# DIGITAL INDICATOR

## MODEL : DC9696-P / DC4896-P



### FEATURES

- Microcontroller based
- Universal or fixed input
- Programmable range
- Simple 4 key user control
- High accuracy
- 95 – 265V AC universal power supply
- User friendly installation and operation
- Operation & Calibration through keyboard on front panel

**Alpha Make DC9696-P/ DC4896-P** is an advanced Microcontroller based indicating on/off controller used in majority of industrial processes. The indicating controller can accept analog inputs from RTDs, Thermocouples, current and voltage input with provision of single or dual output. The controller is calibrated for all the basic inputs and the calibration is not required to be changed if the input type is changed. However if recalibration is required due to any error then calibration can be done through keyboard.

### INPUT TABLE:

| INPUTS | | TYPE | RANGE | CODE |
|---|---|---|---|---|
| **Universal** | | Programmable | As per input selected | **0** |
| **Fixed** | **Thermocouple** | J | 0 to 700 Deg. C | **1** |
| | | K | 0 to 1200 Deg. C | **2** |
| | | R | -50 to 1765 Deg. C | **3** |
| | | S | 0 to 1766 Deg. C | **4** |
| | | T | -100 to 400 Deg. C | **5** |
| | | E | -100 to 1000 Deg. C | **6** |
| | | B | 250 to 1820 Deg. C | **7** |
| | | N | 0 to 1800 Deg. C | **8** |
| | **RTD** | PT100 | 0 to 200.0 Deg.C | **9** |
| | | PT100 | 0 to 600 Deg.C | **A** |
| | **Linear ( V / mA )** | 0 – 5 V / 0 – 20 mA | -1999 to +9999 Field programmable | **B** |
| | | **1 – 5 V / 4 – 20 mA** | | **C** |

## SPECIFICATIONS:

| | |
|---|---|
| No. of channels | : 1 |
| Input | : Universal or Fixed inputs (Refer Table ) |
| Input Connection | : Rugged Screw type terminal, suitable for wire size ranging from 0.2-2.5sq.mm |
| Input Impedance | : For Thermocouples & mV inputs: >1 MΩ<br>DC Volts: >100 KΩ |
| Display | : - 4 digit 7seg. Red LED<br>-Range –1999 to 9999 |
| Square root extraction | : Provided built-in for linear inputs |
| Automatic Compensations | : -Cold junction compensation for thermocouples<br>-Wire resistance compensation for three wire RTDs. |
| Accuracy | : +/- 0.1% of FS, +/- 1 digit for Linear inputs<br>+/- 0.2% of FS, +/- 1 digit for others |
| Decimal Point | : Programmable as 8888, 888.8, 88.88, 8.888 for Linear Inputs |
| Noise Rejection | : -Common Mode 120dB or better<br>-Series Mode 60dB or better |
| Battery Backup | : EEPROM Nonvolatile Memory (Battery not required) |
| Power supply | : 90 - 265V AC +/-10%, 50 Hz, 1 Ph |
| Open Sensor Indication | : 'OPEN' or 'OR' where applicable. |

## OUTPUT OPTIONS

| | | |
|---|---|---|
| 1. Output | : | 1. Up to 2 relay outputs, 5A / 230 V AC resistive max. |
| 2. Retransmission Output | : | 2. Isolated 4 – 20 mA |
| 3. Transmitter Excitation Voltage | : | 3. 24V DC/30 mA max. |

(Note: Retransmission option is non isolated if excitation voltages are used)

## PROTECTION

| | |
|---|---|
| Sensor Burn out Protection | : Programmable alarm ON or OFF |
| Set Point & Configuration Protection | : Password Protected – User & configuration menu |
| System Protection | : Through hardware and software watch dog |

## ENVIRONMENT

| | |
|---|---|
| Operating Temperature | : 0 to +55 Deg. C |
| Operating Humidity | : Up to 95% non condensing |
| Storage Temperature | : -10 to +70 Deg. C |

## ENCLOSURE

| | |
|---|---|
| Enclosure | : Flame Retardant ABS |
| IP Rating | : IP54 (Front panel) |
| Mounting Type | : Flush on panel |
| External Dimension | : 96(H) x96 (W) x125 (D) mm |
| Panel Cutout | : 92(H) x92 (W) mm, Depth behind panel: 125mm including terminals |

## EXTERNAL DIMENSIONS (mm):

**ORDERING CODE:** DC9696-P / DC4896-P

| 9 | 6 | 9 | 6 | - | | | | - | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|

**INPUT TYPE:**
Refer Input Table

**NO. OF RELAYS:**
0 = None
1 = 1 Relay
2 = 2 Relay

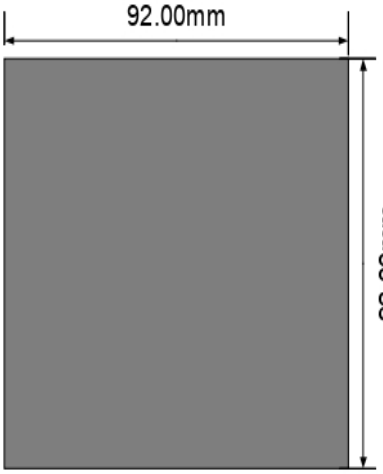
**TX. SUPPLY (24VDC)**
0 = Without
1 = With

**RETRANSMISSON:**
0 = Without
1 = With

**SAMPLE ORDER CODE**

**DC9696-P-C-2-1-0**
4-20 mA Input, 2 Relay Output, With Tx. Supply, Without Re-transmitter Supply

**DIMENSIONS IN mm:**




**PANEL CUTOUT**



**For Sales Support:**
Call: +91-9810269554, 9818269554
Email: sales@alphaengg.in