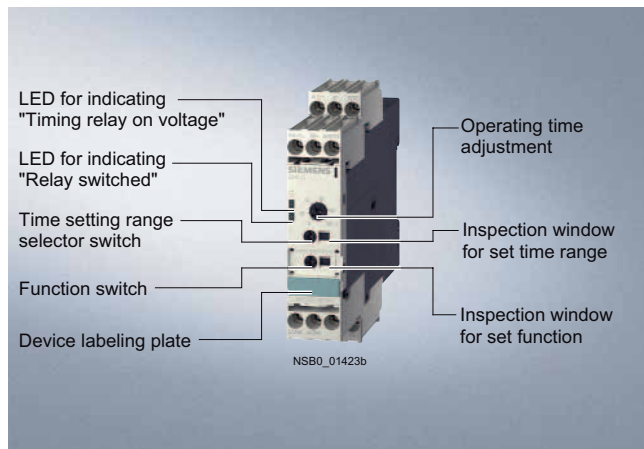


3RP, 3RT19 Timing Relays

**3RP15 timing relays
in industrial enclosure, 22.5 mm**

Overview



Standards

The timing relays comply with:

- EN 60721-3-3 "Environmental conditions"
- EN 61812-1/DIN VDE 0435 Part 2021 "Electrical relays, timing relays"
- EN 61000-6-2 and EN 61000-6-4 "Electromagnetic compatibility"
- EN 60947-5-1; (VDE 0660 Part 200) "Low-voltage controlgear"

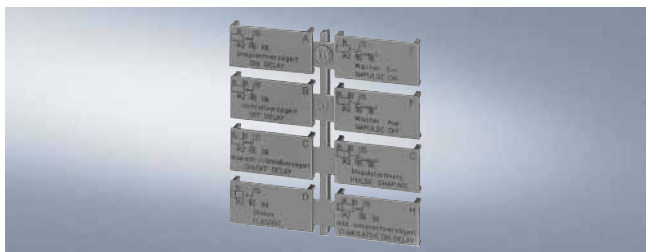
Accessories



Push-in lugs for screw mounting



Sealable cover



Label set for marking the multifunction relay

Application

Timing relays are used in control, starting, and protective circuits for all switching operations involving time delays. They guarantee a high level of functionality and a high repeat accuracy of timer settings.

Enclosure version

All timing relays are suitable for snap-on mounting onto TH 35 standard mounting rails according to EN 60715 or for screw mounting.

3RP, 3RT19 Timing Relays

3RP15 timing relays in industrial enclosure, 22.5 mm

Selection and ordering data

Solid-state timing relays for general use in control systems and mechanical engineering with:

- 1 changeover contact or 2 changeover contacts

- Single or selectable time setting ranges
- Switch position indication by LED
- Voltage indication by LED

Version	Time setting range t adjustable by rotary switch to	Rated control supply voltage U_s		DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		AC 50/60 Hz	DC		Order No.	Price per PU			kg
		V	V						

3RP15 05 timing relays, multifunction, 15 time setting ranges

The functions can be adjusted by means of rotary switches. Insert labels can be used to adjust different functions of the 3RP15 05 timing relay clearly and unmistakably. The corresponding labels can be ordered as an accessory. The same potential must be applied to terminals A. and B.¹⁾



3RP15 05-1BP30

With LED and										
1 CO contact, 8 functions	0.05 ... 1 s	--	12	A	▶	3RP15 05-1AA40	1	1 unit	101	0.125
	0.15 ... 3 s	24/100 ... 127	24		▶	3RP15 05-1AQ30	1	1 unit	101	0.140
	0.5 ... 10 s	24/200 ... 240	24		▶	3RP15 05-1AP30	1	1 unit	101	0.141
	1.5 ... 30 s	24 ... 240 ⁶⁾	24 ... 240 ³⁾		▶	3RP15 05-1AW30	1	1 unit	101	0.136
2 CO contacts, 16 functions	0.05 ... 1 min	24/100 ... 127	24		▶	3RP15 05-1BQ30	1	1 unit	101	0.162
	5 ... 100 s	24/200 ... 240	24		▶	3RP15 05-1BP30	1	1 unit	101	0.161
	0.15 ... 3 min	24 ... 240 ⁶⁾	24 ... 240 ³⁾		▶	3RP15 05-1BW30	1	1 unit	101	0.168
	0.5 ... 10 min	400 ... 440	-	A	▶	3RP15 05-1BT20	1	1 unit	101	0.169
	1.5 ... 30 min	24 ... 240	24 ... 240		▶	3RP15 05-1RW30	1	1 unit	101	0.169
2 CO contacts, positively driven and hard gold-plated, 8 functions ⁴⁾⁵⁾	0.05 ... 1 h									
	5 ... 100 min									
	0.15 ... 3 h									
	0.5 ... 10 h									
	1.5 ... 30 h									
5 ... 100 h	∞ ²⁾									

3RP15 1. timing relays, ON-delay, 1 time setting range



3RP15 11-1AP30

With LED and 1 CO contact									
0.5 ... 10 s	24/100 ... 127	24		▶	3RP15 11-1AQ30	1	1 unit	101	0.108
	24/200 ... 240	24		▶	3RP15 11-1AP30	1	1 unit	101	0.108
1.5 ... 30 s	24/100 ... 127	24		▶	3RP15 12-1AQ30	1	1 unit	101	0.107
	24/200 ... 240	24		▶	3RP15 12-1AP30	1	1 unit	101	0.104
5 ... 100 s	24/100 ... 127	24		▶	3RP15 13-1AQ30	1	1 unit	101	0.107
	24/200 ... 240	24		▶	3RP15 13-1AP30	1	1 unit	101	0.108

3RP15 25 timing relays, ON-delay, 15 time setting ranges



3RP15 25-1BW30

With LED and										
1 CO contact	0.05 ... 1 s	24/100 ... 127	24		▶	3RP15 25-1AQ30	1	1 unit	101	0.109
	0.15 ... 3 s	24/200 ... 240	24		▶	3RP15 25-1AP30	1	1 unit	101	0.104
2 CO contacts	0.5 ... 10 s	42 ... 48/60	42 ... 48/60 ⁶⁾	A	▶	3RP15 25-1BR30	1	1 unit	101	0.152
	1.5 ... 30 s									
	0.05 ... 1 min	24/100 ... 127	24		▶	3RP15 25-1BQ30	1	1 unit	101	0.152
	5 ... 100 s	24/200 ... 240	24		▶	3RP15 25-1BP30	1	1 unit	101	0.155
	0.15 ... 3 min	24 ... 240 ⁶⁾	24 ... 240 ³⁾		▶	3RP15 25-1BW30	1	1 unit	101	0.159
	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⁾								

3RP15 27 timing relays, ON-delay, two-wire design, 4 time setting ranges



3RP15 27-1EM30

1 NO contact (semiconductor)	0.05 ... 1 s	24 ... 66	24...66 ⁶⁾	A	▶	3RP15 27-1EC30	1	1 unit	101	0.099
	0.2 ... 4 s	90 ... 240	90...240 ⁶⁾		▶	3RP15 27-1EM30	1	1 unit	101	0.100
	1.5 ... 30 s									
	12 ... 240 s									

¹⁾ For functions, see 3RP19 01-0. label set.

²⁾ With switch position ∞ , 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.

³⁾ Operating range 0.7 ... 1.1 x U_s .

⁴⁾ Positively driven: NO and NC are never closed simultaneously; contact gap ≥ 0.5 mm is ensured, minimum make-break capacity 12 V, 3 mA.

⁵⁾ The changeover contacts are actuated simultaneously, as a result of which only 8 functions are selectable (no wye-delta, no instantaneous contact).

⁶⁾ Operating range 0.8 ... 1.1 x U_s .

3RP, 3RT19 Timing Relays

3RP15 timing relays in industrial enclosure, 22.5 mm

Solid-state timing relays for general use in control systems and mechanical engineering with

- 1 changeover contact or 2 changeover contacts

- Single or selectable time setting ranges
- Switch position indication by LED
- Voltage indication by LED

Version	Time setting range t adjustable by rotary switch to	Rated control supply voltage U_s		DT	Spring-loaded terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		AC 50/60 Hz	DC						
		V	V		Order No.	Price per PU			kg

3RP15 05 timing relays, multifunction, 15 time setting ranges

The functions can be adjusted by means of rotary switches. Insert labels can be used to adjust different functions of the 3RP15 05 timing relay clearly and unmistakably. The corresponding labels can be ordered as an accessory. The same potential must be applied to terminals A. and B.¹⁾



3RP15 05-2BP30

With LED and									
1 CO contact, 8 functions	0.05 ... 1 s	24/100 ... 127	24	C	3RP15 05-2AQ30	1	1 unit	101	0.125
	0.15 ... 3 s	24/200 ... 240	24	A	3RP15 05-2AP30	1	1 unit	101	0.126
	0.5 ... 10 s	24 ... 240 ⁶⁾	24 ... 240 ³⁾	A	3RP15 05-2AW30	1	1 unit	101	0.132
2 CO contacts, 16 functions	1.5 ... 30 s	24/100 ... 127	24	A	3RP15 05-2BQ30	1	1 unit	101	0.142
	0.05 ... 1 min	24/200 ... 240	24	A	3RP15 05-2BP30	1	1 unit	101	0.137
	5 ... 100 s	24 ... 240 ⁶⁾	24 ... 240 ³⁾	A	3RP15 05-2BW30	1	1 unit	101	0.143
2 CO contacts, positively driven and hard gold-plated, 8 functions ⁴⁾⁵⁾	0.15 ... 3 min	24 ... 240	24 ... 240	A	3RP15 05-2RW30	1	1 unit	101	0.143
	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⁾									

3RP15 1. timing relays, ON-delay, 1 time setting range



3RP15 11-2AP30

With LED and 1 CO contact									
0.5 ... 10 s	24/100 ... 127	24	C	3RP15 11-2AQ30	1	1 unit	101	0.092	
	24/200 ... 240	24	A	3RP15 11-2AP30	1	1 unit	101	0.092	
1.5 ... 30 s	24/100 ... 127	24	C	3RP15 12-2AQ30	1	1 unit	101	0.092	
	24/200 ... 240	24	A	3RP15 12-2AP30	1	1 unit	101	0.097	
5 ... 100 s	24/100 ... 127	24	C	3RP15 13-2AQ30	1	1 unit	101	0.094	
	24/200 ... 240	24	C	3RP15 13-2AP30	1	1 unit	101	0.094	

3RP15 25 timing relays, ON-delay, 15 time setting ranges



3RP15 25-2BW30

With LED and									
1 CO contact	0.05 ... 1 s	24/100 ... 127	24	C	3RP15 25-2AQ30	1	1 unit	101	0.095
	0.15 ... 3 s	24/200 ... 240	24	A	3RP15 25-2AP30	1	1 unit	101	0.093
2 CO contacts	0.5 ... 10 s	24/100 ... 127	24	C	3RP15 25-2BQ30	1	1 unit	101	0.128
	1.5 ... 30 s	24/200 ... 240	24	A	3RP15 25-2BP30	1	1 unit	101	0.127
	0.05 ... 1 min	24 ... 240 ⁶⁾	24 ... 240 ³⁾	A	3RP15 25-2BW30	1	1 unit	101	0.134
	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⁾								

3RP15 27 timing relays, ON-delay, two-wire design, 4 time setting ranges



3RP15 27-2EM30

1 NO contact (semiconductor)	0.05 ... 1 s	24 ... 66	24...66 ⁶⁾	C	3RP15 27-2EC30	1	1 unit	101	0.090
	0.2 ... 4 s	90 ... 240	90...240 ⁶⁾	C	3RP15 27-2EM30	1	1 unit	101	0.090
	1.5 ... 30 s								
	12 ... 240 s								

1) For functions, see 3RP19 01-0. label set.

2) With switch position ∞ , 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.

3) Operating range 0.7 ... 1.1 x U_s .

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

5) The changeover contacts are actuated simultaneously, as a result of which only 8 functions are selectable (no wye-delta, no instantaneous contact).

6) Operating range 0.8 ... 1.1 x U_s .






3RP, 3RT19 Timing Relays

3RP15 timing relays in industrial enclosure, 22.5 mm

Solid-state timing relays for general use in control systems and mechanical engineering with

- 1 changeover contact or 2 changeover contacts

- Single or selectable time setting ranges
- Switch position indication by LED
- Voltage indication by LED

Version	Time setting range t adjustable by rotary switch to	Rated control supply voltage U_s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
		AC 50/60 Hz	DC	Order No.	Price per PU			kg	
		V	V						
3RP15 3. timing relays, OFF-delay, with auxiliary voltage, 1 time setting range									
	With LED and 1 CO contact	0.5 ... 10 s	24/100 ... 127 24/200 ... 240	24 24	A				
	The same potential must be applied to terminals A and B	1.5 ... 30 s	24/100 ... 127 24/200 ... 240	24 24	A				
		5 ... 100 s	24/100 ... 127 24/200 ... 240	24 24	A				
3RP15 33-1AP30									
3RP15 40 timing relays, OFF-delay, without auxiliary voltage, 7 time setting ranges¹⁾									
	With LED and 1 CO contact	0.05 ... 1 s	24	24 ²⁾	▶				
		0.15 ... 3 s	100 ... 127	100...127 ³⁾	▶				
		0.3 ... 6 s	200 ... 240	200...240 ³⁾	▶				
		0.5 ... 10 s	24	24 ²⁾	▶				
	2 CO contacts	1.5 ... 30 s	100 ... 127	100...127 ³⁾	A				
		3 ... 60 s	200 ... 240	200...240 ³⁾	▶				
		5 ... 100 s			▶				
3RP15 40-1BB30									
3RP15 55 timing relays, clock-pulse relays, 15 time setting ranges									
	With LED and 1 CO contact	0.05 ... 1 s	42 ... 48/60	42...48/ 60 ⁵⁾	A				
		0.15 ... 3 s			▶				
		0.5 ... 10 s	24/100 ... 127	24	▶				
		1.5 ... 30 s	24/200 ... 240	24	▶				
	3RP15 55-1AP30		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						
∞ ⁴⁾									
3RP15 60 timing relays, wye-delta function, dead interval 50 ms and overtravel time, 1 time setting range									
	3 NO contacts ³⁾ (common contact root terminal 17)	wye-delta	24/100 ... 127 24/200 ... 240	24 24	A				
		1 ... 20 s, overtravel time (idling) 30 ... 600 s			▶				
3RP15 60-1SP30									
3RP15 7. timing relays, wye-delta function⁶⁾, dead interval 50 ms, 1 time setting range									
	1 NO contact instantaneous and 1 NO contact delayed (common contact root terminal 17)	1 ... 20 s	24/100 ... 127 24/200 ... 240	24 24	▶				
		3 ... 60 s	200 ... 240/ 380 ... 440	--	B				
			24/100 ... 127 24/200 ... 240	24 24	▶				
	3RP15 76-1NP30		200 ... 240/ 380 ... 440	--	B				

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

2) Operating range $0.7 \dots 1.25 \times U_s$.

3) Operating range $0.85 \dots 1.1 \times U_s$.

4) With switch position ∞ , no timing. For test purposes (ON/OFF function) on site. For dead time "infinite", the relay is always off. For pulse time "infinite", the relay is always on.

5) Operating range $0.8 \dots 1.1 \times U_s$.

6) For example circuit see Technical Information LV 1 T, "Schematics".






3RP, 3RT19 Timing Relays

3RP15 timing relays in industrial enclosure, 22.5 mm

Solid-state timing relays for general use in control systems and mechanical engineering with

- 1 changeover contact or 2 changeover contacts

- Single or selectable time setting ranges
- Switch position indication by LED
- Voltage indication by LED

Version	Time setting range t adjustable by rotary switch to	Rated control supply voltage U_s		DT	Spring-loaded terminals		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
		AC 50/60 Hz	DC		Order No.	Price per PU					
3RP15 3. timing relays, OFF-delay, with auxiliary voltage, 1 time setting range											
	With LED and 1 CO contact	0.5 ... 10 s	24/100 ... 127	24	C	3RP15 31-2AQ30	1	1 unit	101	0.124	
			24/200 ... 240	24	A	3RP15 31-2AP30	1	1 unit	101	0.122	
	The same potential must be applied to terminals A and B	1.5 ... 30 s	24/100 ... 127	24	C	3RP15 32-2AQ30	1	1 unit	101	0.125	
			24/200 ... 240	24	C	3RP15 32-2AP30	1	1 unit	101	0.121	
	5 ... 100 s	24/100 ... 127	24	C	3RP15 33-2AQ30	1	1 unit	101	0.123		
		24/200 ... 240	24	C	3RP15 33-2AP30	1	1 unit	101	0.125		
3RP15 33-2AP30											
3RP15 40 timing relays, OFF-delay, without auxiliary voltage, 7 time setting ranges ¹⁾											
	With LED and 1 CO contact	0.05 ... 1 s	24	24 ²⁾	A	3RP15 40-2AB30	1	1 unit	101	0.105	
			0.15 ... 3 s	100 ... 127	100...127 ³⁾	A	3RP15 40-2AJ30	1	1 unit	101	0.108
	2 CO contacts	0.3 ... 6 s	200 ... 240	200...240 ³⁾	A	3RP15 40-2AN30	1	1 unit	101	0.110	
			0.5 ... 10 s	24	24 ²⁾	A	3RP15 40-2BB30	1	1 unit	101	0.136
	3 ... 60 s	100 ... 127	100...127 ³⁾	C	3RP15 40-2BJ30	1	1 unit	101	0.136		
		200 ... 240	200...240 ³⁾	C	3RP15 40-2BN30	1	1 unit	101	0.136		
	3RP15 40-2BB30										
	3RP15 55 timing relays, clock-pulse relays, 15 time setting ranges										
	With LED and 1 CO contact	0.05 ... 1 s	42 ... 48/60	42...48/60 ⁵⁾	C	3RP15 55-2AR30	1	1 unit	101	0.102	
			0.15 ... 3 s	24/100 ... 127	24	C	3RP15 55-2AQ30	1	1 unit	101	0.100
	0.5 ... 10 s	24/200 ... 240	24	A	3RP15 55-2AP30	1	1 unit	101	0.104		
		1.5 ... 30 s									
	0.05 ... 1 min	5 ... 100 s									
		0.15 ... 3 min									
	0.5 ... 10 min	1.5 ... 30 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									
	3RP15 55-2AP30										
	3RP15 60 timing relays, wye-delta function, dead interval 50 ms and overtravel time, 1 time setting range										
		3 NO contacts ³⁾ (common contact root terminal 17)	wye-delta 1 ... 20 s, overtravel time (idling) 30 ... 600 s	24/200 ... 240	24	C	3RP15 60-2SP30	1	1 unit	101	0.152
3RP15 60-2SP30											
3RP15 7. timing relays, wye-delta function ⁶⁾ , dead interval 50 ms, 1 time setting range											
	1 NO contact instantaneous and 1 NO contact delayed (common contact root terminal 17)	1 ... 20 s	24/200 ... 240	24	A	3RP15 74-2NP30	1	1 unit	101	0.104	
			200 ... 240/380 ... 440		B	3RP15 74-2NM20	1	1 unit	101	0.100	
	3 ... 60 s	24/100 ... 127	24	C	3RP15 76-2NQ30	1	1 unit	101	0.102		
		24/200 ... 240	24	A	3RP15 76-2NP30	1	1 unit	101	0.104		
	200 ... 240/380 ... 440			B	3RP15 76-2NM20	1	1 unit	101	0.100		

¹⁾ Setting of output contacts in as-supplied state not defined (bistable relay). Application of the control voltage once results in contact changeover to the correct setting.

²⁾ Operating range $0.7 \dots 1.25 \times U_s$.

³⁾ Operating range $0.85 \dots 1.1 \times U_s$.

⁴⁾ With switch position ∞ , no timing. For test purposes (ON/OFF function) on site. For dead time "infinite", the relay is always off. For pulse time "infinite", the relay is always on.

⁵⁾ Operating range $0.8 \dots 1.1 \times U_s$.

⁶⁾ For example circuit, see Technical Information LV 1 T, "Schematics".

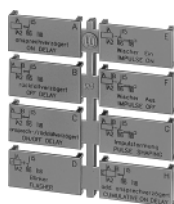
3RP, 3RT19 Timing Relays

3RP15 timing relays in industrial enclosure, 22.5 mm

Accessories

Version	Function	Identification letter	Use	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
---------	----------	-----------------------	-----	----	-----------	--------------	-------------------	-----	----	-----------------------------

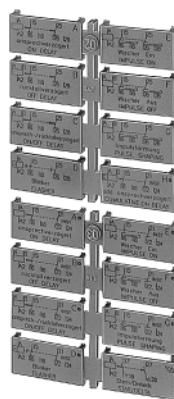
Label sets



3RP19 01-0A

Accessory for 3RP15 05 (not included in the scope of supply).
The label set offers the possibility of labeling timing relays with the set function in English and German.

1 label set (1 unit) with 8 functions	With ON-delay	A	for devices with 1 CO contact and 3RP15 05-.. RW30	▶	3RP19 01-0A		1	5 units	101	0.003
	OFF-delay with auxiliary voltage	B								
	ON-delay and OFF-delay with auxiliary voltage	C								
	Flashing, starting with interval	D								
	Passing make contact	E								
	Passing break contact with auxiliary voltage	F								
	Pulse-forming with auxiliary voltage	G								
	Additive ON-delay with auxiliary voltage	H								



3RP19 01-0B

1 label set (1 unit) with 16 functions	With ON-delay	A	for devices with 2 CO contacts	▶	3RP19 01-0B		1	5 units	101	0.006
	OFF-delay with auxiliary voltage	B								
	ON-delay and OFF-delay with auxiliary voltage	C								
	Flashing, starting with interval	D								
	Passing make contact	E								
	Passing break contact with auxiliary voltage	F								
	Pulse-forming with auxiliary voltage	G								
	Additive ON-delay with auxiliary voltage and instantaneous contact	H•								
	ON-delay and instantaneous contact	A•								
	OFF-delay with auxiliary voltage and instantaneous contact	B•								
	ON-delay and OFF-delay with auxiliary voltage and instantaneous contact	C•								
	Flashing, starting with interval, and instantaneous contact	D•								
	Passing make contact and instantaneous contact	E•								
	Passing break contact with auxiliary voltage and instantaneous contact	F•								
	Pulse-forming with auxiliary voltage and instantaneous contact	G•								
	Wye-delta function	YΔ								

Blank labels

Blank labels, 20 mm x 7 mm, pastel turquoise ¹⁾	C	3RT19 00-1SB20	100	340 units	101	22.000
--	---	-----------------------	-----	-----------	-----	--------

Covers and push-in lugs



3RP19 03

Push-in lugs
For screw mounting,
2 units are required for each device

for devices with 1 or 2 CO contacts

3RP19 03	1	10 units	101	0.002
-----------------	---	----------	-----	-------



3RP19 02

Sealable covers
For securing against unauthorized adjustment of setting knobs

for devices with 1 or 2 CO contacts

3RP19 02	1	5 units	101	0.004
-----------------	---	---------	-----	-------

¹⁾ Computer labeling system for individual inscription of unit labeling plates available from:
murrplastik Systemtechnik GmbH.