Europa components | Technical Data: Phase Failure Relay **ECPF03, 05, 08**

⚠ **Important Safety** Notice

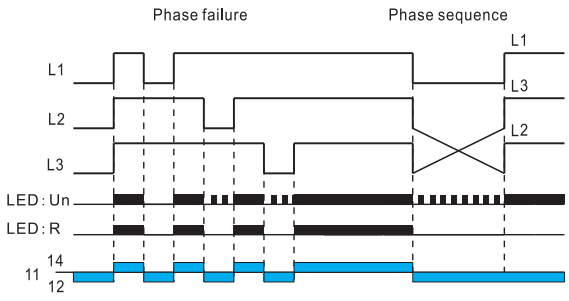
It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.
All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation.
All connections should be checked periodically to ensure correct tightness.
DO NOT USE POWER TOOLS ON THESE PRODUCTS



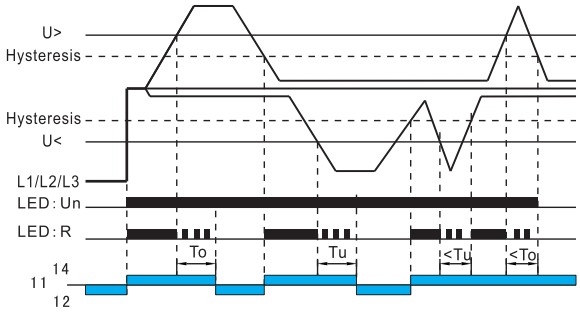
Data	ECPF03	ECPF05	ECPF08
Function	Monitoring 3-phase voltage		
Monitoring terminials	L1-L2-L3		
Supply terminals	L1-L2		
Voltage range	220-230-240-380-400-415-440-460 (P-P)		
Rated supply frequency	45Hz-65Hz		
Measuring range	176V-552V		
Threshold adjustment voltage	-	2%-20% of Un selected	
Adjustment of asymmetry threshold	-	8%	
Hysteresis	2%		
Phase failure value	70% of Un selected		
Time delay	-	Adjustable 0.1s-10s,10%	2s
Measurement error	≤1%		
Run up delay at power up	0.5s time delay		
Knob Setting Accuracy	-	1% of scale value	
Supply Indication	Green LED		
Output indication	Red LED		
Reset time	1000ms		
Output	1 × SPDT		
Current rating	10A / AC1		
Switching voltage	250VAC / 24VDC		
Min breaking capacity DC	500mW		
Temperature coecient	0.05%/^{o}C,at=20^{o}C (0.05%^{o}F, at=68^{o}F)		
Mechanical life	1×10^{7}		
Electrical life (AC1)	1×10^{6}		
Operating temperature	-20^{o}C to + 55^{o}C (-4^{o}F to 131^{o}F)		
Storage temperature	-35^{o}C to + 75^{o}C (-22^{o}F to 158^{o}F)		
Mounting/DIN rail	Din Rail EN/IEC 60715		
Protection degree	IP40 for front panel / IP20 Terminals		
Operating position	Any		
Overvoltage category	III.		
Pollution degree	2		
Max Cable Size (mm^2)	Solid wire max 1 x 2. 5 or 2 x 1.5 / with sleeve max 1 x 2.5 (AWG 12)		
Dimensions	90 x 18 x 64mm		
Weight	64g		
Standards	IEC/EN 60255-6, IEC/EN61010-1		

Functions Diagram:

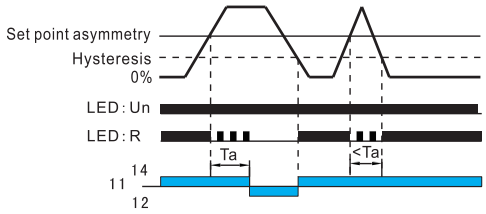
●Phase failure and phase equence function diagram



●Overvoltage and undervoltage function diagram



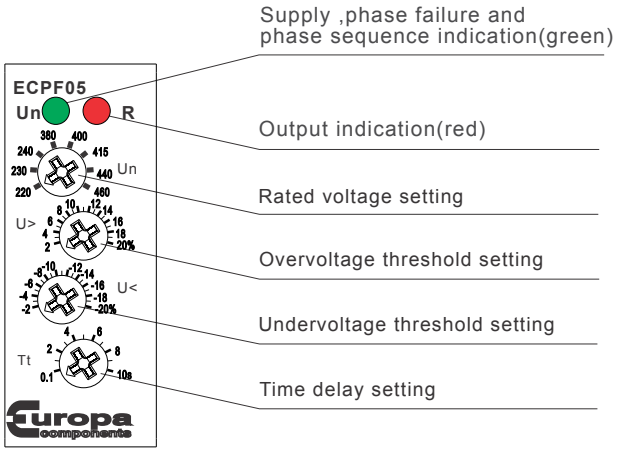
●Asymmetry function diagram

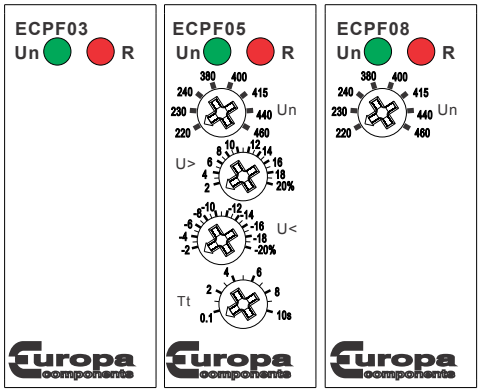


To:Overvoltage threshold tripping delay.
Tu:Undervoltage threshold tripping delay.
Ta:Asymmetry threshold tripping delay.

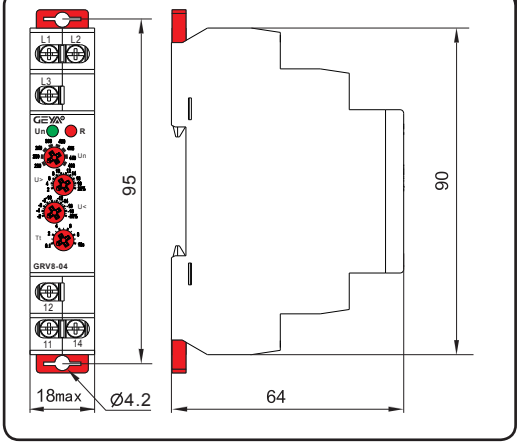
NOTE:
1. In case of phase fault at power supply terminals L1 and L2, the function LED would not make indication.
2. If the switch position is changed while he device is operating, all the LED's flash, but the product continues to operate normally with the voltage selected at the time of energisation precedubg the change of position. The LED's return to their normal state if the switch is returned to the original position selected prior to the last energisation.

Panel Diagram:





Dimensions:



Wiring Diagram:

