

C31 with single contacts

11 pin plug-in relay, 3-pole, according to IEC 67-I-18a



Type **C31/...V**
 Long Life Relay, according to EN 50 155 Railway
 3 change over contacts
 Types with LED status indicator
 Types with free wheeling diode
 Manual actuator and mech. status indicator

Maximum contact load **10 A / 250 V AC-1, 4 A / 440 V AC-1**

Recommended minimum contact load **50 mA / 10 V**

Contacts
 Type single contact micro disconnection
 Material AgCuNi
 Rated operational current 10 A
 Max. inrush current (20 ms) 40 A
 Rated/max. switching voltage 250 V / 440 V
 Max. AC load 2500 VA AC-1
 Max. DC load 30V / 230V DC-1 (Fig. 2) 300W / 90 W

Coils (Values are valid at 20 °C)
 Pick-up voltage $\leq 0.8 \times V_N$
 Release voltage AC / DC $> 0.15 \times V_N / > 0.05 \times V_N$
 Nominal power AC / DC 2.5 VA / 1.2 W

Coil Table

V_N AC	Ω	mA	V_N DC	Ω	mA
24	52	104	12	115	104
48	240	55	24	480	50
115	1350	23	48	1850	26
230	5600	11.5	110	9000	12
			220	29000	7.6

Types with LED indicator take additional 5 ... 10 mA @ < 80 V

Insulation
 Test voltage open contact 1.5 kVrms, 1 minute
 Test voltage between adjacent poles 1.5 kVrms, 1minute
 Test voltage between contacts and coil 2 kVrms, 1minute

General Specifications
 Ambient temperature operation, storage -40 ... +70 °C
 Pickup time AC / DC 3 ... 10 ms / ≤ 12 ms
 Release time AC / DC 2 ... 15 ms / ≤ 3.5 ms
 Bounce time NO contact AC / DC 3 ... 6 ms / approx. 3.5 ms
 Mechanical life $\geq 10^8$ operations
 Operating frequency at nominal load ≤ 360 operations / h
 Ingress Protection degree IP 40
 Weight 80 g

Standard types

AC 50 Hz / 60 Hz: 24, 48, 115, 230 (240)

LED

DC: 12, 24, 48, 110, 220

Free wheeling diode

LED + Free wheeling diode

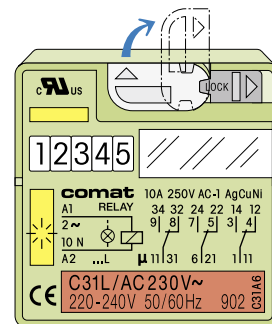
Railway EN 50155; NF F 16-101/102

C31/AC...V
 C31L/AC...V
 C31/DC...V
 C31D/DC...V
 C31DL/DC...V
 C31D/R DC...V

"..." enter the voltage for full type designation

Accessories

Socket: EC-11, EC11A, S3-B, S3-S, S3-L, S3-P, S3-PO



Connection diagram

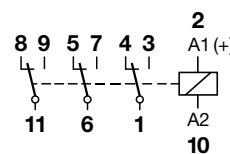


Fig.1 AC voltage endurance

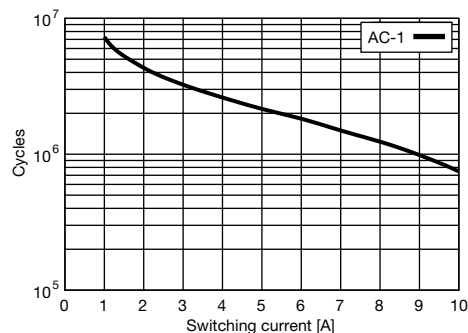
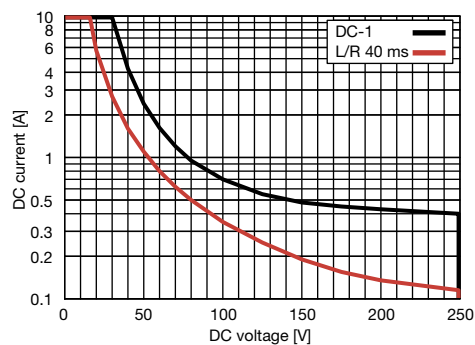
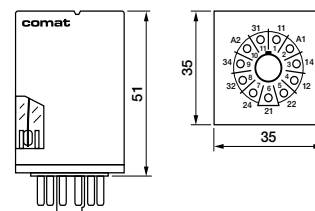


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

