



# IFD™ Sensor Tech Specs

## Certified Distribution Transformers

- Pole mount single and 3-phase
- Pad mount

## Transformer Operation\*

- Located in the airspace above the maximum operating oil level – has no impact on the normal operation of the transformer

## Activation Level\*

- Designed to activate due to pressure rises associated with low impedance internal faults
- Cert: Simulated symmetrical and asymmetrical internal faults from 500A to 8000A

## Pressure Relief Valve

- The integrated PVR (pressure relief valve) can be specified to meet IEEE (ref IEEE C57.12.20) or CSA (CSA C2.2) transformer standards
- Minimum flow rate: 50 SCFM (23.5 L/s)
- Operates with or without shipping lock installed

## Reliable Activation\*

- Activates only during a transformer internal fault
- Will not activate due to faults external to the transformer or due to normal pressure changes within the transformer
- Permanent fault indication: once activated, cannot be reset; the transformer must be removed from service

## Operating Temperature Range

- Operated between -40°C (-40°F) to 185°C (365°F)
- Ref: IFD Engineering

## Service Life

- Manufactured from glass reinforced PBT for greater than 30 years of service and requires no maintenance

## Visibility

- The activated IFD is clearly visible from at least 60ft. (20m) day or night
- Cert: Day and night visibility test
- Ref: BC Research Inc.

## Standards

- IEEE C57.12.20
- CSA C2.2
- IEC 61936-1

## Quality and Testing



Every IFD sensor tested in a calibrated chamber to ensure activation as designed.

Examples of additional testing:

- a. Lightning Impulse: passed the lightning impulse test at a level of 16% above rating; Ref: CREATI Report\*
- b. Mechanical Vibration: when shipping lock is properly installed, the signal will not activate during normal transformer transportation or handling; Ref: CREATI Report\*
- c. Shipping and Handling: removable shipping lock, for transportation and storage, prevents accidental activation of the mechanical sensor

**IMPORTANT NOTE:** *Always transport IFD sensor equipped transformers with the shipping lock installed. Ref: IFD Engineering.*

\*Ref CREATI Report: CEA Technologies Inc Report #T994700-5003