



## COOLING CHAMBER FOR IDD SERIES DETECTORS

### DETECTOR COOLING IN A COMPACT PACKAGE WITH NO ADDITIONAL COOLING AIR REQUIREMENTS.

The IDD flame detector cooling chamber is an economical, compact method of providing additional detector cooling in higher ambient air temperature applications. The cooling chamber consists of a two piece cast steel housing that encloses the Forney IDD flame detectors.

When an IDD Detector is installed on the burner front **without** a cooling chamber, the cooling air is connected between the detector and the sight tube with the air directed down the sight tube into the furnace. When installed **with** a cooling chamber, the cooling chamber air inlet connection allows for the detector to be included in the air stream. The cooling chamber redirects the air over the detector, helping to keep it cool, then continues down the sight tube into the furnace.

The two piece casting is easily opened by hand to allow access to the detector inside. No connections need to be disconnected to gain access to the detector. The design of the cooling chamber also supports and protects the detector and cable connection from possible damage at the boiler front.



- **DETECTOR COOLING** – Will keep the flame detector cool up to an ambient temperature of 200° F (see specifications section)
- **DETECTOR COMPATABILITY** – Will provide additional detector cooling for the IDD-II, IDD-IIU, IDD-UV and IDD-IIL.
- **SIMPLIFIED MAINTENANCE** – Hand operated side clamps allow easy access to the flame detector located inside the cooling chamber
- **COMPACT & DURABLE** – Compact size and rugged design will stand up to the harshest burner front conditions



Re-powering your world



### COOLING CHAMBER FOR IDD SERIES DETECTORS

#### PRODUCTS AND ACCESSORIES

Cooling Chamber	Part #381071-01
IDD II, Filtered Infrared Detector	Part #38321-21
IDD-IIU, Unfiltered Infrared Detector	Part #38321-22
IDD-IIL, Infrared Detector for Lignite	Part #339234-01

#### SPECIFICATIONS

The Forney Cooling Chamber is required when the ambient temperature is above 140°F (60°C) but no more than 200°F (93°C).

- Dimensions: 9.8" x 5" x 3.5" (249 x 127 x 89mm)
- Weight: 4 lbs 2oz (1.86kg)
- Mounting: 1" FNTP sight tube fitting
- Cooling air connection: 1" FNTP
- Materials: Cast Steel Housing, Silicone Rubber Seal
- Electrical: N/A
- Detector temperature limits: 32°F to 140°F (0°C to 60°C) for all IDD detectors
- Cooling air flow/supply: Front mount applications - minimum cooling air flow of 10 scfm (17m<sup>3</sup>/hr) at a maximum temperature of 120°F (48°C)  
Fiber optic applications - minimum cooling air flow of 15 scfm (25m<sup>3</sup>/hr) at a maximum temperature of 120°F (48°C)
- Compatible flame detectors: IDD-II, IDD-IIU, IDD-UV and IDD-IIL
- Cable support: The cooling air chamber supports the IDD series detector cable by capturing it in the cooling air housing cap.

