Vertiv™ Liebert® XD CoolFrame
GUIDE SPECIFICATIONS

1.0 GENERAL

1.1 Summary

These specifications describe requirements for an air conditioning system designed to cool Egenera BladeFrame EX equipment. The system shall be designed to maintain the temperature within the BladeFrame cabinet and cool the air leaving the rack. The manufacturer shall design and furnish all equipment to be fully compatible with heat dissipation requirements.

1.2 Design Requirements

The air conditioning system shall be a Liebert® XD CoolFrame factory-assembled unit. The unit shall be designed for a push-through air arrangement to ensure warm exhaust air from the rack is cooled before it enters the room.

1.3 Submittals

Submittals shall be provided with the proposal and shall include: dimensional and capacity data, and typical piping drawings.

1.4 Warranty

The system shall be provided with a warranty against defects in material and workmanship.

1.5 Quality Assurance

The specified system shall be factory-tested before shipment and designed to meet NRTL requirements. The system shall be designed and manufactured according to world-class quality standards. The manufacturer shall be ISO 9001 certified.

2.0 PRODUCT

2.1 Standard Features Vertiv™ Liebert® XD CoolFrame

2.1.1 Liebert® XD CoolFrame Module

The Liebert® XD CoolFrame module shall include a cooling coil housed in a metal cabinet. The module shall have a nominal cooling capacity of 34,000 BTUH (10 kW), based on 55°F (12.8°C) entering fluid temperature, 50°F (10°C) or lower dew point when attached to a fully loaded BladeFrame EX rack.

The module shall be leak-tested and pressure-tested prior to shipment from the factory.

2.1.2 Cooling

Fluid shall be supplied to the Liebert® XD CoolFrame by a Liebert® XD Pumping Unit or a Liebert® XD Chiller to prevent coil condensation and optimize the leaving fluid temperature.

2.1.3 Piping

Flex piping, for connecting the Liebert® XD CoolFrame module to the distribution piping from the Liebert® Pumping Unit (XDP) or Liebert® XD Chiller (XDC), shall be leak-tested and pressure-tested prior to shipment from the factory.

The CoolFrame module shall be shipped pre-charged with R-134a coolant. The supply and return pipes containing the R-134a coolant shall have threaded couplings with automatic shutoff at the end for easy connection of the flexible pipes to the ports in the Liebert® XD Piping.

3.0 EXECUTION

3.1 Installation of Vertiv™ Liebert® XD CoolFrame

3.1.1 General

Install the unit in accordance with the manufacturer's installation instructions. Maintain recommended service clearances as outlined in installation instructions.

3.1.2 Piping Connections

Install and connect devices furnished by the manufacturer but not specified to be factory-mounted. Furnish a copy of the manufacturer's piping connection diagram submittal to the piping contractor.

3.1.3 Supply and Return Piping

Connect flexible piping to the supply and return connections on the Liebert® XD CoolFrame module.

3.2 Field Quality Control

3.2.1 Startup

Startup air conditioning unit in accordance with the manufacturer's startup instructions.