

RIC63-040/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 mm ² / 16 mm ² |
| 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 | -15 ... 55 °C |
| Relative humidity, 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

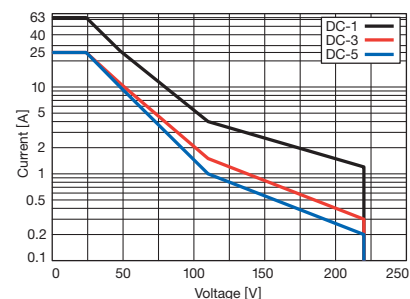
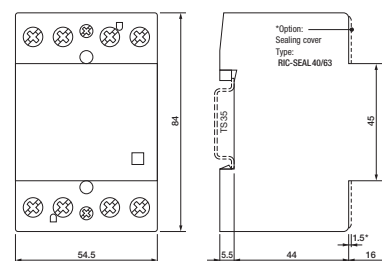


fig. 3. Dimensions (mm)



Technical approvals, conformities

Standards IEC/EN 60947; IEC/EN 61095

Approvals

RIC63-040/UC24V

4 pole | 63 A | 13.3 kW



Safety

| | |
|--|----------|
| MTTF - Mean time to failure, AC-1 (h) | 2,500 |
| MTTF = $1/\lambda = B10/(0.1 n_{op})$, AC-3 (h) | 3,750 |
| MTTF _d - Mean time to failure dangerous, AC-1 (h) | 3,333 |
| MTTF _d = $1/\lambda = B10_d/(0.1 n_{op})$ | 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 devices fail 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 |
| $\lambda = (0.1 n_{op})/B10$, AC-3 (1/h) | 0.000266 |
| λ_d - Failure rate dangerous, AC-1 (1/h) | 0.0003 |
| $\lambda_d = (0.1 n_{op})/B10_{op}$, 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 NC | RIC63-040/UC...V | ✓ |

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

Accessories

| | |
|-------------------|---------------------------------|
| Sealing cover | RIC-SEAL40/63 |
| Spacer | RIC-DIST |
| Auxiliary contact | RIC-AUX02, RIC-AUX11, RIC-AUX20 |

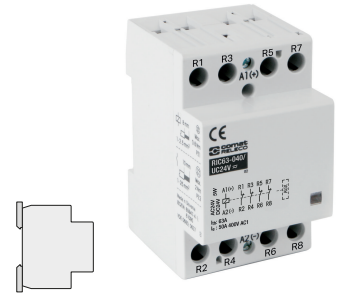


fig. 1. Wiring diagram

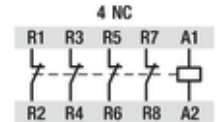


fig. 2. DC load limit curve

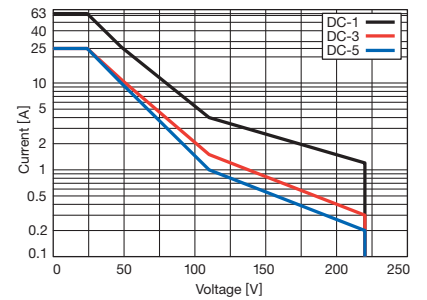
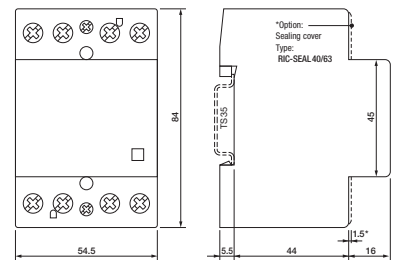


fig. 3. Dimensions (mm)



Technical approvals, conformities

Standards IEC/EN 60947; IEC/EN 61095

Approvals