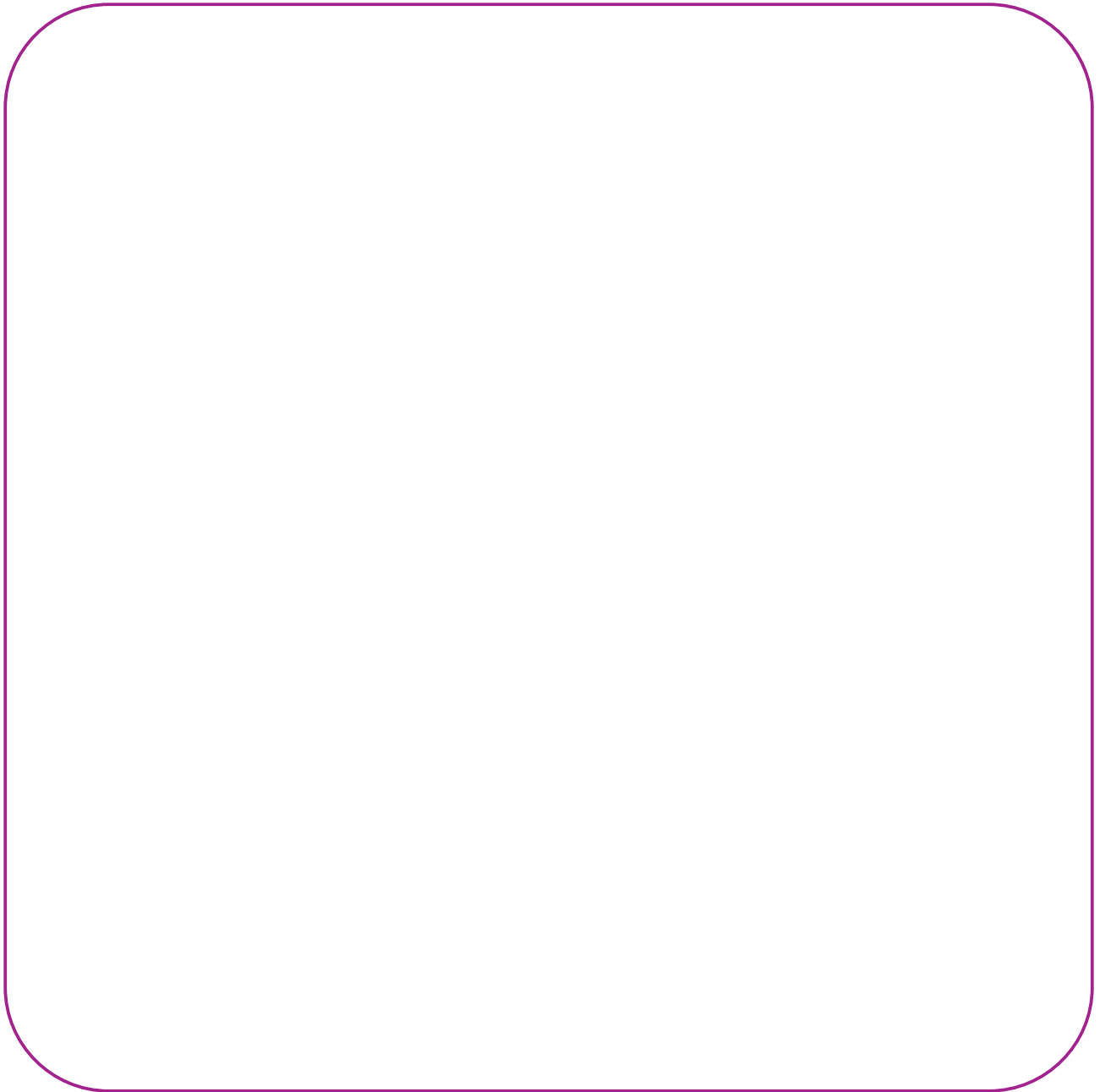


RISH *Lay*

The Protector Trip Relay Series

Data Sheet

D.C. Voltage Rrlay



Models available

Function / System	Product Type
D.C. Under Voltage: With external time delay	252-PDU
D.C. Over Voltage: With external time delay	252-PDO
D.C. Under Voltage: With external differential	252-PDE

Applications

The protectors can protect for :-

- Under voltage
- Over voltage
- Battery level control.

An illuminated LED indicates when the relay is energised.

Relays normally energise on over voltage and de - energise on under voltage.

- Battery supplies - To monitor correct terminal voltage and detect under or over voltage conditions
- Battery Chargers - To monitor correct charging voltage is correct.

Features

- Adjustable Setpoint
- Adjustable time delay
- Internal differential (factory settable)
- LED trip indication
- 2 pole relay contacts
- Adjustable Differential (252 PDE only)
- Internal time delay (252 PDE only)
- Auto Reset

Introduction

The Rishabh D. C. Voltage protectors provide continuous surveillance of the monitored circuit. When the measured voltage moves outside the set- point limits, the relay will operate after the selected time delay or differential, giving an alarm and / or initiation signal.

Specifications

Model

Under Voltage : 252-PDU
Over Voltage : 252-PDO

Input

D.C. Voltage : 18 to 20 V d.c. or
20 to 32 V d.c.

Time Delay : Externally adjustable

Specify either :
0-10, 0-20, 0-30 seconds

Differential : Preset to 1% (Any value
between 1 and 15% available
on request)

Model

Under Voltage : 252-PDE

Input

D.C. Voltage : 18 to 20 V d.c. or
20 to 32 V d.c.

Time Delay : Optional preset up to 30
(factory settable) seconds (specify)

Differential : Externally adjustable range
1 - 15 %

All Models

Burden : < 3 VA

Overload : 1.2 x rated voltage cont.
1.5 x rating for 10 seconds,
acc. to BS 6253

Setpoint

Repeatability : > 0.5% of full span

Output Relay

Type : D.P. 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° C to +60° C

Storage temperature : -20° C to +70° C

Temp. co-efficient : 0.05% per °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

Weight : Approximately 0.4Kg

Product Function

Under Voltage models :

When the monitored voltage falls below the setpoint, the time delay is started. When the time has elapsed, the relay will de - energise and the red LED will extinguish to indicate the trip condition. The relay will automatically reset once the monitored voltage rises above the setpoint plus the differential. When reset, the LED will illuminate and the relay energise. The time delay is not active when resetting.

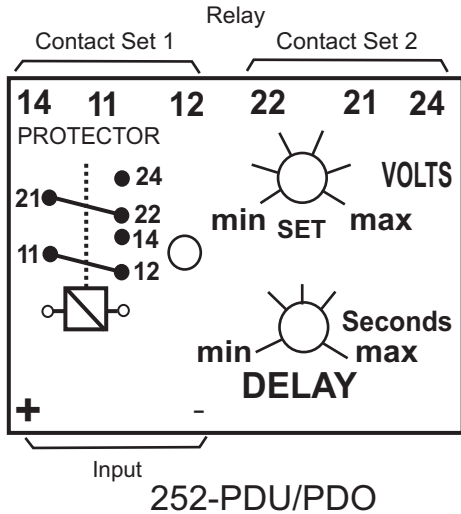
Over Voltage models

When the monitored voltage exceeds the setpoint, the time delay is started. When the time has elapsed, the relay will energise and the red LED will illuminate to indicate the trip condition. The relay will automatically reset once the monitored voltage falls below the setpoint minus the differential. When reset, the LED will extinguish and the relay de - energise. The time delay is not active when resetting

Options

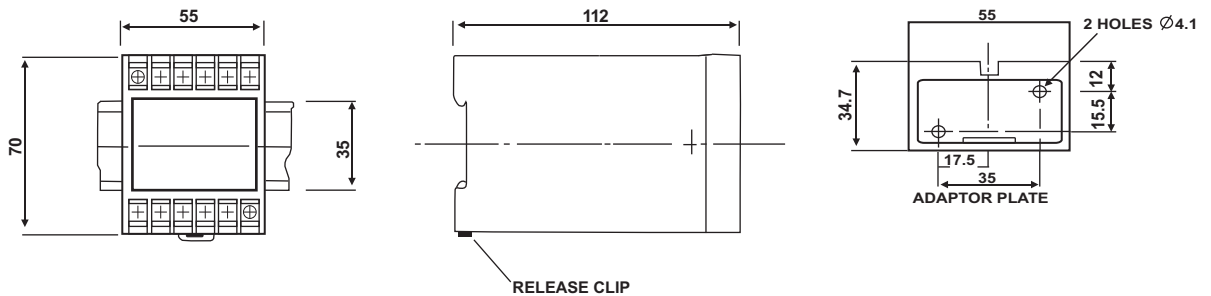
- Adjustment ranges – different adjustment ranges are possible for the set point and time delay controls.
- Differential - internally fixed value between 1% and 15%
- Relay operation – standard models are fail safe, but the relays can be customised to energise or de-energise on trip.

Connection diagrams



Dimensions

Model 252



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. Auxiliary Voltage where required.
7. Preset Differential where required.
8. Time delay where applicable.



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