

RC20: DC-Current

RV20: DC-Voltage

Adjustment of setpoint and hysteresis

Selectable activation or release of relay

DC Supply or AC supplies up to 230 VAC

1- or 2- pole relay output



The C-mac® modules type RC20 / RV20 are simple current- and voltage measuring relays, for DC signals.

The modules can be supplied for several current-/voltage ranges, the current range is specified by order, as each unit only has one current-/voltage range

With the help of a connection on the relay base, you can choose whether the relay should pull or de-energize when the set point is exceeded. so that the module can be used both for under- and over-current/voltage

The RC20 is a DC current module and is supplied for 6 measuring ranges, from 0.05mA to 5 A..

The RV20 is a DC-Voltage modules and is supplied for 7 6 measuring ranges from 0,05V to 50VDC

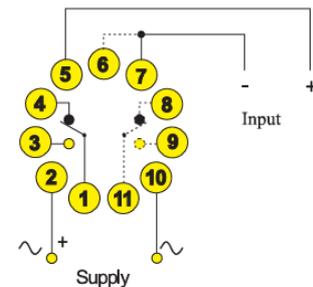
Technical data

Supply voltage AC	24, 120 and 230 VAC +/- 10%	
Supply frequency	40-70 Hz	
Variable supply :	12-60 VDC or 85-260 VDC	
Isolation voltage:	Supply -input-output: 3.75 kV	
Supply voltage, DC:	24 VDC +/- 10% Note: With this DC-supply there is no isolation between supply and internal electronics	
Power consumption:	2,5 VA	
Operation temp.:	-20°C to +60°C	
Humidity:	0 - 90% RH, non-condensing	
Relay inversion Open:	Pin 6-7	
	Open:	Relay releases at undercurrent
	Closed:	Relay releases at overcurrent
Adjustments:	Level:	Potentiometer, Scale 5 to 100%
	Hysteresis:	Potentiometer, scale 5 to 50%
Indications:	Green LED:	Supply voltage connected
	Red LED	Relay activated
Accuracy, scale	5 %	
Temp. coefficient:	typisk 0,1 % / °C	
Max. load, relay:	1-pole:	8A- 250 VAC
	2-pole:	5A- 250 VAC
	Ohmic load	

Metering ranges

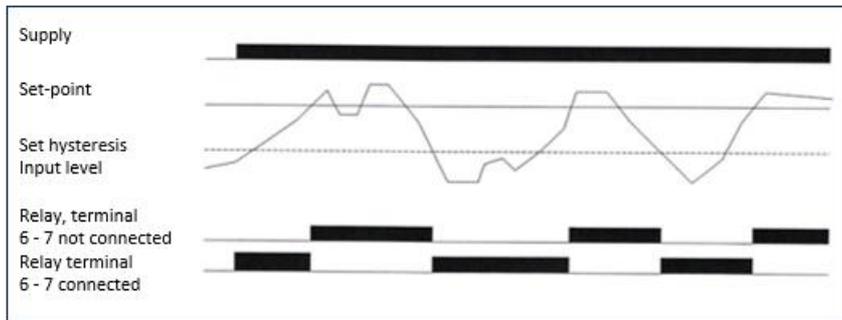
Module	Metering Range	Max.Current	Int.shunt
RC20	0,05 – 1 mA	10 mA	100 Ω
	1 – 20 mA	100 mA	5 Ω
	5 – 100 mA	500 mA	1,3 Ω
	25 – 500 mA	2 A	0,20 Ω
	0,1 – 2 A	6 A	0,07 Ω
	0,25 – 5 A	10 A	0,03 Ω
	Metering Range	Max.Voltage	Int. resistor
RV20	3 – 60 mV	1V	150 Ω
	7,5 –150 mV	2V	150 Ω
	0,05 – 1 V	10V	1 kΩ
	0,25 – 5 V	30V	3 kΩ
	0,5 – 10 V	50V	10 kΩ
	1 – 20 V	100V	20 kΩ
	2,5 – 50 V	150V	5020 kΩ

Connection

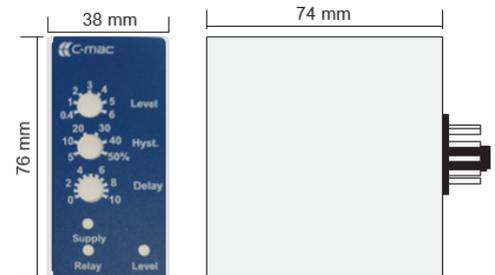


Connections 8-9-11: 2-pole version only.

Functional diagram:



Mechanical dimensions:



Ordering guide RC20			
Module	Relay (X)	Supply	Metering range (Y)
RC20	1=1pole 2=2pole	0-024 = 24 VDC	1M = 0,05 – 1 mA
		4-012 = 12 - 60 VDC	20M = 1 – 20 mA
		1-024 = 24 VAC	100M = 5 – 100 mA
		1-120 = 120 VAC	500M = 25 – 500 mA
		1-230 = 230VAC	2 = 0,1 – 2 A
		4-100 = 85 - 260 VAC/DC	5 = 0,25 – 5 A
Example	RC20-X-1-230-Y		
Ordering guide RV20			
Module	Relay (X)	Supply	Metering range (Y)
RV20	1=1polet 2=2polet	0-024 = 24 VDC	60M = 3 – 60 mV
		4-012 = 12 - 60 VDC	150M = 7,5 – 150 mV
		1-024 = 24 VAC	1V = 0,05 – 1 V
		1-120 = 120 VAC	5V = 0,25 – 5 V
		1-230 = 230VAC	10V = 0,5 – 10 V
		4-100 = 85 - 260 VAC/DC	20V = 1 – 20 V
		50V = 2,5 – 50 V	
Example	RV20-X-1-230-Y		

EMC and safety regulations

Emmision: EN50081-1
 Immunity: EN50082-2
 Safety: EN60730



Materials and weight:

Housing: NORYL-SE-1, grey, self-extinguishing
 Housing bottom: NORYL SE-1, GFN-2, black
 Terminals: Nickel-plated brass
 Weight: 190 g