



BP1-R – Reverse power relay

Manual BP1-R (Revision A)

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Application

Reverse power detection of gen.-sets in parallel

Function

The unit BP1-R is equipped with a reverse power supervision (PR>) with infinitely adjustable pickup value and time delay.

The reverse power measured is constantly compared with the set reference values. If the reverse power exceeds the set reference value the relay trips after of the time delay has elapsed.

The relay functions will be activated from 70 % Un.

Technical data

rated current In:	1 A, 5 A
rated voltage Un:	230 V AC
frequency range:	45 - 66 Hz
hysteresis:	2% Un
power consumption:	3 VA
thermal load carrying capacity:	continuously 1.5 x In continuously 1.3 x Un
returning time:	300 ms
minimum operating time:	300 ms

Output relays:

max. breaking capacity	
ohmic:	250 V AC/120 W DC
inductive:	500 V AC/75 W DC
rated current:	5 A
making current (16ms):	20 A

System data:

regulations:	VDE 0435 part 303
temperature range at storage and operation:	- 25°C to + 70°C

Mechanical stress:

shock:	class 1 acc. to DIN IEC 255-21-2
vibration:	class 1 acc. to DIN IEC 255-21-1
degree of protection:	IP 40 at closed front cover
weight:	approx. 0,5 kg
mounting position:	any

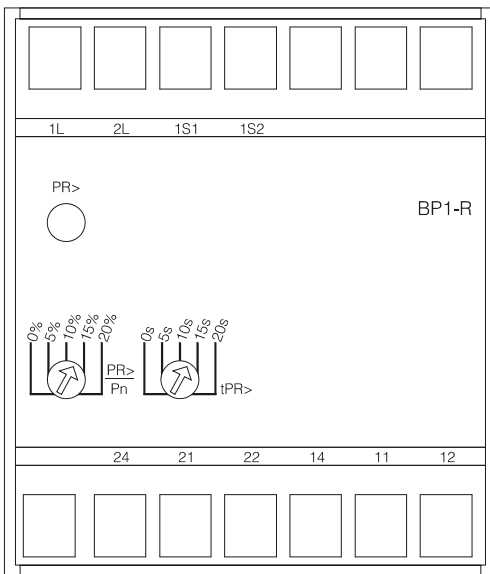


Figure 1: Front plate

The unit BP1-R is designed to be fastened onto a DIN-rail acc. to DIN EN 50022 same as all units of the BASIC LINE.

The front plate of the unit is protected with a sealable transparent cover (IP40). Please remove the transparent cover with a screw driver to adjust the relay.

LED

LED PR> is used to indicate operation without fault with steady light. This LED indicates pickup of the relay by flashing. At tripping the LED PR> extinguishes.

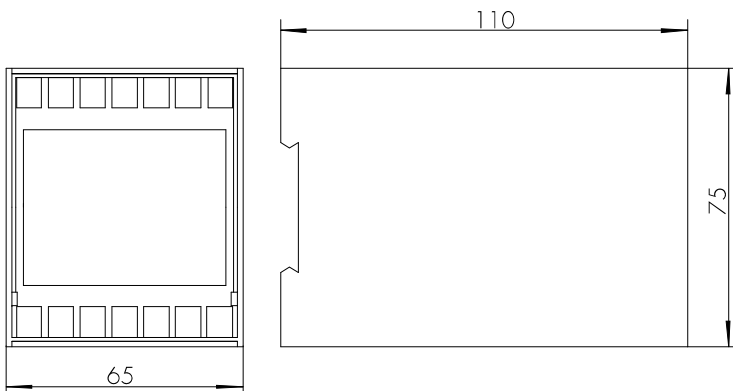


Figure 2: Dimensional drawing of BP1-R

Auxiliary voltage supply

The unit BP1-R needs no separate auxiliary voltage supply. The supply voltage can be formed directly from the measuring quantity.

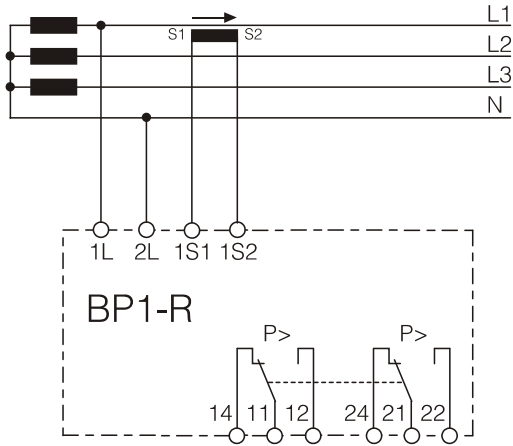


Figure 3: Connection diagram

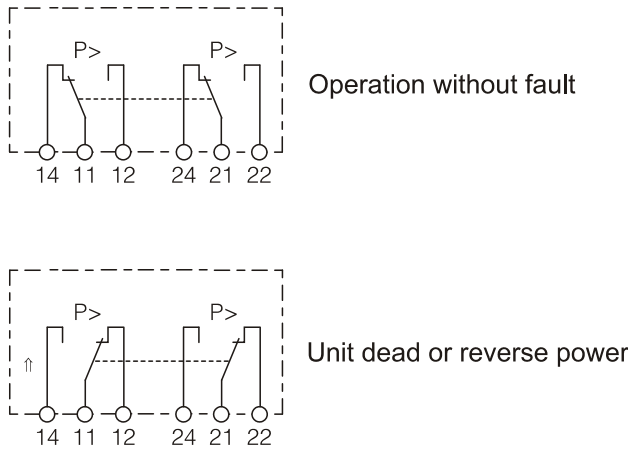


Figure 4: Contact positions

Connection terminals

The connection up to a maximum of 2 x 2,5 mm² cross-section conductors is possible. For this procedure the transparent cover of the unit has to be removed.

Setting ranges

PR>/Pn: 0 - 20 % Pn

tPR>: 0 - 20 s

Order form

Directional power relay		BP1R		
Rated voltage	110 V/AC		110	
	120 V/AC		120	
	230 V/AC		230	
Rated current	1 A			1
	5 A			5

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