ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4) L76632 - COUPLERS

Document Number: **CRL1-XRL-Z3-ADDSD-CR001-50483**

Document Revision: **6.0**

Legacy Document

Document History:

Revision:	Date:	Prepared by:	Checked by:	Authorised by:	Reason for Issue:
1.0	19-Sep-2014	[redacted]	[redacted]	[redacted]	First Issue
2.0	27-Aug-2015	[redacted]	[redacted]	[redacted]	Labelling Section Updated
3.0	11-May-2016	[redacted]	[redacted]	[redacted]	Attribute added
4.0	30-Aug-2016	[redacted]	[redacted]	[redacted]	Attribute Added
5.0	20-Apr-2017	[redacted]	[redacted]	[redacted]	Attribute Replaced
6.0	25-Apr-2017	[redacted]	[redacted]	[redacted]	LRS Codes Updated

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Contents

1 Introduction 4
1.1 Asset Details 4
1.2 Description 4
1.3 Related Functions 4
2 Asset Tag Identification Rules 4
2.1 Example Images 5
3 Attributes 6
3.1 Generic Attributes 6
3.2 Class Specific Attributes 6
4 Performance Data 8
5 Labelling 8
6 Other Information 8
7 Reference Material 8
8 Crossrail Technical Approvals 9

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1 Introduction

1.1 Asset Details

Class Code:	L76632
Class Name:	Couplers
Class Lineage:	Construction Products> Services > Information-communication services products > Communication cables > Other > Couplers

1.2 Description

Couplers are passive devices that split a defined amount of electromagnetic power in a transmission line to a port, enabling the signal to be used in another circuit. A directional coupler has an input port, a "through" port (where most of the incident signal exits), and a "coupled" port (where a fixed fraction of the input signal appears, expressed in dB).

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>

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2.1 Example Images

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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
Coupling Factor (Decibels)	Decibels	NU	0		The magnitude of the coupling factor at the frequency band centre. This represents the fraction of the input signal that is directed to the coupled port.
Minimum bandwidth frequency (Hertz)	Hertz	NU	0		The minimum usable frequency of the coupler.
Maximum bandwidth frequency (Hertz)	Hertz	NU	0		The maximum usable frequency of the coupler.
Cable Interface		CH			Insert Cable interface type – e.g. ST,FCST
Meterage (Metres)	Metres	NU	0		Meterage (Chainage) location of asset. To be populated only when the asset is located on track.

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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)

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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

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8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Project Manager - C660 Communications and Control Systems	19-Sep-2014

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