

3-phase monitoring of phase asymmetry

Monitors correct phase sequence

Adjustable asymmetry level 5-25 %

1-pole relay output 8 A / 250 V AC

AC supply voltages up to 3 x 415 VAC

Made in accordance with the $\text{C}\epsilon$ and EMC regulations



The C-mac[®] module type RP33 meters its own 3-phase supply voltage, and if the phase sequence is correct and the phase asymmetry is below the adjusted level, the output relay is activated.

The module is suitable for monitoring of motors, since it ensures correct rotation direction and releases in case of a missing phase, also if the motor continues its rotation, provided that the resulting asymmetry is higher than the adjusted limit.

To ensure the best possible monitoring, the module must be connected as close to the motor as possible, in this way, the contactor function is also monitored.

Technical data:

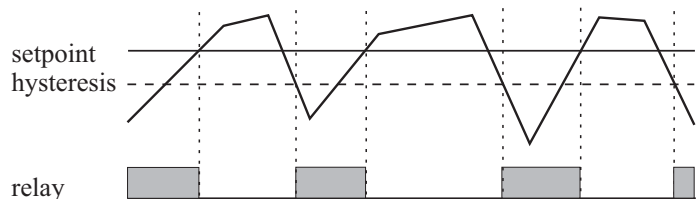
Supply voltage:	3 x 220 V +/- 25%
	3 x 380 V +/- 25%
	3 x 400 V +/- 25%
	3 x 415 V +/- 25%
Supply frequency:	50 or 60 Hz
Power consumption:	2,5 VA
Operation temp.:	-20°C to +60°C
Humidity:	0 - 90% RH, non-condensing
Adjustments:	Potentiometer, scale 5 to 25%.
Hysteresis:	1 - 3,5 %.
Reaction delay:	typ. 1 sec.
Indications:	
Green LED:	Supply voltage connected
Red LED:	Relay aktive
Max. load, relay:	1-pole: 8 A - 250 VAC, ohmic load

EMC and safety regulations.

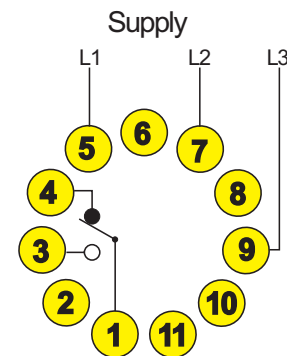
Emmission:	EN 50 081 - 1
Immunity:	EN 50 082 - 2
Safety:	EN 60 730

Approvals: The units are produced in accordance with the CE og low voltage regulations.

Functional diagram:



Connections RP31:



Ordering guide RP31:

Supply	Type no.
3 x 220 V	RP33-1-3-220-50
3 x 380 V	RP33-1-3-380-50
3 x 400 V	RP33-1-3-400-50
3 x 415 V	RP33-1-3-415-50

Note 1: The type numbers are shown for 50 Hz supply. for 60 HZ supply, replace -50 with -60.

Note 2: The unit is also available with supply connections to pins 5-6-7 instead of pins 5-7-9. In this case, the type number is RP31.1-..... instead of RP31-.....

Materials and weight:

Housing:	NORYL-SE-1, grey, self-extinguishing
Housing bottom:	NORYL SE-1, GFN-2, black, self-extinguishing
Terminals:	Nickel-plated brass
Weight:	110 g