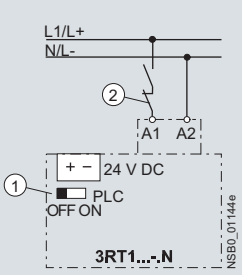
■ Control without a coupling link directly through a 24 V DC/≥ 30 mA PLC output (IEC 61131-2). Connection by means of 2-pole plug-in connection. The screwless spring-type connection is part of the scope of supply. The control supply voltage which supplies the solenoid operating mechanism must be connected to A1/A2.



Note:

Before start-up, the slide switch for PLC operation must be moved to the "PLC ON" position (setting ex works: "PLC OFF").

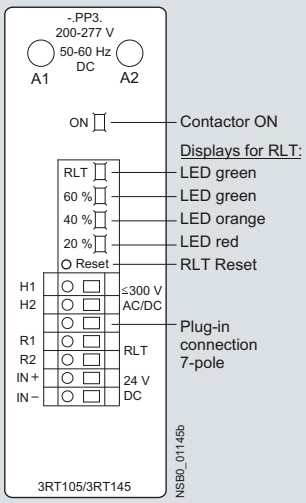
■ Conventional control by applying the control supply voltage at A1/A2 through a switching contact.



Note:

The slide switch must be in the "PLC OFF" position (= setting ex works).

Version 3RT1. . .-.P: for 24 V DC PLC output or PLC relay output, with remaining lifetime indicator (RLT).

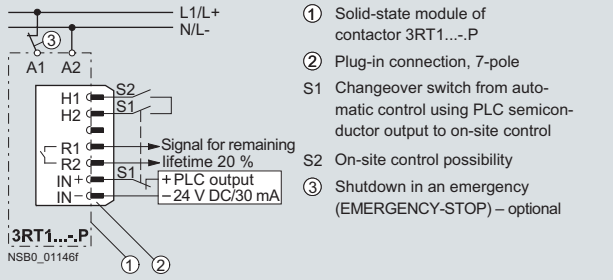


To supply the solenoid and the remaining lifetime indicator with power, the control supply voltage U_s must be connected to terminals A1/A2 of the laterally mounted solid-state module. The control inputs of the contactor are connected to a 7-pole plug-in connection; the screwless spring-type connection is part of the scope of supply.

- The "Remaining Lifetime RLT" status signal is available at terminals R1/R2 through a floating relay contact (hard gold-plated, enclosed) and can be input to SIMOCODE, PLC or other devices for processing, for example.
  Permissible current-carrying capacity of the R1/R2 relay output:
  - I_e/AC-15/24 to 230 V: 3 A
  - I_e/DC-13/24 V: 1 A
- LED displays
  The following states are indicated by means of LEDs on the laterally mounted solid-state module:
  - Contactor ON (energized state): green LED ("ON")
  - Indication of remaining lifetime

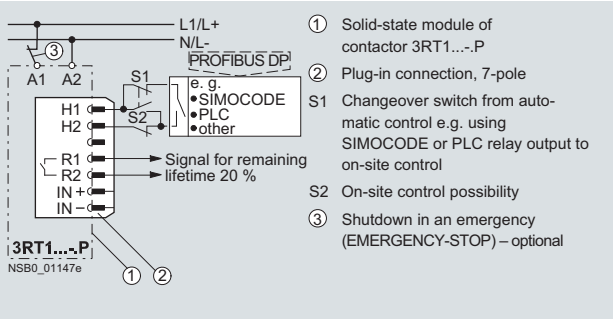
2 control options:

- Contactor control without a coupling link directly through a 24 V DC/≥ 30 mA PLC output (IEC 61131-2) by way of terminals IN+/IN-.



Possibility of switching from automatic control to local control by way of terminals H1/H2, i.e. automatic control through PLC or SIMOCODE/PROFIBUS DP can be deactivated e.g. at start-up or in the event of a fault and the contactor can be controlled manually.

- Contactor control through relay outputs at connections H1/H2, e.g. by
  - PLC or
  - SIMOCODE



Contact loading: U_s/approx. 5 mA.

When operated through SIMOCODE, a communication link to PROFIBUS DP is also provided.

Order No. scheme

Digit of the Order No.	1. - 3.	4.	5.	6.	7.		8.	9.	10.	11.	12.		13.	14.	15.	16.
	□□□	□	□	□	□	–	□	□	□	□	□	–	□	□	□	□
SIRIUS power contactors	**3 R T**															
1. generation		**1**														
Device type (e. g. 0 = 3-pole motor contactor, 3 = 4-pole AC-1 contactor)			□													
Size of the contactor (3 = S2, 4 = S3, 5 = S6, etc.)				□												
Power dependent on size (e.g. 45 = 37 kW)					□											
Connection type (1 = screw, 2 = spring)							□									
Operating range / solenoid coil circuit (e. g. A = AC standard / without)								□								
Rated control supply voltage (e. g. P0 = 230 V, 50 Hz)									□	□						
Auxiliary switches (e.g. S3: 0 = without auxiliary switches											□					
Special version													□	□	□	□
Example	**3 R T**	**1**	**0**	**4**	**5**	**–**	**1**	**A**	**P**	**0**	**0**					

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

For your orders, please use the order numbers quote in the catalog and in the Industry Mall.

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

Selection and ordering data

AC operation

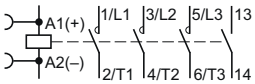
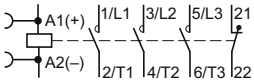
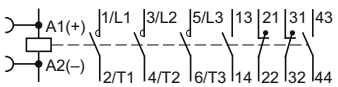
PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B

3RT10 1.-1AP04-3MA0

3RT10 1.-2AP04-3MA0

3RT10 1.-1A...

3RT10 1.-2A...

Ratings			Auxiliary contacts			Rated control supply voltage U_s at 50/60 Hz	DT	Screw terminals		DT	Spring-type terminals	
AC-2 and AC-3, T_u: Up to 60 °C		AC-1, T_u: 40 °C										
Operational current I_e up to	Rating of induction motors at 50 Hz and	Operational current I_e up to	Ident. No.	Version				Order No.	Price € per PU		Order No.	Price € per PU
400 V	**400 V**	690 V		NO	NC	V AC						
A	**kW**	A										
For screw and snap-on mounting onto TH 35 standard mounting rail												
Size S00[1]												
• With auxiliary contact 1 NO, Ident. No. **10**												
												
• With auxiliary contact 1 NC, Ident. No. **01**												
												
7	**3**	18	**10**	1	--	24	▶	**3RT10 15-1AB01**		▶	**3RT10 15-2AB01**	
						110	▶	**3RT10 15-1AF01**		▶	**3RT10 15-2AF01**	
						230	▶	**3RT10 15-1AP01**		▶	**3RT10 15-2AP01**	
			01	--	1	24	▶	**3RT10 15-1AB02**		▶	**3RT10 15-2AB02**	
						110	▶	**3RT10 15-1AF02**		▶	**3RT10 15-2AF02**	
						230	▶	**3RT10 15-1AP02**		▶	**3RT10 15-2AP02**	
9	**4**	22	**10**	1	--	24	▶	**3RT10 16-1AB01**		▶	**3RT10 16-2AB01**	
						110	▶	**3RT10 16-1AF01**		▶	**3RT10 16-2AF01**	
						230	▶	**3RT10 16-1AP01**		▶	**3RT10 16-2AP01**	
			01	--	1	24	▶	**3RT10 16-1AB02**		▶	**3RT10 16-2AB02**	
						110	▶	**3RT10 16-1AF02**		▶	**3RT10 16-2AF02**	
						230	▶	**3RT10 16-1AP02**		▶	**3RT10 16-2AP02**	
12	**5.5**	22	**10**	1	--	24	▶	**3RT10 17-1AB01**		▶	**3RT10 17-2AB01**	
						110	▶	**3RT10 17-1AF01**		▶	**3RT10 17-2AF01**	
						230	▶	**3RT10 17-1AP01**		▶	**3RT10 17-2AP01**	
			01	--	1	24	▶	**3RT10 17-1AB02**		B	**3RT10 17-2AB02**	
						110	▶	**3RT10 17-1AF02**		▶	**3RT10 17-2AF02**	
						230	▶	**3RT10 17-1AP02**		▶	**3RT10 17-2AP02**	
with permanently mounted auxiliary switch block for safety applications according to SUVA												
												
7	**3**	18	**22**	2	2	230	▶	**3RT10 15-1AP04-3MA0**		B	**3RT10 15-2AP04-3MA0**	
9	**4**	22	**22**	2	2	230	▶	**3RT10 16-1AP04-3MA0**		B	**3RT10 16-2AP04-3MA0**	
12	**5.5**	22	**22**	2	2	230	▶	**3RT10 17-1AP04-3MA0**		B	**3RT10 17-2AP04-3MA0**	

Other voltages according to page 3/25 on request.
Accessories see page 3/34.
Spare parts see page 3/49.

Multi-unit/reusable packaging available on request.

[1] For size S00: Coil operating range
at 50 Hz: 0.8 ... 1.1 × U_s,
at 60 Hz: 0.85 ... 1.1 × U_s.

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

AC operation

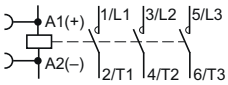
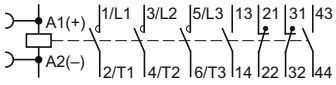
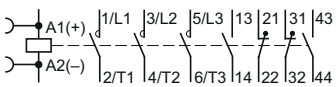
PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B

3RT10 2.-1A.04

3RT10 2.-1AL24-3MA0

3RT10 2.-1A.00

3RT10 2.-3A.00

Ratings			Auxiliary contacts			Rated control supply voltage U_s at 50 Hz	DT	Screw terminals		DT	Spring-type terminals for coil terminals	
AC-2 and AC-3, T_u: Up to 60 °C		AC-1, T_u: 40 °C										
Operational current I_e up to 400 V	Rating of induction motors at 50 Hz and **400 V**	Operational current I_e up to 690 V	Ident. No.	Version NO	Version NC			Order No.	Price € per PU		Order No.	Price € per PU
A	**kW**	A		NO	NC	V AC						
For screw and snap-on mounting onto TH 35 standard mounting rail												
Size S0												
												
9	**4**	40[1]	--	--	--	24	▶	**3RT10 23-1AB00**		B	**3RT10 23-3AB00**	
						110	▶	**3RT10 23-1AF00**		B	**3RT10 23-3AF00**	
						230	▶	**3RT10 23-1AP00**		▶	**3RT10 23-3AP00**	
12	**5.5**	40[1]	--	--	--	24	▶	**3RT10 24-1AB00**		B	**3RT10 24-3AB00**	
						110	▶	**3RT10 24-1AF00**		B	**3RT10 24-3AF00**	
						230	▶	**3RT10 24-1AP00**		▶	**3RT10 24-3AP00**	
17	**7.5**	40[1]	--	--	--	24	▶	**3RT10 25-1AB00**		B	**3RT10 25-3AB00**	
						110	▶	**3RT10 25-1AF00**		B	**3RT10 25-3AF00**	
						230	▶	**3RT10 25-1AP00**		▶	**3RT10 25-3AP00**	
25	**11**	40[1]	--	--	--	24	▶	**3RT10 26-1AB00**		B	**3RT10 26-3AB00**	
						110	▶	**3RT10 26-1AF00**		B	**3RT10 26-3AF00**	
						230	▶	**3RT10 26-1AP00**		▶	**3RT10 26-3AP00**	
With mounted auxiliary switch block (removable)[2]												
												
9	**4**	40[1]	**22**	2	2	24	▶	**3RT10 23-1AB04**			--	
						110	▶	**3RT10 23-1AF04**			--	
						230	▶	**3RT10 23-1AP04**			--	
12	**5.5**	40[1]	**22**	2	2	24	▶	**3RT10 24-1AB04**			--	
						110	▶	**3RT10 24-1AF04**			--	
						230	▶	**3RT10 24-1AP04**			--	
17	**7.5**	40[1]	**22**	2	2	24	▶	**3RT10 25-1AB04**			--	
						110	▶	**3RT10 25-1AF04**			--	
						230	▶	**3RT10 25-1AP04**			--	
25	**11**	40[1]	**22**	2	2	24	▶	**3RT10 26-1AB04**			--	
						110	▶	**3RT10 26-1AF04**			--	
						230	▶	**3RT10 26-1AP04**			--	
with permanently mounted auxiliary switch block for safety applications according to SUVA						At 50/60 Hz V AC						
												
12	**5.5**	40[1]	**22**	2	2	230	B	**3RT10 24-1AL24-3MA0**			--	
17	**7.5**	40[1]	**22**	2	2	230	A	**3RT10 25-1AL24-3MA0**			--	
25	**11**	40[1]	**22**	2	2	230	A	**3RT10 26-1AL24-3MA0**			--	

Other voltages according to page 3/25 on request.
Accessories see page 3/34.
Spare parts see page 3/49.

Multi-unit/reusable packaging available on request.

[1] Minimum conductor cross-section 10 mm².

[2] Order No. for the auxiliary switch block (removable): 3RH19 21-1HA22 (2 NO + 2 NC acc. to EN 50012; 22).

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

AC operation

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

3RT10 3.-1A.04

3RT10 3.-1A.00

3RT10 3.-3A.00

Ratings			Auxiliary contacts			Rated control supply voltage U_s at 50 Hz	DT	**Screw terminals**		DT	**Spring-type terminals** for coil terminals	
AC-2 and AC-3, T_u: Up to 60 °C		AC-1, T_u: 40 °C										
Operational current I_e up to 500 V	Rating of induction motors at 50 Hz and **400 V**	Operational current I_e up to 690 V	Ident. No.	Version NO	Version NC			Order No.	Price € per PU		Order No.	Price € per PU
A	**kW**	A		NO	NC	V AC						
For screw and snap-on mounting onto TH 35 standard mounting rail												
Size S2												
32	**15**	50	--	--	--	24	▶	**3RT10 34-1AB00**		B	**3RT10 34-3AB00**	
						110	▶	**3RT10 34-1AF00**		B	**3RT10 34-3AF00**	
						230	▶	**3RT10 34-1AP00**		▶	**3RT10 34-3AP00**	
40	**18.5**	60	--	--	--	24	▶	**3RT10 35-1AB00**		B	**3RT10 35-3AB00**	
						110	▶	**3RT10 35-1AF00**		B	**3RT10 35-3AF00**	
						230	▶	**3RT10 35-1AP00**		▶	**3RT10 35-3AP00**	
50	**22**	60	--	--	--	24	▶	**3RT10 36-1AB00**		B	**3RT10 36-3AB00**	
						110	▶	**3RT10 36-1AF00**		B	**3RT10 36-3AF00**	
						230	▶	**3RT10 36-1AP00**		▶	**3RT10 36-3AP00**	
With mounted auxiliary switch block (removable)[1)]												
32	**15**	50	**22**	2	2	24	▶	**3RT10 34-1AB04**			--	
						110	▶	**3RT10 34-1AF04**			--	
						230	▶	**3RT10 34-1AP04**			--	
40	**18.5**	60	**22**	2	2	24	▶	**3RT10 35-1AB04**			--	
						110	▶	**3RT10 35-1AF04**			--	
						230	▶	**3RT10 35-1AP04**			--	
50	**22**	60	**22**	2	2	24	▶	**3RT10 36-1AB04**			--	
						110	▶	**3RT10 36-1AF04**			--	
						230	▶	**3RT10 36-1AP04**			--	
With permanently mounted auxiliary switch block for safety applications according to SUVA												
32	**15**	50	**22**	2	2	230	B	**3RT10 34-1AP04-3MA0**			--	
40	**18.5**	60	**22**	2	2	230	B	**3RT10 35-1AP04-3MA0**			--	
50	**22**	60	**22**	2	2	230	B	**3RT10 36-1AP04-3MA0**			--	

Other voltages according to page 3/25 on request.
Accessories see page 3/34.
Spare parts see page 3/49.

Multi-unit packaging and reusable packaging see Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes".

1) Order No. for the auxiliary switch block (removable): 3RH19 21-1HA22 (2 NO + 2 NC acc. to EN 50012; Ident. No. 22).

* You can order this quantity or a multiple thereof.
Illustrations are approximate

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

DC operation · DC solenoid system

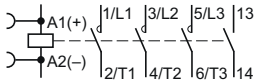
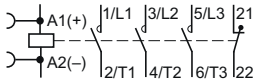
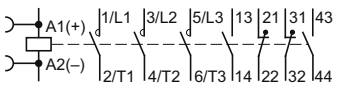
PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B


3RT10 1.-1BB44-3MA0


3RT10 1.-2BB44-3MA0


3RT10 1.-1B...


3RT10 1.-2B...

Ratings			Auxiliary contacts			Rated control supply voltage U_s	DT	Screw terminals		DT	Spring-type terminals	
AC-2 and AC-3, T_u: Up to 60 °C		AC-1, T_u: 40 °C										
Operational current I_e up to 400 V	Rating of induction motors at 50 Hz and **400 V**	Operational current I_e up to 690 V	Ident. No.	Version NO	Version NC			Order No.	Price € per PU		Order No.	Price € per PU
A	**kW**	A				V DC						
For screw and snap-on mounting onto TH 35 standard mounting rail												
Size S00												
• With auxiliary contact 1 NO, Ident. No. **10**												
												
• With auxiliary contact 1 NC, Ident. No. **01**												
												
7	**3**	18	**10**	1	--	24	▶	**3RT10 15-1BB41**		▶	**3RT10 15-2BB41**	
						220	A	**3RT10 15-1BM41**		B	**3RT10 15-2BM41**	
			01	--	1	24	▶	**3RT10 15-1BB42**		▶	**3RT10 15-2BB42**	
						220	B	**3RT10 15-1BM42**		B	**3RT10 15-2BM42**	
9	**4**	22	**10**	1	--	24	▶	**3RT10 16-1BB41**		▶	**3RT10 16-2BB41**	
						220	B	**3RT10 16-1BM41**		B	**3RT10 16-2BM41**	
			01	--	1	24	▶	**3RT10 16-1BB42**		▶	**3RT10 16-2BB42**	
						220	B	**3RT10 16-1BM42**		B	**3RT10 16-2BM42**	
12	**5.5**	22	**10**	1	--	24	▶	**3RT10 17-1BB41**		▶	**3RT10 17-2BB41**	
						220	B	**3RT10 17-1BM41**		B	**3RT10 17-2BM41**	
			01	--	1	24	▶	**3RT10 17-1BB42**		▶	**3RT10 17-2BB42**	
						220	B	**3RT10 17-1BM42**		B	**3RT10 17-2BM42**	
With permanently mounted auxiliary switch block for safety applications according to SUVA Terminal designations according to EN 50012												
												
7	**3**	18	**22**	2	2	24	▶	**3RT10 15-1BB44-3MA0**		B	**3RT10 15-2BB44-3MA0**	
9	**4**	22	**22**	2	2	24	▶	**3RT10 16-1BB44-3MA0**		A	**3RT10 16-2BB44-3MA0**	
12	**5.5**	22	**22**	2	2	24	▶	**3RT10 17-1BB44-3MA0**		B	**3RT10 17-2BB44-3MA0**	

Other voltages according to page 3/25 on request.
Accessories see page 3/34.
Spare parts see page 3/50.

Multi-unit/reusable packaging available on request.

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

DC operation · DC solenoid system

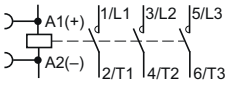
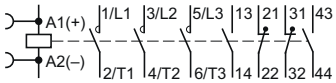
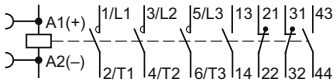
PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B

3RT10 2.-3B.44

3RT10 2.-1BB44-3MA0

3RT10 2.-1B.40

3RT10 2.-3B.40

Ratings			Auxiliary contacts			Rated control supply voltage U_s	DT	**Screw terminals**		DT	**Spring-type terminals** for coil terminals	
AC-2 and AC-3, T_u: Up to 60 °C		AC-1, T_u: 40 °C										
Operational current I_e up to 400 V	Rating of induction motors at 50 Hz and **400 V**	Operational current I_e up to 690 V	Ident. No.	Version NO	Version NC			Order No.	Price € per PU		Order No.	Price € per PU
A	**kW**	A		NO	NC	V DC						
For screw and snap-on mounting onto TH 35 standard mounting rail												
Size S0												
												
9	**4**	40[1]	--	--	--	24	▶	**3RT10 23-1BB40**		▶	**3RT10 23-3BB40**	
						220	B	**3RT10 23-1BM40**		B	**3RT10 23-3BM40**	
12	**5.5**	40[1]	--	--	--	24	▶	**3RT10 24-1BB40**		▶	**3RT10 24-3BB40**	
						220	A	**3RT10 24-1BM40**		B	**3RT10 24-3BM40**	
17	**7.5**	40[1]	--	--	--	24	▶	**3RT10 25-1BB40**		▶	**3RT10 25-3BB40**	
						220	A	**3RT10 25-1BM40**		B	**3RT10 25-3BM40**	
25	**11**	40[1]	--	--	--	24	▶	**3RT10 26-1BB40**		▶	**3RT10 26-3BB40**	
						220	A	**3RT10 26-1BM40**		B	**3RT10 26-3BM40**	
With mounted auxiliary switch block (removable)[2] Terminal designations according to DIN 50012												
												
9	**4**	40[1]	**22**	2	2	24	▶	**3RT10 23-1BB44**			--	
						220	B	**3RT10 23-1BM44**			--	
12	**5.5**	40[1]	**22**	2	2	24	▶	**3RT10 24-1BB44**			--	
						220	B	**3RT10 24-1BM44**			--	
17	**7.5**	40[1]	**22**	2	2	24	▶	**3RT10 25-1BB44**			--	
						220	B	**3RT10 25-1BM44**			--	
25	**11**	40[1]	**22**	2	2	24	▶	**3RT10 26-1BB44**			--	
						220	B	**3RT10 26-1BM44**			--	
With permanently mounted auxiliary switch block for safety applications according to SUVA Terminal designations according to DIN 50012												
												
12	**5.5**	40[1]	**22**	2	2	24	A	**3RT10 24-1BB44-3MA0**			--	
17	**7.5**	40[1]	**22**	2	2	24	A	**3RT10 25-1BB44-3MA0**			--	
25	**11**	40[1]	**22**	2	2	24	A	**3RT10 26-1BB44-3MA0**			--	

Other voltages according to page 3/25 on request.
Accessories see page 3/34.
Spare parts see page 3/50.

Multi-unit/reusable packaging available on request.

1) Minimum conductor cross-section 10 mm².

2) Order No. for the auxiliary switch block (removable): 3RH19 21-1HA22 (2 NO + 2 NC acc. to EN 50012; 22E).

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

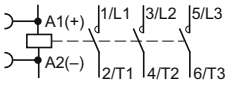
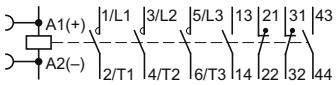
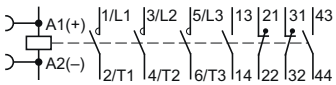
DC operation · DC solenoid system

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

3RT10 3.-1B.44

3RT10 3.-1B.40

3RT10 3.-3B.40

Ratings			Auxiliary contacts			Rated control supply voltage U_s	DT	**Screw terminals**		DT	**Spring-type terminals** for coil terminals	
AC-2 and AC-3, T_u: Up to 60 °C		AC-1, T_u: 40 °C										
Operational current I_e up to 500 V	Rating of induction motors at 50 Hz and **400 V**	Operational current I_e up to 690 V	Ident. No.	Version NO	Version NC			Order No.	Price € per PU		Order No.	Price € per PU
A	**kW**	A		NO	NC	V DC						
For screw and snap-on mounting onto TH 35 standard mounting rail												
Size S2												
												
32	**15**	50	--	--	--	24	▶	**3RT10 34-1BB40**		▶	**3RT10 34-3BB40**	
						220	B	**3RT10 34-1BM40**		B	**3RT10 34-3BM40**	
40	**18.5**	60	--	--	--	24	▶	**3RT10 35-1BB40**		▶	**3RT10 35-3BB40**	
						220	B	**3RT10 35-1BM40**		B	**3RT10 35-3BM40**	
50	**22**	60	--	--	--	24	▶	**3RT10 36-1BB40**		▶	**3RT10 36-3BB40**	
						220	B	**3RT10 36-1BM40**		B	**3RT10 36-3BM40**	
With mounted auxiliary switch block (removable)[1)]												
												
32	**15**	50	**22**	2	2	24	▶	**3RT10 34-1BB44**			--	
						220	B	**3RT10 34-1BM44**			--	
40	**18.5**	60	**22**	2	2	24	▶	**3RT10 35-1BB44**			--	
						220	B	**3RT10 35-1BM44**			--	
50	**22**	60	**22**	2	2	24	▶	**3RT10 36-1BB44**			--	
						220	B	**3RT10 36-1BM44**			--	
With permanently mounted auxiliary switch block for safety applications according to SUVA												
												
32	**15**	50	**22**	2	2	24	B	**3RT10 34-1BB44-3MA0**			--	
40	**18.5**	60	**22**	2	2	24	B	**3RT10 35-1BB44-3MA0**			--	
50	**22**	60	**22**	2	2	24	B	**3RT10 36-1BB44-3MA0**			--	

Other voltages according to page 3/25 on request.
Accessories see page 3/34.
Spare parts see page 3/50.

Multi-unit packaging and reusable packaging see Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes".

[1)] Order No. for the auxiliary switch block (removable): 3RH19 21-1HA22 (2 NO + 2 NC acc. to EN 50012; Ident. No. 22).

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

Options

Rated control supply voltages, possible on request (the 10th and 11th position of the order number must be changed)

Rated control supply voltage U_s	Contactor type	3RT10 1	3RT10 2, 3RT10 3, 3RT10 4	3RT14 4	3RT13 1, 3RT15 1	3RT13 2 ... 3RT13 4, 3RT15 2, 3RT15 3	3RT16 17, 3RT16 27, 3RT16 47
	Size	S00	S0, S2, S3	S3	S00	S0, S2, S3	S00, S0, S3
Sizes S2 and S3							
AC operation							
Solenoid coils for 50 Hz[1]							
24 V AC		B0	B0	B0	B0	B0	B0
42 V AC		D0	D0	D0	D0	--	--
48 V AC		H0	H0	H0	H0	--	--
110 V AC		F0	F0	F0	F0	F0	F0
230 V AC		P0	P0	P0	P0	P0	P0
240 V AC		U0	U0	U0	U0	U0	U0
400 V AC		V0	V0	V0	V0	V0	V0
Solenoid coils for 50 and 60 Hz[1]							
24 V AC		B0	C2	C2	B0	C2	C2
42 V AC		D0	D2	D2	D0	D2	--
48 V AC		H0	H2	H2	H0	H2	--
110 V AC		F0	G2	G2	F0	G2	G2
220 V AC		N2	N2	N2	N2	N2	N2
230 V AC		P0	L2	L2	P0	L2	L2
240 V AC		P2	P2	P2	P2	P2	P2
Solenoid coils (for USA and Canada[2]**)**							
50 Hz	**60 Hz**						
110 V AC	120 V AC	K6	K6	K6	K6	K6	K6
220 V AC	240 V AC	P6	P6	P6	P6	P6	P6
Solenoid coils (for Japan)							
50/60 Hz[3]	**60 Hz**[4]						
100 V AC	110 V AC	G6	G6	G6	G6	G6	G6
200 V AC	220 V AC	N6	N6	N6	N6	N6	N6
400 V AC	440 V AC	R6	R6	R6	R6	R6	R6
DC operation							
12 V DC		A4	--	--	A4	--	--
24 V DC		B4	B4	B4	B4	B4	--
42 V DC		D4	D4	D4	D4	D4	--
48 V DC		W4	W4	W4	W4	--	--
60 V DC		E4	E4	E4	--	--	--
110 V DC		F4	F4	F4	F4	F4	--
125 V DC		G4	G4	G4	G4	G4	--
220 V DC		M4	M4	M4	M4	M4	--
230 V DC		P4	P4	P4	P4	--	--

Examples

AC operation	3RT10 34-1A**P0**0	Contactor with screw terminals; with solenoid coil for 50 Hz for rated control supply voltage 230 V AC.
	3RT10 34-1A**G2**0	Contactor with screw terminals; with solenoid coil for 50/60 Hz for rated control supply voltage 110 V AC.
DC operation	3RT10 34-3B**B4**0	Contactor with spring-type terminals; for rated control supply voltage 24 V DC.
	3RT10 34-3B**G4**0	Contactor with spring-type terminals; for rated control supply voltage 125 V DC.

Rated control supply voltage U_s	Contactor type	3RT1. 5.-.A 3RT1. 6.-.A 3RT1. 7.-.A	Rated control supply voltage U_s	Contactor type	3RT1. 5.-.N 3RT1. 6.-.N 3RT1. 7.-.N	3RT1. 5.-.P 3RT1. 6.-.P 3RT1. 7.-.P
$U_{s\,min}$ ... $U_{s\,max}$[5]	Size	S6, S10, S12	$U_{s\,min}$ ... $U_{s\,max}$[5]	Size	S6, S10, S12	S6, S10, S12
Sizes S6 to S12						
UC operation (AC 50 ... 60 Hz, DC)						
Conventional operating mechanisms			**Solid-state operating mechanism**			
23 ... 26 V AC/DC		B3	21 ... 27.3 V AC/DC		B3	--
42 ... 48 V AC/DC		D3	96 ... 127 V AC/DC		F3	F3
110 ... 127 V AC/DC		F3	200 ... 277 V AC/DC		P3	P3
200 ... 220 V AC/DC		M3				
220 ... 240 V AC/DC		P3				
240 ... 277 V AC/DC		U3				
380 ... 420 V AC/DC		V3				
440 ... 480 V AC/DC		R3				
500 ... 550 V AC/DC		S3				
575 ... 600 V AC/DC		T3				

[1] Coil operating range:
at 50 Hz: 0.8 to 1.1 x U_s
at 60 Hz: 0.85 to 1.1 × U_s.

[2] Coil operating range (sizes S2 and S3):
at 50 Hz and 60 Hz: 0.8 to 1.1 × U_s.

[3] Coil operating range (sizes S2 and S3):
at 50 Hz: 0.8 to 1.1 x U_s
at 60 Hz: 0.85 to 1.1 × U_s.

[4] Coil operating range:
at 60 Hz: 0.8 to 1.1 × U_s.

[5] Operating range:
0.8 x $U_{s\,min}$ to 1.1 × $U_{s\,max}$.

Auxiliary switches

Selection and ordering data

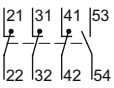
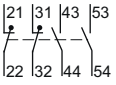
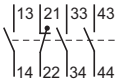
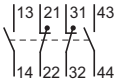
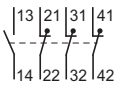
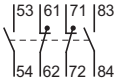
PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B


3RH19 11-1HA..


3RH19 11-2HA..


3RH19 21-1HA..


3RH19 21-2HA..

For contactors	Auxiliary contacts						DT	Screw terminals		DT	Spring-type terminals	
	Ident. No.	Version						Order No.	Price € per PU		Order No.	Price € per PU
Type		NO	NC	NO	NC							
Auxiliary switch blocks for snapping onto the front according to EN 50012												
Size S00												
	1, 2 or 4-pole auxiliary switch blocks for assembling contactors with 2, 4 or 5 auxiliary contacts											
3RT1. 1, Ident. No. 10	**01 → 11**	--	1	--	--		▶	**3RH19 11-1HA01**		▶	**3RH19 11-2HA01**	
	12 → 22	1	2	--	--		▶	**3RH1911-1HA12**		▶	**3RH19 11-2HA12**	
	13 → 23	1	3	--	--		▶	**3RH1911-1HA13**		▶	**3RH19 11-2HA13**	
	22 → 32	2	2	--	--		▶	**3RH19 11-1HA22**		▶	**3RH19 11-2HA22**	
Sizes S0 to S3[1]												
	4-pole auxiliary switch blocks											
3RT1. 2, 3RT1. 3, 3RT1. 4	**31**	3	1	--	--		▶	**3RH19 21-1HA31**		▶	**3RH19 21-2HA31**	
	22	2	2	--	--		▶	**3RH19 21-1HA22**		▶	**3RH19 21-2HA22**	
	13	1	3	--	--		▶	**3RH19 21-1HA13**		▶	**3RH19 21-2HA13**	
Sizes S0 to S12[2]												
	4-pole auxiliary switch blocks											
3RT1. 3 ... 3RT1. 7	**22**	2	2	--	--		B	**3RH19 21-1XA22-0MA0**		D	**3RH19 21-2XA22-0MA0**	

Multi-unit/reusable packaging
- Size S00 available on request
- Sizes S0 to S12 see Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes"

[1] Exception: 3RT16.
[2] Exception: 3RT12, 3RT16.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

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

3RH19 11-1LA..

3RH19 11-1FA..

3RH19 11-2FA..

For contactors	Auxiliary contacts						DT	Screw terminals		DT	Spring-type terminals	
	Ident. No.	Version						Order No.	Price € per PU		Order No.	Price € per PU
Type		NO	NC	NO	NC							
Auxiliary switch blocks for snapping onto the front according to EN 50005												
Size S00												
	2 or 4-pole auxiliary switch blocks for assembling contactors with 3 or 5 auxiliary contacts											
3RT1. 1, 3RH11, 3RH14	**20**	2	0	--	--	53 63 / 54 64	▶	**3RH19 11-1FA20**		▶	**3RH19 11-2FA20**	
	11	1	2	--	--	53 61 / 54 62	▶	**3RH19 11-1FA11**		▶	**3RH19 11-2FA11**	
	02	--	2	--	--	51 61 / 52 62	▶	**3RH19 11-1FA02**		▶	**3RH19 11-2FA02**	
	11U	--	--	1	1	57 65 / 58 66	▶	**3RH19 11-1FB11**		A	**3RH19 11-2FB11**	
	40	4	--	--	--	53 63 73 83 / 54 64 74 84	▶	**3RH19 11-1FA40**		▶	**3RH19 11-2FA40**	
	31	3	1	--	--	53 61 73 83 / 54 62 74 84	▶	**3RH19 11-1FA31**		▶	**3RH19 11-2FA31**	
	22	2	2	--	--	57 67 75 85 / 58 68 76 86	▶	**3RH19 11-1FA22**		▶	**3RH19 11-2FA22**	
	22U	--	--	2	2	57 67 75 85 / 58 68 76 86	▶	**3RH19 11-1FC22**		▶	**3RH19 11-2FC22**	
	11, 11U	1	1	1	1	53 61 75 87 / 54 62 76 88	▶	**3RH19 11-1FB22**		B	**3RH19 11-2FB22**	
	1- and 2-pole auxiliary switch blocks, connections on one side **• Cable entry from above**											
3RT1. 1, 3RH11, 3RH14	**--**	1	--	--	--	51 / 52	▶	**3RH19 11-1AA10**			**--**	
	--	--	1			51 / 52	▶	**3RH19 11-1AA01**			**--**	
	--	1	1			53 61 / 54 62	▶	**3RH19 11-1LA11**			**--**	
	--	2	-			53 63 / 54 64	▶	**3RH19 11-1LA20**			**--**	

Multi-unit/reusable packaging available on request.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

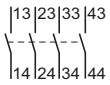
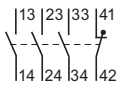
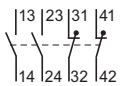
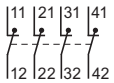
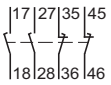
Accessories for 3RT1 contactors

Auxiliary switches

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

3RH19 21-1FA..

3RH19 21-2FA..

For contactors	Auxiliary contacts						DT	Screw terminals		DT	Spring-type terminals	
	Ident. No.	Version						Order No.	Price € per PU		Order No.	Price € per PU
Type		NO	NC	NO	NC							
Auxiliary switch blocks for snapping onto the front according to EN 50005												
Size S00												
	1- and 2-pole auxiliary switch blocks, terminals on one side • Cable entry from below											
3RT1. 1, 3RH11, 3RH14	**--**	1	--	--	--		▶	**3RH19 11-1BA10**			**--**	
	--	--	1				▶	**3RH19 11-1BA01**			**--**	
	--	1	1				▶	**3RH19 11-1MA11**			**--**	
	--	2	-				▶	**3RH19 11-1MA20**			**--**	
Sizes S0 to S3[1]	**4-pole auxiliary switch blocks**											
3RT1. 3, 3RT1. 4	**40**	4	--	--	--		▶	**3RH19 21-1FA40**		▶	**3RH19 21-2FA40**	
	31	3	1	--	--		▶	**3RH19 21-1FA31**		▶	**3RH19 21-2FA31**	
	22	2	2	--	--		▶	**3RH19 21-1FA22**		▶	**3RH19 21-2FA22**	
	04	--	4	--	--		▶	**3RH19 21-1FA04**		A	**3RH19 21-2FA04**	
	22 U	--	--	2	2		▶	**3RH19 21-1FC22**		A	**3RH19 21-2FC22**	

Multi-unit/reusable packaging

- Size S00 available on request
- Sizes S0 to S12 see Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes"

[1] Exception: 3RT16.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Auxiliary switches

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


3RH19 21-1LA..


3RH19 21-1MA..


3RH19 21-1C..


3RH19 21-2C..

For contactors	Auxiliary contacts					DT	Screw terminals		DT	Spring-type terminals	
	Ident. No.	Version					Order No.	Price € per PU		Order No.	Price € per PU
Type		NO	NC	NO	NC						
Auxiliary switch blocks for snapping onto the front according to EN 50005											
Sizes S0 to S3 [1]											
	2-pole auxiliary switch blocks with terminals on one side • Cable entry from above										
3RT1. 3, 3RT1. 4	**11**	1	1	--	--		▶	**3RH19 21-1LA11**		**--**	
	20	2	--	--	--		▶	**3RH19 21-1LA20**		**--**	
	02	--	2	--	--		▶	**3RH19 21-1LA02**		**--**	
	• Cable entry from below										
3RT1. 3, 3RT1. 4	**11**	1	1	--	--		▶	**3RH19 21-1MA11**		**--**	
	20	2	--	--	--		▶	**3RH19 21-1MA20**		**--**	
	02	--	2	--	--		▶	**3RH19 21-1MA02**		**--**	
Sizes S0 to S12 [2]											
	1-pole auxiliary switch blocks according to EN 50005 and EN 50012										
3RT1. 3 ... 3RT1. 7	**10**	1	--	--	--		▶	**3RH19 21-1CA10**	▶	**3RH19 21-2CA10**	
	01	--	1	--	--		▶	**3RH19 21-1CA01**	▶	**3RH19 21-2CA01**	
	10	--	--	1	--		▶	**3RH19 21-1CD10**		**--**	
	01	--	--	--	1		▶	**3RH19 21-1CD01**		**--**	

[1] Exception: 3RT16.
[2] Exception: 3RT12, 3RT16

Surge suppressors

Selection and ordering data

Surge suppressors with LED

Size S00 (also for spring-type terminals)


3RT19 16-1L.00

For plugging onto the front side of the contactors with and without auxiliary switch blocks

For contactors Type	Version	Rated control supply voltage U_s [1] AC operation V AC	DC operation V DC	Power consumption of LED at U_s	DT	Order No. [2]	Price € per PU	PU (UNIT, SET, M)	PS*	PG
3RT1, 3RH1.	**Varistor**	24 ... 48	12 ... 24	10 ... 120	▶	**3RT19 16-1JJ00**		1	1 unit	41B
		48 ... 127	24 ... 70	20 ... 470	▶	**3RT19 16-1JK00**		1	1 unit	41B
		127 ... 240	70 ... 150	50 ... 700	▶	**3RT19 16-1JL00**		1	1 unit	41B
		--	150 ... 250	160 ... 950	A	**3RT19 16-1JP00**		1	1 unit	41B
3RT1, 3RH1.	**Noise suppression diodes**	--	24 ... 70	20 ... 470	▶	**3RT19 16-1LM00**		1	1 unit	41B
		--	50 ... 150	50 ... 700	▶	**3RT19 16-1LN00**		1	1 unit	41B
		--	150 ... 250	160 ... 950	▶	**3RT19 16-1LP00**		1	1 unit	41B

[1] Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

[2] For packs of 10 or 5 units "**-Z**" and order code "**X90**" must be added to the Order No.

Surge suppressors without LED

Size S00 (also for spring-type terminals)


3RT19 16-1DG00

For plugging onto the front side of the contactors with and without auxiliary switch blocks

For contactors Type	Version	Rated control supply voltage U_s [1] AC operation V AC	DC operation V DC	DT	Order No. [2]	Price € per PU	PU (UNIT, SET, M)	PS*	PG
3RT1., 3RH1	**Varistor**	24 ... 48	24 ... 70	▶	**3RT19 16-1BB00**		1	1 unit	41B
		48 ... 127	70 ... 150	▶	**3RT19 16-1BC00**		1	1 unit	41B
		127 ... 240	150 ... 250	A	**3RT19 16-1BD00**		1	1 unit	41B
		240 ... 400	--	▶	**3RT19 16-1BE00**		1	1 unit	41B
		400 ... 600	--	A	**3RT19 16-1BF00**		1	1 unit	41B
3RT1., 3RH1	**RC elements**	24 ... 48	24 ... 70	▶	**3RT19 16-1CB00**		1	1 unit	41B
		48 ... 127	70 ... 150	▶	**3RT19 16-1CC00**		1	1 unit	41B
		127 ... 240	150 ... 250	▶	**3RT19 16-1CD00**		1	1 unit	41B
		240 ... 400	--	▶	**3RT19 16-1CE00**		1	1 unit	41B
		400 ... 600	--	▶	**3RT19 16-1CF00**		1	1 unit	41B
3RT1., 3RH1	**Noise suppression diodes**	--	12 ... 250	▶	**3RT19 16-1DG00**		1	1 unit	41B
3RT1., 3RH1	**Diode assemblies** (diode and Zener diode) for DC operation	--	12 ... 250	▶	**3RT19 16-1EH00**		1	1 unit	41B

Size S0


3RT19 26-1B.00

For fitting onto the coil terminals at top or bottom

For contactors Type	Version	Rated control supply voltage U_s [1] AC operation V AC	DC operation V DC	DT	Order No. [2]	Price € per PU	PU (UNIT, SET, M)	PS*	PG
3RT1. 2	**Varistor**	24 ... 48	24 ... 70	▶	**3RT19 26-1BB00**		1	1 unit	41B
		48 ... 127	70 ... 150	▶	**3RT19 26-1BC00**		1	1 unit	41B
		127 ... 240	150 ... 250	▶	**3RT19 26-1BD00**		1	1 unit	41B
		240 ... 400	--	▶	**3RT19 26-1BE00**		1	1 unit	41B
		400 ... 600	--	B	**3RT19 26-1BF00**		1	1 unit	41B
3RT1. 2	**RC elements**	24 ... 48	24 ... 70	▶	**3RT19 26-1CB00**		1	1 unit	41B
		48 ... 127	70 ... 150	▶	**3RT19 26-1CC00**		1	1 unit	41B
		127 ... 240	150 ... 250	▶	**3RT19 26-1CD00**		1	1 unit	41B
		240 ... 400	--	▶	**3RT19 26-1CE00**		1	1 unit	41B
		400 ... 600	--	B	**3RT19 26-1CF00**		1	1 unit	41B
3RT1. 2	**Diode assembly** for DC operation								
	• Connectable at the top (e.g. for contactor with overload relay)	--	24	▶	**3RT19 26-1ER00**		1	1 unit	41B
		--	30 ... 250	▶	**3RT19 26-1ES00**		1	1 unit	41B
	• Connectable at the bottom (e.g. for fuseless load feeders)	--	24	▶	**3RT19 26-1TR00**		1	1 unit	41B
		--	30 ... 250	A	**3RT19 26-1TS00**		1	1 unit	41B

[1] Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

[2] For packs of 10 units, the Order No. must be supplemented with **"-Z"** and the order code "**X90**".

* You can order this quantity or a multiple thereof.
Illustrations are approximate