RIC63-400/UC24V

4 pole | 63 A | 13.3 kW

Main circuit

Available contact materials	$AgSnO_2$
Rated voltage	400 V AC
Rated current AC-1	63 A
Recommended minimum contact load	50 mA, 17 V
Inrush current	240 A, 100 ms / 1500 A, 300 µs
Rated load AC-1	13.3 kW
Rated load AC-3	6 kW
Rated load DC-1	see fig. 2
Mechanical endurance (cycles)	≥ 10 000 000
Electrical endurance at rated load AC-1 (cycles)	≥ 100 000
Electrical endurance at rated load AC-3 (cycles)	≥ 150 000
Electrical endurance at rated load DC-1 (cycles)	≥ 100 000
Switching frequency at rated load AC-1 (cycles / h)	≤ 600
Switching frequency at rated load AC-3 (cycles / h)	≤ 600
Switching frequency at rated load DC-1 (cycles / h)	≤ 300

Control circuit

Nominal voltage	see table product references	
Operating voltage range	0.85 ... 1.1 U_N	
Pick-up voltage	≤ 0.85 U_N	
Release voltage	≥ 0.1 U_N	
Pick-up time	15 ... 20 ms	
Release time	35 ... 45 ms	
Power consumption AC / DC	5 VA / 5 W	
Frequency range	50 / 60 Hz (AC)	40 ... 500 Hz (UC)

Insulation

Rated insulation voltage	440 V
Rated impulse withstand voltage open contact	6 kV / 1 min
Pollution degree	3
Overvoltage category	III
Clearance of open contact	3.6 mm

Wiring

Contact type control / main circuit	Screw connection M3 / M5
Conductor cross section control / main circuit	2.5 mm² / 16 mm²
Stripping Length control / main circuit	8 mm / 10 mm
Nominal screw torque control / main circuit	0.6 Nm / 3.5 Nm
Screwdrive control / main circuit	PZ1 / PZ2
Max. wire count control / main circuit	1
Dual sleeve control / main circuit	1

Housing and environmental conditions

Storage temperature (no ice)	-40 … 80 °C
Operation temperature	-25 … 70 °C
Relative huminity, no condensation	95 % relative humidity
Ingress Protection	IP 20
Weight	420 g
Housing material	PA 6
Operation Altitude	Max. 2 000 m
Mounting	DIN rail
Dimensions	84 x 53.5 x 65.5 mm
Vibration test	switched off: 2 g (Z and X axis) / switched on: 3 g (Z axis) and 1 g (X axis)
Shock test	switched off: 10 g (Z and X axis) / switched on: 15 g (Z axis) and 2 g (X axis)

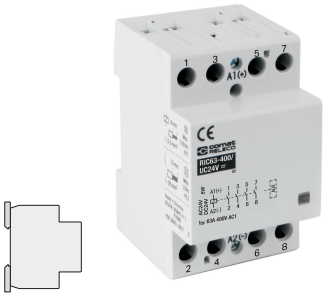


fig. 1. Wiring diagram

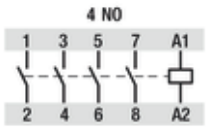


fig. 2. DC load limit curve

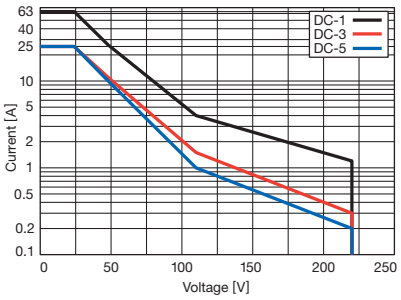
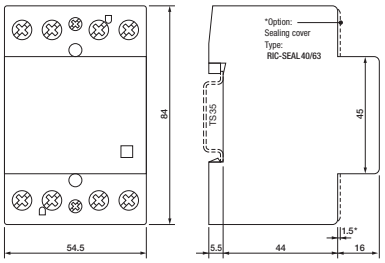


fig. 3. Dimensions (mm)



Technical approvals, conformities

Standards IEC/EN 60947; IEC/EN 61095

Approvals

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Safety

MTTF - Mean time to failure, AC-1 (h)	2,500
MTTF = 1/λ = B10/(0.1 n_{op}), AC-3 (h)	3,750
$MTTF_d$ - Mean time to failure dangerous, AC-1 (h)	3,333
$MTTF_d$ = 1/λ = $B10_d$ /(0.1 n_{op})	5,000
B10 - Number of operating cycles until 10 % of devices fail, AC-1	75,000
B10 - Number of operating cycles until 10 % of devices fail, AC-3	112,500
$B10_d$ - Number of operating cycles until 10 % of device dangerous, AC-1	100,000
$B10_d$ = B10/ratio of dangerous failures, AC-3	150,000
λ - Failure rate, AC-1 (1/h)	0.0004
λ = (0.1 n_{op})/B10, AC-3 (1/h)	0.000266
λ_d - Failure rate dangerous, AC-1 (1/h)	0.0003
λ_d = (0.1n_d)/$B10_{op}$, AC-3 (1/h)	0.0002
Ratio of dangerous failures (%)	75
n_{op} - Operating cycles (operating cycles/h)	300

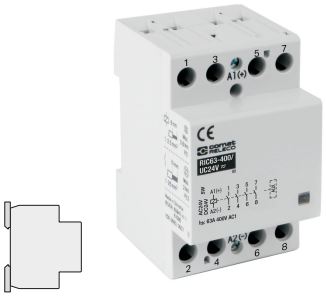
Product references

Description	Type	24
4 NO	RIC63-400/UC...V	✓

Other voltages on request. Please contact support@comatreleco.com.
«…» List control circuit voltage to complete product references

Accessories

Auxiliary contact	RIC-AUX02, RIC-AUX11, RIC-AUX20
Sealing cover	RIC-SEAL40/63 (BAG 10 PCS)



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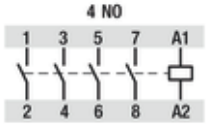

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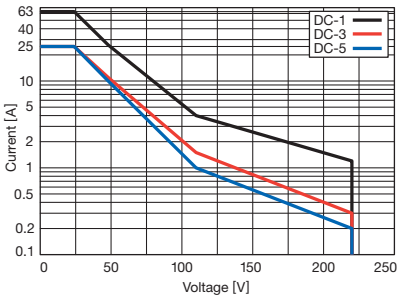

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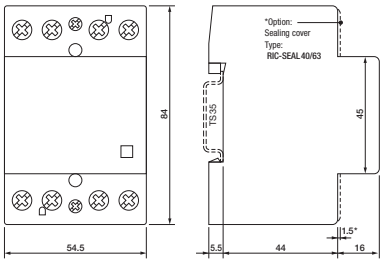

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