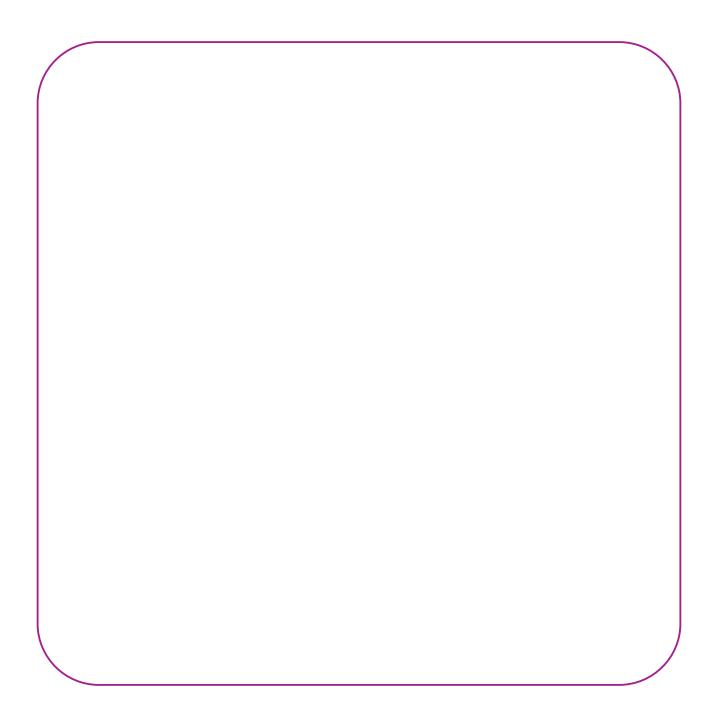


Data Sheet Hot Spot 3 Relay





#### Models available

Function / System	Product Type
3 Setpoints 2 Setpoints 1 Setpoint	256-PRA 256-PRB 256-PRC

### **Applications**

- Motor protection
- Transformer protection
- Gensets protection
- · Heating equipments protection
- Ineffective cooling
- Blocked ventilation
- Overloads
- Worn bearings

#### **Features**

- Up to three RTD inputs
- 1mA analogue output
- Three adjustable set points
- Internal differential
- LED trip indication
- Automatic reset
- Three single-pole relay contacts

#### Introduction

The Rishabh temperature trip relay has been designed to monitor three separate temperature zones in large electric motors, transformer winding or any temperature conscious equipment such as process lines gas turbines or engine driven generating sets, using Resistance Temperature Detectors (RTDs). The highest of three temperatures is automatically selected and a 0 to 1 milliamp output signal produced. Yellow LEDs are fitted to show which of three sensors is at the highest temperature. The output signal is compared internally with the voltage from up to three set point potentiometers and the difference fed to trigger relay circuits. Red LEDs are used to indicate relay energised. Single pole changeover relay are provided for each set point. In a typical installation the three set points would be set to trip on increasing temperature, in the following sequence :-

- 1. Initiate cooling/reset if effective
- 2. Bring up alarm/ reset if action and cooling effective
- 3. Shut down

#### **Specifications**

Input

: Up to 3 inputs, 2 or 3 wire RTD sensors either  $10\Omega$  Copper or  $100\Omega$  platinum minimum span  $100^{\circ}$ C

#### Auxiliary supply

Auxiliary supply	
A.C.	: 110, 120, 220, 230, 240 V (specify) +/- 20% 50/60Hz
Burden	: 4 VA maximum
Output Relay(s)	
Relay differential	: Standard 2% of range
Туре	: SP Changeover
Rating A.C.	: 240V, 5A non-inductive
D.C.	: 24V, 5A resistive
Operations	: 0.2 million at the above loads
Reset	: Automatic
Standard	: De-energise at set point
	with rising temperature
Indicator O/P	: 1 mA into 0/4kΩload
Other Specificati	ons
Operating temperating	ature $: 0^\circ$ C to +60° C
Storage temperate	ure : $-20^{\circ}$ C to $+70^{\circ}$ C
Temp. co-efficient	: 0.05% per °C
Interference immu	nity : 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 256 dimens	sions : 150mm(5.9")wide x 70mm(2.8")H x 112mm (4.4") deep

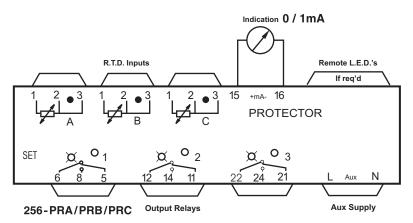
# Options

Weight

- 1. An extra 4 terminals can be fitted for remote indication.
- 2. Relay energising at the set points (rising temperature)

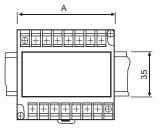
: Approximately 1.4Kg

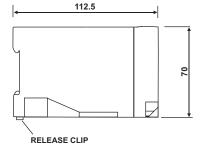
# **Connection diagram**

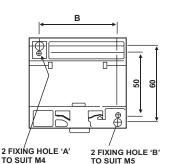


#### **Dimensions**

Model 256







# Model A B 256 150 135

# **Ordering Information**

#### Please quote :

- 1. Product Type.
- 2. 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.
- 3. System Frequency.
- 4. Auxiliary Voltage where required.
- 5. Preset Differential where required.
- 6. On temperature trips quote temperature span and sensor type and set points and trip temperatures.



# **RISHABH INSTRUMENTS LIMITED**

Domestic (India): +91 253 2202099 | marketing@rishabh.co.in International: +91 253 2202004/06/08/99 | global@rishabh.co.in www.rishabh.co.in