RIGID DUCT AVERAGE TEMPERATURE SENSOR

TSDR Series

The multi-point rigid duct average temperature sensor utilizes several precision sensors spaced at equal distances and encapsulated in 6mm (0236”) OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resistance to moisture penetration.

PRODUCT HIGHLIGHTS

* UL Listed device
* Compact form factor enclosure with soft close lid
* Compact form factor makes handling/carrying easier
* IP 65 Enclosure
* Slotted mounting holes angled for ease of field installation
* Custom branding available
* Multiple mounting options

ENGINEERING SPEC’S

* Product shall be UL Listed to UL 60730, CSA E60730
* Product should be UL Listed to UL2043 and CSA/ULC S142 for use in Plenum space
* Shall be IP65 (NEMA 4X) with a UL94-V0 rated enclosure
* External mounting tabs must be slotted & tapered away from enclosure to ease field installation
* Probe shall be one piece 304 S.S fully potted
* Enclosure shall be complete with neoprene gasket for duct to enclosure seal
* Enclosure shall be complete with threaded (1/2 NPT and/or M16) conduit connection
* Cover must be hinged and securely attached in the open position
* Sensing range must be -40 to 60°C (-40 to 140°F)
* Cover must contain security screw as extra protection from opening
* Product shall be CE approved

|  |  |
| --- | --- |
| SPECIFICATIONS |  |
| SENSOR TYPE | **100 Ω Platinum, IEC 751, 385 Alpha, thin film**  **1801 Ω NTC Thermistor, ±0.2°C**  **3000 Ω NTC Thermistor, ±0.2°C**  **10,000 Ω Type 3, NTC Thermistor, ±0.2°C**  **2.252K Ω NTC Thermistor, ±0.2°C**  **1000 Ω Platinum, IEC 751, 385 Alpha, thin film**  **1000 Ω Nickel, Class B, DIN 43760**  **10,000 Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor**  **20,000 Ω NTC Thermistor, ±0.2°C**  **10,000 Ω Type 2, NTC Thermistor, ±0.2°C**  **10,000 Ω, 25°C, ±1%, B = 3435 ±1% (25/85)** |
| SENSOR ACCURACY | **Thermistors:** ±0.2°C (±0.36°F) @ 25°C (77°F)  **Platinum RTD’s:** ±0.3°C (±0.54°F) @ 0°C (32°F)  **Nickel RTD’s:** ±0.4°C (±0.72°F) @ 0°C (32°F) |
| PROBE SENSING RANGE | -20 to 60°C (-4 to 140°F) |
| AMBIENT OPERATING RANGE | -40 to650°C (-40 to 140°F) |
| WIRE MATERIAL | PVC/Kynar, 28 AWG |
| STANDARD LENGTHS | 450, 600, 900mm (18”, 24”, 36” ) |
| ENCLOSURE | ABS, UL94-V0, IP65 (NEMA 4X)  **C:** includes terminal block  **E:** same as C, with thread adapter (1/2” NPT to M16), and cable gland fitting |
| TERMINATION | **A:** pigtail, 2 or 3 wire  **C & E:** terminal block, 2 or 3 wire |
| APPROVALS | UL Listed UL 60730, CSA E60730 and UL2043, CSA/ULC S142 |
| COUNTRY OF ORIGIN | Canada |