ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L752293 – TRACE HEATING ELEMENT

Learning Legacy Document

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1 Introduction

1.1 Asset Details

Class Code:	L752293
Class Name:	Trace Heating Element
Class Lineage:	Construction Products>Services>Climate control plant and equipment (HVAC)>Transformation and conversion of energy>Electric heaters>Other electric heaters>Trace Heating Element

1.2 Description

Electric trace heating is a system used to maintain or raise the temperature of pipes and vessels. Trace heating takes the form of an electrical element run in physical contact along the length of a pipe for the purpose of maintaining the temperature of heated water or protect it from frost in the case of chilled water. The temperature sensor device is treated separately as L755243 Temperature Sensor

Every pipe or vessel is subject to heat loss or frost when its temperature is greater than ambient temperature or in an environment of cold temperature. Thermal insulation reduces the heat loss but does not eliminate it and protects it from frost damage. Trace heating is used to replace the heat that is lost to atmosphere. If the heat replaced matches the heat lost, temperature will be maintained.

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

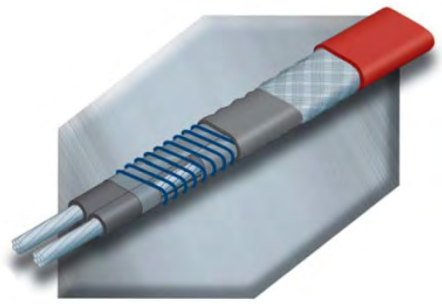
Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031) in the following format:

<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 of the unit
Length (Metres)	Metres	NU	2		The total length of the trace heating tape
Operating Temperature Maximum (Degrees Celsius)	Degrees Celsius	NU	2		The maximum operating temperature of the trace heating
Operating Temperature Minimum (Degrees Celsius)	Degrees Celsius	NU	2		The maximum operating temperature of the trace heating
Output Power (Watts)	Watts	NU	2		The manufacture rated
Self Regulating		PD		Yes No	Is the heating self regulated

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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