ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4) L746231 – RETURN CURRENT BUS BAR (RCBB)

Learning Legacy Document

Document Number: **CRL1-XRL-Z3-ADDSD-CR001-50304**

Document Revision: **8.0**

Document History:

Revision:	Date:	Prepared by:	Checked by:	Authorised by:	Reason for Issue:
1.0	05-Mar-2014	Michael Niven	[redacted]	[redacted]	First Issue
2.0	03-Jun-2014	[redacted]	[redacted]	[redacted]	Corrected Attribute Name Asset Tag Identification Section Updated
3.0	19-Sep-2014	[redacted]	[redacted]	[redacted]	Attribute changes Image Changes Description Updated Approvals Added Consultations Removed
4.0	27-Aug-2015	[redacted]	[redacted]	[redacted]	Labelling Section Updated
5.0	11-May-2016	[redacted]	[redacted]	[redacted]	Attribute added
6.0	30-Aug-2016	[redacted]	[redacted]	[redacted]	Attribute Added
7.0	20-Apr-2017	[redacted]	[redacted]	[redacted]	Attribute Replaced

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System

© Crossrail Limited **RESTRICTED**

Revision:	Date:	Prepared by:	Checked by:	Authorised by:	Reason for Issue:
8.0	25-Apr-2017	[redacted]	[redacted]	[redacted]	LRS Codes Updated

This document contains proprietary information. No part of this document may be reproduced without prior written consent from the chief executive of Crossrail Ltd.

Contents

1 Introduction 3
1.1 Asset Details 3
1.2 Description 3
1.3 Related Functions 3
2 Asset Tag Identification Rules 3
2.1 Example Images 4
3 Attributes 5
3.1 Generic Attributes 5
3.2 Class Specific Attributes 5
4 Performance Data 7
5 Labelling 7
6 Other Information 7
7 Reference Material 7
8 Crossrail Technical Approvals 8

Learning Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System
© Crossrail Limited RESTRICTED

1 Introduction

1.1 Asset Details

Class Code:	L746231
Class Name:	Return Current Bus Bar (RCBB)
Class Lineage:	Construction Products>Services>Electric power and lighting services products>Distribution devices>Conductors>Busbars>Return current bus bar (RCBB)

1.2 Description

A Return Current Busbar is a bar of copper or aluminium that conducts a substantial current of electricity. It connects the return cables from the track to the neutral mid-point of the feeder station transformers and autotransformers.

1.3 Related Functions

All information on the configuration of asset classes (L-Class) to functions is contained within the latest revision of the Asset Data Dictionary Master Configuration document (eB ref: CRL1-XRL-Z3-ADDSD-CR001-50186)

2 Asset Tag Identification Rules

Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031) in the following format:

<LCS Code>-<Function Code>-<Incremental number to ensure uniqueness>

e.g. CR076-BAF-12345

Information and guidance on the standard naming convention for all asset classes is contained within the latest revision of the Asset Naming Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

Learning Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System

© Crossrail Limited RESTRICTED

2.1 Example Images

Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System
© Crossrail Limited RESTRICTED

3 Attributes

3.1 Generic Attributes

All Classes of assets will have a set of Generic Attributes for which data is collected without exception. Full details relating to these assets can be found at:

AD4 – Generic Attributes CRL1-XRL-Z3-ADDSD-CR001-50069

3.2 Class Specific Attributes

Below is a table of the further specific attributes which are associated with this asset class.

Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
Bus Bar Material		PD		Copper Aluminium	The material of the current-carrying segment of the bus bar.
Current Capacity (Amps)	Amps	NU	0		The maximum current that the bus bar can carry. Often dictated by the maximum temperature the bus bar can operate at.
Cross Sectional Area (Square Millimetres)	Square Millimetres	NU	0		The total cross-sectional area of the current-carrying portion of the bus bar.
Length (Millimetres)	Millimetres	NU	0		The total straight length of a bus bar segment
Meterage (Metres)	Metres	NU	0		Meterage (Chainage) location of asset. To be populated only when the asset is located on track.

Learning Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System

© Crossrail Limited RESTRICTED

Attribute Name	Base Unit or Formula	Value Type (See Below)	Decimal Places (nu Only)	Defined Values List (pd only)	Description
LRS Code		PD		C.EB C.EB.CRW5 C.EB.CR1 C.EB.CR7 C.EB.TBC C.WB C.WB.CRW9 C.WB.CRW6 C.WB.CR2 C.WB.CR5 C.WB.TBA C.WB.TBB CNE.EB CNE.WB CSE.EB CSE.EB.CR11 CSE.WB CSE.EB.CR13 CSE.WB.CR15 Non Track	The Crossrail Linear Referencing Standard code (CRL1-XRL-O6-STD-CR001-00026) where the asset is located. When the asset is not located on track then non track should be selected. The LRS codes are as follows: C.EB - Central Section Eastbound C.EB.CRW5 - Crossover between W5 and W4 Points C.EB.CR1 - Crossover between C1 and C4 Points C.EB.CR7 - Crossover between C7 and C8 Points C.EB.TBC - Turnback C C.WB - Central Section Westbound C.WB.CRW9 - Crossover between W9 and W8 Points C.WB.CRW6 - Crossover between W6 and W3 Points C.WB.CR2 - Crossover between C2 and C3 Points C.WB.CR5 - Crossover between C5 and C6 Points C.WB.TBA - Turnback A C.WB.TBB - Turnback B CNE.EB - Central Section North East Spur Eastbound CNE.WB - Central Section North East Spur Westbound CSE.EB - Central Section South East Spur Eastbound CSE.EB.CR11 - Crossover between C11 and C12 Points CSE.WB - Central Section South East Spur Westbound CSE.EB.CR13 - Crossover between C13 and C14 Points CSE.WB.CR15 - Crossover between C15 and C16 Points Non Track - Non Track Assets

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)
da = Date (dd-mm-yyyy)
me = Memo (Free text 1GB Limit)

Learning Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System

© Crossrail Limited RESTRICTED

4 Performance Data

This section is to be used to specify the performance data to be gathered from this Class of asset when in operation. To be populated once the performance measures have been agreed with the Infrastructure Managers.

5 Labelling

Information and guidance on the standard labelling convention for all asset classes is contained within the latest revision of the Asset Naming and Labelling Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

6 Other Information

Not Applicable

7 Reference Material

- Asset Data Dictionary Master Configuration document - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069
- Asset Naming Convention Document - CRL1-XR1-Z3-ADDSD-CR001-50413

Learning Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System

© Crossrail Limited RESTRICTED

8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Traction Power	19-Sep-2014

Learning Legacy Document

Document uncontrolled once printed. All controlled documents are saved on the CRL Document System
© Crossrail Limited RESTRICTED