

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 10A 250 V AC 3PDT 10 A 250 V AC
General Purpose Rating		15A 250V (resistive) 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		B300
Contacts	Inductive	Make Break HP
	120VAC	30A 3A 1/3
	240VAC	15A 1.5A 1/2
	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	AC	2,8 VA 50 Hz 2,5 VA 60 Hz
consumption	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
