

**Models:**

2000 Series (240VAC)

IWP2011 1 Stage HEAT and 1 Stage COOL  
IWP2022 2 Stage HEAT and 2 Stage COOL

IWP2002 2 Stage COOL  
IWP2020 2 Stage HEAT

**IWP**

**Electronic Controller**

4000 Series (24VAC)

IWP4011 1 Stage HEAT and 1 Stage COOL  
IWP4022 2 Stage HEAT and 2 Stage COOL

IWP4002 2 Stage COOL  
IWP4020 2 Stage HEAT

**Specifications**

**Power Supply**

2000 Series 240VAC  $\pm 10\%$  50/60hz  
4000 Series 24VAC  $\pm 10\%$  50/60hz

**Temperature Detector**

Standard Internal (R25 = 10k $\Omega$  thermistor)  
SENXX Series of Remote Detectors

**Outputs**

One SPDT voltage free contact per stage (2A max)  
Two 0-10VDC control outputs (Heat and Cool)

**Terminal Identification**

**Sensor**

S Screened Cable + Detector  
DET Detector

**Relay Outputs**

Change over per stage

**Modulating Outputs**

7 Cool 0-10VDC  
8 Heat 0-10VDC  
9 Signal Common

**Supply**

**2000 Series**

E Earth  
N Neutral  
L Mains 240VAC Supply

**4000 Series**

$\sim$  24VAC Supply  
 $\perp$  0V  
 $\div$  Earth

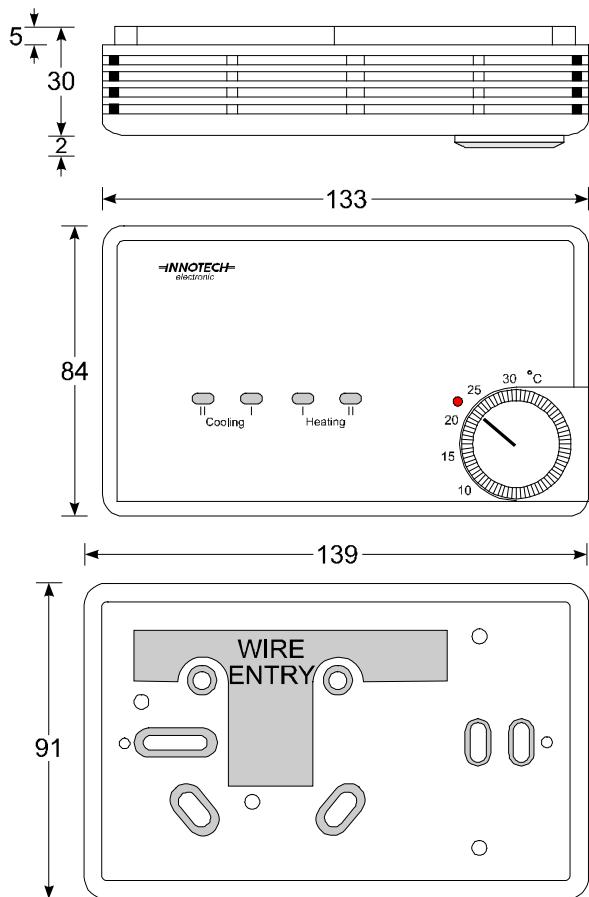
**Remote Detector Wiring**

- DO NOT Connect 24V or 240VAC to the "Sensor" terminals or terminals 7 & 8.
- Shielded cable should be used. This shield should remain continuous from the detector to terminal "S" on the controller.
- The screen of the connector wiring MUST be connected to the right hand connection "S" of the "SENSOR" terminals.
- It is good practice to maintain at least 50mm clearance between detector wiring and power wiring.

 The internal or external detector is calibrated via the "CAL" pot.

**Temperature Ratings**

**Storage:** 0-50°C non-condensing  
**Operating:** 0-40°C non-condensing



**Application**

The INNOTECH range of IWP Controllers are designed to regulate the staging of heating and cooling or air conditioning systems.

The controllers can be used as standalone devices or the modulating outputs can be used to control auxiliary units, such as chilled water valves or damper actuators.

**Features**

- LED indication of relay status
- Attractively styled low profile case blends with any decor
- Auto Change Over
- Wide Range of Applications
- Mounting plate fits 50mm conduit box and standard wall plate
- Separate 0-10VDC outputs for heating and cooling

### Set Point

The Set Point is adjustable from 10°C to 30°C via the Set Point pot. An external scaled knob is fitted for user adjustment.

### Proportional Band

The Proportional Band (PB) is adjustable from 1°C to 11°C via the internal PB potentiometer. A scale is printed on the printed circuit board to facilitate this adjustment. This adjustment represents Total PB (Cool PB + Heat PB).

### Dead Zone

The Dead Zone is adjustable from 10 to 60% of the proportional band setting via the internal "% DZ potentiometer". A scale is printed on the printed circuit board to facilitate this adjustment.

### Installation

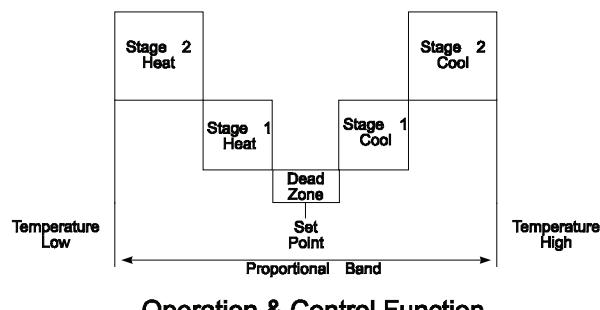
1. Mount controller in a dry and reasonably clean location free of excessive vibration.
2. Wire in accordance with INNOTECH connection diagrams and local bylaws or refer to your local distributor.

 This product should only be installed by qualified personnel.

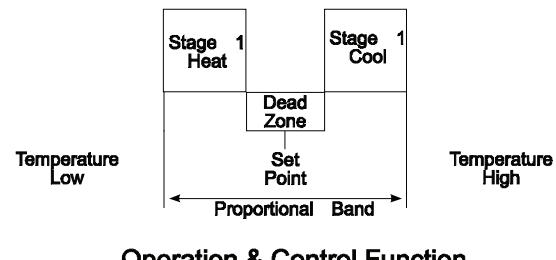
### Enclosure

Manufactured from an ignition resistant grade of ABS which meets the requirements of AS2420.

Colour: Off White

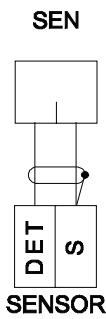


### 2 Stage Heat and 2 Stage Cool



### 1 Stage Heat and 1 Stage Cool

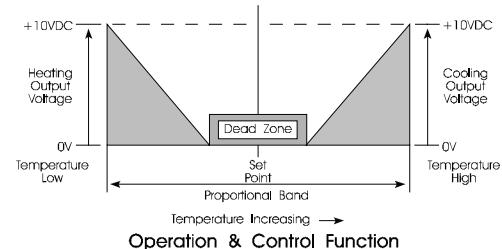
### REMOTE DETECTOR CONNECTION



DET - DETECTOR      S - CABLE SCREEN  
 SCREENED CABLE SHOULD BE USED TO REDUCE EMI

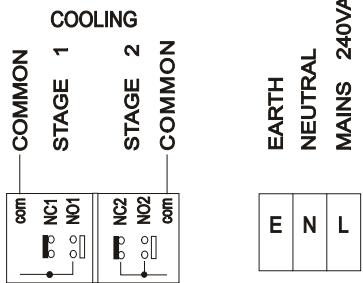
# NB - REMOVE THERMISTOR FROM TERMINAL STRIP

### OPERATION AND CONTROL FUNCTION OF MODULATING OUTPUTS



## STANDARD CONNECTION IWP2002

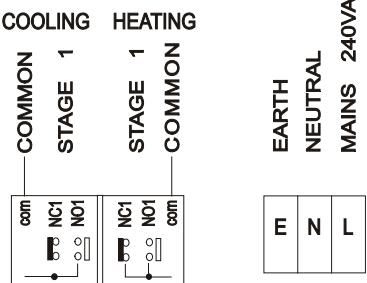
COOL OUTPUT 0-10VDC  
HEAT OUTPUT 0-10VDC  
COMMON



\* Note : Terminal 9 and Earth are Internally Connected.

## STANDARD CONNECTION IWP2011

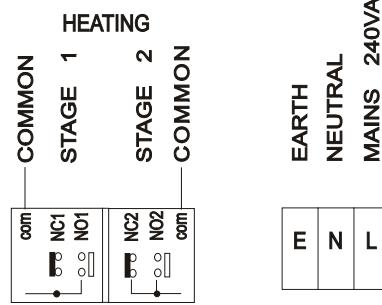
COOL OUTPUT 0-10VDC  
HEAT OUTPUT 0-10VDC  
COMMON



\* Note : Terminal 9 and Earth are Internally Connected.

# STANDARD CONNECTION IWP2020

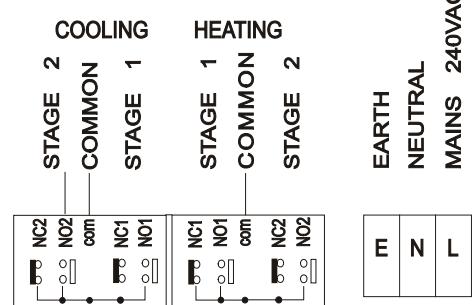
COOL OUTPUT 0-10VDC  
HEAT OUTPUT 0-10VDC  
COMMON



\* Note : Terminal 9 and Earth are Internally Connected.

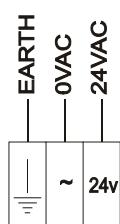
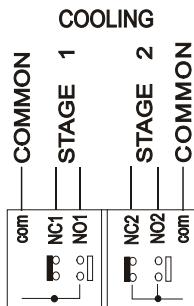
STANDARD CONNECTION  
IWP2022

COOL OUTPUT 0-10VDC  
HEAT OUTPUT 0-10VDC  
COMMON

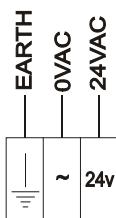
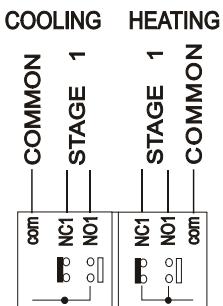


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**STANDARD CONNECTION**  
**IWP4002**

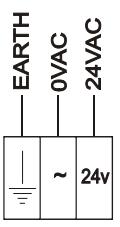
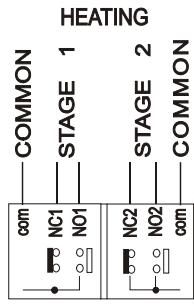
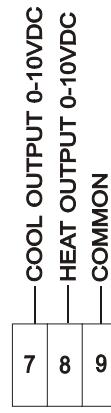


**STANDARD CONNECTION**  
**IWP4011**

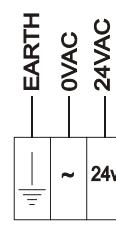
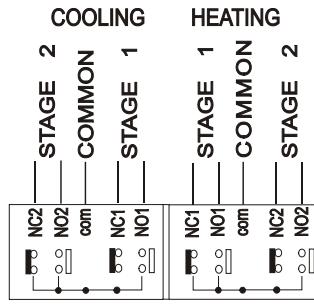


\* Note : Terminal 9 and Earth are Internally Connected.

**STANDARD CONNECTION**  
**IWP4020**



**STANDARD CONNECTION**  
**IWP4022**



\* Note : Terminal 9 and Earth are Internally Connected.

**INNOTECH®**

Australian Owned, Designed & Manufactured  
 by Mass Electronics Brisbane

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