

Phase Failure Relay

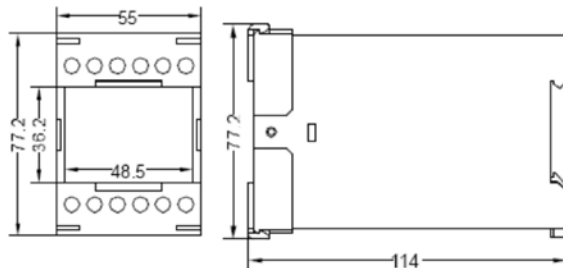
GC1100



Specification

Nominal voltage	380Vac
Frequency	50 Hz
Set point range	adjustable 5% ... 25% of Nominal voltage
Relay type	SPDT – Contact rating 5A ($\cos\phi = 1$), 250 Vac
Burden	5VA / 4W (max)
Operating temperature	0° C ... +50° C
Storage temperature	-10° C ... +70° C
Relative humidity	95% (non condensing)
Weight	324 gr
Mounting	DIN rail 35 x 7.5 mm

Dimension (mm)



Calibration

The calibration marks on the face plate have a certain error and are provided only as guides. Proper calibration requires using an accurate voltmeter in parallel with the input signal. Use the following procedure to calibrate GC1100 :

1. Adjust the ASYMMETRY(%) potentiometer fully clockwise.
2. Apply three-phase, nominal input voltage with the proper phase sequence to the relay. The output relay should energize and BALANCE LED indicator lit.
3. Lower one phase of the applied voltage to the desired trip level.
4. Slowly adjust the ASYMMETRY(%) control counter-clockwise until the relay trips and BALANCE LED goes out.

Ordering Code

No.	Ordering Code
1	40700

Function

GC1100 phase failure relays protect three phase lines, transformers, motors, generators, and another three phase loads against phase unbalance, phase loss, and phase reversal.

The output relay energizes and the green BALANCE LED lights when a balanced input with the proper phase sequence is sensed. The output relay de-energizes and the BALANCE LED goes out when a fault condition is detected.

One external potentiometer control - ASYMMETRY (%) - is provided. The potentiometer adjusts percentage of unbalanced voltage at which the relay trips. A factory presetted hysteresis provides enough and sufficient time delay to prevent relay tripping on voltage transients. The units are self powered

Installation

GC1100 phase failure relays are designed for mounting on standard DIN rails. Mounting involves hooking the top edge of the cutout on the base of the case over one edge of the DIN rail. The opposite side of the cutout containing the release clip is then pushed over the opposite side of the DIN rail. To remove or reposition the relay, lever the release clip and move the relay as required.

GC1100 relays should be installed in a dry, vibration free location where the ambient temperature does not exceed the operating temperature range. Connections to the relay should be made using wire that meets applicable codes and is properly sized for the application. Figure 1 shows the terminal connections for GC1100 relay.

Figure 1

