# RIC25 (Railway)

# 25 A, AC/DC control voltage, silent operation DIN Rail mounting according to DIN 43 880



Type: RIC25-xxx/ ...V

Hum-free installation contactor, 4 contacts, 4 NO, 4 NC, 2 NO-2 NC types available

Rated operational power AC-1 Single phase: 5.4 kW/230 V, 0.5 A/220 V DC-1

> 3 phase 230 V: 9 kW 3 phase 400 V: 16 kW

Recommended minimum contact load 10 mA / 24 V

Contacts

AgNi Material Rated operational current 25 A 50 A Max. inrush current (100ms) 400 V Max. switching voltage

Max. AC load 3 phase AC-1, AC-7a 9 kW / 230 V, 16 kW / 400 V

2.2 kW /230 V, 4 kW / 400 V AC-3

Max. DC load 24V/220V DC-1 (Fig. 1) 600 W / 130 W

| Control input V <sub>n</sub> = | UC 24 V   | UC 36 V   | UC 230 V |
|--------------------------------|-----------|-----------|----------|
| Operating voltage range [V]    | 20.4 26.4 | 30.6 39.6 | 195 253  |
| Typ. pic up voltage [V]        | 17        | 25        | 160      |
| Typ. release voltage [V]       | 7         | 11        | 70       |
| Power consumption [W]          | ≤ 3       | ≤ 3       | ≤ 3      |
| Inductive turn-off voltage     | None      | None      | None     |
| Surge immunity EN 6100-4-5     | 2 kV      | 2 kV      | 2 kV     |

Insulation

Rated insulation voltage 440 V Rated impulse withstand voltage 4 KV Min. clearance of open contact 3.6 mm

### **General Specifications**

Ambient temperature

-30 ... 80 °C storage operation, Spacer after 2 contactors side by side -5 ... 55 °C -5 ... 40 °C operation, Spacer after 3 contactors side by side 15 ... 45 ms Pick-up time Release time 20 ... 70 ms  $\geq$  3 x 10<sup>6</sup> operations Mechanical life AC voltage endurance at rated load AC-3, AC-7b  $\geq 5 \times 10^5$  operations DC voltage endurance at rated load DC-1 10<sup>5</sup> operations Operating frequency at rated load DC-1 ≤ 300 operations / h Operating frequency at rated load AC-1, AC-3 ≤ 600 operations / h Conductor cross section coil / contacts terminals Stranded wire 2.5 mm<sup>2</sup> / 6 mm<sup>2</sup> 0.6 Nm / 1.2 Nm Max. Screw torque coil / contacts IP 20 Ingress protection degree

Standard types

Weight

UC (AC / DC) 50 / 60 Hz, 24, 36, 230 **4NO** RIC25-400/UC ...V 2NO + 2NC RIC25-220/UC ...V RIC25-040/UC ...V "..." enter the voltage for full type designation 4NC

270 g

Accessories

**RIC-AUX..** Auxillary contact bloc: **RIC-SEAL 25** Sealing cover: **RIC-DIST** Spacer:

Samples of lamp loads Number of lamps Incandescent lamps 230 V/ 100 W 20

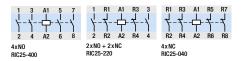
Fluorescent lamps not corrected 230 V/36 W 20 Fluorescent lamps electronic ballast units 36 W 20

Mounting information

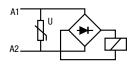
If multiple contactors are mounted side by side, spacers (RIC DIST) have to be inserted for the purpose of heat dissipation. Example: Ambient temperature up to 40°C: 1 spacer after 3 RIC // 40...55°C: 1 spacer after 2 RIC



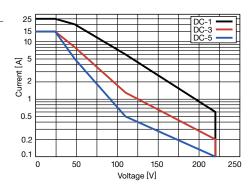
# **Connection diagram**



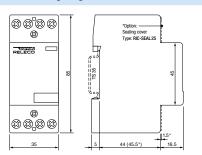
#### Coil circuit



#### Fig. 1 DC load limit curve DC-1



## Dimensions [mm]



## Technical approvals, conformities



IEC/EN 60947-4-1 IEC/EN 60947-5-1 IEC/EN 61095