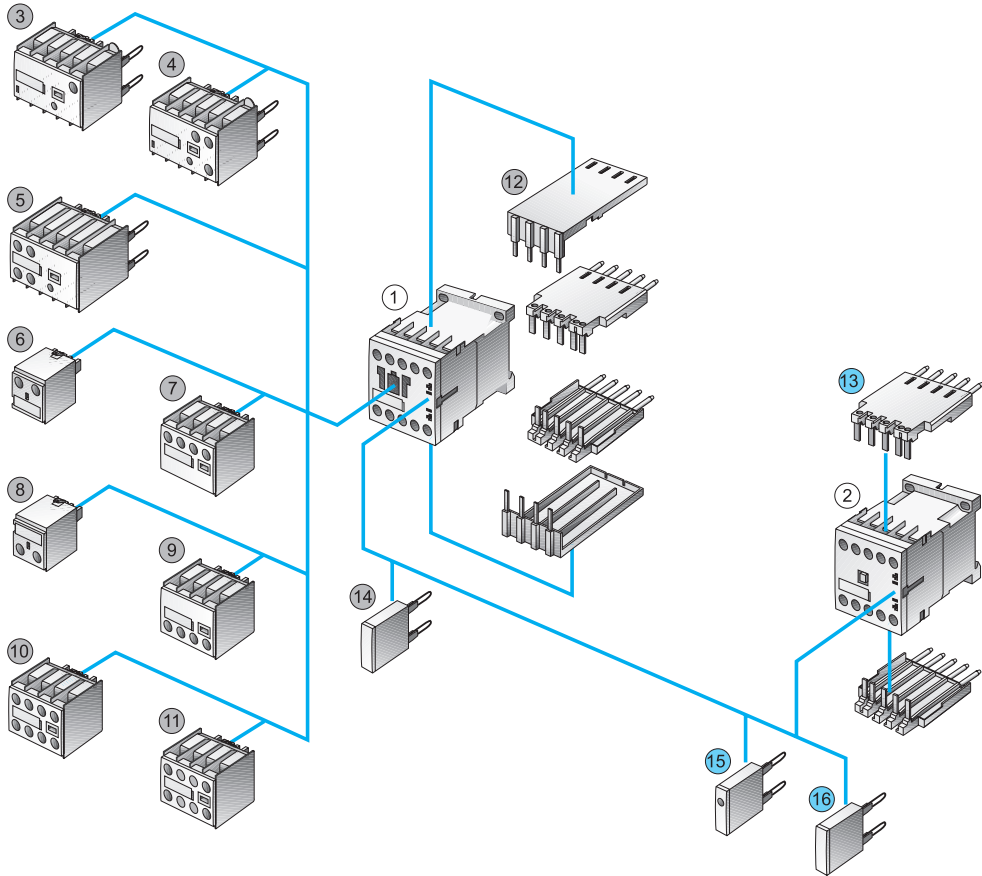




Overview

The new SIRIUS generation is a complete, modular system family, logically designed right down to the last detail, from the basic units to the accessories.



Control relays and coupling relays
Size S00 with accessories

- ① Control relay, see 2/55
- ② Coupling relay for auxiliary circuits, see 2/58
- ③ Solid-state time-delay block, ON-delay, see 2/46
- ④ Solid-state time-delay block, OFF-delay, see 2/46
- ⑤ Auxiliary switch block, solid-state time delay, see 2/45
(variants: ON or OFF-delay)
- ⑥ Single-pole auxiliary switch block, cable entry from above, see 2/41
- ⑦ 2-pole auxiliary switch block, cable entry from above, see 2/41
- ⑧ Single-pole auxiliary switch block, cable entry from below, see 2/41
- ⑨ 2-pole auxiliary switch block, cable entry from below, see 2/41
- ⑩ 4-pole auxiliary switch block, see 2/41
(terminal designations acc. to EN 50 011 or EN 50 005)
- ⑪ 2-pole auxiliary switch block, standard design or solid-state compatible design, see page 2/41 (terminal designations acc. to EN 50 005)
- ⑫ Solder pin adapter for contactor relays with 4-pole auxiliary switch block, see 2/51
- ⑬ Solder pin adapter for contactor relays and coupling relays, see 2/51
- ⑭ Additional load module for increasing the permissible off-state current, see 2/49
- ⑮ Surge suppressor with LED, see 2/48
- ⑯ Surge suppressor without LED, see 2/47

- for control relays
- for control relays and coupling relays

Contactors and Contactor Assemblies

Control Relays, Coupling Relays

SIRIUS



3RH11 control relays, size S00 with 4 or 8 contacts

Application

AC and DC operation

IEC 60 947, EN 60 947 (VDE 0660)

Design

The 3RH11 control relays are suitable for use in any climate. They are safe from touch to DIN VDE 0106 Part 100.

The 3RH11 control relays have screw or Cage Clamp connections. Four contacts are available in the basic unit.

Contact reliability

High contact stability at low voltages and currents, suitable for electronic circuits with currents ≥ 1 mA at a voltage of 17 V.

Auxiliary switch blocks

The 3RH11 control relays can be expanded by up to four contacts by the addition of mountable auxiliary switch blocks.

The auxiliary switch block can easily be snapped onto the front of the relays. The auxiliary switch block has a centrally positioned release lever for disassembly.

The control relays with 4 contacts in accordance with EN 50 011, with the identification number 40E, can be extended with 80E to 44E auxiliary switch blocks to obtain control relays with 8 contacts in accordance with EN 50 011. The identification numbers 80E to 44E on the auxiliary switch blocks apply to the complete relays (see illustration alongside).

These auxiliary switch blocks (3RH19 11-1GA ..) cannot be combined with control relays with identification numbers 31E and 22E; they are coded.

All control relays with 4 contacts in accordance with EN 50 011, identification numbers 40E to 22E, can be extended with auxiliary switch blocks 40 to 02 to obtain control relays with 6 or 8 contacts in accordance with EN 50 005. The identification numbers on the auxiliary switch blocks apply only to the attached auxiliary switch blocks.

Surge suppression

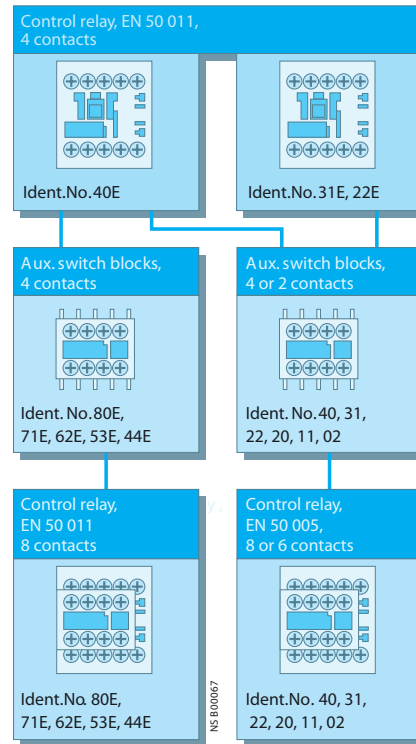
RC elements, varistors, diodes or diode assemblies (combination of a diode and a Zener diode) can be plugged onto all control relays from the front for damping opening surges in the coil. The plug-in direction is determined by a coding device.

Note

The opening times of the NO contacts and the closing times of the NC contacts increase if the relay coils are protected against voltage peaks (suppression diode 6 to 10 times, diode assemblies 2 to 6 times, varistor +2 ms to 5 ms).

Overview

3RH1. contactor relays acc. to EN 50 011 and EN 50 005



3RH14 latched control relays, size S00

Application

AC and DC operation

IEC 60 947, EN 60 947 (VDE 0660)

The terminal designations comply with EN 50 011.

The relay coil and the coil of the release solenoid are both designed for continuous duty.

The number of auxiliary contacts can be extended by means of auxiliary switch blocks (up to 4 poles).

RC elements, varistors, diodes or diode assemblies can be plugged onto both coils

from the front for damping opening surges.

The control relay can also be switched on and released manually.



Selection and ordering data

AC and DC operation



3RH11...-1....



3RH11...-2....

Rated operational current NEMA A600 / P600	Contacts		Rated control supply voltage U_s	Screw connection	Cage Clamp connection	Weight approx.	Pack.
	Ident. no.	Design		Order No.	Order No.		
		NO NC				kg	Units

For screwing and snapping onto 35 mm standard mounting rail

AC operation

• Size S00

Terminal designations according to EN 50 011

40 E	4	–	24 V 50/60 Hz 120 V 60 Hz 240 V 60 Hz	3RH11 40-1AB00 3RH11 40-1AK60 3RH11 40-1AP60	3RH11 40-2AB00 3RH11 40-2AK60 3RH11 40-2AP60	0.19	1
31 E	3	1	24 V 50/60 Hz 120 V 60 Hz 240 V 60 Hz	3RH11 31-1AB00 3RH11 31-1AK60 3RH11 31-1AP60	3RH11 31-2AB00 3RH11 31-2AK60 3RH11 31-2AP60	0.19	1
22 E	2	2	24 V 50/60 Hz 120 V 60 Hz 240 V 60 Hz	3RH11 22-1AB00 3RH11 22-1AK60 3RH11 22-1AP60	3RH11 22-2AB00 3RH11 22-2AK60 3RH11 22-2AP60	0.19	1
DC operation · DC solenoid system			DC				
40 E	4	–	24 V 48 V	3RH11 40-1BB40 3RH11 40-1BW40	3RH11 40-2BB40 3RH11 40-2BW40	0.25	1
31 E	3	1	24 V 48 V	3RH11 31-1BB40 3RH11 31-1BW40	3RH11 31-2BB40 3RH11 31-2BW40	0.25	1
22 E	2	2	24 V 48 V	3RH11 22-1BB40 3RH11 22-1BW40	3RH11 22-2BB40 3RH11 22-2BW40	0.25	1
With permanently mounted auxiliary switch block^{2) 3)}							
44 E	4	4	24 V	3RH12 44-1BB40	3RH12 44-2BB40	0.29	1
62 E	6	2	24 V	3RH12 62-1BB40	3RH12 62-2BB40	0.29	1

1) Coil voltage tolerance
at 50 Hz: 0.8 ... 1.1 × U_s
at 60 Hz: 0.85 ... 1.1 × U_s

2) Further designs/voltages on request.

3) Auxiliary switch block A600/Q600.



Selection and ordering data



3RH19 11-1GA..



3RH19 11-2GA..

For controls relays	Rated operational current	Contacts		Screw connection	Cage Clamp connection	Weight approx.
Type	NEMA A600 / Q600 2)	Ident. no.	Design	Order No.	Order No.	kg
			 NO NC			

Snap-on auxiliary switch blocks, Terminal Designations acc. to EN 50 011

3RH11 40
3RH14 40 1)
(ident. no. 40E) for making contactor relays with 8 contacts

80 E	4	–
71 E	3	1
62 E	2	2
53 E	1	3
44 E	–	4

3RH19 11-1GA40
3RH19 11-1GA31
3RH19 11-1GA22
3RH19 11-1GA13
3RH19 11-1GA04

3RH19 11-2GA40
3RH19 11-2GA31
3RH19 11-2GA22
3RH19 11-2GA13
3RH19 11-2GA04

0.045

1) Only 3RH19 11-1...

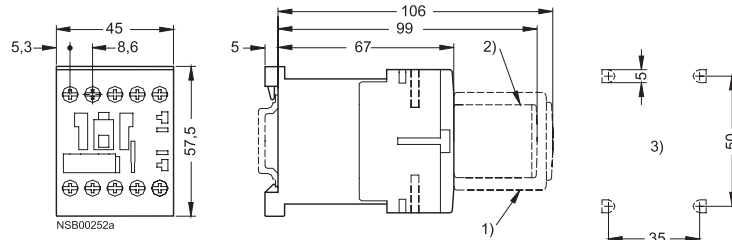


3RH11 and 3RH14 control relays

Dimension drawings

3RH11 control relays

Size S00, with screw connections,
with surge suppressor and auxiliary switch block



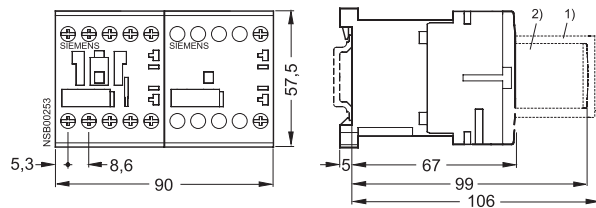
Lateral clearance from
earthed parts = 6 mm

- 1) Auxiliary switch block
- 2) Surge suppressor
- 3) Drilling pattern

Deviating dimensions for contactor relays
with [Cage Clamp connections](#):
Height: 60 mm
Mounting depth with auxiliary switch
block:
110 mm

3RH14 latched control relays

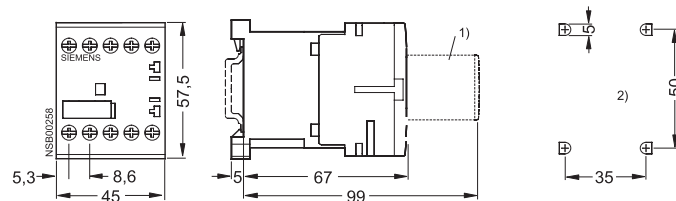
Size S00,
with surge suppressor and auxiliary switch block



3RH11 coupling relays

Dimension drawings

Size S00, with screw connections,
with surge suppressor



- 1) Surge suppressor
- 2) Drilling pattern

Deviating dimensions for coupling relays
with [Cage Clamp connections](#):
Height: 60 mm