

Selection and ordering data

Screw and Cage Clamp connection

Solid-state time relays for general use in control systems and mechanical engineering with
• 1 or 2 SPDT contacts


- single or selectable time setting ranges
- switching position indication by LED
- voltage indication by LED

For function table, see Page 8/31.


Design	Time setting range <i>t</i>	Rated control supply voltage	Screw terminals	Cage Clamp connection ¹⁾	Weight approx. kg
			Order No.	Order No.	
	adjustable by rotary switch to	AC 50-60 Hz DC V V			

3RP15 05 time relay, multifunction, 15 time setting ranges


The functions²⁾ can be selected by means of a rotary switch. The 3RP15 05 time relay can be provided with labels which allow for legible and unmistakable marking of different functions. The corresponding labels are supplied as accessories. The terminals A. and B. must be of equal potential.

	3RP15 05-1B	with LED and: 1 SPDT contact, 8 functions	0.05 ... 1 s 0.15 ... 3 s 0.5 ... 10 s 1.5 ... 30 s 0.05 ... 1 min 5 ... 100 s	– 12 24/100 ... 127 24 24/200 ... 240 24 24 ... 240 ⁴⁾ 24–240 ⁵⁾	3RP15 05-1AA40 3RP15 05-1AQ30 3RP15 05-1AP30 3RP15 05-1AW30	3RP15 05-2AA40 3RP15 05-2AQ30 3RP15 05-2AP30 3RP15 05-2AW30	0.140
		2 SPDT contacts, 16 functions	0.15 ... 3 min 0.5 ... 10 min 1.5 ... 30 min 0.05 ... 1 h	24/100 ... 127 24 24/200 ... 240 24 24 ... 240 ⁴⁾ 24–240 ⁵⁾ 400 ... 440 –	3RP15 05-1BQ30 3RP15 05-1BP30 3RP15 05-1BW30 3RP15 05-1BT20	3RP15 05-2BQ30 3RP15 05-2BP30 3RP15 05-2BW30	0.150
		2 SPDT contacts, positively driven ⁶⁾ and hard gold-plated. 5 ... 100 h 8 functions ⁷⁾	5 ... 100 min 0.15 ... 3 h 0.5 ... 10 h 1.5 ... 30 h 5 ... 100 h ∞ ³⁾	24 ... 240 24–240	3RP15 05-1RW30	3RP15 05-2RW30	0.150


3RP15 1. time relay, ON-delay, 1 time setting range

	3RP15 1.-1A...	with LED and and 1 SPDT contact	0.5 ... 10 s 1.5 ... 30 s 5 ... 100 s	24/100 ... 127 24 24/200 ... 240 24 24/100 ... 127 24 24/200 ... 240 24 24/100 ... 127 24 24/200 ... 240 24	3RP15 11-1AQ30 3RP15 11-1AP30 3RP15 12-1AQ30 3RP15 12-1AP30 3RP15 13-1AQ30 3RP15 13-1AP30	3RP15 11-2AQ30 3RP15 11-2AP30 3RP15 12-2AQ30 3RP15 12-2AP30 3RP15 13-2AQ30 3RP15 13-2AP30	0.100
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3RP15 25 time relay, ON-delay, 15 time setting ranges

	3RP15 25-1A...	with LED and: and: 1 SPDT contact	0.05 ... 1 s 0.15 ... 3 s 0.5 ... 10 s 1.5 ... 30 s 0.05 ... 1 min 5 ... 100 s 0.15 ... 3 min 0.5 ... 10 min 1.5 ... 30 min	24/100 ... 127 24 24/200 ... 240 24	3RP15 25-1AQ30 3RP15 25-1AP30	3RP15 25-2AQ30 3RP15 25-2AP30	0.110
		2 SPDT contacts	0.05 ... 1 h 5 ... 100 min 0.15 ... 3 h 0.5 ... 10 h 1.5 ... 30 h 5 ... 100 h ∞ ³⁾	42 ... 48/60 42 ... 48/60 ⁴⁾ 24/100 ... 127 24 24/200 ... 240 24 24 ... 240 ⁴⁾ 24 ... 240 ⁵⁾	3RP15 25-1BR30 3RP15 25-1BQ30 3RP15 25-1BP30 3RP15 25-1BW30	3RP15 25-2BR30 3RP15 25-2BQ30 3RP15 25-2BP30 3RP15 25-2BW30	0.110

3RP15 27 time relay, ON-delay, two-wire version, 4 time setting ranges

	3RP15 27-1E...	1 NO contact (semiconductor)	0.05 ... 1 s 0.2 ... 4 s 1.5 ... 30 s 12 ... 240 s	24 ... 66 24 ... 66 ⁴⁾ 90 ... 240 90 ... 240 ⁴⁾	3RP15 27-1EC30 3RP15 27-1EM30	3RP15 27-2EC30 3RP15 27-2EM30	0.100
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1) For information about Cage Clamp connections, see page 17/32.

2) For functions, see 3RP19 01-0 label set, Page 8/27.

3) With selection of ∞ no timing. For test purposes (ON/OFF function) on site. Relay is constantly on when activated, or relay remains constantly off when activated. Depending on which function is set.

4) Operating range 0.8 to 1.1 x U_s .

5) Operating range 0.7 to 1.1 x U_s .

6) Positively driven: NO and NC are never closed simultaneously; contact gap ≥ 0.5 mm is guaranteed, minimum make-break capacity 12 V, 3 mA.

7) The SPDT contacts are actuated simultaneously, as a result of which only 8 functions are selectable (no YΔ, no instantaneous contact).

3RP20/3RP15/7PV

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- voltage indication by LED

For function table, see Page 8/31.

Design	Time setting range t	Rated control supply voltage	Screw terminals		Cage Clamp connection ¹⁾		Weight approx. 1 unit kg
			Order No.	Order No.	Price		
	adjustable by rotary switch to	AC 50-60 Hz DC V V					
3RP15 3. time relay, OFF-delay, with auxiliary voltage, 1 time setting range							
	3RP15 3-1A... with LED and 1 SPDT contact.	0.5 ... 10 s	24/100 ... 127 24 24/200 ... 240 24	3RP15 31-1AQ30 3RP15 31-1AP30	3RP15 31-2AQ30 3RP15 31-2AP30		0.130
	The terminals A and B must be of equal potential.	1.5 ... 30 s	24/100 ... 127 24 24/200 ... 240 24	3RP15 32-1AQ30 3RP15 32-1AP30	3RP15 32-2AQ30 3RP15 32-2AP30		0.130
		5 ... 100 s	24/100 ... 127 24 24/200 ... 240 24	3RP15 33-1AQ30 3RP15 33-1AP30	3RP15 33-2AQ30 3RP15 33-2AP30		0.130
3RP15 40 time relay, OFF-delay, without auxiliary voltage³⁾, 7 time setting ranges							
	3RP15 40-1.A... with LED and: 1 SPDT contact.	0.05 ... 1 s 0.15 ... 3 s 0.3 ... 6 s 0.5 ... 10 s 1.5 ... 30 s 3 ... 60 s	24 24 ⁴⁾ 100 ... 127 100 ... 127 ⁵⁾ 200 ... 240 200 ... 240 ⁵⁾	3RP15 40-1AB30 3RP15 40-1AJ30 3RP15 40-1AN30	3RP15 40-2AB30 3RP15 40-2AJ30 3RP15 40-2AN30		0.130
	2 SPDT contacts	5 ... 100 s	24 24 ⁴⁾ 100 ... 127 100 ... 127 ⁵⁾ 200 ... 240 200 ... 240 ⁵⁾	3RP15 40-1BB30 3RP15 40-1BJ30 3RP15 40-1BN30	3RP15 40-2BB30 3RP15 40-2BJ30 3RP15 40-2BN30		0.150
3RP15 55 time relay, clock-pulse relay, 15 time setting ranges							
	3RP15 55-1A... with LED and 1 SPDT contact	0.05 ... 1 s 0.15 ... 3 s 0.5 ... 10 s 1.5 ... 30 s 0.05 ... 1 min 5 ... 100 s 0.15 ... 3 min 0.5 ... 10 min 1.5 ... 30 min 0.05 ... 1 h 5 ... 100 min 0.15 ... 3 h 0.5 ... 10 h 1.5 ... 30 h 5 ... 100 h ∞ ²⁾	42 ... 48/60 42 ... 48/60 ⁵⁾ 24/100 ... 127 24 24/200 ... 240 24	3RP15 55-1AR30 3RP15 55-1AQ30 3RP15 55-1AP30	3RP15 55-2AR30 3RP15 55-2AQ30 3RP15 55-2AP30		0.110
3RP15 60 time relay, star-delta function, dead interval 50 ms and overtravel time, 1 time setting range							
	3RP15 60-1S... 3 NO contacts ⁶⁾	Star delta 1.0 ... 20 s	24/ 100 ... 127 24 24/ 200 ... 240 24	3RP15 60-1SQ30 3RP15 60-1SP30	3RP15 60-2SQ30 3RP15 60-2SP30		0.150
	(common contact root terminal 17)	Overtravel time (idling) 30 ... 600 s					
<i>For function tables, see page 8/34</i>							
3RP15 7. time relay, star-delta function⁷⁾, dead interval 50 ms, 1 time setting range							
	3RP15 7-1N... 1 NO instantaneous and 1 NO delayed	1 ... 20 s 3 ... 60 s	24/100 ... 127 24 24/200 ... 240 24	3RP15 74-1NQ30 3RP15 74-1NP30	3RP15 74-2NQ30 3RP15 74-2NP30		0.110
	(common contact root terminal 17)		24/100 ... 127 24 24/200 ... 240 24	3RP15 76-1NQ30 3RP15 76-1NP30	3RP15 76-2NQ30 3RP15 76-2NP30		0.110

1) For Cage Clamp connections, see page 17/32.

2) With selection of ∞ , no timing. For test purposes (ON/OFF function) on site. If interval time ∞ , relay permanently off. If pulse time ∞ , relay permanently on.

3) Setting of output contacts in as-supplied state not defined (bistable relay). Single application of the control voltage results in contact changeover to the correct setting.

4) Working range 0.7 to 1.25 x U_s .

5) Working range 0.85 to 1.1 x U_s .

6) Working range 0.8 to 1.1 x U_s .

7) For typical circuit, see page 8/35.