



DUCTED SPLIT SYSTEMS

ISD/OSA Systems c/w UC6 Controller

CLIENT WIRING

Control Type	Drawing No. (click links)
BMS - EC Fan Motor Control	(A) 291-000-093
BMS - 3PH Indoor	(B) 291-000-098
SAT-2 - EC Fan Motor Control	(C) 291-000-091
SAT-2 - 3PH Indoor	(D) 291-000-096
TZT 100 - EC Fan Motor Control	(E) 291-000-088
TZT 100 - 3PH Indoor	(F) 291-000-095
Generic - EC Fan Motor Control	(G) 291-000-092
Generic - 3PH Indoor	(H) 291-000-097

A BMS - EC Fan Motor Control



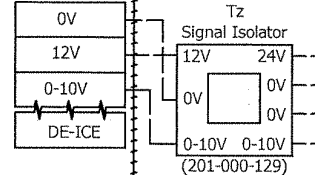
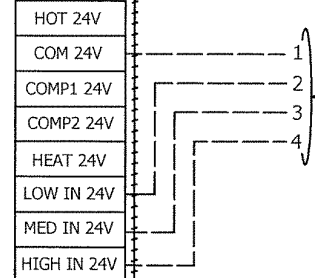
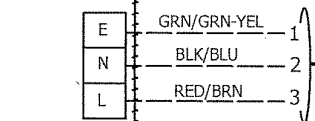
CLIENT WIRING

IMPORTANT

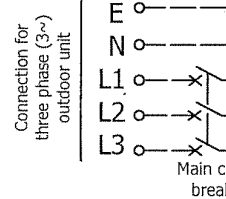
Options	CABLES required			
	1	2	3	4
Option 1: Control indoor fan speed using 24V High, Med & Low	✓	✓		✓
Option 2: Control indoor fan speed using 0-10V control.	✓		✓	✓

ISD-Indoor unit with EC motor

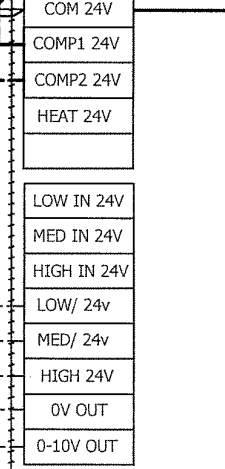
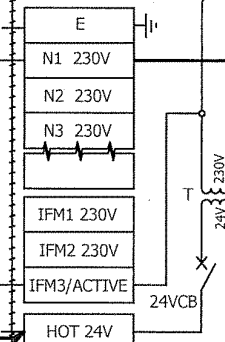
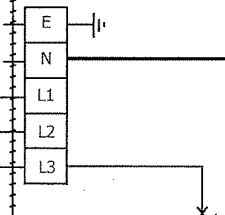
T/STAT not pre-fitted



Distribution Board



OSA (RKT) - Outdoor unit with UC6 Controller



CABLE 1: TPS 3 - core
1.5mm² - 2.5mm²
(15G -13G)

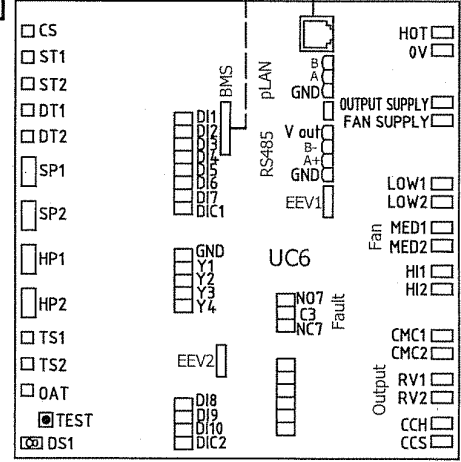
CABLE 2: 4 - core cable
Cable size 24G (0.2mm²)
or thicker recommended
TZ #012-000-398

CABLE 3:
4 - core cable
Cable size 24G
(0.2mm²) or thicker
recommended
TZ #012-000-398

NOTE 1
Ensure UC6 is configured for BMS control prior to fitting link wires.
Connect wires from HOT24V to COMP1 24V & COMP2 24V terminals on outdoor unit.

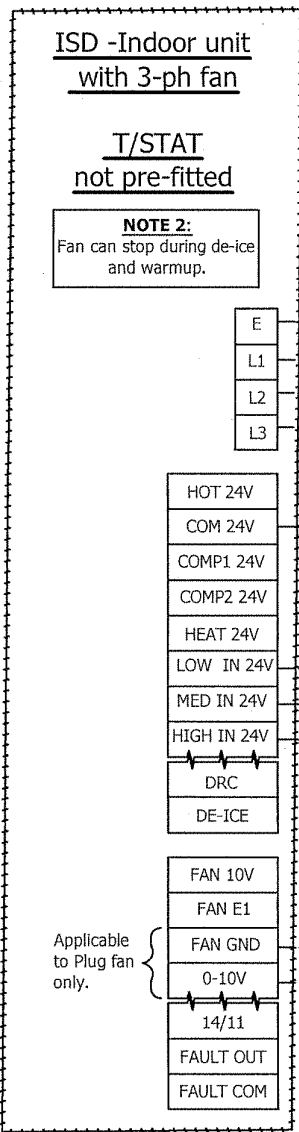
BMS port
(for monitoring & control)
Must install appropriate comms board e.g. TZ #201-000-388 for MODBUS

Optional UC6 Service Interface.

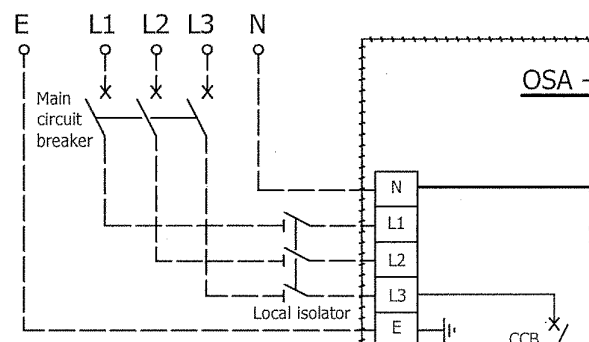




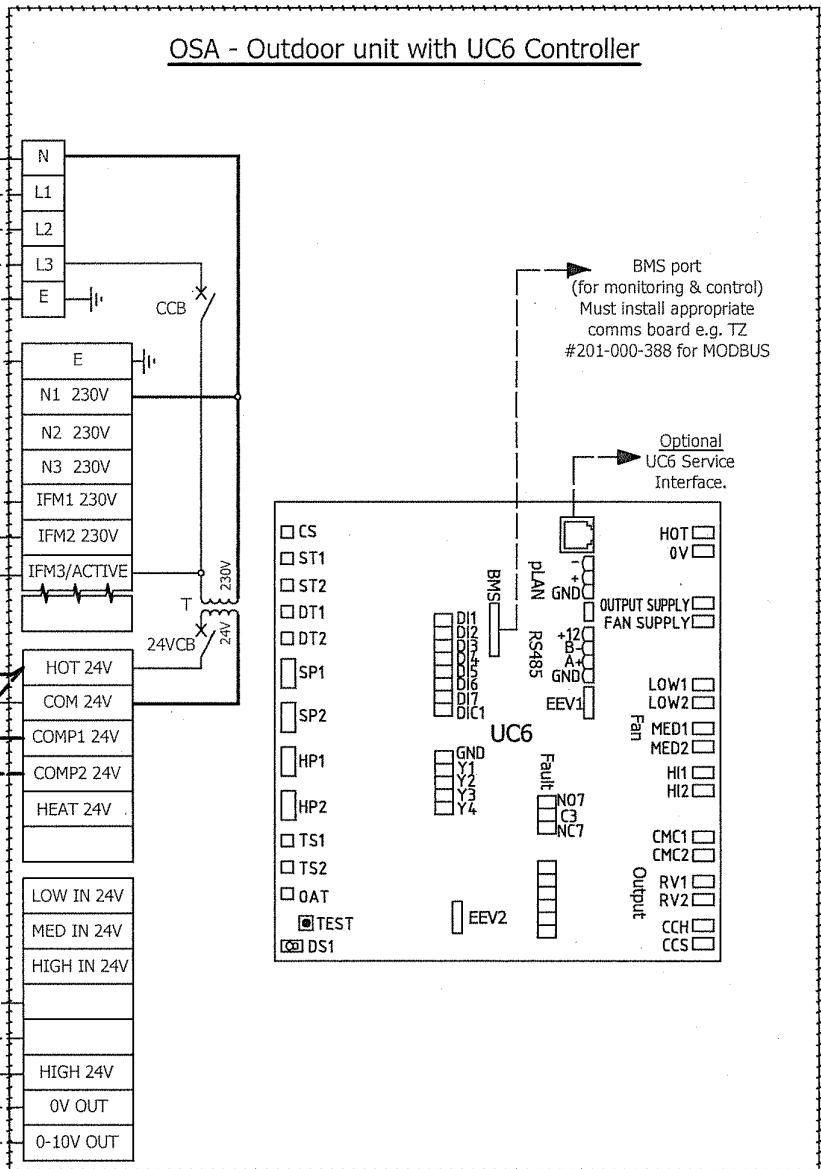
CLIENT WIRING



Distribution Board

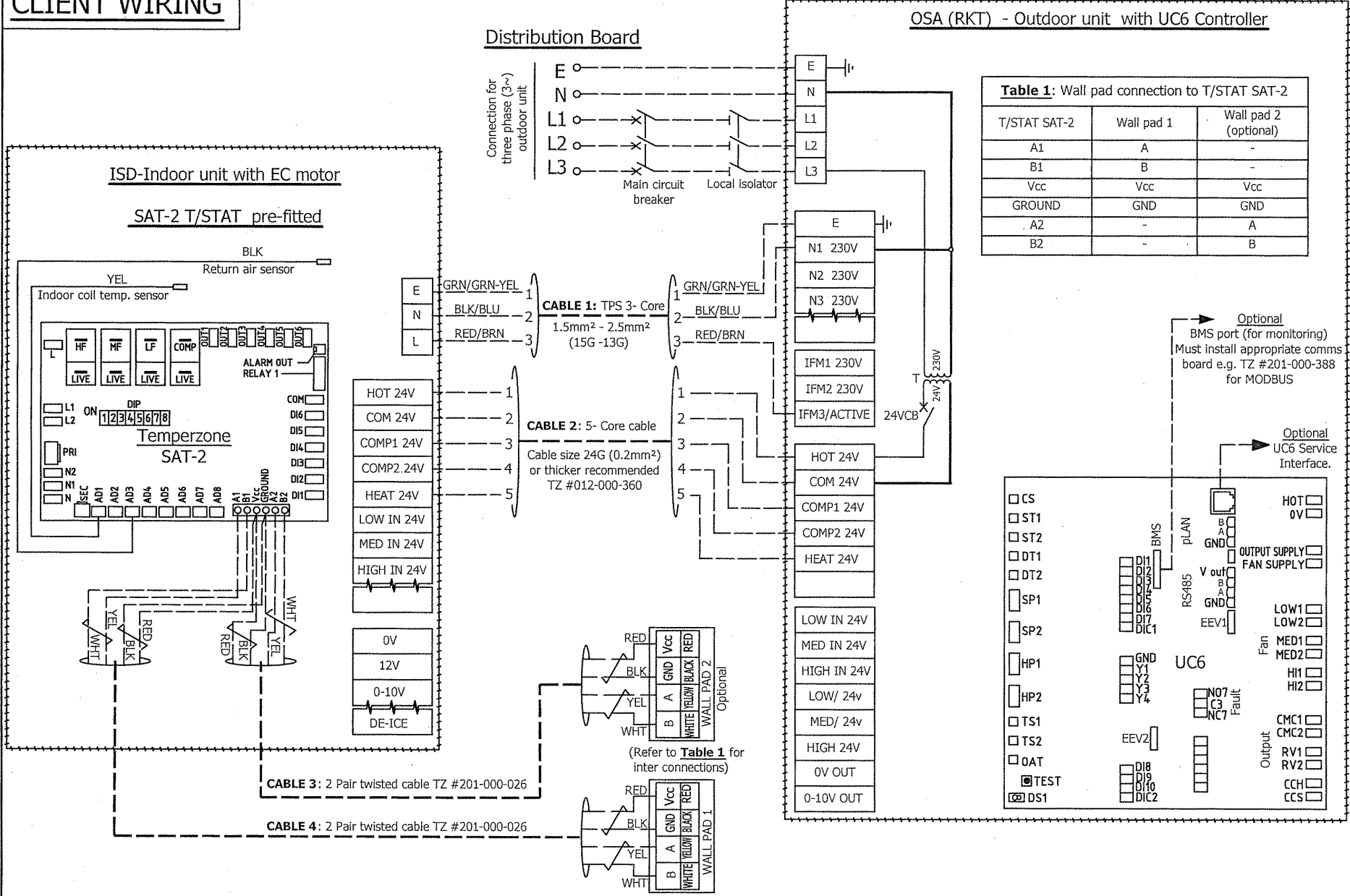


OSA - Outdoor unit with UC6 Controller



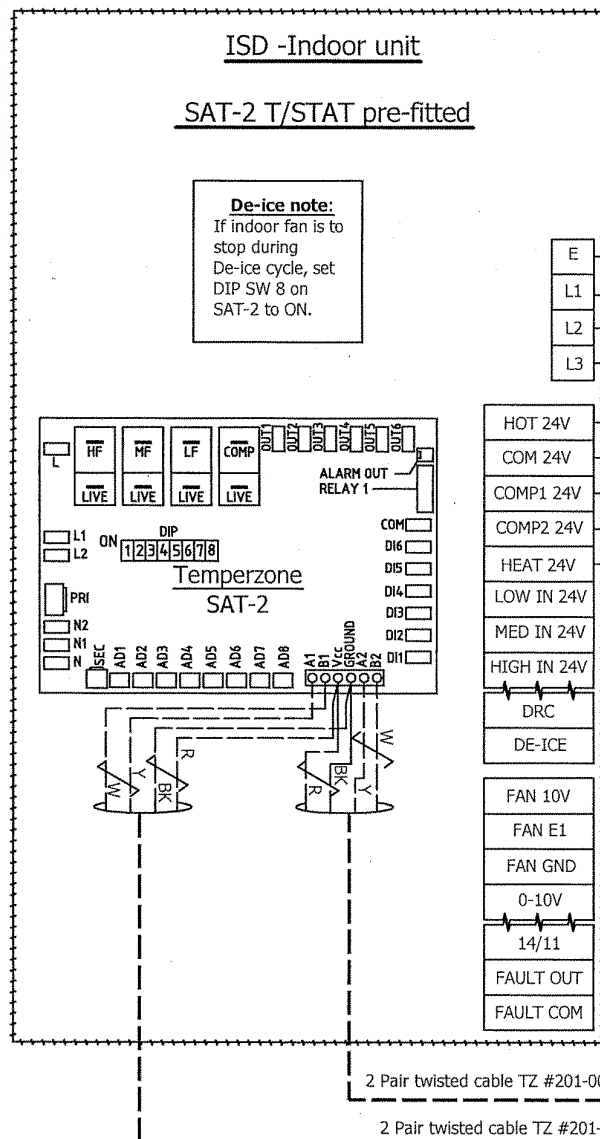


CLIENT WIRING

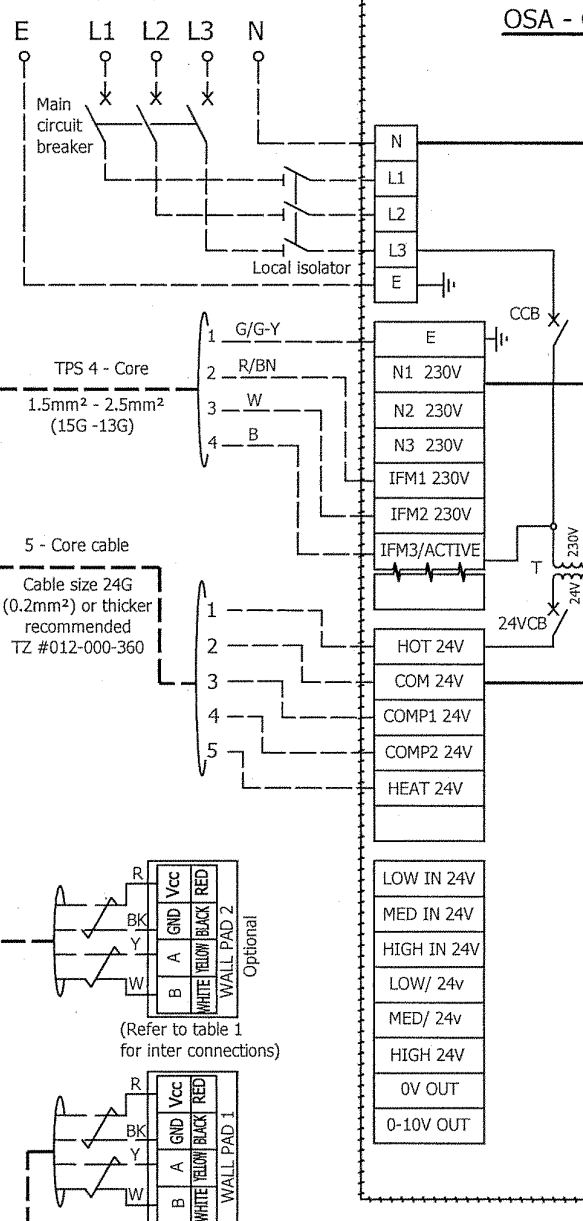




CLIENT WIRING



Distribution Board

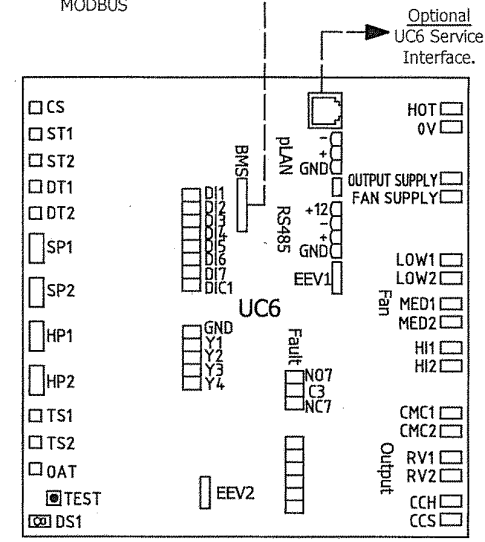


OSA - Outdoor unit with UC6 Controller

Table 1: Wall pad connection to T/STAT SAT-2

SAT-2 T/STAT	Wall pad 1	Wall pad 2 (optional)
A1	A	-
B1	B	-
Vcc	Vcc	Vcc
GROUND	GND	GND
A2	-	A
B2	-	B

Optional
 BMS port (for monitoring)
 Must install appropriate comms board e.g. TZ #201-000-388 for MODBUS



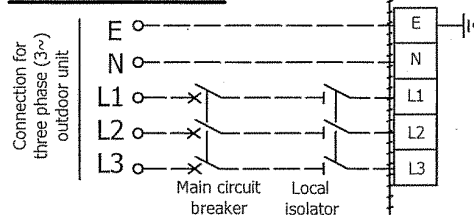


CLIENT WIRING

IMPORTANT

Options	CABLES required			
	1	2	3	4
Option 1: Control indoor fan speed using 24V High, Med & Low	✓	✓		✓
Option 2: Control indoor fan speed using 0-10V control.	✓		✓	✓

Distribution Board



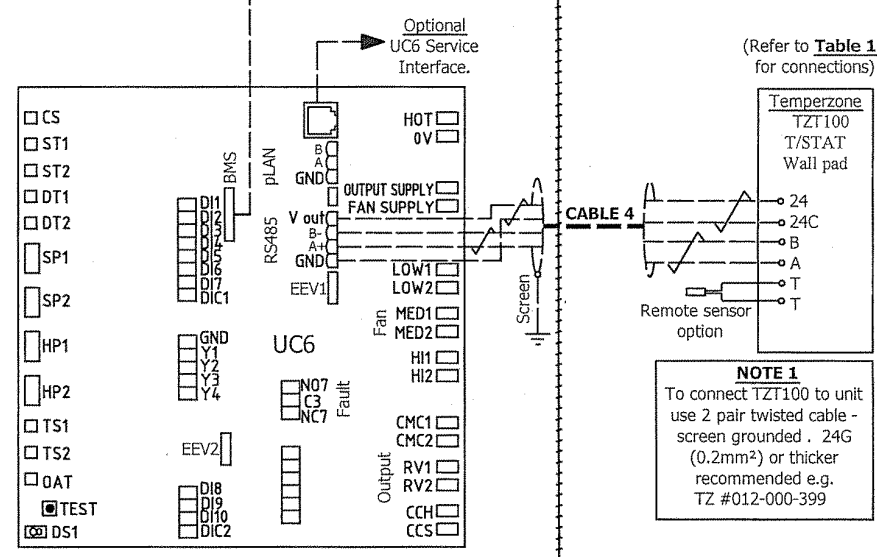
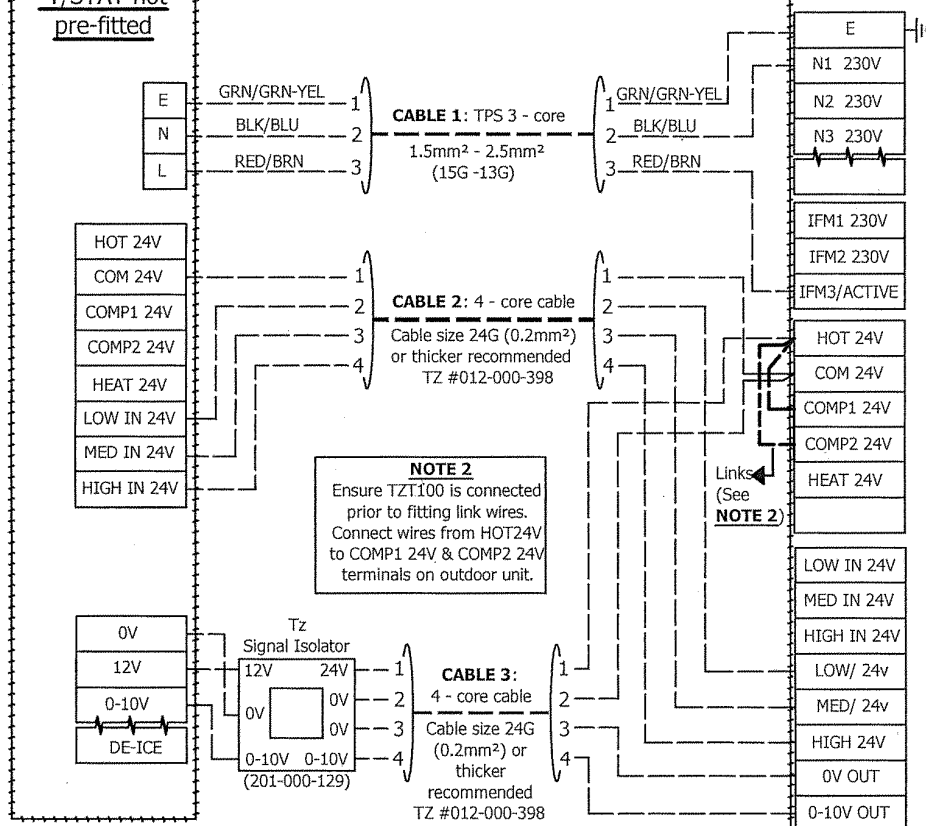
OSA (RKT) - Outdoor unit with UC6 Controller

Table 1: TZT100 connection to UC6 terminals

TZT100 terminals	UC6 terminals
24	V out
24C	GND
B	B-
A	A+
	Screen to E

ISD-Indoor unit with EC motor

T/STAT not pre-fitted



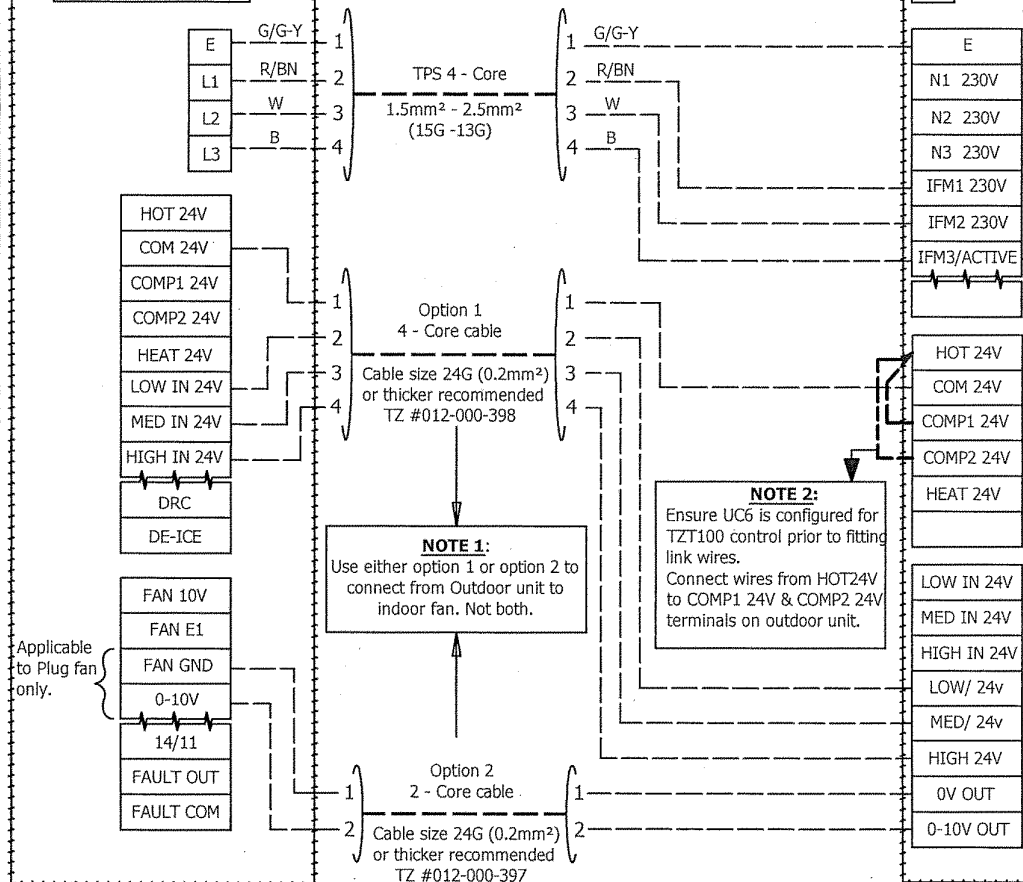


CLIENT WIRING

ISD -Indoor unit with 3-ph fan

T/STAT not pre-fitted

NOTE 4:
Fan can stop during de-ice and warmup.



Distribution Board

E L1 L2 L3 N

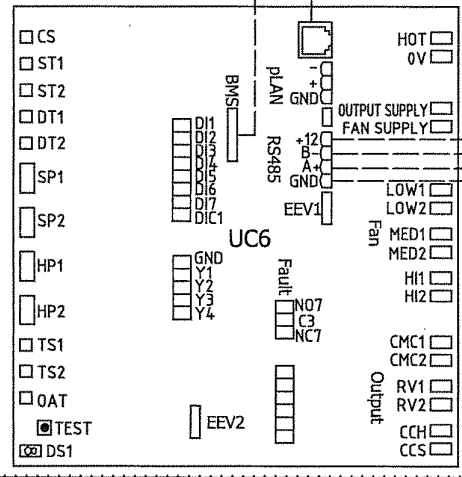
OSA - Outdoor unit with UC6 Controller

Table 1: TZT100 connection to UC6 terminals (See NOTE 3:)

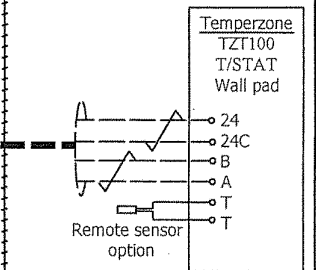
TZT100 terminals	UC6 terminals
24	+12
24C	GND
B	B-
A	A+
	Screen to E

Optional
BMS port (for monitoring)
Must install appropriate comms board e.g. TZ #201-000-388 for MODBUS

Optional
UC6 Service Interface.



(Refer to **Table 1** for connections)



NOTE 3:
To connect TZT100 to unit use 2 pair twisted cable - screen grounded at UC6. 24G (0.2mm²) or thicker recommended e.g. TZ #012-000-399



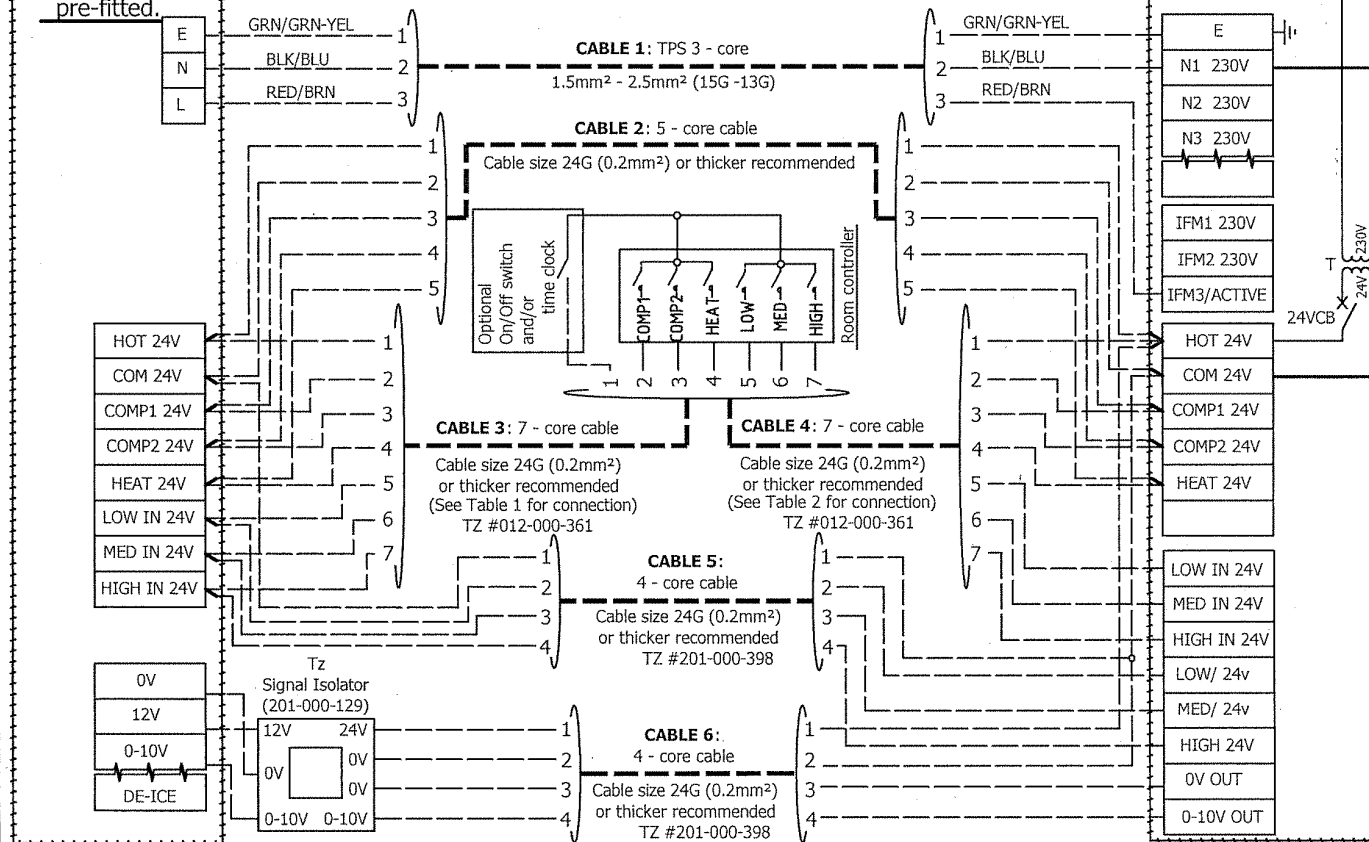
CLIENT WIRING

IMPORTANT

Options	CABLES required					
	1	2	3	4	5	6
Option 1: To connect room controller to indoor unit (ISD)	✓	✓	✓			
Option 2: To connect room controller to outdoor unit (OSA) & to control indoor fan speed using 24V High, Med & Low	✓			✓	✓	
Option 3: To connect room controller to outdoor unit (OSA) & to control indoor fan speed using 0-10V control.	✓			✓		✓

ISD-Indoor unit with EC motor

T/STAT not pre-fitted.



OSA (RKT) - Outdoor unit with UC6 Controller

Table 1: Generic room controller connection to ISD terminals

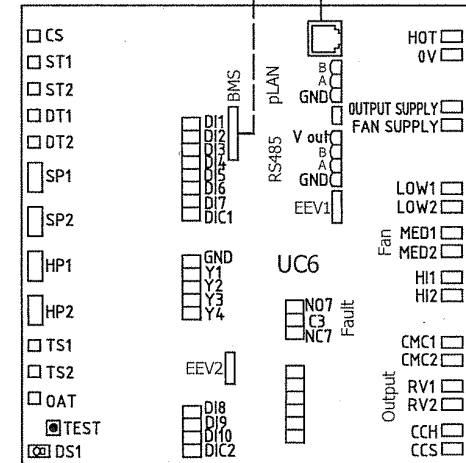
Room controller	ISD terminal block
COMP 1	COMP1 24V
COMP 2	COMP2 24V
HEAT	HEAT 24V
LOW	LOW IN 24V
MED	MED IN 24V
HIGH	HIGH IN 24V
On/Off switch and/or time clock	HOT 24V

Table 2: Generic room controller connection to OSA terminals

Room controller	OSA terminal block
COMP 1	COMP1 24V
COMP 2	COMP2 24V
HEAT	HEAT 24V
LOW	LOW IN 24V
MED	MED IN 24V
HIGH	HIGH IN 24V
On/Off switch and/or time clock	HOT 24V

Optional BMS port (for monitoring)
Must install appropriate comms board e.g. TZ #201-000-388 for MODBUS

Optional UC6 Service Interface.





CLIENT WIRING

**ISD -Indoor unit
with 3-ph fan**

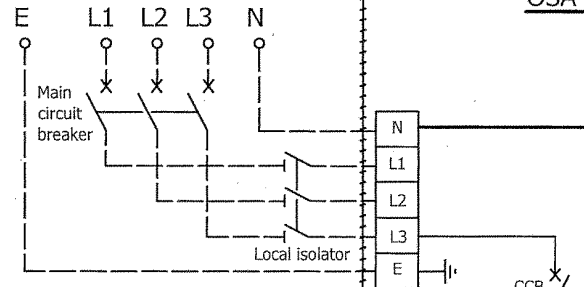
**T/STAT not
pre-fitted**

NOTE 2:

Fan can stop during de-ice and warmup.

NOTE 1:
Use either Option 1 or Option 2 to connect from Outdoor unit to indoor fan. Not both.

Distribution Board



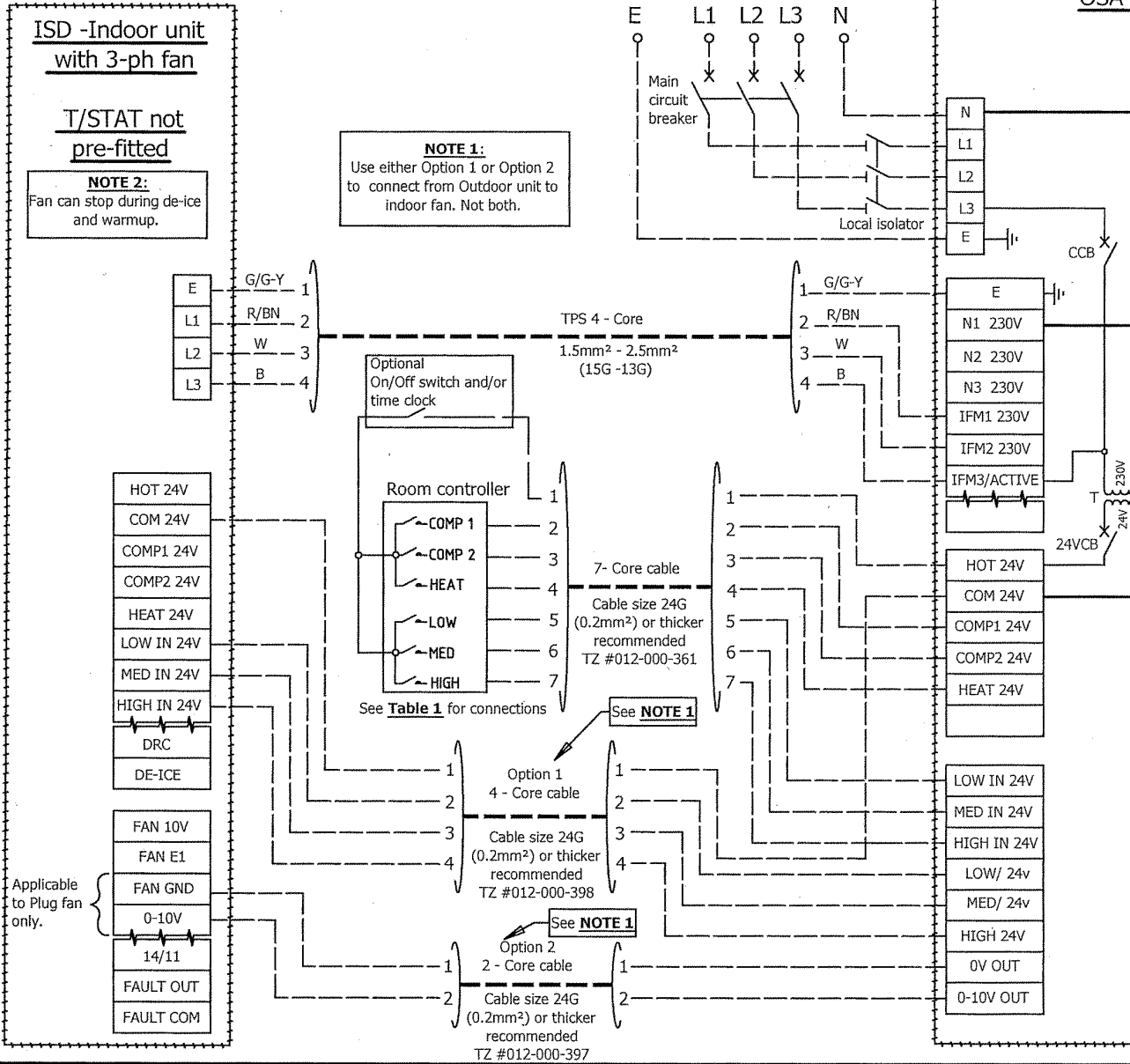
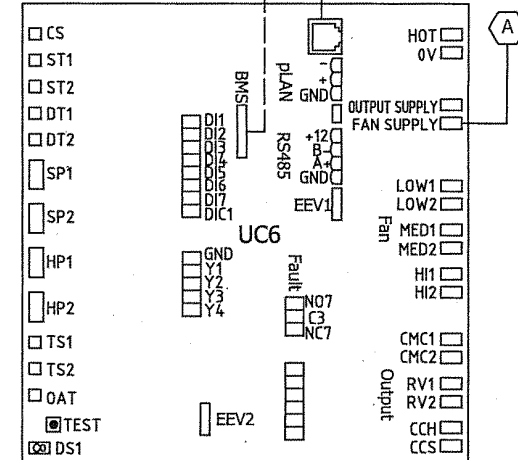
OSA - Outdoor unit with UC6 Controller

Table 1: Generic room controller connection to OSA terminals

Room controller	OSA terminal block
COMP 1	COMP1 24V
COMP 2	COMP2 24V
HEAT	HEAT 24V
LOW	LOW IN 24V
MED	MED IN 24V
HIGH	HIGH IN 24V
On/Off switch and/or time clock	HOT 24V

Optional
BMS port (for monitoring)
Must install appropriate comms board e.g. TZ #201-000-388 for MODBUS

Optional UC6 Service Interface.



Applicable to Plug fan only.