Ballard Power Systems Europe A/S
Majsmarken 1
9500 Hobro
Denmark

Revision history		
Rev.	**Date.**	**Description**
001	05/06/2024	First Issue

Document Title:	**BLPH Project - Panel Cabinet Layout: Introduction and Overview**
Document Number:	K559-2254-CWIWP4202202-E03-001
Revision:	Rev001
Sequence Number:	001
File Name:	K559-2254-CWIWP4202202-E03-001Rev001
Purchaser Job:	K559-2254
Purchase Order:	CWIWP4202202
Code:	E03
Requsition Number:	n/a
Customer:	CrossWind C.V., Rotterdam, The Netherlands

Short Title	Electrical Cabinet Documentation Introduction and Overview
Full Title	Crosswind/Baseload Power Hub Fuel Cell Package Electrical Cabinet Documentation Introduction and Overview
Abstract	The purpose of this document is to assist the reader of the E03 series of electrical documentation to understand the context and relation of the individual documents

This document, submitted in confidence, contains proprietary information which shall not be reproduced or transferred to other documents or disclosed to others or used for manufacturing or any other purpose without prior written permission of Ballard Power Systems.

Revision Record

Rev #	Description	Revised By	Date
1	Initial Release	PBL	June 2024

Checked by: n/a	Date: n/a
Approved by: n/a	Date: n/a

THIS DOCUMENT IS VALID ONLY AT TIME OF PRINTING.
ANY COPIES MADE ARE CONSIDERED UNCONTROLLED UNLESS STAMPED OTHERWISE IN RED.

Table of Contents

1.0 Purpose and Scope 4
2.0 Electrical Cabinets 4
2.1 List of Cabinets 4
3.0 Document contents 5
3.1 Project Information 5
3.2 Controller IO Overview 5
3.3 Multiline Electrical Documentation 5
3.4 Panel Documentation 5

List of Figures

No table of figures entries found.

List of Tables

No table of figures entries found.

1.0 Purpose and Scope

The purpose of this document is to provide the reader of the E03 series of documents with an overview of the electrical cabinets present in the Fuel Cell Package and the documents providing the documentation for each of them.

2.0 Electrical Cabinets

2.1 List of Cabinets

Designation	Description	Physical Location
GB01..GB06	Fuel Cell Modules (FCwave #1..#6)	40ft Container, one side of the container
UC01..UC06	Fuel Cell DCDC Converter Cabinet	40ft container, opposite fuel cells
UC20	40ft Container control Cabinet	40ft container, middle on DCDC side
UC30	Coolant Skid Control Cabinet	On the coolant skid, middle
UC31	10ft Container Control Cabinet	10ft container, behind control panel access hatch
UC41	Coolant Skid VFD Cabinet	On the coolant skid, back-to-back with UC30
UC50	AC Power Distribution	40ft container, facing entrance door

THIS DOCUMENT IS VALID ONLY AT TIME OF PRINTING.
ANY COPIES MADE ARE CONSIDERED UNCONTROLLED UNLESS STAMPED OTHERWISE IN RED.

3.0 Document contents

The documentation for the cabinets follows a standard template as follows:

3.1 Project Information

The section serves as front page and standard compliance requirements.

- Front Page with cabinet DT and name
- Ballard Standard wire color page
- Ballard Tagging Standard page
- Table of Contents

3.2 Controller IO Overview

This section is only present if the cabinet contains PLC racks. The section outlines the construction of the PLC and the cards in the PLC rack(s). For each input/output (DI/DO/AI/AO), the associated control loop is outlined.

3.3 Multiline Electrical Documentation

This section contains the multiline electrical documentation. Reader is expected to be familiar with electrical drawings.

3.4 Panel Documentation

This section contains terminal block listings and layouts for all terminal blocks.

THIS DOCUMENT IS VALID ONLY AT TIME OF PRINTING.
ANY COPIES MADE ARE CONSIDERED UNCONTROLLED UNLESS STAMPED OTHERWISE IN RED.