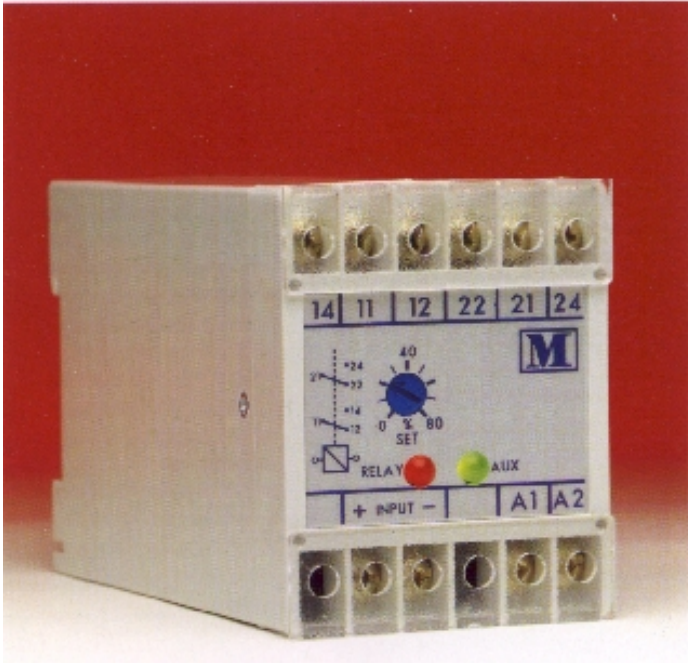




DC VOLTAGE TRIP



TECHNICAL SPECIFICATION

INPUT

Rated value U_n	$1 < 150$ volt
Impedance	10k Ohm / Volt
Overload	1.5 x U_n continuous 2 x U_n for 3 seconds

SETPOINT

Range Over	Adjustable 40% to 120%
Range Under	Adjustable 0% to 80%
Repeatability	Better than 0.5% of full span
Differential	Fixed 5%

AUXILIARY

AC Voltage	115/230/400V $\pm 25\%$ / 45-65Hz / 2VA
DC Voltage	24 volt ($\pm 20\%$ / galvanically isolated) <3 watt

WEIGHT & CASE SIZE

Single units	Approx. 0.4kg, 55mm case size
Combined unit	Approx. 0.6kg, 100mm case size

ORDERING INFORMATION

Product Code	Input	V_n	Aux	Freq	Options
M200-TVU	24V	110V	50Hz		

OPTIONS

1. AC auxiliary in the range 57.7 to 480 volts
2. Calibration at nominal Hz 35...450Hz
3. Calibration at temperature other than 23° C

SELECTION GUIDE

M200-TVU	DC volts under trip
M200-TVO	DC volts over trip
M200-TVC	DC volts combined trip

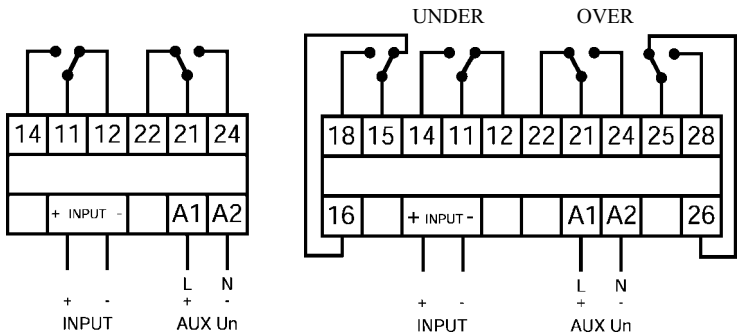
TYPICAL APPLICATIONS

The M200 DC voltage trips are commonly used for monitoring battery voltage conditions but can be used in any application where the dc voltage level is critical. The user is provided with an adjustable set-point of 0-80% on under units and 40-120% on over units. The differential is internally set at 5%; no time delay is provided.

As is common with all M200 relays, on over units the relay energises when the input signal exceeds the trip point and on under units the relay de-energises when the input signal goes below the trip point.

A red LED indicates the state of the relay whilst a green LED indicates the state of the power supply.

CONNECTION DIAGRAMS



M200TVO M200TVU

M200TVC

GENERAL SPECIFICATIONS

ENVIRONMENTAL

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

INSULATION

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/ EN60947
Safety	BS EN 61010 DIN 57411 / VDE 0411 ANSI C37
Surge withstand	IEC 801 / EN 55020 ANSI C37-90a
Radio screening	RFI degree N complies with VDE087S
EMC	Emissions EN50081-2 Immunity EN50082-1

RELAY OUTPUT

Relay type	dual pole change over
Material	Silver / Cadmium
Contact resistance	200mOhm max Typically <50m Ohm
Rating AC	250V 5A non resistive 1200VA
Rating DC	125V 1A resistive 120 watts
Electrical life	1 x 10 ⁶ at above load
Mechanical life	5 x 10 ⁶
Operating time approx.	7ms (20ms max)
Dielectric strength	Between coil and contacts 5kV RMS 1min Between open contacts 1kV RMS 1min Between adjacent contacts 1kV RMS 1min
Insulation resistance	1000M Ohm at 500V DC
Operating temperature	-30 to + 75 deg C
Approval	UL and CSA recognised

ENCLOSURE

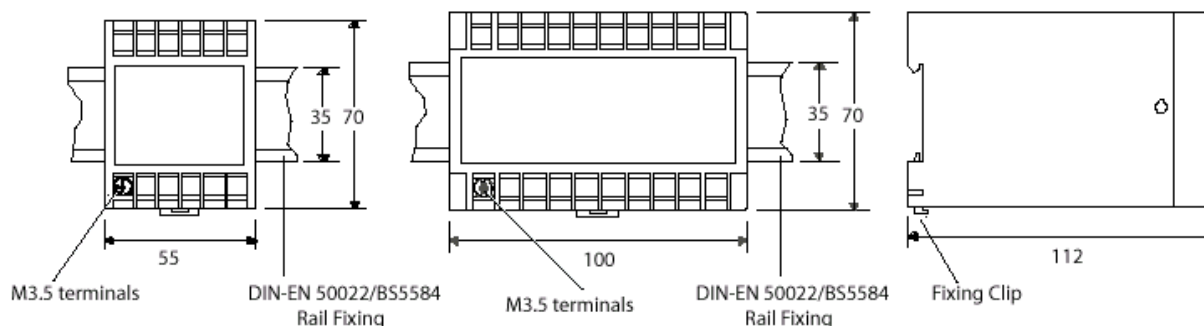
Fixing	Snap on to DIN rail 35 x7.5 mm complies with DIN-EN 50022 BS 5584
Mounting	Any position
Enclosure Code	Case IP 50/ terminals IP 30 Complies with IEC 529 BS 5490 DIN 40050
Material	Complying with UL 94 VO

APPROVALS

U.L. Approval File No E157034

CASE DIMENSIONS

All Dimensions in mm



Panel Components & Systems

