



Integrated Flame Scanner with Internal Flame Relay

Addendum to CU-113 reduced temperature operation

The Fireeye InSight II flame scanners (e.g., 95DSS3) are microprocessor-based flame scanners utilizing dual solid-state infrared (IR) and ultraviolet (UV) sensors.

Fireeye's engineering department performed tests confirming the ability of our model "InSight II" flame scanner to perform at reduced temperatures. Testing was carried out on a Fireeye InSight II model 95DSS3-1. These results apply to all models and versions of the product.

The unit was placed in a cold-box set for -50°C and left overnight with no power applied to the scanner. The following morning the scanner was powered up and its display read the internal temperature as -50°C . A flame was simulated outside of the cold-box through an eight-inch sight-tube.

Power was applied to the scanner, and after 20 minutes the scanner inside temperature had risen to -39°C , although the ambient remained at -50°C throughout (internal heat rise). Upon reaching an internal temperature of -39°C , power was cycled to the scanner, and it operated normally.

Conclusion:

The InSight II scanners will properly operate from a cold start condition of -50°C if power is applied to the InSight scanner for a minimum of 20 minutes and power is cycled.