

SPECIFICATIONS



| | | |
|---|---------------|-----------------------------|
| Indoor Unit | (524-281-711) | ISU 141KYX |
| Outdoor Unit | (536-281-311) | OSA 141RKTGH (3Ø) |
| Cooling capacity (net) to AS/NZS 3823 T1 | | 13.2 kW |
| Heating capacity H1 | | 12.8 kW |
| Electrical input - cooling | | 4.1 kW |
| Electrical input - heating | | 3.6 kW |
| EER / AEER (cooling) | | 3.25 / 3.23 |
| COP / ACOP (heating) | | 3.58 / 3.56 |
| Unit Controllers | | UC8 / IUC |
| Refrigerant | | R410A |
| Refrigerant precharge for 10 m | | 4.5 kg * |
| Additional charge req'd for over 10 m | | 50 g/m |
| Base refrigerant charge OSA | | 3.5 kg |
| Maximum extended line length | | 60 m using 19 mm suction |
| Separation limit: OSA above ISU | | 20 m |
| Separation limit: OSA below ISU | | 20 m |
| Suction line $\leq 20\text{m}$ / $> 20\text{m}$ | | 16 / 19 mm OD |
| Liquid line | | 9.5 mm OD |
| Compressor oil type | | POE 32-3MAF (or equivalent) |
| Additional oil charge over 40m line length | | 10 ml/m |
| Compressor type | | digital scroll |
| Power supply via OSA | | 3 ph. 400V ac 50Hz |
| Compressor run amps at rating cond. | | 5.5 A/ph. |
| Indoor fan motor size | | 230 W (x2) |
| Rated indoor fan speed | | HIGH (9.5V) |
| Indoor fan motor (1ph.) - full load | | 1.4 A (x2) |
| Outdoor fan motor (1ph.) - full load | | 1.4 A |
| Outdoor fan capacitor size | | 6 μfd |
| Control circuit breaker (internal) | | 10 A/ph. |
| Running amps (total system) | | 8.0 / 5.5 / 5.5 A |
| Max. running amps (total system) | | 9.9 / 8.6 / 8.6 A |
| Net weight ISU | | 79 kg |
| Net weight OSA | | 128 kg |

Accessories:

| | |
|---|-----------------------|
| ISU Replacement filter (x3) | 119-123-001 590x244x4 |
| OSA Drain connection adaptor 25/13mm | 060-000-039 |
| OSA Anti-vibration mounts - rubber (x4) | 060-000-170 |

Optional Controls:

| | |
|-------------------------------------|-------------|
| SAT-3 Room temperature controller | 201-000-146 |
| TZT-100 Room temperature controller | 201-000-350 |

Refer to temperzone for other options, eg remote sensors, connection wires.

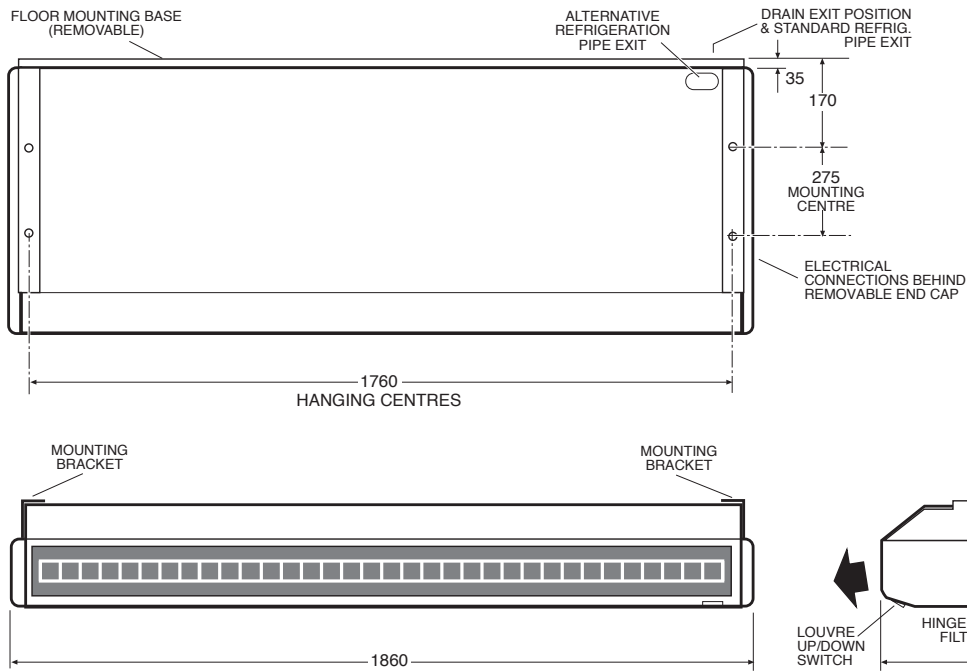
* **Note:** Remove 500 g from precharge for this ISU/OSA combination. Deduct a further 250g for line lengths $< 5\text{m}$. Other unit combinations use the full precharge.

DIMENSIONS (mm)



Not to Scale

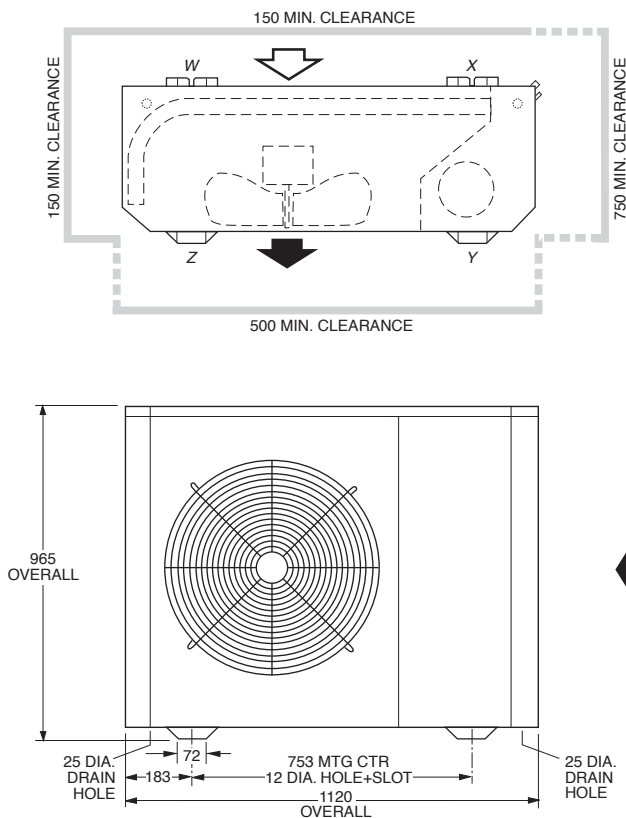
ISU 141KYX Indoor Unit



Note:

1. Weight distribution 40 kg at each end.
2. Fan motor can be accessed from panel above, below or sides; no more than two panels at once.

OSA 141RKTG Outdoor Unit



| POINT LOADS (kg) | | | |
|------------------|----|----|----|
| W | X | Y | Z |
| 16 | 38 | 50 | 24 |

Recommended

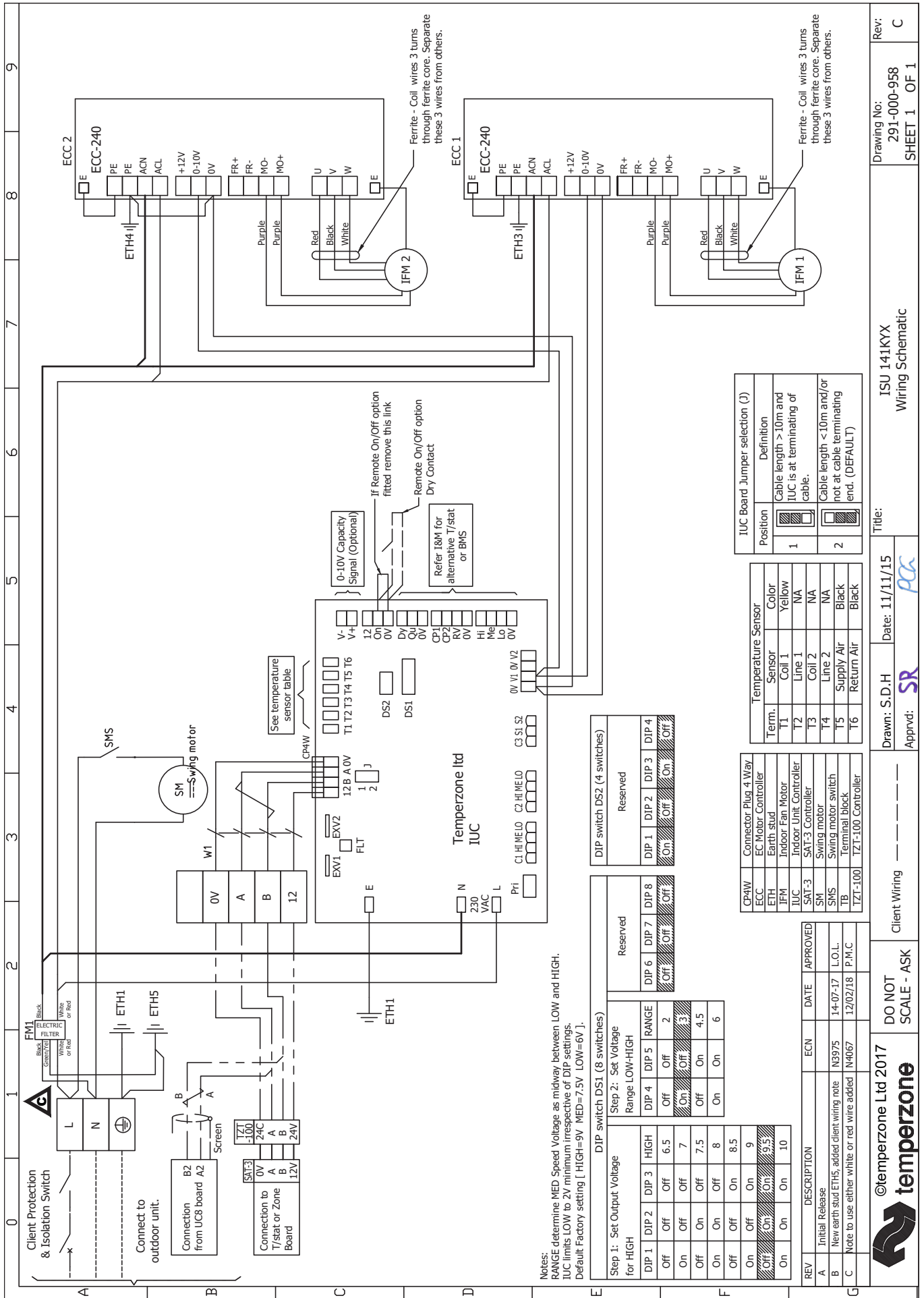
Connecting Pipe Sizes

Suction : 19 mm OD
Liquid : 10 mm OD

NOTE

Specifications are subject to change without notice due to the manufacturer's ongoing research and development programme.





Notes:
 RANGE determine MED Speed Voltage, as midway between LOW and HIGH.
 IUC limits LOW to 2V minimum irrespective of DIP settings.
 Default Factory setting [HIGH=9V MED=7.5V LOW=6V].

| DIP switch DS1 (8 switches) | | | |
|-------------------------------------|-------|-------|-------|
| Step 1: Set Output Voltage for HIGH | | | |
| DIP 1 | DIP 2 | DIP 3 | RANGE |
| Off | Off | Off | 6.5 |
| On | Off | Off | 7 |
| Off | On | Off | 7.5 |
| On | On | Off | 8 |
| Off | Off | On | 8.5 |
| On | Off | On | 9 |
| Off | On | On | 9.5 |
| On | On | On | 10 |

| DIP switch DS2 (4 switches) | | | |
|-----------------------------|-------|-------|-------|
| Reserved | | | |
| DIP 1 | DIP 2 | DIP 3 | DIP 4 |
| On | Off | On | Off |

| REV | DESCRIPTION | ECN | DATE | APPROVED |
|-----|---|-------|----------|----------|
| A | Initial Release | | | |
| B | New earth stud ETH5, added client wiring note | N3975 | 14-07-17 | L.O.L. |
| C | Note to use either white or red wire added | N4067 | 12/02/18 | P.M.C |

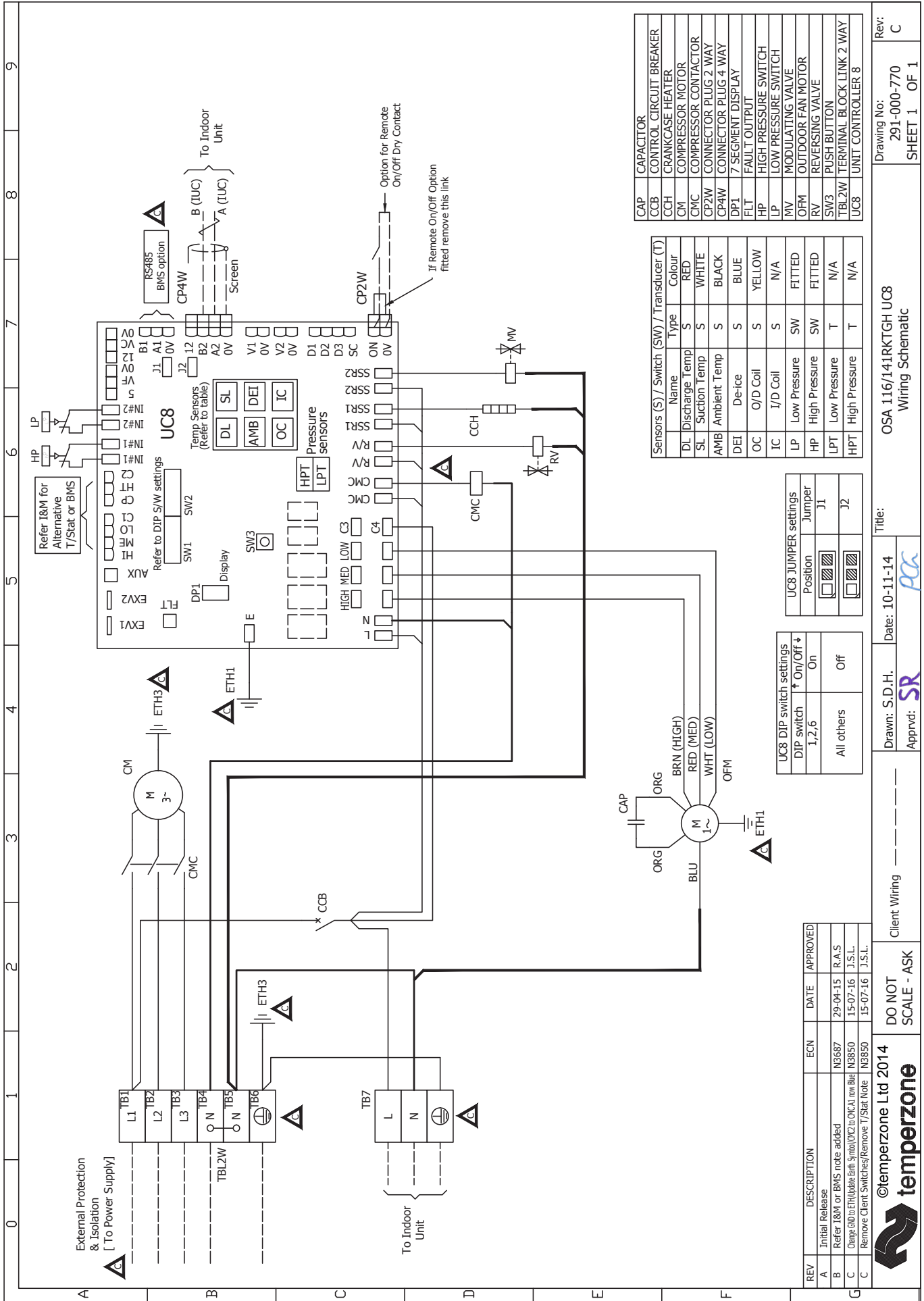
| CP4W | Connector: Plug 4 Way |
|---------|------------------------|
| ETH | EC Motor Controller |
| IFM | Earth stud |
| IUC | Indoor Fan Motor |
| SM | Indoor Unit Controller |
| SMS | SAT-3 Controller |
| TB | Swing motor |
| TZT-100 | Swing motor switch |
| | Terminal block |
| | TZT-100 Controller |

| Term. | Sensor | Color |
|-------|------------|--------|
| T1 | Coil 1 | Yellow |
| T2 | Line 1 | NA |
| T3 | Coil 2 | NA |
| T4 | Line 2 | NA |
| T5 | Supply Air | Black |
| T6 | Return Air | Black |

| Position | Definition |
|----------|--|
| 1 | Cable length >10m and IUC is at terminating of cable. |
| 2 | Cable length <10m and/or not at cable terminating end. (DEFAULT) |

OUTDOOR UNIT WIRING

Indoor-Outdoor Connection Wiring: refer 'Installation & Maintenance' pamphlet, page 6.



| Code | Description |
|-------|---------------------------|
| CAP | CAPACITOR |
| CCB | CONTROL CIRCUIT BREAKER |
| CCH | CRANKCASE HEATER |
| CM | COMPRESSOR MOTOR |
| CMC | COMPRESSOR CONTACTOR |
| CP2W | CONNECTOR PLUG 2 WAY |
| CP4W | CONNECTOR PLUG 4 WAY |
| DP1 | 7 SEGMENT DISPLAY |
| FLT | FAULT OUTPUT |
| HP | HIGH PRESSURE SWITCH |
| LP | LOW PRESSURE SWITCH |
| MV | MODULATING VALVE |
| OFM | OUTDOOR FAN MOTOR |
| RV | REVERSING VALVE |
| SW3 | PUSH BUTTON |
| TBL2W | TERMINAL BLOCK LINK 2 WAY |
| UC8 | UNIT CONTROLLER 8 |

| Name | Type | Colour | Transducer (T) |
|------|----------------|--------|----------------|
| DL | Discharge Temp | S | RED |
| SL | Suction Temp | S | WHITE |
| AMB | Ambient Temp | S | BLACK |
| DEI | De-ice | S | BLUE |
| OC | O/D Coil | S | YELLOW |
| IC | I/D Coil | S | N/A |
| LP | Low Pressure | SW | FITTED |
| HP | High Pressure | SW | FITTED |
| LPT | Low Pressure | T | N/A |
| HPT | High Pressure | T | N/A |

| UC8 DIP switch settings | UC8 JUMPER settings |
|-------------------------|---------------------|
| DIP switch 1,2,6 | Position |
| All others | Jumper |
| | J1 |
| | J2 |

Drawing No: 291-000-770
 SHEET 1 OF 1
 Rev: C
 Title: OSA 116/141RKTGH UC8 Wiring Schematic
 Date: 10-11-14
 Drawn: S.D.H.
 Approved: SR
 Client: Wiring
 DO NOT SCALE - ASK
 ©temperzone Ltd 2014