

C31 with single contacts

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



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| 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 |
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| Maximum contact load | 10 A / 250 V AC-1 10 A / 30 V DC-1 |
| Recommended minimum contact load | 50 mA / 10 V |

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

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| 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

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| 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 |

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| 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 |

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| Standard types | C31/AC...V |
| AC 50 Hz / 60 Hz: 24, 48, 115, 230 (240) | C31L/AC...V |
| LED | C31/DC...V |
| DC: 12, 24, 48, 110, 220 | C31D/DC...V |
| Free wheeling diode | C31DL/DC...V |
| LED + Free wheeling diode | C31D/R DC...V |
| Railway EN 50155; NF F 16-101/102 | |

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

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



Connection diagram

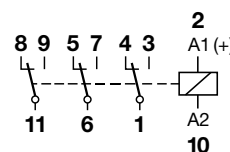


Fig.1 AC voltage endurance

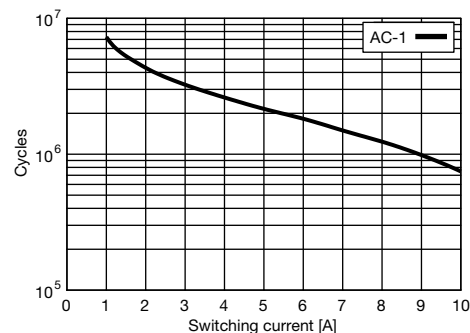
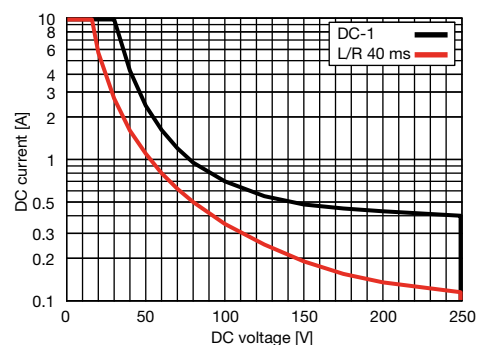
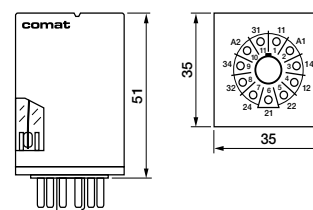


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

