

## Features

- Ten year factory warranty
- Plug in measuring module
- Double insulated high impact polystyrol case
- Termination socket included for surface mounting enabling front or rear connection with optional DIN rail mounting
- Proven circuit designs based on over 15 years of field service in hundreds of varied & demanding applications
- Easy to set calibration scales
- Tolerance to shock & vibration for generator, compressor & mobile applications

## Technical Data

### AUXILIARY SUPPLY

Order code	Vx nominal
2TD770-B	24V DC
2TD770-D	48/50V DC
2TD770-E	110V DC
2TD770-L	110/115V AC
2TD770-M	240V AC

### POWER CONSUMPTION

<5VA AC      3W DC

### SUPPLY TOLERANCE

AC      -20% to +10% of nominal  
 DC      -25% to +15% of nominal

### STANDARDS CONFORMANCE

AS1023 Part 1 1985  
 Built in thermal detectors & associated control units.

### RESISTANCE INPUT TO OPERATE

2.8K Ohm +/-5% (Fixed setting)

### RESISTANCE RELEASE TO OPERATE

1.5K Ohm Approx. (Fixed setting)

### PTC THERMISTOR

Philips series 672 or equivalent

### THERMISTOR VOLTAGE

4.5V DC

### OUTPUT CONTACTS

2 C/O with 1KV isolation across contacts

### SWITCHING CAPACITY

5 Amp 250V AC resistive  
 5 Amp 30V DC resistive

### OPERATING TEMPERATURE RANGE

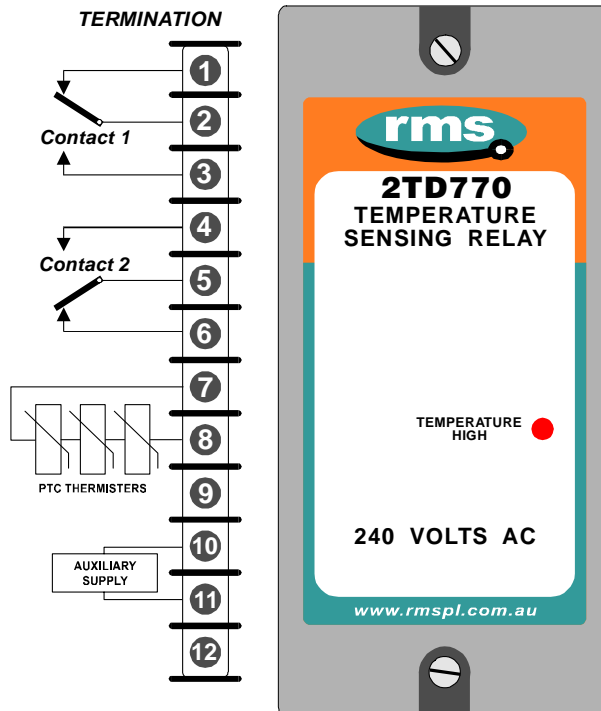
-5 to 55 degrees C.

### INSULATION WITHSTAND

In accordance with IEC 255-5: 2KV RMS between input & frame, output & frame, & output & input. 1.2/50 5KV impulse between each terminal & earth, between circuits not normally connected together & between terminals of the same circuit.

### NOISE IMMUNITY

Withstands the high frequency interference test detailed in IEC 255-22-1.



## Description

Made in Australia

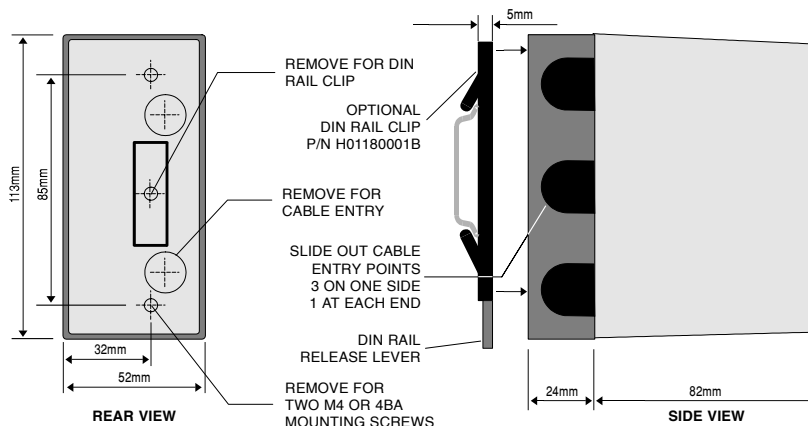
The 2TD770 Series relays are solid state temperature sensing relays for use in motor protection applications where sensors are located in the stator windings. Heavy duty industrial motors are prone to catastrophic failure. If overheating occurs due to such circumstances as locked rotor, restricted cooling or heavy starting conditions.

The 2TD770 can be used to effectively monitor the motor temperature and switch its mechanical output relay to indicate an alarm condition or isolate the power supply.

The 700 Series range of electronic measuring relays are manufactured as a modular approach to electrical system protection & control. Designed to meet rigid Australian & international specifications the 700 Series provide a flexible, cost effective & extremely reliable solution for a multitude of applications under electrically hostile conditions.

## Application

Three PTC thermistors (one for each phase) are connected in series to the input terminals of the relay. An increase in local temperature of the motor causes an increase in resistance in the corresponding thermistor. The relay senses the change in resistance and picks up when the temperature increases beyond the preset setting. A visual indication is given by a red LED on the front panel when the output relay is energised.



## **Australian Content**

Unless otherwise stated the product(s) quoted are manufactured by RMS at our production facility in Melbourne Australia. Approximately 60% of our sales volume is derived from equipment manufactured in house with a local content close to 90%. Imported components such as semi-conductors are sourced from local suppliers & preference is given for reasonable stock holding to support our build requirements.

## **Quality Assurance**

RMS holds NCSI (NATA Certification Services International), registration number 6869 for the certification of a quality assurance system to AS/NZS ISO9001-2000. Quality plans for all products involve 100% inspection and testing carried out before despatch. Further details on specific test plans, quality policy & procedures may be found in section A4 of the RMS product catalogue.

## **Product Packaging**

Protection relays are supplied in secure individual packing cardboard boxes with moulded styrene inserts suitable for recycling. Each product & packing box is labeled with the product part number, customer name & order details.

## **Design References**

The products & components produced by RMS are based on many years of field experience since Relays Pty Ltd was formed in 1955. A large population of equipment is in service throughout Australia, New Zealand, South Africa & South East Asia attesting to this fact. Specific product & customer reference sites may be provided on application.

## **Product Warranty**

All utility grade protection & auxiliary relay products, unless otherwise stated, are warranted for a period of 24 months from shipment for materials & labour on a return to factory basis. Repair of products damaged through poor application or circumstances outside the product ratings will be carried out at the customer's expense.

## **Standard Conditions of Sale**

Unless otherwise agreed RMS Standard Terms & Conditions (QF 907) shall apply to all sales. These are available on request or from our web site.



## **Relay Monitoring Systems Pty Ltd**

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