

C31

3 pole | changeover contact | Power relay



Main circuit

Available contact materials	⚡ AgCuNi
Recommended minimum contact load	50 mA / 10 V
Maximum contact load AC	10 A / 250 V AC-1
Maximum contact load DC	10 A / 30 V DC-1
Inrush current	40 A, 20 ms
AC load	2500 VA
DC load	fig. 3.
Rated current	10 A
Mechanical endurance (cycles)	≥ 100 000 000
Electrical endurance at rated load AC-1 (cycles)	≥ 700 000

Control circuit

Nominal voltage	see table product references
Operating voltage range	0.7 U _N ... 1.25 U _N
Pick-up voltage	0.7 U _N
Release voltage	> 0.15 x U _N / > 0.05 x U _N
Power consumption AC / DC	2.5 VA / 1.2 W

Coil table

V AC	Ohm	mA	V DC	Ohm	mA
115	1 350	23	24	480	50
230	5 600	11.5	36	780	46
			48	1 850	26
			72	3 200	23
			110	9 000	12

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

Insulation

Test voltage open contact	1 kV / 1 min
Test voltage contact / contact	1.5 kV / 1 min
Test voltage contact / coil	2 kV / 1 min
Pollution degree	3
Overvoltage category	III
Insulation resistance at 500 V	≥ 1 GΩ

General data

Ambient temperature storage (no ice)	-40 ... 80 °C
Ambient temperature operation	-40 ... 70 °C
Pick-up time / bounce time	3 ... 10 ms / ≤ 12 ms
Release time / bounce time	2 ... 15 ms / ≤ 3.5 ms
Maximum switching frequency at rated load	360 / h
Dimension	fig. 4.
Weight	80 g
Housing material	PA / PC

Product references

Description	Type	24	36	48	72	110	115	230
Railway & LED	C31L/R AC...V	✓		✓			✓	✓
Railway & Free wheeling diode	C31D/R DC...V	✓	✓	✓	✓	✓		

AC relays also available as 60 Hz. Other voltages on request. Please contact support@comatreleco.com.
«...» List coil voltage to complete product references

Accessories

Socket	S3-MR S3-M0R
Blanking plug	SO-NP (BAG 10 PCS)



fig. 1. Wiring diagram

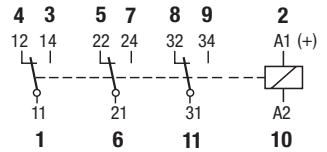


fig. 2. AC voltage endurance

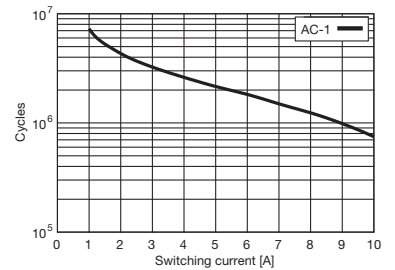


fig. 3. DC load limit curve

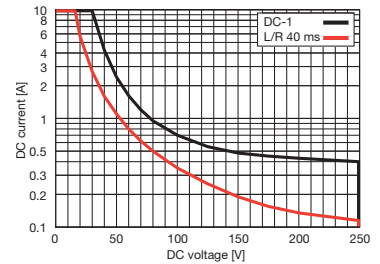
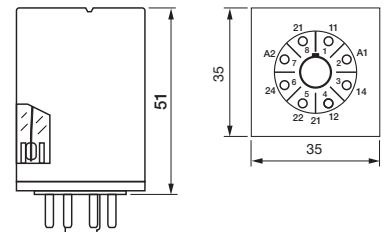


fig. 4. Dimension (mm)



Technical approvals, conformities

Standards IEC/EN 60947; IEC/EN 61810
Railway EN 45545-2; EN 50155

