



Engineering Change Notice

Introduction

The internal fault detector IFD™ Orca is announced. The IFD Orca replaces all previous product versions and requires tooling changes for transformer processing.

General availability is March 2011. All IFD unit shipments are plant order-rate dependent.

Applications

- Pole mount transformers – 1 & 3 ph
- **New:** Pad mount transformers – 1 & 3 ph
- **New:** Natural ester fluid filled equipment

IFD Part Number Change

Product Name	Description	IFD Orca Part No.
IFD Orca	Internal fault detector with 45 kPa PRD	IFD-ORCA-45KPA-A
IFD Orca	Internal fault detector with 10 psi PRD	IFD-ORCA-10PSI-A

Description of Tooling Changes

As a result of dimensional changes in the IFD a new adapter and / or PRD Plug have been designed to ensure effective manufacturing.

Two other special purpose tools have been designed to support manufacturing processes.

Tool Name	Description	IFD Orca Part No.
IFD Orca Adapter	Provides a ¼" NPT boss for compressed air connections.	IFD-ACC-PTS-A
IFD Orca PRD Plug	Plugs the PRD during transformer processing.	IFD-ACC-PRP-A
Special Order Tooling:		
IFD Orca Reset Tool	This tool is generally intended for transformer repair shops and OEM's. It is used to reset an inadvertently activated IFD without the need to remove the transformer lid.	IFD-ACC-RST-A
42 mm socket	Smaller, light weight, aluminum construction socket for use with a ¾" drive torque wrench	IFD-ACC-SKT-A

Note: The existing IFD Adapter cannot be used with IFD Orca; however, it will be required if reprocessing of a previous version IFD is necessary.



Impact of change to utility

Redesigned shipping lock	Stronger design is easier to install and remove
Higher flow PRD	Venting capability that exceeds minimum standards and is also compatible with FR3 venting guidelines
More indicator exposed	More visible for line crews
Sealed after activation	Prevents oil spillage during transporting after IFD's have activated; eliminates special handling by line workers after IFD Orca has activated

Impact of change to transformer manufacturer

New IFD Adapters are required for processing the IFD Orca.

[IFD Engineering will be in contact to review tooling requirements and process improvement opportunities.]

Redesigned shipping lock	Twist-on design is easier to use for line workers and transformer builders; stronger design and is more UV resistant
Larger keyway	IFD can be mounted in a range of common hole sizes
Thicker nut	Stronger and easier to install
Tapered gasket seat	Reduces nut torque required to 90 ± 10 in-lb (10 ± 1 Nm)
Added thread length	Can be installed in tank walls up to 0.19 in. (5 mm) thick
Cup height decreased by .25 inches (6 mm)	Fits in smaller airspaces
Recyclable Temporary Shipping Lock (TSL)	Reduced environmental impact
Can be reset externally using the IFD Reset Tool	This will ONLY be used by Transformer Manufacturers or Utility shop personnel if the IFD has activated inadvertently.

Further Information

This document is issued for information purposes only. For additional questions or comments regarding these changes to the IFD Orca or its installation, please contact IFD engineering at engineering@ifdcorporation.com or (604) 734-0105.