

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

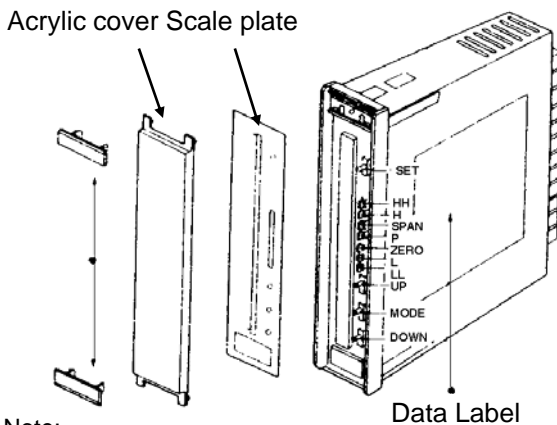
The units should be mounted in a reasonably stable ambient temperature within the range 0 to 60°C. The unit should not be mounted where it will be subjected to excessive sunlight; vibration should be kept to a minimum. Connection wires should be sized to comply with local regulations and should preferably 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)



Note:
264-DTV does not have set points and therefore does not have HH, LL, H and L LED's.
264-DTT only has low and high setpoints, therefore, does not have HH and LL LED's.

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

Digital Indicators

LED Digital Indicator &

Bargraph Controller 264 DT Series

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 $HiHi \geq Hi$ and $Hi \geq Lo$ and $Lo \geq LoLo$.

4. ALARM OUTPUT DELAY FOR EACHSETPOINT

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:-

Digital Indicators LED Digital Indicator & Bargraph Controller – 264 DT Series

- 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
σ = Up τ = 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) 264-DTT)
H =	High relay LED))
HH =	High High relay LED)) 264-DTF
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.

Programming 264-DT

1. To zero 4 digit display
Press M™ Z LED flashes σ or τ to give 0000. Press S to store. Note, offset zero readings are possible σ τ until reading required is displayed. Press S to store.
2. Decimal Point
Press M™ P LED flashes σ or τ to achieve desired reading 0000, or 0.000, 00.00 or 000. Press S to store.
3. Span for Digital Display
Inject full-scale input signal. Press M™ until S LED flashes. Then σ or τ until desired value is shown on digital display, i.e., 4 digit 9999 31/2 1999 or any value between 0 and 9999 can be programmed to correspond with the full scale input signal. Desired reading is stored by pressing S to store.
4. Digital Filtering (average sensing)
Periods of 1, 2, 4, 8 or 16 can be selected as follows. Press M™ until P LED flashes σ τ press simultaneously. The display will show A 16, by pressing σ or τ 16, 8, 4 etc will show. Once the desired value is reached, press S to store.
5. Relay Programming 264-DTT and DTF only
Low setpoint M™ until L LED flashes σ or τ until desired trip point value is reached. Press S to store. High setpoint M™ H LED flashes then repeat as above. On 264-DTF 4 setpoints LL is programmed before L and HH before H. Programming as above.
6. Time delay setting for relays 264DTT and DTF only
Low setpoint M™ until L LED flashes σ τ pressed simultaneously. Display will show d O by σ or τ a value between 1 and 10 seconds can be programmed. Once desired value is shown press S to store. LL, H and HH relays are programmed as above.

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.



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INSTALLATION INSTRUCTIONS

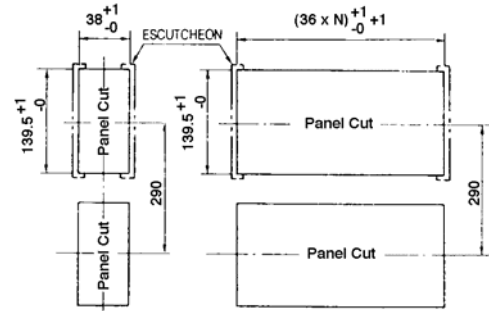
Digital Indicators LED Digital Indicator & Bargraph Controller – 264 DT Series

Programming Guide

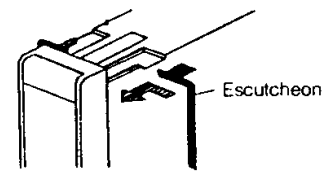
	Mode	LED				
	Choosing	Flashing	Value	Setting	LED off	
HH Setting	M	HH	σ	τ	SET HH	Setting
		Finished				
H Setting	M	H	σ	τ	SET H	
		Finished				
L Setting	M	L	σ	τ	SET L	Setting
		Finished				
LL Setting	M	LL	σ	τ	SET LL	Setting
		Finished				
Zero						
Adjustment	M	Z	σ	τ	SET Z	
		Adjustment				
		Finished				
Span						
Adjustment	M	S	σ	τ	SET S	
		Adjustment				
		Finished				
Decimal						
Point	M	P	σ	τ	SET P	
		Adjustment				
		Finished				
Digital						
Filtering	M	P	σ	τ	SET P	
		Adjustment				
		Finished simultaneously				
Relay Time						
Delay	M	L,LL	σ	τ	SET L,LL	
		Adjustment				H,HH
						H,HH
		Finished simultaneously				

Panel Cutout Dimension

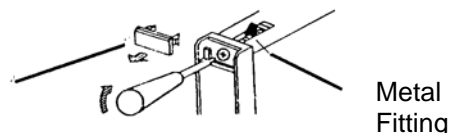
For single mounting for stacked mounting (horizontal)



2 mounting plates are supplies 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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