Product simulation probes

Product simulation probes for refrigeration applications

The product probe simulates the food's temperature inertia in refrigeration applications where gaining knowledge of food internal temperature is an advantage for proper system management.

The solid design, tested accuracy and proven longterm reliability, make this sensor ideal in providing a realistic representation of stored groceries, so to keep the food in safe thermal conditions.

Food's temperature inertia monitoring can help to optimize refrigeration systems for energy saving, to minimize product waste, and to ensure systems meet safety standards for temperature-sensitive products.

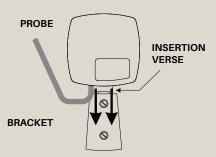
Features

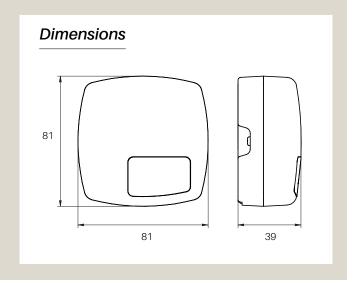
- Designed for refrigeration cabinets, display cases, and cold rooms
- It simulates food like half kilogram of lean meat
- It enables Copeland controllers to optimally manage the temperature so to keep groceries safe from mis-preserve food quality and avoid waste
- It comes with a plug-in male connector for simple mating with the optional cable plus female bulkhead connector, so to link the connector at the fridge's wall and reaching Copeland controller with the extended cable

COPELAND

Mounting

The included mounting bracket allows for easy installation with screws or cable tie (not included). The product simulation probe is then fixed on the bracket by insertion.







Connections

The product simulation probe is a 2-wire passive sensor, which is not polarity sensitive. Two connections available are:

- the standard one (2 wires brown/blue without terminals)
- the Phoenix M8 male connector (3 Pins, brown/blue used for probe wiring and one black to keep it free)

Technical features

| SPECIFICATION | DESCRIPTION |
|-------------------------------|---|
| Sensor | NTC 10KΩ, Tolerance ±1%; Operative Range -30 to +80°C or PT1000 Class B; Operative Range -30 to +80°C |
| Male connector | M8 thread, IP65, 3 pins |
| Female connector | Flush-type socket, M8, front/screw mounting with M8 thread, IP67, wires $3x\ 0.25$ mm2, with $3\ m\ cable$ Flat nut with M8 thread (included) |
| Overall operating temperature | -30°C to +80°C |
| Storage temperature | -30°C to +80°C |
| Output signal | Passive: 2 wires not polarity sensitive |
| Installation | Plastic clip mounting (2 wall screws and cable ties - not included) |
| Fixing torque | Male connector: knurl 0,2 Nm; female connector: 0.8 ÷ 1 Nm (Installation-side) |
| Protection degree | Internal temperature sensor: IP67 |
| Housing material | Plastic |

Order Information

Product simulation probe models

| Part Number | Model | Color | Description |
|-------------|---------|-------|--|
| BN65900157 | NGP0PV | White | NTC probe, 1.5mt cable embedded, free terminals |
| BN659001 58 | NGP0PV | White | NTC probe, 1.5mt cable embedded, M8 male connector, mating female connector with 3mt extension |
| BN65900159 | NGP0PV | White | NTC probe, 1.5mt cable embedded, M8 male connector |
| BZ659001 51 | PMGP0PV | Black | PT1000 probe, 1.5mt cable embedded, M8 male connector, mating female connector with 3mt extension |

Order Information

Spare parts

| Part Number | Description | |
|-------------|---|--|
| DD92190300 | Female connector with 3mt cable extension | |



To learn more, visit **copeland.com**

©2024 Copeland LP

