

RAC20

20 A, AC/DC control voltage, silent operation
DIN rail mounting according to DIN 43 880



Type: RAC20-xxx/ ...V

Hum-free installation contactor, 2 contacts, 2 NO, 1 NO-1 NC, 2 NC types available.
 Manual actuating and locking

Rated operational power	4 kW / 230 V AC-1, 0.6 A / 220 V DC-1
Recommended minimum contact load	50 mA / 24 V

Contacts

Material	AgNi
Rated operational current	20 A
Max. inrush current (100ms)	50 A
Max. switching voltage	230 V
Max. AC load	AC-1, AC-7a 4 kW / 230 V
	AC-3 1.3 kW / 230 V (NO) 0.75 kW / 230 V (NC)
Max. DC load	24 V / 220 V DC-1 (Fig. 1) 480 W / 130 W

Control input V_n =

	UC 24 V	UC 36 V	UC 230 V
Operating voltage range [V]	20.4 ... 26.4	30.6 ... 39.6	195 ... 253
Typ. pick up voltage [V]	17	25	160
Typ. release voltage [V]	7	11	70
Power consumption [W]	2.1	2.1	2.1
Inductive turn-off voltage	None	None	None
Surge immunity EN 6100-4-5	2 kV	2 kV	2 kV

Insulation

Rated insulation voltage	230 V
Rated impulse withstand voltage	4 kV
Min. clearance of open contact	3.6 mm

General Specifications

Ambient temperature storage	-30 ... 80 °C
operation, Spacer after 2 contactors side by side	-5 ... 55 °C
operation, Spacer after 3 contactors side by side	-5 ... 40 °C
Pick-up time	15 ... 45 ms
Release time	20 ... 50 ms
Mechanical life	≥ 3 x 10 ⁶ operations
AC voltage endurance at rated load AC-3, AC-7b	≥ 3 x 10 ⁵ operations
DC voltage endurance at rated load DC-1	10 ⁵ operations
Operating frequency at rated load DC-1	≤ 300 operations / h
Operating frequency at rated load AC-1	≤ 600 operations / h
Conductor cross section coil /contacts	Stranded wire 2.5 mm ² / 6 mm ²
Max. Screw torque coil /contacts	0.6 Nm / 1.2 Nm
Ingress protection degree	IP 20
Weight	140 g

Standard types

UC (AC / DC) 50 / 60 Hz, 24, 36, 230

2NO	RAC20-200/UC ...V
1NO + 1NC	RAC20-110/UC ...V
2NC	RAC20-020/UC ...V

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

Accessories

Auxiliary contact bloc:	RIC-AUX..
Sealing cover:	RIC-SEAL 20
Spacer:	RIC-DIST

Samples of lamp loads

Samples of lamp loads	Number of lamps
Incandescent lamps 230 V / 100 W	20
Fluorescent lamps not corrected 230 V / 36 W	17
Fluorescent lamps electronic ballast units 36 W	10

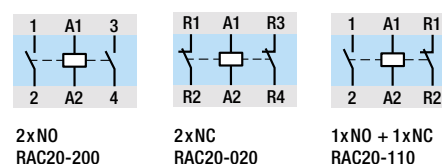
Mounting information

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 RAC // 40...55°C: 1 spacer after 2 RAC.



Connection diagram



Coil circuit

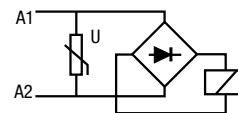
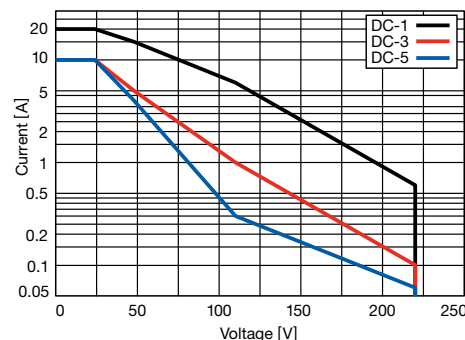
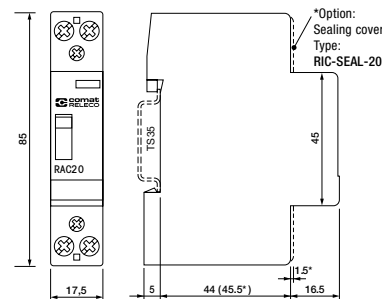


Fig. 1 DC load limit curve DC-1



Dimensions [mm]



Technical approvals, conformities

CE **RoHS**
 IEC/EN 60947-4-1, VDE 0660
 IEC/EN 60947-5-1
 IEC/EN 61095, VDE 0637