Ref: IW264DT – Rev 4 – Sept 02

**Introduction**
The 264-DT range offers a 101/LED-Bargraph display with the added benefit of 4 or 3½ digit display. This combination allows for both accurate instantaneous measurement and trend indication.

**Installation**
The units should be mounted in a reasonably stable ambient temperature within the range 0 to 60°C. The unit should not be mounted where it will be subjected to excessive sunlight; vibration should be kept to a minimum. Connection wires should be sized to comply with local regulations and should preferably be fitted with tags for the terminals provided. Labels are fixed to the unit and carry connection information, and data including input voltage, input current, supply and applications as appropriate. These products do not have internal fuses therefore external fuses must be used for safety protection under fault conditions.

**Typical Applications**
The ease of on site programming allows for the use of 264-DT series in a wide variety of applications such as Process Control, Water Treatments, Power Generation, Control Panels and Switchgear Monitoring Systems.

**Assembly of Parts**
windows for heat radiation top and bottom
(Clearance of 15cm maintained above and below)

**Functions**
1. **SCALING**
   Span and zero on the digital display can be adjusted e.g. offset zero. Span and zero on the Bargraph display cannot be adjusted.
2. **OVER SCALE DISPLAY**
The over-range annunciator “Hi” will display and blink on the digital display when the input signal exceeds the span value. The under-range annunciator “Lo” will display and blink on the digital display when the input is below the zero value.
3. **SETPOINT PROGRAMMING**
The setpoints programming can be changed to suit the desired positions (Hi/Lo or HIHI/LoLo) any value between zero and span can be selected. If an invalid value is entered, the processor will select the setpoint position “OFF”. The setpoints must be programmed as HIHI > Hi and Hi > Lo and Lo > LoLo.
4. **ALARM OUTPUT DELAY FOR EACH SETPOINT**
The alarm delay time can be programmed between 0 and 10 seconds at 1 second intervals.
5. **RELAY HYSTERESIS**
The Hysteresis is to 1% of total scale, and not programmable.

For programming instructions see overleaf.

**Fusing and connections**
1. This unit must be fitted with external fuses in voltage and auxiliary supply lines.
2. Voltage input lines must be fused with a quick blow fuse 1A maximum.
3. Auxiliary supply lines must be fused with a slow blow fuse rated 1A maximum.
4. Choose fuses of a type and with a breaking capacity appropriate to the supply and in accordance with local regulations.
5. Where fitted, CT secondaries must be grounded in accordance with local regulations.

**Warning**
- During normal operation, voltages hazardous to life may be present at some of the terminals of this unit. Installation and servicing should be performed only by qualified, properly trained personnel abiding by local regulations. Ensure all supplies are de-energised before attempting connection or other procedures.
- Terminals should not be user accessible after installation and external installation provisions must be sufficient to prevent hazards under fault conditions.
- Never open circuit the secondary winding of an energised current transformer.

**Screw torque**
Main terminal screws should be tightened to 1.35Nm or 1.0 ft/lbf only. Detachable terminal connector screws should be tightened to 0.9Nm or 0.7 ft/lbf only. Where fitted, terminal covers are held in place by miniature self tapping screws into plastic. These screws should be tightened by hand only, sufficiently to secure the terminal cover and prevent it vibrating.

**Electromagnetic Compatibility**
This unit has been designed to provide protection against EM (electro-magnetic) interference in line with requirements of EU and other regulations. Precautions necessary to provide proper operation of this and adjacent equipment will be installation dependent and so the following can only be general guidance:
Avoid routing wiring to this unit alongside cables and products that are, or could be, a source of interference.

The auxiliary supply to the unit should not be subject to excessive interference. In some cases, a supply line filter may be required.

To protect the product against incorrect operation or permanent damage, surge transients must be controlled. It is good EMC practice to suppress differential surges to 2kV or less at the source. The unit has been designed to automatically recover from typical transients, however in extreme circumstances it may be necessary to temporarily disconnect the auxiliary supply for a period of greater than 5 seconds to restore correct operation.

Screened communication and small signal leads are recommended and may be required. These and other connecting leads may require the fitting of RF suppression components, such as ferrite absorbers, line filters etc., if RF fields cause problems.

It is good practice to install sensitive electronic instruments that are performing critical functions in EMC enclosures that protect against electrical interference causing a disturbance in function.

**Programming Instructions**

All types of 264-DT have the same operating control buttons:

- **M** = Mode
- **S** = Store
- **▲** = Up
- **▼** = Down

The annunciator LED’s on the right hand display are as follows and flash when that particular parameter is being programmed.

- **Z** = Zero LED
- **P** = Decimal point LED
- **S** = Span LED
- **L** = Low relay LED
- **H** = High relay LED
- **HH** = High High relay LED
- **LL** = Low Low relay LED

When a mode button is pressed an annunciator LED flashes indicating that function can be altered by pressing the up or down buttons. Once the desired parameter is reached press the store button to store the parameter.

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The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions, which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. Crompton is a trade mark.

Tyco Electronics UK Limited
Crompton Instruments
Freebournes Road, Witham, Essex, CM8 3AH, UK
Phone: +44 1376 509 509 Fax: +44 1376 509 511

http://energy.tycoelectronics.com
## INSTALLATION INSTRUCTIONS

**Digital Indicators**

LED Digital Indicator & Bargraph Controller – 264 DT Series

### Programming Guide

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**Zero Adjustment Finished** M Z ▲ ▼ SET Z

**Span Adjustment Finished** M S ▲ ▼ SET S

**Decimal Point Adjustment Finished** M P ▲ ▼ SET P

**Digital Filtering Adjustment Finished** M P ▲ ▼ SET P

**Relay Time Adjustment** M L,LL ▲ ▼ SET L,LL

**H,HH**

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**Panel Cutout Dimension**

For single mounting for stacked mounting (horizontal)

2 mounting plates are supplied in the packing box. Install as shown.

Remove top and bottom lens clip by gently pulling forward. Turn the top and bottom mounting screws clockwise, this will lock the metal fitting against the back of the panel. Turning the mounting screws anticlockwise will release the meter.

Clearances of 15cm must be maintained above and below any meter. Failure to ensure correct clearance can cause overheating and damage to the meter. With top and bottom lens clip removed, the clear cover and scale plate may be removed.

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