



Standard: General Template Labelling Standard for Distribution Equipment

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The following positions shall be consulted if an update or review is required:	
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1 PURPOSE

The purpose of this document is to provide a standard general template for consistency in labelling of distribution primary equipment.

2 APPLICATION

This Standard covers all labelling to be secured to distribution primary equipment on Horizon Power's distribution network and represents the minimum requirements applicable to all labels applied to the distribution primary equipment.

3 NORMATIVE REFERENCES

For the purposes of this standard the following apply:

3.1 Abbreviations

- 1) CAPT: Capacitor
- 2) CBOX: Control Box
- 3) CBHV: MV Circuit Breaker
- 4) CBLV: LV Circuit Breaker
- 5) DDOF: Drop Out Fuse
- 6) DPTS: Pole Top Switch
- 7) DRMU: Ring Main Unit
- 8) DSUB: Distribution Substation
- 9) DTTX: Distribution Transformer
- 10) EASW: Earth Switch
- 11) NMTR: Medium Voltage Customer Metering Unit
- 12) FDIS: Fuse Disconnecter LV
- 13) FLIN: Fault Indicator
- 14) FUSW: Fuse Switch
- 15) GIS: Horizon Power's Geographic Information System
- 16) HVDI: MV Disconnecter
- 17) ISTX: Isolating Transformer
- 18) LUMI: Luminaire
- 19) LV: Low Voltage <1000 volts ac
- 20) LVDI: Low Voltage Disconnecter
- 21) LVFM: Low Voltage Distribution Frame
- 22) SPS: Standalone Power System
- 23) MV: Medium Voltage >1000 volts ac; <36 000 volts ac
- 24) PILL: Pillar (used for mini and universal pillars and wall-mounted boxes)

- 25) POLE: Pole
- 26) REAC: Reactor
- 27) RECL: Recloser
- 28) RETX: Voltage Regulator
- 29) SURD: Surge Diverter
- 30) SECT: Sectionaliser
- 31) SLCB: Street Light Control Box
- 32) SWTC: Switch Disconnecter
- 33) WAER: Western Australian Electrical Requirements
- 34) FUSV: Fusesaver

3.2 Definitions

- 1) **Critical Information:** Information that needs to be prominently displayed in comparison to other information on a Label
- 2) **Equipment Number:** A unique identification number assigned to each item in GIS/Ellipse and 'PowerOn Fusion'
- 3) **Label:** An inscribed board, plaque or other delineated space on which a combination of words and/or symbols is used to identify a piece of equipment.
- 4) **SPS:** Standalone Power System
- 5) **PowerOn Fusion:** Human Machine Interface System for SCADA
- 6) **RMU:** Ring Main Unit
- 7) **SCADA:** Supervisory Control and Data Acquisition
- 8) **Sign:** An inscribed board, plaque or other delineated space on which a combination of legend and/or symbolic shape is used to convey a message.

3.3 Standards

The following documents contain provisions that, through reference in the text, constitute requirements of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the documents listed below. Information on currently valid national and international standards can be obtained from the Information Centre and Engineering Department at Bentley.

Table 1: List of Applicable Standards

STANDARD	DESCRIPTION
AS 1319	Safety signs for the occupational environment
AS 2067	Substations and high voltage installations exceeding 1 kV AC
AS/NZS 3000	Wiring Rules
WAER	Western Australian Electrical Requirements

4 RESPONSIBILITIES

The fixing of permanent labels is the responsibility of the equipment installer. However, the commissioning officer must identify and confirm the presence and correctness of all labels fitted to distribution equipment. No equipment as specified in this standard shall be commissioned and placed into service without permanent labels installed.

The maintenance of labels is the responsibility of the relevant regional maintenance power systems officers; however the switching operator must identify and confirm the presence and correctness of all labels fitted to distribution primary equipment at the time of switch operation.

The installer has the responsibility of ensuring that information included in a label can be interpreted by others, particularly for operators that do not have local knowledge of the area. If the installer deems that the information provided by the standard format is insufficient for a particular asset, it is the installer's responsibility to add further information in an appropriate manner or to seek advice.

5 GENERAL REQUIREMENTS

Equipment labels are used to identify plant and also to assist operators in the field during switching and incident responses.

Distribution primary equipment shall be legibly and indelibly labelled to clearly identify the equipment, what it is connected to, and where applicable indicate the portion of the electrical installation that it controls.

Labelling shall be located on or adjacent to the equipment, in a position adjacent to the means of operation. Where access is provided to equipment at the side or rear, such labelling shall also be located on a fixed portion at the alternate location.

The following represents the minimum requirements for material to be used for distribution primary equipment labels.

5.1 Material

The labels shall be capable of being adhered or fastened to any smooth, clean surface inclusive of wood, metalwork, and concrete. Details are:

- 1) Yellow vinyl adhesive-backed tape with a minimum of 10 years' adhesiveness.
- 2) Minimum outdoor life (UV tolerant) of 10 years and remain legible.
- 3) Must provide for the text to have a viewing distance of 6 metres as per AS 1319.
- 4) Up to four lines of text, aerial bold type.
- 5) Length is dependent on entered text.

5.2 Graffiti Resistance

Labels shall have a graffiti resistant laminate or coating applied for environments where graffiti may be applied.

5.3 Housekeeping Rules

- Where a location is provided for a referenced asset, the 'at' @ symbol can be used to improve readability as often the address is provided with other details.
- Where a referenced asset shares the same site as the asset being labelled, the referenced asset's location can simply be 'local'.
- If there is space in a label, the installer can include an upstream isolation point with the use of the word 'VIA' if preferred.
- Do not use business names for locations as business names are likely to change over the life of the asset.
- If a lot or street number is not signed or available at the site, the label must include further information that will enable operators to locate the referenced asset e.g. Brockman Park, High School, Hospital.
- Addresses in locations shall have the lot number shown by including an 'L' in front of the number with no space between, and then the house number and street name following a comma (e.g. *L100, 2 Smith St.*)
- If a pole rural number is large and does not fit in one line using 13mm text, multiple lines may be used with the final line having the largest text.
- If a label contains all adequate information and there is room to spare using the specified text sizes, the text sizes may be increased to fill the label so long as the text sizes remain in proportion to the sizes specified.

5.3.1 ***Label Size, Formatting & Colour***

All labels shall have black text on a yellow background and must also have a thin frame border.

Standard labels size shall be with minimum:

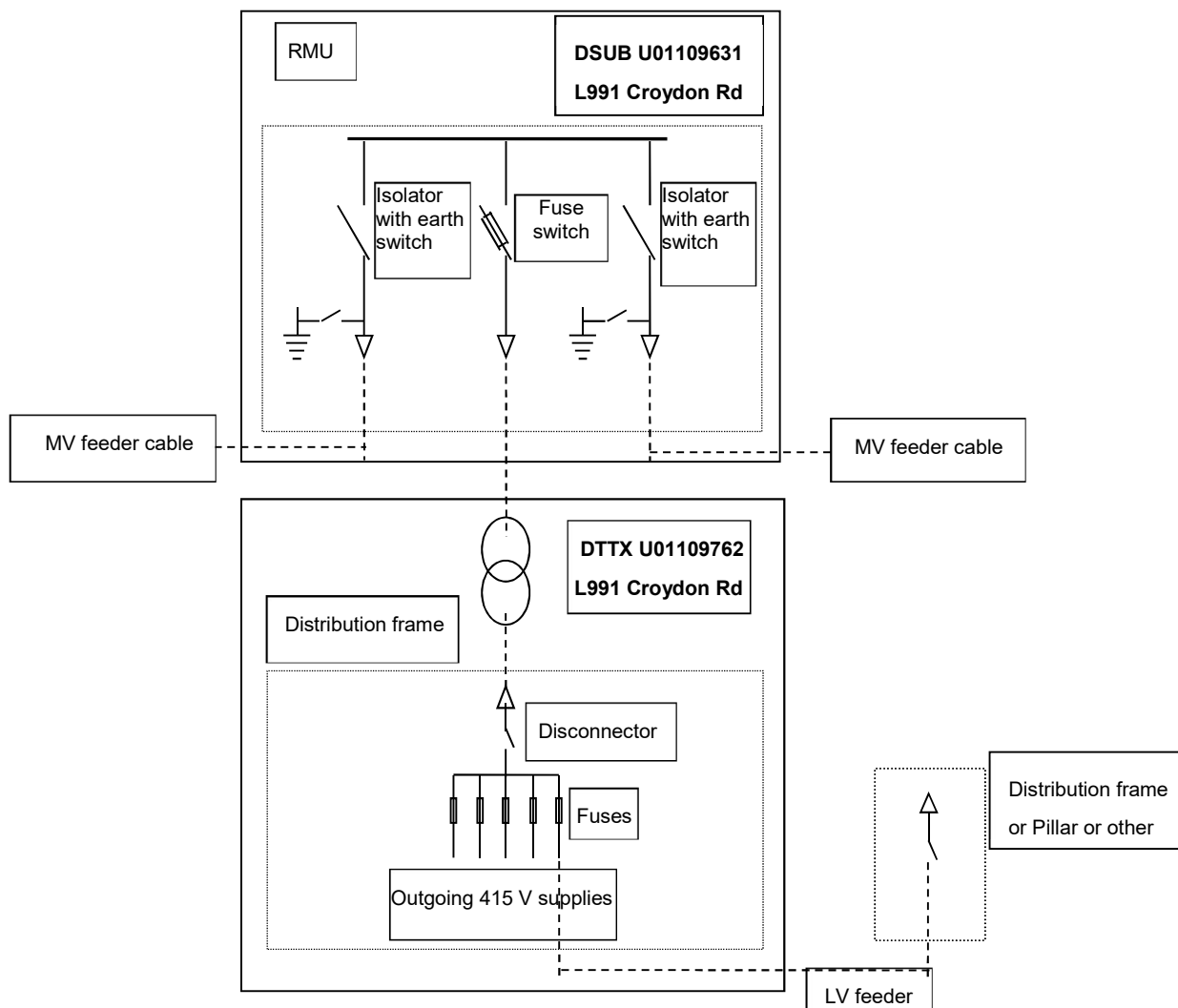
- 50 mm roll width
- 13 mm font size for lines with critical information
- 7 mm font size for other lines.

6

GROUND-MOUNTED SYSTEM EQUIPMENT

All labelling shall be affixed directly to the equipment.

Figure 1 – Schematic Diagram of a typical underground network.



The schematic diagram of a typical underground network has been used to derive the ground-mounted equipment labels including the following:

- 1) Distribution Substations
- 2) Distribution Transformers
- 3) Metering Transformers
- 4) Voltage Regulators
- 5) Fault Indicators
- 6) Isolators or Switch Disconnectors
- 7) Fuse switches
- 8) LV Distribution frames

- 9) Transformer disconnectors
- 10) LV disconnectors
- 11) Fuse disconnectors
- 12) Universal Pillars
- 13) Streetlights
- 14) Streetlight control boxes

Labels shall be attached to the equipment as indicated in the following sections.

6.1 Distribution Substations – Ground Mounted

Distribution substations are representative of a group of assets inclusive of a distribution transformer or high voltage switchgear. A substation label shall be used where there is a physical enclosure to which it can be attached. If a non-enclosed distribution substation consists of only ground-mounted assets which are individually identified with a label, then a substation label is not required.

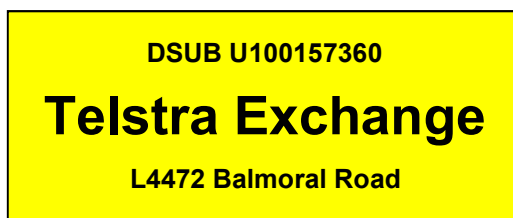
A substation shall be primarily identified with the abbreviation DSUB followed by a system-generated number. In addition, the name of the distribution substation and the location address shall also be included.

Labels for distribution substations shall have a roll width of 50mm and be of the following format:

Table 2 - Ground mounted substation label format.

Line 1	[DSUB] and [System-generated number]	Text: 7mm
Line 2	[Substation name]	Text: 13mm
Line 3	[Location]	Text: 7mm
Line 4	Space	Text: 7mm

Figure 2 – Distribution substation example label.



6.1.1 Label Location - Brick Enclosures

Where the substation enclosure has a door, the label shall be fitted at a height of approximately 1.8 m above the finished floor level, on the inside of the door. An additional label may be fitted at a height of approximately 1.8 m above the finished floor level, on the outside of the door.

Where the doors are removable, the label shall be fitted inside the substation, adjacent to the doors and on the same face of the substation as the doors. Alternatively the label may be placed inside the substation at a conspicuous location in full view of the operator.

Figure 3 – Brick enclosure substation.



6.1.2 Label Location - Non-brick enclosures

This may include cyclone or sheeted perimeter fencing. Where the substation enclosure has a door, the label shall be fitted at a height of approximately 1.8 m above the finished floor level on the outside of the door, otherwise on the outside of the fence. An additional label shall be fitted inside the substation at a conspicuous location in full view of the operator.

6.3 Distribution Transformers – Ground Mounted

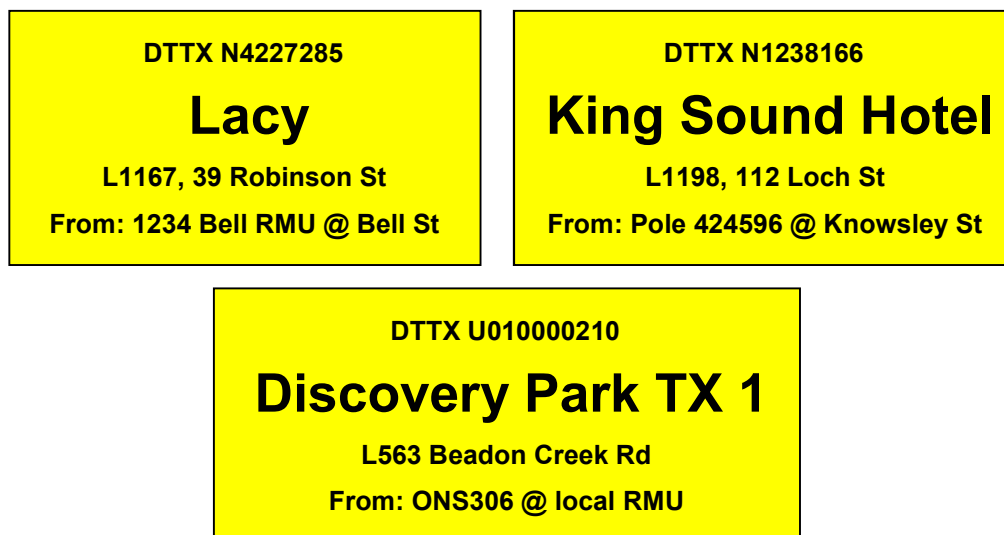
A ground-mounted transformer shall be primarily identified with the abbreviation DTTX, followed by a system-generated number. The substation name is displayed in the second line with the location of the transformer in the third line. Details of the supplying asset and location are included in the fourth line.

Labels for ground-mounted distribution transformers shall have a roll width of 50mm and be of the following format:

Table 3 - Ground mounted distribution transformer label format.

Line 1	[DTTX] and [System-generated number]	Text: 7mm
Line 2	[Substation name]	Text: 13mm
Line 3	[Location]	Text: 7mm
Line 4	[From] and [Switch name and Asset name] for and RMU switch or [Pole number] and, [Location]	Text: 7mm

Figure 4 – Distribution transformer example labels.



6.3.1 Label Location - Brick buildings, Brick compounds, or Non-brick enclosures

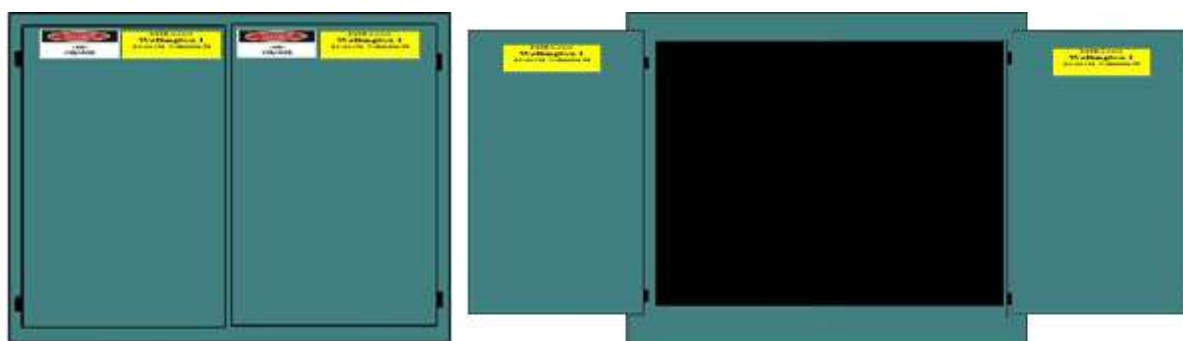
Distribution transformers located in brick buildings, brick compounds, or non-brick enclosures are free standing. There may be more than one transformer in any one

substation. As such, the transformer label shall be fitted to the transformer tank, adjacent to the transformer nameplate.

6.3.2 ***Label Location - Ground Mounted Transformers (standalone)***

Access to the nameplate of ground-mounted transformers located inside kiosks is not readily available. Therefore labels shall be fitted to the inside and outside of the doors to the LV and HV compartments. The label sizes in the figure below are only informative; the proper label sizes shall be used.

Figure 5 – Ground-mounted transformer label positions.



6.4 Metering Units – Ground Mounted

A ground-mounted metering unit shall be primarily identified with the abbreviation NMTR, followed by the system-generated number. Its name and physical address is also included. In addition to this, the equipment number and location address from which the metering unit is supplied is also included.

Labels for ground-mounted metering units shall have a roll width of 50mm and be of the following format:

Table 4 - Ground mounted metering unit label format.

Line 1	[NMTR] and [System-generated number]	Text: 7mm
Line 2	[Substation name]	Text: 13mm
Line 3	[Location]	Text: 7mm
Line 4	[From] and [Switch name and Asset name] for and RMU switch or [Pole number] and, [Location]	Text: 7mm

Figure 6 – Ground-mounted metering transformer example label.



The label shall be placed on the front panel of the metering unit, in full view of the operator.

6.6 Voltage Regulator – Ground Mounted

A voltage regulator shall be primarily identified with the abbreviation RETX, followed by the system-generated number. The name is included in the second line and the location of the regulator is included in the third. In addition to this, the details and location from which the regulator is supplied is also included.

Labels for voltage regulators shall have a roll width of 50mm and be of the following format:

Table 5 - Ground mounted voltage regulator label format.

Line 1	[RETX] and [System-generated number]	Text: 7mm
Line 2	[Name]	Text: 13mm
Line 3	[Location]	Text: 7mm
Line 4	[From:] and [Switch name and Asset name] for and RMU switch or [Pole number] and, [Location]	Text: 7mm

Figure 7 – Voltage regulator label example.



The labels shall be placed on the exterior surface of the control panel door and the body of the tank (opposite the control panel but not on the cooling fins).

6.7 Fault Indicator – Relay & Flag Type

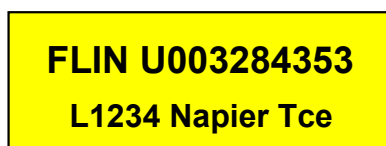
A fault indicator shall be primarily identified with the abbreviation FLIN, followed by a system-generated number. Its physical address is also included.

Labels for fault indicators shall have a roll width of 50mm and be of the following format:

Table 6 - Fault indicator label format.

Line 1	[FLIN] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	Spare	Text: 7mm
Line 4	Spare	Text: 7mm

Figure 8 – Typical Fault Indicator label



The label shall be fixed to the fault indicator or placed adjacent to the fault indicator, on the switchgear panel. The following examples in Figures 9.1 & 9.2 illustrate the placement of labels for fault indicators.

Figure 9.1 – ‘Relay and Flag Indicator’ label

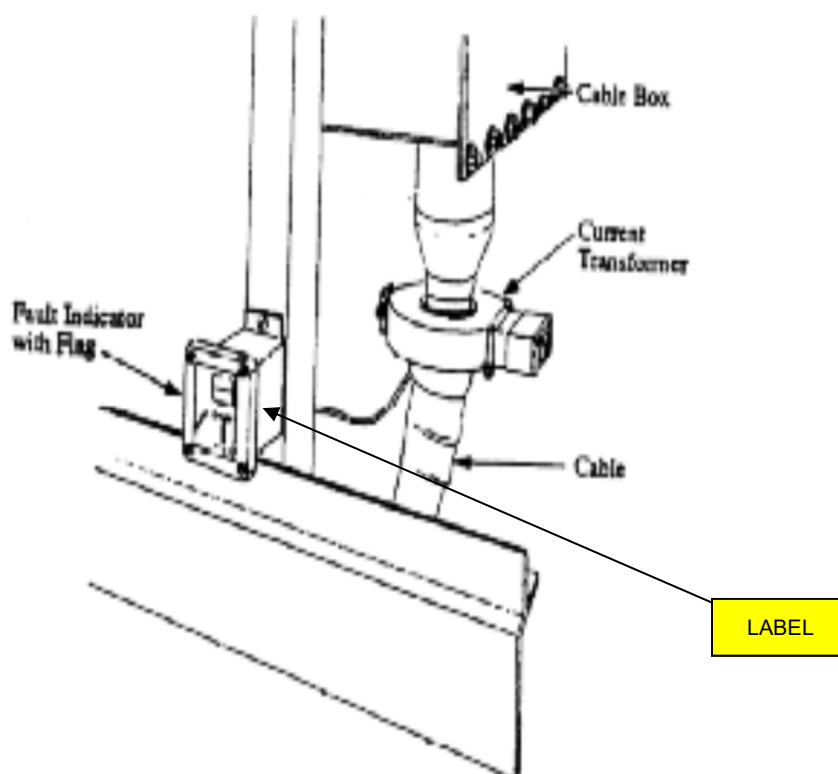
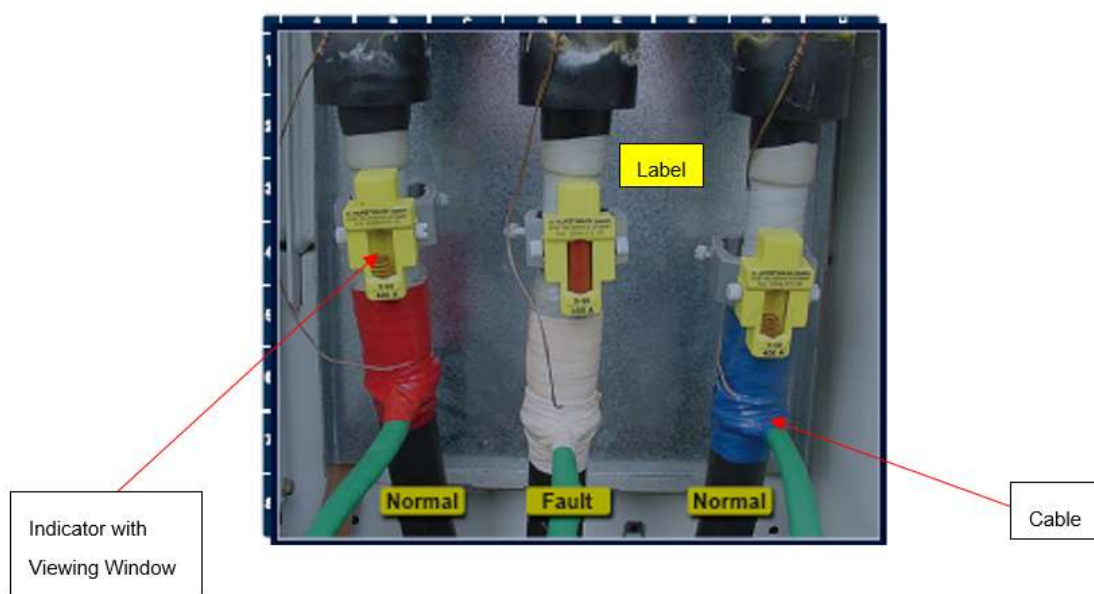


Figure 9.2 – ‘Horstmann Fluid type Fault Indicator’ label



6.8 Ring Main Unit (RMU)

A ring main unit shall contain the abbreviation DRMU followed by a system-generated number for identification with the system. The substation name is shown in the second line and details as well as the location of where the RMU is supplied from shall be included in the third and fourth line to assist operators.

Labels for RMUs shall have a roll width of 50mm and be of the following format:

Table 7 - RMU label format.

Line 1	[DRMU] and [System-generated number]	Text: 7mm
Line 2	[Substation Name] (This should not include the equipment abbreviation, but should include the town code if this is used in PoF)	Text: 13mm
Line 3	[From:] and [Feeder number + Substation name] for a zone substation or power station, or	Text: 7mm
Line 4	[Switch name and Substation name] for an RMU switch, or [Pole number] for a HV cable termination, and [Location]	Text: 7mm

Figure 10 – RMU label examples.

<p>DRMU U200477844</p> <p>ONSLOW SCHOOL</p> <p>From: ONS424 Hope RMU @ L608, Burt CI</p>	<p>DRMU S2883069</p> <p>JOHNSTON RMU</p> <p>From: Pole 424026 @ L1, 5 Rowan St</p>
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Labels shall be fixed to the inside and outside of both doors and also on the RMU front panel.

6.9 HV Switch Disconnecter – Ground Mounted Equipment

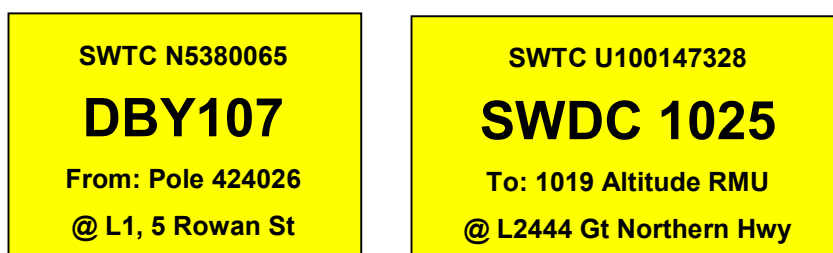
A switch disconnector shall contain the abbreviation SWTC followed by a system-generated number for identification with the system. Its name and details of where the switch's cable is connected to shall also be included in order assist operators. The location of the switch itself is not necessary as this is included in the label for the RMU.

Labels for HV switch disconnectors shall have a roll width of 50mm and be of the following format:

Table 8 - Ground mounted HV switch disconnector label format.

Line 1	[SWTC] and [System-generated number]	Text: 7mm
Line 2	[Switch name] Do not include any earth switch details if included in the name, for example 289/ES66 is to be labelled with its name as <i>SWDC 289</i> .	Text: 13mm
Line 3	[From/To:] and [Feeder number + Substation name] for a zone substation or power station, or	Text: 7mm
Line 4	[Switch name and Substation name] for an RMU or [Pole number] for a HV cable termination, and [Location]	Text: 7mm

Figure 11 – HV switch disconnector label examples.



In most cases the label shall be placed on the label placard, or front panel, of the RMU. The examples later in this section illustrate the placement of labels for switch disconnectors.

6.9.1.1 *Alstom RMU Label Locations*

The label shall be placed on the label placard on the front panel of the RMU.

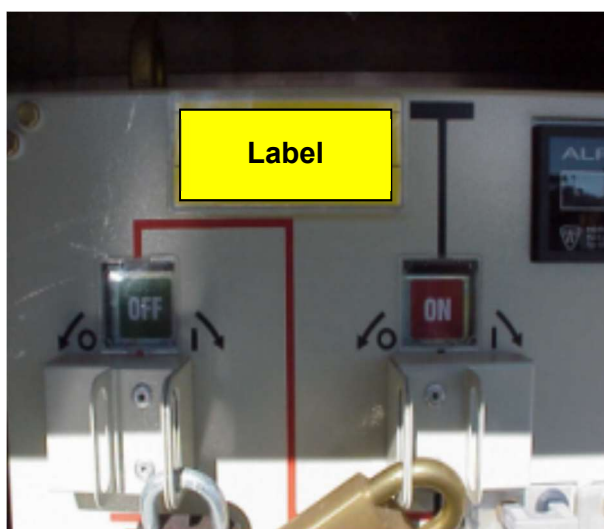
Figure 12 – Alstom RMU label location.



6.9.1.2 *F&G RMU Label Locations*

The label shall be placed on the label placard of the RMU.

Figure 13 – F&G RMU label location.



6.9.1.3 *Merlin Gerin RMU Label Locations*

The label shall be placed on the front panel of the RMU, adjacent to the operating mechanism.

Figure 14 – Merlin Gerin RMU label location.



6.9.1.4 *Long & Crawford RMU Label Locations*

The label shall be placed on the front panel of the RMU, adjacent to the operating mechanism.

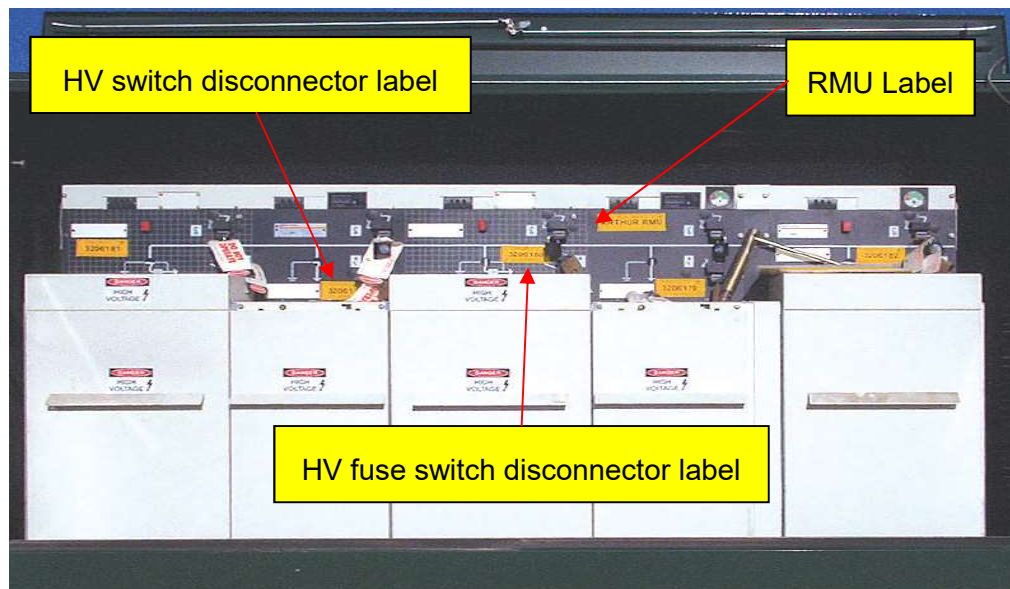
Figure 15 – 'Long & Crawford RMU' label



6.9.1.5 *Schneider RMU Label Locations*

The label shall be placed on the front panel of the RMU, in the designated area.

Figure 16 – ‘Schneider RM6 RMU’ label



6.10 HV Fuse Switch Disconnecter – Ground Mounted Equipment

A fuse switch disconnector shall contain the abbreviation FUSW followed by a system-generated number for identification with the system. Its name and details of where the fuse switch's cable is connected to is also included in order assist operators. The location of the fuse switch itself is not necessary as this is included in the label for the RMU.

In most cases the label shall be placed on the label placard, or front panel, of the RMU.

Labels for HV fuse switch disconnectors shall have a roll width of the 50mm and format shall be as follows:

Table 9 - Ground mounted HV switch disconnector label format.

Line 1	[FUSW] and [System-generated number]	Text: 7mm
Line 2	[Fuse switch name] Do not include any earth switch details if included in the name, for example 290/ES67 is to be labelled with its name as <i>FSSW 290</i> .	Text: 13mm
Line 3	[To:] and [Substation name] for a transformer or [Pole number] for a HV cable termination, and [Location]	Text: 7mm
Line 4		Text: 7mm

Figure 17 – Fuse switch disconnector label example.

<p>FUSW U200219020</p> <p>EHR2227</p> <p>To: ESP0071 TX</p> <p>@ L508, 1 Forrest St (Shopping Centre)</p>	<p>FUSW U100189446</p> <p>FSSW 1181</p> <p>To: Karratha Shire TX (local)</p>
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6.11 LV Distribution Frame

A low voltage distribution frame, shall be identified with the abbreviation LVFM, followed by a system-generated number. Its physical address is also included.

In most cases, labels shall be placed on the centre of both sides of each door.

Labels for LV distribution frames shall have a roll width of 50mm and be of the following format:

Table 10 - LV distribution frame label format.

Line 1	[LVFM] and [System-generated number] and [Substation Name] if applicable	Text: 13mm
Line 2	[Location] (Location to be included only if the LV kiosk is not located within a substation site.)	Text: 7mm
Line 3	[From:] and [Circuit Number + Substation name] for a distribution substation or	Text: 7mm
Line 4	[Abbreviation + system-generated number] for universal pillars standalone frames or [Pole number] for an LV cable termination, and [Location]	Text: 7mm

Figure 18 – LV Distribution Frame example label.



6.11.1.1 LV Distribution Frames in Kiosks, Label Locations

Where a distribution frame is located within a kiosk, labels shall be placed on the inside and outside of the kiosk door. The labels shall be placed on the centre of the door.

6.11.1.2 LV Distribution Frames in Wall Mounted Feeder Pillars, Label Locations

Where a distribution frame is located in wall-mounted boxes, labels shall be placed on the inside and outside of the kiosk door. The labels shall be placed in the centre of the door.

6.11.1.3 Freestanding LV Distribution Frames in Substations, Label Locations

Where a distribution frame is located in a substation and is freestanding, the label shall be fixed to the distribution frame and also placed on the inside of the substation door, at a height of approximately 1.5 m above the finished floor level and located just below the substation label. If more than one LV Frame exists in the substation, then each label must be fixed to the appropriate distribution frame.

6.12 LV Disconnecter – Ground Mounted Equipment

A LV disconnecter shall be primarily identified with the abbreviation LVDI, followed by a system-generated number for identification with the system. Its physical address is not necessary as this shall be included in the label for the LV frame or Modular Package Substation transformer kiosk. The circuit number as well as details of the connected asset of the outgoing cable shall be included to assist operators.

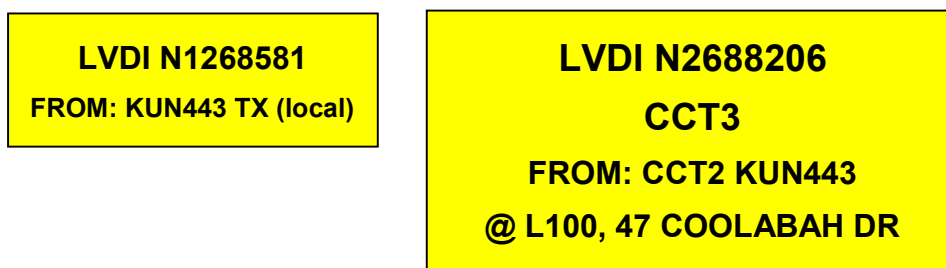
In most cases the label shall be placed on the transformer disconnecter label placard or on the disconnecter panel. More specific details for label placements are given later in this section.

Labels for LV disconnecters in ground-mounted equipment shall have a roll width of 50mm and be of the following format:

Table 11 - Ground mounted LV disconnecter label format.

Line 1	[LVDI] and [System-generated number]	Text: 4mm
Line 2	[Circuit number] (This line is not required for LV disconnectors used as a transformer isolator)	Text: 6mm
Line 3	[From/To:] and [Circuit Number + Substation Name] for substations or [Abbreviation + system-generated number] for pillars or standalone frames, or [Customer Switchboard Name] for consumer mains, and [Location]	Text: 4mm
Line 4		Text: 4mm

Figure 19 – Example LV disconnecter label examples.



6.12.1.1 *Pronutec Disconnecter*

The label shall be placed on the disconnecter top space, as shown:

Figure 20 – ABB LV disconnecter label location example.



6.12.1.2 *ABB Isolator (Disconnecter) Label Location*

The label shall be placed on the transformer disconnecter label placard, as shown:

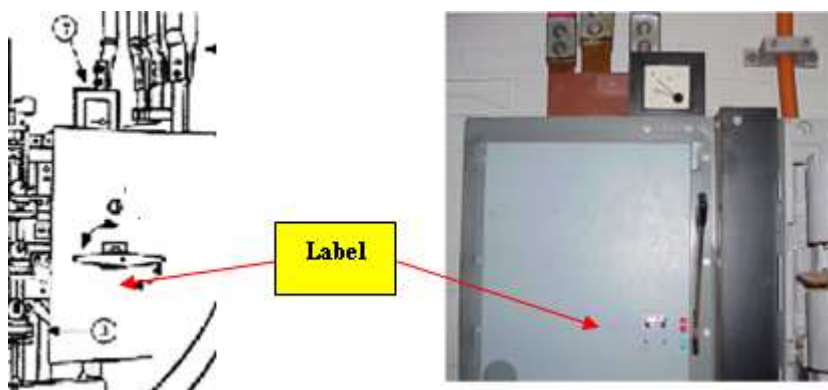
Figure 21 – ABB LV disconnecter label location example.



6.12.1.3 Lever Operated Isolator (Disconnectors) Label Location

The label shall be placed on the transformer disconnector panel, as shown:

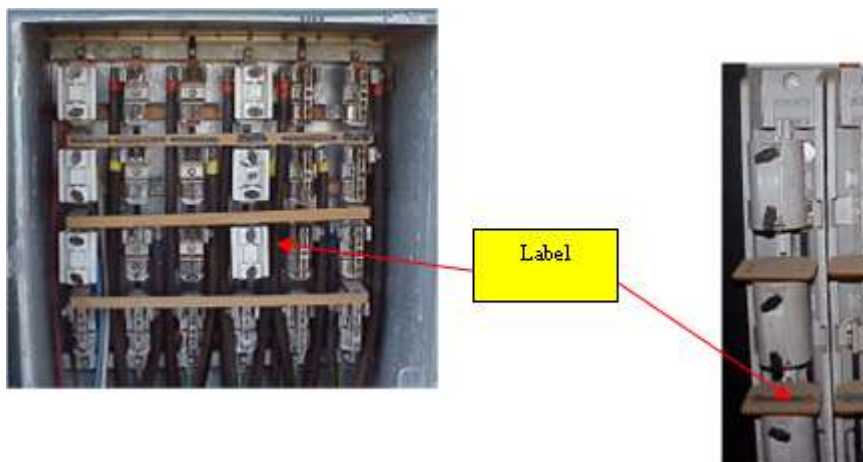
Figure 22 – Lever Operated Isolator label location example.



6.12.1.4 Extractable Links Label Location

The label shall be placed on the middle transformer disconnector label placard, as shown.

Figure 23 – Extractable links example label location.



6.13 LV Fuse Disconnecter – Ground Mounted Equipment

A low voltage fuse disconnecter shall be primarily identified with the abbreviation FDIS, followed by a system-generated number for identification with the system. The circuit number (fuse ways numbered from left to right) and also the 'to/from' information for the terminated cable is included to assist operators.

In most cases the label shall be placed on the label placard provided with the LV fuse disconnecter. Examples of label locations are provided later in this section.

The format of the label shall be of the table below:

Table 12 - Ground mounted LV fuse disconnecter label format.

Line 1	[FDIS] and [System-generated number]	Text: 4mm
Line 2	[Circuit number]	Text: 6mm
Line 3	[To:] and [Abbreviation + system-generated number] for pillars or stand-alone frames, or [Customer Switchboard] for consumer mains, and [Location]	Text: 4mm
Line 4		Text: 4mm

Figure 24 – Example LV fuse disconnecter label examples.

FDIS N1268584 CCT2 TO: POST OFFICE FRM @ L2227, 89 COOLABAH DR	FDIS N1268613 CCT1 TO: PILL S455055 @ L560, 106 COOLABAH DR
---	--

6.13.1.1 Pronutec Fuse Switch Label Location

The label shall be placed on the fuseswitch disconnecter label placard, as shown.

Figure 25 – Pronutec fuse switch example label location.



6.13.1.2 ABB Fuse Switch Label Location

The label shall be placed on the fuseswitch disconnecter label placard, as shown.

Figure 26 – Pronutec fuse switch example label location.



6.14 Universal Pillar

A universal pillar shall be primarily identified with the abbreviation PILL, followed by a system-generated number for identification with the system. Its physical address shall be given in the second line. The physical addresses of the equipment in which any LV mains cable is connected to are also included to assist operators.

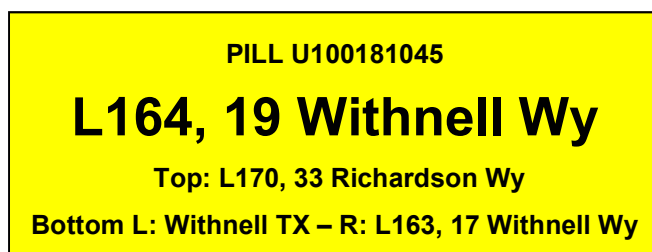
The lid of the universal pillar displays the words 'HORIZON POWER - DANGER ELECTRICAL CABLES' as per specification - 'Low Voltage Underground Distribution Pillars'.

Labels for universal pillars shall have a roll width of 50mm and be of the format below:

Table 13 - Universal pillar label format.

Line 1	[PILL] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	[Top:] and [Abbreviation + system-generated number] for pillars or stand-alone frames, or [Circuit Number + Substation name] for a distribution substation or [Pole Number] and [Location]	Text: 7mm
Line 4	[Bottom] and [Abbreviation + system-generated number] for pillars or stand-alone frames, or [Circuit Number + Substation name] for a distribution substation or [Pole Number] and [Location] for both left and right bars if applicable.	Text: 7mm

Figure 27 – Universal pillar label examples (continued on next page).



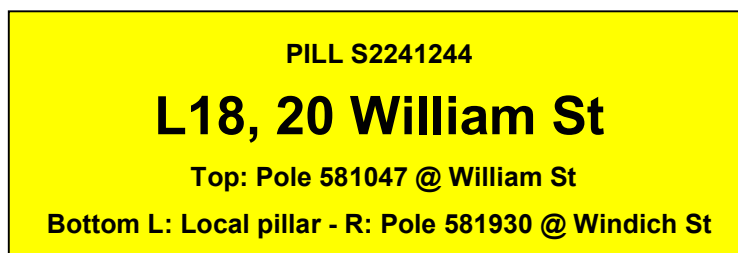


Figure 28 – Universal pillar label location example.



The label shall be placed on the top of the orange plastic covering, located inside the universal pillar. If preferred an additional label can be placed on the exterior of the universal pillar facing an area where it will be best visible, preferably on the road side of the pillar.

In addition, universal pillars functioning as normally-open points shall have a reflective red 'I' marking on the outer case of the pillar lid, to indicate the open point status. As open points are changed, the lid with the 'I' marking may move with the open point. The marking shall be placed on the roadside of the pillar. This marking is shown in the following diagram:

Figure 27 – Universal Pillar with normally-open point with 'I' marking.



Where required, and where the universal pillar has a LV disconnect or LV fuse disconnect fitted, a label may be fitted for these items as per Clause 6.13 and 6.14.

6.15 Mini Pillar

The lid of the mini pillar displays the words 'HORIZON POWER - DANGER ELECTRICAL CABLES' as per specification - 'Low Voltage Underground Distribution Pillars'. Refer also to Clause 7.3 for tagging of cables within pillars.

A mini pillar shall be primarily identified with the abbreviation PILL, followed by a system-generated number for identification with the system. The pillar's physical address is included in the second line.

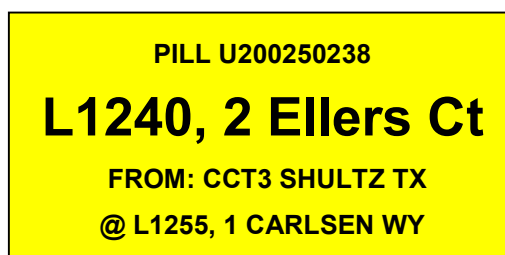
For pillars of an LV circuit supplied by an underground transformer, the supplying transformer name, circuit number and address shall be displayed on the third and fourth lines to assist operators.

Labels for mini pillars shall have a roll width of 50mm and where the pillar is supplied by a ground-mounted transformer, the format of the label shall be that of the table below:

Table 14 - Mini pillar label format for underground system.

Line 1	[PILL] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	[From:] and [Circuit Number + Substation name] for the distribution substation and [Location]	Text: 7mm
Line 4		Text: 7mm

Figure 29 – Example mini pillar label for LV circuit with ground-mounted transformer.



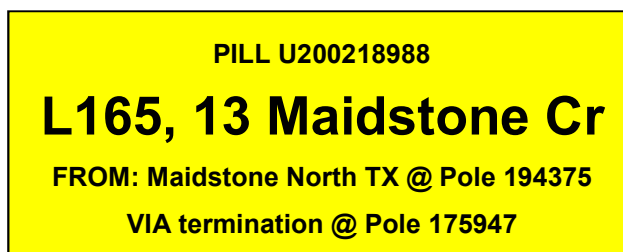
For mini pillars of an LV circuit supplied by a pole-mounted transformer, the transformer name and pole number shall be displayed in the third line to assist operators. The final line shall contain the pole number at which the LV section connects to the overhead network.

Where the pillar is supplied by a pole-mounted transformer, the format of the label shall be that of the table below:

Table 15 - mini pillar label format for an overhead system.

Line 1	[PILL] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	[From:] and supplying transformer [Name] and [Pole Number]	Text: 7mm
Line 4	[VIA] cable termination [Pole number]	Text: 7mm

Figure 30 – Typical Mini Pillar label for LV network with pole-mounted transformer.



The label shall be placed on the exterior of the pillar facing an area where it will be best visible, preferably on the road side of the pillar.

6.16 Streetlight Poles & Luminaires

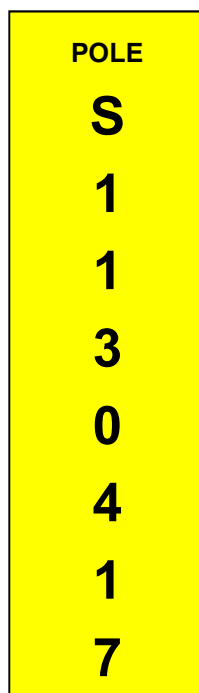
A streetlight standard pole is to be primarily identified with the abbreviation POLE, followed by a system-generated number shown vertically. The label shall be affixed to the pole at a height of 1.8 metres.

Labels for streetlight poles and shall have a roll width of 50mm and be that of the format below:

Table 16 - Streetlight pole label format.

Line 1	[POLE]	Text: 7mm
	[System-generated number] (shown vertically)	Text: 13mm

Figure 31 – Streetlight pole label example.



Luminaire numbers on the streetlight pole may also be included as a separate label, these are to include the abbreviation LUMI followed by a system-generated number in the first line. The second line shall contain the streetlight number if available. Luminaire labels shall be affixed to the pole beneath the pole label.

The label format for a streetlight pole label shall be that of the table below:

Table 17 - Streetlight pole luminaire label format.

Line 1	[LUMI] and [System-generated number]	Text: 7mm
	[Luminaire number]	Text: 13mm

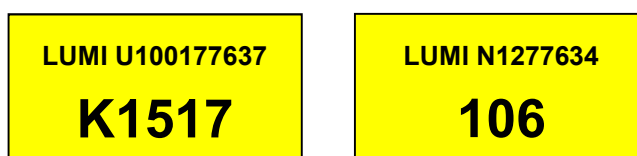


Figure 32 – Streetlight luminaire label examples.

6.17 Wall Mounted Box

A wall-mounted box shall be primarily identified with the abbreviation PILL, followed by a system-generated number for identification with the system. The pillar's physical address is included in the second line.

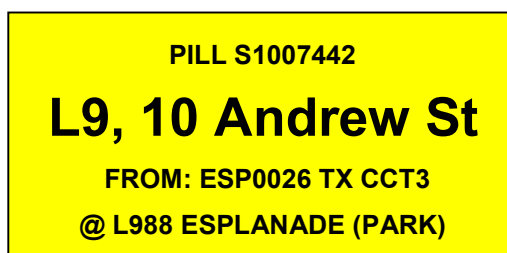
For wall-mounted boxes of an LV circuit supplied by an underground transformer, the supplying transformer name, circuit number and address shall be displayed on the third line to assist operators. The fourth line may be used for additional information such as upstream isolation point details etc. if preferred.

Where the wall-mounted box is supplied by a ground-mounted transformer, the format of the label shall be that of the table below:

Table 18 – Wall mounted box label format for underground system.

Line 1	[PILL] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	[From:] and supplying transformer [Substation name] and [Circuit Number] and [Location]	Text: 7mm
Line 4		Text: 7mm

Figure 33 – Typical wall-mounted box label for LV circuit with ground-mounted transformer.



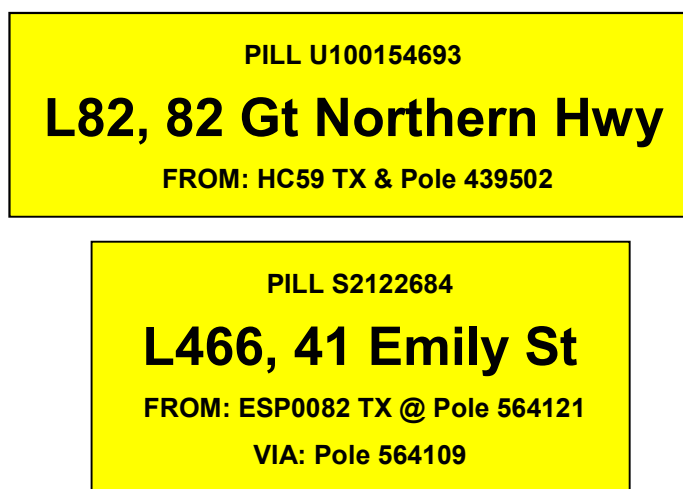
For wall-mounted boxes of an LV circuit supplied by an overhead transformer, the transformer name, pole number and pole location shall be displayed in the third line to assist operators. If the LV underground section terminates to a pole that is not shared by the supplying transformer, then this pole may be labelled in the fourth line. The pole numbers shall be the rural or short plant ID whichever is considered easiest to locate and identify the pole.

Where the wall-mounted box is supplied by an overhead transformer, the format of the label shall be that of the table below:

Table 19 - Wall mounted box label format for an overhead system.

Line 1	[PILL] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	[From:] and supplying [Substation name] and [Pole Number]	Text: 7mm
Line 4	[VIA] cable termination @ [Pole number]	Text: 7mm

Figure 34 – Typical wall-mounted box label for an LV circuit with pole-mounted transformer.



7 UNDERGROUND EQUIPMENT

Underground equipment generally does not have visibility of individual items from above ground.

Labelling shall have two components, one of the individual components within the underground portion and one allowing easy identification from above the ground.

This covers the following equipment

- 1) Un-metered supply pit
- 2) Underground cables
- 3) Underground supply pit
- 4) Underground transformers

7.1 Un-metered Supplies

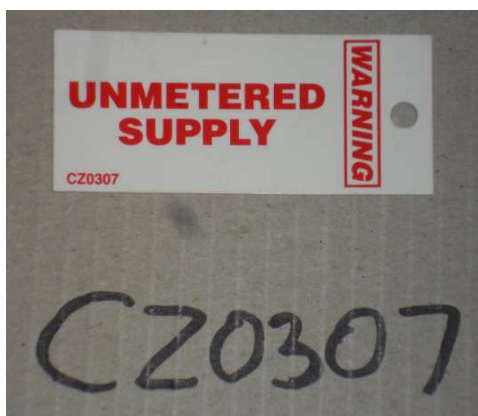
7.1.1 Pits

The concrete lid of the un-metered supply pit indicates the Horizon Power and customer cables as per standard – ‘Un-Metered Supply Standard’. Main power fuse inside the pit shall be tagged with a label “Unmetered Supply” – Stock Item No: CZ0307. No other labels are fixed to LV un-metered supply pits.

7.1.2 Pillars

The un-metered supply cable from a mini pillar shall be tagged with a label “Unmetered Supply” – Stock Item No: CZ0307.

Figure 35 – Unmetered supply label.



7.2 Underground Cables

In some cases a label displaying the words ‘Horizon Power – DANGER – Underground Electrical Cables in the Vicinity’ may be required (ref Horizon Power manuals ‘Underground Distribution Schemes’, ‘Single Phase Underground Rural Supply’, and ‘Single Phase Underground Distribution System’. This label is commonly placed on a marker post in close proximity to the cable.

No other labelling shall be fixed to underground cables.

7.3 Underground Supply Pit

The concrete lid of the underground supply pit displays the words 'HORIZON POWER - DANGER ELECTRICAL CABLES' as per specification – 'Low Voltage Underground Distribution Pits'.

An underground supply pit shall be primarily identified with the abbreviation PITT followed by a system-generated number.

For an underground supply pit, the format of the label shall be that of the table below:

Table 20 - Underground supply pit label format.

Line 1	[PITT] and [System-generated number]	Text: 7mm
Line 2	[Location]	Text: 13mm
Line 3	[From:] and [Abbreviation + system-generated number] for pillars or stand-alone frames, or [Circuit Number + Substation name] for a distribution substation, or [Pole Number] and [Location]	Text: 7mm
Line 4	[To:] and [Abbreviation + system-generated number] for pillars or stand-alone frames, or [Circuit Number + Substation name] for a distribution substation or [Pole Number] and [Location]	Text: 7mm

Figure 36 – Typical underground supply pit label examples.

<p>PITT S2366778</p> <p>Lot 22, 43 Foy St</p> <p>From: CCT1 ESP0037 @ 659, 31 Foy St</p>	<p>PITT U200485171</p> <p>Lot 160, 9 Goldfields Rd</p> <p>From: Pole 567421 @ Goldfields Rd</p>
---	--

The label shall be tagged on to the neutral of the incoming cable, or neutral connector.

7.3.1 **Customer Service Cable ID Tag**

The tag shall be used to identify customer services within underground pits and pillars.

Single phase services are tagged on the phase of the service cable with the corresponding house number clearly marked on the tag using a permanent marker pen.

Three phase services are tagged on the red phase of the service cable and similarly the house number is included on the tag.

Figure 37 – Customer Service Cable ID Tag label example.



8 OVERHEAD SYSTEM EQUIPMENT

This section covers the following equipment:

- 1) Pole-top switches
- 2) Load break switches
- 3) Drop-out fuses
- 4) Distribution transformers
- 5) Metering units
- 6) Voltage regulators
- 7) Reclosers
- 8) Fault indicators
- 9) Surge diverters
- 10) Capacitors
- 11) Reactors
- 12) Sectionalisers
- 13) Isolators (HV and LV)
- 14) Streetlights
- 15) Streetlight control boxes
- 16) Fusesavers

8.1 Poles

8.1.1 *Warning sign for poles with high voltage*

High Voltage poles require the fitting of a 'HORIZON POWER DANGER HIGH VOLTAGE' warning sign (stock number CZ0230).

The sign shall be positioned directly on the pole surface. The label shall be positioned approximately to 1.8 m above ground level and located for viewing on the best approachable side of the pole.

Figure 38 – Warning label for poles with high voltage.



8.1.2 Pole Labelling

Where the surface of the pole is not appropriate to fix a sign or label, the label may be affixed to a plate (stock item no: CZ5005) and the plate shall be fixed to the pole surface using silicon sealant, Sikaflex sealant or liquid nails.

Figure 39 – Label plate CZ5005.



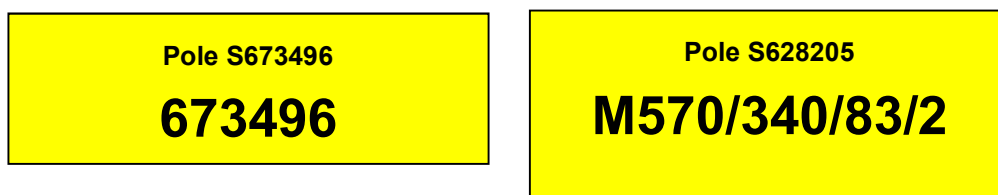
A pole is to be primarily identified with the abbreviation POLE, followed by a system-generated number. The pole number shall be placed either in a vertical or horizontal position appropriate for the type of pole and the surface area. If the rural number of a pole is large and does not fit it one line, multiple lines may be used with the final line having 13mm font.

Labels for poles shall have a roll width of 50mm and when labelled horizontally, the format shall be of that the table below:

Table 21 - Pole label horizontal format.

Line 1	[POLE] and [System-generated number]	Text: 7mm
Line 2	[Pole Number]	Text: 13mm

Figure 40 – Distribution pole horizontal label examples.



When labelled vertically, the format shall be of the table below:

Table 22 - Pole label vertical format.

Line 1	[POLE] and [System-generated number]	Text: 7mm
Line 2	[Pole Number] (displayed vertically)	Text: 13mm

Figure 41 – Distribution pole vertical label examples

Pole S673496	Pole S628205
6	M
7	9
3	0
4	0
9	/
6	2
	0

8.1.3 Pole Equipment Label Positioning

Pole equipment labels shall be attached to the danger plate below the pole label or to the pole below the danger plate.

8.2 Pole Top Switch

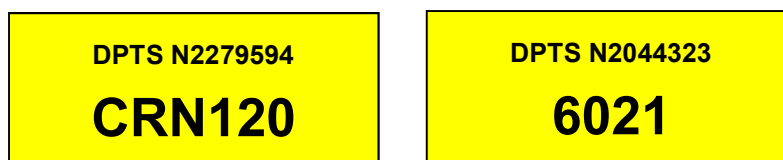
Pole top switches shall be labelled with the acronym DPTS followed by a system-generated number for identification with the system. The name or number of the switch shall be contained in the second line.

Labels for pole top switches shall have a roll width of 50mm and the format shall be that of the table below:

Table 23 - Pole top switch label format.

Line 1	[DPTS] and [System-generated number]	Text: 7mm
Line 2	Switch [Name] or [Number]	Text: 13mm

Figure 42 – Pole top switch label examples.



8.3 Drop Out Fuse

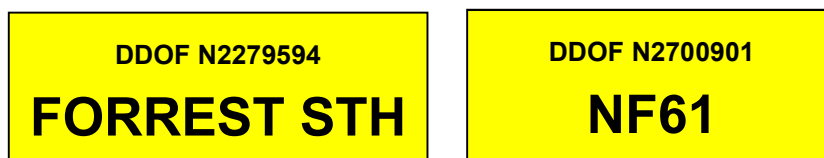
Drop-out fuses may be labelled with the acronym DDOF followed by a system-generated number for identification with the system. The name or number of the drop out fuse/s shall be contained in the second line.

Labels for drop out fuses shall have a roll width of 50mm and the format shall be that of the table below:

Table 24 - Drop out fuse label format.

Line 1	[DDOF] and [System-generated number]	Text: 7mm
Line 2	Drop out fuse [Name] or [Number]	Text: 13mm

Figure 43 – Drop out fuse label examples.



8.4 Fusesaver

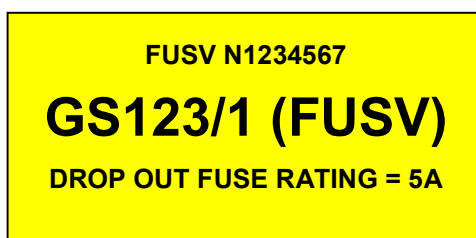
Fusesavers may be labelled with the acronym FUSV followed by a system-generated number for identification with the system. The name of the fusesaver associated with the area spur name and pole number shall be contained in the second line. The third line shall contain the drop out fuse rating.

Labels for fusesavers shall have a roll width of 50mm and the format shall be that of the table below:

Table 25 - Fusesaver label format.

Line 1	[FUSV] and [System-generated number]	Text: 7mm
Line 2	Fusesaver [Name]	Text: 13mm
Line 3	Drop Out Fuse Rating = []	Text: 7mm

Figure 44 – Fusesaver label example.



8.5 Distribution Transformer – Pole Mounted

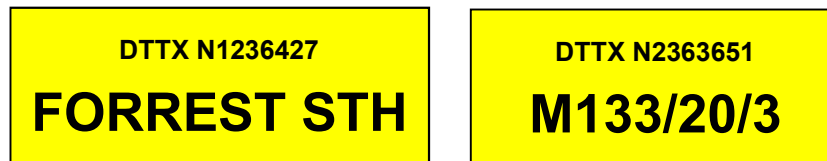
Distribution transformers shall be labelled with the acronym DTTX followed by a system-generated number for identification with the system. The name of the distribution transformer shall be contained in the second line. If the rural number of a pole is used for the transformer name and this number is large, multiple lines may be used with the final line having 13mm font.

Labels for pole mounted distribution transformer shall have a roll width of 50mm and the format shall be that of the table below:

Table 26 - Pole mounted transformer label format.

Line 1	[DTTX] and [System-generated number]	Text: 7mm
Line 2	Transformer [Name]	Text: 13mm

Figure 45 – Pole-mounted distribution transformer label examples.



8.6 Load Break Switch

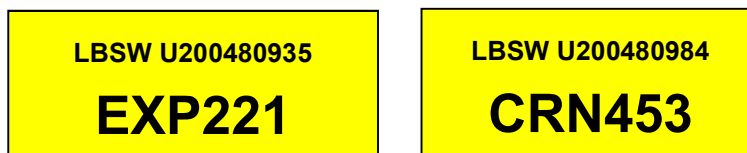
Load break switches shall be labelled with the acronym LBSW followed by a system-generated number for identification with the system. The name or number of the load-break switch shall be contained in the second line.

Labels for load break switches shall have a roll width of 50mm and the format shall be that of the table below:

Table 27 - Load break switch label format.

Line 1	[LBSW] and [System-generated number]	Text: 7mm
Line 2	Load Break Switch [Number]	Text: 13mm

Figure 46 – Load break switch label examples.



8.7 Recloser

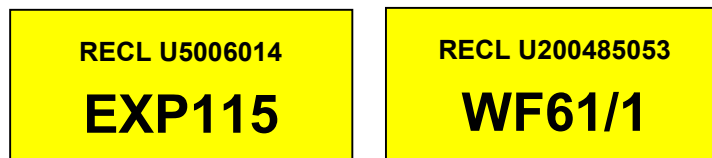
Reclosers shall be labelled with the acronym RECL followed by a system-generated number for identification with the system. The name or number of the recloser shall be contained in the second line.

Labels for reclosers shall have a roll width of 50mm and the format shall be that of the table below:

Table 28 - Recloser label format.

Line 1	[RECL] and [System-generated number]	Text: 7mm
Line 2	Recloser [Number]	Text: 13mm

Figure 47 – Recloser switch label examples.



8.8 HV Isolator – Pole Mounted

HV isolators may be labelled with the acronym HVDI followed by a system-generated number for identification with the system. The name or number of the HV disconnecter shall be contained in the second line.

Labels for pole-mounted HV isolators shall have a roll width of 50mm and the format shall be that of the table below:

Table 29 - Pole mounted HV disconnecter label format.

Line 1	[HVDI] and [System-generated number]	7mm
Line 2	HV isolator switch [Number]	13mm

Figure 47 – HV isolator label example.



8.9 LV Disconnecter – Pole Mounted

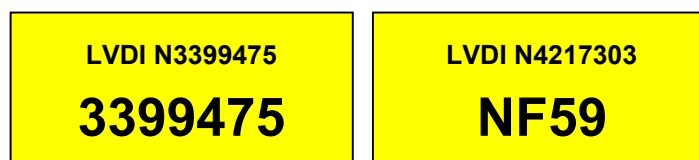
LV disconnectors may be labelled with the acronym LVDI followed by a system-generated number for identification with the system. The name of the LV disconnector shall be contained in the second line.

Labels for pole-mounted LV disconnectors shall have a roll width of 50mm and the format shall be that of the table below:

Table 30 - Pole mounted LV disconnector label format.

Line 1	[LVDI] and [System-generated number]	Text: 7mm
Line 2	[Name]	Text: 13mm

Figure 48 – LV disconnector label examples.



8.10 LV Fuse Disconnecter – Pole Mounted

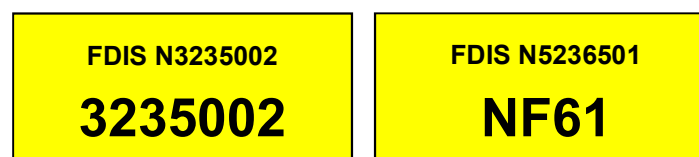
LV fuse disconnectors may be labelled with the acronym FDIS followed by a system-generated number for identification with the system. The name or number of the LV disconnector shall be contained in the second line.

Labels for pole-mounted LV fuse disconnectors shall have a roll width of 50mm and the format shall be that of the table below:

Table 31 - Pole mounted LV fuse disconnector label format.

Line 1	[LVDI] and [System-generated number]	Text: 7mm
Line 2	Sectionaliser [Name] or [Number]	Text: 13mm

Figure 49 – LV fuse switch disconnector label examples.



8.11 Sectionaliser

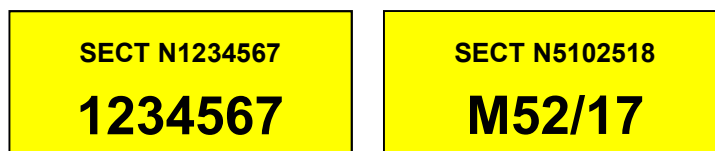
Sectionalisers may be labelled with the acronym SECT followed by a system-generated number for identification with the system. The name or number of the HV disconnecter shall be contained in the second line followed by the location or pole rural number if available in the third line.

Labels for pole-mounted sectionalisers shall have a roll width of 50mm and the format shall be that of the table below:

Table 32 - Sectionaliser label format.

Line 1	[SECT] and [System-generated number]	Text: 7mm
Line 2	Sectionaliser [Name] or [Number]	Text: 13mm

Figure 50 – Sectionaliser label examples.



8.12 Metering Transformer – Pole Mounted

Metering transformers shall be labelled with the acronym NMTR followed by a system-generated number for identification with the system. The name of the metering transformer shall be contained in the second line, and the location in the third.

Labels for pole-mounted metering transformers shall have a roll width of 50mm and the format shall be that of the table below:

Table 33 - Pole mounted metering transformer label.

Line 1	[NMTR] and [System-generated number]	Text: 7mm
Line 2	Metering Transformer [Name] or [Number]	Text: 13mm
Line 3	[Location]	Text: 7mm

Figure 51 – HV isolator label example.



8.13 Fault Indicator – Pole Mounted

Fault indicators may be labelled with the acronym FLIN followed by a system-generated number for identification with the system. The name or number of the fault indicator shall be contained in the second line.

Labels for pole-mounted fault indicators shall have a roll width of 50mm and the format shall be that of the table below:

Table 34 - Pole mounted fault indicator label format.

Line 1	[NMTR] and [System-generated number]	Text: 7mm
Line 2	Fault indicator [Name] or [Number]	Text: 13mm
Line 3	[Location] or [Rural number] if available	Text: 7mm

Figure 52 – Pole mounted fault indicator label example.



8.14 Voltage Regulator – Pole Mounted

Voltage regulators shall be labelled with the acronym RETX followed by a system-generated number for identification with the system. The name of the fault indicator shall be contained in the second line.

Labels for pole-mounted voltage regulators shall have a roll width of 50mm and the format shall be that of the table below:

Table 35 - Pole mounted voltage regulator.

Line 1	[RETX] and [System-generated number]	Text: 7mm
Line 2	Voltage regulator [Name]	Text: 13mm

Figure 53 – Pole-mounted voltage regulator example.



8.15 Capacitor Bank

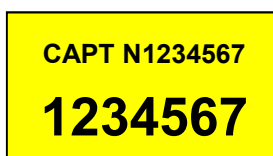
Capacitor banks shall may be labelled with the acronym CAPT followed by a system-generated number for identification with the system. The name of the capacitor bank shall be contained in the second line.

Labels for capacitor banks shall have a roll width of 50mm and the format shall be that of the table below:

Table 36 - Capacitor bank label format.

Line 1	[CAPT] and [System-generated number]	Text: 7mm
Line 2	Capacitor bank [Name]	Text: 13mm

Figure 54 – Capacitor bank label example.



8.16 Reactor – Pole Mounted

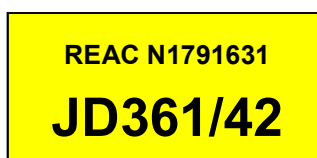
Reactors shall be labelled with the acronym REAC followed by a system-generated number for identification with the system. The name or number of the reactor shall be contained in the second line.

Labels for pole-mounted reactors shall have a roll width of 50mm and the format shall be that of the table below:

Table 37 - Pole mounted reactor label format.

Line 1	[REAC] and [System-generated number]	Text: 7mm
Line 2	Capacitor bank [Name] or [Number]	Text: 13mm

Figure 55 – Pole mounted reactor label example.



8.17 Luminaries – Pole Mounted

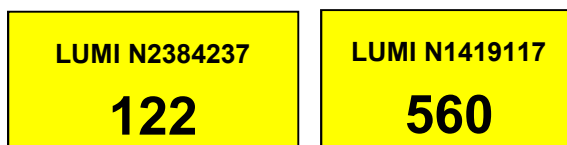
Pole-mounted luminaires shall be labelled with the abbreviation LUMI, followed by a system-generated number. The streetlight number shall be contained in the second line.

Labels for pole-mounted luminaires shall have a roll width of 50mm and the format shall be that of the table below:

Table 38 - Pole mounted luminaire label format.

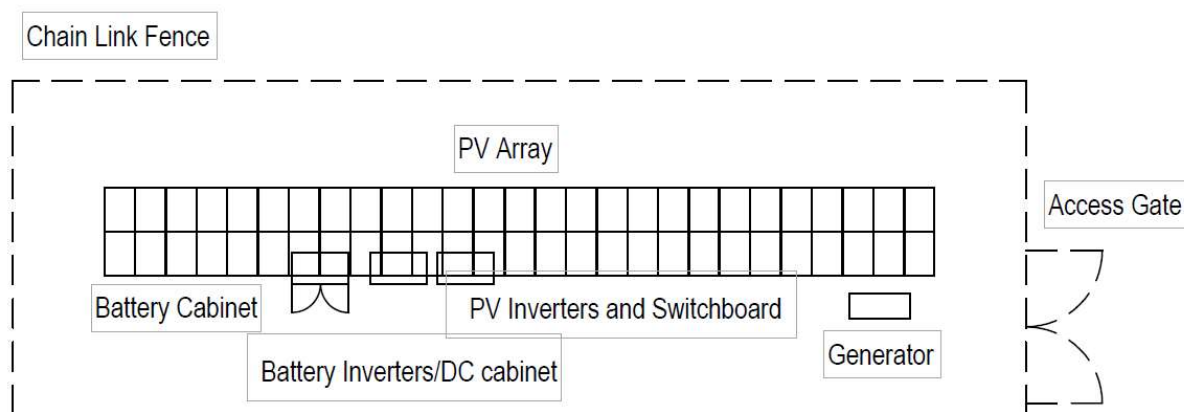
Line 1	[LUMI + System-generated number]	Text: 7mm
Line 2	[Luminaire number]	Text: 13mm

Figure 56 – HV isolator label example.



9 STANDALONE POWER SYSTEM

Standalone Power System (SPS) is plant equipment comprises of a Diesel generator, PV Solar array, Battery and Battery cabinet, Battery inverters, PV inverters and an electrical switchboard, the electrical equipment installed within an enclosed fencing with a lockable access gate.



Typical SPS Site plant

Standalone Power System (SPS) shall be labelled with two individual signs located on top of one another:

- A sign of a system-generated number for identification of the system and
- A sign of the location of the system.

Location of the labels shall be installed at an access gate, labels for Standalone Power System shall have a roll width of 50mm and the format shall be that of the table below:

Note: Labels of individual equipment within the SPS compound such as Generator, Batteries, and Inverters etc. shall be supplied and installed by others.

Table 38 – SPS-Standalone Power System label

Line 1	[System-generated number]	Text: 19.5mm
Line 1	[Location]	Text: 13mm

Figure 57 – Standalone Power System label example

EHRGSXXX

Lxxx, XXX Esperance Rd Esperance

APPENDIX A – REVISION INFORMATION

(Informative) Horizon Power has endeavoured to provide standards of the highest quality and would appreciate notification if any errors are found or even queries raised.

Each Standard makes use of its own comment sheet which is maintained throughout the life of the standard, which lists all comments made by stakeholders regarding the standard.

A comment sheet found in **CS10# 1565365**, can be used to record any errors or queries found in or pertaining to this standard, which can then be addressed whenever the standard gets reviewed.

Date	Rev No.	Notes
15/04/2013	0	Original Issue
19/07/2016	1	Revised to incorporate new equipment numbering and label format
1/11/2019	2	Revised to include more information, mini pillar, fusesaver and Standalone Power System labelling added.

APPENDIX B – SCHEDULE OF LABEL REQUIREMENTS

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handimark Filename	Other Requirements
Capacitor Bank – Pole Mounted	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> CAPT and system-generated number Capacitor bank name or number 	CAPT	
Concrete Pole	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> POLE and system-generated number. Pole/rural number 	POLE	High Voltage poles require the fitting of a 'HORIZON POWER DANGER HIGH VOLTAGE' warning sign (stock number CZ0230) at a height of approximately 1.8 m above ground.
Distribution Substation – Brick Building	✓	50 mm	Yellow vinyl	The label shall be fitted at a height of approximately 1.8m above the finished floor level, on the inside of the door.	<ul style="list-style-type: none"> DSUB and system-generated number. Substation name Location 	DSUB	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000 'AUTHORISED PERSONS ONLY' sign in accordance with AS/NZS 3000
Distribution Substation – Brick Compound	✓	50 mm	Yellow vinyl	The label shall be fitted at a height of approximately 1.8m above the finished floor level, on the inside of the door.	<ul style="list-style-type: none"> DSUB and system-generated number. Substation name Location 	DSUB	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000 'AUTHORISED PERSONS ONLY' sign in accordance with AS/NZS 3000

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handmark Filename	Other Requirements
Distribution Substation – Fenced Compound	✓	50 mm	Yellow vinyl	The label shall be fitted at a height of approximately 1.8m above the finished floor level, on the door, using the metal plate.	<ul style="list-style-type: none"> DSUB and system-generated number. Substation name Location 	DSUB	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000 'AUTHORISED PERSONS ONLY' sign in accordance with AS/NZS 3000
Distribution Substation – Modular Package Substation/Non-Modular Package Substation	✗	50 mm	Yellow vinyl	Labels shall be fitted on the inside of the door to the LV switchgear only where applicable.	<ul style="list-style-type: none"> DSUB and system-generated number. Substation name Location 	DSUB	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000 'AUTHORISED PERSONS ONLY' sign in accordance with AS/NZS 3000
Distribution Transformer – Modular Package Substation & Non-Modular Package Substation	✓	50 mm	Yellow vinyl	The label shall be fitted to the inside and outside of the transformer doors.	<ul style="list-style-type: none"> DTTX and system-generated number Substation name Information for where and what the transformer is supplied from. See relevant section. 	DTTX	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000
Distribution Transformer – Pole Mounted	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> DTTX and system-generated number Substation name 	DTTX	
Drop Out Fuse	✗	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> DDOF and system-generated number Name or number of drop-out fuse. 	DDOF	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handmark Filename	Other Requirements
Fault Indicator – Pole Top	✖	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> FLIN and system-generated number Name or number of fault indicator. 	FLIN	
Fault Indicator – Relay & Flag	✓	25 mm	Yellow vinyl	The label shall be placed on the side of the relay unit, or directly underneath the relay on the relay panel.	<ul style="list-style-type: none"> Fault Indicator Number, Location 	FLIN	
Fusesaver	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> FUSV and system-generated number Name of fusesaver associated with the area spur name and pole Drop Out Fuse Rating 	FUSV	
HV Fuse Switch Disconnect – Inside RMU	✓	50 mm	Yellow vinyl	The label shall be placed on the label placard, or front panel, of the ring main switchgear unit.	<ul style="list-style-type: none"> FUSW and system-generated number Fuse switch name Information for where and what the remote end of the terminated cable is connected to. See relevant section. 	FUSW	‘DANGER – HIGH VOLTAGE’ sign in accordance with AS/NZS 3000

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handimark Filename	Other Requirements
HV Switch Disconnecter – Inside RMU	✓	50 mm	Yellow vinyl	The label shall be placed on the label placard, or front panel, of the ring main switchgear unit.	<ul style="list-style-type: none"> SWTC and system-generated number. Switch name or number. Information for where and what the remote end of the terminated cable is connected to. See relevant section. 	SWTC	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000
HV Isolator – Pole Mounted	✗	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> HVDI and system-generated number. HV isolator name or number. 	HVDI	
Joints, Terminations, Line Hardware	✗	-	-	-	-	-	-
Load Break Switch	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> LBSW and system-generated number. Load break switch number. 	LBSW	
Luminaire – Pole Mounted	✗	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> LUMI and system-generated number. Streetlight number. 	LUMI	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handmark Filename	Other Requirements
LV Disconnecter – Ground Mounted Asset	✓	50 mm	Yellow vinyl	The label shall be placed on the LV disconnecter label placard.	<ul style="list-style-type: none"> • LVDI and system-generated number. • Circuit number • Information for where and what the remote end of the terminated cable is connected to. See relevant section. 	LVDI	
LV Disconnecter – Pole Mounted	✗	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> • LVDI and system-generated number. • Switch disconnecter name. 	LVDI	
LV Distribution Frame	✓	50 mm	Yellow vinyl	The label shall be placed on the inside and outside of the kiosk door. The label shall be placed in the centre of the door. For freestanding frames in substations the label shall be attached to the frame.	<ul style="list-style-type: none"> • LVFM and system-generated number. • Location. • Information for where and what the frame is supplied from. See relevant section. 	LVFM	
LV Fuse Disconnecter – Pole Mounted	✗	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> • FDIS and system-generated number. • Fuse switch disconnecter name. 	FDIS	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handmark Filename	Other Requirements
LV Fuse Disconnect – Ground-Mounted Asset	✓	50 mm	Yellow vinyl	The label shall be placed on the fuse disconnect label placard.	<ul style="list-style-type: none"> • FDIS and system-generated number. • Circuit number • Information for where and what the remote end of the terminated cable is connected to. See relevant section. 	FDIS	
Metal Pole	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> • POLE and system-generated number. • Pole/rural number. 	POLE	High Voltage poles require the fitting of a 'HORIZON POWER DANGER HIGH VOLTAGE' warning sign (stock number CZ0230) at a height of approximately 1.8m above ground.
Metering Unit – Ground-Mounted Asset	✓	50 mm	Yellow vinyl	The label shall be placed on the front panel of the metering transformer unit.	<ul style="list-style-type: none"> • NMTR and system-generated number. • Substation name. • Location. • Information for where and what the metering transformer is supplied from. See relevant section. 	NMTR	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS 3000
Metering Unit – Pole-Mounted	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> • NMTR and system-generated number. • Substation name. • Location or pole rural number. 	NMTR	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handimark Filename	Other Requirements
Mini Pillar	✓	50mm	Yellow vinyl	Label shall be placed on the exterior of the mini pillar on a side most easily visible to operators.	<ul style="list-style-type: none"> PILL and system-generated number. Location. Transformer name and relevant circuit number if underground transformer. Transformer name and pole number if overhead transformer. LV cable termination pole and location for LV cable termination to pole if applicable. See relevant section. 	PILL	
Overhead Conductor	✗	-	-	-	<ul style="list-style-type: none"> - 	-	-
Pole Top Switch	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> DPTS and system-generated number. Switch Name. 	DPTS	
Reactor – Pole Mounted	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> CAPT and system-generated number. Substation name or number. 	REAC	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handmark Filename	Other Requirements
Recloser	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> RECL and system-generated number. Recloser number. 	RECL	
Ring Main Unit	✓	50 mm	Yellow vinyl	Labels shall be affixed to both sides of each door and to the front panel of the RMU.	<ul style="list-style-type: none"> DRMU and system-generated number. Substation name. Information for where and what the RMU is supplied from. See relevant section. 		
Sectionalizer	✗	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> SECT and system-generated number. Sectionalizer name or number. 	SECT	
Stays & Anchors	✗	-	-	-	<ul style="list-style-type: none"> - 	-	-
Streetlight Pole	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole at approximately 1.8m above ground.	<ul style="list-style-type: none"> POLE and system-generated number. 	POLE	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handimark Filename	Other Requirements
Streetlight Pole Luminaires	✖	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole at approximately 1.8m above ground, below the pole label.	<ul style="list-style-type: none"> LUMI and system-generated. Luminaire number 	LUMI	
Streetlight Control Box	✖	-	-	-	<ul style="list-style-type: none"> - 	CBOX	
Surge Diverter	✖	-	-	-	<ul style="list-style-type: none"> - 	SURD	-
Transformer - Ground Mounted in Brick or Non-Brick Enclosures	✓	50 mm	Yellow vinyl	The label shall be fitted adjacent to the transformer nameplate.	<ul style="list-style-type: none"> DTTX and system-generated number Substation name Information for where and what the transformer is supplied from. See relevant section. 	DTTX	
Underground Cable	✖	-	-	-	<ul style="list-style-type: none"> - 	-	-
Underground Supply Pit	✓	50 mm	Yellow vinyl	The label shall be placed on the neutral incoming cable, or neutral connector	<ul style="list-style-type: none"> PITT and system-generated number. Location Information for where and what the pit is supplied from and also where and what the pit supplies if the pit supplies a Horizon Power asset. See relevant section. 	PITT	

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handmark Filename	Other Requirements
Universal Pillar	✓	50 mm	Yellow vinyl	The label shall be placed on the top of the orange plastic covering, located inside the universal pillar. An additional label can also be placed on the exterior of the pillar if preferred.	<ul style="list-style-type: none"> PILL and system-generated number. Location Information for where and what the pit is supplied from and also where and what the pit supplies if the pit supplies a Horizon Power asset. See relevant section. 	PILL	Universal pillars functioning as normally open points shall have a reflective red or white 'I' marking on the outer case of the pillar lid.
Un-Metered Supply Pit	✗	-	-	-	<ul style="list-style-type: none"> - 	-	-
Voltage Regulator – Ground Mounted	✓	50 mm	Yellow vinyl	The label shall be placed on the exterior surface of the control panel door.	<ul style="list-style-type: none"> RETX and system-generated number. Locations Information for where and what the voltage regulator is supplied from, see relevant section. 	RETX	'DANGER – HIGH VOLTAGE' sign in accordance with AS/NZS3000
Voltage Regulator – Pole Mounted	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> RETX and system-generated number. Regulator name. 	RETX	
Wood Pole	✓	50 mm	Yellow vinyl	The label shall be affixed to the road side of the pole on the bottom of the danger plate or separately.	<ul style="list-style-type: none"> POLE Number Voltage/Substation/ Feeder name/Tee-Off-Number/Name (optional) 	POLE	High Voltage poles require the fitting of a 'HORIZON POWER DANGER HIGH VOLTAGE' warning sign (stock number CZ0230) at a height of approximately 1.8m above ground.

Equipment Type	Label Mandatory?	Label Tape Size	Label Type	Label Placement	Label Contents (L1, L2, L3, L4)	Handimark Filename	Other Requirements
Standalone Power System	✓	50 mm	Yellow vinyl	The label shall be affixed on the access gate of the site.	<ul style="list-style-type: none"> SPS and system generated number Location (Notes: Two individual labels)	SPS	'AUTHORISED PERSONS ONLY' sign in accordance with AS/NZS 3000