

# 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<sub>n</sub> =**

**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 <sup>6</sup> operations
AC voltage endurance at rated load AC-3, AC-7b	10 <sup>5</sup> operations
DC voltage endurance at rated load DC-1	10 <sup>5</sup> 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 <sup>2</sup> / 10 mm <sup>2</sup>
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

<b>2NO</b>	<b>RBC20-200/AC230V</b>
<b>1NO + 1NC</b>	<b>RBC20-110/AC230V</b>

**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

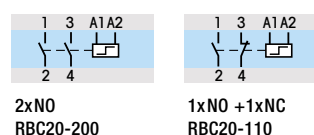
**Mounting information**

If multiple contactors are mounted side by side, spacers (RIC DIST) have to be inserted for the purpose of heat dissipation.

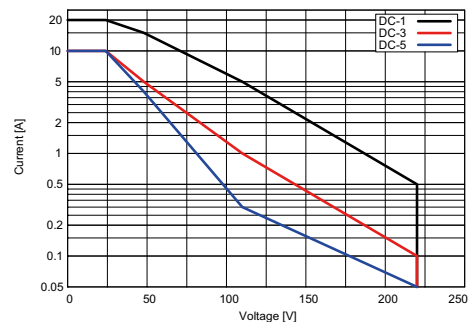
**Example:** Ambient temperature up to 40°C: 1 spacer after 3 RBC // 40...55°C: 1 spacer after 2 RBC.



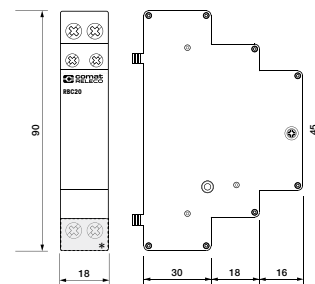
**Connection diagram**



**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