



NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH NETWORK STANDARDS.
2. THIS DRAWING SHOWS THE CONTROL CIRCUIT FOR THE SUBSTATION FAN FOUND IN BASEMENT AND SURFACE CHAMBER CITY DISTRIBUTION SUBSTATIONS WHICH ARE USUALLY EQUIPPED WITH OIL FILLED TRANSFORMERS. IF DRY TYPE TRANSFORMERS ARE USED, THE SUBSTATION FAN AND FCT UNITS ARE STILL REQUIRED. THE FANS FOR EACH DRY TYPE TRANSFORMER ARE INTERNALLY CONTROLLED BY EACH TRANSFORMER AND ARE NOT CONNECTED INTO THE SUBSTATION FAN CIRCUITRY.
3. THE FIRE DETECTION THERMOSTAT IS MOUNTED ON THE AVS HOUSING. IT IS TO LATCH OPEN AT 70°C AND MUST BE MANUALLY RESET.
4. THE FAN CONTROL THERMOSTAT UNITS ARE TO BE MOUNTED ON THE TRANSFORMER CLOSEST TO AND THE TRANSFORMER FURTHEST FROM THE SUBSTATION FAN. THIS IS TO BE CONFIRMED AT EACH SUBSTATION DEPENDING ON TRANSFORMER LAYOUT.
5. ONLY TWO FAN CONTROL THERMOSTAT UNITS ARE TO BE INSTALLED AT A SUBSTATION.
6. THE TIMER T, IS TO BE SET TO 1 MINUTE.
7. AUSGRID IS TO CHECK FAN DIRECTION/ALARMS ON ENERGISATION.

LEGEND

| ITEM | DESCRIPTION | LOCATION | DRAWING |
|------|--|----------------------------|----------|
| CB | CIRCUIT BREAKERS FOR FAN POWER AND CONTROL | SUBSTATION SERVICE BOARD | 227387-1 |
| DOL | DOL STARTER WITH MOTOR THERMAL PROTECTION | SUBSTATION SERVICE BOARD | 227387-1 |
| TH | FIRE DETECTION THERMOSTAT | AIR VANE SWITCH HOUSING | 228913 |
| SW | FAN CONTROL THERMOSTAT SHORTING SWITCH | SUBSTATION SERVICE BOARD | 227387-1 |
| FCT1 | FAN CONTROL THERMOSTATS | TRANSFORMER - REFER NOTE 4 | |
| FCT2 | PENN A19AAC-13 -ACT2705641# | | |
| AVS | AIR VANE SWITCH | FAN | 228913 |
| L | CAMDENBOSS, IND515205-LED2-T/RD, RED LED PANEL MOUNT INDICATOR, 240 VAC, 6.4 mm dia, 1 mA. Element14 Order Code: 2490470 | SUBSTATION SERVICE BOARD | 227387-1 |
| AF | AIR FLOW AUXILIARY RELAY (IDEC RH2B-ULA RELAY & DIN RAIL SNAP MOUNTED SOCKET SH2B-05C) | SUBSTATION SERVICE BOARD | 227387-1 |
| T | TIMER - TRUE OFF DELAY (BROYCE CONTROL LEDF 230VAC. 0.5-10 Minutes) (RS No. 828-5199) | SUBSTATION SERVICE BOARD | 227387-1 |
| ○ ∅ | PANEL TERMINALS | SUBSTATION SERVICE BOARD | 227387-1 |

CAD DRAWING
DO NOT MANUALLY AMEND
AMENDMENTS

| DESCRIPTION | DRAWING |
|--|----------|
| CITY DISTRIBUTION SUBSTATIONS AIR VANE SWITCH DETAILS | 228913 |
| CITY DISTRIBUTION SUBSTATIONS WITH SUBSTATION FAN CONTROL SERVICE BOARD | 227387-1 |
| CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD & OPTICAL ARC FLASH DETECTION CABLING DIAGRAM | 227386-1 |
| ASSOCIATED DRAWINGS | |



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| SCALE | NTS |
|----------|--------------|
| DESIGNED | L.MARTINUZZI |
| DRAWN | L.MARTINUZZI |
| CHECKED | M.BENNETT |
| APPROVED | M.BENNETT |
| DATE | 27/04/2023 |
| TRIM REF | - |

**CITY DISTRIBUTION SUBSTATIONS
SUBSTATION FAN CONTROL
SCHEMATIC**

ISSUED FOR
CONSTRUCTION

| PROJECT NUMBER | SIZE | DRAWING No | SHEET | AMD |
|----------------|------|------------|-------|-----|
| - | A2 | 254134 | 1 | 0 |