

Industrial Controls

SIRIUS 3R_1* in sizes S00/S0 to S12

Catalog Add-On IC 10 AO · 2012



SIRIUS

Answers for industry.

SIEMENS

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data

Overview

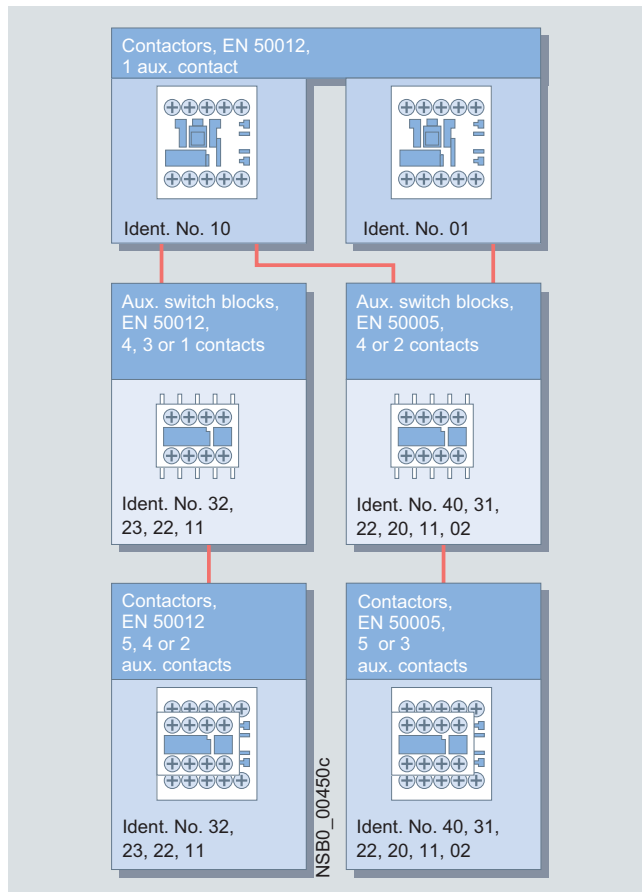
Snap-on auxiliary switch blocks

Various auxiliary switch blocks can be added to the 3RT1 basic units depending on the application:

Size S00

Terminal designations according to EN 50005 or EN 50012

Size S00 contactors have an auxiliary contact integrated in the basic unit.



4-pole auxiliary switch blocks 3RT1 (S00).

Contactors with a NO contact as auxiliary contact (screw or spring-type terminals), Ident. No. 10, can be expanded into contactors with 2, 4 or 5 auxiliary contacts according to EN 50012 using auxiliary switch blocks. The Ident. Nos. 11, 22, 23 and 32 on the auxiliary switch blocks apply to the complete contactors. These auxiliary switch blocks cannot be combined with contactors which have a NC contact in the basic unit (Ident. No. 01) as they are coded.

All contactors of size S00 with one auxiliary contact (Ident. Nos. 10 or 01) and the contactors with 4 main contacts can be expanded into contactors with 3 or 5 auxiliary contacts using auxiliary switch blocks with the Ident. Nos. 40 to 02 (in the case of contactors with 4 main contacts: 2 or 4 auxiliary contacts) according to EN 50005. The Ident. Nos. on these auxiliary switch blocks apply only to the attached auxiliary switches.

Single- or 2-pole auxiliary switch blocks with only one connection option from above or below are provided for easy and clearly arranged wiring especially for the installation of network access junctions. These auxiliary switch blocks are offered only with screw terminals.

The solid-state compatible 3RH19 11-1NF. auxiliary switch blocks for contactors of size S00 include 2 enclosed contacts.

They are suitable in particular for switching small voltages and currents (hard gold-plated contacts) and for operation in dusty atmospheres. The NC auxiliary contacts are not mirror contacts.

All the previously mentioned auxiliary switch variants can be snap-fitted onto the front of the contactor. The auxiliary switch block has a centrally positioned release lever for disassembly.

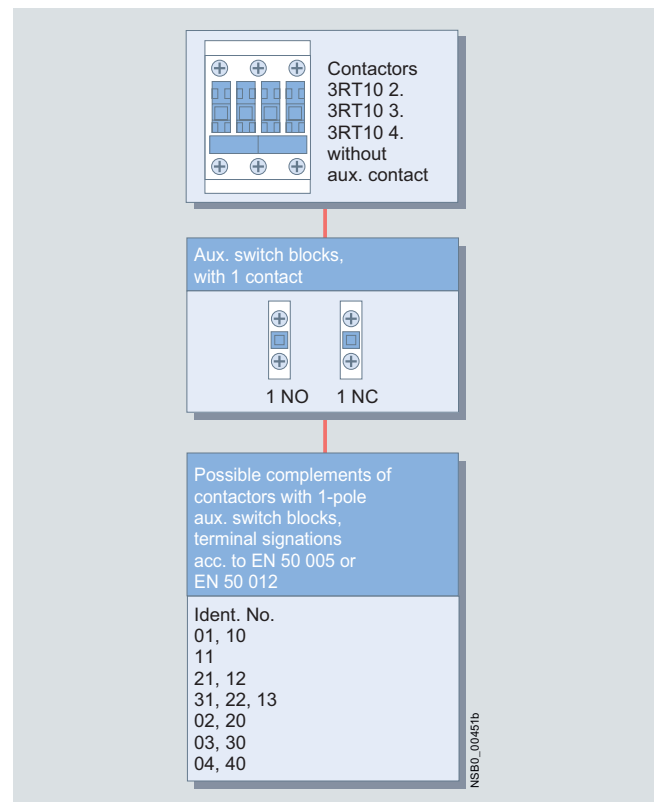
Sizes S0 to S12

Terminal designations according to EN 50005 or EN 50012

One 4-pole or up to four single-pole auxiliary switch blocks (screw or spring-type connections) can be snapped on. When the contactors are switched on, the NC contacts are opened first and then the NO contacts are closed.

Also available are 2-pole auxiliary switch blocks (screw terminals) for cable entry from above or below in the design of a quad block (feeder auxiliary switch).

If the installation space is limited in depth, 2-pole auxiliary switch blocks (screw or spring-type connections) can be attached laterally (on the left or on the right).



1-pole auxiliary switch blocks for 3RT1 contactors

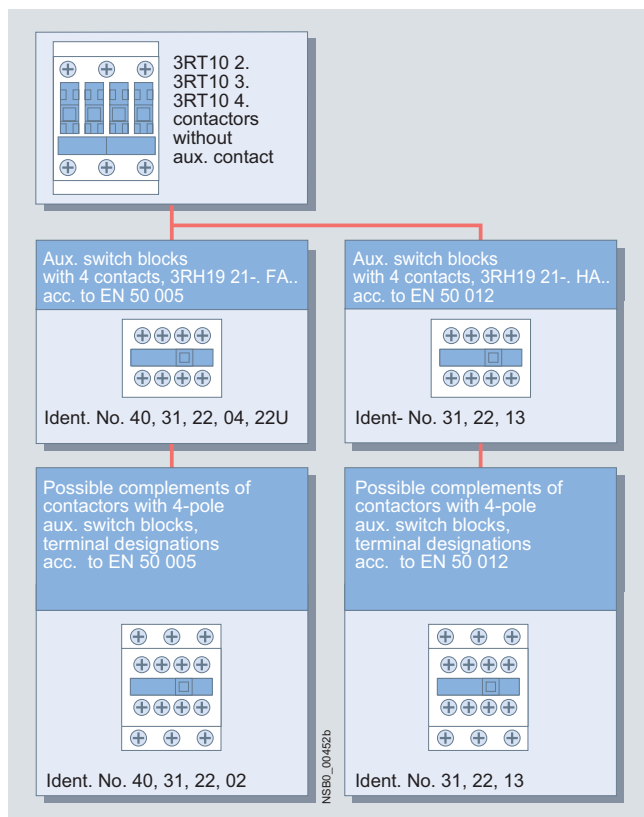
The terminal designations of the single-pole auxiliary switch blocks are comprised of Ident. Nos. (location identifiers) on the basic unit and of function numbers on the auxiliary switch blocks.

The terminal designations of the individual auxiliary switch blocks correspond to EN 50005 or EN 50012, those of the complete contactors with auxiliary switch block 2 NO + 2 NC correspond to EN 50012.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data



4-pole auxiliary switch blocks for 3RT1 contactors

The auxiliary switch blocks attached to the front can be disassembled with the help of a centrally arranged release lever; the laterally attached auxiliary switch blocks are easy to remove by pressing on the checkered surfaces.

The laterally mountable auxiliary switch blocks according to EN 50012 can be used only when no 4-pole auxiliary switch blocks are snapped onto the front. If single-pole auxiliary switch blocks are used in addition, the location identifiers on the contactor must be noted.

Two enclosed and two standard contacts are available with the 3RH19 21-.FE22 solid-state compatible auxiliary switch block, which can be attached to the front. The 3RH19 21-2DE11 laterally mountable auxiliary switch block contains 2 enclosed contacts (1 NO + 1 NC). The enclosed contacts are suitable in particular for switching small voltages and currents (hard gold-plated contacts) and for operation in dusty atmospheres. The NC auxiliary contacts are mirror contacts.

Sizes S0 and S2

A maximum of 4 auxiliary contacts can be attached; the auxiliary switch blocks used can be of any version. For reasons of symmetry, when two 2-pole laterally mountable auxiliary switch blocks are used, one block must be attached on the right and one on the left.

More auxiliary contacts are permissible with size S2 under certain conditions (please ask).

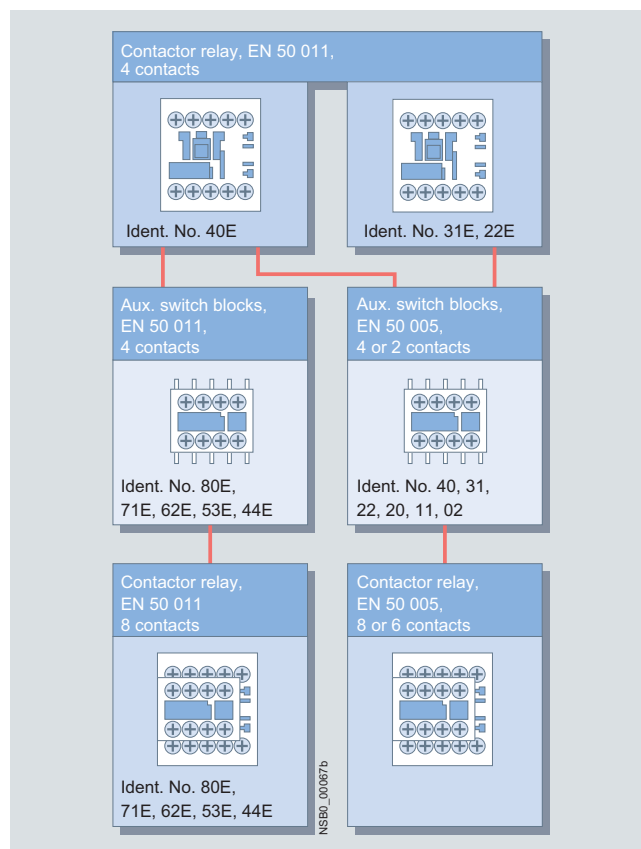
Sizes S3 to S12

A maximum of 8 auxiliary contacts can be attached; please note the following:

- Of these 8 auxiliary contacts, there must be no more than 4 NC contacts
- Ensure the symmetry of laterally mounted auxiliary switch blocks

3RH1 contactor relays

The 3RH1 contactor relays can be expanded by up to four contacts by the addition of snap-on auxiliary switch blocks.



4-pole auxiliary switch blocks for 3RH1 contactor relays

The contactor relays with 4 contacts according to EN 50011, with the Ident. No. 40E, can be extended with 80E to 44E auxiliary switch blocks to obtain contactor relays with 8 contacts according to EN 50011. The Ident. Nos. 80E to 44E on the auxiliary switch blocks apply to the complete contactors. These auxiliary switch blocks (3RH19 11-1GA ..) cannot be combined with contactor relays with Ident. Nos. 31E and 22E; they are coded.

All contactor relays with 4 contacts according to EN 50011, Ident. Nos. 40E to 22E, can be extended with auxiliary switch blocks 40 to 02 to obtain contactor relays with 6 or 8 contacts in accordance with EN 50005. The Ident. Nos. on the auxiliary switch blocks apply only to the attached auxiliary switch blocks.

In addition, fully mounted 3RH12 8-pole contactor relays are available; the mounted 4-pole auxiliary switch block in the 2nd tier is not removable. The terminal designations are according to EN 50011.

These 8-pole versions are built according to special Swiss regulations "SUVA" and are distinguished externally by a red labeling plate.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data

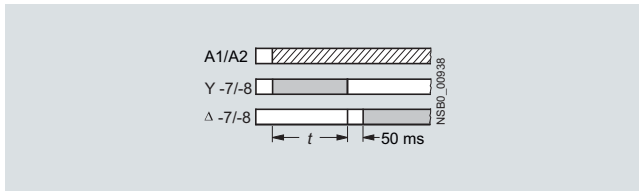
Solid-state time-delay auxiliary switch blocks

The solid-state, time-delay auxiliary switch block is fitted onto the front side of the contactor.

The timer module, which is available in the "ON-DELAY" and "OFF-DELAY" versions, allows time-delayed functions up to 100 s (3 delay ranges). It contains a relay with one NO contact and one NC contact; depending on the version, the relay is switched either after an ON-delay or after an OFF-delay.

The timer module with "WYE-DELTA FUNCTION" is equipped with one delayed and one instantaneous NO contact, with a dead time of 50 ms between the two. The delay time of the NO contact can be adjusted between 1.5 s and 30 s.

Wye-delta function



The contactor on which the solid-state time-delay auxiliary switch block is mounted operates without a delay.

Size S00

The timer module is supplied with power directly by plug-in contacts through the coil terminals of the contactor, in parallel with A1/A2. The timing function is activated by closing the contactor on which the auxiliary switch block is mounted. The OFF-delay version operates without an auxiliary voltage; minimum ON period: 200 ms.

A varistor is integrated in the timer module in order to damp opening surges in the contactor coil.

The solid-state time-delay auxiliary switch block cannot be mounted on size S00 coupling contactors.

Sizes S0 to S12

The timer module is supplied with power through two terminals (A1/A2); the time delay of the auxiliary switch block can be activated either by a parallel link to any contactor coil or by any power source.

The OFF-delay version operates without an auxiliary voltage; the minimum ON period is 200 ms.

A single-pole auxiliary switch block can be snapped onto the front of the contactor in addition to the timer module.

The timer module has no integrated components for overvoltage damping.

Solid-state time-delay blocks with semiconductor output

The timer module in the "ON-DELAY" and "OFF-DELAY with auxiliary voltage" versions allows time-delayed functions up to 100 s (3 delay ranges). Contactors fitted with a timing relay block close or open after a delay according to the set time.

The timing relays are suitable for both AC and DC operation.

A varistor is integrated in the timer module in order to damp opening surges in the contactor coil.

Size S00

The version for size S00 contactors is fitted onto the front of the contactor (with the control supply voltage switched off) and then slid into its latched position; at the same time, the timing relay is connected by means of plug-in contacts to coil terminals A1 and A2 of the contactor. Any contactor coil terminals which are not required are sealed off by means of covers on the enclosure of the timing relay block, to prevent them from being connected inadvertently.

The solid-state, timing relay block cannot be mounted on size S00 coupling contactors.

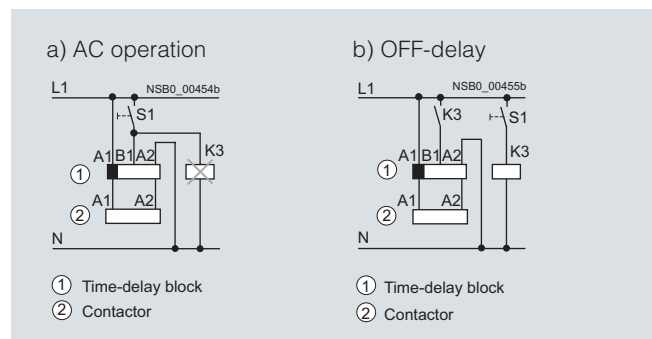
Sizes S0 to S3

The timing relay block for size S0 to S3 contactors is plugged into coil terminals A1 and A2 on top of each contactor; the timing relay is connected both electrically and mechanically by means of pins.

Configuration

The ON-delay variant of the timing relay is connected in series with the contactor coil; terminal A1 of this coil must not be connected.

With the OFF-delay variant of the timing relay, the contactor coil is contacted directly through the relay; terminals A1 and A2 of the contactor coil must not be connected.



The activation of loads parallel to the start input is not permissible when using AC control voltage (see (a) in the circuit diagram).

The 3RT19 26-2D... OFF-delay timing relay blocks have a zero potential start input B1. This means that if there is a parallel load on terminal B1, activation can be simulated with AC voltage. In this case, the additional load (e. g. contactor K3) must be wired (see (b) in the drawing).

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data

OFF-delay device for size S00 to S3 contactors

AC and DC operation

IEC 60947, EN 60947

For screw and snap-on mounting onto TH 35 standard mounting rail. The OFF-delay devices have screw terminals.

The OFF-delay device prevents a contactor from dropping out unintentionally when there is a short-time voltage dip or voltage failure. It supplies a downstream, DC-operated contactor with the necessary energy during a voltage dip, ensuring that the contactor does not trip. The 3RT19 16 OFF-delay devices are specifically designed for operation with the 3RT contactors and 3RH contactor relays of the SIRIUS series.

The OFF-delay device operates without external voltage on a capacitive basis, and can be energized with either AC or DC (24 V version only for DC operation). Voltage matching, which is only necessary with AC operation, is performed using a rectifier bridge.

A contactor opens after a delay when the capacitors of the solenoid coil, built into the OFF-delay device, are switched in parallel. In the event of voltage failures, the capacitors are discharged via the solenoid coil and thereby delay the opening of the contactor.

If the command devices are upstream of the OFF-delay device in the circuit, the OFF-delay takes effect with every opening operation. If the opening operation is downstream of the OFF-delay device, an OFF-delay only applies in the event of failure of the mains voltage.

Operation

In the case of the versions for rated control supply voltages of 110 V and 230 V, either AC voltage or DC voltage can be applied on the line side, whereas the variant for 24 V is designed for DC operation only.

A DC-operated contactor is connected to the output in accordance with the input voltage that is applied.

The mean value of the OFF-delay is approximately 1.5 times the specified minimum time.

Surge suppressors

- Without LED (also for spring-type terminals)
Sizes S00, S0, S2, S3, S6 to S12
- With LED (also for spring-type terminals)
Size S00

All 3RT1 contactors and 3RH1 contactor relays can be retrofitted with RC elements or varistors for damping opening surges in the coil. Diodes or diode assemblies (comprising noise suppression diodes and Zener diodes for short break times) can be used.

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.

With all size S0 to S3 contactors, varistors, RC elements and diode assemblies can be plugged on directly at the coil terminals, either on the top or underneath.

The plug-in direction of the diodes and diode assemblies is determined by a coding device.

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

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).

Additional load modules

The module is available for size S00 and is plugged onto the front of the contactors with and without auxiliary switch block.

Coupling links for mounting on contactors of sizes S0 to S3

DC operation

IEC 60947, EN 60947

The coupling link is suitable for use in any climate. It is finger-safe according to EN 50274. The terminal designations comply with EN 50005.

System-compatible operation with 24 V DC, operating range 17 to 30 V.

Low power consumption in conformity with the technical specifications of the solid-state systems. An LED indicates the switching state.

Surge suppression

The 3RH19 24-1GP11 coupling link has an integrated surge suppressor (varistor) for the contactor coil being switched.

Mounting

The 3RH19 24-1GP11 coupling link is mounted directly on the contactor coil.

Solder pin adapters

The solder pin adapters for the size S00 contactors are available in two versions:

- Solder pin adapters for contactors with one integrated auxiliary contact
- Solder pin adapters for contactors with mounted 4-pole auxiliary switch block

Screw adapters

Plug-on adapters improve the accessibility of the screw connection for size S0 contactors. As a result it is possible to position the screwdriver vertically even when using insulated screwdrivers or power screwdrivers.

Optionally the adapters can be rotated through 90° before mounting.

Sealable covers for sizes S2 to S12

When contactors and contactor relays are used in safety-oriented applications, it must be ensured that it is impossible to operate the contactors manually.

For SIRIUS contactors there are sealable covers available for this purpose as accessories; these prevent accidental manual operation. These are transparent molded-plastic caps with a bracket that enables the contactor to be sealed.

Power Contactors for Switching Motors

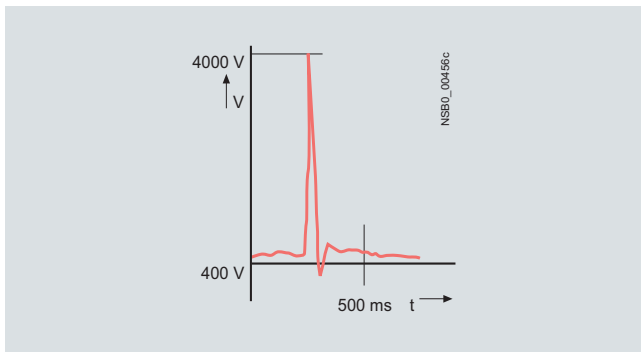
Accessories for 3RT1 contactors

General data

EMC suppression module, three-phase (size S00)



What is known as a counter-e.m.f. (electromotive force) is produced when motors or various inductive loads are turned off. Voltage peaks of up to 4000 V may occur as a result, with a frequency spectrum from 1 kHz to 10 MHz and a rate of voltage variation from 0.1 to 20 V/ns.



Capacitive input to various analog and digital signals makes it necessary to suppress interference in the load circuit.

Reducing contact arcing

The connection between the main current path and the EMC suppression module enables contact arcing, which is responsible for contact erosion and the majority of clicking noises, to be reduced; this in turn is conducive to an electromagnetically compatible design.

Higher operational reliability

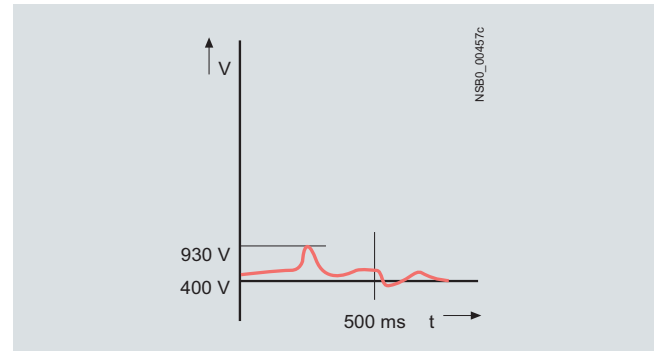
Since the EMC suppression module achieves a significant reduction in radio-frequency components and the voltage level in three phases, the contact endurance is also improved considerably. This makes an important contribution towards enhancing the reliability and availability of the system as a whole.

Dispensing with fine graduations

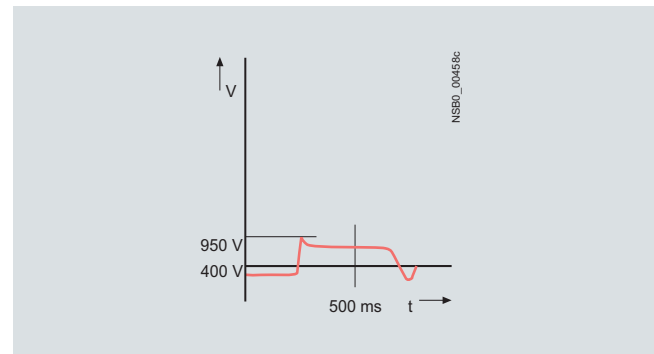
There is no need for fine graduations within each performance class, as smaller motors inherently have a higher inductance, so that one solution for all fixed-speed operating mechanisms up to 5.5 kW is adequate.

Two electrical versions are available:

- The advantages of the RC circuit lie mainly in the reduction in the rate of rise and in its RF damping ability. The selected values ensure effective interference suppression over a wide range.



- The varistor circuit can absorb a high energy level and can also be used for frequencies ranging from 10 to 400 Hz (closed-loop controlled operating mechanisms). There is no limiting below the knee-point voltage, however.



Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data

Circuit diagrams

Function	Function chart	Circuit diagrams
Solid-state time-delay auxiliary switch blocks		
With ON-delay 1 NO + 1 NC	3RT19 16-2E, 3RT19 26-2E 	
OFF-delay without auxiliary voltage 1 NO + 1 NC	3RT19 16-2F, 3RT19 26-2F 	
OFF-delay, with auxiliary voltage 1 CO contact	3RT19 16-2L 	
Wye-delta function 1 NO delayed, 1 NO instantaneous, dead time 50 ms	3RT19 26-2G, 3RT19 26-2G 	
Solid-state time-delay blocks		
ON-delay, two-wire version 1 NO contact (semiconductor output)	3RT19 16-2C 	
ON-delay, two-wire version 1 NO contact (semiconductor output)	3RT19 26-2C 	
OFF-delay, with auxiliary voltage 1 NO contact (semiconductor output)	3RT19 16-2D, 3RT19 26-2D 	

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

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- and 4-pole auxiliary switch blocks
 for assembling contactors with 2, 4 and 5 auxiliary
 contacts

3RT1. 1,
 Ident. No. 10

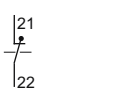
01 → 11

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1

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3RH19 11-1HA01



3RH19 11-2HA01

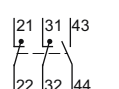
12 → 22

1

2

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3RH19 11-1HA12



3RH19 11-2HA12

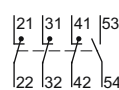
13 → 23

1

3

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3RH19 11-1HA13



3RH19 11-2HA13

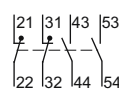
22 → 32

2

2

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3RH19 11-1HA22



3RH19 11-2HA22

Sizes S0 to S3¹⁾

4-pole auxiliary switch blocks

3RT1. 2,
 3RT1. 3,
 3RT1. 4

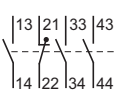
31

3

1

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3RH19 21-1HA31



3RH19 21-2HA31

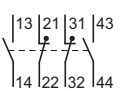
22

2

2

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3RH19 21-1HA22



3RH19 21-2HA22

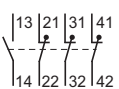
13

1

3

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3RH19 21-1HA13



3RH19 21-2HA13

Sizes S0 to S12²⁾

4-pole auxiliary switch blocks

3RT1. 3 ...
 3RT1. 7

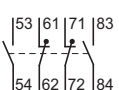
22

2

2

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B

3RH19 21-1XA22-0MA0

D

3RH19 21-2XA22-0MA0

Multi-unit packing and reusable packaging see Catalog IC 10 ·
 2012, "Appendix" → "Ordering Notes", number of units on re-
 quest.

¹⁾ Exception: 3RT16.

²⁾ Exception: 3RT12, 3RT16.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

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						
											
Type				NO	NC	NO	NC				

Auxiliary switch blocks for snapping onto the front according to EN 50005

Size S00

2- and 4-pole auxiliary switch blocks for assembling contactors with 3 and 5 auxiliary contacts

3RT1, 1, 3RH11, 3RH14	20	2	0	--	--	53 63	▶	3RH19 11-1FA20	▶	3RH19 11-2FA20
	11	1	2	--	--	54 64	▶	3RH19 11-1FA11	▶	3RH19 11-2FA11
	02	--	2	--	--	53 61	▶	3RH19 11-1FA02	▶	3RH19 11-2FA02
	11U	--	--	1	1	54 62	▶	3RH19 11-1FB11	A	3RH19 11-2FB11
	40	4	--	--	--	51 61	▶	3RH19 11-1FA40	▶	3RH19 11-2FA40
	31	3	1	--	--	52 62	▶	3RH19 11-1FA31	▶	3RH19 11-2FA31
	22	2	2	--	--	57 65	▶	3RH19 11-1FA22	▶	3RH19 11-2FA22
	22U	--	--	2	2	58 66	▶	3RH19 11-1FC22	▶	3RH19 11-2FC22
	11, 11U	1	1	1	1	53 63 73 83	▶	3RH19 11-1FB22	B	3RH19 11-2FB22

1- and 2-pole auxiliary switch blocks, terminals on one side

• Cable entry from above

3RT1, 1, 3RH11, 3RH14	--	1	--	--	--	51	▶	3RH19 11-1AA10	--
	--	--	1	--	--	52	▶	3RH19 11-1AA01	--
	--	1	1	--	--	51	▶	3RH19 11-1LA11	--
	--	2	--	--	--	52	▶	3RH19 11-1LA20	--

Multi-unit packing and reusable packaging see Catalog IC 10 · 2012, "Appendix" → "Ordering Notes", number of units on req.

Power Contactors for Switching Motors

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								

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	--	--	--	51	▶	3RH19 11-1BA10	--
	--	--	1			52	▶	3RH19 11-1BA01	--
	--	1	1			53 61	▶	3RH19 11-1MA11	--
	--	2	-			54 62 53 63 54 64	▶	3RH19 11-1MA20	--

Sizes S0 to S3¹⁾

4-pole auxiliary switch blocks

3RT1.. 3, 3RT1.. 4	40	4	--	--	--	13 23 33 43	▶	3RH19 21-1FA40	▶	3RH19 21-2FA40
	31	3	1	--	--	14 24 34 44	▶	3RH19 21-1FA31	▶	3RH19 21-2FA31
	22	2	2	--	--	13 23 31 41	▶	3RH19 21-1FA22	▶	3RH19 21-2FA22
	04	--	4	--	--	14 24 32 42	▶	3RH19 21-1FA04	A	3RH19 21-2FA04
	22 U	--	--	2	2	11 21 31 41 12 22 32 42 17 27 35 45 18 28 36 46	▶	3RH19 21-1FC22	A	3RH19 21-2FC22

Multi-unit packing and reusable packaging see Catalog IC 10 · 2012, "Appendix" → "Ordering Notes", number of units on request.

¹⁾ Exception: 3RT16.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

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 S3¹⁾

2-pole auxiliary switch blocks, terminals on one side
 • Cable entry from above

3RT1. 3,
3RT1. 4

11

1

1

--

--



3RH19 21-1LA11

--

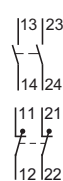
20

2

--

--

--



3RH19 21-1LA20

--

02

--

2

--

--



3RH19 21-1LA02

--

• Cable entry from below

3RT1. 3,
3RT1. 4

11

1

1

--

--



3RH19 21-1MA11

--

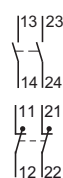
20

2

--

--

--



3RH19 21-1MA20

--

02

--

2

--

--



3RH19 21-1MA02

--

Sizes S0 to S12²⁾

1-pole auxiliary switch blocks
 according to EN 50005 and EN 50012

3RT1. 3 ...
3RT1. 7

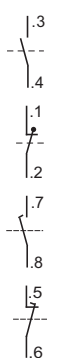
10

1

--

--

--



3RH19 21-1CA10



3RH19 21-2CA10

01

--

1

--

--



3RH19 21-1CA01



3RH19 21-2CA01

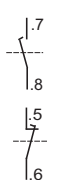
10

--

--

1

--



3RH19 21-1CD10

--

01

--

--

--

1



3RH19 21-1CD01

--

¹⁾ Exception: 3RT16.

²⁾ Exception: 3RT12, 3RT16

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

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



3RH19 21-1.A11



3RH19 21-2.A11

For contactors	Auxiliary contacts	DT	Screw terminals	DT	Spring-type terminals
	Version				
Type	NO NC		Order No. Price € per PU		Order No. Price € per PU

Laterally mountable auxiliary switch blocks according to EN 50012

Sizes S0 to S3		Mounting:	Left	Right		
			First laterally mountable auxiliary switch block, 2-pole			
3RT1. 3, 3RT1. 4	1 1				▶ 3RH19 21-1DA11	▶ 3RH19 21-2DA11
Sizes S3 ... S12		Mounting:	Left	Right		
			Second laterally mountable auxiliary switch block, 2-pole			
3RT1. 4 ... 3RT1. 7	1 1				▶ 3RH19 21-1JA11	▶ 3RH19 21-2JA11

Laterally mountable auxiliary switch blocks according to EN 50005

Sizes S3 to S12		Mounting:	Left	Right		
			First laterally mountable auxiliary switch block, 2-pole			
3RT1. 3 ... 3RT1. 7	2 --				▶ 3RH19 21-1EA20	▶ 3RH19 21-2EA20
	1 1				▶ 3RH19 21-1EA11	--
	-- 2				▶ 3RH19 21-1EA02	▶ 3RH19 21-2EA02
Sizes S3 to S12		Mounting:	Left	Right		
			Second laterally mountable auxiliary switch block, 2-pole			
3RT1. 4 ... 3RT1. 7	2 --				▶ 3RH19 21-1KA20	D ▶ 3RH19 21-2KA20
	1 1				▶ 3RH19 21-1KA11	--
	-- 2				▶ 3RH19 21-1KA02	D ▶ 3RH19 21-2KA02

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

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



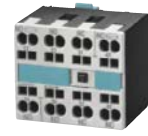
3RH19 21-2DE11,
3RH19 21-2JE11







3RH19 11-1NF..



3RH19 21-1FE22



3RH19 21-2FE22

For contactors	Contacts	DT	Screw terminals	DT	Spring-type terminals	
	Version		Order No.	Price € per PU	Order No.	Price € per PU
	   					
Type	NO NO ¹⁾ NC ¹⁾ NC					

Solid-state compatible auxiliary switch blocks

- For operation in dusty atmospheres
- For solid-state circuits with rated operational currents I_e /AC-14 and DC-13 of 1 ... 300 mA at 3 ... 60 V
- Hard gold-plated contacts
- Mirror contacts acc. to EN 60947-4-1, Appendix F

Auxiliary switch blocks for snapping onto the front according to EN 50005

Size S00

3RT1.. 1..,
3RH11,
3RH14

1	--	--	1
2	--	--	--
--	--	--	2

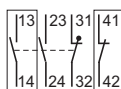


► 3RH19 11-1NF11	A	3RH19 11-2NF11
► 3RH19 11-1NF20	A	3RH19 11-2NF20
A 3RH19 11-1NF02	A	3RH19 11-2NF02

Sizes S0 to S3

3RT1.. 3 ...
3RT1.. 7

1	1	1	1
---	---	---	---



► 3RH19 21-1FE22	B	3RH19 21-2FE22
------------------	---	----------------

Laterally mountable auxiliary switch blocks according to EN 50012

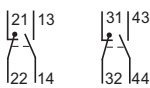
Sizes S0 to S12

Mounting: Left Right

First laterally mountable auxiliary switch block, 2-pole

3RT1.. 3 ...
3RT1.. 7

1	--	--	1
---	----	----	---



--	►	3RH19 21-2DE11
----	---	----------------

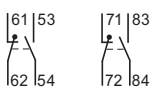
Sizes S3 to S12

Left Right

Second laterally mountable auxiliary switch block, 2-pole

3RT1.. 4 ...
3RT1.. 7

1	--	--
---	----	----



--	►	3RH19 21-2JE11
----	---	----------------

¹⁾ 1 NO + 1 NC standard auxiliary switches:
[See descriptions on page 3/29.](#)

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Solid-state time-delay auxiliary switch blocks, timing relay blocks and other time-delay blocks

Selection and ordering data

For contactors	Auxiliary contacts	Rated control supply voltage U_s ¹⁾	Time setting range t	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
Type	V		s		Order No.	Price € per PU			

Solid-state time-delay auxiliary switch blocks for snapping onto the front, terminal designations according to DIN 46199-5

Size S00



3RT19 16-2....

With ON-delay³⁾

3RT1. 1, 3RH11 ²⁾ 3RH14	1 NO + 1 NC	24 AC/DC	0,05 ... 1	▶	3RT19 16-2EJ11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 16-2EJ21	1	1 unit	41H
			5 ... 100	B	3RT19 16-2EJ31	1	1 unit	41H
		100 ... 127 AC	0,05 ... 1	C	3RT19 16-2EC11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 16-2EC21	1	1 unit	41H
			5 ... 100	▶	3RT19 16-2EC31	1	1 unit	41H
		200 ... 240 AC	0,05 ... 1	D	3RT19 16-2ED11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 16-2ED21	1	1 unit	41H
			5 ... 100	▶	3RT19 16-2ED31	1	1 unit	41H

OFF-delay without auxiliary voltage³⁾⁴⁾

3RT1. 1, 3RH11 ²⁾ 3RH14	1 NO + 1 NC	24 AC/DC	0,05 ... 1	▶	3RT19 16-2FJ11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 16-2FJ21	1	1 unit	41H
			5 ... 100	▶	3RT19 16-2FJ31	1	1 unit	41H
		100 ... 127 AC/DC	0,05 ... 1	C	3RT19 16-2FK11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 16-2FK21	1	1 unit	41H
			5 ... 100	B	3RT19 16-2FK31	1	1 unit	41H
		200 ... 240 AC/DC	0,05 ... 1	D	3RT19 16-2FL11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 16-2FL21	1	1 unit	41H
			5 ... 100	▶	3RT19 16-2FL31	1	1 unit	41H

OFF-delay with auxiliary voltage (varistor integrated)

3RT10 1 3RH11 ²⁾	1 CO	24 AC/DC	0,5 ... 10	B	3RT19 16-2LJ21	1	1 unit	41H
		100 ... 127 AC	0,5 ... 10	B	3RT19 16-2LC21	1	1 unit	41H
		200 ... 240 AC	0,5 ... 10	C	3RT19 16-2LD21	1	1 unit	41H

Wye-delta function (varistor integrated)³⁾

3RT10 1 ²⁾	1 NO delayed + 1 NO instantaneous, dead time 50 ms	24 AC/DC	1,5 ... 30	▶	3RT19 16-2GJ51	1	1 unit	41H
		100 ... 127 AC	1,5 ... 30	D	3RT19 16-2GC51	1	1 unit	41H
		200 ... 240 AC	1,5 ... 30	▶	3RT19 16-2GD51	1	1 unit	41H

Sizes S0 to S12

With ON-delay⁵⁾

3RT10, 3RT13, 3RT14, 3RT15	1 NO + 1 NC	24 AC/DC	0,05 ... 1	D	3RT19 26-2EJ11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 26-2EJ21	1	1 unit	41H
			5 ... 100	A	3RT19 26-2EJ31	1	1 unit	41H
		100 ... 127 AC	0,05 ... 1	C	3RT19 26-2EC11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 26-2EC21	1	1 unit	41H
			5 ... 100	D	3RT19 26-2EC31	1	1 unit	41H
		200 ... 240 AC	0,05 ... 1	D	3RT19 26-2ED11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 26-2ED21	1	1 unit	41H
			5 ... 100	B	3RT19 26-2ED31	1	1 unit	41H

OFF-delay without auxiliary voltage⁴⁾⁵⁾

3RT10, 3RT13, 3RT14, 3RT15	1 NO + 1 NC	24 AC/DC	0,05 ... 1	▶	3RT19 26-2FJ11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 26-2FJ21	1	1 unit	41H
			5 ... 100	▶	3RT19 26-2FJ31	1	1 unit	41H
		100 ... 127 AC/DC	0,05 ... 1	D	3RT19 26-2FK11	1	1 unit	41H
			0,5 ... 10	▶	3RT19 26-2FK21	1	1 unit	41H
			5 ... 100	C	3RT19 26-2FK31	1	1 unit	41H
		200 ... 240 AC/DC	0,05 ... 1	D	3RT19 26-2FL11	1	1 unit	41H
			0,5 ... 10	A	3RT19 26-2FL21	1	1 unit	41H
			5 ... 100	A	3RT19 26-2FL31	1	1 unit	41H

Wye-delta function (varistor integrated)⁵⁾

3RT10, 3RT13, 3RT14, 3RT15	1 NO delayed + 1 NO instantaneous, dead time 50 ms	24 AC/DC	1,5 ... 30	▶	3RT19 26-2GJ51	1	1 unit	41H
		100 ... 127 AC	1,5 ... 30	▶	3RT19 26-2GC51	1	1 unit	41H
		200 ... 240 AC	1,5 ... 30	▶	3RT19 26-2GD51	1	1 unit	41H

Function diagrams and circuit diagrams [see page 3/34](#).

1) The AC voltages are valid for 50 and 60 Hz.

2) Cannot be fitted onto 3RT1 and 3RH11 coupling contactors.

3) The terminals for the control supply voltage are connected to the contactor by the integrated spring contacts of the solid-state time auxiliary switch above it when this switch is mounted.






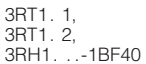
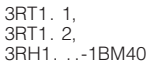
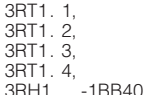

4) Setting of output contacts in as-supplied state not defined (bistable relay). Application of the control supply voltage once results in contact change-over to the correct setting.

5) Terminals A1 and A2 for the control supply voltage of the solid-state time-delay auxiliary switch must be connected to the associated contactor by means of connecting cables.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

**Solid-state time-delay auxiliary switch blocks,
timing relay blocks and other time-delay blocks**

For contactors	Rated control supply voltage $U_s^{1)}$	Time setting range t	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
Type		s		Order No.		Price € per PU		
-delay blocks with semiconductor output								
Size S00								
For mounting onto the front of contactors								
• ON-delay (varistor integrated)								
 3RT1. 1, 3RH11 ¹⁾ 3RH14	24 ... 66 AC/DC	0,05 ... 1	B	3RT19 16-2CG11		1	1 unit	41H
		0,5 ... 10	►	3RT19 16-2CG21		1	1 unit	41H
		5 ... 100	B	3RT19 16-2CG31		1	1 unit	41H
	90 ... 240 AC/DC	0,05 ... 1	D	3RT19 16-2CH11		1	1 unit	41H
		0,5 ... 10	►	3RT19 16-2CH21		1	1 unit	41H
		5 ... 100	►	3RT19 16-2CH31		1	1 unit	41H
• OFF-delay with auxiliary voltage (varistor integrated)								
 3RT1. 1, 3RH11 ¹⁾ 3RH14	24 ... 66 AC/DC	0,05 ... 1	C	3RT19 16-2DG11		1	1 unit	41H
		0,5 ... 10	B	3RT19 16-2DG21		1	1 unit	41H
		5 ... 100	B	3RT19 16-2DG31		1	1 unit	41H
	90 ... 240 AC/DC	0,05 ... 1	D	3RT19 16-2DH11		1	1 unit	41H
		0,5 ... 10	►	3RT19 16-2DH21		1	1 unit	41H
		5 ... 100	B	3RT19 16-2DH31		1	1 unit	41H
Sizes S0 to S3								
For mounting onto top-lying coil terminals, (only for contactors with screw terminals)								
• ON-delay (varistor integrated)								
 3RT10 2, 3RT10 3, 3RT10 4 ²⁾ , 3RT13, 3RT15	24 ... 66 AC/DC	0,05 ... 1	D	3RT19 26-2CG11		1	1 unit	41H
		0,5 ... 10	B	3RT19 26-2CG21		1	1 unit	41H
		5 ... 100	D	3RT19 26-2CG31		1	1 unit	41H
	90 ... 240 AC/DC	0,05 ... 1	►	3RT19 26-2CH11		1	1 unit	41H
		0,5 ... 10	►	3RT19 26-2CH21		1	1 unit	41H
		5 ... 100	►	3RT19 26-2CH31		1	1 unit	41H
• OFF-delay with auxiliary voltage (varistor integrated)								
 3RT10 2, 3RT10 3, 3RT10 4 ²⁾ , 3RT13, 3RT15	24 ... 66 AC/DC	0,05 ... 1	D	3RT19 26-2DG11		1	1 unit	41H
		0,5 ... 10	D	3RT19 26-2DG21		1	1 unit	41H
		5 ... 100	D	3RT19 26-2DG31		1	1 unit	41H
	90 ... 240 AC/DC	0,05 ... 1	C	3RT19 26-2DH11		1	1 unit	41H
		0,5 ... 10	D	3RT19 26-2DH21		1	1 unit	41H
		5 ... 100	C	3RT19 26-2DH31		1	1 unit	41H
OFF-delay devices								
Sizes S00 to S3								
 3RT1. 1, 3RT1. 2, 3RH1. ...-1BF40	110 AC/DC	S00: 130 non-adjustable	D	3RT19 16-2BK01		1	1 unit	41H
		S0: 100 non-adjustable						
 3RT1. 1, 3RT1. 2, 3RH1. ...-1BM40	220/230 AC/DC	S00: 600 non-adjustable	D	3RT19 16-2BL01		1	1 unit	41H
		S0: 400 non-adjustable						
 3RT1. 1, 3RT1. 2, 3RT1. 3, 3RT1. 4, 3RH1. ...-1BB40	24 DC	S00: 250 non-adjustable	►	3RT19 16-2BE01		1	1 unit	41H
		S0: 150 non-adjustable						
		S2: 90 non-adjustable						
Pneumatic delay block, terminal designation according to EN 50005								
Size S0								
 3RT1. 2	for mounting onto the front of contactors							
	Auxiliary contacts 1 NO and 1 NC ³⁾⁴⁾							
	• ON-delay							
	0,1 ... 30	C	3RT19 26-2PA01		1	1 unit	41B	
	1 ... 60	C	3RT19 26-2PA11		1	1 unit	41B	
	• OFF-delay							
0,1 ... 30	C	3RT19 26-2PR01		1	1 unit	41B		
1 ... 60	C	3RT19 26-2PR11		1	1 unit	41B		

Function diagrams and circuit diagrams [see page 3/34](#).

¹⁾ Cannot be fitted onto 3RT1 and 3RH11 coupling contactors.

²⁾ Not to be used for 3RT10 4. and 3RT13 4. contactors with $U_s \leq 42$ V.

³⁾ In addition to these, no other auxiliary contacts are permitted.

⁴⁾ Versions according to DIN VDE 0116 on request.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Surge suppressors

Selection and ordering data

For contactors	Version	Rated control supply voltage $U_s^{1)}$		Power consumption of LED at U_s	DT	Order No. ²⁾	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type		V AC	V DC	mW						

Surge suppressors with LED

Size S00 (also for spring-type terminals)

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



3RT19 16-1L.00

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.

For contactors	Version	Rated control supply voltage $U_s^{1)}$			DT	Order No. ²⁾	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type		V AC	V DC							

Surge suppressors without LED

Size S00 (also for spring-type terminals)

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



3RT19 16-1DG00

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

For fitting onto the coil terminals at top or bottom



3RT19 26-1B.00

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	--	24	▶	3RT19 26-1ER00	1	1 unit	41B
		(e. g. for contactor with over-load relay)	--	30 ... 250	▶	3RT19 26-1ES00	1	1 unit	41B
		• Connectable at the bottom	--	24	▶	3RT19 26-1TR00	1	1 unit	41B
		(e. g. for fuseless load feeders)	--	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".

Power Contactors for Switching Motors

Accessories for 3RT1 contactors






Surge suppressors

For contactors	Version	Rated control supply voltage U_s ¹⁾		DT	Order No. ²⁾	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type		AC operation	DC operation						
		V AC	V DC						

Surge suppressors without LED




Sizes S2 and S3 (also for spring-type terminals)

For fitting onto the coil terminals at top or bottom

	3RT1. 3, 3RT1. 4		Varistor	24 ... 48 48 ... 127 127 ... 240 240 ... 400 400 ... 600	24 ... 70 70 ... 150 150 ... 250 --	▶ ▶ ▶ ▶ B	3RT19 26-1BB00 3RT19 26-1BC00 3RT19 26-1BD00 3RT19 26-1BE00 3RT19 26-1BF00	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	41B 41B 41B 41B 41B
	3RT1. 3 ³⁾ , 3RT1. 4		RC elements	24 ... 48 48 ... 127 127 ... 240 240 ... 400 400 ... 600	24 ... 70 70 ... 150 150 ... 250 --	▶ ▶ ▶ ▶ B	3RT19 36-1CB00 3RT19 36-1CC00 3RT19 36-1CD00 3RT19 36-1CE00 3RT19 36-1CF00	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	41B 41B 41B 41B 41B
	3RT1. 3, 3RT1. 4		Diode assembly for DC operation							
			• Connectable at the top (e. g. for contactor with over-load relay)	-- --	24 30 ... 250	▶ ▶	3RT19 36-1ER00 3RT19 36-1ES00	1 1	1 unit 1 unit	41B 41B
			• Connectable at the bottom (e. g. for fuseless load feeders)	-- --	24 30 ... 250	▶ B	3RT19 36-1TR00 3RT19 36-1TS00	1 1	1 unit 1 unit	41B 41B

Sizes S6 ... S12

For connecting to withdrawable coil with screw terminals for contactors with
 • conventional operating mechanism 3RT1. ...A...
 • solid-state operating mechanism 3RT1. ...N...

 3RT19 56-1C.00	3RT1. 5, 3RT1. 6, 3RT1. 7 	RC elements	24 ... 48	24 ... 70	▶	3RT19 56-1CB00	1	1 unit	41B
			48 ... 127	70 ... 150	▶	3RT19 56-1CC00	1	1 unit	41B
			127 ... 240	150 ... 250	▶	3RT19 56-1CD00	1	1 unit	41B
			240 ... 400	--	▶	3RT19 56-1CE00	1	1 unit	41B
			400 ... 600	--	C	3RT19 56-1CF00	1	1 unit	41B
3RT1. 5, 3RT1. 6, 3RT1. 7 		RC elements	24 ... 48	24 ... 70	▶	3RT19 56-1CB02	1	1 unit	41B
			48 ... 127	70 ... 150	▶	3RT19 56-1CC02	1	1 unit	41B
			127 ... 240	150 ... 250	▶	3RT19 56-1CD02	1	1 unit	41B
			240 ... 400	--	▶	3RT19 56-1CE02	1	1 unit	41B
			400 ... 600	--	C	3RT19 56-1CF02	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.

³⁾ For 3RT1. 3 with AC operation mountable only at the top.

For contactors	Version	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Type			Order No.	Price € per PU		

Main current path surge suppression modules for 3RT12 vacuum contactors

Size S10 and S12

3RT12	For damping overvoltages and protecting motor windings against multiple re-ignition when switching off induction motors. For connection on the contactor feeder side (2-T1/4-T2/6-T3). For separate installation. Rated operational voltage U_e = 690 V AC Rated operational voltage U_e = 1000 V AC	C	3RT19 66-1PV3	73,10	1	1 unit	41B
			3RT19 66-1PV4	107,—	1	1 unit	41B

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Miscellaneous accessories

Selection and ordering data

For contactors	Rated control supply voltage U_s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Type	V		Order No.	Price € per PU		

Mechanical latching blocks



3RT19 26-3A.31

Sizes S0 and S2

For mounting on 1 contactor¹⁾

The contactor remains in the energized state even after a voltage failure

3RT1. 3	24 AC/DC 110 AC/DC 230 AC/DC	A B B	3RT19 26-3AB31 3RT19 26-3AF31 3RT19 26-3AP31	1 1 1	1 unit 1 unit 1 unit	41B 41B 41B
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¹⁾ Two front-mounted auxiliary switch blocks can be mounted in addition.

For contactors	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type							

EMC suppression modules; 3-phase ≤ 5.5 kW

Size S00 (for contactors with AC or DC operation)¹⁾



3RT19 16-1PA.

3RT10 1	RC elements (3 x 220 Ω/0.22 μF) Up to 400 V Up to 575 V Up to 690 V	► ► C	3RT19 16-1PA1 3RT19 16-1PA2 3RT19 16-1PA3	1 1 1	1 unit 1 unit 1 unit	41B 41B 41B
3RT10 1	Varistor Up to 400 V Up to 575 V Up to 690 V	A B D	3RT19 16-1PB1 3RT19 16-1PB2 3RT19 16-1PB3	1 1 1	1 unit 1 unit 1 unit	41B 41B 41B

Additional load modules

Size S00 (also for spring-type terminals)

For plugging onto the front side of the contactors with and without auxiliary switch blocks²⁾



3RT19 16-1GA00

3RT1. 1, 3RH1.	For increasing the permissible residual current and for limiting the residual voltage. Ensures safe opening of contactors with direct control via 230 V AC semiconductor outputs of SIMATIC controllers. Also performs the function of an overvoltage damping circuit. Rated voltage: AC 50/60 Hz, 180 V to 255 V. Operating range: 0.8 to 1.1 x U_s	►	3RT19 16-1GA00	1	1 unit	41B
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Control kit

Size S00



3RK1 903-0CA00

3RT1. 1, 3RH1.	For manual operation of the contactor contacts for start-up and service	A	3RK1 903-0CA00	1	1 unit	42D
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¹⁾ See also description on page 3/33.

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

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Miscellaneous accessories

For contactors	Version	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Type	V		Order No.	Price € per PU		

Coupling links (interfaces) for control by PLC

Sizes S0 to S3



3RT1. 2,
3RT1. 3,
3RT1. 4

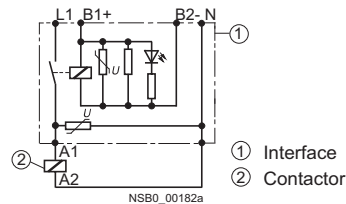
For mounting onto the coil terminals of the contactors With LED for indicating switching state

Operating range 17 ... 30 V DC
Power consumption: 0.5 W at 24 V DC
Permissible residual current of the electronics
(with 0 signal): 2.5 mA

Rated operational current I_{ϕ} :

- AC-15/AC-14 at 230 V: 3 A
- DC-13 at 230 V: 0.1 A

With integrated varistor for damping opening surges.



▶ **3RH19 24-1GP11**

1 1 unit 41B

For contactors	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type							

LED modules for indicating contactor operation

Sizes S0 to S12¹⁾ (also for spring-type terminals)



3RT1. 2 ...
3RT1. 7

For snapping into the location hole of an inscription label on the front of a contactor either directly on the contactor or on the front auxiliary switch.

The LED module is connected to coil terminals A1 and A2 of the contactor and indicates its energized state. Yellow LED.

Rated voltage:

24 ... 240 V AC/DC with reverse polarity protection.

(1 pack = 5 units)

B **3RT19 26-1QT00**

1 5 units 41B

Auxiliary terminals, 3-pole

Size S3



3RT10 4.

For connection of auxiliary and control cables (0.5 to 2.5 mm²) to the main conductor connections (for one side)

B **3RT19 46-4F**





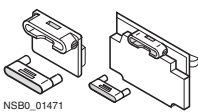
1 1 unit 41B

¹⁾ For sizes S6 to S12 the connecting leads have to be extended.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Miscellaneous accessories

For contactors		Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Size	Type							
Box terminal blocks								
	S6	3RT1. 5 (3RB20 5)	For round and ribbon cables ¹⁾					
			Up to 70 mm ² ²⁾	▶ 3RT19 55-4G	1	1 unit	41B	
			Up to 120 mm ²	▶ 3RT19 56-4G	1	1 unit	41B	
				Auxiliary conductor connection for box terminals	B 3TX7 500-0A	1	1 unit	41B
3RT19 5-4G	S10, S12	3RT1. 6, 3RT1. 7 (3RB20 6, 3RB21 6)	Up to 240 mm ² With auxiliary conductor connection	▶	3RT19 66-4G	1	1 unit	41B
Covers								
	S2	3RT10 3 3RT13 3, 3RT15 3	Terminal covers for box terminals (additional touch protection) To be fitted at the box terminals (2 units required per contactor)					
			--	▶ 3RT19 36-4EA2	1	1 unit	41B	
				For 4-pole contactors	B 3RT19 36-4EA4	1	1 unit	41B
	S3	3RT10 4, 3RT14 4 3RT13 4	--	▶ 3RT19 46-4EA2	1	1 unit	41B	
			For 4-pole contactors	B 3RT19 46-4EA4	1	1 unit	41B	
		S6 ³⁾	3RT1. 5	Length: 25 mm	▶ 3RT19 56-4EA2	1	1 unit	41B
	S10, S12 ³⁾	3RT1. 6, 3RT1. 7	Length: 30 mm	▶ 3RT19 66-4EA2	1	1 unit	41B	
			Terminal covers for cable lug and busbar connection ³⁾ For complying with the phase clearances and as touch protection if box terminal is removed (2 units required per contactor)					
	S3	3RT10 4, 3RT14 4	--	▶ 3RT19 46-4EA1	1	1 unit	41B	
	S6	3RT1. 5	Length: 100 mm	▶ 3RT19 56-4EA1	1	1 unit	41B	
	S10/S12	3RT1. 6, 3RT1. 7	Length: 120 mm	▶ 3RT19 66-4EA1	1	1 unit	41B	
				Can be screwed on free screw end; covers one busbar connection (1 set = 6 units)				
		S6	3RT1. 5	M8	B 3TX6 526-3B	1	1 unit	41B
		S10, S12	M10	B 3TX6 546-3B	1	1 unit	41B	
				For busbar cover between contactor and 3RB2 overload relay or wiring module for contactor assemblies				
	S6	3RT1. 5 3RT1. 6, 3RT1. 7	Length: 27 mm	▶ 3RT19 56-4EA3	1	1 unit	41B	
			Length: 42 mm	▶ 3RT19 66-4EA3	1	1 unit	41B	
				For busbar cover of the flat line connectors for reversing and wye-delta assemblies				
	S6	3RT1. 5	Length: 38 mm	▶ 3RT19 56-4EA4	1	1 unit	41B	
Sealable covers								
	S00	3RT1. 1... 3RH1. ⁵⁾	Sealable covers for preventing manual operation	C	3RT19 16-4MA10	1	5 units	41B
	S0 ... S12	3RT1. 3 3RT1. 7 ⁵⁾	1 unit required per contactor	C	3RT19 26-4MA10	1	5 units	41B
	NSB0_01471 3RT19 .6-4MA10							

¹⁾ Connectable cross-sections of the contactors see "Technical Specifications".

²⁾ As standard for 3RT10 54-1 contactor (55 kW).

³⁾ Also fits on contactors S6 to S12 with box terminals.

⁴⁾ The 3RT19 66-4EA3 cover is required in addition for use in contactor assemblies (reversing/wye-delta).

⁵⁾ Exception: contactors and contactor relays auxiliary switch block mounted onto the front.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Miscellaneous accessories

For contactors	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type							

Connection modules for contactors with screw terminals

Size S00, S0



3RT19 26-4RD01

Adapters for contactors
Ambient temperature $T_{U\max} = 60\text{ °C}$

Size S00,
rated operational current I_e
at AC-3/400 V: 20 A

Size S0,
rated operational current I_e
at AC-3/400 V: 25 A

Plugs for contactors
Size S00, S0

C

Screw terminals



3RT19 16-4RD01

1

1 unit

41B

C

3RT19 26-4RD01

1

1 unit

41B



3RT19 00-4RE01

B

3RT19 00-4RE01

1

1 unit

41B

Solder pin adapters for contactors

Size S00



3RT19 16-4KA1

3RT1 . 1,
3RH11
Assembly kit for soldering contactors onto a
printed circuit board.
For 1 contactor, 1 set is required.

A

3RT19 16-4KA1

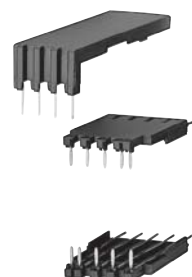
1

4 units

41B

Solder pin adapters for contactors with mounted 4-pole auxiliary switch block

Size S00



3RT19 16-4KA2

3RT1 . 1,
3RH11
Assembly kit for soldering contactors with an
auxiliary switch block onto a printed circuit
board.
For 1 contactor, 1 set is required.

B

3RT19 16-4KA2

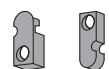
1

4 units

41B

Screw adapters for fixing the contactors

Size S0

NSB0_01470
3RT19 26-4P

3RT1 . 2
Screw adapters for easier screw fixing
2 units required per contactor
(1 pack contains 10 sets for 10 contactors)

C

3RT19 26-4P

1




10
units

41B

Power Contactors for Switching Motors




Accessories for 3RT1 contactors

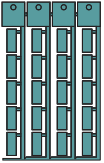
Miscellaneous accessories

For contactors			Max. conductor cross-sections	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
Size	Type	mm ²			Order No.	Price € per PU			
Links for paralleling									
	3-pole, with connecting terminal¹⁾²⁾								
	S00	3RT10 1	25	▶	3RT19 16-4BB31		1	1 unit	41B
	S0	3RT10 2	35, stranded	▶	3RT19 26-4BB31		1	1 unit	41B
	S2	3RT10 3	95	▶	3RT19 36-4BB31		1	1 unit	41B
3-pole, with through hole (star jumpers)¹⁾²⁾									
	S3	3RT10 4, 3RT14 4	185	▶	3RT19 46-4BB31		1	1 unit	41B
	S6	3RT1. 5	--	▶	3RT19 56-4BA31		1	1 unit	41B
	S10/S12	3RT1. 6, 3RT1. 7	--	▶	3RT19 66-4BA31		1	1 unit	41B
	4-pole, with connecting terminal¹⁾²⁾								
	S00	3RT10 1		C	3RT19 16-4BB41		1	1 unit	41B

¹⁾ The links for paralleling can be reduced by one pole.

²⁾ Sizes S00 to S2: The links for paralleling are insulated.
Size S3: A cover plate is included for touch protection (can only be used when the box terminal is removed).
Sizes S6 to S12: The 3RT19 56-4EA1 (for S6) or 3RT19 66-4EA1 (for S10 and S12) cover can be used for touch protection.

Version	DT	Spring-type terminals		PU (UNIT, SET, M)	PS*	PG
		Order No.	Price € per PU			
Insulation stop for securely holding back the conductor insulation on conductors up to 1 mm²						
	B	3RT19 16-4JA02	2,40	1	20 units	41B
3RT19 16-4JA02		Insulation stop strip can be inserted in cable entry of spring-type terminals (2 strips per contactor required, can be removed in pairs) For all SIRIUS devices with spring-type terminals, up to 2.5 mm ² conductor cross-section.				
Tools for opening spring-type terminal points						
	A	3RA29 08-1A		1	1 unit	41B
3RA29 08-1A		For all SIRIUS devices with spring-type terminals, for conductor cross-sections up to 2.5 mm ² . <u>Not suitable for devices with removable terminal</u> Length: approx. 200 mm, 3.0 mm x 0.5 mm, titanium gray/black, partially insulated				

Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Blank labels						
	Unit labeling plates for SIRIUS					
	C	3RT19 00-1SB10		1	816 units	41B
	D	3RT19 00-1SB20		100	340 units	41B
	Labels for sticking for SIRIUS					
	C	3RT19 00-1SB60		1	3060 units	41B
	C	3RT19 00-1SD60		1	3060 units	41B
PC labeling systems						
For individual inscription of unit labeling plates available from: Murrplastik Systemtechnik GmbH (see Chapter 16, "Appendix" → "External Partners")						

Power Contactors for Switching Motors

Spare parts for 3RT1 contactors

Solenoid coils

Selection and ordering data

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



3RT19 34-5A.01

For contactors		Rated control supply voltage U_s			DT	Screw terminals		DT	Spring-type terminals	
Size	Type	50 Hz V	50/60 Hz V	60 Hz V		Order No.	Price € per PU		Order No.	Price € per PU
Solenoid coils · AC operation										
S0	3RT10 2., 3RT13 2., 3RT15 2.	24	--	--	▶	3RT19 24-5AB01	B		3RT19 24-5AB02	
		42	--	--	B	3RT19 24-5AD01	C		3RT19 24-5AD02	
		48	--	--	A	3RT19 24-5AH01	B		3RT19 24-5AH02	
		110	--	--	▶	3RT19 24-5AF01	B		3RT19 24-5AF02	
		230	--	--	▶	3RT19 24-5AP01	B		3RT19 24-5AP02	
		400	--	--	▶	3RT19 24-5AV01	C		3RT19 24-5AV02	
		--	24	--	▶	3RT19 24-5AC21	B		3RT19 24-5AC22	
		--	42	--	B	3RT19 24-5AD21	C		3RT19 24-5AD22	
		--	48	--	B	3RT19 24-5AH21	C		3RT19 24-5AH22	
		--	110	--	▶	3RT19 24-5AG21	B		3RT19 24-5AG22	
		--	220	--	B	3RT19 24-5AN21	B		3RT19 24-5AN22	
		--	230	--	B	3RT19 24-5AL21	B		3RT19 24-5AL22	
		110	--	120	B	3RT19 24-5AK61	B		3RT19 24-5AK62	
		220	--	240	B	3RT19 24-5AP61	C		3RT19 24-5AP62	
		--	100	110	B	3RT19 24-5AG61	C		3RT19 24-5AG62	
		--	200	220	B	3RT19 24-5AN61	C		3RT19 24-5AN62	
		--	400	440	B	3RT19 24-5AR61	C		3RT19 24-5AR62	
S2	3RT10 34	24	--	--	B	3RT19 34-5AB01	B		3RT19 34-5AB02	
		42	--	--	B	3RT19 34-5AD01	B		3RT19 34-5AD02	
		48	--	--	B	3RT19 34-5AH01	B		3RT19 34-5AH02	
		110	--	--	B	3RT19 34-5AF01	B		3RT19 34-5AF02	
		230	--	--	B	3RT19 34-5AP01	B		3RT19 34-5AP02	
		400	--	--	C	3RT19 34-5AV01	B		3RT19 34-5AV02	
		--	24	--	B	3RT19 34-5AC21	B		3RT19 34-5AC22	
		--	42	--	B	3RT19 34-5AD21	B		3RT19 34-5AD22	
		--	48	--	B	3RT19 34-5AH21	B		3RT19 34-5AH22	
		--	110	--	C	3RT19 34-5AG21	B		3RT19 34-5AG22	
		--	220	--	C	3RT19 34-5AN21	B		3RT19 34-5AN22	
		--	230	--	C	3RT19 34-5AL21	B		3RT19 34-5AL22	
		110	--	120	B	3RT19 34-5AK61	B		3RT19 34-5AK62	
		220	--	240	B	3RT19 34-5AP61	B		3RT19 34-5AP62	
		--	100	110	B	3RT19 34-5AG61	B		3RT19 34-5AG62	
		--	200	220	B	3RT19 34-5AN61	B		3RT19 34-5AN62	
		--	400	440	B	3RT19 34-5AR61	B		3RT19 34-5AR62	
	3RT10 35, 3RT10 36, 3RT13 3., 3RT15 3.	24	--	--	B	3RT19 35-5AB01	B		3RT19 35-5AB02	
		42	--	--	B	3RT19 35-5AD01	B		3RT19 35-5AD02	
		48	--	--	B	3RT19 35-5AH01	B		3RT19 35-5AH02	
		110	--	--	▶	3RT19 35-5AF01	B		3RT19 35-5AF02	
		230	--	--	▶	3RT19 35-5AP01	B		3RT19 35-5AP02	
		400	--	--	C	3RT19 35-5AV01	B		3RT19 35-5AV02	
		--	24	--	B	3RT19 35-5AC21	B		3RT19 35-5AC22	
		--	42	--	B	3RT19 35-5AD21	B		3RT19 35-5AD22	
		--	48	--	B	3RT19 35-5AH21	B		3RT19 35-5AH22	
		--	110	--	B	3RT19 35-5AG21	B		3RT19 35-5AG22	
		--	220	--	B	3RT19 35-5AN21	B		3RT19 35-5AN22	
		--	230	--	B	3RT19 35-5AL21	B		3RT19 35-5AL22	
		110	--	120	B	3RT19 35-5AK61	B		3RT19 35-5AK62	
		220	--	240	B	3RT19 35-5AP61	B		3RT19 35-5AP62	
		--	100	110	B	3RT19 35-5AG61	B		3RT19 35-5AG62	
		--	200	220	B	3RT19 35-5AN61	B		3RT19 35-5AN62	
		--	400	440	C	3RT19 35-5AR61	B		3RT19 35-5AR62	

Power Contactors for Switching Motors

Spare parts for 3RT1 contactors

Solenoid coils

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



3RT19 44-5A.01





3RT19 45-5A.01



3RT19 45-5A.02



3RT19 44-5B.42

For contactors		Rated control supply voltage U_s				DT	Screw terminals			DT	Spring-type terminals		
		AC			DC		Order No.	Price € per PU			Order No.	Price € per PU	
Size	Type	50 Hz V	50/60 Hz V	60 Hz V	V								
Solenoid coils · AC operation													
S3	3RT10 44	24	--	--	--	B	3RT19 44-5AB01	B	3RT19 44-5AB02	B	3RT19 44-5AB02		
		42	--	--	--	B	3RT19 44-5AD01	B	3RT19 44-5AD02	B	3RT19 44-5AD02		
		48	--	--	--	B	3RT19 44-5AH01	B	3RT19 44-5AH02	B	3RT19 44-5AH02		
		110	--	--	--	B	3RT19 44-5AF01	B	3RT19 44-5AF02	B	3RT19 44-5AF02		
		230	--	--	--	B	3RT19 44-5AP01	B	3RT19 44-5AP02	B	3RT19 44-5AP02		
		400	--	--	--	B	3RT19 44-5AV01	B	3RT19 44-5AV02	B	3RT19 44-5AV02		
		--	24	--	--	B	3RT19 44-5AC21	B	3RT19 44-5AC22	B	3RT19 44-5AC22		
		--	42	--	--	B	3RT19 44-5AD21	B	3RT19 44-5AD22	B	3RT19 44-5AD22		
		--	48	--	--	B	3RT19 44-5AH21	B	3RT19 44-5AH22	B	3RT19 44-5AH22		
		--	110	--	--	B	3RT19 44-5AG21	B	3RT19 44-5AG22	B	3RT19 44-5AG22		
		--	220	--	--	B	3RT19 44-5AN21	B	3RT19 44-5AN22	B	3RT19 44-5AN22		
		--	230	--	--	B	3RT19 44-5AL21	B	3RT19 44-5AL22	B	3RT19 44-5AL22		
	3RT10 45, 3RT10 46, 3RT13 4., 3RT14 46, 3RT15 4.	110	--	120	--	B	3RT19 44-5AK61	B	3RT19 44-5AK62	B	3RT19 44-5AK62		
		220	--	240	--	B	3RT19 44-5AP61	B	3RT19 44-5AP62	B	3RT19 44-5AP62		
		--	100	110	--	B	3RT19 44-5AG61	B	3RT19 44-5AG62	B	3RT19 44-5AG62		
		--	200	220	--	B	3RT19 44-5AN61	B	3RT19 44-5AN62	B	3RT19 44-5AN62		
		--	400	440	--	B	3RT19 44-5AR61	B	3RT19 44-5AR62	B	3RT19 44-5AR62		
		24	--	--	--	B	3RT19 45-5AB01	B	3RT19 45-5AB02	B	3RT19 45-5AB02		
		42	--	--	--	B	3RT19 45-5AD01	B	3RT19 45-5AD02	B	3RT19 45-5AD02		
		48	--	--	--	B	3RT19 45-5AH01	B	3RT19 45-5AH02	B	3RT19 45-5AH02		
		110	--	--	--	B	3RT19 45-5AF01	B	3RT19 45-5AF02	B	3RT19 45-5AF02		
		230	--	--	--	► B	3RT19 45-5AP01	B	3RT19 45-5AP02	B	3RT19 45-5AP02		
		400	--	--	--	C	3RT19 45-5AV01	B	3RT19 45-5AV02	B	3RT19 45-5AV02		
		--	24	--	--	B	3RT19 45-5AC21	B	3RT19 45-5AC22	B	3RT19 45-5AC22		
	--	42	--	--	B	3RT19 45-5AD21	B	3RT19 45-5AD22	B	3RT19 45-5AD22			
	--	48	--	--	B	3RT19 45-5AH21	B	3RT19 45-5AH22	B	3RT19 45-5AH22			
	--	110	--	--	B	3RT19 45-5AG21	B	3RT19 45-5AG22	B	3RT19 45-5AG22			
	--	220	--	--	B	3RT19 45-5AN21	B	3RT19 45-5AN22	B	3RT19 45-5AN22			
	--	230	--	--	B	3RT19 45-5AL21	B	3RT19 45-5AL22	B	3RT19 45-5AL22			
	110	--	120	--	B	3RT19 45-5AK61	B	3RT19 45-5AK62	B	3RT19 45-5AK62			
	220	--	240	--	B	3RT19 45-5AP61	B	3RT19 45-5AP62	B	3RT19 45-5AP62			
	--	100	110	--	B	3RT19 45-5AG61	B	3RT19 45-5AG62	B	3RT19 45-5AG62			
	--	200	220	--	C	3RT19 45-5AN61	B	3RT19 45-5AN62	B	3RT19 45-5AN62			
	--	400	440	--	B	3RT19 45-5AR61	B	3RT19 45-5AR62	B	3RT19 45-5AR62			
Solenoid coils · DC operation													
S2	3RT10 3.,	--	--	--	24	B	3RT19 34-5BB41	B	3RT19 34-5BB42	B	3RT19 34-5BB42		
	3RT13 3.,	--	--	--	42	B	3RT19 34-5BD41	C	3RT19 34-5BD42	C	3RT19 34-5BD42		
	3RT15 3.	--	--	--	48	B	3RT19 34-5BW41	B	3RT19 34-5BW42	B	3RT19 34-5BW42		
	--	--	--	--	60	B	3RT19 34-5BE41	B	3RT19 34-5BE42	B	3RT19 34-5BE42		
	--	--	--	--	110	B	3RT19 34-5BF41	B	3RT19 34-5BF42	B	3RT19 34-5BF42		
	--	--	--	--	125	B	3RT19 34-5BG41	C	3RT19 34-5BG42	C	3RT19 34-5BG42		
	--	--	--	--	220	B	3RT19 34-5BM41	B	3RT19 34-5BM42	B	3RT19 34-5BM42		
	--	--	--	--	230	B	3RT19 34-5BP41	B	3RT19 34-5BP42	B	3RT19 34-5BP42		
S3	3RT10 4.,	--	--	--	24	B	3RT19 44-5BB41	B	3RT19 44-5BB42	B	3RT19 44-5BB42		
	3RT13 4.,	--	--	--	42	C	3RT19 44-5BD41	B	3RT19 44-5BD42	B	3RT19 44-5BD42		
	3RT14 4.,	--	--	--	48	B	3RT19 44-5BW41	B	3RT19 44-5BW42	B	3RT19 44-5BW42		
	3RT15 4.	--	--	--	60	B	3RT19 44-5BE41	B	3RT19 44-5BE42	B	3RT19 44-5BE42		
	--	--	--	--	110	B	3RT19 44-5BF41	B	3RT19 44-5BF42	B	3RT19 44-5BF42		
	--	--	--	--	125	B	3RT19 44-5BG41	B	3RT19 44-5BG42	B	3RT19 44-5BG42		
	--	--	--	--	220	B	3RT19 44-5BM41	B	3RT19 44-5BM42	B	3RT19 44-5BM42		
	--	--	--	--	230	B	3RT19 44-5BP41	B	3RT19 44-5BP42	B	3RT19 44-5BP42		

Power Contactors for Switching Motors

Spare parts for 3RT1 contactors

Solenoid coils

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



3RT19 55-5A...

For contactors			DT	Screw terminals		DT	Spring-type terminals	
Rated control supply voltage $U_{s \text{ min}} \dots U_{s \text{ max}}$								
Size	Type	V AC/DC		Order No.	Price € per PU		Order No.	Price € per PU
Withdrawable coils								
Conventional operating mechanisms								
S6	3RT10 5, 3RT14 5	23 ... 26	B	3RT19 55-5AB31		B	3RT19 55-5AB32	
		42 ... 48	B	3RT19 55-5AD31		B	3RT19 55-5AD32	
		110 ... 127	B	3RT19 55-5AF31		B	3RT19 55-5AF32	
		200 ... 220	B	3RT19 55-5AM31		B	3RT19 55-5AM32	
		220 ... 240	B	3RT19 55-5AP31		B	3RT19 55-5AP32	
		240 ... 277	B	3RT19 55-5AU31		B	3RT19 55-5AU32	
		380 ... 420	B	3RT19 55-5AV31		B	3RT19 55-5AV32	
		440 ... 480	B	3RT19 55-5AR31		B	3RT19 55-5AR32	
		500 ... 550	B	3RT19 55-5AS31		B	3RT19 55-5AS32	
		575 ... 600	B	3RT19 55-5AT31		B	3RT19 55-5AT32	
S10	3RT10 6, 3RT14 6	23 ... 26	B	3RT19 65-5AB31		B	3RT19 65-5AB32	
		42 ... 48	B	3RT19 65-5AD31		B	3RT19 65-5AD32	
		110 ... 127	B	3RT19 65-5AF31		B	3RT19 65-5AF32	
		200 ... 220	C	3RT19 65-5AM31		B	3RT19 65-5AM32	
		220 ... 240	B	3RT19 65-5AP31		B	3RT19 65-5AP32	
		240 ... 277	B	3RT19 65-5AU31		B	3RT19 65-5AU32	
		380 ... 420	B	3RT19 65-5AV31		B	3RT19 65-5AV32	
		440 ... 480	B	3RT19 65-5AR31		B	3RT19 65-5AR32	
		500 ... 550	C	3RT19 65-5AS31		B	3RT19 65-5AS32	
		575 ... 600	C	3RT19 65-5AT31		B	3RT19 65-5AT32	
S10	3RT12 6 vacuum con- tactors	23 ... 26	B	3RT19 66-5AB31			--	
		42 ... 48	B	3RT19 66-5AD31			--	
		110 ... 127	A	3RT19 66-5AF31			--	
		200 ... 220	C	3RT19 66-5AM31			--	
		220 ... 240	A	3RT19 66-5AP31			--	
		240 ... 277	C	3RT19 66-5AU31			--	
		380 ... 420	B	3RT19 66-5AV31			--	
		440 ... 480	C	3RT19 66-5AR31			--	
		500 ... 550	C	3RT19 66-5AS31			--	
		575 ... 600	C	3RT19 66-5AT31			--	
S12	3RT10 7, 3RT14 7, 3RT12 7 vacuum con- tactors	23 ... 26	B	3RT19 75-5AB31		B	3RT19 75-5AB32	
		42 ... 48	B	3RT19 75-5AD31		B	3RT19 75-5AD32	
		110 ... 127	B	3RT19 75-5AF31		B	3RT19 75-5AF32	
		200 ... 220	C	3RT19 75-5AM31		B	3RT19 75-5AM32	
		220 ... 240	B	3RT19 75-5AP31		B	3RT19 75-5AP32	
		240 ... 277	B	3RT19 75-5AU31		B	3RT19 75-5AU32	
		380 ... 420	B	3RT19 75-5AV31		B	3RT19 75-5AV32	
		440 ... 480	B	3RT19 75-5AR31		B	3RT19 75-5AR32	
		500 ... 550	C	3RT19 75-5AS31		B	3RT19 75-5AS32	
		575 ... 600	C	3RT19 75-5AT31		B	3RT19 75-5AT32	

Power Contactors for Switching Motors

Spare parts for 3RT1 contactors

Solenoid coils

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



3RT19 55-5N...

m

For contactors		Rated control supply voltage U_s	DT	Screw terminals		DT	Spring-type terminals	
Size	Type	V AC/DC		Order No.	Price € per PU		Order No.	Price € per PU
Withdrawable coils								
Solid-state operating mechanism								
For 24 V DC PLC output								
S6	3RT10 5,	21 ... 27,3	C	3RT19 55-5NB31		B	3RT19 55-5NB32	
	3RT14 5	96 ... 127	B	3RT19 55-5NF31		B	3RT19 55-5NF32	
		200 ... 277	B	3RT19 55-5NP31		B	3RT19 55-5NP32	
S10	3RT10 6,	21 ... 27,3	B	3RT19 65-5NB31		B	3RT19 65-5NB32	
	3RT14 6	96 ... 127	B	3RT19 65-5NF31		B	3RT19 65-5NF32	
		200 ... 277	B	3RT19 65-5NP31		B	3RT19 65-5NP32	
S12	3RT12 6	21 ... 27,3	B	3RT19 66-5NB31			--	
	vacuum con-	96 ... 127	C	3RT19 66-5NF31			--	
	tactors	200 ... 277	C	3RT19 66-5NP31			--	
	3RT10 7,	21 ... 27,3	B	3RT19 75-5NB31		B	3RT19 75-5NB32	
	3RT14 7,	96 ... 127	B	3RT19 75-5NF31		B	3RT19 75-5NF32	
	3RT12 7	200 ... 277	B	3RT19 75-5NP31		B	3RT19 75-5NP32	
	vacuum con-							
	tactors							
For 24 V DC PLC output/PLC relay output, with remaining lifetime indicator (RLT)								
(withdrawable coil with laterally mounted solid-state module)								
S6	3RT10 5,	96 ... 127	B	3RT19 55-5PF31			--	
	3RT14 5	200 ... 277	B	3RT19 55-5PP31			--	
S10	3RT10 6,	96 ... 127	B	3RT19 65-5PF31			--	
	3RT14 6	200 ... 277	B	3RT19 65-5PP31			--	
S12	3RT10 7,	96 ... 127	B	3RT19 75-5PF31			--	
	3RT14 7	200 ... 277	B	3RT19 75-5PP31			--	
With AS-Interface interface and remaining lifetime indicator (RLT)								
(withdrawable coil with laterally mounted solid-state module)								
S6	3RT10 5,	96 ... 127	B	3RT19 55-5QF31			--	
	3RT14 5	200 ... 277	B	3RT19 55-5QP31			--	
S10	3RT10 6,	96 ... 127	B	3RT19 65-5QF31			--	
	3RT14 6	200 ... 277	B	3RT19 65-5QP31			--	
S12	3RT10 7,	96 ... 127	B	3RT19 75-5QF31			--	
	3RT14 7	200 ... 277	B	3RT19 75-5QP31			--	

Power Contactors for Switching Motors

Spare parts for 3RT1 contactors

Contacts and arc chutes

Selection and ordering data

For contactors		Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Size	Type							
Contacts with fixing parts								
For contactors with 3 main contacts								
S2	3RT10 34	Main contacts (3 NO contacts) for utilization category AC-3 (1 set = 3 movable and 6 fixed switching elements with fixing parts)	▶	3RT19 34-6A		1	1 unit	41B
	▶		3RT19 35-6A		1	1 unit	41B	
	▶		3RT19 36-6A		1	1 unit	41B	
S3	3RT10 44		▶	3RT19 44-6A		1	1 unit	41B
	3RT10 45		▶	3RT19 45-6A		1	1 unit	41B
	3RT10 46		▶	3RT19 46-6A		1	1 unit	41B
S6	3RT10 54		▶	3RT19 54-6A		1	1 unit	41B
	3RT10 55		▶	3RT19 55-6A		1	1 unit	41B
	3RT10 56		▶	3RT19 56-6A		1	1 unit	41B
S10	3RT10 64		▶	3RT19 64-6A		1	1 unit	41B
	3RT10 65		▶	3RT19 65-6A		1	1 unit	41B
	3RT10 66		▶	3RT19 66-6A		1	1 unit	41B
S12	3RT10 75		▶	3RT19 75-6A		1	1 unit	41B
	3RT10 76		A	3RT19 76-6A		1	1 unit	41B
S3	3RT14 46	Main contacts (3 NO contacts) for utilization category AC-1	B	3RT19 46-6D		1	1 unit	41B
S6	3RT14 56	(1 set = 3 movable and 6 fixed switching elements with fixing parts)	B	3RT19 56-6D		1	1 unit	41B
S10	3RT14 66		B	3RT19 66-6D		1	1 unit	41B
S12	3RT14 76		A	3RT19 76-6D		1	1 unit	41B
For 3RT12 vacuum contactors								
S10	3RT12 64	3 vacuum interrupters with fixing parts	B	3RT19 64-6V		1	1 unit	41B
	B		3RT19 65-6V		1	1 unit	41B	
	B		3RT19 66-6V		1	1 unit	41B	
S12	3RT12 75		B	3RT19 75-6V		1	1 unit	41B
	3RT12 76		B	3RT19 76-6V		1	1 unit	41B
For contactors with 4 main contacts								
S2	3RT13 36	Main contacts (4 NO contacts) for utilization category AC-1	C	3RT19 36-6E		1	1 unit	41B
S3	3RT13 44	(1 set = 4 movable and 8 fixed switching elements with fixing parts)	C	3RT19 44-6E		1	1 unit	41B
	B		3RT19 46-6E		1	1 unit	41B	
Arc chutes								
S2	3RT10 3.	Arc chutes, 3-pole	C	3RT19 36-7A		1	1 unit	41B
S3	3RT10 4., 3RT14 46		B	3RT19 46-7A		1	1 unit	41B
S6	3RT10 54		B	3RT19 54-7A		1	1 unit	41B
	3RT10 55	B	3RT19 55-7A		1	1 unit	41B	
	3RT10 56	B	3RT19 56-7A		1	1 unit	41B	
S10	3RT10 64		B	3RT19 64-7A		1	1 unit	41B
	3RT10 65		B	3RT19 65-7A		1	1 unit	41B
	3RT10 66		B	3RT19 66-7A		1	1 unit	41B
S12	3RT10 75		B	3RT19 75-7A		1	1 unit	41B
	3RT10 76		B	3RT19 76-7A		1	1 unit	41B
S6	3RT14 56		B	3RT19 56-7B		1	1 unit	41B
S10	3RT14 66		B	3RT19 66-7B		1	1 unit	41B
S12	3RT14 76		B	3RT19 76-7B		1	1 unit	41B

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

Overview

The 3RA13 reversing contactor assemblies can be ordered as follows:

Sizes S00 to S3

- Fully wired and tested, with mechanical and electrical interlock
- For assemblies with AC operation and 50/60 Hz, a dead interval of 50 ms must be provided when used with voltages ≥ 500 V; a dead interval of 30 ms is recommended for use with voltages ≥ 400 V. These dead times do not apply to assemblies with DC operation.

Sizes S00 to S12

- As individual parts for customer assembly

There is also a range of accessories (auxiliary switch blocks, surge suppressors, etc.) that must be ordered separately.

Overload relays for motor protection [see Chapter 7 "Protection Equipment" → "Overload Relays"](#).

The 3RA13 contactor assemblies have screw terminals and are suitable for screw and snap-on mounting onto TH 35 standard mounting rails.

Complete units

The fully wired reversing contactor assemblies are suitable for use in any climate. They are finger-safe according to EN 50274.

The contactor assemblies consist of 2 contactors with the same power, with one NC contact in the basic unit. The contactors are mechanically and electrically interlocked (NC contact interlock).

For motor protection, either 3RU11 or 3RB2. overload relays for direct mounting or stand-alone installation or thermistor motor protection tripping units must be ordered separately.

Components for customer assembly

Assembly kits for all sizes are available for customer assembly of reversing contactor assemblies.

Contactors, overload relays, the mechanical interlock (as of size S2) and – for momentary-contact operation – auxiliary switch blocks for latching must be ordered separately.

Rated data AC-2 and AC-3 for 50 Hz 400 V AC		Size	Order No.					Fully wired and tested contactor assemblies
Rating kW	Operational current I_e A		Contactor	Mechanical interlocks ¹⁾	Mechanical interlocks ²⁾	Mechanical interlocks ³⁾	Assembly kit	
3	7	S00	3RT10 15	-- ⁴⁾	--	--	3RA19 13-2A ⁵⁾	3RA13 15-8XB30-1 ..
4	9		3RT10 16					3RA13 16-8XB30-1 ..
5,5	12		3RT10 17					3RA13 17-8XB30-1 ..
5,5	12	S0	3RT10 24	3RA19 24-1A	3RA19 24-2B	--	3RA19 23-2A ⁶⁾	3RA13 24-8XB30-1 ..
7,5	17		3RT10 25					3RA13 25-8XB30-1 ..
11	25		3RT10 26					3RA13 26-8XB30-1 ..
15	32	S2	3RT10 34	3RA19 24-1A	3RA19 24-2B	--	3RA19 33-2A ⁷⁾	3RA13 34-8XB30-1...
18,5	40		3RT10 35					3RA13 35-8XB30-1...
22	50		3RT10 36					3RA13 36-8XB30-1...
30	65	S3	3RT10 44	3RA19 24-1A	3RA19 24-2B	--	3RA19 43-2A ⁷⁾	3RA13 44-8XB30-1...
37	80		3RT10 45					3RA13 45-8XB30-1...
45	95		3RT10 46					3RA13 46-8XB30-1...
55	115	S6	3RT10 54	--	--	3RA19 54-2A	3RA19 53-2M ⁸⁾	--
75	150		3RT10 55					
90	185		3RT10 56					
110	225	S10	3RT10 64	--	--	3RA19 54-2A	3RA19 63-2A ⁸⁾	--
132	265		3RT10 65					
160	300		3RT10 66					
200	400	S12	3RT10 75	--	--	3RA19 54-2A	3RA19 73-2A ⁸⁾	--
250	500		3RT10 76					

¹⁾ Can be mounted onto the front.

²⁾ Laterally mountable with one auxiliary contact.

³⁾ Laterally mountable without auxiliary contact.

⁴⁾ Interlock can only be ordered with assembly kit.

⁵⁾ Assembly kit contains: mechanical interlock; connecting clips for 2 contactors; wiring modules on the top and bottom.

⁶⁾ Assembly kit contains: wiring modules on the top and bottom.

⁷⁾ Assembly kit contains: 2 connecting clips for contactors; wiring modules on the top and bottom.

⁸⁾ Assembly kit contains: wiring module on the top and bottom.

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies


SIRIUS 3RA13 reversing contactor assemblies

Selection and ordering data

Fully wired and tested contactor assemblies · Size S00 · up to 5.5 kW



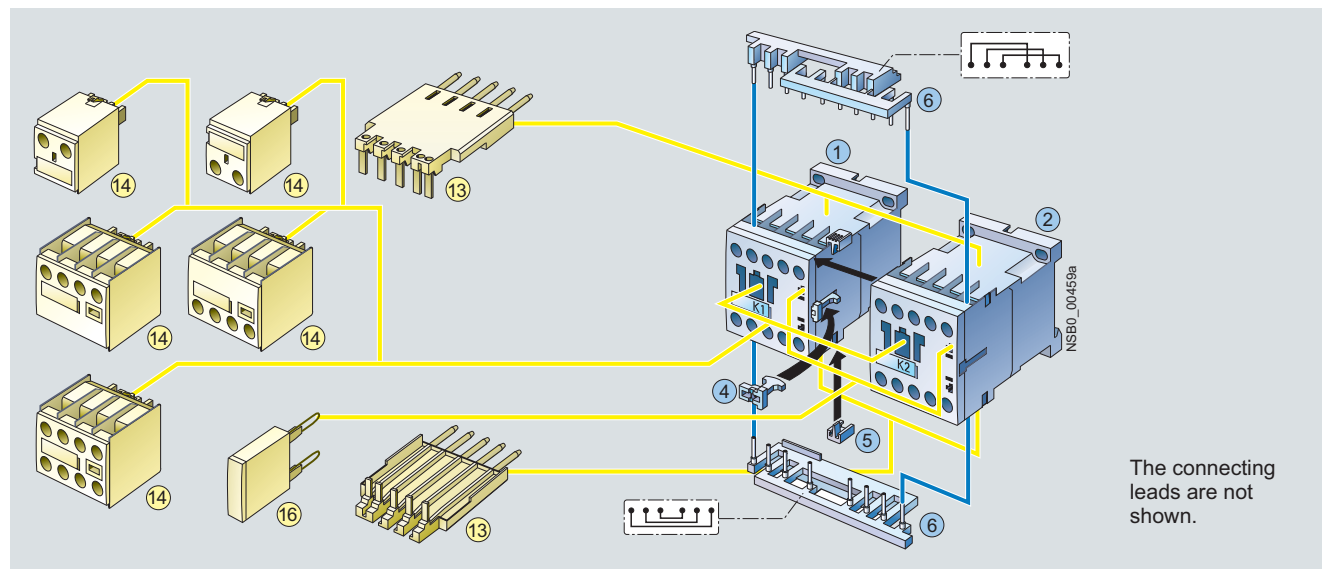
3RA13 1.-8XB30-1...

Rated data AC-2 and AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG	
Operational current I_θ up to	Ratings of induction motors at 50 Hz and						Order No.					Price € per PU
	400 V	230 V	400 V	500 V			690 V					
A	kW	kW	kW	kW	V							
AC operation, 50/60 Hz												
7	2,2	3	3,5	4	24 AC	A	3RA13 15-8XB30-1AB0	1	1 unit	41B		
					110 AC	A	3RA13 15-8XB30-1AF0	1	1 unit	41B		
					230 AC	▶	3RA13 15-8XB30-1AP0	1	1 unit	41B		
9	3	4	4,5	5,5	24 AC	A	3RA13 16-8XB30-1AB0	1	1 unit	41B		
					110 AC	A	3RA13 16-8XB30-1AF0	1	1 unit	41B		
					230 AC	▶	3RA13 16-8XB30-1AP0	1	1 unit	41B		
12	3	5,5	5,5	5,5	24 AC	A	3RA13 17-8XB30-1AB0	1	1 unit	41B		
					110 AC	A	3RA13 17-8XB30-1AF0	1	1 unit	41B		
					230 AC	▶	3RA13 17-8XB30-1AP0	1	1 unit	41B		
DC operation												
7	2,2	3	3,5	4	24 DC	▶	3RA13 15-8XB30-1BB4	1	1 unit	41B		
9	3	4	4,5	5,5	24 DC	▶	3RA13 16-8XB30-1BB4	1	1 unit	41B		

¹⁾ Coil operating range at 50 Hz: 0,8 ... 1,1 x U_s ; at 60 Hz: 0,85 ... 1,1 x U_s .

Note:

The contactors integrated in the contactor assemblies have no unassigned auxiliary contacts.



The connecting leads are not shown.

Mountable accessories (optional)

To be ordered separately	Order No.	Page
13 Solder pin adapters	3RT19 16-4KA1	3/66
14 Auxiliary switch block, front (according to EN 50005 must be used)	3RH11 11-1...	3/36
16 Surge suppressor	3RT19 16-1...	3/43

Complete contactor assemblies

Individual parts		Order No.		Page
		K1	K2	
1 2	Contactor, 3 kW	3RT10 15	3RT10 15	3/15
1 2	Contactor, 4 kW	3RT10 16	3RT10 16	3/15
1 2	Contactor, 5.5 kW	3RT10 17	3RT10 17	3/15
4 5 6	Assembly kit	3RA19 13-2A		3/65

The assembly kit contains:

- 4 Mechanical interlock
- 5 2 connecting clips for 2 contactors
- 6 Wiring modules on the top and bottom for connecting the main current paths, electrical interlock included¹⁾, interruptible (NC contact interlock)

¹⁾ 3RT10 1. contactors with one NC contact in the basic unit are required for the electrical interlock.

Contactor Assemblies


3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

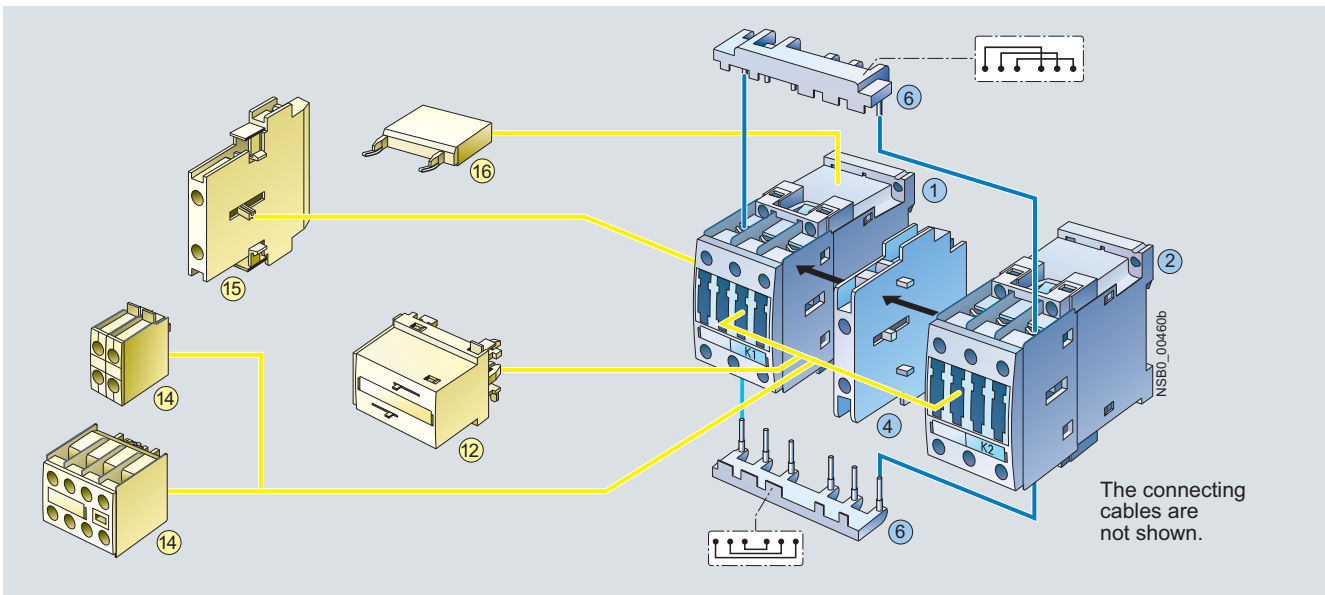
Fully wired and tested contactor assemblies - Size S0 - up to 11 kW



3RA13 2...8XB30-1...

Rated data AC-2 and AC-3						Rated control supply voltage U_s ¹⁾	DT	Screw terminals			PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and				Order No.			Price € per PU					
400 V	230 V	400 V	500 V	690 V									
A	kW	kW	kW	kW	V								
AC operation, 50/60 Hz													
12	3	5,5	7,5	7,5	24 AC	A	A	3RA13 24-8XB30-1AC2		1	1 unit	41B	
					110 AC	A	A	3RA13 24-8XB30-1AG2		1	1 unit	41B	
					230 AC	▶	▶	3RA13 24-8XB30-1AL2		1	1 unit	41B	
17	4	7,5	10	11	24 AC	A	A	3RA13 25-8XB30-1AC2		1	1 unit	41B	
					110 AC	A	A	3RA13 25-8XB30-1AG2		1	1 unit	41B	
					230 AC	▶	▶	3RA13 25-8XB30-1AL2		1	1 unit	41B	
25	5,5	11	11	11	24 AC	A	A	3RA13 26-8XB30-1AC2		1	1 unit	41B	
					110 AC	A	A	3RA13 26-8XB30-1AG2		1	1 unit	41B	
					230 AC	A	A	3RA13 26-8XB30-1AL2		1	1 unit	41B	
DC operation													
12	3	5,5	7,5	7,5	24 DC	▶	▶	3RA13 24-8XB30-1BB4		1	1 unit	41B	
17	4	7,5	10	11	24 DC	A	A	3RA13 25-8XB30-1BB4		1	1 unit	41B	
25	5,5	11	11	11	24 DC	A	A	3RA13 26-8XB30-1BB4		1	1 unit	41B	

¹⁾ Coil operating range
at 50 Hz: $0,8 \dots 1,1 \times U_s$; at 60 Hz: $0,85 \dots 1,1 \times U_s$.



Mountable accessories (optional)

To be ordered separately	Order No.	Page
12 Mechanical interlock, front	3RA19 24-1A	3/64
14 Auxiliary switch block, front	3RH19 21-1CA..	3/35
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/39
16 Surge suppressor	3RT19 26-1....	3/43

Complete contactor assemblies

Individual parts		Order No.		Page
		K1	K2	
1 2	Contactor, 5,5 kW	3RT10 24	3RT10 24	3/16
1 2	Contactor, 7,5 kW	3RT10 25	3RT10 25	3/16
1 2	Contactor, 11 kW	3RT10 26	3RT10 26	3/16
4	Mechanical interlock, lateral	3RA19 24-2B		3/64
6	Assembly kit	3RA19 23-2A		3/65

The assembly kit contains wiring modules on the top and bottom (they also form the mechanical connection between the contactors).

Contactor Assemblies


3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

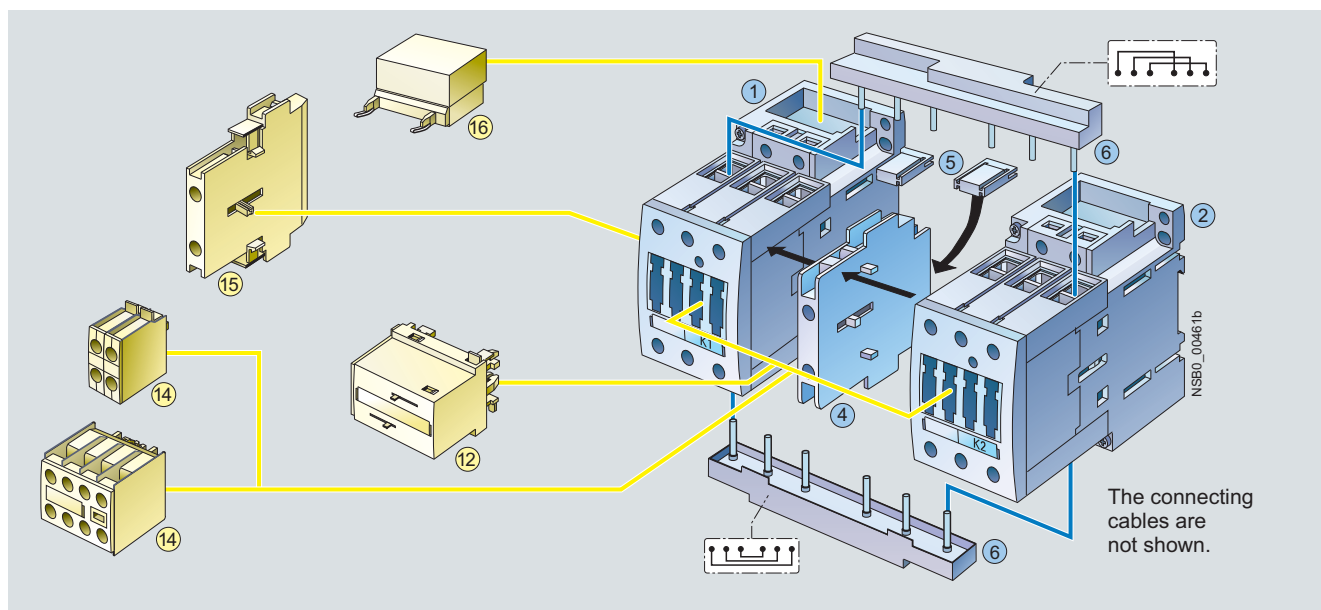
Fully wired and tested contactor assemblies - Size S2 - up to 22 kW



3RA13 3.-8XB30-1...

Rated data AC-2 and AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and										
500 V	230 V	400 V	500 V	690 V							
A	kW	kW	kW	kW	V						
AC operation, 50/60 Hz											
32	7,5	15	18,5	18,5	24 AC	A	3RA13 34-8XB30-1AC2		1	1 unit	41B
					110 AC	A			1	1 unit	41B
					230 AC	A			1	1 unit	41B
40	11	18,5	22	22	24 AC	A	3RA13 35-8XB30-1AC2		1	1 unit	41B
					110 AC	A			1	1 unit	41B
					230 AC	A			1	1 unit	41B
50	15	22	30	22	24 AC	B	3RA13 36-8XB30-1AC2		1	1 unit	41B
					110 AC	B			1	1 unit	41B
					230 AC	A			1	1 unit	41B
DC operation											
32	7,5	15	18,5	18,5	24 DC	A	3RA13 34-8XB30-1BB4		1	1 unit	41B
40	11	18,5	22	22	24 DC	A	3RA13 35-8XB30-1BB4		1	1 unit	41B
50	15	22	30	22	24 DC	A	3RA13 36-8XB30-1BB4		1	1 unit	41B

¹⁾ Coil operating range
at 50 Hz: 0,8 ... 1.1 x U_s ; at 60 Hz: 0,85 ... 1.1 x U_s .



Mountable accessories (optional)

To be ordered separately	Order No.	Page
12 Mechanical interlock, front	3RA19 24-1A	3/64
14 Auxiliary switch block, front	3RH19 21-1CA..	3/35
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/39
16 Surge suppressor	3RT19 26-1... 3RT19 36-1...	3/44

Complete contactor assemblies

Individual parts		Order No.	K1	K2	Page
1 2	Contactor, 15 kW	3RT10 34	3RT10 34		3/17
1 2	Contactor, 18.5 kW	3RT10 35	3RT10 35		3/17
1 2	Contactor, 22 kW	3RT10 36	3RT10 36		3/17
4	Mechanical interlock, lateral	3RA19 24-2B			3/64
5 6	Assembly kit	3RA19 33-2A			3/65
The assembly kit contains:					
5	2 connecting clips for 2 contactors with 10 mm distance				
6	Wiring modules on the top and bottom for connecting the main current paths				

Contactor Assemblies


3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

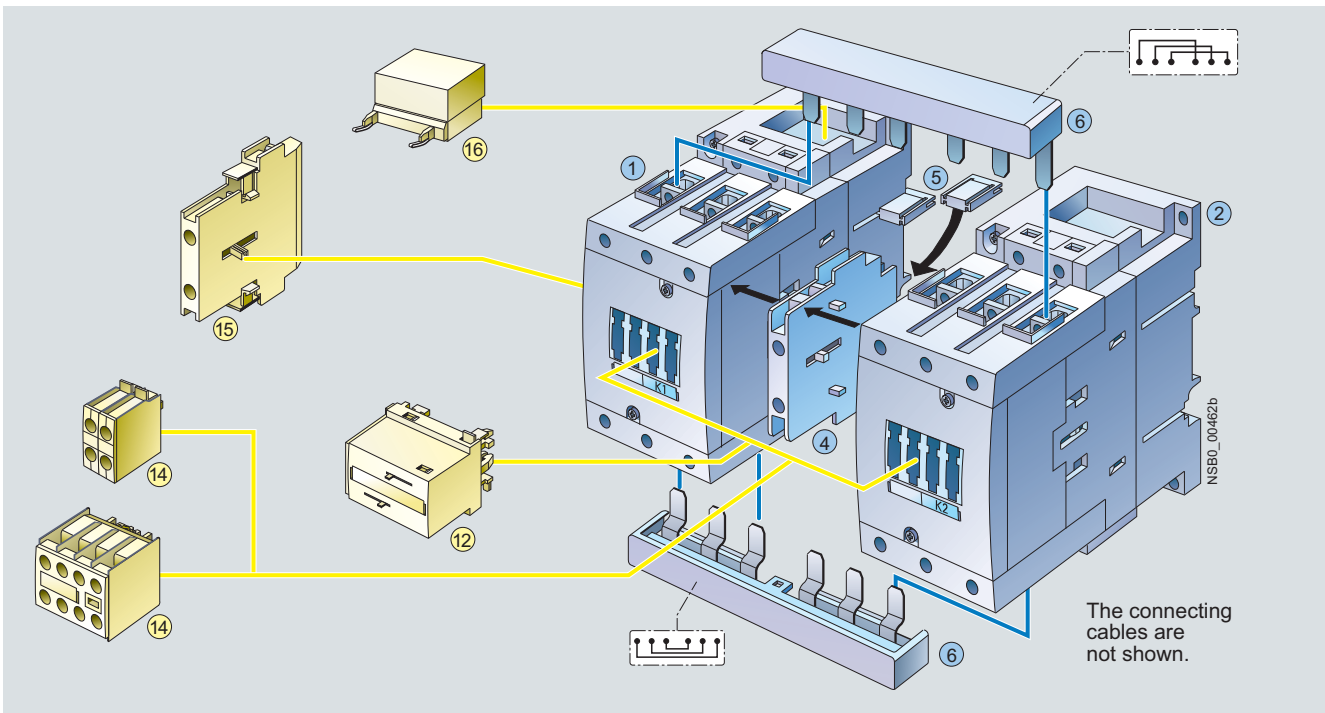
Fully wired and tested contactor assemblies · Size S3 · up to 45 kW



3RA13 4.-8XB30-1...

Rated data AC-2 and AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals 		PU (UNIT, SET, M)	PS*	PG			
Operational current I_e up to 500 V	Ratings of induction motors at 50 Hz and						Order No.	Price € per PU						
230 V	400 V	500 V	690 V											
A	kW	kW	kW	kW	V									
AC operation at 50/60 Hz														
65	18,5	30	37	45	24 AC	B	3RA13 44-8XB30-1AC2	1	1 unit	41B				
					110 AC	B					3RA13 44-8XB30-1AG2	1	1 unit	41B
					230 AC	B					3RA13 44-8XB30-1AL2	1	1 unit	41B
80	22	37	45	55	24 AC	B	3RA13 45-8XB30-1AC2	1	1 unit	41B				
					110 AC	B					3RA13 45-8XB30-1AG2	1	1 unit	41B
					230 AC	B					3RA13 45-8XB30-1AL2	1	1 unit	41B
95	22	45	55	55	24 AC	B	3RA13 46-8XB30-1AC2	1	1 unit	41B				
					110 AC	B					3RA13 46-8XB30-1AG2	1	1 unit	41B
					230 AC	B					3RA13 46-8XB30-1AL2	1	1 unit	41B
DC operation														
65	18,5	30	37	45	24 DC	B	3RA13 44-8XB30-1BB4	1	1 unit	41B				
80	22	37	45	55	24 DC	B	3RA13 45-8XB30-1BB4	1	1 unit	41B				
95	22	45	55	55	24 DC	B	3RA13 46-8XB30-1BB4	1	1 unit	41B				

1) Coil operating range
at 50 Hz: 0,8 ... 1.1 x U_s ; at 60 Hz: 0,85 ... 1.1 x U_s .



Mountable accessories (optional)

To be ordered separately	Order No.	Page
12 Mechanical interlock, front	3RA19 24-1A	3/64
14 Auxiliary switch block, front	3RH19 21-1CA..	3/35
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/39
16 Surge suppressor	3RT19 26-1.... 3RT19 36-1....	3/44

Complete contactor assemblies

Individual parts		Order No.		Page
		K1	K2	
1 2	Contactor, 30 kW	3RT10 44	3RT10 44	3/18
1 2	Contactor, 37 kW	3RT10 45	3RT10 45	3/18
1 2	Contactor, 45 kW	3RT10 46	3RT10 46	3/18
4	Mechanical interlock, lateral	3RA19 24-2B		3/64
5 6	Assembly kit	3RA19 43-2A		3/65

The assembly kit contains:





- 5 2 connecting clips for 2 contactors with 10 mm distance
- 6 Wiring modules on the top and bottom for connecting the main current paths

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

Components for customer assembly

For contactors	Size	Version		Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type								
Mechanical interlocks								
 3RA19 24-1A mounted onto 2 contactors	3RT10 2	S0	Laterally mountable¹⁾ Each with one auxiliary contact (1 NC contact) per contactor (can only be used to connect contactors which are not more than 1 size larger or smaller). The mounting depth of the smaller contactor has to be adapted.)	▶	3RA19 24-2B	1	1 unit	41B
	3RT10 3	S2						
	3RT10 4	S3						
	3RT13 2							
	3RT13 4							
	3RT14 4							
	3RT15 2							
	3RT15 3							
	3RT10 2	S0	Can be mounted onto the front²⁾ Onto contactor sizes S2 and S3 (for contactors of the same size) Note: Size S0: Wiring modules must be mounted first. Sizes S2 and S3: Use 3RA19 32-2C mechanical connectors.	▶	3RA19 24-1A	1	1 unit	41B
	3RT10 3	S2						
3RT10 4	S3							
3RT13 2								
3RT15 2								
 3RA19 54-2A	3RT1. 5	S6	Laterally mountable, without auxiliary contacts Contactor sizes S6, S10 and S12 can be interlocked with each other as required; no adaptation of mounting depth is necessary. Contactor clearance 10 mm.	▶	3RA19 54-2A	1	1 unit	41B
	3RT1. 6	S10						
	3RT1. 7	S12						
 3RA19 54-2C	3RT10 4..-A with 3RT10 5	S3 with S6	Adapters, laterally mountable; for mechanical interlocking of contactor S3 (only for AC operation) with contactor S6 using 3RA19 54-2A locking device (must be ordered separately) incl. connecting clips	A	3RA19 54-2C	1	1 unit	41B
Coil repeat terminals								
 3RA19 23-3B	3RT10 3	S2, S3	For the coil terminals A1 and A2 for reversing starters (contactor sizes S2 and S3). 2 x A1 and 1 x A2 required per assembly (one set contains 10 x A1 and 5 x A2)	B	3RA19 23-3B	1	1 unit	41B
	3RT10 4							
Base plates								
	3RT10 5	S6	For customer assembly of reversing contactor assemblies	B	3RA19 52-2A	1	1 unit	41B
	3RT1. 6	S10		B	3RA19 62-2A	1	1 unit	41B
	3RT1. 7	S12		B	3RA19 72-2A	1	1 unit	41B

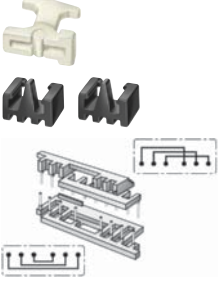
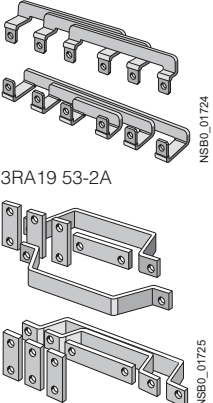
¹⁾ Can also be used for 4-pole contactors with sizes S2 and S3.

²⁾ Can also be used for size S0 4-pole contactors.

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

For contactors	Size	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type								
Assembly kits for making 3-pole contactor assemblies								
 <p>3RA19 13-2A</p>	3RT10 1	S00	The assembly kit contains: mechanical interlock; 2 connecting clips for 2 contactors; wiring modules on the top and bottom	►	3RA19 13-2A	1	1 unit	41B
	3RT10 2	S0	The assembly kit contains: wiring modules on the top and bottom	►	3RA19 23-2A	1	1 unit	41B
	3RT10 3	S2	The assembly kit contains: 2 connecting clips for 2 contactors; wiring modules on the top and bottom	►	3RA19 33-2A	1	1 unit	41B
	3RT10 4	S3	The assembly kit contains: 2 connecting clips for 2 contactors; wiring modules on the top and bottom	►	3RA19 43-2A	1	1 unit	41B
	3RT10 5	S6	The assembly kit contains: Wiring modules on the top and bottom (for connection with box terminal)	A	3RA19 53-2A	1	1 unit	41B
 <p>3RA19 53-2M</p>	3RT1. 6	S10	The assembly kit contains: Wiring modules on the top and bottom (for connection without box terminal)	A	3RA19 63-2A	1	1 unit	41B
	3RT1. 7	S12		A	3RA19 73-2A	1	1 unit	41B

Contactors Assemblies

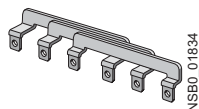
3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

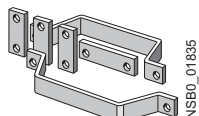
For con- tactors	Size	Contact- tor clear- ance	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type		mm							

Wiring modules, single

3RT10 1	S00-S00	0	Top (in-phase)	▶	3RA19 13-3D		1	5 units	41B
			Bottom (with phase reversal)	▶	3RA19 13-3E		1	5 units	41B
3RT10 2	S0-S0 and S0-S0	0 and 10	Top (in-phase)	▶	3RA19 23-3D		1	5 units	41B
			Bottom (with phase reversal)	▶	3RA19 23-3E		1	5 units	41B
3RT10 3	S2-S2	10	Top (in-phase)	▶	3RA19 33-3D		1	1 unit	41B
			Bottom (with phase reversal)	▶	3RA19 33-3E		1	1 unit	41B
3RT10 4	S3-S3	10	Top (in-phase)	▶	3RA19 43-3D		1	1 unit	41B
			Bottom (with phase reversal)	▶	3RA19 43-3E		1	1 unit	41B
3RT10 5	S6-S6	10	Top (in-phase, for connection with box terminal)	A	3RA19 53-3D		1	1 unit	41B



3RA19 53-3D



3RA19 53-3P

			Top (with phase reversal, for connection without box terminal)	A	3RA19 53-3P		1	1 unit	41B
--	--	--	---	---	--------------------	--	---	--------	-----

For con- tactors	Size	Contact- tor clear- ance	Interlocking	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type		mm								

Mechanical connectors

3RT1. 1 ¹⁾	S00-S00	0	Lateral	For 3- and 4-pole contactors	▶	3RA19 12-2H		1	10 units	41B
3RT1. 2	S0-S0	0 10 ²⁾	On front	For 3- and 4-pole contactors	A	3RA19 22-2C		1	10 units	41B
			Lateral		▶	3RT19 22-2D		100	20 units	41B
3RT1. 3	S2-S2	0	On front	For 3-pole con- tactors	▶	3RA19 32-2C		1	10 units	41B
3RT1. 4	S3-S3									
3RT1. 3	S2-S2	10	Lateral	For 3-pole con- tactors	▶	3RA19 32-2D		1	10 units	41B
3RT1. 4	S3-S3									
3RT1. 5	S6-S6									
3RT1. 3	S2-S2	10	Lateral	For 4-pole con- tactors	A	3RA19 32-2G		1	10 units	41B
3RT1. 4	S3-S3	10	Lateral	For 4-pole con- tactors	B	3RA19 42-2G		1	10 units	41B



3RA19 12-2H



3RA19 22-2C



3RA19 32-2C



3RA19 32-2D



3RA19 32-2G



3RA19 42-2G

¹⁾ This pack contains 10 additional interlocks.

²⁾ The connector function can be fulfilled with the wiring modules for size S0, a contactor clearance of 10 mm and a lateral interlock.

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

**SIRIUS 3RA14 contactor assemblies
for wye-delta starting**

Overview

These 3RA14 contactor assemblies for wye-delta starting are designed for standard applications.

Note:

Contactor assemblies for wye-delta starting in special applications such as very heavy starting¹⁾ or wye-delta starting of special motors must be customized. Help with designing such special applications is available from Technical Assistance.

The 3RA14 contactor assemblies for wye-delta starting can be ordered as follows:

Sizes S00 to S3

- Fully wired and tested, with electrical interlock, dead interval of up to 10 s on reversing (size S00 with electrical and mechanical interlocks)

Sizes S00 to S12

- As individual parts for customer assembly

A dead interval of 50 ms on reversing is already integrated in the time relay function.

There is also a range of accessories (auxiliary switch blocks, surge suppressors, etc.) that must be ordered separately.

Overload relays for motor protection [see Chapter 7 "Protection Equipment" → "Overload Relays"](#)
→ ["SIRIUS 3RB2 Solid-State Overload Relays"](#).

The 3RA14 contactor assemblies have screw terminals and are suitable for screw and snap-on mounting onto TH 35 standard mounting rails.

Fully wired and tested 3RA14 contactor assemblies have one unassigned NO contact which is mounted onto the front of the K3 delta contactor.

A solid-state time-delay auxiliary switch block is snapped onto the front of the complete contactor assemblies, size S00 up to 7.5 kW, while a timing relay is mounted onto the side of sizes S0 to S3, 11 kW to 75 kW.

¹⁾ For effective support from Technical Assistance you must provide the following details:

- Rated motor voltage
- Rated motor current
- Service factor, operating values
- Motor starting current factor
- Starting time
- Ambient temperature

Rated data at 50 Hz 400 V AC			Size			Order No. complete
Rating P kW	Operational current I_e A	Motor current A		Line/delta contactor	Star contactor	
5,5	12	9,5 ... 13,8	S00-S00-S00	3RT10 15	3RT10 15	3RA14 15-8XB31-1...
7,5	17	12,1 ... 17		3RT10 17		3RA14 16-8XB31-1...
11	25	19 ... 25	S0-S0-S0	3RT10 24	3RT10 24	3RA14 23-8XC21-1...
15	32	24,1 ... 34		3RT10 26		3RA14 25-8XC21-1...
18,5	40	34,5 ... 40				
22	50	31 ... 43	S2-S2-S0	3RT10 34	3RT10 26	3RA14 34-8XC21-1...
30	50	48,3 ... 65		3RT10 34		--
37	80	62,1 ... 77,8	S2-S2-S2		3RT10 34	3RA14 35-8XC21-1...
45	86	69 ... 86		3RT10 36		3RA14 36-8XC21-1...
55	115	77,6 ... 108,6	S3-S3-S2	3RT10 44	3RT10 35	3RA14 44-8XC21-1...
75	150	120,7 ... 150		3RT10 45	3RT10 36	3RA14 45-8XC21-1...
90	160	86 ... 160	S6-S6-S3	3RT10 54	3RT10 44	--
110	195	86 ... 195				
132	230	86 ... 230		3RT10 55	3RT10 45	
160	280	86 ... 280		3RT10 56	3RT10 46	
200	350	95 ... 350	S10-S10-S6	3RT10 64	3RT10 54	--
250	430	95 ... 430		3RT10 65	3RT10 55	
315	540	277 ... 540	S12-S12-S10	3RT10 75	3RT10 64	--
355	610	277 ... 610				
400	690	277 ... 690			3RT10 65	
500	850	277 ... 850		3RT10 76	3RT10 66	

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for wye-delta starting

Components for customer assembly

Assembly kits with wiring modules and, if necessary, mechanical connectors are available for contactor assemblies for wye-delta starting. Contactors, overload relays, wye-delta timing relays, auxiliary switches for electrical interlock – if required also feeder terminals, mechanical interlocks and base plates – must be ordered separately (exception: in the case of the assembly kit for size S00 contactor assemblies, the mechanical interlock between the delta contactor and the star contactor is included in the kit).

The wiring kits for sizes S00 and S0 contain the top and bottom main conducting path connections between the line and delta contactors (top) and between the delta and star contactors (bottom).

In the case of sizes S2 to S12 only the bottom main conducting path connection between the delta and star contactors is included in the wiring module, owing to the larger conductor cross-section at the infeed.

Motor protection

Overload relays or thermistor motor protection releases can be used for overload protection.

The overload relay can be either mounted onto the line contactor or separately fitted. It must be set to 0.58 times the rated motor current.

Note:

The selection of contactor types refers to fused configurations.

P kW	Accessories for customer assembly					Overload relay, thermal (CLASS 10 trip class)		Overload relay, solid-state (CLASS 10 trip class)	
	Timing relays	Assembly kit A, for double infeed	Assembly kit B, for single infeed	Star jumper	Base plates	Setting range A	Order No.	Setting range A	Order No.
5,5	3RT19 16-2G.51	--	3RA19 13-2B ¹⁾	--	--	5,5 ... 8	3RU11 16-1HB0	3 ... 12	3RB20 16-1SB0
7,5	3RP15 74-1N.30					7 ... 10	3RU11 16-1JB0		
11	3RP15 74-1N.30	--	3RA19 23-2B ²⁾	--	--	11 ... 16	3RU11 26-4AB0	6 ... 25	3RB20 26-1QB0
15						14 ... 20	3RU11 26-4BB0		
18,5						20 ... 25	3RU11 26-4DB0		
22	3RP15 74-1N.30	3RA19 33-2C ³⁾	3RV19 35-1A	3RT19 26-4BA31	3RA19 32-2E	18 ... 25	3RU11 36-4DB0	12,5 ... 50	3RB20 36-1UB0
30						28 ... 40	3RU11 36-4FB0		
37	3RP15 74-1N.30	3RA19 33-2B ³⁾	3RV19 35-1A	3RT19 36-4BA31	3RA19 32-2F	36 ... 45	3RU11 36-4GB0	12,5 ... 50	3RB20 36-1UB0
45						40 ... 50	3RU11 36-4HB0		
55	3RP15 74-1N.30	3RA19 43-2C ³⁾	--	3RT19 36-4BA31	3RA19 42-2E	45 ... 63	3RU11 46-4JB0	25 ... 100	3RB20 46-1EB0
75						70 ... 90	3RU11 46-4LB0		
90	3RP15 74-1N.30	--	3RA19 53-3D ⁴⁾	3RT19 46-4BA31	3RA19 52-2E	--	--	50 ... 200	3RB20 56-1FC2
110									
132									
160									
200	3RP15 74-1N.30	--	--	3RT19 56-4BA31	3RA19 62-2E	--	--	55 ... 250	3RB20 66-1GC2
250								160 ... 630	3RB20 66-1MC2
315	3RP15 74-1N.30	--	--	3RT19 66-4BA31	3RA19 72-2E	--	--	160 ... 630	3RB20 66-1MC2
355									
400									
500									

¹⁾ Assembly kit contains mechanical interlock, 3 connecting clips; wiring modules on the top (connection between line and delta contactor) and on the bottom (connection between delta and star contactor); star jumper.

²⁾ Assembly kit contains 5 connecting clips; wiring modules on the top (connection between line and delta contactor) and on the bottom (connection between delta and star contactor); star jumper.

³⁾ Assembly kit contains wiring module on the bottom (connection between delta and star contactor) and star jumper.

⁴⁾ Wiring module on top from reversing contactor assembly (note conductor cross-sections).

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

**SIRIUS 3RA14 contactor assemblies
for wye-delta starting**

Selection and ordering data

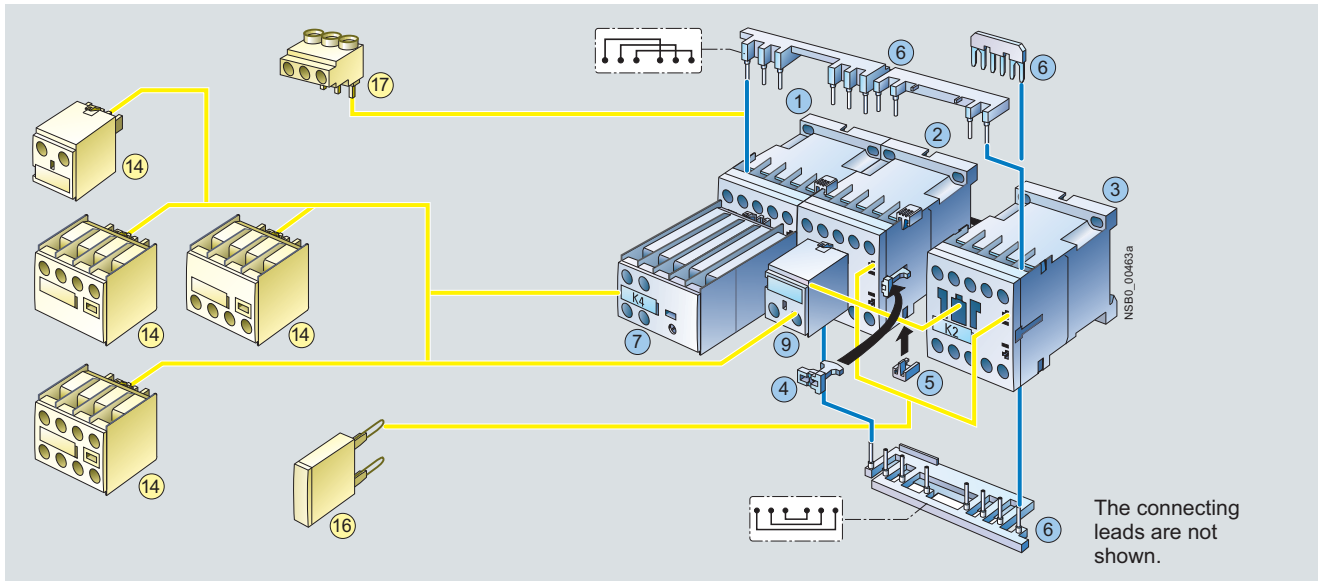
Fully wired and tested contactor assemblies · Size S00-S00-S00 · up to 7.5 kW



3RA14 1.-8XB31-1...

Rated data AC-3						DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and				Rated control supply voltage U_s ¹⁾					
400 V	230 V	400 V	500 V	690 V			Order No.	Price € per PU		
A	kW	kW	kW	kW	V					
AC operation, 50/60 Hz										
12	3,3	5,5	7,2	9,2	24 AC	B	3RA14 15-8XB31-1AB0	1	1 unit	41B
					110 AC	B	3RA14 15-8XB31-1AF0	1	1 unit	41B
					230 AC	B	3RA14 15-8XB31-1AP0	1	1 unit	41B
17	4,7	7,5	10,3	9,2	24 AC	B	3RA14 16-8XB31-1AB0	1	1 unit	41B
					110 AC	B	3RA14 16-8XB31-1AF0	1	1 unit	41B
					230 AC	B	3RA14 16-8XB31-1AP0	1	1 unit	41B
DC operation										
12	3,3	5,5	7,2	9,2	24 DC	B	3RA14 15-8XB31-1BB4	1	1 unit	41B
17	4,7	7,5	10,3	9,2	24 DC	B	3RA14 16-8XB31-1BB4	1	1 unit	41B

¹⁾ Coil operating range
at 50 Hz: 0,8 ... 1,1 x U_s ; at 60 Hz: 0,85 ... 1,1 x U_s .



Mountable accessories (optional)

To be ordered separately	Order No.	Page
14 Auxiliary switch block, front	3RH19 11-1...	3/35
16 Surge suppressor	3RT19 16-1...	3/43
17 Three-phase feeder terminal	3RA19 13-3K	3/74

Complete contactor assemblies

Individual parts		Order No.			Page
		K1 ¹⁾	K3 ²⁾	K2 ²⁾	
① ② ③	Contactor, 5,5 kW	3RT10 15	3RT10 15	3RT10 15	3/15
① ② ③	Contactor, 7,5 kW	3RT10 17	3RT10 17	3RT10 15	3/15
⑦	Solid-state time-delay auxiliary switch block, front	3RT19 16-2G.51			3/41
⑨	Auxiliary switch block with 1 unassigned NO contact	3RH19 11-1BA10			3/35
④ ⑤ ⑥	Assembly kit	3RA19 13-2B			3/74
The assembly kit contains:					
④	Mechanical interlock				
⑤	3 connecting clips				
⑥	Wiring modules on the top and bottom for connecting the main and control conducting paths				

¹⁾ Use version with 1 NO.


²⁾ Use version with 1 NC.

Contactor Assemblies

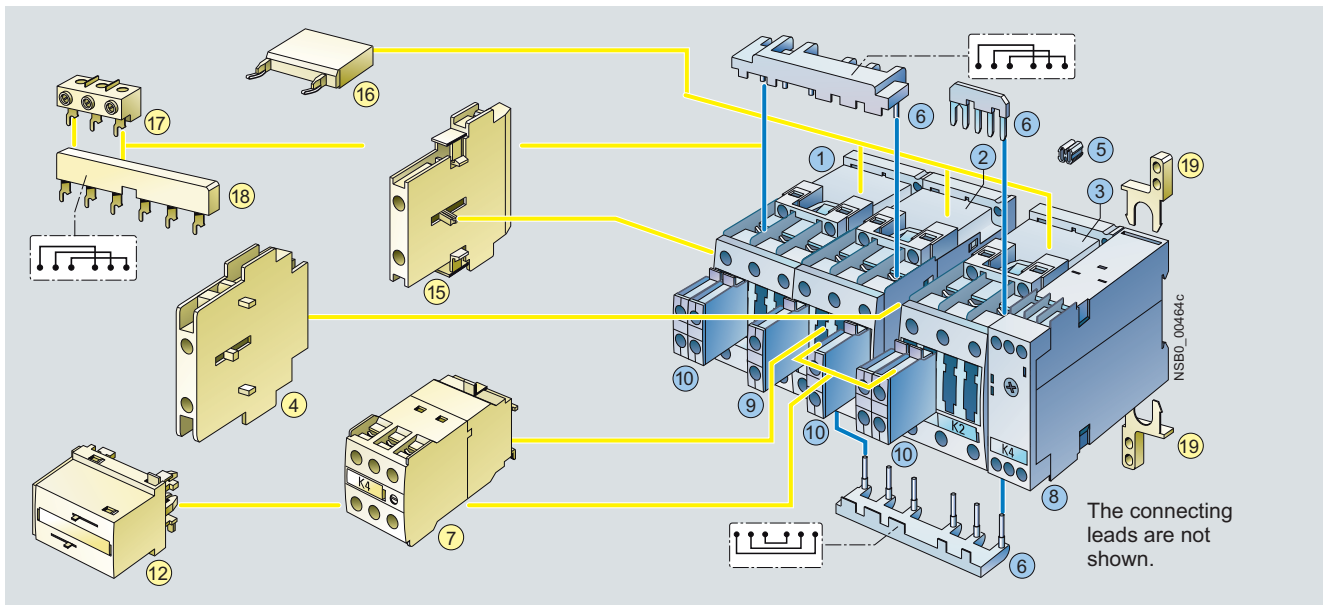
3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for wye-delta starting

Fully wired and tested contactor assemblies · Size S0-S0-S0 · up to 18.5 kW

Rated data AC-3						DT	Screw terminals			PU (UNIT, SET, M)	PS*	PG			
Operational current I_e up to	Ratings of induction motors at 50 Hz and						Order No.	Price € per PU							
	400 V	230 V	400 V	500 V	690 V										
A	kW	kW	kW	kW	V										
AC operation, 50/60 Hz															
25	7,1	11	15,6	19	24 AC	B	3RA14 23-8XC21-1AC2		1	1 unit	41B				
					110 AC	B						3RA14 23-8XC21-1AG2	1	1 unit	41B
					230 AC	▶						3RA14 23-8XC21-1AL2	1	1 unit	41B
32 / 40	11,4	15 / 18,5	19	19	24 AC	B	3RA14 25-8XC21-1AC2		1	1 unit	41B				
					110 AC	B						3RA14 25-8XC21-1AG2	1	1 unit	41B
					230 AC	▶						3RA14 25-8XC21-1AL2	1	1 unit	41B
DC operation															
25	7,1	11	15,6	19	24 DC	▶	3RA14 23-8XC21-1BB4		1	1 unit	41B				
32 / 40	11,4	15 / 18,5	19	19	24 DC	▶						3RA14 25-8XC21-1BB4	1	1 unit	41B

1) Coil operating range at 50 Hz:
0.8 ... 1.1 x U_N ; at 60 Hz: 0.85 ... 1.1 x U_N .



Mountable accessories (optional)			
To be ordered separately	Order No.	Page	
4 Mechanical interlock, lateral	3RA19 24-2B	3/64	
7 Solid-state time-delay auxiliary switch block, front ¹⁾	3RT19 26-2G...	3/41	
12 Mechanical interlock, front	3RA19 24-1A	3/64	
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/39	
16 Surge suppressor	3RT19 26-1...	3/43	
17 Three-phase feeder terminal ²⁾	3RV19 15-5A	3/74	
18 Three-phase busbar ²⁾	3RT19 26-4CC20	3/74	
19 Push-in lug for screw mounting of timing relay ³⁾	3RP19 03	4)	

Complete contactor assemblies					
Individual parts		Order No.			Page
		K1	K3	K2	
① ② ③	Contactor, 11 kW	3RT10 24	3RT10 24	3RT10 24	3/16
① ② ③	Contactor, 15/18.5 kW	3RT10 26	3RT10 26	3RT10 24	3/16
⑧	Timing relay, lateral	3RP15 74-1N.30			4)
⑨	Auxiliary switch block with 1 unassigned NO contact	3RH19 21-1CA10			3/38
⑩	Auxiliary switch block for local control				
	- 2 units	3RH19 21-1CA01			
	- 3 units	3RH19 21-1CA10			3/38
⑤ ⑥	Assembly kit	3RA19 23-2B			3/74
The assembly kit contains:					
⑤	Connecting clips				
⑥	Wiring modules on the top and bottom for connecting the main and control conducting paths				

1) Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.

2) 17 and 18 can only be mounted with contactors with screw terminal (coil).

3) Not included in the scope of supply of the preassembled contactor assemblies; can be ordered as an accessory.

4) See chapter 10 "Monitoring and Control Devices" → "3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies


**SIRIUS 3RA14 contactor assemblies
for wye-delta starting**

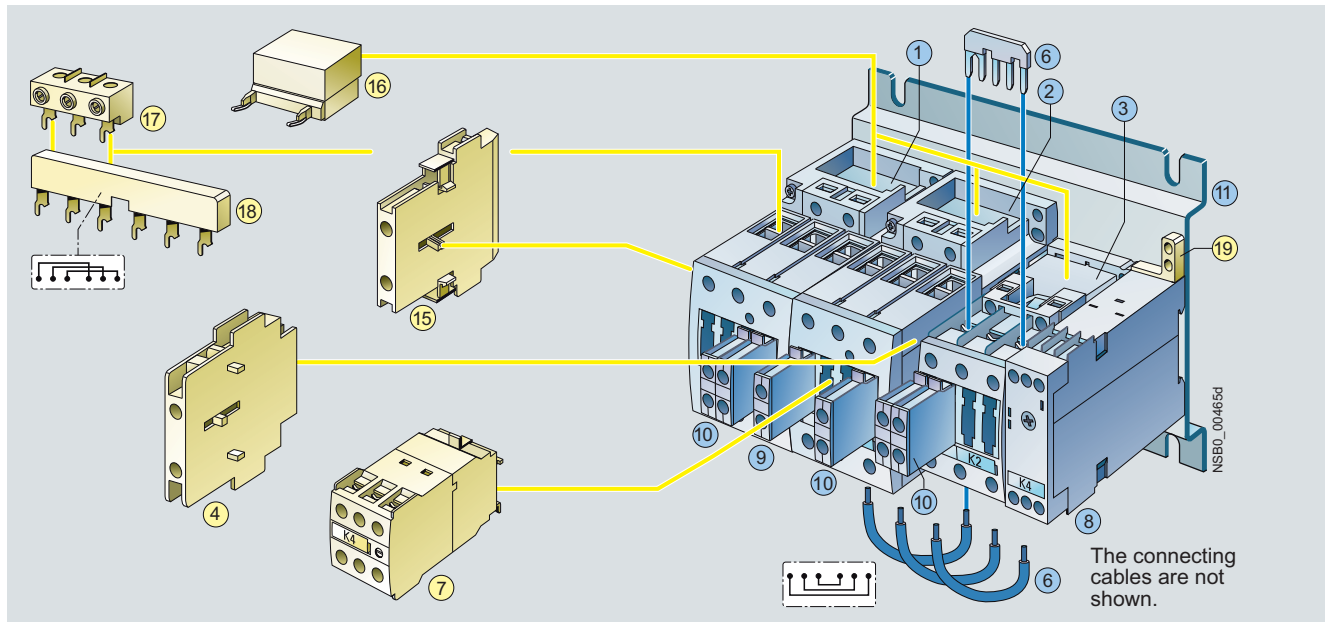
Fully wired and tested contactor assemblies · Size S2-S2-S0 · up to 30 kW



3RA14 34-8XC21-1...

1) Coil operating range
at 50 Hz: 0,8 ... 1.1 x U_s ; at 60 Hz: 0,85 ... 1.1 x U_s .

Rated data AC-3						DT	Screw terminals			PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and						Order No.	Price € per PU				
400 V	230 V	400 V	500 V	690 V								
A	kW	kW	kW	kW	V							
AC operation, 50/60 Hz												
50 / 65	19,6	22 / 30	35	34	24 AC	B	3RA14 34-8XC21-1AC2		1	1 unit	41B	
					110 AC	B	3RA14 34-8XC21-1AG2		1	1 unit	41B	
					230 AC	▶	3RA14 34-8XC21-1AL2		1	1 unit	41B	
DC operation												
50 / 65	19,6	22 / 30	35	34	24 DC	▶	3RA14 34-8XC21-1BB4		1	1 unit	41B	



Mountable accessories (optional)

To be ordered separately	Order No.	Page
4 Mechanical interlock, lateral. Depth compensation required: K3: 1.5 mm; K2: 0 mm ¹⁾	3RA19 24-2B	3/64
7 Solid-state time-delay auxiliary switch block, front ²⁾	3RT19 26-2G...	3/41
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/39
16 Surge suppressor	3RT19 26-1.... 3RT19 36-1....	3/43, 3/44
17 Three-phase feeder terminal	3RV19 35-5A	3/74
18 Three-phase busbar	3RV19 35-1A	3/74
19 Push-in lug for screw mounting of timing relay	3RP19 03	4)

Complete contactor assemblies

Individual parts		Order No.			Page
		K1	K3	K2	
1 2 3	Contactor, 22/30 kW	3RT10 34	3RT10 34	3RT10 26	3/16
8	Timing relay, lateral	3RP15 74-1N.30			3)
9	Auxiliary switch block with 1 unassigned NO contact	3RH19 21-1CA10			3/38
10	Auxiliary switch block for local control				
	- 2 units	3RH19 21-1CA01			3/38
	- 3 units	3RH19 21-1CA10			3/38
11	Base plate	3RA19 32-2E			3/74
6	Assembly kit	3RA19 33-2C			3/74
The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.					

1) Use the 3RA19 32-2B base plate for this configuration.

2) Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.


3) See chapter 10 "Monitoring and Control Devices" → "3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

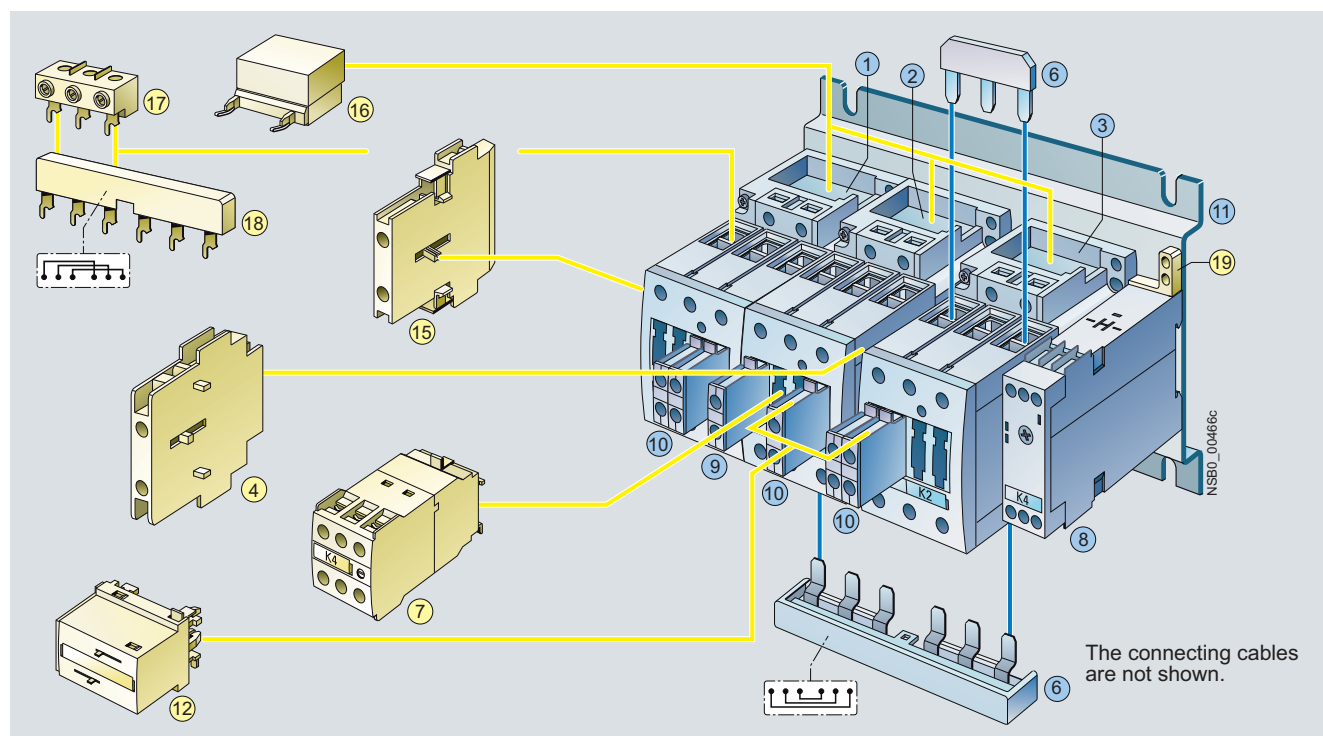
SIRIUS 3RA14 contactor assemblies for wye-delta starting

Fully wired and tested contactor assemblies · Size S2-S2-S2 · up to 45 kW

Rated data AC-3						DT	Screw terminals			PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and				Order No.		Price € per PU					
400 V	230 V	400 V	500 V	690 V								
A	kW	kW	kW	kW	V							
AC operation, 50/60 Hz												
80	25	37	51	63	24 AC	B	3RA14 35-8XC21-1AC2		1	1 unit	41B	
					110 AC	B	3RA14 35-8XC21-1AG2		1	1 unit	41B	
					230 AC	▶	3RA14 35-8XC21-1AL2		1	1 unit	41B	
86	27	45	55	63	24 AC	B	3RA14 36-8XC21-1AC2		1	1 unit	41B	
					110 AC	B	3RA14 36-8XC21-1AG2		1	1 unit	41B	
					230 AC	▶	3RA14 36-8XC21-1AL2		1	1 unit	41B	
DC operation												
80	25	37	51	63	24 DC	B	3RA14 35-8XC21-1BB4		1	1 unit	41B	
86	27	45	55	63	24 DC	B	3RA14 36-8XC21-1BB4		1	1 unit	41B	

3RA14 3...-8XC21-1...

1) Coil operating range
at 50 Hz: 0,8 ... 1,1 x U_s ; at 60 Hz: 0,85 ... 1,1 x U_s .



Mountable accessories (optional)

To be ordered separately	Order No.	Page
4 Mechanical interlock, lateral	3RA19 24-2B	3/64
7 Solid-state time-delay auxiliary switch block, front ¹⁾	3RT19 26-2G...	3/41
12 Mechanical interlock, front	3RA19 24-1A	3/64
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/39
16 Surge suppressor	3RT19 26-1.... 3RT19 36-1....	3/43, 3/44
17 Three-phase feeder terminal	3RV19 35-5A	3/74
18 Three-phase busbar	3RV19 35-1A	3/74
19 Push-in lug for screw mounting of timing relay	3RP19 03	2)

Complete contactor assemblies

Individual parts		Order No.			Page
		K1	K3	K2	
① ② ③	Contactor, 37 kW	3RT10 35	3RT10 35	3RT10 34	3/17
① ② ③	Contactor, 45 kW	3RT10 36	3RT10 36	3RT10 34	3/17
⑧	Timing relay, lateral	3RP15 74-1N.30			2)
⑨	Auxiliary switch block with 1 unassigned NO contact	3RH19 21-1CA10			3/38
⑩	Auxiliary switch block for local control				
	- 2 units	3RH19 21-1CA01			3/38
	- 3 units	3RH19 21-1CA10			3/38
⑪	Base plate	3RA19 32-2F			3/74
⑥	Assembly kit	3RA19 33-2B			3/74

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

1) Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.


2) See chapter 10 "Monitoring and Control Devices" → "3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".


Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

**SIRIUS 3RA14 contactor assemblies
for wye-delta starting**

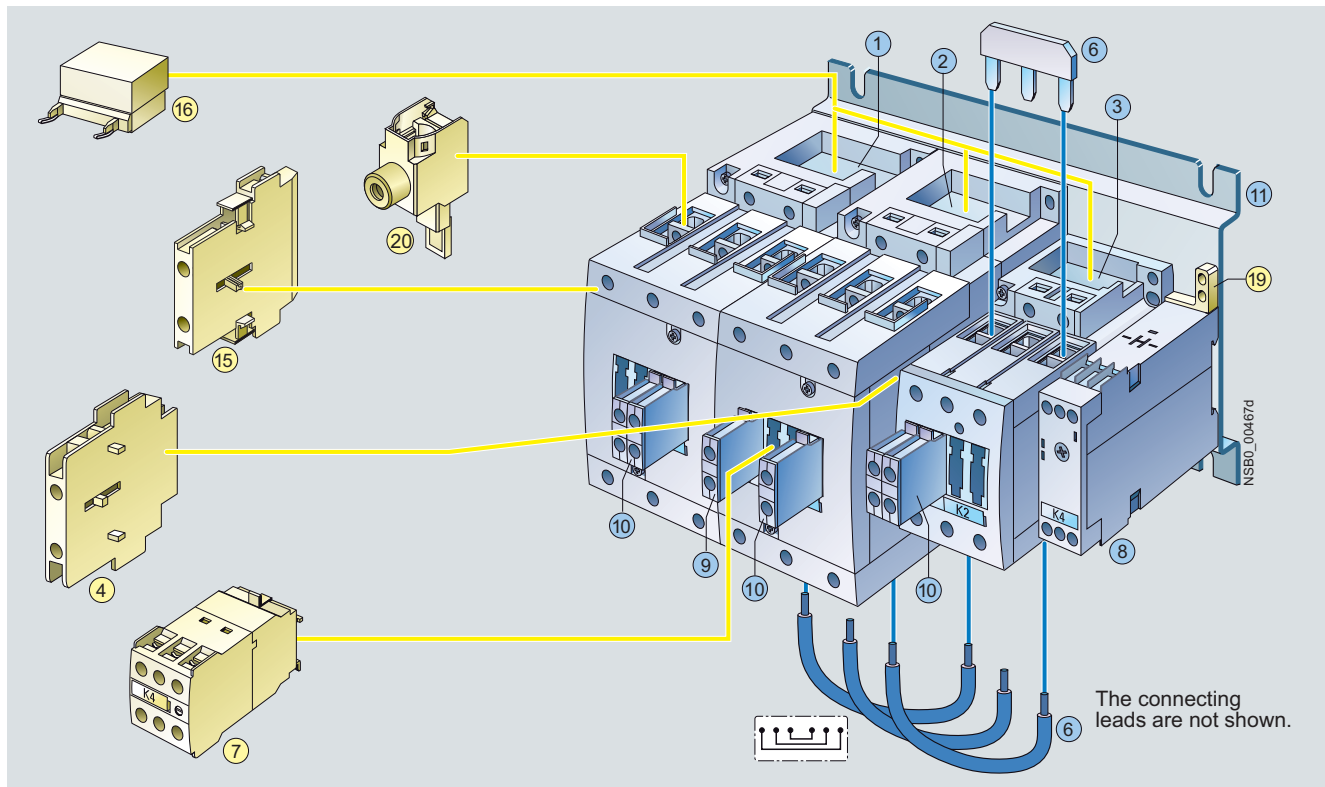
Fully wired and tested contactor assemblies · Size S3-S3-S2 · up to 75 kW



Rated data AC-3						Rated control supply voltage U_s ¹⁾	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and											
400 V	230 V	400 V	500 V	690 V								
A	kW	kW	kW	kW	V							
AC operation, 50/60 Hz												
115	37	55	81	93	24 AC	B	3RA14 44-8XC21-1AC2 3RA14 44-8XC21-1AG2 3RA14 44-8XC21-1AL2		1	1 unit	41B	
					110 AC	B			1	1 unit	41B	
					230 AC	▶			1	1 unit	41B	
150	47	75	103	110	24 AC	B	3RA14 45-8XC21-1AC2 3RA14 45-8XC21-1AG2 3RA14 45-8XC21-1AL2		1	1 unit	41B	
					110 AC	B			1	1 unit	41B	
					230 AC	▶			1	1 unit	41B	
DC operation												
115	37	55	81	93	24 DC	B	3RA14 44-8XC21-1BB4 3RA14 45-8XC21-1BB4		1	1 unit	41B	
150	47	75	103	110	24 DC	B			1	1 unit	41B	

3RA14 4.-8XC21-1...

¹⁾ Coil operating range at 50 Hz: 0,8 ... 1.1 x U_s ; at 60 Hz: 0,85 ... 1.1 x U_s .



Mountable accessories (optional)

To be ordered separately	Order No.	Page
4 Mechanical interlock, lateral. Depth compensation required: K3: 0 mm; K2: 27.5 mm ¹⁾	3RA19 24-2B	3/64
7 Solid-state time-delay auxiliary switch block, front ²⁾	3RT19 26-2G...	3/41
15 Auxiliary switch block, lateral	3RH19 21-1EA...	3/39
16 Surge suppressors	3RT19 .6-1....	3/44
19 Push-in lug for screw mounting of timing relay	3RP19 03	3)
20 Single-phase feeder terminal	3RA19 43-3L	3/74

¹⁾ Use the 3RA19 42-2B base plate for this configuration.

²⁾ Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.

Complete contactor assemblies

Individual parts		Order No.			Page
		K1	K3	K2	
① ② ③	Contactor, 55 kW	3RT10 44	3RT10 44	3RT10 35	3/17
① ② ③	Contactor, 75 kW	3RT10 45	3RT10 45	3RT10 36	3/17
⑧	Timing relay, lateral	3RP15 74-1N.30			3)
⑨	Auxiliary switch block with 1 unassigned NO contact	3RH19 21-1CA10			3/38
⑩	Auxiliary switch block for local control				
	- 2 units	3RH19 21-1CA01			3/38
	- 3 units	3RH19 21-1CA10			3/38
⑪	Base plate	3RA19 42-2E			3/74
⑥	Assembly kit	3RA19 43-2C			3/74

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

³⁾ See chapter 10 "Monitoring and Control Devices" → "3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for wye-delta starting

Components for customer assembly

Version	Size	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Assembly kits							
The assembly kit contains: Mechanical interlock; 3 connecting clips, star jumper, wiring modules on the top and bottom	S00-S00-S00	►	3RA19 13-2B		1	1 unit	41B
The assembly kit contains: 5 connecting clips, star jumper, wiring modules on the top and bottom	S0-S0-S0	►	3RA19 23-2B		1	1 unit	41B
The assembly kit contains: Star jumper, wiring module on the bottom (Wiring module on the top is not included in the scope of supply.) (A double infeed between the line contactor and the delta contactor is recommended.)	S2-S2-S0 S2-S2-S2 S3-S3-S2 S3-S3-S3 S6-S6-S6 S6-S6-S6 S10-S10-S10 S12-S12-S12	► ► ► ► A A A B	3RA19 33-2C 3RA19 33-2B 3RA19 43-2C 3RA19 43-2B 3RA19 53-2B 3RA19 53-2N 3RA19 63-2B 3RA19 73-2B		1 1 1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	41B 41B 41B 41B 41B 41B 41B 41B
Single-phase feeder terminals							
Conductor cross-section: 95 mm ²	S3	A	3RA19 43-3L		1	1 unit	41B
Three-phase feeder terminal							
Feeder terminal block for the line contactor for large conductor cross-sections							
Conductor cross-section: 6 mm ²	S00	►	3RA19 13-3K		1	1 unit	41B
Conductor cross-section: 25 mm ²	S0	►	3RV19 25-5AB		1	1 unit	41E
Conductor cross-section: 50 mm ²	S2	►	3RV19 35-5A		1	1 unit	41E
Three-phase busbars							
Bridging phase-by-phase of all input terminals of the line contactor (K1) and the delta contactor (K3)	S0 S2	D ►	3RT19 26-4CC20 3RV19 35-1A		1 1	1 unit 1 unit	41B 41E
Links for paralleling, 3-pole (star jumpers)							
Without terminal (The links for paralleling can be reduced by one pole)	S00 S0 S2 S3 S6¹⁾ S10, S12¹⁾	► ► ► ► ► ►	3RT19 16-4BA31 3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31 3RT19 66-4BA31		1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	41B 41B 41B 41B 41B 41B
Base plates							
For customer assembly of contactor assemblies for wye-delta starting with timing relay mounted on the side							
Side-by-side mounting	S2, S2, S0	B	3RA19 32-2E		1	1 unit	41B
10 mm distance between K3 and K2	S2, S2, S2	B	3RA19 32-2F		1	1 unit	41B
Side-by-side mounting	S3, S3, S2	B	3RA19 42-2E		1	1 unit	41B
10 mm distance between K1, K3 and K2	S6, S6, S3 S6, S6, S6 S10, S10, S6 S10, S10, S10 S12, S12, S10 S12, S12, S12	B B B B B B	3RA19 52-2E 3RA19 52-2F 3RA19 62-2E 3RA19 62-2F 3RA19 72-2E 3RA19 72-2F		1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	41B 41B 41B 41B 41B 41B
For customer assembly of contactor assemblies for wye-delta starting with a timing relay mounted on the front							
10 mm distance between K1, K3 and K2	S2, S2, S0 S2, S2, S2 S3, S3, S2	B B B	3RA19 32-2B 3RA19 32-2B 3RA19 42-2B		1 1 1	1 unit 1 unit 1 unit	41B 41B 41B

¹⁾ The 3RT19 56-4EA1 (S6) or 3RT19 66-4EA1 (S10, S12) cover can be used for touch protection.