

## 3-phase phase sequence / phase breaking module

**Monitors correct phase sequence**

**Secures against phase breaking**

**1- or 2-pole relay output**

**AC supply voltages up to 3 x 415 VAC**

**Made in accordance with the CE and EMC regulations**



The C-mac<sup>®</sup> module type RP32 meters its own 3-phase supply voltage, and checks that all 3 phases are present and the phase sequence is correct, and in that case the output relay is activated.

The module is suitable for the monitoring of motors, as it ensures correct rotation, and in case of a missing phase the relay releases, provided that the possible regenerated voltage from the motor is below the fixed minimum limits.

The module can be used both with and without neutral, but with neutral the unit is most sensitive.

### Technical data:

<b>Supply voltage:</b>	3 x 230 V +/- 15%
	3 x 400 V +/- 15%
	3 x 415 V +/- 15%
<b>Supply frequency:</b>	50-60 Hz
<b>Power consumption:</b>	2,5 VA
<b>Operation temp.:</b>	-20°C to +60°C
<b>Humidity:</b>	0 - 90% RH, non-condensing
<b>Hysteresis:</b>	2% of the nominal supply.
<b>Reaction delay:</b>	approx. 0,2 sec.
<b>Indications:</b>	
Green LED:	Supply voltage connected
Red LED:	Relay active
<b>Max. load, relay:</b>	1-pole: 8 A - 250 VAC
	2-pole: 5 A - 250 VAC (RP32.1), ohmic load

### EMC and safety regulations.

<b>Emmission:</b>	EN 50 081 - 1
<b>Immunity:</b>	EN 50 082 - 2
<b>Safety:</b>	EN 60 730

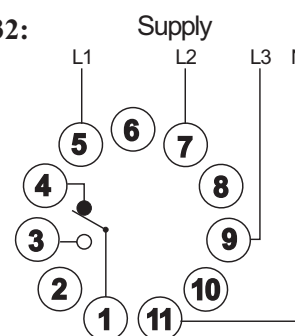
**Approvals:** The units are produced in accordance with the CE og low voltage regulations.

### Sensitivity:

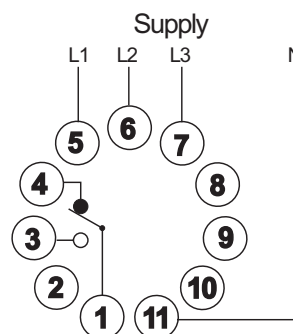
If the unit is connected to 3 phases with neutral, the relay will release, if one or more of the phase-neutral voltages is lower than 75-85% of the nominal voltage.

If the unit is connected to 3 phases without neutral, the relay will release, if one or more of the phase-phase voltages is lower than 60-70% of the nominal voltage

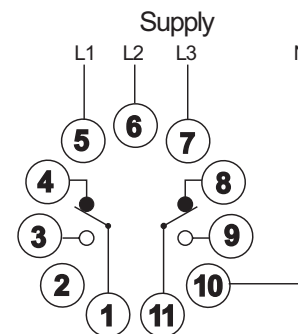
### Connections RP32:



### Connections RP32.1, 1-pole:



### 2-pole:



### Ordering guide RP32:

Supply	Type no.
3 x 230 V (phase-phase)	RP32-1-3-230
3 x 400 V (phase-phase)	RP32-1-3-400
3 x 415 V (phase-phase)	RP32-1-3-415

### Ordering guide RP32.1:

Supply	Type no.
3 x 230 V (phase-phase)	RP32.1-x-3-230
3 x 400 V (phase-phase)	RP32.1-x-3-400
3 x 415 V (phase-phase)	RP32.1-x-3-415

x = output relay:

1 = 1-pole

2 = 2-pole

**Materials and weight:** see previous page.