Thermal Overload Relays

3RU21 up to 100 A, CLASS 10

Selection and ordering data

Features and technical characteristics
- Auxiliary contacts: 1 NO + 1 NC
- Manual/automatic RESET
- Switching position indication
- CLASS 10
- TEST function
- STOP button
- Phase failure sensitivity
- Sealable cover: optional in S00, S0 & S2. Integrated in S3

Ordering information

- Replace the (••) with the letter Number combination from the Terminal types I table
- Replace the (††) with the letter Number combination from the Terminal types II table
- For description, see page 3/8
- For technical data, see pages 3/12-3/15
- For circuit diagrams, see page 3/15
- For dimension drawings, see page 3/16-3/17.

•• Terminal Types I

Type	Mounting Type	Ltr
Screw	Direct to Contactor	B0
Screw[1]	Stand Alone	B1
Spring[2]	Direct to Contactor	C0
Spring[1] [2]	Stand Alone	C1
Ring Lug	Direct to Contactor	J0

†† Terminal Types II

Type	Mounting Type	Ltr
Screw	Direct to Contactor	B0
Screw [4]	Stand Alone	B1
Spring [3]	Direct to Contactor	D0
Spring [3] [4]	Stand Alone	D1

3RU2116-1GB0

3RU2116-1GC0

3RU2126-4NB0

3RU2136-4RB1

3RU2146-4JB0

Thermal Overload Relays up to 40A Frame Size S00 and S0 ••

Setting Range A	Order No.	Setting Range A	Order No.	Weight approx. (screw/ spring) kg
Frame Size S00: For mounting directly to 3RT201 contactors or for stand-alone installation				
0.11 - 0.16	**3RU2116-0A••**	1.4 - 2	**3RU2116-1B••**	0.13/0.15
0.14 - 0.2	**3RU2116-0B••**	1.8 - 2.5	**3RU2116-1C••**	
0.18 - 0.25	**3RU2116-0C••**	2.2 - 3.2	**3RU2116-1D••**	
0.22 - 0.32	**3RU2116-0D••**	2.8 - 4	**3RU2116-1E••**	
0.28 - 0.4	**3RU2116-0E••**	3.5 - 5	**3RU2116-1F••**	0.13/0.15
0.35 - 0.5	**3RU2116-0F••**	4.5 - 6.3	**3RU2116-1G••**	
0.45 - 0.63	**3RU2116-0G••**	5.5 - 8	**3RU2116-1H••**	
0.55 - 0.8	**3RU2116-0H••**	7 - 10	**3RU2116-1J••**	
0.7 - 1	**3RU2116-0J••**	9 - 12.5	**3RU2116-1K••**	0.13/0.15
0.9 - 1.25	**3RU2116-0K••**	11 - 16	**3RU2116-4A••**	
1.1 - 1.6	**3RU2116-1A••**			
Frame Size S0: For mounting directly to 3RT202 contactors or for stand-alone installation				
1.8 - 2.5	**3RU2126-1C••**	11 - 16	**3RU2126-4A••**	0.16/0.22
2.2 - 3.2	**3RU2126-1D••**	14 - 20	**3RU2126-4B••**	
2.8 - 4	**3RU2126-1E••**	17 - 22	**3RU2126-4C••**	
3.5 - 5	**3RU2126-1F••**	20 - 25	**3RU2126-4D••**	
4.5 - 6.3	**3RU2126-1G••**	23 - 28	**3RU2126-4N••**	0.16/0.22
5.5 - 8	**3RU2126-1H••**	27 - 32	**3RU2126-4E••**	
7 - 10	**3RU2126-1J••**	30 - 36	**3RU2126-4P••**	
9 - 12.5	**3RU2126-1K••**	34 - 40	**3RU2126-4F••**	

Thermal Overload Relays up to 100A Frame Size S2 and S3 ††

Setting Range A	Order No.	Setting Range A	Order No.	Weight approx. (screw/ spring) kg
Frame Size S2: For mounting directly to 3RT203 contactors [4]				
22 - 32	**3RU2136-4E††**	47 - 57	**3RU2136-4Q††**	0.34
28 - 40	**3RU2136-4F††**	54 - 65	**3RU2136-4J††**	
36 - 45	**3RU2136-4G††**	62 - 73	**3RU2136-4K††**	
40 - 50	**3RU2136-4H††**	70 - 80	**3RU2136-4R††**	
Frame Size S3: For mounting directly to 3RT104 contactors [4]				
28 - 40	**3RU2146-4F††**	70 - 90	**3RU2146-4L††**	
36 - 50	**3RU2146-4H††**	80 - 100	**3RU2146-4M††**	

[1] Not available for size S0 3RU212 with current setting range below 14 A.

[2] Size S00 and S0: main and auxiliary conductor terminals are spring-type.

[3] Size S2 and S3 auxiliary terminals are spring-type only. Main conductor terminals are screw.

[4] 3RU Overloads in S2 and S3 frame are available preassembled with a terminal bracket for standalone mounting. S2 and S3 overloads can also be customer assembled to the terminal bracket (see Accessories).

3RB20 solid-state overload relays and stand-alone installation[2)3)], CLASS 10 or CLASS 20 for direct mounting[1)2)]

Features and technical specifications:

- Overload protection, phase failure protection and unbalance protection
- Internal power supply
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function and self-monitoring

	Size Contactor[4)]	Set current value of the inverse-time delayed overload trip A		Screw Terminal Order Number	Spring Loaded Terminal Order Number	Weight per PU approx. kg
Size S00[1)]						
 3RB30 16-1RB0	S00	0.1 … 0.4		**3RB30 16-□RB0**	**3RB30 16-□RE0**	0.172
		0.32 … 1.25		**3RB30 16-□NB0**	**3RB30 16-□NE0**	0.172
		1 … 4		**3RB30 16-□PB0**	**3RB30 16-□PE0**	0.172
		3 … 12		**3RB30 16-□SB0**	**3RB30 16-□SE0**	0.172
		4 … 16		**3RB30 16-□TB0**	**3RB30 16-□TE0**	0.172
Size S0[1)]						
 3RB30 26-1QB0	S0	0.1 … 0.4		**3RB30 26-□RB0**	**3RB30 26-□RE0**	0.250
		0.32 … 1.25		**3RB30 26-□NB0**	**3RB30 26-□NE0**	0.250
		1 … 4		**3RB30 26-□PB0**	**3RB30 26-□PE0**	0.250
		3 … 12		**3RB30 26-□SB0**	**3RB30 26-□SE0**	0.250
		6 … 25		**3RB30 26-□QB0**	**3RB30 26-□QE0**	0.250
		10 … 40		**3RB30 26-□VB0**	**3RB30 26-□VE0**	0.250
Size S2 [1)3)5)]						
 3RB30 36-1UB0	S2	12 … 50	with busbar	**3RB30 36-□UB0**	**3RB30 36-□UD0**	0.360
			with pass through CT's	**3RB30 36-□UW1**	**3RB30 36-□UX1**	0.230
		20 … 80	with busbar	**3RB30 36-□WB0**	**3RB30 36-□WD0**	0.360
			with pass through CT's	**3RB30 36-□WW1**	**3RB30 36-□WX1**	0.230
Size S3 [1)3)5)]						
 3RB30 46-1EB0	S3	12.5 … 50	with busbar	**3RB30 46-□UB0**	**3RB30 46-□UD0**	0.560
		25 … 100	with busbar	**3RB30 46-□EB0**	**3RB30 46-□ED0**	0.560
			with pass through CT's	**3RB30 46-□EW1**	**3RB30 46-□EX1**	0.450
Size S6 [2)5)]						
 3RB20 56-1FW2	S6	50 … 200	with busbar	**3RB20 56-□FC2**	**3RB20 56-□FF2**	1.030
			with pass through CT's	**3RB20 56-□FW2**	**3RB20 56-□FX2**	0.690
Size S10/S12[2)]						
 3RB20 66-1MC2	S10/S12 and size 14 (3TF68/ 3TF69)	55 … 250	with busbar	**3RB20 66-□GC2**	**3RB20 66-□GF2**	1.820
		160 … 630	with busbar	**3RB20 66-□MC2**	**3RB20 66-□MF2**	1.820

2 Class 20 **1** Class 10 — **2** Class 20 **1** Class 10

1) The relays with an Order No. ending with **"0"** are designed for direct mounting to the contactor. With the matching terminal brackets (see Accessories) the sizes S00 to S3 can also be installed as stand-alone units.

2) The relays with an Order No. ending with **"2"** are designed for direct mounting and stand-alone installation. For 3TF68/3TF69 contactors, direct mounting is not possible.

3) The relays with an Order No. ending with **"1"** are designed for stand-alone installation.

4) Observe maximum rated operational current of the devices.

5) The relays with an Order No. with **"X"** in 10th position are equipped with a straight-through transformer.

For accessories, see pages 3/49-3/50.
For description, see pages 3/18-3/20.
For technical data, see pages 3/24-3/29.
For dimension drawings, see page 3/30.
For schematic diagrams, see page 3/31.