

## 3-phase phase sequence / phase breaking module

Monitors correct phase sequence

Secures against phase breaking

AC supply voltages up to 3 x 415 VAC

1 – or 2 pole relay output



C-mac® RP32 measures on 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:</b>	3 x 230 V +/- 15 % 3 x 380 V +/- 15 % 3 x 415 V +/- 15 %
<b>Supply frequency:</b>	45 til 75 Hz
<b>Power consumption:</b>	2,5 VA
<b>Operation temp.:</b>	-20°C til +60°C
<b>Humidity:</b>	0 - 90% relative luftfugtighed, ikke-kondenserende
<b>Indstilling:</b>	Potentiometer, skala 5 til 25 %
<b>Indications:</b>	Green LED: Supply voltage connected
	Red LED: Relay aktive
<b>Hysteresis</b>	2 % af nominal spænding
<b>Reaction delay:</b>	Ca. 0,2 sek.
<b>Max. load, relay:</b>	1 - polet 8 A - 250 VAC
	2 – polet 5 A – 250 VAC (RP32.1)
	Ohmic belastning

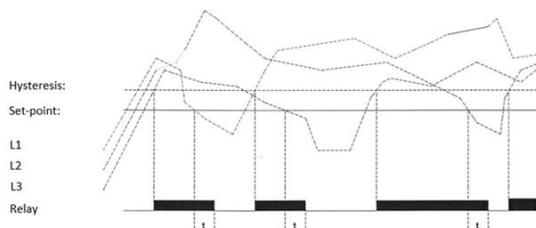
### Sensitivity:

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

### Ordering guide

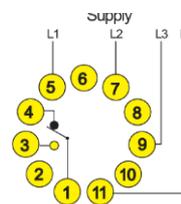
Type	Relay	Supply
<b>RP32</b> <b>RP32-1</b>	1 = 1 polet	3-220 = 220 VAC
	2 = 2 polet (kun RP32.1)	3-380 = 380 VAC
		3-415 = 415 VAC (fase - fase spændinger)
Eksempel:	<b>RP32.1-2-3-400</b>	

### Functional diagram

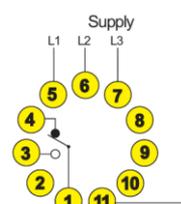


### Connections:

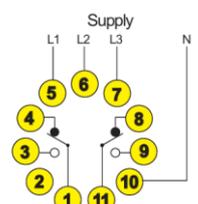
Connections RP32



RP32.1 1-pole



2-pole



### EMC og safety regulations.

<b>Emmision:</b>	EN50081-1
<b>Immunity:</b>	EN50082-2
<b>Safety:</b>	EN60730



### Materials and Weight

<b>Housing:</b>	NORYL-SE-1, grey, self-extinguishing
<b>Housing bottom:</b>	NORYL SE-1, GFN-2, Black self-extinguishing
<b>Terminaler:</b>	Nickel-plated brass
<b>Vægt:</b>	110 g