

Indoor Unit	(525-501-712)	ISD 294KYX
Outdoor Unit	(546-501-312)	OSA 294RKTFV (inverter)
Cooling capacity (net) to AS/NZS 3823 T1		27.1 kW
Heating capacity H1		27.5 kW
Electrical input - cooling		8.7 kW
Electrical input - heating		7.8 kW
EER / AEER (cooling)		3.13 / 3.11
Unit Controllers		UC8 / IUC
Refrigerant		R410A
Refrigerant precharge for 10 m		11.9 kg
Additional charge req'd for over 10 m		100 g/m
Base refrigerant charge OSA		10.9 kg
Maximum line length		90 m
Separation limit: OSA above ISD		20 m
Separation limit: OSA below ISD		20 m
Suction line		28 mm OD
Liquid line		13 mm OD
Compressor oil type		PVE FVC68D (or equivalent)
Additional oil charge over 40m line length		20 ml/m
Compressor type		inverter scroll
Power supply via OSA		3 ph. 400V ac 50Hz
Compressor (3ph.) run amps at rating cond.		12.7 A
Indoor fan motor size		900W + 1250W
Rated indoor fan speed		MED
Indoor fan motor (1ph.) - full load		10 A
Outdoor fan motor (1ph.) - full load		4 A (x2)
Outdoor fan capacitor size		6 μ fd (x2)
Control circuit breaker (internal)		20 A
Running amps (total system)		17 A/ph.
Max. running amps (total system)		36 A/ph.
Net weight ISD		127 kg
Net weight OSA		245 kg

Accessories:

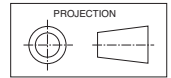
ISD Spring mounting kit	307-341-101
ISD Filter box c/w EU4/G4 filter (NZ only)	493-000-016
ISD Replacement filter (NZ only)	019-400-003 (x3)
ISD Supply air plenum Ø400 x 4 (NZ only)	492-000-030
ISD Return air plenum Ø400 x 4 (NZ only)	492-100-008
ISD Fresh air inlet spigot Ø200 (NZ only)	325-000-052
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
Six Zone Control kit for SAT-3	201-000-073
TZT-100 Room temperature controller	201-000-350

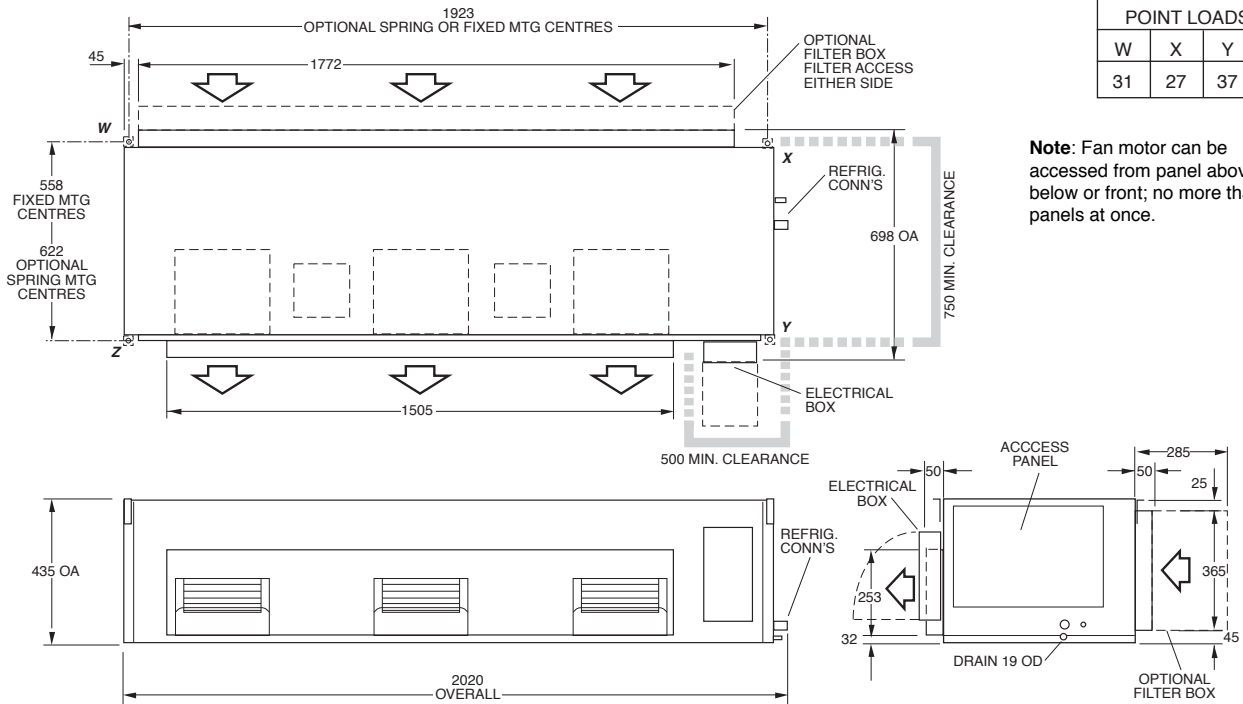
Refer to temperzone for other options, eg remote sensors, connection wires.

DIMENSIONS (mm)



Not to Scale

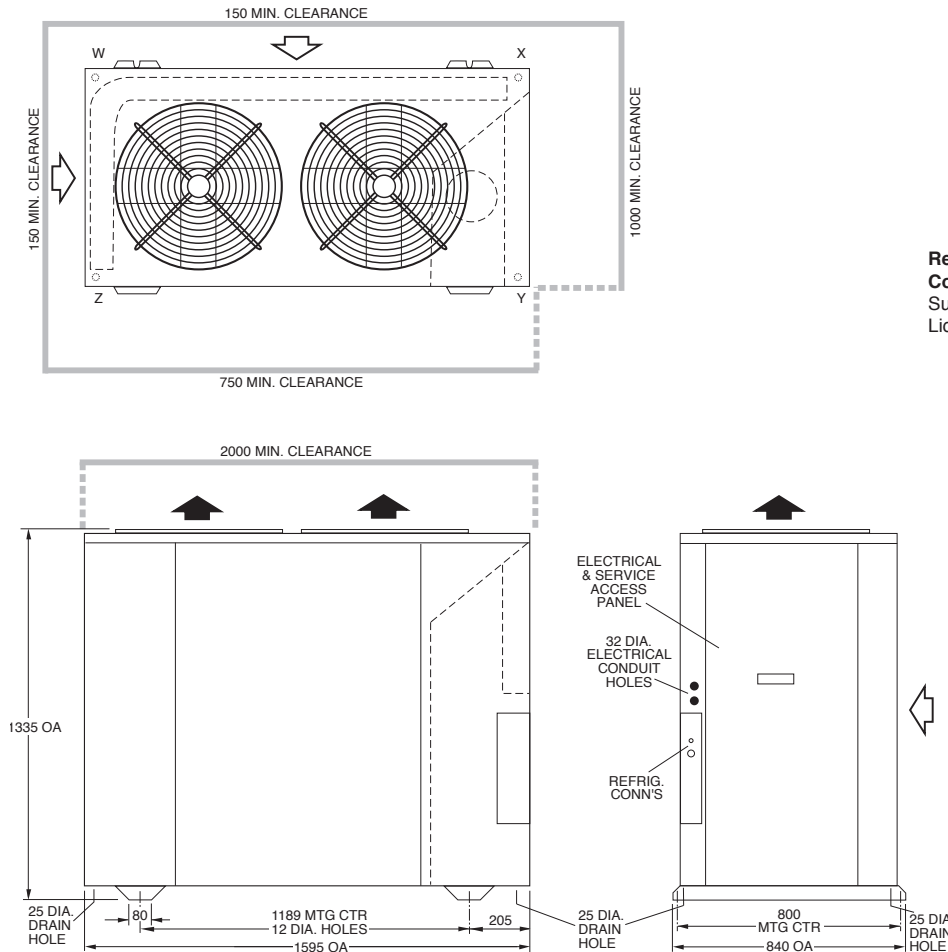
ISD 294KYX Indoor Unit



POINT LOADS (kg)			
W	X	Y	Z
31	27	37	32

Note: Fan motor can be accessed from panel above, below or front; no more than two panels at once.

OSA 294RKTFV Outdoor Unit



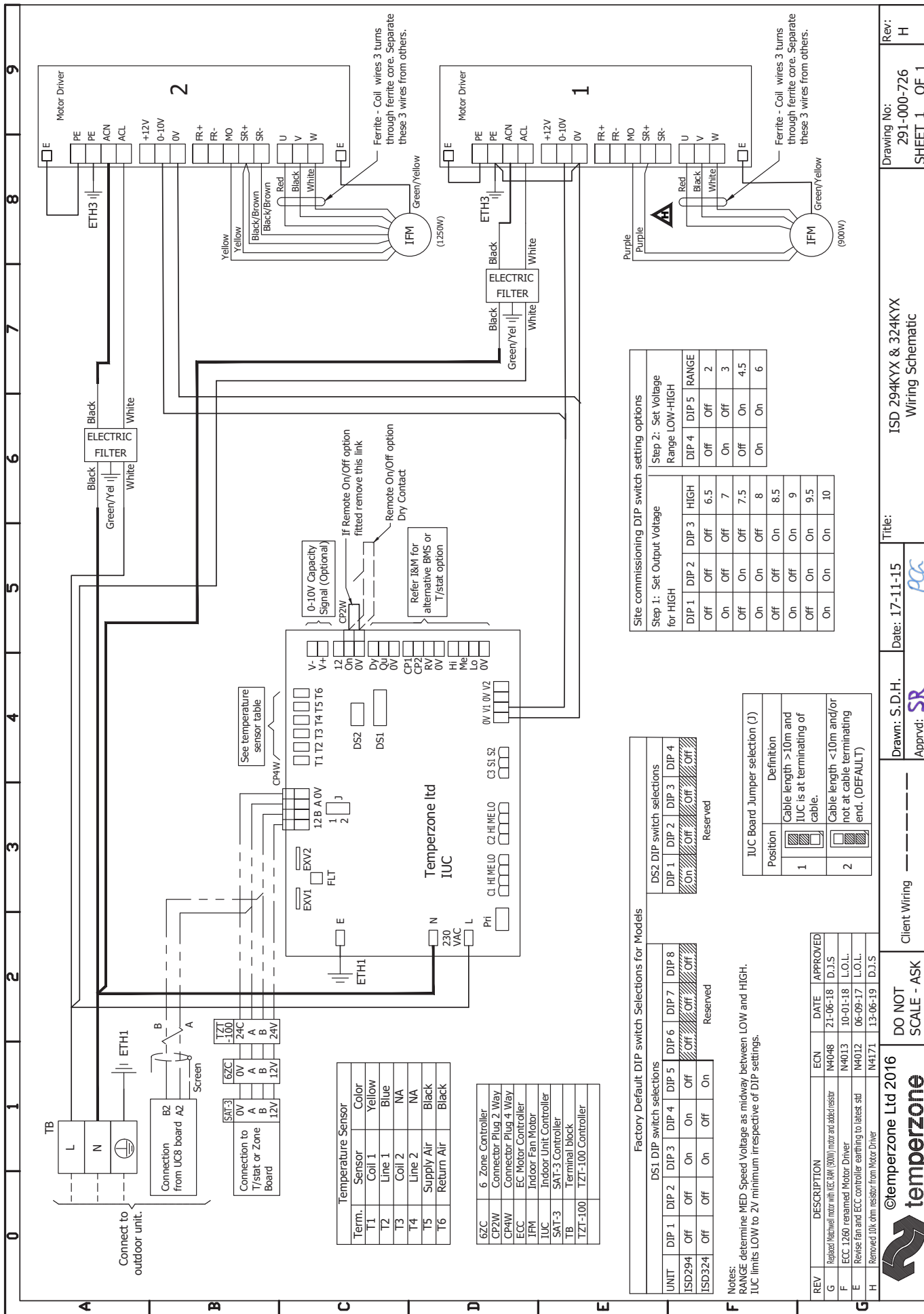
POINT LOADS (kg)			
W	X	Y	Z
49	87	60	49

Recommended Connecting Pipe Sizes
 Suction : 28 mm OD
 Liquid : 13 mm OD

NOTE

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





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

6ZC	6 Zone Controller
CP2W	Connector Plug 2 Way
CP4W	Connector Plug 4 Way
ECC	EC Motor Controller
IFM	Indoor Fan Motor
IUC	Indoor Unit Controller
SAT-3	SAT-3 Controller
TB	Terminal block
TZ1-100	TZ1-100 Controller

Factory Default DIP switch Selections for Models								
DS1 DIP switch selections			DS2 DIP switch selections			DIP 4		
UNIT	DIP 1	DIP 2	DIP 3	DIP 4	DIP 5	DIP 6	DIP 7	DIP 8
ISD294	Off	Off	On	Off	Off	Off	Off	Off
ISD324	Off	Off	On	Off	On	Reserved	Reserved	Reserved

Notes:
 RANGE determine MED Speed Voltage as midway between LOW and HIGH.
 IUC limits LOW to 2V minimum irrespective of DIP settings.

Site commissioning DIP switch setting options									
Step 1: Set Output Voltage for HIGH					Step 2: Set Voltage Range LOW-HIGH				
DIP 1	DIP 2	DIP 3	HIGH	DIP 4	DIP 5	RANGE	DIP 6	DIP 7	DIP 8
Off	Off	Off	6.5	Off	Off	2	On	Off	2
On	Off	Off	7	On	Off	3	On	Off	3
Off	On	Off	7.5	Off	On	4.5	Off	On	4.5
On	On	Off	8	On	On	6	On	On	6
Off	Off	On	8.5	Off	On	9	On	On	9
On	Off	On	9	On	On	9.5	On	On	9.5
Off	On	On	10	Off	On	10	On	On	10

IUC Board Jumper selection (J)	
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)

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DO NOT SCALE - ASK

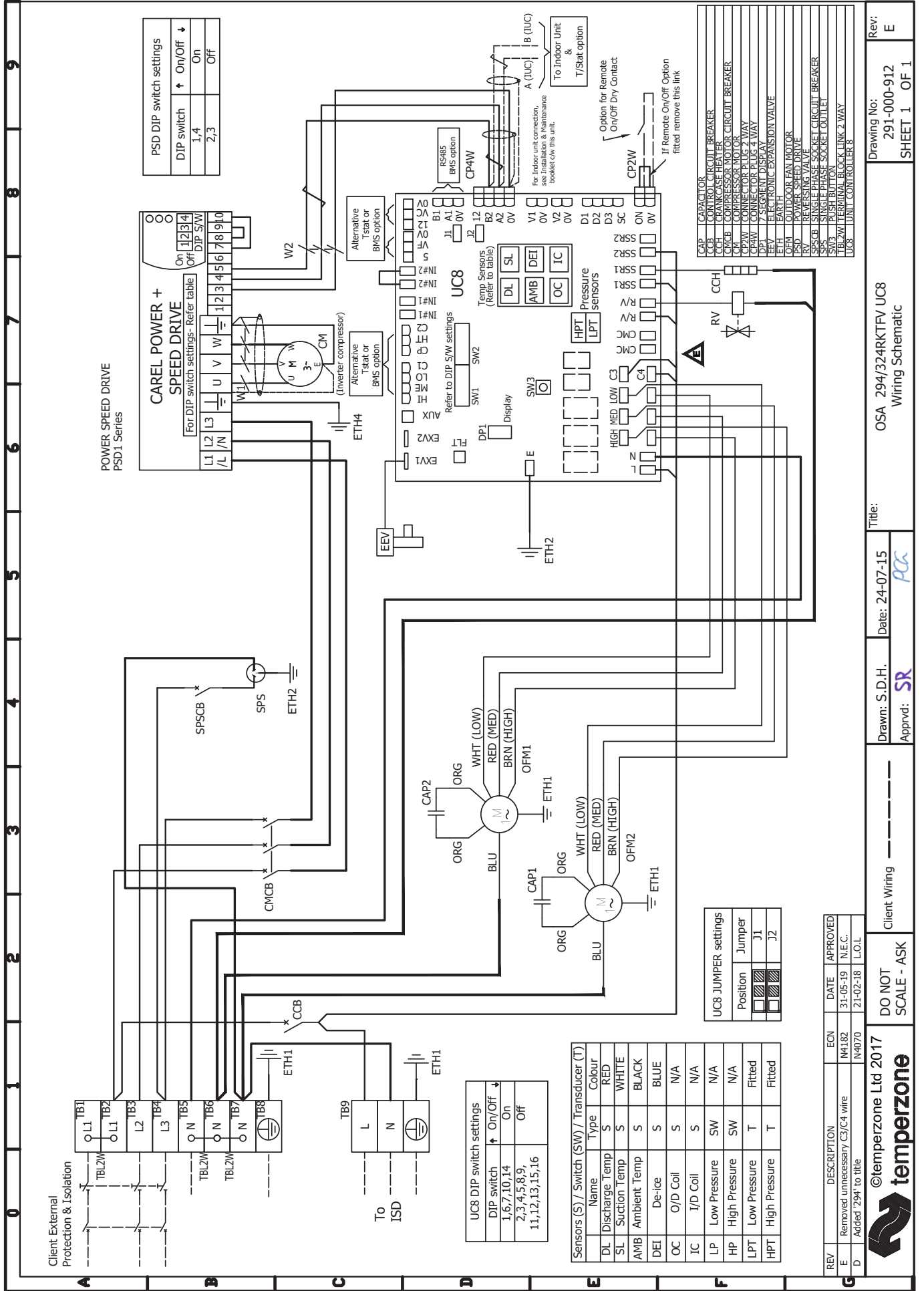
Client Wiring

Drawn: S.D.H. Date: 17-11-15

ISD 294KXX & 324KXX Wiring Schematic

Drawing No: 291-000-726 SHEET 1 OF 1

Rev: H



PSD DIP switch settings

DJP switch	↑ On/Off	↑
1,4	On	On
2,3	Off	Off

CAREL POWER + SPEED DRIVE
PSD1 Series

For DIP switch settings- Refer table

On	1	2	3	4
Off	5	6	7	8
DIP S/W	9	10	11	12

UC8 DIP switch settings

DIP switch	↑ On/Off	↑
1,6,7,10,14	On	On
2,3,4,5,8,9	Off	Off
11,12,13,15,16	Off	Off

Sensors (S) / Switch (SW) / Transducer (T)

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

UC8 JUMPER settings

Position	Jumper
<input type="checkbox"/>	J1
<input type="checkbox"/>	J2

REV	DESCRIPTION	ECN	DATE	APPROVED
E	Removed unnecessary C3/C4 wire	N4182	31-05-19	N.E.C.
D	Added 294' to title	N4070	21-02-18	L.O.L.

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Client Wiring

DO NOT SCALE - ASK

Drawn: S.D.H. Date: 24-07-15

Apprvd: SR

OSA 294/324RKTFF UC8
Wiring Schematic

Drawing No: 291-000-912
SHEET 1 OF 1

Rev: E