### DESCRIPTION

1. **Equipment Name**
   - TBA
2. **Equipment Number**
   - TBA
3. **Single Line Diagram**
   - TBA
4. **Technical Specification**
   - TMS060
5. **Normal Power Supply**
   - V, 240 V AC, ±10% -6%
6. **Nominal Frequency**
   - Hz, 50 Hz ±2.5%
7. **No. of Phases**
   - Three phases, 4 Wire
8. **Earthing System**
   - Solidly Earthed Neutral (TN-C-S to IEC60364)
9. **Location**
   - LV Switchroom (airconditioned)
10. **Mounting**
    - Wall Mounted. Top of board no higher than 2M AFFL
11. **Area Classification**
    - Non - Hazardous
12. **Ambient Air Temperature**
    - °C, -5 °C min to '45 °C max
13. **Relative Humidity (maximum - minimum)**
    - %, 100% max 26% min
14. **Altitude (above sea level)**
    - m, Not exceeding 1000 m
15. **Pollution Level**
    - Normally only non-conductive pollution occurs
16. **Vibration**
    - Nil
17. **Minimum Service Life**
    - Years, 20 years, 5 years (min.) continuous operation without maintenance

### INSTALLATION CONDITIONS

18. **Make**
    - NHP Concept Premier *
19. **Model / Type No.**
    - VTA
20. **Rated Operational Voltage**
    - V, 240VAC
21. **Rated Insulation Voltage**
    - V, VTA
22. **Maximum Permissible Peak Current**
    - kA, 20kA for 0.2 seconds *
23. **Construction Type**
    - VTA
24. **Construction Material / Thickness (min.)**
    - VTA
25. **Cable Entry**
    - Bottom Only
26. **Degree of Protection**
    - IP42 (AS 60529)
27. **Segregation**
    - Form 2 (AS/NZS 3439.1) with escutcheon panels for switchgear section
28. **Escutcheon Attachment**
    - Hinged
29. **Max. Temperature Rise**
    - °C, 20 °C or as limited by installed equipment whichever is less
30. **Overall Dimensions**
    - (W x D x H), VTA
31. **Total Mass**
    - kg, VTA
32. **No. of Shipping Sections**
    - Qty, 1 (One)
33. **Lift Eye Bolts**
    - As per manufacturers recommendation *
34. **Roof Pitch**
    - Nil
35. **Door(s)**
    - Lift off pintle Hinges, with quarter turn locks, braced to prevent flexing, Minimum 160° Opening
36. **Panel/door seals**
    - Closed cell neoprene
37. **Electrical Equipment Shrouding**
    - IP2X
38. **Safety Interlocks**
    - No specific requirements beyond Electrical Safety Act 2002, AS/NZS 3000
39. **Spare Capacity**
    - 20% minimum installed spare capacity
40. **Busbar Material**
    - Hard Drawn High Conductivity Copper
41. **Main Busbar Rated Current**
    - A, VTA
42. **Main Busbar Size**
    - mm², VTA
43. **Neutral Busbar Size**
    - mm², VTA
44. **Earth Busbar Size**
    - mm², 120 mm² (minimum). * Predrilled for all outgoing circuits and min. 50% spare connections.
45. **Power Cabling within Switchboard**
    - 0.6/1 kV, PVC/PVC, V-90 (PVC insulated, 2.5 mm² minimum)
46. **Control Wiring within Switchboard**
    - Stranded Cu, 32/0.020, 0.6/1 kV, PVC insulated (1.0 mm² minimum)
47. **Gland Plate Material**
    - nickel-plated brass *
48. **Gland Plate Thickness**
    - mm, 3mm (min.) *
49. **Bolts / Fixings**
    - Zinc plated steel or stainless steel

### MAIN SWITCH (S1)

50. **Type**
    - Isolator
51. **Number of Poles**
    - 3 Poles for Mains (S1B)
52. **Quantity**
    - TBA
53. **Main Switch Current Rating**
    - A, 250 A
54. **Rated Insulation Voltage**
    - V, 750 V
55. **Auxiliary Contacts**
    - 1 NO unused contact wired to terminal strip
56. **Operator Handle**
    - Padlockable in OFF position

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FOR637-LV_Distribution_Board.xlsx
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>UNIT OF MEASURE</th>
<th>DATA TO BE CONFIRMED BY VENDOR</th>
<th>VENDORS RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fault Current Limiting Use</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57 Fault Current Limiting Fuse</td>
<td>-</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>58 Rating</td>
<td>A</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>59 Make/Model</td>
<td>-</td>
<td>VTA</td>
<td></td>
</tr>
<tr>
<td>60 Surge Protective Device Make</td>
<td>-</td>
<td>VTA</td>
<td></td>
</tr>
<tr>
<td>61 Surge Protective Device Model / Type No.</td>
<td>-</td>
<td>VTA</td>
<td></td>
</tr>
<tr>
<td>62 Surge Protective Device Location</td>
<td>-</td>
<td>After Main Switch Fuse</td>
<td></td>
</tr>
<tr>
<td>63 Surge Protective Device Category</td>
<td>-</td>
<td>Category B to AS/NZS 1768</td>
<td></td>
</tr>
<tr>
<td>64 Surge Protective Device Rating</td>
<td>kA</td>
<td>40 kA for 8/20 ms</td>
<td></td>
</tr>
<tr>
<td>65 Surge Protective Device Voltage Rating</td>
<td>V</td>
<td>440 V AC</td>
<td></td>
</tr>
<tr>
<td>66 Surge Protective Device Type</td>
<td>-</td>
<td>Pluggable Type MOV, 3P + N</td>
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</tr>
<tr>
<td>67 Surge Protective Device CB Rating</td>
<td>-</td>
<td>VTA</td>
<td></td>
</tr>
<tr>
<td>68 Surge Protective Device Monitoring Status</td>
<td>-</td>
<td>Yes, CB and Surge device status to be monitored by PLC</td>
<td></td>
</tr>
<tr>
<td>69 Surge Protective Device CB Make / Model / Type / Volts</td>
<td>-</td>
<td>NHP Finder</td>
<td></td>
</tr>
<tr>
<td>70 Circuit Breaker Current Rating</td>
<td>A</td>
<td>(Note 2)</td>
<td></td>
</tr>
<tr>
<td>71 Rated Insulation Voltage</td>
<td>-</td>
<td>750 V</td>
<td></td>
</tr>
<tr>
<td>72 Rated Short-Time withstand Current</td>
<td>kA</td>
<td>10 kA</td>
<td></td>
</tr>
<tr>
<td>73 Circuit Breaker Quantity</td>
<td>-</td>
<td>(Note 2)</td>
<td></td>
</tr>
<tr>
<td>74 Auxiliary Contacts</td>
<td>-</td>
<td>I NO unused contact wired to terminal strip</td>
<td></td>
</tr>
<tr>
<td>75 Indicators / Make / Type / Diameter / Volts</td>
<td>-</td>
<td>D7/22mm/24V Sprecher Schuh</td>
<td></td>
</tr>
<tr>
<td>76 Pushbuttons / Make / Type / Diameter / Volts</td>
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<td>D7/22mm/24V Sprecher Schuh</td>
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<tr>
<td>77 Control switches / Make / Type / Volts</td>
<td>-</td>
<td>Kraus and Naimer C11</td>
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<tr>
<td>78 Control Relays / Make / Type / Volts</td>
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<td>NHP Finder</td>
<td></td>
</tr>
<tr>
<td>79 Lamp Colours</td>
<td>-</td>
<td>D7 Standard</td>
<td></td>
</tr>
<tr>
<td>80 Ventilation Fan No.</td>
<td>-</td>
<td>Not required</td>
<td></td>
</tr>
<tr>
<td>81 Ventilation Fan Model</td>
<td>-</td>
<td>N/A</td>
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</tr>
<tr>
<td>82 Ventilation Fan Quantity</td>
<td>-</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>83 Ventilation Fan Voltage</td>
<td>V</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>84 Ventilation Fan Airflow</td>
<td>L/s</td>
<td>N/A</td>
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<tr>
<td>85 Control Cabling Insulation Colour Code</td>
<td>-</td>
<td>24 V DC Positive - Orange</td>
<td></td>
</tr>
<tr>
<td>86 Cable Core Labelling System</td>
<td>-</td>
<td>24 V DC Common - Black</td>
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</tr>
<tr>
<td>87 Labels Required</td>
<td>-</td>
<td>24 V DC Signal - Orange</td>
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</tr>
<tr>
<td>88 Surge Protective Device CB Make / Model / Type / Volts</td>
<td>-</td>
<td>230 V AC Active - Red</td>
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</tr>
<tr>
<td>89 Pressure Switch Insulation Colour Code</td>
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<td>230 V AC Neutral - Black</td>
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</tr>
<tr>
<td>90 Cable Core Labelling System</td>
<td>-</td>
<td>Analogue Signals - Black/White</td>
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</tr>
<tr>
<td>91 Surge Protective Device CB Make / Model / Type / Volts</td>
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<td>In accordance with AS/NZS 5000.1</td>
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</tr>
<tr>
<td>92 Surge Protective Device CB Make / Model / Type / Volts</td>
<td>-</td>
<td>Surge Protective Device CB Rating</td>
<td></td>
</tr>
<tr>
<td>93 Surge Protective Device CB Make / Model / Type / Volts</td>
<td>-</td>
<td>Surge Protective Device CB Rating</td>
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</tr>
</tbody>
</table>

**NOTE:** The data in the table is extracted from an Excel file named FOR637-LV_Distribution_Board.xlsx.
### QUEENSLAND URBAN UTILITIES

**EQUIPMENT Datasheet**

<table>
<thead>
<tr>
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<th>DATA TO BE CONFIRMED BY VENDOR</th>
<th>VENDORS RESPONSE</th>
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<tbody>
<tr>
<td>94 Exterior Colour</td>
<td>-</td>
<td>Light grey (RAL 7035)</td>
<td></td>
</tr>
<tr>
<td>95 Escutcheon Panel Colour</td>
<td>-</td>
<td>Bright white (RAL 9016)</td>
<td></td>
</tr>
<tr>
<td>96 Interior Colour</td>
<td>-</td>
<td>VTA</td>
<td></td>
</tr>
<tr>
<td>97 Coating Make</td>
<td>-</td>
<td>VTA</td>
<td></td>
</tr>
<tr>
<td>98 Coating Type</td>
<td>-</td>
<td>Polyester Powder Coat *</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Item denoted by * to be supplied by Vendor.
2. Refer to Single Line Diagram TBA
4. Vendor shall provide a list of departures from TMS060.

---

**Title:** LV DISTRIBUTION BOARD

**Client:** QUEENSLAND URBAN UTILITIES

**Document No:** FOR637

**Sheet No:** 3 of 3

**EQUIPMENT NO:**

**PREPARED:**

**CHECKED:**

**APPROVED:**

**DESCRIPTION**

**DATE** | **INITIAL** | **DATE** | **INITIAL** | **DATE** | **SIGNATURE** | **DESCRIPTION**

| A | 30/11/2017 | KA | 30/11/2017 | SB | 30/11/2017 | SB | ISSUED FOR TENDER |
| B | 30/11/2017 | KA | 30/11/2017 | DN | 30/11/2017 | SB | ISSUED FOR USE |

---

**Data to be confirmed by Vendor:**

- Exterior Colour: Light grey (RAL 7035)
- Escutcheon Panel Colour: Bright white (RAL 9016)
- Interior Colour: VTA
- Coating Make: VTA
- Coating Type: Polyester Powder Coat *

---

**Notes:**

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