

# INNOVEC

## CONTROLS PTY LTD

### INNOVEC DIR4 POWERED PROCESS INDICATORS



The **DIR4 Powered Process Indicator** is a 120/240VAC or 18-36VDC powered 4.5 digit process indicator supplied in an extruded aluminium panel mount enclosure with 4 set points which can switch 240VAC at one (1) ampere resistive with 99% dead band. The instrument is touch switch programmable from the front panel for input range and set point relay operation. A 24VDC at 30mA loop supply is available for the direct connection of 2 wire transmitters.

#### FEATURES

- Accepts all standard process signals
- Digital instrument with touch switch programming of all functions - input range, filter, relay on and off point, high or low alarm, display intensity and decimal point position.
- Eeprom storage of programmable variables
- Differential input
- Low cost - High performance
- 120 or 240VAC 47-63 Hz supply or factory fitted 18 to 24vdc isolated supply
- 4.5 digit high brightness LED display of 25mm digit height
- Decimal point programming
- Four (4) set point relays with form C contacts
- Panel mount enclosure of 72x144mm with sealed weatherproof front
- 24VDC loop supply for loop powered sensors and transmitters.
- Emc compliant (C tick)

The DIR4 Powered Process Indicator is an advanced instrument which has been designed and manufactured to stringent specifications which accept all the standard analogue process signals.

The DIR4 provides four (4) set point relays with 99% dead band. All the set point relays have changeover contacts and will switch one amp at 240VAC resistive. Screw terminal electrical connection by two part plug connectors allows simple connection and disconnection.

## TECHNICAL SPECIFICATIONS

### Input Details

- The instrument has a bipolar differential input. To realise the accuracy a temperature compensated band gap reference is used in the radiometric measurement system. Full scale ranges of 20 MV to 200VDC 200uA to 2 Amps and 4-20mA are acceptable. CMRR greater than 86db
- NMRR greater than 100db

### Display

- **DIR4:** A 4.5 digit high contrast light emitting diode (LED) of 25mm digit height with a wide viewing angle and a reading rate of 4 per second. The display intensity is programmable from the front panel. The digits have a viewing distance of 10 metres.

### Decimal Points

- **DIR4:** Four (4) position user programmable from the front panel.

### Relay Outputs

- **DIR4:** Four (4) switch point relays are provided with form C contacts rated at 240VAC one (1) ampere resistive.

Connection Details DIR4	
Terminal 1:input low (-)	Terminal 11:AL3 relay common
Terminal 2:mA input (+)	Terminal 12:AL2 normally closed
Terminal 3:volts input (+)	Terminal 13:AL2 normally open
Terminal 4:24VDC loop supply	Terminal 14:relay common
Terminal 5:not used	Terminal 15:AL1 normally closed
Terminal 6:AL4 normally closed	Terminal 16:AL1 normally open
Terminal 7:AL4 normally open	Terminal 17:AL1 relay common
Terminal 8:AL4 relay common	Terminal 18:120/240AC supply or 24DC (+)
Terminal 9:AL3 normally closed	Terminal 19:VAC neutral or 0VDC supply
Terminal 10:AL3 normally open	Terminal 20: ground supply

### Instrument Power supply

- 120/240VAC 47-63 Hz or factory fitted DC converter isolator from 12 to 76VDC.

### Transducer Power Supply

- A 24VDC at 30mA transducer power supply is incorporated in the instrument.

### Environmental Parameters

- 0-70 degrees Celsius.
- 0-90% rh non condensing.

### Weight

- **DIR4:** 450 grams.

### Mounting Details

- **DIR4:** Panel mounting aluminium enclosure of case dimensions 144mm wide by 72mm high by 85mm deep with a panel cut out of 138mm wide by 67mm high.

### Ordering Information

- Model/input signal/display units/power supply
- Sample number: DIR4/4-20mA/0-100.0/VAC
- All units shipped factory calibrated to 0-100.0