Charles Universal Broadband Enclosure
CUBE-PM52422FM2 Series
General Description and Installation

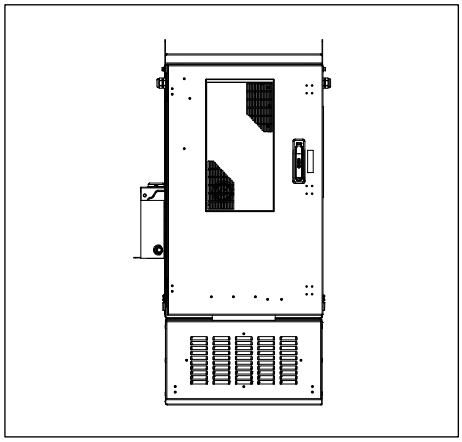

Figure 1 Front View of the CUBE

1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides additional information for the CUBE-PM52422FM2 of the Charles Industries' Universal Broadband Enclosure (CUBE) product line that is not included in the family document, LT-PM524xx. Figure 1 shows a closed front view of the enclosure.

-NOTE-
Hereafter, the Charles Universal Broadband Enclosure CUBE-PM52422FM2 will be referred to as the "CUBE."

2. PRODUCT DESCRIPTION

The CUBE has two compartments. The equipment compartment has a 760W heat exchanger and an 8-position AC load center.

Figure 2 shows the components of the CUBE.

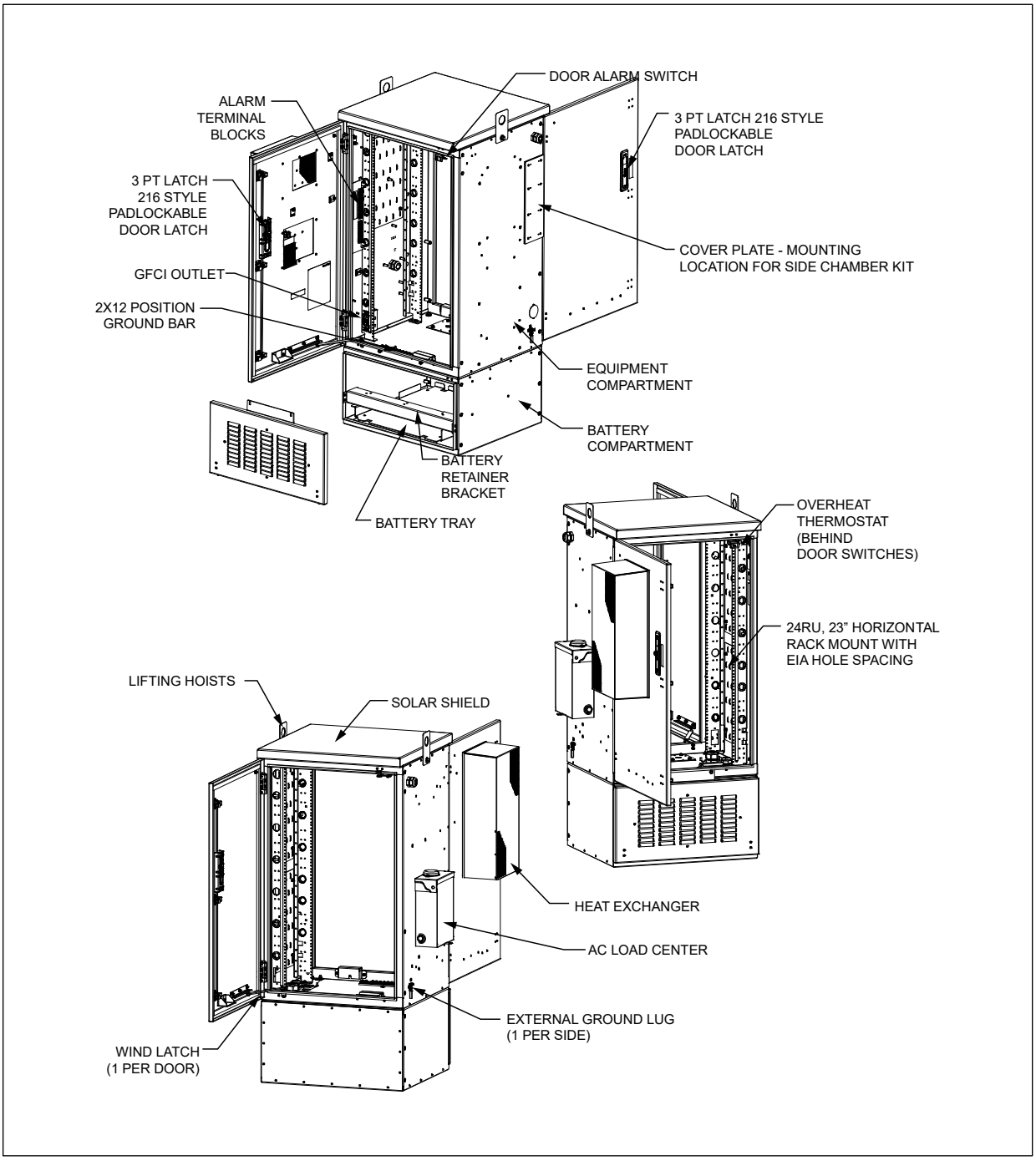

Figure 2 CUBE Components

3. CUBE WIRING AND EQUIPMENT

After the CUBE is properly mounted in the desired location, apply No-Ox where bus bar and other 2-hole lug connections will be made. Install ground and power connections. Always ground the equipment first, before making any other connections.

⚠	**WARNING**	**Perform all bonding and grounding connections prior to any electrical and communications connections.**

In order to prevent condensation prior to being placed in service, do not remove the desiccant until the CUBE is sealed and power is applied. A basic electrical diagram is shown Figure 3.

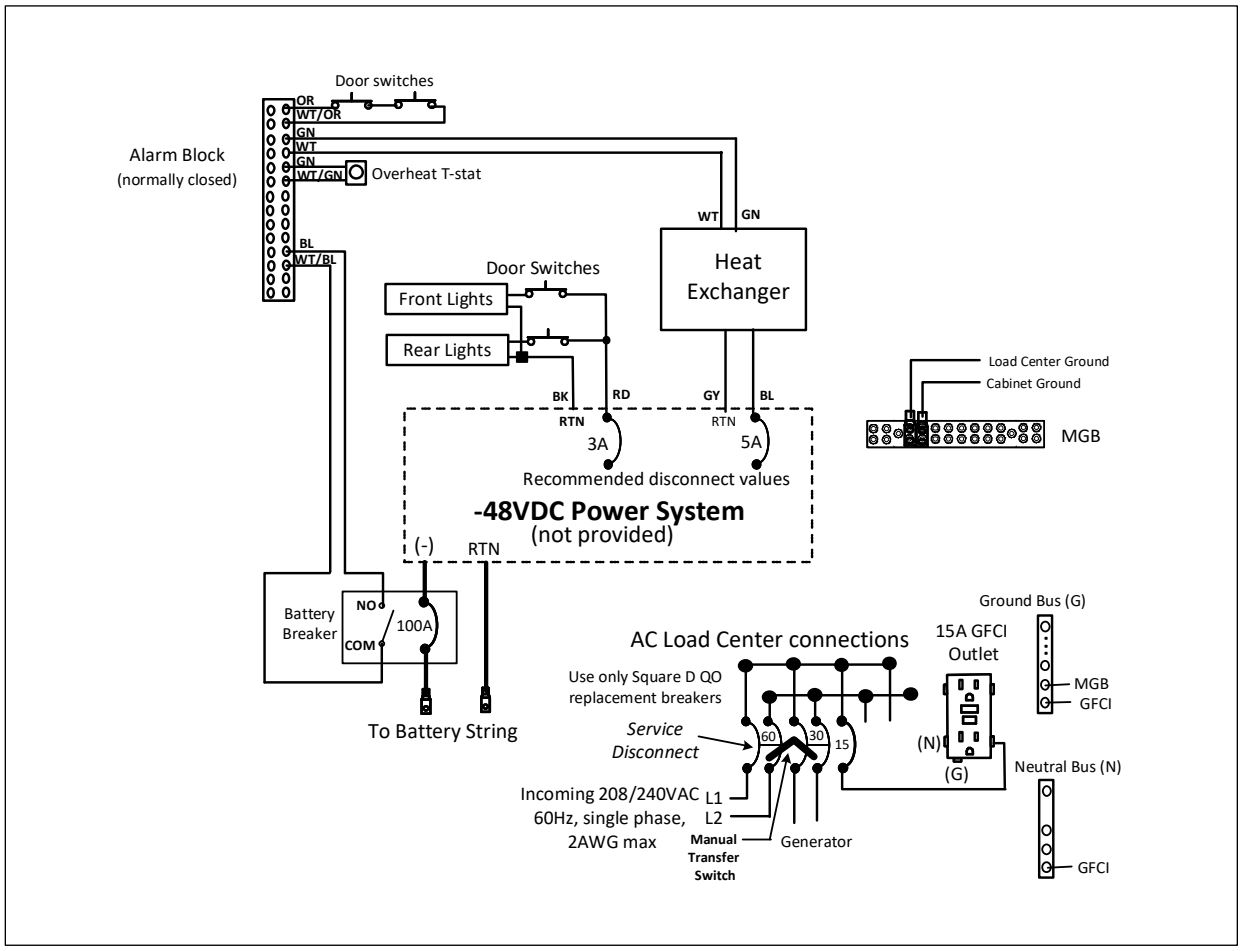

Figure 3 Electrical Diagram

3.1. Heat Exchanger Operation

The 760W DC powered heat exchanger in the equipment compartment has a fan speed controller and includes an internal and an external fan. Both fans' speed increases with increasing internal cabinet temperature. Fans and heat exchanger settings are defined below, and are based off of the cabinet interior temperature. The maximum airflow amount supplied to the equipment by the heat exchanger is 147CFM.

Setting	Internal	External
Turn-on Setting (5°C Differential)	0°C	30°C
Medium Temp Setting	30°C	35°C
High Temp Setting	45°C	50°C
High Temp Alarm Setting	70°C	N/A
Low Temp Alarm Setting	-40°C	N/A

For more information, refer to the heat exchanger documentation found inside the CUBE.

-NOTE-
Changing the speed controller default factory set points can lead to system performance issues, such as equipment failures, increased power use, unnecessary alarms, noise, condensation build up, fan failure caused by excessive runtimes and vibration.
Avoid placing items in front of the heat exchanger's return and supply vents. Maintain a minimum of 6" clearance to enable proper air flow.

4. SPECIFICATIONS

Physical	
Weight	Approx. 310 lbs. as shipped
Thermal	
Heat Exchanger	760W, 48VDC, Vikinor VHC-040-DC

Table 1 CUBE Specifications (See the family document for full list)