

Panel Components & Syste

149 Main St. - Stanhope, New Jersey 07874 - Phone 800-523-9194 - Fax 973-448-1674

# **REVERSE POWER**



# TECHNICAL SPECIFICATION

**INPUT** Rated value Un Rated value In

Frequency Burden **Overload** 

 $57.8 < 500V \pm 25\%$ C. T operated 1 or 5A amp direct connection 0.2 to 10A 50 / 60 /400Hz *<3VA voltage < 0.5 VA current* 1.5 x Un 2 x In continuous 2x Un 10 x In for 3 seconds

### SETPOINT

Range *Repeatability Time delay* Hysteresis

2% to 20% reverse current Better than 0.5% of full span Adjustable 200ms to 20 sec 1%

AUXILIARY All units self powered

WEIGHT & CASE SIZE Approx. 0.6kg. 100mm case

#### **ORDERING INFORMATION**

Product Code In Input Un Input Freq. M200-RP3 1 Amp 400V 50Hz

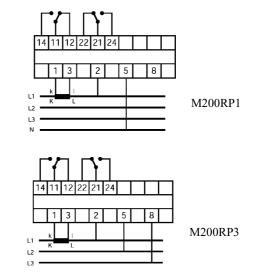
#### **OPTIONS**

- 1. Adjustable time delay max 30 seconds
- 2. AC auxiliary in range 57.7 to 480 volts

3. Calibration at nominal Hz 35 450Hz

4. Calibration at temperature other than 23 C

# **CONNECTION DIAGRAMS**



### **SELECTION GUIDE**

M200-RP1 Single phase or 3 phase 4 wire M200-RP3 3 phase 3 wire

## **TYPICAL APPLICATIONS**

The M200 reverse power relay is used to monitor the direction of power from AC generators. If the current in the system being monitored is reversed, to a value greater than the customer adjustable preset limit, the relay will energise.

The adjustable trip point is 2 to 20% of input current. An adjustable time delay of 0 to 20 seconds is provided. Correct setting of the trip point and time delay will ensure protection against motoring in the event of a generator failure and prevent tripping due to transients encountered during synchronising.

A red LED indicates the state of the relay and a green LED indicates the condition of the power supply

# **GENERAL SPECIFICATIONS**

#### **ENVIRONMENTAL**

Working temperature Functional temperature Storage temperature Temperature Coefficient Relative humidity Class of climate 0 to +60 deg C -25 to + 70 deg C -40 to +85 deg C 0.03% per deg C (300ppm/<sup>0</sup>C) 95% non condensing HSE complying with DIN 40040 -3 complying with VDE/VDJ 3540

# **INSULATION**

All Dimensions in mm

Test voltage	4kV RMS 50Hz 1min between Input / Case /Auxiliary
Impulse test	EMC 5kV transient complying with IEC 801 / EN55020
HF interference test	EHF 2.5kv 1MHz complying with IEC 255-4
Protection class	II complying with IEC 348

# **APPLIED STANDARDS**

General	IEC 144/ BS 5420/ VDE/ VDI 0435/ IEC 947/
Safety	VDI 0435/1EC 9477 EN60947 BS EN 61010
Surge withstand	DIN 57411 / VDE 0411 ANSI C37 IEC 801 / EN 55020
Surge withstand	ANSI C37-90a
Radio screening	RFI degree N complies with VDEO87S
EMC	Emissions EN50081-2 Immunity EN50082-1

#### **RELAY OUTPUT**

Relay type Material Contact resistance

Rating AC Rating DC Electrical lije Mechanical life Operating time approx. Dielectric strength dual pole change over Silver / Cadmium 200mOhm max Typically <50m Ohm 250V 5A non resistive 1200VA 125V 1A resistive 120 watts 1 x 10<sup>6</sup> at above load 5 x 10<sup>6</sup> 7ms (20ms max) Between coil and contacts

5kV RMS 1min Between open contacts 1kV RMS Imin Between adjacent contacts 1kV RMS imin 1000M Ohm at 500V DC -30 to + 75 deg C UL and CSA recognised

## ENCLOSURE

Insulation resistance Operating temperature

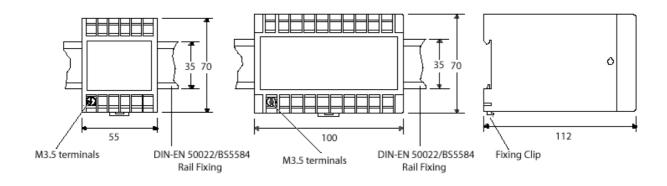
Approval

Fixing	Snap on to DIN rail 35 x7.5 mm complies with DIN-EN 50022
	BS 5584
Mounting	Any position
Enclosure Code	Case IP 50/ terminals IP 30
	Complies with IEC 529
	BS 5490 DIN 40050
Material	Complying with UL 94 VO

#### **APPROVALS**

U.L. Approval File No E157034

#### CASE DIMENSIONS





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