

CRS1C

Stepping relay with 1-pole change over power contact
DIN Rail mounting according to DIN 43 880



Type: CRS1C/...V R

Stepping relay (bistable, mech. latching)
 1 change over contact with 0.5 mm gap

Maximum contact load 6 A / 250 V, 180 W DC-1
Recommended minimum contact load 0.1 A / 10 V

Contacts

Type	Single contact micro disconnection
Material	AgNi 10 + 0.2 µm Au
Rated operational current	
AC-1, AC-5a, AC-5b, AC-7a, AC-7b	6 A
Max. inrush current (20ms)	15 A
Max. switching voltage AC-1	250 V
Max. AC load (Fig. 1) AC-1	1500 VA
Max. DC load (Fig. 2) DC-1	180 W

Control input V_n =

	AC 230 V 50 Hz	DC 24 V
Operating voltage range	185 ... 255 V	19 ... 27 V
Max. pulse voltage	253 V * (t _{on} /t _p) ^{0.5}	26.4 V * (t _{on} /t _p) ^{0.5}
Op. voltage @100% duty cycle, 60 °C ambient temp., 6 A contact load	≤ 245 V	≤ 25.5 V
Nominal power consumption	1.4 VA	1 W
		With free wheeling diode

Coil Table

VAC	Ω ±10%	mA	VDC	Ω ±10%	mA
230	25	000	24	575	42

Insulation

Test voltage open contact	1 kVrms 1 minute
Test voltage between contacts and coil	4 kVrms 1 minute

General Specifications

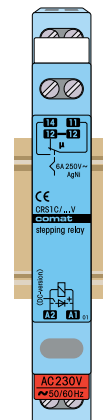
Ambient temperature storage/operation	-40 ... +85 °C / -25 ... +60 °C
Min. drive pulse width	50 ms
Mechanical life, DC drive / AC drive	≥ 10 ⁷ / ≥ 10 ⁵ operations
Electrical life 250 V, AC-1	≥ 10 ⁵ operations
Ingress Protection degree	Housing: IP 40, terminals: IP 20
Max. Screw torque	0.4 Nm
Housing material	Lexan
Weight	47 g

Standard types

AC 230 V, 50Hz/60Hz:	CRS1C/AC230V R
DC 24 V:	CRS1C/DC24V R

Accessories

Marking Strip:	
Large	BS-13G
Small	BS-13K



Connection diagram

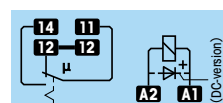


Fig.1 AC voltage endurance

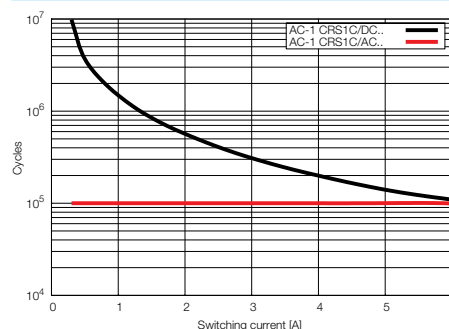
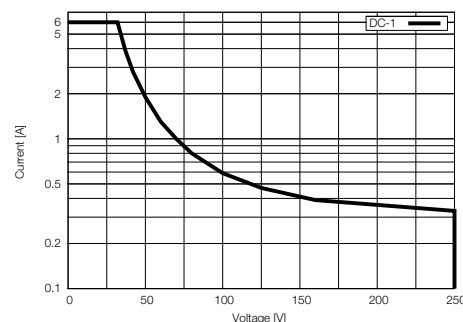
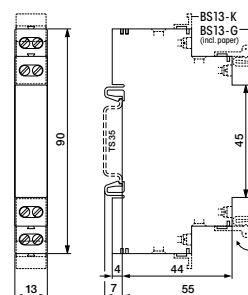


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

IEC 61810; EN 60947

