

Technical Information

		RUC
Contacts		
Contact number & arrangement		DPDT, 3PDT
Contact material		AgSnO ₂
Max. switching voltage	AC/DC	250 V
Min. switching voltage		10 V
Rated load	AC1	16 A / 250 V AC
	DC1	16 A / 24 V DC
Min. switching current		10 mA
Max. inrush current		40 A
Rated current		16 A
Max. breaking capacity	AC1	4 000 VA
Min. breaking capacity		1 W
Resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load		AC1 1 200 cycles/hour
• no load		12 000 cycles/hour
General data		
Operating time (typical value)		AC: 12 ms DC: 12 ms
Release time (typical value)		AC: 10 ms DC: 7 ms
Electrical life		
• resistive AC1		≥ 10 ⁵ 16 A, 250 V AC
• cos φ		see graphs on page <?>
Mechanical life (cycles)		≥ 10 ⁷
Dimensions (L x W x H)		38,6 x 36,1 x 45,5 mm
Weight		85 g
Ambient temperature		
• storage		-40...+85 °C
• operating		AC -40...+55 °C 3 C/O, 3 NO / 16A (+70 °C 2 C/O, 2 NO / 16A)
		DC -40...+55 °C 3 C/O, 3 NO / 16A (+70 °C 3 C/O, 3 NO / 10A; 2 C/O, 2 NO / 16A)
Cover protection category		IP 40
Shock resistance (NO/NC)		10 g
Vibration resistance		5 g 10...150 Hz
Solder bath temperature		max. 270 °C
Soldering time		max. 5 s

		RUC		
Insulation				
Insulation category		C250		
Insulation rated voltage		400 V AC		
Dielectric strength				
• coil - contact		2 500 V AC		
• contact - contact		1 500 V AC		
• contact - contact 3 mm		2 500 V AC		
• pole - pole		2 000 V AC		
Contact - coil distance				
• clearance / • creepage		≥ 6 mm / ≥ 8 mm		
UL/CSA Ratings				
Contact Ratings		DPDT	3PDT	
		10A 250 V AC		
General Purpose Rating		15A 250V (resistive)	10 A 250 V AC	
		15A 150 V AC		
Motor Load according to UL 508		2 C/O:	1/3 HP 120 V AC single-phase motor 1/2 HP 240 V AC single-phase motor	
		3 C/O:	1/3 HP 120 V AC single-phase 1/2 HP 240 V AC single-phase motor 1/2 HP 240 V AC three-phase motor	
Pilot Duty Ratings				
Contacts		Inductive	Make	Break
		120VAC	30A	3A
		240VAC	15A	1.5A
		DC	10A 28V DC	
UL File Number		E105728		
CSA File Number		LR86957		
Standards		UL 508, CAN/CSA-C22.2 No. 14		
Coil				
Rated voltage		50/60 HzAC	6...240 V	
		DC	6...110 V	
Must release voltage		AC: ≥ 0,15 U _n DC: 0,1 U _n		
Operating range of supply voltage		see coil data tables below		
Rated power consumption		AC	2,8 VA 50 Hz 2,5 VA 60 Hz	
		DC	1,5 W / 1,7 W with contact gap ≥ 3 mm	

Coil Data - AC 50/60 Hz voltage version

Coil Code	Rated Voltage V AC	Coil Resistance (±10%) at 20 °C Ω	Coil Operating Range V AC	
			min. (at 20 °C)	max. (at 55 °C)
5006	6	4,3	4,8	6,6
5012	12	18,5	9,6	13,2
2024	24	75,0	19,2	26,4
5120	120	1 910	96,0	132,0
5240	240	7 760	192,0	264,0

Coil Data - DC voltage version

Coil Code	Rated Voltage V DC	Coil Resistance (±10%) at 20 °C Ω	Coil Operating Range V DC	
			min. (at 20 °C)	max. (at 55 °C)
1006	6	28	4,8	6,6
1012	12	110	9,6	13,2
1024	24	430	19,2	26,4
1048	48	1 750	38,4	52,8
1110	110	9 200	88,0	121,0

RUC DPDT Connection Diagram
