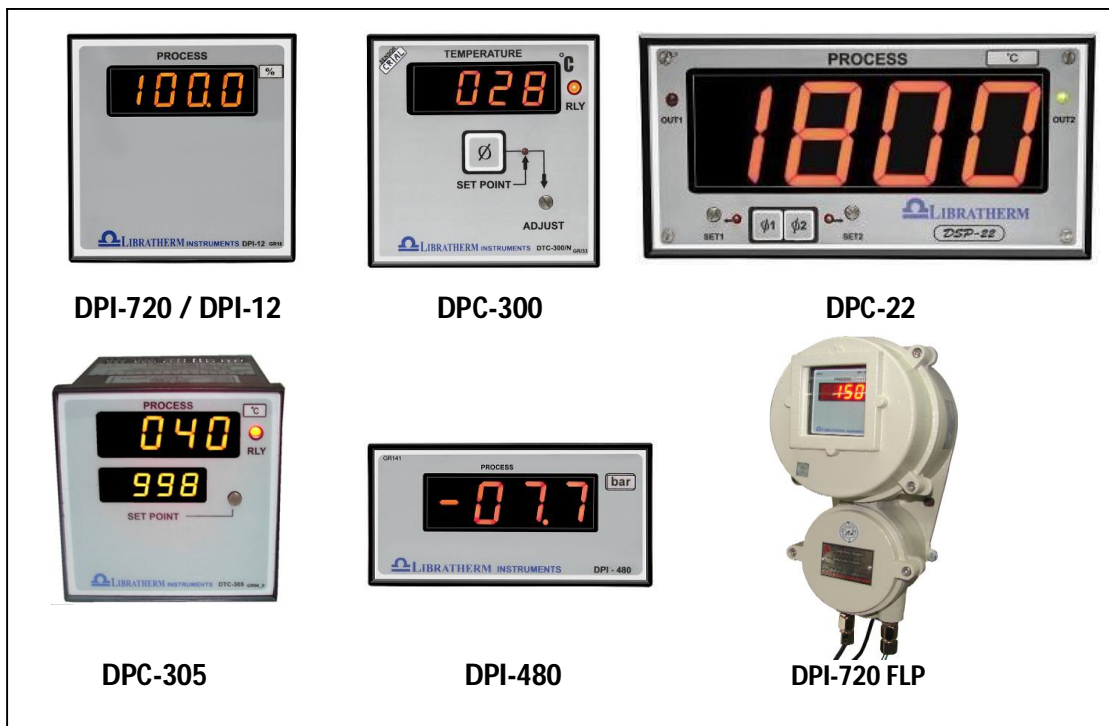


## Process Indicator – Controller (Digital)

(Product code 3.1 to 3.15)



### Model Wise Descriptions:

#### Process Indicators: (3.1 to 3.9)

Sr.No.	Model	Product Description	Size hwd (mm.)
3.1	DVI-483	3 and ½ digit AC /DC Voltage Indicator	48 x 96 x 120
3.2	DCI-483	3 and ½ digit AC / DC Current Indicator	48 x 96 x 120
3.3	DPI-480	3 and ½ digit Process Indicator with Loop Supply	48 x 96 x 120
3.4	DPI-12	3 and ½ digit Process Indicator with Loop Supply	96 x 96 x 120
3.5	DPI-484	4 and ½ Digit Process Indicator with Loop Supply	48 x 96 x 120
3.6	DPI-1000	1" Display size 3 and ½ digit Indicator with Loop Supply	192 x 96 x 160
3.7	DPI-2000	2" Display size 3 and ½ digit Indicator with Loop Supply	192 x 96 x 160
3.8	DPI-4000	4" Display size 3 and ½ digit Indicator with Loop Supply (Wall mounting enclosure)	500 x 250 x 150
3.9	DPI-720-FLP	3 and ½ digit process indicator in FLP enclosure	350 x 200 x 160

\*Loop supply of 24VDC @ 100mA is provided for external loop powered process transmitter.

### On-Off Process Controllers: (3.10 to 3.15)

Sr.No.	Model	Product Description	Size (mm.)
3.10	DPC-300	Single set point on/off controller pot. setting with built in loop supply	96 x 96 x 120
3.11	DPC-305	Single set point on/off controller potentiometer setting with Dual display (One each for PV and SV) with built in loop supply	96 x 96 x 120
3.12	DPC-12	Two set point on/off controller pot. setting with built in loop supply	96 x 96 x 120
3.13	DPC-22	Two set point on/off controller (2" display size) with pot. setting with built in loop supply	192 x 96 x 160
3.14	DPC-720-FLP	Single set point on/off controller potentiometer setting in Flame Proof Enclosure with loop supply.	350 x 200 x 160
3.15	DPC-722-FLP	Two set point on/off controller potentiometer setting in Flame Proof Enclosure with loop supply.	350 x 200 x 160

\*Loop supply of 24VDC @ 100mA is provided for external loop powered process transmitter.

### Description:

Libratherm offers simple Digital Process Indicator Controller, which are low cost, accurate, rugged and reliable instruments available for indication and single and dual set point On/Off control for general-purpose process control applications. Indicators are available in display sizes of 0.5" to 4" for panel mounting and shop floor installations.

Models featured here can be used to monitor and control the various industrial process parameters such as AC/DC voltage and current, Pressure, Load, pH, ORP, Conductivity, RPM, Flow, Level, Humidity etc. Single and Two set points with relay outputs are provided for control or alarms.

All instruments accepting 4-20mA are also provided with built in 12 to 24VDC loop supply.

Some of the above models are also available in suitable size Weather proof and flameproof /Explosion proof enclosures for use in the hazardous environment.

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## Features:

- ❖ Elegant appearance and compact in size.
- ❖ Accurate and sturdy in operation.
- ❖ Accuracy better than  $\pm 0.5\%$  of the full scale.
- ❖ Very easy to operate.

## Applications:

- ◆ Monitoring of Process parameters with digital display
- ◆ Pressure, Weight, Flow, Level control
- ◆ pH, Conductivity, ORP Control
- ◆ AC/DC voltage and current control
- ◆ Measurement of RPM, LPM, BPM etc...

## Technical Specifications:

<b>Inputs</b>	AC/DC voltage and Current, process signal of 4-20mA, 0-1VDC, 0-5VDC, 0-10VDC (please refer to Input and Range selection table).
<b>Accuracy</b>	Indicating accuracy better than $\pm 0.2\%$ of the specified range
<b>Display</b>	3.5 digits or 4.5 digits 0.5" Red 7-segment LED display. Other Display sizes are model dependent as given in the above tables.
<b>Range Calibration</b>	User accessible ZERO and SPAN presets to calibrate the desired range of display proportional to input.
<b>Set Points</b>	Single or Dual - adjustable using front panel multi-turn potentiometers with push to read membrane switches. For Low Alarm and / or High Alarm outputs.
<b>Type of Control Outputs</b>	a) Relay changeover contacts (rated for 6A @ 230VAC) and b) Solid state relay driver (0 to 10) VDC logic pulse.
<b>Hysteresis (Fixed)</b>	2 counts for ON/OFF action (for 1 count resolution controller) 0.3 count for ON/OFF action (for 0.1 count resolution controller)
<b>Supply</b>	230 VAC or 110VAC 50/60Hz (5VA max)
<b>Size</b>	As given in the above table - 72 x 72, 96 x 48, 96 x 96, 192 x 96 mm
<b>Panel Cutout</b>	68 x 68, 92 x 44, 92 x 92, 186 x 92 mm $\pm 0.5$ mm.
<b>Enclosure</b>	ABS Plastic /Metal powder coated with polycarbonate front, Aluminum Die cast housing for flame proof enclosures, Metal enclosures for large display.

### Input and Range Selection Table:

Code	Input	Range
A1	AC voltage @50/60 Hz	0 to 120VAC
A2	AC voltage @50/60 Hz	0 to 250VAC
A3	AC voltage @50/60 Hz	0 to 440VAC
A4	AC Current @ 50/60Hz with CT ratio of (Max current : 5)	0 to 1999 AAC
A5	DC voltage	0 to 1999 VDC
A6	DC Current from 50mV/ 75mV/100mV shunt	0 to 1999 ADC
A7	4-20mA / 0-10V (Any one or user selectable)	0 to +1999 unit
A8	4-20mA/0-10V (Any one or user selectable)	-1999 to 1999 unit
A9	4-20mA/0-10V (Any one or user selectable)	0 to 19999 unit
A10	4-20mA/0-10V (Any one or user selectable)	-19999 to +19999 unit

User may specify the Input, Range and Decimal point on display.

### Ordering Information Process Indicator – Controller Model:

Model	A- Input	B- Output-1 Mode	C- Output-2 Mode	D- Decimal Point	E- Unit of Measurement	F-Supply Voltage
DVI-483	Any one of A1 to A10	B1- (High Alarm Relay)	C1- (High Alarm Relay)	D1- 000.1	E1 – VAC	F1- (230VAC)
DCI-483						
DPI-480						
DPI-12		B2- (Low Alarm Relay)	C2- (Low Alarm Relay)	D2- 00.01	E3 – AAC	F2- (110VAC)
DPI-484						
DPI-1000		00- (None)	00- (None)	D3- 0.001	E4 – ADC	
DPI-2000						
DPI-4000						
DPI-720-FLP						
DPC-300						
DPC-305						
DPC-12						
DPC-22						
DPC-720-FLP		00- (None)	00- (None)	D4- 0.0001	E5 - %	
DPC-722-FLP						
					E6 - pH	
					E7 – ORP	
					E8 – uS / Cm	
					E9 – Kg / Cm <sup>2</sup>	
					E10 – PSI	
					E11 – BAR	
					E12 – LPH	
					E13 – RPM	
					E14 – mm	
					E15 – Other	

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### Examples:

Model	A- Input	B- Output-1 Mode	C- Output-2 Mode	D- Decimal Point	E- Unit of Measurement	F-Supply Voltage
DVI-483	A2	00	00	D1	E1	F1
DCI-483	A4	00	00	D2	E4	F1
DPI-484	A9	00	00	D3	E5	F3
DPC-300	A7	B2	00	D3	E6	F1
DPC-722-FLP	A7	B1	C2	D1	E11	F1

Example	Ordering Code	Description
1	DVI-483-A2-00-00-D1-E1-F1	This is AC voltage Indicator in 96 x 48 mm size calibrated in the range of 0 to 250VAC and working on 230VAC supply.
2	DCI-483-A4-00-00-D2-E4-F1	This is DC current Indicator in 96 x 48 mm size accepting input say from 75mVDC shunt and calibrated in the range of 0.0 to 199.9 ADC and working on 230VAC.
3	DPI-484-A9-00-00-D3-E5-F3	This is 4 and ½ digit process Indicator in 96 x 48 mm size accepting say 0-10VDC or 4-20mA input and calibrated in the range of 0.00 to 100.00% and working on 110VAC.
4	DPC-300-A7-B2-00-D3-E6-F1	This is single set point on-off controller accepting 4-20mA from pH transmitter and calibrated in the range of 0.00 to 14.00pH with single control relay and dc pulse output and working on 230VAC
5	DPC-722-FLP-A7-B1-C2-D1-E11-F1	This is two set point on-off controller in flame proof enclosure accepting 4-20mA signal from pressure transmitter and calibrated in the range of 0 to 1999 bar with dual relay and dc pulse output for Low and High alarm and working on 230VAC.

REMARK :

User can select the desired model of Process indicator/controller with type of input, calibrated range, control output and supply voltage from the above tables. For any special purpose requirement please write to us on [sales@libratherm.com](mailto:sales@libratherm.com) .