

RBC20

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



Type: RBC20-xxx/AC230V

Step relay, 2 contacts, 2 NO, 1 NO-1 NC types available
 Manually switchable

Rated operational power	4 kW / 230 V AC-1, 0.5 A / 220 V DC-1
Recommended minimum contact load	100 mA / 10 V

Contacts

Material	AgNi
Rated operational current	20 A
Max. inrush current (100ms)	50 A
Max. switching voltage	440 V
Max. AC load	AC-1, AC-7a 4 kW / 230 V
	AC-3 0.55 kW / 230 V
Max. DC load	24 V / 220 V DC-1 (Fig. 1) 480 W / 110 W

Control input V_n =

AC 230 V

Operating voltage range [V]	10 ... 440
Typ. pick up voltage [V]	160
Typ. release voltage [V]	70
Power consumption [W]	4
Inductive turn-off voltage	None
Surge immunity EN 6100-4-5	2 kV

Insulation

Rated insulation voltage	440 V
Rated impulse withstand voltage	4 kV
Min. clearance of open contact	3 mm

General Specifications

Ambient temperature storage	-30 ... 80 °C
operation	-25 ... 55 °C
Pick-up time	15 ... 45 ms
Release time	20 ... 50 ms
Mechanical life	10 ⁶ operations
AC voltage endurance at rated load AC-3, AC-7b	10 ⁵ operations
DC voltage endurance at rated load DC-1	10 ⁵ operations
Operating frequency at rated load DC-1	≤ 900 operations / h
Operating frequency at rated load AC-1	≤ 900 operations / h
Conductor cross section coil /contacts	Stranded wire 4 mm ² / 10 mm ²
Max. Screw torque coil /contacts	0.6 Nm / 1.2 Nm
Ingress protection degree	IP 20
Weight	132 g

Standard types

AC 50 / 60 Hz, 230

„...“ enter the voltage for full type designation

2NO	RBC20-200/AC230V
1NO + 1NC	RBC20-110/AC230V

Accessories

Auxiliary contact bloc: **RBC-AUX..**

Samples of lamp loads

Number of lamps

Incandescent lamps 230 V / 100 W	20
Fluorescent lamps not corrected 230 V / 36 W	29
Fluorescent lamps electronic ballast units 36 W	38

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



Connection diagram

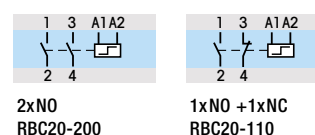
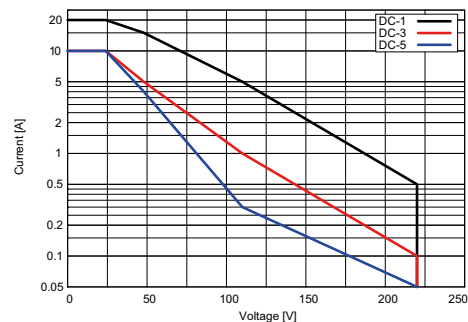
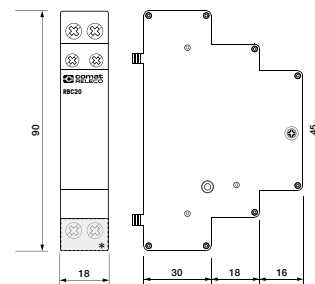


Fig. 1 DC load limit curve DC-1



Dimensions [mm]



Technical approvals, conformities

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