

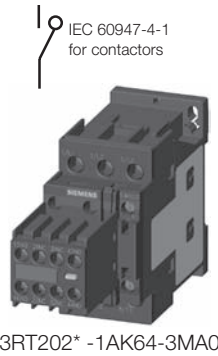
Contactors & Relays for Safety Applications

3RT safety contactors, 3RH2 safety control relays with permanently mounted auxiliary contact blocks

Application

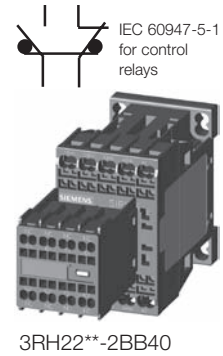
"Safety" Contactors

Safety rated contactors are required to have mirrored contact construction according to IEC 60947-4 Annex F. A mirror contact is a Normally Closed (NC) auxiliary contact which can not be closed simultaneously with a Normally Open (NO) main contact. In some industries, such as Automotive, the auxiliary contact blocks are required to be permanently attached to meet the requirements of "unintentional misuse" as specified in IEC 60292, paragraph 3.12. Tested by SUVA.



"Safety" Control Relays

Safety rated control relays are required to have positively driven contact elements according to IEC 60947-5-1 Annex L. Positively driven contact elements are a combination of NO auxiliary contacts and NC auxiliary contacts whose construction prevents them from being closed simultaneously. In some industries, such as automotive, the auxiliary contact blocks are required to be permanently attached to meet the requirements of "unintentional misuse" as specified in IEC 60292, paragraph 3.12. Tested by SUVA.



2 CONTACTORS AND ASSEMBLIES

Application

Frame Size	Max. current		Single-phase HP ratings		Three-phase HP ratings				Auxiliary contacts			Screw Terminals	Spring-Type Terminals ¹⁾
	AC3	AC1	115V	220/240V	200V	230V	460V	575V	Ident. No.	NO	NC	Order No.	Order No.
	A	A	HP	HP	HP	HP	HP	HP					
Contactors with permanently mounted auxiliary contact blocks													
S00	6	18	¼	¾	1 ½	2	3	5	22E	2	2	3RT2015-1●●●4-3MA0	3RT2015-2●●●4-3MA0
	9	22	½	1	2	3	5	7 ½	22E	2	2	3RT2016-1●●●4-3MA0	3RT2016-2●●●4-3MA0
	12	22	½	2	3	3	7 ½	10	22E	2	2	3RT2017-1●●●4-3MA0	3RT2017-2●●●4-3MA0
	16	22	1	2	3	5	10	10	22E	2	2	3RT2018-1●●●4-3MA0	3RT2018-2●●●4-3MA0
S0	9	40	1	1	2	3	5	7 ½	22E	2	2	3RT2023-1●●●4-3MA0	3RT2023-2●●●4-3MA0
	12	40	1	2	3	3	7 ½	10	22E	2	2	3RT2024-1●●●4-3MA0	3RT2024-2●●●4-3MA0
	17	40	1	3	5	5	10	15	22E	2	2	3RT2025-1●●●4-3MA0	3RT2025-2●●●4-3MA0
	25	40	2	3	7 ½	7 ½	15	20	22E	2	2	3RT2026-1●●●4-3MA0	3RT2026-2●●●4-3MA0
	32	50	2	5	10	10	20	25	22E	2	2	3RT2027-1●●●4-3MA0	3RT2027-2●●●4-3MA0
	38	50	3	5	10	10	25	25	22E	2	2	3RT2028-1●●●4-3MA0	3RT2028-2●●●4-3MA0
S2	40	60	3	7 ½	10	15	30	40	22E	2	2	3RT2035-1●●●4-3MA0	3RT2035-3●●●4-3MA0
	50	70	3	10	15	15	40	50	22E	2	2	3RT2036-1●●●4-3MA0	3RT2036-3●●●4-3MA0
	65	80	5	10	20	20	50	50	22E	2	2	3RT2037-1●●●4-3MA0	3RT2037-3●●●4-3MA0
	80 ⁴⁾	90	5	15	20	25	50	60	22E	2	2	3RT2038-1●●●4-3MA0	3RT2038-3●●●4-3MA0
S3	80	120	7 ½	15	25	30	60	75	22E	2	2	3RT2045-1●●●4-3MA0	3RT2045-3●●●4-3MA0
	95	120	10	20	30	30	75	100	22E	2	2	3RT2046-1●●●4-3MA0	3RT2046-3●●●4-3MA0
S6	150	185	--	30	50	60	125	150	22E	2	2	3RT1055-6●●●6-3PA0	—
	185	215	--	30	60	75	150	200	22E	2	2	3RT1056-6●●●6-3PA0	—
S10	225	275	--	--	60	75	150	200	22E	2	2	3RT1064-6●●●6-3PA0	—
	265	330	--	--	75	100	200	250	22E	2	2	3RT1065-6●●●6-3PA0	—
	300	330	--	--	100	125	250	300	22E	2	2	3RT1066-6●●●6-3PA0	—

Control circuit coil options: Replace ●●● with the desired code

Frame Size S00 - S0	●●●	Frame Size S2	●●●	Frame Size S3	●●●	Frame Size S6 - S10	●●●
120 V AC	AK6	120 V AC	AK6	120 V AC **	AK6	23 ... 26 V UC*, conventional coil	AB3
120 V AC, integrated varistor	CK6	120 V AC w/ Varistor	CK6	24V DC	KB4	21-27 V UC*, solid state coil	NB3
230 V AC	AP0	24 V DC w/Varistor	KB4	w/ integrated varistor		w/ PLC interface	
24 V DC	BB4			24V AC/DC	NB3	110 ... 127 V UC*, conventional coil	AF3
24 V DC, integrated varistor	DB4			w/integrated varistor		*UC coil: accepts DC voltage or AC voltage, 40 to 60 Hz.	
24 V DC, integrated diode assy.	FB4						

Frame Size	Max. current at 240 V ²⁾	Rated control supply voltage U _s	Auxiliary contacts			Screw Terminals ³⁾	Spring Terminals ³⁾
	A		Ident. No.	NO	NC	Order No.	Order No.

Control relays with permanently mounted auxiliary contact blocks

S00-S00	10	110 V AC, 50 Hz / 120 V AC, 60 Hz	44E	4	4	3RH2244-1AK60	3RH2244-2AK60
	10	24 V DC	44E	4	4	3RH2244-1BB40	3RH2244-2BB40
	10	110 V AC, 50 Hz / 120 V AC, 60 Hz	62E	6	2	3RH2262-1AK60	3RH2262-2AK60
	10	24 V DC	62E	6	2	3RH2262-1BB40	3RH2262-2BB40

For other voltages see page 2/51.

For accessories, see pages 2/75-2/80.

For spare parts, see pages 2/96-2/99.

For technical data, see pages 2/123-2/144.

For description, see pages 2/106-2/107.

For int. circuit diagrams, see page 2/192-2/198.

For dimension drawings, see pages 2/211-2/218.

1) All terminals are spring loaded on frame size S00 and S0.

Only the coil and auxiliary contact terminals are spring loaded on frame sizes S2 & S3.

2) For AC-15/AC-14, max current for front mounted auxiliary contacts = 6 A.

3) The 3RH22 control relays are also available with ring lug terminals. Replace the 8th digit of the order number with a "4", e.g. 3RH2244-4AK60

4) Max UL FLA = 65A at 460V