Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1

The 3RH2 contactor relays are available with screw, ring terminal lug or spring-type terminals. The basic unit contains four contacts with terminal designations according to EN 50011.

The 3RH2 contactor relays are suitable for use in any climate. They are finger-safe according to IEC 60529.

The 3RH21 coupling contactor relays for switching auxiliary circuits are tailored to the special requirements of working with electronic controls.

Contact reliability

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

Surge suppression

RC elements, varistors, diodes or diode assemblies (combination of a diode and a Zener diode) can be plugged onto all 3RH2 contactor relays from the front for damping opening surges in the coil. The plug-in direction is determined by a coding device.

Coupling contactor relays have a low power consumption and an extended solenoid coil operating range.

Depending on the version, the solenoid coils of the coupling contactor relays are supplied either without overvoltage damping (versions 3RH21..-.HB40 or 3RH21..-.MB40-0KT0) or with a diode or suppressor diode connected as standard.

Accessories

The accessories for the 3RT2 contactors in size S00 can also be used for the 3RH2 contactor relays (see Accessories for 3RT2 contactors, from page 3/54 onwards).

Auxiliary switch blocks

The 3RH21 contactor relays (with the exception of coupling contactor relays) can be expanded by up to four contacts by the addition of mounted auxiliary switch blocks.

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

Manuals

For more information, see

- System manual "SIRIUS Innovations – System Overview", https://support.industry.siemens.com/cs/ww/en/view/60311318
- Manual "SIRIUS Innovations – SIRIUS 3RT2 Contactors/ Contactor Assemblies", https://support.industry.siemens.com/cs/ww/en/view/60306557

Article No. scheme

Digit of the article No.	1st - 3rd	4th	5th	6th	7th		8th	9th	10th	11th	12th		13th	14th	15th	16th
	□□□	□	□	□	□	–	□	□	□	□	□	–	□	□	□	□
SIRIUS contactor relays	**3 R H**															
2. generation		**2**														
Device type (e.g. 1 = 4-pole contactor relay, 2 = 8-pole contactor relay)			□													
Number of NO contacts (e.g. 2 = 2 NO)				□												
Number of NC contacts (e.g. 2 = 2 NC)					□											
Connection type (1 = screw, 2 = spring)							□									
Operating range / solenoid coil circuit (e.g. A = AC standard / without coil circuit)								□								
Rated control supply voltage (e.g. P0 = 230 V, 50 Hz)									□	□						
No significance											□					
Special version													□	□	□	□
Example	**3 R H**	**2**	**1**	**2**	**2**	**–**	**1**	**A**	**P**	**0**	**0**					

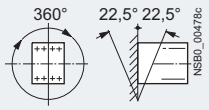
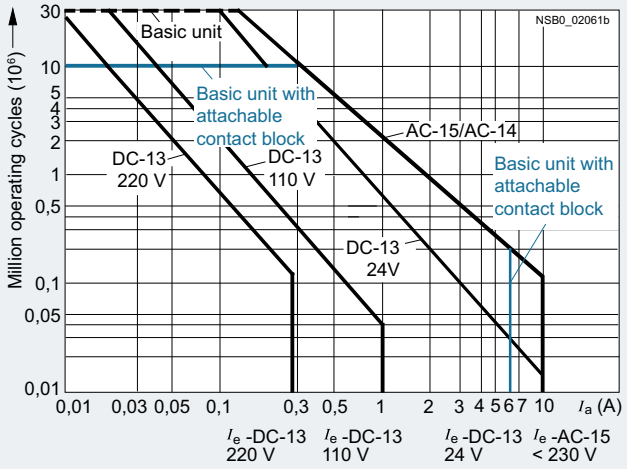
Note:

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

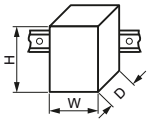
For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

SIRIUS 3RH2 contactor relays, 4- and 8-pole

Technical specifications

	Contactor relays
Type	**3RH2**
Size	**S00**
Permissible mounting position	
The contactor relays are designed for operation on a vertical mounting surface.	
Upright mounting position	 Special version required (3RH2122-2K..40 coupling contactor relays and contactor relays with extended operating range on request)
Positively-driven operation of contacts in contactor relays	
3RH2: **Yes,** in the basic unit and the auxiliary switch block as well as between the basic unit and the front-mounted auxiliary switch block (removable) according to: • ZH1/457 • IEC 60947-5-1, Appendix L **3RH22:** **Yes,** in the basic unit and the auxiliary switch block as well as between the basic unit and the mounted auxiliary switch block (permanently mounted) according to: • ZH1/457 • IEC 60947-5-1, Appendix L Note: 3RH2911-..NF. solid-state compatible auxiliary switch blocks have no positively-driven contacts.	Explanations: There is positively-driven operation if it is ensured that the NC and NO contacts cannot be closed at the same time. **ZH1/457** Safety Rules for Controls on Power-Operated Metalworking Presses. **IEC 60947-5-1, Appendix L** Low-voltage switchgear and controlgear; special requirements for positively-driven contacts
Contact reliability	
Contact reliability at 17 V, 1 mA acc. to IEC 60947-5-4	Frequency of contact faults $<10^{-8}$ i.e. < 1 fault per 100 million operating cycles
Contact endurance for AC-15/AC-14 and DC-13 utilization categories	
The contact endurance is mainly dependent on the breaking current. It is assumed that the operating mechanisms are switched randomly, i.e. not synchronized with the phase angle of the supply system. If magnetic circuits other than the contactor coil systems or solenoid valves are present, e.g. magnetic brakes, protective measures for the load circuits are necessary, e.g. in the form of RC elements and freewheel diodes. The characteristic curves apply to • 3RH21/3RH22 contactor relays[1)] • 3RH24 latched contactor relays • 3RH2911 auxiliary switch blocks[1)] • Auxiliary switch blocks for snapping onto the front, max. 4-pole and for mounting onto the side in size S00	 Diagram legend: I_a = Breaking current I_e = Rated operational current

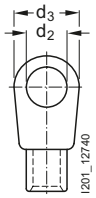
[1)] 3RH22, 3RH2911: I_e = 6 A for AC-15/AC-14 and DC-13.

			Contactor relays		
Type			**3RH21**	**3RH22**	**3RH24**
Size			**S00**		
General data					
Dimensions (W x H x D)					
• Basic units					
- Screw terminals		mm	45 x 58 x 73	--	90 x 58 x 73
- Spring-type terminals		mm	45 x 70 x 73	--	
• Basic unit with mounted auxiliary switch block					
- Screw terminals		mm	45 x 58 x 117		--
- Spring-type terminals		mm	45 x 70 x 121		--
• Basic unit with mounted function module or solid-state time-delay auxiliary switch block					
- Screw terminals		mm	45 x 58 x 147	--	
- Spring-type terminals		mm	45 x 70 x 147	--	
Mechanical endurance					
• Basic units		Operating cycles	30 million		5 million
• Basic unit with mounted auxiliary switch block		Operating cycles	10 million		5 million
• Solid-state compatible auxiliary switch block		Operating cycles	5 million		
Rated insulation voltage U_i (pollution degree 3)		V	690		
Rated impulse withstand voltage U_{imp}		kV	6		
Protective separation between the coil and the contacts in the basic unit, acc. to IEC 60947-1, Appendix N		V	400		
Permissible ambient temperature					
• During operation		°C	-25 ... +60		
• During storage		°C	-55 ... +80		
Degree of protection acc. to IEC 60529					
• On front			IP20 (screw terminals and spring-type terminals)[1]		
• Connecting terminal			IP20 (screw terminals and spring-type terminals)[1]		
Touch protection acc. to IEC 60529			Finger-safe (screw terminals and spring-type terminals)[1]		
Shock resistance					
• Rectangular pulse					
- AC operation		*g*/ms	7.3/5 and 4.7/10		
- DC operation		*g*/ms	10/5 and 5/10		
• Sine pulse					
- AC operation		*g*/ms	11.4/5 and 7.3/10		
- DC operation		*g*/ms	15/5 and 8/10		
Short-circuit protection					
• Short-circuit test					
- with fuse links of operational class gG: DIAZED, type 5SB; NEOZED, type 5SE with short-circuit current I_k = 1 kA acc. to IEC 60947-5-1		A	10		
- with miniature circuit breaker with C characteristic with short-circuit current I_k = 400 A acc. to IEC 60947-5-1		A	6		

[1] Ring terminal lug connections: Degree of protection IP20 on front as well as touch protection from the front only possible with terminal cover and insulating sleeve, connecting terminal degree of protection IP00.

SIRIUS 3RH2 contactor relays, 4- and 8-pole

		Contactor relays		
Type		3RH21	3RH22	3RH24
Size		S00		
Conductor cross-sections				
Auxiliary conductors and coil terminals (1 or 2 conductors can be connected)		**Screw terminals**		
• Solid or stranded	mm^2	2 x (0.5 ... 1.5)[1], 2 x (0.75 ... 2.5)[1], max. 2 x 4		
• Finely stranded with end sleeve	mm^2	2 x (0.5 ... 1.5)[1]; 2 x (0.75 ... 2.5)[1]		
• AWG cables, solid or stranded	AWG	2 x (20 ... 16)[1]; 2 x (18 ... 14)[1]		
• Terminal screw		M3 (for Pozidriv size 2, Ø 5 ... 6 mm)		
- Tightening torque	Nm	0.8 ... 1.2 (7 ... 10.3 lb.in)		
Auxiliary conductor and coil terminals[2] (1 or 2 conductors can be connected)		**Spring-type terminals**		
• Operating devices[3]	mm	3.0 x 0.5; 3.5 x 0.5		
• Solid or stranded	mm^2	2 x (0.5 ... 4)		
• Finely stranded with end sleeve	mm^2	2 x (0.5 ... 2.5)		
• Finely stranded without end sleeve	mm^2	2 x (0.5 ... 2.5)		
• AWG cables, solid or stranded	AWG	2 x (20 ... 12)		
Auxiliary conductors for front and laterally mounted auxiliary switches[2]				
• Operating devices[3]	mm	3.0 x 0.5; 3.5 x 0.5		
• Solid or stranded	mm^2	2 x (0.5 ... 2.5)		
• Finely stranded with end sleeve	mm^2	2 x (0.5 ... 1.5)		
• Finely stranded without end sleeve	mm^2	2 x (0.5 ... 2.5)		
• AWG cables, solid or stranded	AWG	2 x (20 ... 14)		
Auxiliary conductor and coil terminals		**Ring terminal lug connections**		
• Terminal screw	mm	M3, Pozidriv size 2		
• Operating devices	Nm	Ø 5 ... 6		
• Tightening torque	mm	0.8 ... 1.2		
• Usable ring terminal lugs	mm	d_2 = min. 3.2		
- DIN 46234 without insulation sleeve - DIN 46225 without insulation sleeve - DIN 46237 with insulation sleeve - JIS C2805 Type R without insulation sleeve - JIS C2805 Type RAV with insulation sleeve - JIS C2805 Type RAP with insulation sleeve	mm	d_3 = max. 7.5		



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

2) Max. external diameter of the conductor insulation: 3.6 mm. An insulation stop must be used for spring-type terminals with conductor cross-sections ≤ 1 mm^2; see "Accessories for 3RT2 contactors", page 3/92.

3) Tool for opening the spring-type terminals, see Accessories for 3RT2 contactors on page 3/92.

			Contactor relays
Type			**3RH2**
Size			**S00**
Control			
Solenoid coil operating range			
• AC operation	At 50 Hz		0.8 ... 1.1 x U_s
	At 60 Hz		0.85 ... 1.1 x U_s
• DC operation	At +50 °C		0.8 ... 1.1 x U_s
	At +60 °C		0.85 ... 1.1 x U_s
Power consumption of the solenoid coils (for cold coil and 1.0 x U_s)			
• AC operation, 50 Hz			
- Closing		VA/p.f.	37/0.8
- Closed		VA/p.f.	5.7/0.25
• AC operation, 60 Hz			
- Closing		VA/p.f.	33/0.75
- Closed		VA/p.f.	4.4/0.25
• DC operation Closing = Closed		W	4.0
Permissible residual current of the electronics (with 0 signal)			
• For AC operation[1]			< 4 mA x (230 V/U_s)
• For DC operation			< 10 mA x (24 V/U_s)
Operating times for 1.0 x U_s[2]			
Total break time = Opening delay + Arcing time			
Values apply with coil in cold state and at operating temperature for operating range			
AC operation			
• Closing			
- ON-delay of NO contact		ms	9 ... 22
3RH24 minimum operating time		ms	≥ 35
- OFF-delay of NC contact		ms	6.5 ... 19
• Opening			
- OFF-delay of NO contact		ms	4.5 ... 15
3RH24 minimum operating time		ms	≥ 30
- ON-delay of NC contact		ms	5 ... 15
DC operation			
• Closing			
- ON-delay of NO contact		ms	35 ... 50
3RH24 minimum operating time		ms	≥ 100
- OFF-delay of NC contact		ms	30 ... 45
• Opening			
- OFF-delay of NO contact		ms	7 ... 12
3RH24 minimum operating time		ms	≥ 30
- ON-delay of NC contact		ms	13 ... 18
• Arcing time		ms	10 ... 15

1) The 3RT2916-1GA00 additional load module is recommended for higher residual currents, see Accessories for 3RT2 contactors, page 3/91.

2) 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).

SIRIUS 3RH2 contactor relays, 4- and 8-pole

			Coupling contactor relays		
Type			3RH21..-.HB40	3RH21..-.JB40	3RH21..-.KB40
Size			S00		
Control					
Solenoid coil operating range			0.7 ... 1.25 x U_s		
Power consumption of the solenoid coil (for cold coil and 1.0 x U_s) Closing = Closed at U_s = 24 V		W	2.8		
Permissible residual current of the electronics for 0 signal			< 10 mA x (24 V/U_s)		
Overvoltage configuration of the solenoid coil			No overvoltage damping 	Built-in diode 	Built-in suppressor diode 
Operating times for 1.0 x U_s					
• Closing delay	ON-delay NO	ms	35 ... 60		
	OFF-delay NC	ms	25 ... 40		
• Opening delay	OFF-delay NO	ms	7 ... 20	38 ... 65	7 ... 20
	ON-delay NO	ms	10 ... 30	30 ... 90	10 ... 30
Upright mounting position			On request		

			Coupling contactor relays		
Type			3RH21..-.MB40-0KT0	3RH21..-.VB40	3RH21..-.WB40
Size			S00		
Control					
Solenoid coil operating range			0.85 ... 1.85 x U_s		
Power consumption of the solenoid coil (for cold coil and 1.0 x U_s) Closing = Closed at U_s = 24 V		W	1.6		
Permissible residual current of the electronics for 0 signal			< 8 mA x (24 V/U_s)		
Overvoltage configuration of the solenoid coil			No overvoltage damping 	Built-in diode 	Built-in suppressor diode 
Operating times for 1.0 x U_s					
• Closing delay	ON-delay NO	ms	25 ... 90		
	OFF-delay NC	ms	15 ... 80		
• Opening delay	ON-delay NO	ms	5 ... 20	20 ... 80	5 ... 20
	OFF-delay NC	ms	10 ... 30	30 ... 90	10 ... 30
Upright mounting position			On request		

			Contactor relays
Type			**3RH2**
Size			**S00**
Rated data of the auxiliary contacts			
Load rating with AC			
Rated operational currents I_e			
AC-12		A	10
AC-15/AC-14 for rated operational voltage U_s			
	Up to 230 V	A	10[1]
	400 V	A	3
	500 V	A	2
	690 V	A	1
Load rating with DC			
Rated operational currents I_e			
DC-12 for rated operational voltage U_s			
• 1 conducting path	24 V	A	10
	60 V	A	6
	110 V	A	3
	220 V	A	1
	440 V	A	0.3
	600 V	A	0.15
• 2 conducting paths in series	24 V	A	10
	60 V	A	10
	110 V	A	4
	220 V	A	2
	440 V	A	1.3
	600 V	A	0.65
• 3 conducting paths in series	24 V	A	10
	60 V	A	10
	110 V	A	10
	220 V	A	3.6
	440 V	A	2.5
	600 V	A	1.8
DC-13 for rated operational voltage U_s			
• 1 conducting path	24 V	A	10[1]
	60 V	A	2
	110 V	A	1
	220 V	A	0.3
	440 V	A	0.14
	600 V	A	0.1
• 2 conducting paths in series	24 V	A	10
	60 V	A	3.5
	110 V	A	1.3
	220 V	A	0.9
	440 V	A	0.2
	600 V	A	0.1
• 3 conducting paths in series	24 V	A	10
	60 V	A	4.7
	110 V	A	3
	220 V	A	1.2
	440 V	A	0.5
	600 V	A	0.26
Switching frequency			
Switching frequency *z* in operating cycles/hour			
• Rated operation for utilization category	AC-12/DC-12	h^{-1}	1 000
	AC-15/AC-14	h^{-1}	1 000
Dependence of the switching frequency z' on the operational current I' and operational voltage U':	DC-13	h^{-1}	1 000
$z' = z \cdot (I_e/I') \cdot (U_e/U')^{1.5} \cdot 1/h$			
• No-load switching frequency		h^{-1}	10 000
cULus and cULus rated data			
Basic units and auxiliary switch blocks			
• Rated control supply voltage		V AC	max. 600
• Rated voltage		V AC	600
• Switching capacity			A 600, Q 600
• Uninterrupted current at 240 V AC		A	10

[1] 3RH22, 3RH29: I_e = 6 A for AC-15/AC-14 and DC-13.

SIRIUS 3RH2 contactor relays, 4- and 8-pole

Selection and ordering data

AC operation

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

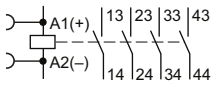
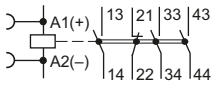
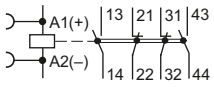
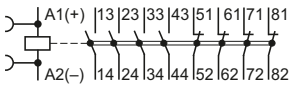
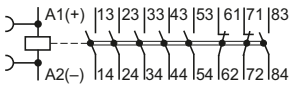
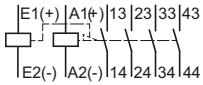
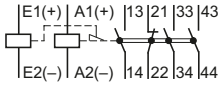
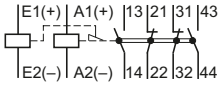

3RH2122-1A..0


3RH2122-2A..0


3RH2244-1A..0


3RH2244-2A..0


3RH2422-1A..0

Rated operational current I_e/AC-15/ AC-14 at **230 V**	Contacts		Rated control supply voltage U_s at 50/60 Hz[2]	DT	**Screw terminals**[1]	DT	**Spring-type terminals**
	Ident. No.	Version			Article No. / Price per PU		Article No. / Price per PU
A	NO	NC	V AC				
For screw fixing and snap-on mounting onto TH 35 standard mounting rail							
Size S00							
Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)							
4 NO, Ident. No. **40E** 							
10	**40E**	4	--	24	▶	**3RH2140-1AB00**	B	**3RH2140-2AB00**
				110	▶	**3RH2140-1AF00**	B	**3RH2140-2AF00**
				230	▶	**3RH2140-1AP00**	▶	**3RH2140-2AP00**
	31E	3	1	24	▶	**3RH2131-1AB00**	B	**3RH2131-2AB00**
				110	▶	**3RH2131-1AF00**	▶	**3RH2131-2AF00**
				230	▶	**3RH2131-1AP00**	▶	**3RH2131-2AP00**
	22E	2	2	24	▶	**3RH2122-1AB00**	B	**3RH2122-2AB00**
				110	▶	**3RH2122-1AF00**	▶	**3RH2122-2AF00**
				230	▶	**3RH2122-1AP00**	▶	**3RH2122-2AP00**
3 NO + 1 NC, Ident. No. **31E** 							
2 NO + 2 NC, Ident. No. **22E** 							
• With permanently mounted auxiliary switch block (SUVA-certified safety contactor)							
4 NO + 4 NC, Ident. No. **44E** 							
6	**44E**	4	4	230	▶	**3RH2244-1AP00**	A	**3RH2244-2AP00**
	62E	6	2	230	▶	**3RH2262-1AP00**	A	**3RH2262-2AP00**
6 NO + 2 NC, Ident. No. **62E** 							
• Latched							
Terminal designations according to EN 50011							
4 NO, Ident. No. **40E** 							
10	**40E**	4	--	24	B	**3RH2440-1AB00**		--
				110	B	**3RH2440-1AF00**		--
				230	B	**3RH2440-1AP00**		--
	31E	3	1	24	B	**3RH2431-1AB00**		--
				110	B	**3RH2431-1AF00**		--
				230	B	**3RH2431-1AP00**		--
	22E	2	2	24	B	**3RH2422-1AB00**		--
				110	B	**3RH2422-1AF00**		--
				230	B	**3RH2422-1AP00**		--
3 NO + 1 NC, Ident. No. **31E** 								
2 NO + 2 NC, Ident. No. **22E** 								

[1] Ring terminal lugs for the 3RH21 and 3RH22 contactor relays on request.

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

Other voltages according to page 3/53 on request.

For accessories, see 3RT2 contactors, from page 3/54 onwards.

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

5

DC operation

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

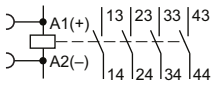
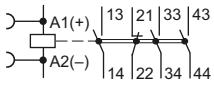
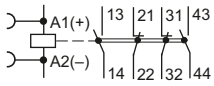
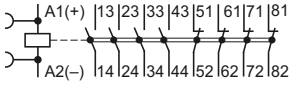
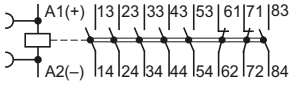
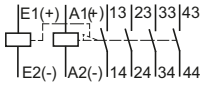
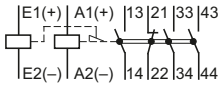
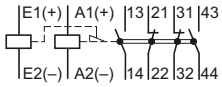

3RH2122-1B..0


3RH2122-2B..0


3RH2244-1B..0


3RH2244-2B..0


3RH2422-1B.40

Rated operational current I_e/AC-15/ AC-14 at **230 V**	Contacts Ident. No.	Version		Rated control supply voltage U_s	DT	**Screw terminals**[1]		DT	**Spring-type terminals**	
						Article No.	Price per PU		Article No.	Price per PU
A		NO	NC	V DC						
For screw fixing and snap-on mounting onto TH 35 standard mounting rail										
Size S00										
Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)										
4 NO, Ident. No. **40E** 										
10	**40E**	4	--	24	▶	**3RH2140-1BB40**		▶	**3RH2140-2BB40**	
				220	▶	**3RH2140-1BM40**		B	**3RH2140-2BM40**	
	31E	3	1	24	▶	**3RH2131-1BB40**		▶	**3RH2131-2BB40**	
				220	A	**3RH2131-1BM40**		B	**3RH2131-2BM40**	
	22E	2	2	24	▶	**3RH2122-1BB40**		▶	**3RH2122-2BB40**	
				220	▶	**3RH2122-1BM40**		B	**3RH2122-2BM40**	
3 NO + 1 NC, Ident. No. **31E** 										
2 NO + 2 NC, Ident. No. **22E** 										
• With permanently mounted auxiliary switch block (SUVA-certified safety contactor)										
4 NO + 4 NC, Ident. No. **44E** 										
6	**44E**	4	4	24	▶	**3RH2244-1BB40**		▶	**3RH2244-2BB40**	
	62E	6	2	24	▶	**3RH2262-1BB40**		▶	**3RH2262-2BB40**	
6 NO + 2 NC, Ident. No. **62E** 										
• Latched										
Terminal designations according to EN 50011										
4 NO, Ident. No. **40E** 										
10	**40E**	4	--	24	B	**3RH2440-1BB40**			--	
				110	B	**3RH2440-1BF40**			--	
				220	B	**3RH2440-1BM40**			--	
	31E	3	1	24	B	**3RH2431-1BB40**			--	
				110	B	**3RH2431-1BF40**			--	
				220	B	**3RH2431-1BM40**			--	
	22E	2	2	24	B	**3RH2422-1BB40**			--	
				110	B	**3RH2422-1BF40**			--	
				220	B	**3RH2422-1BM40**			--	
3 NO + 1 NC, Ident. No. **31E** 										
2 NO + 2 NC, Ident. No. **22E** 										

[1] Ring terminal lugs for the 3RH21 and 3RH22 contactor relays on request.

Other voltages according to page 3/53 on request.

For accessories, see 3RT2 contactors, from page 3/54 onwards.

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

SIRIUS 3RH2 contactor relays, 4- and 8-pole

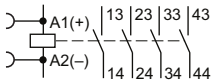
DC operation for direct control from the PLC

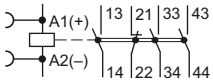
- Coupling contactor relays with adapted power consumption
- Suitable for solid-state PLC outputs
- Cannot be expanded with auxiliary switch blocks

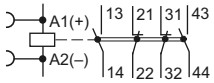
PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41A

3RH21..-1.B40

3RH21..-2.B40

Rated operational current I_e/AC-15/ AC-14 at **230 V**	Auxiliary contacts Ident. No. acc. to EN 50011		Version	DT	**Screw terminals**	DT	**Spring-type terminals**
					Article No. / Price per PU		Article No. / Price per PU
A	NO	NC					
For screw fixing and snap-on mounting onto TH 35 standard mounting rail							
Size S00							
Diode, varistor or RC element, attachable							
Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)							
4 NO, Ident. No. **40E** 							
Rated control supply voltage U_s = 24 V DC Operating range **0.7 to 1.25 x U_s** Power consumption of the solenoid coils **2.8 W** at 24 V							
10	**40E**	4	--	B	**3RH2140-1HB40**	B	**3RH2140-2HB40**
	31E	3	1	B	**3RH2131-1HB40**	B	**3RH2131-2HB40**
	22E	2	2	B	**3RH2122-1HB40**	B	**3RH2122-2HB40**
Rated control supply voltage U_s = 24 V DC Operating range **0.85 to 1.85 x U_s** Power consumption of the solenoid coils **1.6 W** at 24 V							
10	**40E**	4	--	B	**3RH2140-1MB40-0KT0**	B	**3RH2140-2MB40-0KT0**
	31E	3	1	B	**3RH2131-1MB40-0KT0**	B	**3RH2131-2MB40-0KT0**
	22E	2	2	B	**3RH2122-1MB40-0KT0**	B	**3RH2122-2MB40-0KT0**

3 NO + 1 NC, Ident. No. **31E** 

2 NO + 2 NC, Ident. No. **22E** 

Other voltages according to page 3/53 on request.

For accessories, see 3RT2 contactors, from page 3/54 onwards.

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

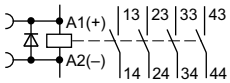
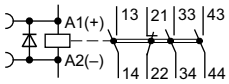
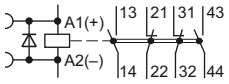
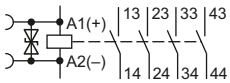
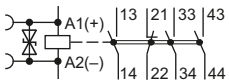
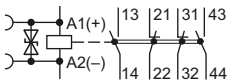
DC operation for direct control from the PLC

- Coupling contactor relays with adapted power consumption
- Suitable for solid-state PLC outputs
- Cannot be expanded with auxiliary switch blocks

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

3RH21..-1.B40

3RH21..-2.B40

Rated operational current I_e/AC-15/ AC-14 at **230 V**	Auxiliary contacts Ident. No. acc. to EN 50011		Version	DT	**Screw terminals**		DT	**Spring-type terminals**	
					Article No.	Price per PU		Article No.	Price per PU
A	NO	NC							
For screw fixing and snap-on mounting onto TH 35 standard mounting rail									
Size S00									
With integrated coil circuit (diode)									
Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)									
4 NO, Ident. No. **40E** 									
3 NO + 1 NC, Ident. No. **31E** 									
2 NO + 2 NC, Ident. No. **22E** 									
Rated control supply voltage U_S = 24 V DC Operating range **0.7 to 1.25 x U_S** Power consumption of the solenoid coils **2.8 W** at 24 V									
10	**40E**	4	--	B	**3RH2140-1JB40**		B	**3RH2140-2JB40**	
	31E	3	1	▶	**3RH2131-1JB40**		▶	**3RH2131-2JB40**	
	22E	2	2	▶	**3RH2122-1JB40**		B	**3RH2122-2JB40**	
Rated control supply voltage U_S = 24 V DC Operating range **0.85 to 1.85 x U_S** Power consumption of the solenoid coils **1.6 W** at 24 V									
10	**40E**	4	--	B	**3RH2140-1VB40**		B	**3RH2140-2VB40**	
	31E	3	1	B	**3RH2131-1VB40**		B	**3RH2131-2VB40**	
	22E	2	2	B	**3RH2122-1VB40**		B	**3RH2122-2VB40**	
With integrated coil circuit (suppressor diode)									
Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)									
4 NO, Ident. No. **40E** 									
3 NO + 1 NC, Ident. No. **31E** 									
2 NO + 2 NC, Ident. No. **22E** 									
Rated control supply voltage U_S = 24 V DC Operating range **0.7 to 1.25 x U_S** Power consumption of the solenoid coils **2.8 W** at 24 V									
10	**40E**	4	--	B	**3RH2140-1KB40**		B	**3RH2140-2KB40**	
	31E	3	1	▶	**3RH2131-1KB40**		▶	**3RH2131-2KB40**	
	22E	2	2	▶	**3RH2122-1KB40**		▶	**3RH2122-2KB40**	
Rated control supply voltage U_S = 24 V DC Operating range **0.85 to 1.85 x U_S** Power consumption of the solenoid coils **1.6 W** at 24 V									
10	**40E**	4	--	B	**3RH2140-1SB40**		B	**3RH2140-2SB40**	
	31E	3	1	B	**3RH2131-1SB40**		B	**3RH2131-2SB40**	
	22E	2	2	B	**3RH2122-1SB40**		B	**3RH2122-2SB40**	

Other voltages according to page 3/53 on request.

For accessories, see 3RT2 contactors, from page 3/54 onwards.

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