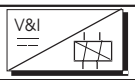
Data Sheet

Transducer Trip

Models available

	
Function / System	Product Type
Low trip High trip Combined High/Low	252-PBA 252-PBB 253-PBV

Applications

- Forward / Reverse Watts
- Under / Over Watts
- Forward / Reverse VAr
- Under / Over VAr
- Under / Over VA
- Power Factor monitoring And Control

Features

- Adjustable Setpoint
- Adjustable time delay
- Internal differential (factory settable)
- LED trip indication
- 2 pole relay contacts
- Energize/De-energize function swapping
- Auto Reset

Introduction

The Rishabh transducer trip will accept analogue signal from most measuring transducer and transmitters, in the form of d. c. voltage or currents.

Inputs are monitored within the preset limits and in the event of the input moving outside these limits, the unit will initiate a trip signal via double pole changeover relay.

An illuminated LED indicates when the relay is energised.

Specifications

Input

Current d.c.	:	0-1, 0-5, 0-10, 0-20, 4-20mA Volt drop 1V
Voltage d.c.	:	1V to 50V, I /p resistance 10 KΩ/V (Consult factory for higher voltage)
Voltage Burden	:	3VA max.
Voltage withstand	:	1.2 x rated voltage cont. 1.5 x rating for 10 sec, acc. to BS 6253

Setpoint

Repeatability	:	> 0.5% of span
Hysteresis	:	2% preset
Adjustment	:	Low trip 0 - 80% High trip : 40 - 120%
Time Delay	:	Up to 10 Seconds adjustable

Auxiliary Supply

A.C. 50/60 Hz	:	120V or 240V(+/-20%) (57 to 480V)
Aux Volt Burden	:	4 VA maximum
D.C. Voltage	:	12 or 24V (+20%)
Weight	:	Model 252-appr.0.4Kg. Model 253-appr.0.6Kg.

Output Relay

Type	:	DP changeover
Rating A.C.	:	240V,5A non-inductive
D.C.	:	24V 5A resistive
Operations	:	0.2 million at the above loads
Reset	:	Automatic

Other Specifications

Operating temperature	:	0^0 C to $+60^0$ C
Storage temperature	:	-20 C to $+70^0$ C
Temp. co-efficient	:	0.05% per ^{0}C
Interference immunity	:	Electrical stress surge withstand and non function to ANSI/IEEE C37 90a
Enclosure style	:	DIN-rail with wall mounting facility
Material	:	Flame retardant polycarbonate /ABS
Enclosure integrity	:	IP 50
Model 252 dimensions	:	55mm(2.2")wide x 70mm(2.8")H x 112mm (4.4") deep
Model 253dimensions	:	75mm(2.9")wide x 70mm(2.8")H x 112mm (4.4") deep

Principle of operation

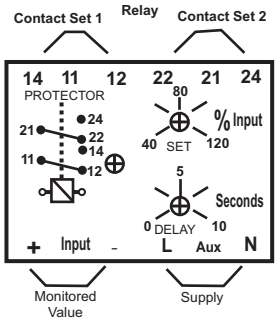
The input current is fed through a resistor and the resultant voltage is compared with a preset reference voltage from the set point potentiometer.

Any voltage difference forms a command signal which is fed via an amplifier to double pole changeover relay. As standard, the relay energises at high set point on a rising signal and de - energises at low set point on a falling signal.

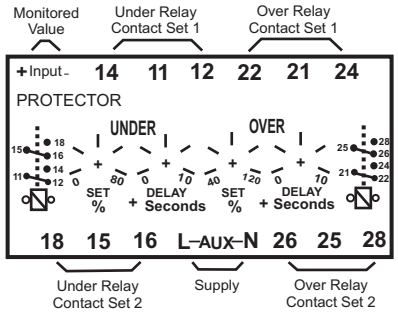
Options

- Adjustment ranges – different adjustment ranges are possible for the set point and time delay controls.
- Differential - internally fixed value between 1% and 15%
- Relay operation – standard models are fail safe, but the relays can be customised to energise or de-energise on trip.

Connection diagrams



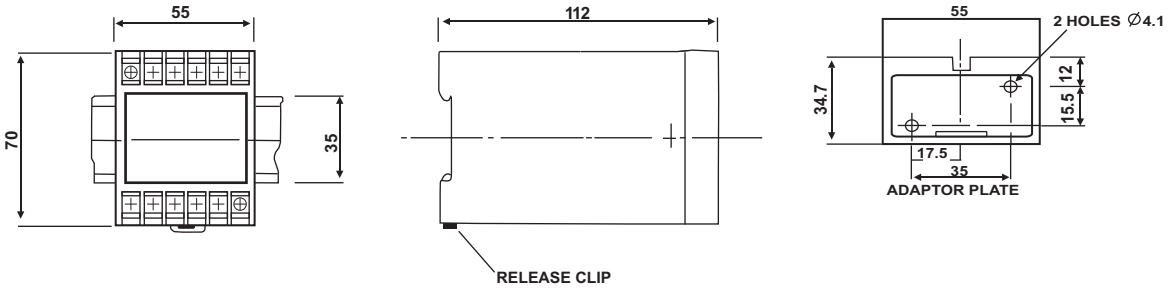
252-PBB, 252-PBA



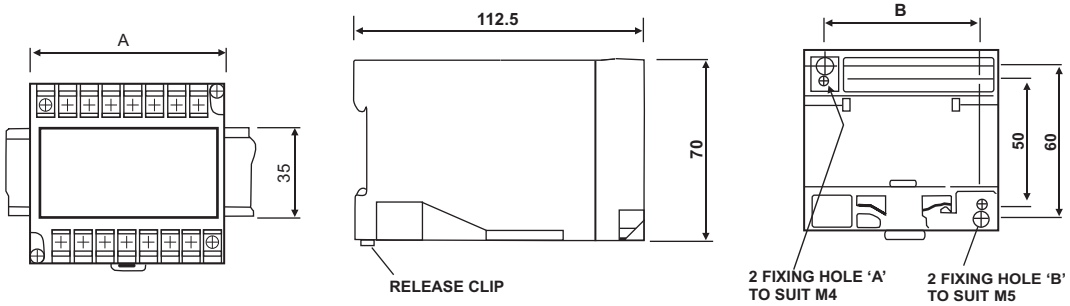
253-PBV

Dimensions

Model 252



Model 253



Model	A	B
253	75	60

Ordering Information

Please quote :

1. Product Type.
2. Function i.e. Under or Over.
3. Relays normally de - energise on under trip and energise on over trip.
4. Please specify standard or non standard trip. An energised relay is indicated by a "Lit" red LED. Setpoint can be factory adjusted to your requirements.
5. System Voltage and/or Current where applicable.
6. System Frequency.
7. Auxiliary Voltage where required.
8. Preset Differential where required.
9. Time delay where applicable.

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