



**Features :**

- 4 Digits, 7 Segment LED single display
- TC / RTD inputs
- ON - OFF / PID control
- Dual set point
- °C / °F selectable
- Control output : Relay or SSR (Field selectable)
- Auxiliary output : Relay

**Display specifications**

|                 |  |
|-----------------|--|
| Display         | 4 Digits, 7 Segment LED single display<br>DTC204A - 2 : Height of display : 0.5385"<br>DTC324A - 2 : Height of display : 0.5510" |
| LED indications | 1. Output 1 ON T : Auto tune<br>2. Output 2 ON   |

**Input specifications**

|                     |   |
|---------------------|---|
| Inputs              | Thermocouple (J, K, T, R, S) / RTD (PT100)  |
| Resolution          | 0.1 / 1 for TC / RTD inputs<br>(fixed 1 for R & S type TC input)  |
| Indication accuracy | For J, K & T inputs : 0.25% of F.S. ±1°<br>For R & S inputs : 0.5% of F.S. ±2°<br>(20 min of warm up time for TC inputs)<br>For RTD input : 0.1% of F.S. ±1°<br>(F.S. = Full scale) |
| Temperature unit    | °C / °F selectable  |
| Input filter (FTC)  | 0.2 to 10.0 sec   |
| Sampling time       | 250 ms  |

**Output specifications**

|  |                                  |
|--|----------------------------------|
| <b>Control output</b> (Relay or SSR user selectable) |                                  |
| Relay contact (SPDT)                                 | 10A resistive @ 230V AC / 30V DC |
| SSR drive (Voltage pulse)                            | 12V DC, 30mA                     |
| <b>Auxiliary output</b>                              |                                  |
| Relay contact (SPDT)                                 | 5A resistive @ 230V AC / 30V DC  |

**Functional specifications**

|                       |  |
|-----------------------|--|
| Control action        | 1) PID control with auto tuning<br>2) ON - OFF control |
| Proportional band (P) | 1 to 400°  |
| Integral time (I)     | 0 to 9999 sec  |
| Derivative time (D)   | 0 to 9999 sec  |
| Cycle time            | 0.1 to 99.9 sec  |
| Hysteresis width      | 0.1 to 99.9°   |
| Manual reset value    | -19.9 to 19.9°   |

**Functional specifications**

|                           |   |
|---------------------------|---|
| Heat-cool                 |   |
| Control action            | PID   |
| Proportional band-cool    | 0.0 to 400.0°   |
| Cycle time-cool           | 0.1 to 99.9 sec   |
| Dead band                 | Programmable from set point low limit to set point high limit |
| Settings for alarm output |   |
| Modes                     | Deviation, Absolute   |
| Hysteresis                | 0.1 to 99.9°  |

**Auxiliary supply specifications**

|                   |                                |
|-------------------|--------------------------------|
| Supply voltage    | 90 to 270V AC / DC (50 / 60Hz) |
| Power consumption | 6 VA max @ 230V AC             |

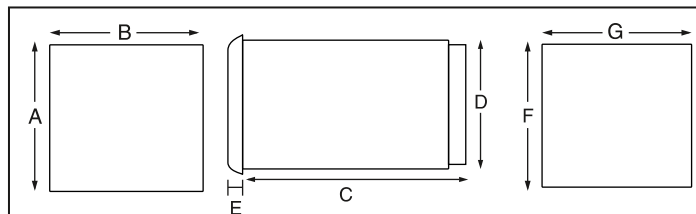
**Environmental specifications**

|                           |  |
|---------------------------|--|
| Temperature               | Operating : 0 to 50°C (32 to 122°F)<br>Storage : -20 to 75°C (-4 to 167°F) |
| Humidity (non-condensing) | 95% RH   |

**Mechanical specifications**

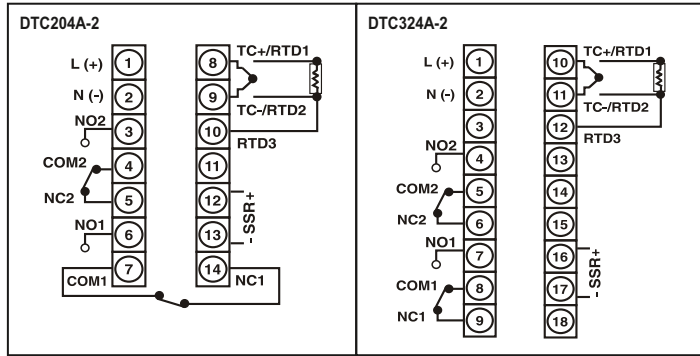
|          |  |
|----------|--|
| Mounting | Panel  |
| Weight   | DTC204A - 2 : 200 gms<br>DTC324A - 2 : 252 gms |

**Dimensions (All are in mm)**



| MODELS    | DIM | A  | B  | C    | D    | E   | F  | G  |
|-----------|-----|----|----|------|------|-----|----|----|
| DTC204A-2 |     | 72 | 72 | 83.7 | 67   | 4.5 | 69 | 69 |
| DTC324A-2 |     | 96 | 96 | 73   | 90.5 | 5   | 92 | 92 |

Terminal connections



Ordering information

| Product code | Output 1 |     | Output 2 | Supply voltage  |
|--------------|----------|-----|----------|-----------------|
| DTC204A-2    | RELAY    | SSR | RELAY    | 90-270V AC / DC |
| DTC324A-2    | RELAY    | SSR | RELAY    | 90-270V AC / DC |

Accessories (Optional)

Standard SELEC accessories that can be used with this product.

|   |
|---|
| Adapter plate   |
| 1) AP9672 : Plastic adapter plate, used to mount 72 x 72mm size instrument into existing (96 x 96) cutout size. |

Mounting accessories (Supplied with units)

|                                 |
|---------------------------------|
| Clamp side with screw assembled |
|---------------------------------|

Input sensor ranges (For TC / RTD inputs)

| Sensor type | Resolution | Ranges       |             |
|-------------|------------|--------------|-------------|
|             |            | 1            | 0.1         |
| PT100       | °C         | -150 to 850  | -150 to 850 |
|             | °F         | -238 to 1562 | -199 to 999 |
| J           | °C         | -199 to 750  | -199 to 750 |
|             | °F         | -328 to 1382 | -199 to 999 |
| K           | °C         | -199 to 1350 | -199 to 999 |
|             | °F         | -328 to 2462 | -199 to 999 |
| T           | °C         | -199 to 400  | -199 to 400 |
|             | °F         | -328 to 750  | -199 to 750 |
| R & S       | °C         | 0 to 1750    | N/A         |
|             | °F         | 32 to 3182   | N/A         |