

# SPECIFICATIONS



<b>Indoor Unit</b>	(525-241-711)	<b>ISD 116KYX</b>
<b>Outdoor Unit</b>	(536-231-311)	<b>OSA 116RKSGH (1Ø)</b>
Cooling capacity (net) to AS/NZS 3823 T1		11.1 kW
Heating capacity H1		10.8 kW
Electrical input - cooling		3.5 kW
Electrical input - heating		3.2 kW
EER / AEER (cooling)		3.17 / 3.15
Unit Controllers		UC8 / IUC
Refrigerant		R410A
Refrigerant precharge for 10 m		4.45 kg
Additional charge req'd for over 10 m		50 g/m
Base refrigerant charge OSA		3.95 kg
Maximum line length		60 m
Separation limit: OSA above ISD		20 m
Separation limit: OSA below ISD		20 m
Suction line		16 mm OD
Liquid line		9.5 mm OD
Compressor oil type		POE 32-3MAF (or equivalent)
Additional oil charge over standard line length		10 ml/m
Compressor type		digital scroll
Power supply via OSA		1 ph. 230V ac 50Hz
Compressor run amps at rating cond.		14.6 A
Compressor run capacitor		80 $\mu$ fd
Indoor fan motor size		600 W
Rated indoor fan speed		MED
Indoor fan motor (1ph.) - full load		3.5 A
Outdoor fan motor (1ph.) - full load		1.3 A
Outdoor fan capacitor size		6 $\mu$ fd
Control circuit breaker (internal)		10 A
Running amps (total system)		16.9 A
Max. running amps (total system)		20 A
Net weight ISD		65 kg
Net weight OSA		128 kg

## Accessories:

ISD Spring mounting kit	307-161-101
ISD Spigot plate adaptor Ø400 x 2	525-271-705
ISD Filter box c/w EU2/G2 filter (NZ only)	493-000-003
ISD Replacement filter (NZ only)	119-000-079
ISD Supply air plenum Ø350 x 2 (NZ only)	492-000-007
ISD Return air plenum Ø350 x 2 (NZ only)	492-100-003
ISD Fresh air inlet spigot Ø150 (NZ only)	325-000-051
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

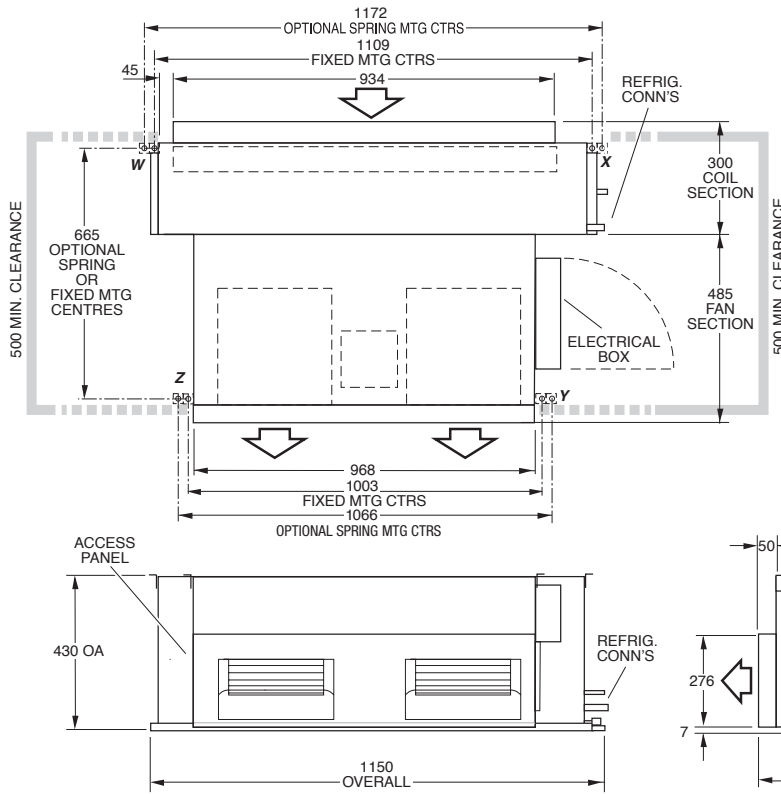
Refer to temperzone for other options, eg remote sensors, connection wires.

# DIMENSIONS (mm)



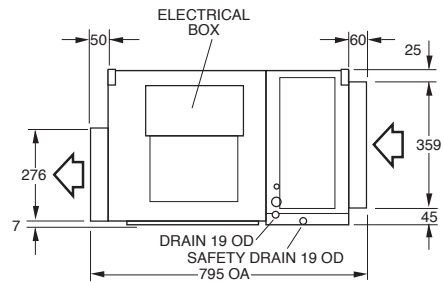
Not to Scale

## ISD 116KYX Indoor Unit

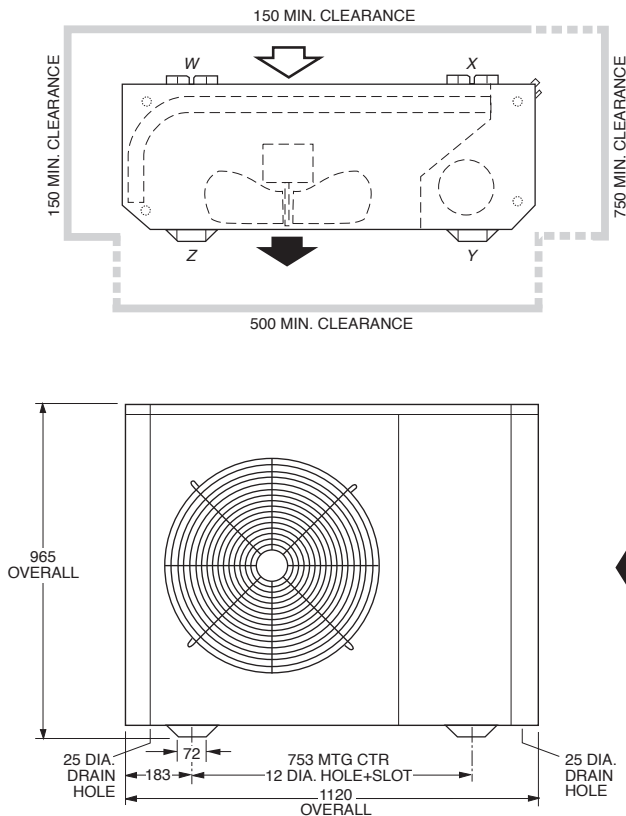


POINT LOADS (kg)			
W	X	Y	Z
15	18	17	15

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



## OSA 116RKSG Outdoor Unit



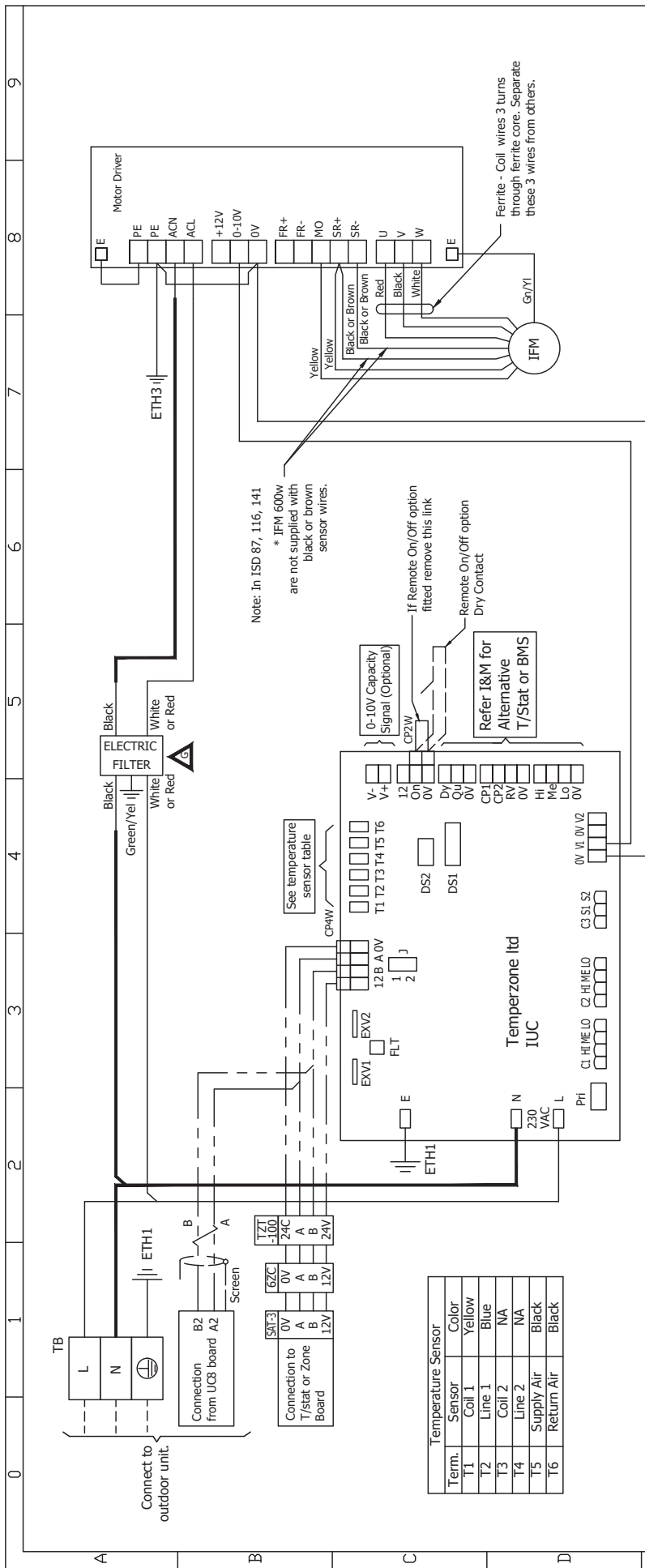
POINT LOADS (kg)			
W	X	Y	Z
16	38	50	24

**Recommended Connecting Pipe Sizes**  
 Suction : 16 mm OD  
 Liquid : 10 mm OD

**NOTE**

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





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	DIP 4	DIP 5	RANGE
Off	Off	Off	Off	Off	2
On	Off	Off	On	Off	3
Off	On	Off	Off	Off	4.5
On	On	Off	On	On	6

IUC Board Jumper selection (1)

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)

Refer I&M for Alternative T/Stat or BMS

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

Notes:  
To adjust indoor fan speed L/N/H settings, see section 5.2.6 of Installation & Maintenance document

Factory Default DIP switch Selections for Models

UNIT	DS1 DIP switch selections				DS2 DIP switch selections			
	DIP 1	DIP 2	DIP 3	DIP 4	DIP 1	DIP 2	DIP 3	DIP 4
ISD87	On	Off	Off	Off	On	Off	Off	Off
ISD116	On	On	Off	Off	On	Off	Off	Off
ISD141	On	On	Off	Off	On	Off	Off	Off
ISD164	On	On	Off	Off	On	Off	Off	Off
ISD184	On	On	Off	Off	On	Off	Off	Off
ISD194	On	On	Off	Off	On	Off	Off	Off
ISD224	On	On	Off	Off	On	Off	Off	Off

REV	DESCRIPTION	ECN	DATE	APPROVED
D	ECC 1260 Wiring Update/Earth Symbols	N3811	06-09-16	J.S.L.
E	Reconfigure DIP Switch Selections Table	N3995	07-07-17	M.A.K.
F	ECC 1260 renamed Motor Driver	N4013	10-01-18	L.O.L.
G	Note to use either white or red wire added	N4067	12-02-18	P.M.C.

Client Wiring

Drawn: K.T.T. Date: 22-10-14

Approved: *SR*

Title: ISD 87 / 116 / 141 / 164 / 184 / 194 / 224KYX Wiring Schematic

Drawing No: 291-000-598 SHEET 1 OF 1

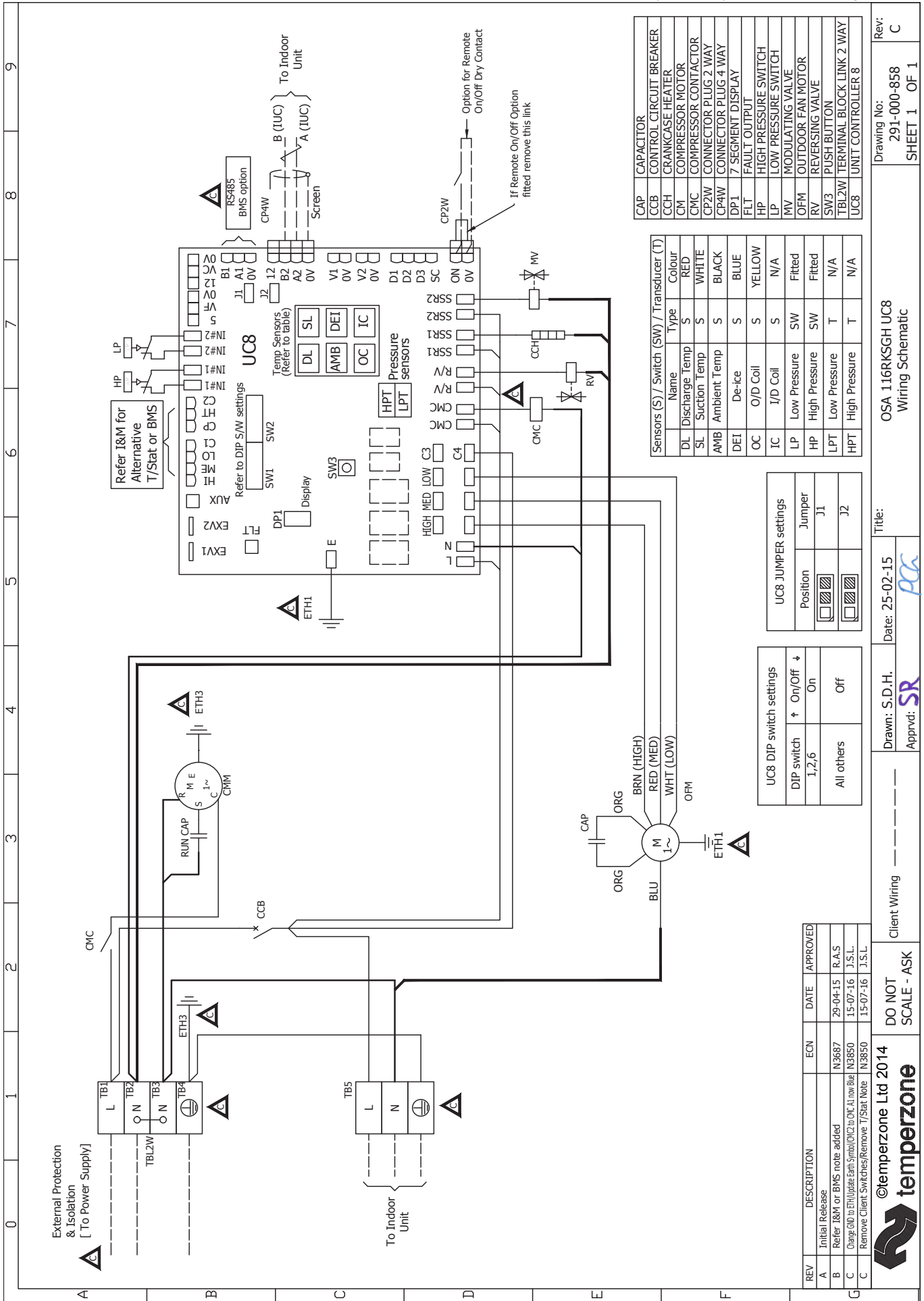
Rev: G

DO NOT SCALE - ASK

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# OUTDOOR UNIT WIRING

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



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

Sensors (S) / Switch (SW) / Transducer (T)	Name	Type	Colour
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	
DIP switch 1,2,6	On
All others	Off

UC8 JUMPER settings	
Position	Jumper
J1	J1
J2	J2

REV	DESCRIPTION	ECN	DATE	APPROVED
A	Initial Release			
B	Refer I&M or BMS note added	N3687	29-04-15	R.A.S
C	Change GND to ETH Update Earth Symbol (CIC) to CMC At New Bldg	N3850	15-07-16	J.S.L.
C	Remove Client Switches/Remove T/Stat Note	N3850	15-07-16	J.S.L.

Drawing No: 291-000-858  
 Rev: C  
 Title: OSA 116RKSQH UC8 Wiring Schematic  
 Date: 25-02-15  
 Drawn: S.D.H.  
 Approved: SR  
 Client: Wiring  
 DO NOT SCALE - ASK  
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