ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L75533 – VARIABLE SPEED DRIVES

Learning Legacy Document

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6.0	04-May-2016	[redacted]	[redacted]	[redacted]	Class name change Attributes removed Attributes added

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1 Introduction

1.1 Asset Details

Class Code:	L75533
Class Name:	Variable Speed Drives
Class Lineage:	Construction Products>Services>Climate control plant and equipment (HVAC)>Measuring, detection and control devices>Other HVAC Control Devices>Variable Speed Drives

1.2 Description

Variable Speed Drives (VSD), or Inverters, enable speed control of electric motors by changing the frequency (Hz) and voltage output of electricity to devices such as motors, pumps, fans, etc. Inverters used for other purposes (e.g. UPS) are outside the scope of this document.

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)

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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).

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
Input Voltage (Volts)	Volts	NU	0		The input voltage
Continuous Power Rating (kW)	kW	NU	2		Continuous power that can be safely dissipated by the device
Depth (Metres)	Metres	NU	2		Depth of the device
Height (Metres)	Metres	NU	2		Vertical length from floor
Maximum Ambient Temperature (Degrees Celsius)	Degrees Celsius	NU	2		Ambient temperature
Maximum Frequency (Hertz)	Hertz	NU	0		Maximum output frequency permitted by design
Maximum Power Rating (kW)	kW	NU	2		Maximum power that can be safely dissipated by the device
Weight (Kilograms)	Kilograms	NU	2		Total device weight
Width (Metres)	Metres	NU	2		Cross sectional horizontal length

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)

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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 - 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]	Lead Mechanical & Electrical Plant (MEP) Engineer	19-Sep-2014

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