## Explosion-Proof Refrigerated Container – ZONE 2

- » Reefer Unit complies with the ATEX Directive for equipment used in potentially explosive atmospheres
- » Containers certified to DNV 2.7-1 are available
- » Explosion-Proof Refrigerated Container designed for Hazardous Zone 2 Locations (<u>Model for Zone 1 Locations</u>)
- » Designed to withstand the harsh conditions of the Offshore industry



Klinge's Explosion-Proof reefer unit complies with the <u>ATEX Directive 94/9/EC</u> level of Group II, Category 3. Group II equipment is intended for use in places likely to become endangered by explosive atmospheres. Category 3 equipment is designed for areas in which explosive atmospheres are unlikely to occur.

The PFR-571 Z2 is suitable for Zone 2 hazardous locations in accordance with EN 60079-10.

The reefer unit, model PFR-571 Z2, was designed for 20ft and 40ft Insulated ISO Containers. Containers certified to DNV 2.7-1 are also available.

The PFR-571 Z2 is used to store and transport goods in hazardous locations, such as those encountered in the <u>offshore industry</u>. It is also used to store and transport hazardous chemicals and other <u>dangerous goods</u>. <u>Contact a Klinge Group Specialist Today!</u>

PHOTOS OF THE EXPLOSION-PROOF REFRIGERATED CONTAINER (MODEL PFR-571 Z2)

## FEATURES OF THE EXPLOSION-PROOF REFRIGERATED CONTAINER (MODEL PFR-571 Z2)

- » The refrigeration unit design is compact, yet offers a large cargo area.
- » Every component in the evaporator section is explosion proof, since this section is in direct



Offshore Zone 2 Explosion-Proof Refrigerated Container (Atex compliant reefer & container certified to DNV 2.7-1)

## contact with the cargo area.

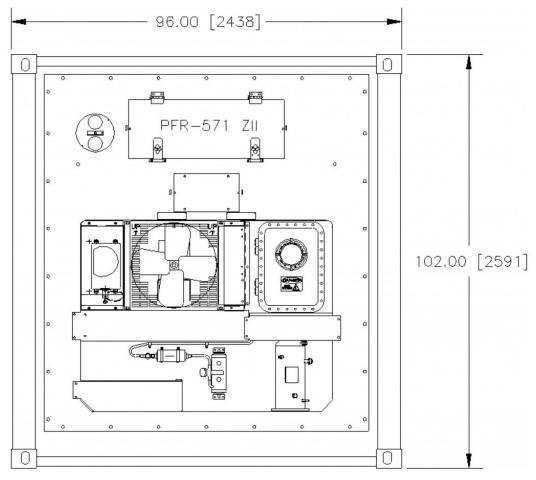
- » All external parts are explosion-proof.
- » Refrigeration system is just 14 in (365 mm) deep, allowing for maximum cargo space.
- » Defrosting of the evaporator coil is done with our unique and well proven "On Demand" hot-gas system, when required.
- » All components except evaporator coil are easily serviced from the front of the unit.
- » Easy access to all components in electric box. Door has lift off hinges.
- » Adjustable fresh air vent is labeled to indicate percentage of opening.
- » Bottom air discharge for better temperature distribution throughout load.
- » 50 Foot power cable with CEE 17 power plug is standard with cable storage box.
- » All electric, all-in-one cooling and heating unit.



The unit is

Explosion-Proof Refrigerated Container (Atex compliant reefer & container certified to DNV 2.7-1

designed to fit into the front of a container and to serve as the container front wall. Forklift pockets are provided for the installation and removal of the unit.



Explosion-Proof Refrigerated Container Drawing - Model PFR-571-Z2

## SPECIFICATION OF THE EXPLOSION-PROOF REFRIGERATED CONTAINER (MODEL PFR-571 Z2)

- » Dimensions: L 2025.5 mm (79.72 in), W 365 mm (14.4 in) from back of flange, H 2235.2 mm (80 in)
- » Weight: 532 kg (1170 Lb)
- » Ambient Temperature Range: -30°C (-22°F) to 52°C (125°F)
- » Designed to Operate on both: 400/480 volt AC ±10%, 3 phase 50/60 Hz ±2.5%, and 230 volt AC
- ±10% 3 phase 60 Hz ±2.5%, by use of a 230-480 volt step up transformer mounted on the unit.
- » Control Circuit: provided by a single-phase transformer which steps down the high voltage power source to 24 volt AC single phase
- » Compressor: Hermetic Scroll, Displacement 498 CFH, Speed3450 rpm, Protection- Automatic reset, Valve Suction and discharge with connection for gauge

Evaporator Coil: Copper Tube Material, Aluminum Fin Material, Special Aluminum DIN 1712/A1 99, Fin Space 4.23mm (6 per in), Attitude Slanted, Surface Area 465 ft2 (43.2m2), Protection - Surface treated with Hydrophilic surface to resist corrosion induced by salt spray atmosphere. Pipe Copper according to DIN 1787 wall thickness 0.45 mm

- » Condenser Coil (air cooled): Copper Tube Material, Aluminum Fin Material, Fin Space 3.07mm (10 per in), Attitude Horizontal, Surface Area 293ft2 (25m2), Protection Treated with Epoxy paint to resist corrosion induced by salt spray atmosphere, Pipe copper according to DIN 1787.
- » Evaporator Fans (quantity 2): Speed 1725 rpm, Aluminum Impeller Material with a high inherent corrosion resistance, Drive Direct on motor shaft
- » Evaporator Fan Motors (quantity 2): Nominal HP 1/4, Explosion Proof Type, Speed 1725 rpm, Bearing Ball Sealed, Stainless Steel Shaft Material, Protection Internal thermal automatic reset, Class Zone 2, Groups IIA
- » Condenser Fan (quantity 1): Propeller type, Diameter 20 3/4 in, 14, Plastic Material (PPG), Drive Direct on motor shaft, Air Flow 1800 CFM, Speed 1740 rpm
- » Condenser Fan Motor: Nominal HP 1, Explosion Proof Type, Speed 1740 rpm, Bearing Ball Sealed, Stainless Steel Shaft Material, Protection Internal thermal automatic reset, Class Zone 2, Groups IIA
- » OPTIONS <u>Satellite communication system</u> for remote and monitoring of the set temperature, supply temperature, return air temperature, alarm indication & power 'on' indication. Special dual voltage transformer enables refrigeration units to also operate on 220 volt 3 phase power. Other options include lighting, air curtains, <u>temperature recorder</u>, and shelving.

Klinge's machinery complies with International Customs Regulations for Containers, relevant ISO recommendations, and the rules of B.V., ABS and Lloyds.

<u>Fill out the form</u> or call +1 717-840-4500 to learn more. If you already know what you need, you can Request a Quote or Request Service from Klinge Group today!