ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L74671 - SECTION INSULATOR

Learning Legacy Document

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1 Introduction

1.1 Asset Details

Class Code:	L74671
Class Name:	Section Insulator
Class Lineage:	Construction Products>Service>Electric power and lighting services products>Distribution devices>Insulators/Insulation (Other than Cable Protection)>Section Insulator

1.2 Description

The section insulator isolates adjacent electrical sections allowing a section to be isolated without turning off the whole system

To allow maintenance to sections of the overhead line without having to turn off the entire system, the overhead line system is broken into electrically separated portions known as sections. The transition from section to section is known as a section break and is set up so that the train's pantograph is in continuous contact with the wire.

A sectioning point is formed by insulators inserted in a continuous run of a contact line, with skids or similar devices to maintain continuous current collection.

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).

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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
Length (Metres)	Metres	NU	2		Overall Length of section Insulator
Creepage Distance (Metres)	Metres	NU	2		Shortest distance on the surface of an insulating material between two conductive elements
Destructive Tensile Load (Kilograms)	Kilograms	NU	2		The destructive tensile load of the insulator
Maximum Deflection (Millimetres)	Millimetres	NU	0		The maximum deflection of the insulator
Section Insulator Type		PD		Bridging Non-Bridging With Gliders Without Gliders	Section Insulator, without gliders for Non-Bridging application
Voltage (Volts)	Volts	NU	0		The maximum voltage for the insulator
Weight (Kilograms)	Kilograms	NU	2		The unit weight of the insulator

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Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
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

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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
- Asset Naming Convention Document - CRL1-XR1-Z3-ADDSD-CR001-50413

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8 Crossrail Technical Approvals

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

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