











AIRES SPLIT DUCTED UNIT

Technical Selection Data





-  SINGLE PHASE
-  THREE PHASE
-  SINGLE STAGE
-  ECM FAN
-  INVERTER
-  R-32 REFRIGERANT
-  SOFT START
-  DC AXIAL FAN

Model Numbers

Single Phase	Three Phase	Split Fan-Coil
CRS10AS / EVA10AS	CRS13AT / EVA13AS	ECA13AS / EFA13AS
CRS13AS / EVA13AS	CRS15AT / EVA15AS	ECA15AS / EFA15AS
CRS15AS / EVA15AS	CRS17AT / EVA17AS	ECA17AS / EFA17AS
CRS17AS / EVA17AS		

UNIT FEATURES

- Inverter Variable Speed Compressor and Drive Technology
- 28*-100% Superior Refrigeration Operating Capacity Range
- High efficient variable speed Indoor and Outdoor Fan Motor
- Pre-charged with Low GWP R-32 Refrigerant
- Adaptive Demand Defrost
- Active Power Factor Correction
- 20m Cat5e wall controller cable included
- Low ambient cooling operation to +5 degree
- Fault and Run Indication - Relay Output
- Up to 3 Wall Controllers and 3 Remote Temperature Sensors
- Ready for up to 8 zones
- Compressor Soft Start via Variable Speed Drive Control
- Hydrophilic Blue Fin Coil Coat Protection - Indoor and Outdoor Coils
- Integrated Fan Coil Safety Tray with Drain Kit
- Bi-Flow Electronic Expansion Valve
- Powder Coated Outdoor Unit
- Turbo Mode

UNIT OPTIONS

- Additional Full Coil Coat Protection - Indoor Coil Only
- Split Fan Coil Unit
- Vertical Fan Coil Unit

UNIT COMPLIANCE

- AS/NZS 3823.2 (MEPS)
- AS/NZS 4755.3.1:2012 (DRM 1, 2 and 3)
- AS/NZS CISPR 14.1 (EMC)
- AS/NZS 60335.2.40 in conjunction with AS/NZS 60335.1 (Electrical Safety - Air Conditioner)

CONTROL OPTIONS AND FEATURES

ActronAir LR7-1/LC7-2

- Available in White or Grey
- 7-day Programmable Controller with 2 Events per Day
- 24-hour ON/OFF Timer
- Temperature Setback
- After Hours Time (LC7-2 Only)
- Auto, Heat, Cool, Turbo, Fan Modes and Night Mode Functions
- Fixed and Continuous Indoor Fan Operation
- Optional 2nd and 3rd Controllers with Mimic Logic
- On-board Temperature Sensor

ActronAir NEO

- 7" Colour Touch Screen Master Controller
- In-built Wi-Fi and Blue-Tooth
- Neo Connect App
- On-Board Temperature, Humidity and Proximity Sensor
- Optional wireless Zone Sensor
- Available in White or Black

ActronAir Group Control

ActronAir BMS ICUNO-MOD (Modbus 485)

Third Party Control

- Optional Manual Inputs
- Optional Analogue Inputs

PLENUMS

See Plenum Matrix for details of spigots availability.

* Minimum varies depending on model selected.

SPECIFICATION SUMMARY

OUTDOOR UNIT MODEL	CRS10AS	CRS13AS	CRS15AS	CRS17AS	CRS13AT	CRS15AT	CRS17AT									
INDOOR UNIT MODEL	EVA10AS	EVA13AS	EVA15AS	EVA17AS	EVA13AS	EVA15AS	EVA17AS									
		⁽¹⁾ TOTAL	⁽²⁾ NETT	⁽¹⁾ TOTAL	⁽²⁾ NETT	⁽¹⁾ TOTAL	⁽²⁾ NETT	⁽¹⁾ TOTAL	⁽²⁾ NETT	⁽¹⁾ TOTAL	⁽²⁾ NETT	⁽¹⁾ TOTAL	⁽²⁾ NETT			
⁽³⁾ COOLING CAPACITY (kW)	RATED	10.40	10.00	13.30	13.02	15.75	15.4	17.40	17.00	13.30	13.00	15.55	15.20	17.40	17.00	
	Max ⁽¹⁰⁾	-	13.34	-	15.01	-	17.26	-	19.32	-	15.32	-	17.21	-	19.16	
	MINIMUM	-	3.89	-	5.55	-	5.94	-	6.54	-	5.49	-	6.00	-	6.48	
⁽⁴⁾ HEATING CAPACITY (kW)	RATED	10.15	10.52	14.70	15.00	16.40	16.74	18.90	19.29	14.70	15.00	16.35	16.7	18.70	19.08	
	Max ⁽¹⁰⁾	-	13.57	-	17.03	-	18.57	-	21.61	-	17.29	-	18.59	-	21.18	
	MINIMUM	-	3.13	-	4.69	-	5.10	-	5.32	-	4.74	-	5.05	-	5.27	
⁽³⁾ SENSIBLE CAPACITY (kW)	RATED	8.50	8.10	10.83	10.55	12.98	12.63	14.17	13.77	10.44	10.14	12.81	12.46	14.17	13.77	
⁽⁵⁾ COOLING INPUT POWER (kW)	RATED	2.97		3.89		4.41		5.02		3.91		4.43		5.02		
⁽⁵⁾ HEATING INPUT POWER (kW)	RATED	3.06		4.27		4.72		5.50		4.13		4.64		5.42		
EER	RATED	3.36		3.35		3.49		3.39		3.33		3.43		3.39		
COP	RATED	3.43		3.51		3.55		3.51		3.63		3.6		3.52		
Total Cooling Seasonal Performance Factor Residential - Cold / Mixed / Hot	4.22 / 4.10 / 4.45		4.37 / 4.21 / 4.50		4.55 / 4.39 / 4.68		4.27 / 4.14 / 4.39		4.34 / 4.19 / 4.48		4.61 / 4.43 / 4.72		4.35 / 4.20 / 4.46			
Heating Seasonal Performance Factor Residential - Cold / Mixed / Hot	3.21 / 3.64 / 4.13		3.42 / 3.86 / 4.33		3.41 / 3.86 / 4.32		3.33 / 3.84 / 4.39		3.46 / 3.97 / 4.50		3.42 / 3.87 / 4.31		3.41 / 3.90 / 4.41			
⁽⁶⁾ INDOOR AIRFLOW (l/s) MIN. / NOMINAL / MAX.	400 / 500 / 600		520 / 650 / 780		620 / 770 / 920		710 / 890 / 1060		520 / 650 / 780		620 / 770 / 920		710 / 890 / 1060			
⁽⁷⁾ OUTDOOR SOUND PRESS. LEVEL @ 3M dB(A) - Quiet / Rated / Max	49.9 / 52.1 / 53.8		47.0 / 54.2 / 55.2		46.0 / 54.9 / 55.1		50.1 / 56.8 / 56.9		46.7 / 54.0 / 54.9		45.8 / 55.1 / 55.4		50.0 / 56.9 / 57.0			
OUTDOOR SOUND POWER LEVEL dB(A) - Quiet / Rated / Max	65.3 / 68.1 / 69.9		64.2 / 70.0 / 71.0		63.6 / 71.6 / 72.0		67.3 / 72.8 / 73.2		64.2 / 70.3 / 71.1		63.4 / 71.8 / 72.1		66.9 / 72.8 / 73.1			
POWER SUPPLY - OUTDOOR	230V / 1Ph+N / 50Hz								400V / 3Ph+N / 50Hz							
VOLTAGE RANGE (MIN - MAX)	216V - 243V								376V - 424V							
IP RATING	IPX4															
POWER SUPPLY - INDOOR	230V / 1Ph+N / 50Hz															
VOLTAGE RANGE (MIN - MAX)	216V - 243V															
IP RATING	IP20															
⁽²⁾ RATED LOAD AMPS** - TOTAL	13.8		18.6		20.8		24.3		6.4		7.3		8.6			
⁽⁸⁾ FULL LOAD AMPS OUTDOOR / INDOOR / TOTAL	17.4 / 3.5 / 20.9		17.7 / 4.3 / 22.0		21.5 / 4.3 / 25.8		24 / 4.3 / 28.3		5.75 / 4.3 / 10.05		6.8 / 4.3 / 11.1		8.1 / 4.3 / 12.4			
OUTDOOR AND INDOOR UNIT (TOTAL)																
FULL LOAD AMPS* - PHASE 1	20.9		22.0		25.8		28.3		10.05		11.1		12.3			
FULL LOAD AMPS* - PHASE 2 AND 3									5.95 / 5.95		8.4 / 6.7		9.95 / 7.9			
⁽⁹⁾ CIRCUIT BREAKER	25.0		25.0		32.0		32.0		16.0		16.0		16.0			
APPROXIMATE STARTING AMPS	10.5		15.0		15.45		17.7		7.0		7.4		8.4			
CABLE SIZE (MAIN LINE) SUGGESTED MINIMUM	Refer to latest edition of AS/ANZ 3000 or AS/ANZ 3008 Australian/New Zealand Wiring Rules to determine required cable size.															
DATA CABLE FIELD WIRING (OUTDOOR TO INDOOR)	2 Core 7 / 0.30 (0.5mm ²) Twisted Shielded Data Cable															
WEIGHT (kg) -- INDOOR / OUTDOOR	36 / 64		44 / 85		53 / 99		61 / 110		44 / 85		53 / 99		61 / 110			

- ⁽¹⁾ Based on unit rating excluding indoor fan kW.
- ⁽²⁾ Measured and tested in accordance with AS/NZS 3823.1.2.
- ⁽³⁾ At 27°C DB / 19°C WB entering air temperatures and 35°C ambient.
- ⁽⁴⁾ At 20°C DB entering air temperature and 7°C DB / 6°C WB ambient.
- ⁽⁵⁾ Total input power includes indoor fan kW.
- ⁽⁶⁾ Max. - Min. airflow application range.
- ⁽⁷⁾ Outdoor sound pressure level is determined in an anechoic chamber and may differ once the unit is installed due to environment conditions.
- ⁽⁸⁾ Full Load Amps are based on compressor and fan motors' maximum expected current.
- ⁽⁹⁾ See Specifications sheet for cable size and circuit breaker size details.
- ⁽¹⁰⁾ MAX - Maximum Capacity
- * Full Load Amps are based on Compressor and Fan Motor's maximum expected current
- ** Rated Load Amps are measured and tested in accordance with AS/NZS3823.1.2.

Notes: Use Total input power to estimate running cost.



CAPACITY SELECTION DATA

CRS10AS / EVA10AS

COOLING PERFORMANCE													
AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	10.88	6.52	7.13	7.74	8.34	8.92	9.41					
	17	10.98	5.92	6.51	7.12	7.73	8.33	8.92	9.44				
	18	11.10	5.28	5.90	6.50	7.11	7.72	8.31	8.92	9.47	9.97		
	19	11.37	4.62	5.26	5.90	6.48	7.09	7.70	8.31	8.91	9.47	10.00	10.46
	20	11.63	3.95	4.60	5.24	5.88	6.46	7.07	7.68	8.29	8.89	9.47	10.01
	21	11.96		3.93	4.57	5.22	5.85	6.43	7.06	7.66	8.26	8.87	9.45
	22	12.26			3.92	4.55	5.20	5.83	6.46	7.03	7.64	8.24	8.85
30	16	10.50	6.34	6.95	7.56	8.15	8.70	9.13					
	17	10.59	5.74	6.33	6.95	7.55	8.14	8.72	9.24				
	18	10.68	5.10	5.73	6.31	6.93	7.53	8.13	8.72	9.27	9.70		
	19	10.90	4.45	5.09	5.72	6.31	6.92	7.53	8.12	8.71	9.28	9.79	
	20	11.16	3.79	4.44	5.08	5.71	6.29	6.91	7.51	8.11	8.70	9.28	9.81
	21	11.48		3.77	4.41	5.05	5.69	6.28	6.88	7.49	8.10	8.69	9.26
	22	11.77			3.75	4.39	5.03	5.66	6.25	6.86	7.47	8.07	8.66
35	16	10.10	6.14	6.75	7.36	7.94	8.47						
	17	10.13	5.55	6.14	6.75	7.35	7.94	8.49	8.98				
	18	10.23	4.92	5.54	6.12	6.74	7.34	7.93	8.51	9.05			
	19	10.40	4.26	4.91	5.54	6.11	6.73	7.34	7.93	8.50	9.06		
	20	10.68	3.61	4.25	4.89	5.52	6.10	6.71	7.31	7.91	8.49	9.07	9.59
	21	10.94		3.60	4.24	4.88	5.50	6.09	6.69	7.30	7.89	8.48	9.06
	22	11.21			3.58	4.22	4.85	5.49	6.06	6.67	7.27	7.87	8.47
40	16	9.64	5.76	6.36	6.93	7.48	7.94						
	17	9.65	5.16	5.76	6.35	6.92	7.50	8.01					
	18	9.71	4.58	5.19	5.75	6.35	6.93	7.49	8.03	8.48			
	19	9.87	3.95	4.57	5.22	5.73	6.33	6.92	7.48	8.04	8.55		
	20	10.10	3.31	3.94	4.56	5.16	5.72	6.32	6.90	7.48	8.04	8.57	9.01
	21	10.35		3.30	3.92	4.54	5.15	5.71	6.29	6.89	7.47	8.02	8.58
	22	10.61			3.28	3.91	4.52	5.13	5.70	6.27	6.87	7.44	8.02
45	16	8.33	5.42	6.01	6.57	7.08							
	17	8.34	4.84	5.42	6.00	6.57	7.10	7.54					
	18	8.40	4.28	4.84	5.42	5.99	6.57	7.11	7.61				
	19	8.47	3.67	4.27	4.83	5.41	5.99	6.56	7.11	7.64	8.05		
	20	8.66	3.04	3.65	4.26	4.85	5.40	5.97	6.54	7.10	7.64	8.13	
	21	8.87		3.03	3.64	4.24	4.84	5.39	5.96	6.53	7.10	7.64	8.15
	22	9.11			3.02	3.62	4.23	4.82	5.37	5.95	6.51	7.08	7.63
50	16	5.62	3.80	4.23	4.62	4.94							
	17	5.63	3.38	3.80	4.23	4.63	5.00						
	18	5.65	2.97	3.38	3.80	4.22	4.63	5.02					
	19	5.67	2.52	2.96	3.37	3.80	4.21	4.63	5.02	5.37			
	20	5.78	2.07	2.51	2.95	3.37	3.79	4.20	4.62	5.02	5.40		
	21	5.92		2.06	2.51	2.95	3.38	3.78	4.19	4.62	5.03	5.41	5.75
	22	6.07			2.05	2.49	2.94	3.37	3.77	4.19	4.61	5.01	5.41

HEATING PERFORMANCE											
WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C										
	16		18		20		22		24		
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH	
-10	6.73	6.46	6.69	6.42	6.66	6.39	6.63	6.36	6.59	6.33	
-8	7.10	6.75	7.07	6.71	7.03	6.67	6.99	6.64	6.95	6.60	
-6	7.50	7.05	7.46	7.01	7.41	6.97	7.37	6.92	7.32	6.88	
-4	7.93	7.29	7.87	7.24	7.82	7.20	7.77	7.15	7.72	7.10	
-2	8.37	7.45	8.31	7.40	8.25	7.34	8.19	7.29	8.13	7.24	
0	8.84	7.78	8.78	7.73	8.72	7.67	8.65	7.61	8.58	7.55	
2	9.30	8.46	9.23	8.40	9.16	8.33	9.08	8.26	9.01	8.20	
4	9.79	9.79	9.71	9.71	9.63	9.63	9.55	9.55	9.46	9.46	
6	10.29	10.29	10.21	10.21	10.12	10.12	10.06	10.06	9.96	9.96	
8	10.84	10.84	10.78	10.78	10.68	10.68	10.58	10.58	10.48	10.48	
10	11.45	11.45	11.35	11.35	11.24	11.24	11.13	11.13	11.02	11.02	
12	12.05	12.05	11.94	11.94	11.82	11.82	11.70	11.70	11.59	11.59	
14	12.69	12.69	12.56	12.56	12.43	12.43	12.30	12.30	12.17	12.17	
16	13.33	13.33	13.19	13.19	13.05	13.05	12.91	12.91	12.78	12.78	
18	14.00	14.00	13.86	13.86	13.71	13.71	13.56	13.56	13.40	13.40	

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER							
% VARIATION	-15%	-10%	-5%	Nominal	+5%	+10%	+15%
INDOOR AIRFLOW (l/s)	425	450	475	500	525	550	575
TOTAL COOLING	0.971	0.982	0.992	1.000	1.008	1.016	1.020
SENSIBLE COOLING	0.913	0.943	0.971	1.000	1.029	1.056	1.081
HEATING FACTOR	0.994	0.996	0.998	1.000	1.002	1.003	1.004

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

PIPE LENGTH CORRECTION MULTIPLIER							
	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



CAPACITY SELECTION DATA

CRS13AS / EVA13AS

COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	13.92	8.25	9.05	9.84	10.62	11.38	12.01					
	17	14.05	7.47	8.24	9.04	9.83	10.61	11.37	12.06				
	18	14.21	6.63	7.45	8.22	9.02	9.81	10.59	11.38	12.10	12.75		
	19	14.57	5.78	6.61	7.44	8.20	9.00	9.79	10.58	11.36	12.09	12.78	13.38
	20	14.90	4.90	5.75	6.59	7.42	8.18	8.97	9.76	10.56	11.34	12.09	12.80
	21	15.33		4.88	5.72	6.56	7.38	8.14	8.95	9.74	10.52	11.31	12.07
30	16	13.43	8.02	8.81	9.60	10.37	11.10	11.66					
	17	13.55	7.24	8.00	8.81	9.59	10.36	11.11	11.79				
	18	13.66	6.41	7.23	7.98	8.79	9.57	10.35	11.12	11.84	12.40		
	19	13.95	5.56	6.39	7.21	7.97	8.77	9.56	10.34	11.10	11.84	12.50	
	20	14.29	4.70	5.54	6.38	7.19	7.95	8.75	9.54	10.32	11.09	11.85	12.54
	21	14.71		4.67	5.50	6.34	7.17	7.93	8.72	9.52	10.31	11.07	11.82
35	16	12.91	7.76	8.56	9.34	10.10	10.78						
	17	12.95	6.99	7.76	8.55	9.33	10.09	10.82	11.45				
	18	13.07	6.17	6.97	7.74	8.53	9.32	10.08	10.84	11.54			
	19	13.30	5.31	6.15	6.97	7.72	8.52	9.31	10.09	10.83	11.56		
	20	13.66	4.46	5.30	6.13	6.95	7.70	8.50	9.29	10.06	10.82	11.57	12.25
	21	14.01		4.44	5.28	6.11	6.92	7.69	8.47	9.26	10.03	10.81	11.56
40	16	12.18	7.33	8.12	8.86	9.59	10.19						
	17	12.19	6.54	7.32	8.10	8.86	9.61	10.28					
	18	12.28	5.78	6.58	7.31	8.10	8.86	9.60	10.31	10.91			
	19	12.48	4.95	5.76	6.62	7.29	8.08	8.86	9.59	10.33	10.99		
	20	12.78	4.11	4.94	5.75	6.54	7.28	8.06	8.83	9.58	10.32	11.02	11.60
	21	13.10		4.10	4.91	5.73	6.52	7.27	8.03	8.81	9.57	10.30	11.03
45	16	10.42	6.82	7.59	8.31	8.98							
	17	10.43	6.07	6.82	7.57	8.31	9.01	9.58					
	18	10.51	5.34	6.07	6.81	7.57	8.31	9.01	9.67				
	19	10.60	4.54	5.32	6.05	6.81	7.56	8.30	9.02	9.70	10.24		
	20	10.83	3.73	4.52	5.31	6.08	6.79	7.53	8.28	9.01	9.71	10.35	
	21	11.10		3.71	4.51	5.29	6.07	6.78	7.52	8.26	9.01	9.71	10.37
50	16	6.96	4.73	5.29	5.79	6.21							
	17	6.97	4.19	4.73	5.28	5.80	6.27						
	18	7.00	3.66	4.18	4.72	5.27	5.80	6.30					
	19	7.02	3.08	3.65	4.18	4.72	5.26	5.80	6.30	6.76			
	20	7.16	2.50	3.07	3.64	4.17	4.71	5.25	5.78	6.31	6.79		
	21	7.33		2.49	3.07	3.63	4.18	4.70	5.23	5.78	6.31	6.80	7.24

HEATING PERFORMANCE

WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C									
	16		18		20		22		24	
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH
-10	9.88	9.29	9.83	9.24	9.78	9.19	9.74	9.16	9.69	9.11
-8	10.42	9.69	10.37	9.64	10.31	9.59	10.25	9.54	10.20	9.49
-6	10.99	10.11	10.92	10.05	10.86	9.99	10.79	9.93	10.72	9.86
-4	11.59	10.38	11.52	10.31	11.44	10.24	11.37	10.18	11.30	10.11
-2	12.22	10.63	12.14	10.56	12.06	10.49	11.97	10.41	11.89	10.34
0	12.90	11.09	12.81	11.02	12.72	10.94	12.62	10.86	12.53	10.78
2	13.55	12.06	13.45	11.97	13.34	11.88	13.24	11.78	13.13	11.69
4	14.25	13.53	14.13	13.42	14.02	13.32	13.90	13.21	13.78	13.09
6	14.97	14.97	14.84	14.84	14.72	14.72	14.63	14.63	14.50	14.50
8	15.75	15.75	15.66	15.66	15.52	15.52	15.38	15.38	15.24	15.24
10	16.62	16.62	16.47	16.47	16.32	16.32	16.17	16.17	16.01	16.01
12	17.48	17.48	17.31	17.31	17.15	17.15	16.98	16.98	16.81	16.81
14	18.38	18.38	18.20	18.20	18.01	18.01	17.83	17.83	17.64	17.64
16	19.30	19.30	19.10	19.10	18.90	18.90	18.70	18.70	18.51	18.51
18	20.26	20.26	20.05	20.05	19.84	19.84	19.62	19.62	19.40	19.40

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	520	552.5	585	617.5	650	682.5	715	747.5	780
TOTAL COOLING	0.965	0.982	0.989	0.997	1.000	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.884	0.916	0.945	0.974	1.000	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	1.000	1.011	1.022	1.033	1.044

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

PIPE LENGTH CORRECTION MULTIPLIER

	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



CAPACITY SELECTION DATA

CRS15AS / EVA15AS

COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	16.49	9.89	10.85	11.79	12.72	13.64	14.39					
	17	16.64	8.95	9.87	10.83	11.78	12.72	13.63	14.45				
	18	16.82	7.95	8.93	9.85	10.82	11.76	12.69	13.64	14.50	15.28		
	19	17.25	6.93	7.93	8.92	9.83	10.79	11.74	12.68	13.62	14.49	15.31	16.04
	20	17.64	5.88	6.90	7.90	8.89	9.80	10.75	11.70	12.65	13.59	14.49	15.34
	21	18.15		5.86	6.86	7.87	8.85	9.76	10.73	11.67	12.61	13.56	14.47
	22	18.62			5.84	6.82	7.84	8.82	9.80	10.69	11.63	12.58	13.52
30	16	15.91	9.62	10.56	11.51	12.43	13.30	13.97					
	17	16.05	8.68	9.59	10.56	11.50	12.42	13.32	14.13				
	18	16.17	7.68	8.67	9.57	10.53	11.47	12.41	13.32	14.19	14.85		
	19	16.51	6.67	7.67	8.65	9.56	10.51	11.46	12.39	13.31	14.19	14.98	
	20	16.92	5.64	6.65	7.65	8.62	9.53	10.49	11.44	12.37	13.30	14.20	15.03
	21	17.42		5.60	6.60	7.61	8.60	9.51	10.45	11.41	12.36	13.27	14.17
	22	17.86			5.57	6.57	7.57	8.56	9.46	10.42	11.37	12.32	13.23
35	16	15.28	9.31	10.26	11.20	12.10	12.93			0.00			
	17	15.34	8.38	9.30	10.25	11.18	12.10	12.97	13.72				
	18	15.48	7.40	8.36	9.28	10.23	11.17	12.09	12.99	13.83			
	19	15.75	6.38	7.37	8.36	9.26	10.22	11.16	12.09	12.98	13.86		
	20	16.17	5.35	6.35	7.35	8.33	9.24	10.19	11.13	12.06	12.97	13.87	14.68
	21	16.58		5.33	6.33	7.33	8.30	9.22	10.15	11.11	12.02	12.95	13.85
	22	16.99			5.30	6.30	7.28	8.28	9.18	10.12	11.06	12.00	12.94
40	16	14.44	8.84	9.78	10.69	11.56	12.28						
	17	14.45	7.89	8.83	9.77	10.68	11.58	12.39					
	18	14.55	6.97	7.93	8.81	9.76	10.68	11.57	12.43	13.15			
	19	14.79	5.97	6.95	7.99	8.80	9.74	10.68	11.56	12.45	13.25		
	20	15.14	4.97	5.96	6.94	7.89	8.78	9.72	10.64	11.55	12.44	13.28	13.98
	21	15.52		4.95	5.93	6.91	7.87	8.76	9.68	10.62	11.54	12.41	13.29
	22	15.91			4.92	5.91	6.88	7.84	8.74	9.65	10.58	11.50	12.41
45	16	12.37	8.23	9.16	10.02	10.83							
	17	12.38	7.33	8.23	9.13	10.02	10.86	11.55					
	18	12.47	6.44	7.32	8.22	9.13	10.02	10.87	11.66				
	19	12.57	5.48	6.42	7.30	8.21	9.12	10.01	10.87	11.70	12.34		
	20	12.85	4.50	5.46	6.41	7.33	8.20	9.09	9.99	10.86	11.71	12.47	
	21	13.17		4.49	5.44	6.38	7.32	8.17	9.07	9.96	10.86	11.71	12.51
	22	13.54			4.46	5.41	6.37	7.29	8.15	9.05	9.94	10.82	11.68
50	16	8.26	5.68	6.34	6.94	7.44							
	17	8.27	5.02	5.67	6.34	6.95	7.52						
	18	8.30	4.39	5.02	5.67	6.32	6.96	7.56					
	19	8.33	3.70	4.38	5.02	5.67	6.31	6.96	7.56	8.11			
	20	8.50	3.01	3.69	4.37	5.01	5.66	6.30	6.94	7.57	8.15		
	21	8.71		2.99	3.68	4.36	5.02	5.64	6.28	6.94	7.57	8.16	8.68
	22	8.93			2.97	3.66	4.35	5.01	5.63	6.28	6.92	7.55	8.16

HEATING PERFORMANCE

WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C									
	16		18		20		22		24	
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH
-10	10.99	10.33	10.94	10.28	10.88	10.22	10.83	10.18	10.78	10.13
-8	11.59	10.78	11.53	10.72	11.47	10.66	11.41	10.61	11.35	10.55
-6	12.22	11.25	12.15	11.18	12.08	11.11	12.01	11.05	11.93	10.97
-4	12.90	11.55	12.82	11.47	12.73	11.40	12.65	11.33	12.57	11.25
-2	13.60	11.83	13.51	11.75	13.42	11.67	13.32	11.59	13.23	11.51
0	14.36	12.35	14.26	12.26	14.16	12.17	14.05	12.08	13.95	11.99
2	15.08	13.42	14.97	13.33	14.86	13.22	14.74	13.12	14.62	13.01
4	15.86	15.07	15.73	14.94	15.61	14.83	15.48	14.70	15.34	14.57
6	16.66	16.66	16.53	16.53	16.39	16.39	16.29	16.29	16.14	16.14
8	17.54	17.54	17.44	17.44	17.28	17.28	17.13	17.13	16.96	16.96
10	18.51	18.51	18.34	18.34	18.17	18.17	18.00	18.00	17.83	17.83
12	19.47	19.47	19.28	19.28	19.10	19.10	18.91	18.91	18.72	18.72
14	20.47	20.47	20.27	20.27	20.06	20.06	19.86	19.86	19.65	19.65
16	21.50	21.50	21.28	21.28	21.06	21.06	20.83	20.83	20.62	20.62
18	22.57	22.57	22.33	22.33	22.10	22.10	21.86	21.86	21.61	21.61

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER

% VARIATION	-19%	-15%	-10%	-5%	Nominal	5%	10%	15%	19.48%
INDOOR AIRFLOW (l/s)	620	654.5	693	731.5	770	808.5	847	885.5	920
TOTAL COOLING	0.967	0.982	0.989	0.997	1.000	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.887	0.916	0.945	0.974	1.000	1.024	1.046	1.072	1.092
HEATING FACTOR	0.970	0.976	0.983	0.991	1.000	1.011	1.022	1.033	1.044

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

PIPE LENGTH CORRECTION MULTIPLIER

	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



CAPACITY SELECTION DATA

CRS17AS / EVA17AS

COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	18.21	10.80	11.85	12.87	13.89	14.89	15.71					
	17	18.38	9.78	10.78	11.83	12.86	13.89	14.88	15.78				
	18	18.59	8.69	9.75	10.76	11.81	12.84	13.85	14.89	15.83	16.67		
	19	19.05	7.58	8.67	9.75	10.74	11.78	12.81	13.84	14.87	15.82	16.72	17.50
	20	19.49	6.43	7.54	8.63	9.71	10.71	11.74	12.78	13.81	14.83	15.82	16.74
	21	20.05		6.41	7.50	8.60	9.67	10.66	11.72	12.74	13.76	14.80	15.79
	22	20.57			6.38	7.46	8.56	9.64	10.70	11.67	12.70	13.74	14.76
30	16	17.57	10.50	11.53	12.56	13.57	14.52	15.25					
	17	17.73	9.48	10.48	11.53	12.56	13.56	14.54	15.42				
	18	17.87	8.40	9.47	10.45	11.50	12.53	13.54	14.55	15.49	16.21		
	19	18.24	7.29	8.38	9.45	10.44	11.48	12.52	13.53	14.53	15.49	16.36	
	20	18.70	6.17	7.27	8.36	9.42	10.41	11.46	12.49	13.50	14.51	15.50	16.40
	21	19.24		6.12	7.22	8.31	9.39	10.39	11.41	12.46	13.49	14.49	15.47
	22	19.73			6.09	7.18	8.27	9.35	10.34	11.38	12.42	13.45	14.45
35	16	16.88	10.16	11.20	12.23	13.21	14.11						
	17	16.95	9.15	10.16	11.19	12.21	13.21	14.16	14.98				
	18	17.10	8.08	9.14	10.13	11.17	12.20	13.20	14.18	15.10			
	19	17.40	6.97	8.06	9.14	10.11	11.16	12.19	13.20	14.17	15.12		
	20	17.87	5.85	6.95	8.03	9.11	10.09	11.12	12.15	13.17	14.16	15.14	16.02
	21	18.32		5.83	6.92	8.01	9.07	10.07	11.09	12.13	13.13	14.14	15.12
	22	18.77			5.80	6.89	7.96	9.05	10.02	11.05	12.08	13.10	14.12
40	16	15.66	9.55	10.57	11.54	12.48	13.27						
	17	15.67	8.53	9.54	10.56	11.53	12.51	13.38					
	18	15.78	7.54	8.57	9.52	10.55	11.54	12.49	13.42	14.19			
	19	16.04	6.45	7.52	8.63	9.50	10.52	11.53	12.49	13.44	14.30		
	20	16.42	5.37	6.45	7.50	8.53	9.49	10.50	11.50	12.48	13.43	14.34	15.10
	21	16.83		5.35	6.41	7.47	8.50	9.47	10.46	11.47	12.46	13.40	14.35
	22	17.26			5.32	6.39	7.44	8.48	9.44	10.42	11.43	12.42	13.40
45	16	13.19	8.87	9.87	10.80	11.67							
	17	13.21	7.90	8.87	9.84	10.80	11.70	12.44					
	18	13.30	6.95	7.90	8.86	9.84	10.80	11.71	12.56				
	19	13.41	5.92	6.92	7.87	8.85	9.83	10.79	11.72	12.60	13.29		
	20	13.71	4.86	5.89	6.91	7.91	8.84	9.79	10.76	11.71	12.61	13.44	
	21	14.05		4.84	5.87	6.89	7.89	8.81	9.78	10.73	11.71	12.62	13.47
	22	14.45			4.82	5.84	6.87	7.86	8.79	9.76	10.71	11.66	12.58
50	16	10.95	7.61	8.51	9.31	9.98							
	17	10.96	6.74	7.61	8.50	9.32	10.08						
	18	11.01	5.90	6.74	7.60	8.48	9.33	10.13					
	19	11.05	4.97	5.88	6.73	7.60	8.47	9.33	10.14	10.86			
	20	11.26	4.04	4.95	5.87	6.72	7.59	8.45	9.30	10.14	10.92		
	21	11.54		4.02	4.95	5.86	6.74	7.57	8.42	9.30	10.15	10.93	11.54
	22	11.84			3.99	4.91	5.83	6.72	7.55	8.41	9.28	10.12	10.93

HEATING PERFORMANCE

WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C									
	16		18		20		22		24	
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH
-10	12.67	11.91	12.61	11.85	12.54	11.79	12.49	11.74	12.42	11.68
-8	13.36	12.42	13.29	12.36	13.22	12.29	13.15	12.23	13.08	12.16
-6	14.09	12.96	14.01	12.88	13.92	12.81	13.84	12.73	13.75	12.65
-4	14.87	13.31	14.77	13.22	14.68	13.13	14.58	13.05	14.49	12.97
-2	15.68	13.64	15.57	13.55	15.47	13.45	15.35	13.36	15.25	13.27
0	16.55	14.23	16.44	14.14	16.32	14.03	16.20	13.93	16.08	13.82
2	17.38	15.47	17.26	15.36	17.12	15.24	16.99	15.12	16.85	15.00
4	18.28	17.37	18.13	17.22	17.99	17.09	17.84	16.94	17.68	16.79
6	19.21	19.21	19.05	19.05	18.89	18.89	18.78	18.78	18.60	18.60
8	20.21	20.21	20.09	20.09	19.92	19.92	19.74	19.74	19.55	19.55
10	21.33	21.33	21.14	21.14	20.94	20.94	20.75	20.75	20.55	20.55
12	22.43	22.43	22.22	22.22	22.01	22.01	21.80	21.80	21.58	21.58
14	23.59	23.59	23.36	23.36	23.12	23.12	22.89	22.89	22.65	22.65
16	24.78	24.78	24.53	24.53	24.27	24.27	24.01	24.01	23.76	23.76
18	26.01	26.01	25.74	25.74	25.47	25.47	25.20	25.20	24.90	24.90

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	19.1%
INDOOR AIRFLOW (l/s)	710	756.5	801	845.5	890	934.5	979	1023.5	1060
TOTAL COOLING	0.964	0.982	0.989	0.997	1.000	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.883	0.916	0.945	0.974	1.000	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	1.000	1.011	1.022	1.033	1.044

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

PIPE LENGTH CORRECTION MULTIPLIER

	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



CAPACITY SELECTION DATA

CRS13AT / EVA13AS

COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	13.92	7.96	8.73	9.49	10.23	10.97	11.57					
	17	14.05	7.21	7.95	8.72	9.48	10.23	10.96	11.62				
	18	14.21	6.40	7.19	7.93	8.70	9.46	10.21	10.97	11.66	12.28		
	19	14.57	5.58	6.39	7.18	7.91	8.68	9.44	10.20	10.95	11.66	12.31	12.89
	20	14.90	4.74	5.56	6.36	7.16	7.89	8.65	9.41	10.18	10.93	11.65	12.33
	21	15.33		4.72	5.53	6.34	7.12	7.85	8.64	9.39	10.14	10.90	11.63
30	22	15.72			4.71	5.50	6.31	7.10	7.89	8.60	9.36	10.12	10.87
	16	13.43	7.74	8.50	9.26	10.00	10.70	11.23					
	17	13.55	6.99	7.72	8.50	9.25	9.99	10.71	11.36				
	18	13.66	6.19	6.98	7.70	8.47	9.23	9.98	10.72	11.41	11.94		
	19	13.94	5.37	6.18	6.96	7.69	8.46	9.22	9.97	10.70	11.41	12.05	
	20	14.29	4.55	5.36	6.16	6.94	7.67	8.44	9.20	9.95	10.69	11.42	12.08
35	21	14.71		4.52	5.32	6.13	6.92	7.66	8.41	9.18	9.94	10.67	11.40
	22	15.08			4.49	5.29	6.10	6.89	7.62	8.38	9.15	9.91	10.64
	16	12.91	7.49	8.25	9.01	9.74	10.40	0.00					
	17	12.95	6.75	7.49	8.25	9.00	9.73	10.43	11.04				
	18	13.07	5.96	6.73	7.47	8.23	8.99	9.72	10.45	11.13			
	19	13.30	5.14	5.94	6.73	7.45	8.22	8.98	9.72	10.44	11.14		
40	20	13.66	4.32	5.12	5.92	6.71	7.44	8.20	8.96	9.70	10.43	11.15	11.80
	21	14.00		4.30	5.10	5.91	6.68	7.42	8.17	8.94	9.67	10.42	11.14
	22	14.35			4.28	5.08	5.87	6.67	7.39	8.14	8.90	9.66	10.41
	16	12.19	7.07	7.82	8.54	9.24	9.82						
	17	12.21	6.31	7.06	7.81	8.54	9.26	9.90					
	18	12.29	5.58	6.35	7.05	7.81	8.54	9.25	9.93	10.50			
45	19	12.49	4.78	5.57	6.39	7.04	7.79	8.54	9.24	9.95	10.59		
	20	12.79	3.98	4.78	5.56	6.31	7.02	7.77	8.51	9.23	9.94	10.61	11.17
	21	13.11		3.97	4.75	5.53	6.30	7.01	7.74	8.49	9.22	9.92	10.62
	22	13.44			3.94	4.73	5.51	6.28	7.07	7.81	8.46	9.19	9.92
	16	10.45	6.59	7.33	8.02	8.66							
	17	10.46	5.87	6.59	7.31	8.02	8.69	9.24					
50	18	10.54	5.16	5.86	6.58	7.30	8.02	8.69	9.33				
	19	10.62	4.40	5.14	5.84	6.58	7.30	8.01	8.70	9.36	9.87		
	20	10.86	3.62	4.38	5.14	5.87	6.56	7.27	7.99	8.69	9.37	9.98	
	21	11.13		3.60	4.36	5.12	5.86	6.54	7.26	7.97	8.69	9.37	10.00
	22	11.44			3.58	4.34	5.10	5.84	6.53	7.25	7.95	8.66	9.34
	16	6.98	4.57	5.11	5.59	5.99							
55	17	6.99	4.05	4.57	5.10	5.60	6.06						
	18	7.02	3.54	4.05	4.57	5.09	5.60	6.08					
	19	7.04	2.99	3.53	4.04	4.57	5.09	5.60	6.09	6.53			
	20	7.18	2.43	2.98	3.53	4.04	4.56	5.07	5.59	6.09	6.56		
	21	7.36		2.41	2.97	3.52	4.05	4.55	5.06	5.59	6.10	6.57	6.99
	22	7.55			2.40	2.95	3.50	4.04	4.54	5.06	5.57	6.08	6.57

HEATING PERFORMANCE

WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C									
	16		18		20		22		24	
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH
-10	9.86	9.27	9.81	9.22	9.76	9.17	9.72	9.14	9.67	9.09
-8	10.40	9.67	10.35	9.62	10.29	9.57	10.23	9.52	10.18	9.47
-6	10.97	10.09	10.90	10.03	10.84	9.97	10.77	9.91	10.70	9.85
-4	11.57	10.36	11.50	10.29	11.42	10.22	11.35	10.16	11.28	10.09
-2	12.20	10.61	12.12	10.54	12.04	10.47	11.95	10.40	11.87	10.32
0	12.88	11.08	12.79	11.00	12.70	10.92	12.60	10.84	12.51	10.76
2	13.53	12.04	13.43	11.95	13.32	11.86	13.22	11.77	13.11	11.67
4	14.23	13.51	14.11	13.40	14.00	13.30	13.88	13.19	13.76	13.07
6	14.95	14.95	14.82	14.82	14.70	14.70	14.61	14.61	14.48	14.48
8	15.73	15.73	15.64	15.64	15.50	15.50	15.36	15.36	15.22	15.22
10	16.60	16.60	16.45	16.45	16.30	16.30	16.15	16.15	15.99	15.99
12	17.46	17.46	17.29	17.29	17.13	17.13	16.96	16.96	16.79	16.79
14	18.36	18.36	18.18	18.18	17.99	17.99	17.81	17.81	17.62	17.62
16	19.28	19.28	19.08	19.08	18.88	18.88	18.68	18.68	18.49	18.49
18	20.24	20.24	20.03	20.03	19.82	19.82	19.60	19.60	19.38	19.38

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	520	552.5	585	617.5	650	682.5	715	747.5	780
TOTAL COOLING	0.965	0.982	0.989	0.997	1.000	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.884	0.916	0.945	0.974	1.000	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	1.000	1.011	1.022	1.033	1.044

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

PIPE LENGTH CORRECTION MULTIPLIER

	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



CAPACITY SELECTION DATA

CRS15AT / EVA15AS

COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	16.28	9.77	10.71	11.64	12.56	13.46	14.20					
	17	16.43	8.84	9.75	10.69	11.63	12.55	13.45	14.26				
	18	16.61	7.85	8.81	9.73	10.68	11.61	12.52	13.46	14.31	15.08		
	19	17.03	6.84	7.83	8.81	9.70	10.65	11.58	12.51	13.44	14.30	15.11	15.82
	20	17.42	5.81	6.81	7.80	8.78	9.68	10.61	11.55	12.49	13.41	14.30	15.14
	21	17.92		5.79	6.77	7.77	8.74	9.63	10.60	11.52	12.44	13.38	14.28
	22	18.38			5.76	6.74	7.74	8.71	9.67	10.55	11.48	12.42	13.34
30	16	15.70	9.49	10.42	11.36	12.26	13.12	13.79					
	17	15.84	8.57	9.47	10.42	11.35	12.26	13.14	13.94				
	18	15.97	7.59	8.56	9.44	10.40	11.32	12.24	13.15	14.00	14.66		
	19	16.30	6.58	7.57	8.54	9.44	10.38	11.31	12.23	13.13	14.01	14.79	
	20	16.71	5.57	6.56	7.55	8.51	9.41	10.36	11.29	12.21	13.12	14.02	14.83
	21	17.20		5.53	6.52	7.51	8.49	9.39	10.32	11.26	12.20	13.10	13.98
	22	17.63			5.50	6.49	7.48	8.45	9.34	10.28	11.22	12.16	13.06
35	16	15.09	9.19	10.12	11.05	11.94	12.76						
	17	15.15	8.27	9.18	10.11	11.04	11.94	12.80	13.54				
	18	15.28	7.30	8.26	9.16	10.10	11.02	11.93	12.82	13.65			
	19	15.55	6.30	7.28	8.25	9.14	10.08	11.02	11.93	12.81	13.67		
	20	15.97	5.29	6.27	7.26	8.23	9.12	10.05	10.99	11.90	12.80	13.69	14.48
	21	16.37		5.27	6.25	7.24	8.19	9.10	10.02	10.96	11.87	12.78	13.67
	22	16.78			5.24	6.22	7.19	8.17	9.06	9.99	10.92	11.85	12.77
40	16	14.25	8.72	9.66	10.54	11.40	12.12						
	17	14.26	7.79	8.71	9.64	10.54	11.43	12.22					
	18	14.36	6.88	7.83	8.70	9.64	10.54	11.41	12.26	12.97			
	19	14.60	5.89	6.86	7.88	8.68	9.61	10.53	11.41	12.28	13.07		
	20	14.94	4.90	5.89	6.85	7.79	8.67	9.59	10.50	11.40	12.27	13.10	13.79
	21	15.32		4.88	5.85	6.82	7.77	8.65	9.55	10.48	11.38	12.25	13.12
	22	15.71			4.86	5.83	6.79	7.74	8.62	9.52	10.44	11.34	12.24
45	16	12.20	8.12	9.04	9.89	10.69							
	17	12.22	7.23	8.13	9.02	9.90	10.72	11.40					
	18	12.30	6.36	7.23	8.12	9.01	9.90	10.73	11.51				
	19	12.41	5.42	6.34	7.21	8.11	9.00	9.88	10.74	11.55	12.18		
	20	12.68	4.45	5.39	6.33	7.24	8.09	8.97	9.86	10.73	11.56	12.31	
	21	13.00		4.43	5.38	6.31	7.23	8.07	8.96	9.83	10.73	11.56	12.35
	22	13.36			4.41	5.34	6.29	7.20	8.05	8.94	9.81	10.69	11.53
50	16	8.15	5.61	6.26	6.86	7.35							
	17	8.16	4.96	5.60	6.26	6.87	7.43						
	18	8.20	4.34	4.96	5.60	6.24	6.87	7.46					
	19	8.22	3.66	4.33	4.96	5.60	6.24	6.87	7.47	8.00			
	20	8.39	2.97	3.64	4.32	4.95	5.59	6.22	6.85	7.47	8.04		
	21	8.59		2.95	3.64	4.31	4.96	5.57	6.20	6.85	7.48	8.05	8.57
	22	8.82			2.93	3.62	4.29	4.95	5.56	6.20	6.83	7.45	8.05

HEATING PERFORMANCE

WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C									
	16		18		20		22		24	
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH
-10	10.96	10.30	10.91	10.25	10.85	10.20	10.81	10.16	10.75	10.11
-8	11.56	10.75	11.50	10.70	11.44	10.64	11.38	10.58	11.32	10.53
-6	12.19	11.22	12.12	11.15	12.05	11.09	11.98	11.02	11.90	10.95
-4	12.87	11.52	12.79	11.44	12.70	11.37	12.62	11.30	12.54	11.22
-2	13.57	11.80	13.48	11.72	13.39	11.65	13.29	11.56	13.20	11.48
0	14.32	12.32	14.23	12.23	14.12	12.14	14.02	12.05	13.91	11.97
2	15.05	13.39	14.94	13.29	14.82	13.19	14.70	13.08	14.58	12.98
4	15.82	15.03	15.69	14.91	15.57	14.79	15.44	14.67	15.30	14.54
6	16.62	16.62	16.49	16.49	16.35	16.35	16.25	16.25	16.10	16.10
8	17.50	17.50	17.39	17.39	17.24	17.24	17.09	17.09	16.92	16.92
10	18.46	18.46	18.30	18.30	18.13	18.13	17.96	17.96	17.78	17.78
12	19.42	19.42	19.24	19.24	19.05	19.05	18.87	18.87	18.68	18.68
14	20.42	20.42	20.22	20.22	20.01	20.01	19.81	19.81	19.60	19.60
16	21.45	21.45	21.23	21.23	21.01	21.01	20.78	20.78	20.57	20.57
18	22.51	22.51	22.28	22.28	22.04	22.04	21.81	21.81	21.56	21.56

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	620	654.5	693	731.5	770	808.5	847	885.5	920
TOTAL COOLING	0.967	0.982	0.989	0.997	1.000	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.887	0.916	0.945	0.974	1.000	1.024	1.046	1.072	1.092
HEATING FACTOR	0.970	0.976	0.983	0.991	1.000	1.011	1.022	1.033	1.044

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

PIPE LENGTH CORRECTION MULTIPLIER

	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



CAPACITY SELECTION DATA

CRS17AT / EVA17AS

COOLING PERFORMANCE													
AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW AT DB TEMPERATURE ONTO INDOOR COIL - °C										
OUTDOOR DB - °C	INDOOR WB - °C		20	21	22	23	24	25	26	27	28	29	30
25	16	18.21	10.80	11.85	12.87	13.89	14.89	15.71					
	17	18.38	9.78	10.78	11.83	12.86	13.89	14.88	15.78				
	18	18.59	8.69	9.75	10.76	11.81	12.84	13.85	14.89	15.83	16.67		
	19	19.05	7.58	8.67	9.75	10.74	11.78	12.81	13.84	14.87	15.82	16.72	17.50
	20	19.49	6.43	7.54	8.63	9.71	10.71	11.74	12.78	13.81	14.83	15.82	16.74
	21	20.05		6.41	7.50	8.60	9.67	10.66	11.72	12.74	13.76	14.80	15.79
	22	20.57			6.38	7.46	8.56	9.64	10.70	11.67	12.70	13.74	14.76
30	16	17.57	10.50	11.53	12.56	13.57	14.52	15.25					
	17	17.73	9.48	10.48	11.53	12.56	13.56	14.54	15.42				
	18	17.87	8.40	9.47	10.45	11.50	12.53	13.54	14.55	15.49	16.21		
	19	18.24	7.29	8.38	9.45	10.44	11.48	12.52	13.53	14.53	15.49	16.36	
	20	18.70	6.17	7.27	8.36	9.42	10.41	11.46	12.49	13.50	14.51	15.50	16.40
	21	19.24		6.12	7.22	8.31	9.39	10.39	11.41	12.46	13.49	14.49	15.47
	22	19.73			6.09	7.18	8.27	9.35	10.34	11.38	12.42	13.45	14.45
35	16	16.88	10.16	11.20	12.23	13.21	14.11						
	17	16.95	9.15	10.16	11.19	12.21	13.21	14.16	14.98				
	18	17.10	8.08	9.14	10.13	11.17	12.20	13.20	14.18	15.10			
	19	17.40	6.97	8.06	9.14	10.11	11.16	12.19	13.20	14.17	15.12		
	20	17.87	5.85	6.95	8.03	9.11	10.09	11.12	12.15	13.17	14.16	15.14	16.02
	21	18.32		5.83	6.92	8.01	9.07	10.07	11.09	12.13	13.13	14.14	15.12
	22	18.77			5.80	6.89	7.96	9.05	10.02	11.05	12.08	13.10	14.12
40	16	15.66	9.55	10.57	11.54	12.48	13.27						
	17	15.67	8.53	9.54	10.56	11.53	12.51	13.38					
	18	15.78	7.54	8.57	9.52	10.55	11.54	12.49	13.42	14.19			
	19	16.04	6.45	7.52	8.63	9.50	10.52	11.53	12.49	13.44	14.30		
	20	16.42	5.37	6.45	7.50	8.53	9.49	10.50	11.50	12.48	13.43	14.34	15.10
	21	16.83		5.35	6.41	7.47	8.50	9.47	10.46	11.47	12.46	13.40	14.35
	22	17.26			5.32	6.39	7.44	8.48	9.44	10.42	11.43	12.42	13.40
45	16	13.19	8.87	9.87	10.80	11.67							
	17	13.21	7.90	8.87	9.84	10.80	11.70	12.44					
	18	13.30	6.95	7.90	8.86	9.84	10.80	11.71	12.56				
	19	13.41	5.92	6.92	7.87	8.85	9.83	10.79	11.72	12.60	13.29		
	20	13.71	4.86	5.89	6.91	7.91	8.84	9.79	10.76	11.71	12.61	13.44	
	21	14.05		4.84	5.87	6.89	7.89	8.81	9.78	10.73	11.71	12.62	13.47
	22	14.45			4.82	5.84	6.87	7.86	8.79	9.76	10.71	11.66	12.58
50	16	10.71	7.61	8.51	9.31	9.98							
	17	10.72	6.74	7.61	8.50	9.32	10.08						
	18	10.77	5.90	6.74	7.60	8.48	9.33	10.13					
	19	10.80	4.97	5.88	6.73	7.60	8.47	9.33	10.14	10.86			
	20	11.01	4.04	4.95	5.87	6.72	7.59	8.45	9.30	10.14	10.92		
	21	11.29		4.02	4.95	5.86	6.74	7.57	8.42	9.30	10.15	10.93	11.29
	22	11.58			3.99	4.91	5.83	6.72	7.55	8.41	9.28	10.12	10.93

HEATING PERFORMANCE										
WB TEMP ON OUTDOOR COIL - °C	HEATING CAPACITY - kW AT DB ENTERING INDOOR - °C									
	16		18		20		22		24	
	TH	IH	TH	IH	TH	IH	TH	IH	TH	IH
-10	12.52	11.77	12.46	11.72	12.40	11.65	12.34	11.60	12.29	11.55
-8	13.21	12.28	13.14	12.22	13.07	12.15	13.00	12.09	12.93	12.03
-6	13.93	12.82	13.85	12.74	13.77	12.67	13.68	12.59	13.60	12.51
-4	14.70	13.16	14.61	13.07	14.51	12.99	14.42	12.91	14.33	12.82
-2	15.50	13.49	15.40	13.40	15.29	13.30	15.18	13.21	15.08	13.12
0	16.36	14.07	16.25	13.98	16.13	13.88	16.01	13.77	15.90	13.67
2	17.19	15.30	17.06	15.19	16.93	15.07	16.80	14.95	16.66	14.83
4	18.08	17.17	17.93	17.03	17.79	16.90	17.64	16.76	17.48	16.61
6	18.99	18.99	18.84	18.84	18.68	18.68	18.57	18.57	18.40	18.40
8	19.99	19.99	19.87	19.87	19.70	19.70	19.52	19.52	19.34	19.34
10	21.09	21.09	20.91	20.91	20.71	20.71	20.52	20.52	20.32	20.32
12	22.19	22.19	21.98	21.98	21.77	21.77	21.55	21.55	21.34	21.34
14	23.33	23.33	23.10	23.10	22.86	22.86	22.63	22.63	22.39	22.39
16	24.50	24.50	24.26	24.26	24.00	24.00	23.74	23.74	23.50	23.50
18	25.72	25.72	25.45	25.45	25.19	25.19	24.92	24.92	24.63	24.63

TH - Total Heating Capacity (kW)
IH - Integrated Heating Capacity (kW) Includes defrost losses.

AIRFLOW CORRECTION MULTIPLIER									
% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	710	756.5	801	845.5	890	934.5	979	1023.5	1060
TOTAL COOLING	0.964	0.982	0.989	0.997	1.000	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.883	0.916	0.945	0.974	1.000	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	1.000	1.011	1.022	1.033	1.044

NOTES:

- No allowance has been made for the effect of indoor fan motor.
- Selection tables are based on nominal airflows. Correction factors must be applied for selection away from these conditions.

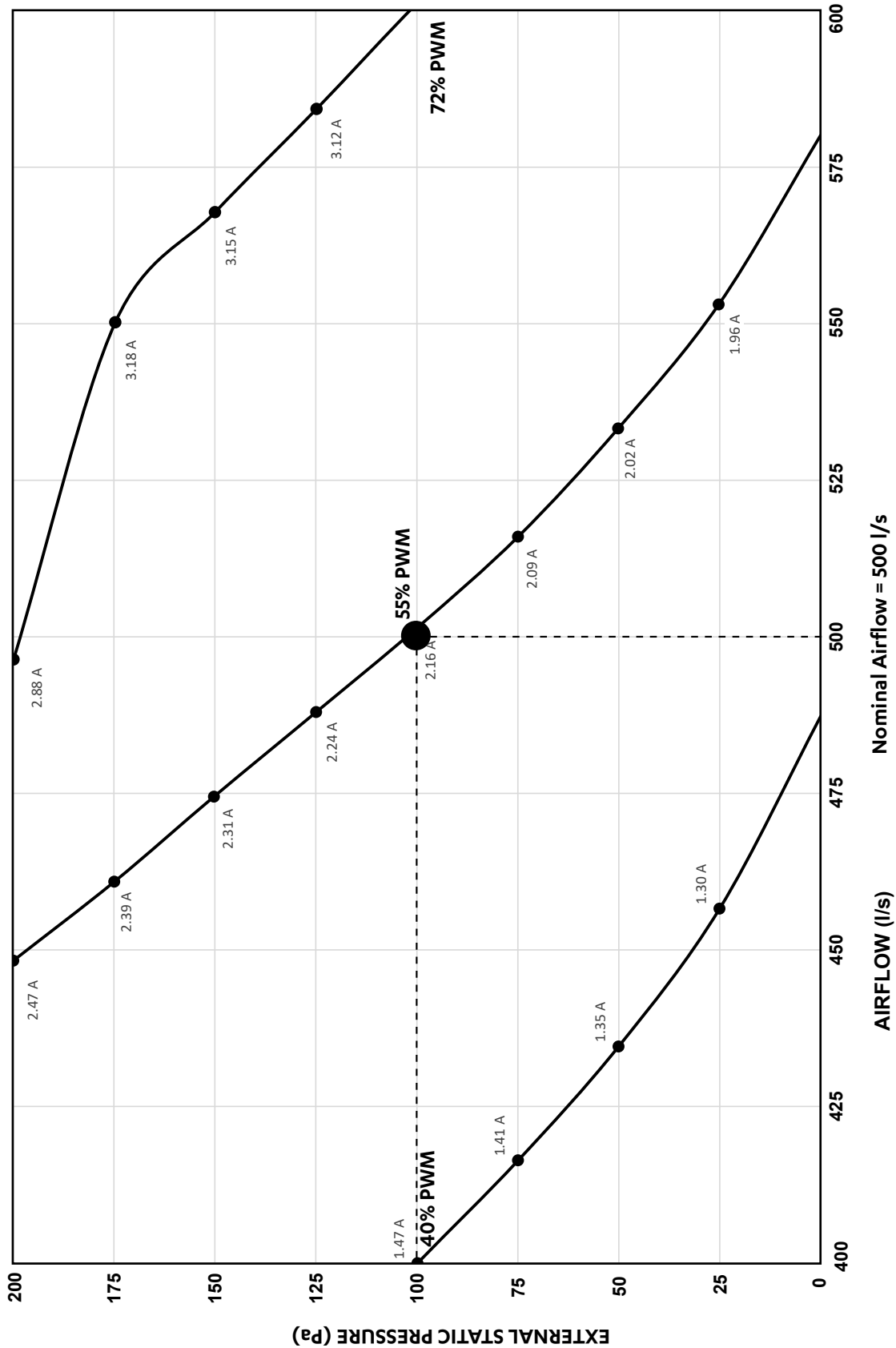
PIPE LENGTH CORRECTION MULTIPLIER							
	5m	10m	20m	30m	40m	50m	60m
COOLING	1.000	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOTES: Correction multipliers are based on horizontal pipe runs.



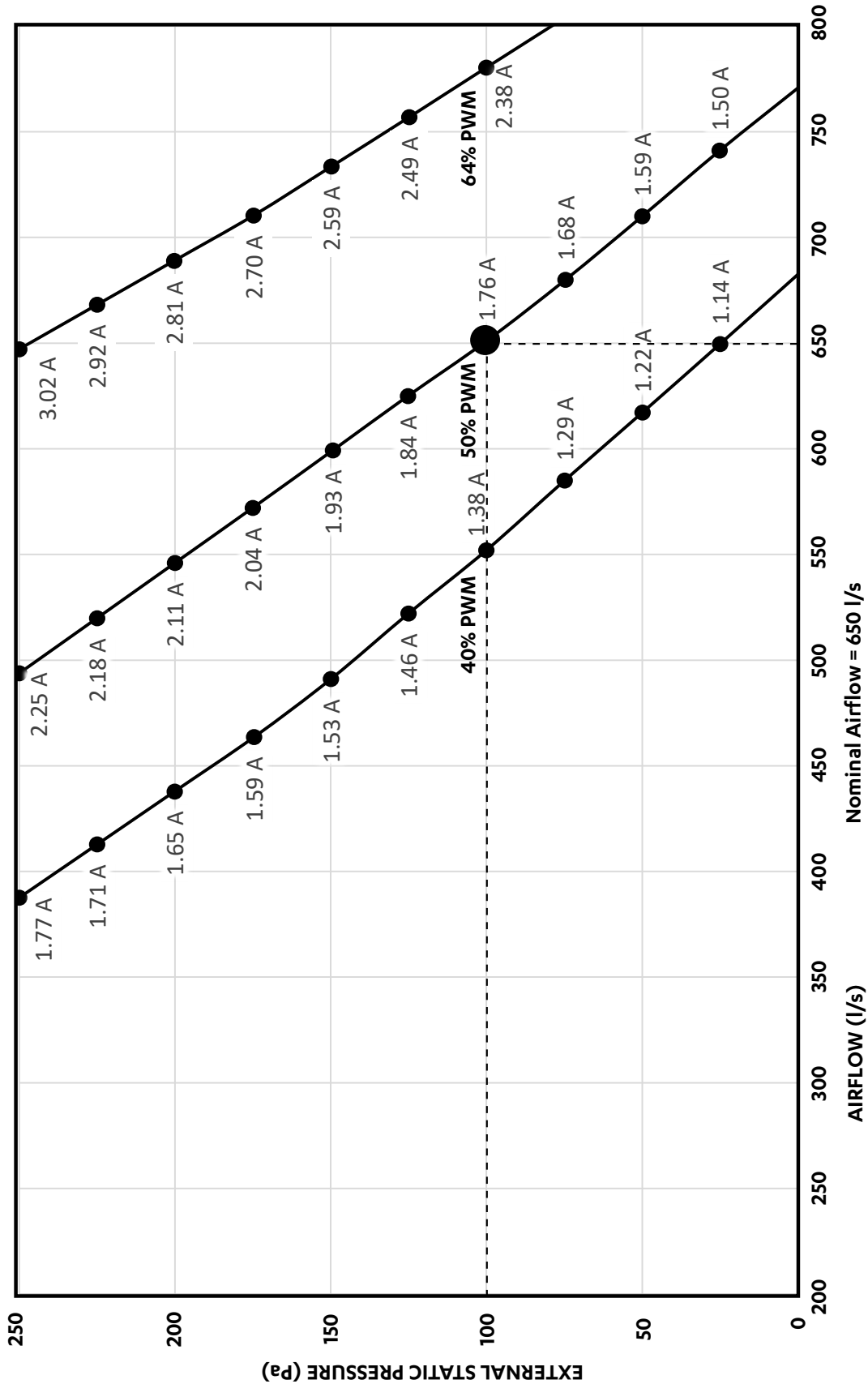
THREE SPEED FAN CURVE

EVA10AS



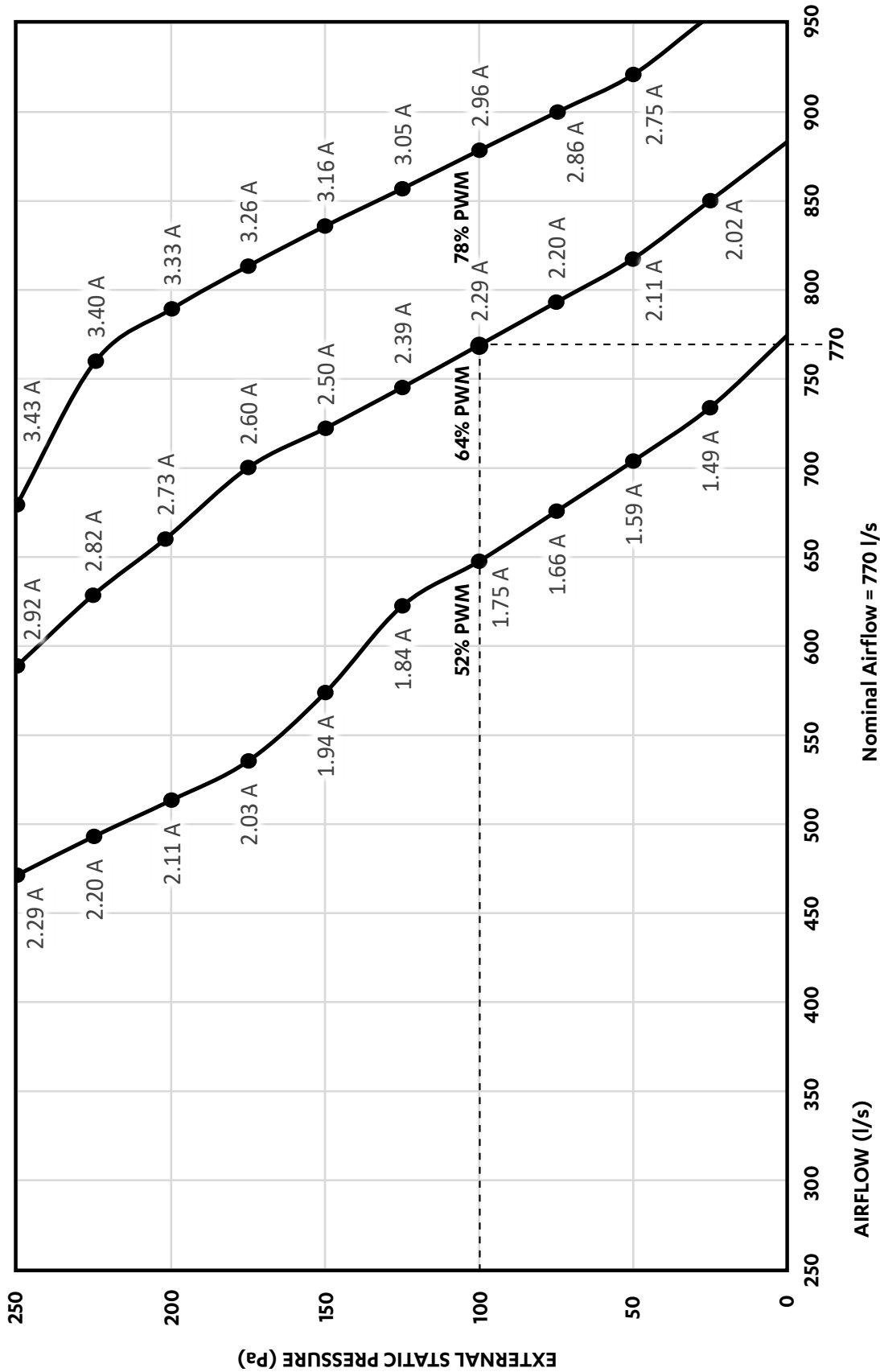
THREE SPEED FAN CURVE

EVA13AS



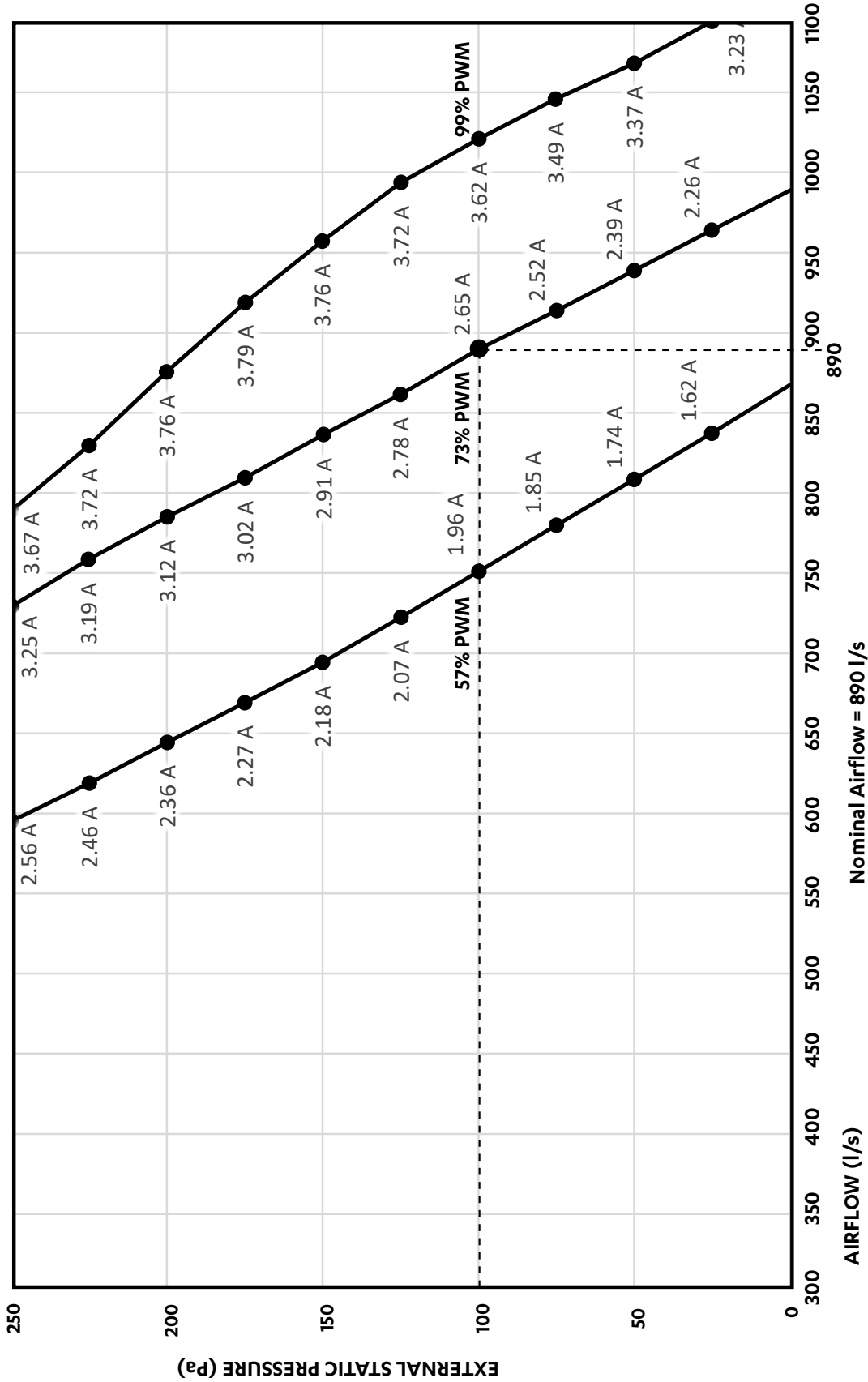
THREE SPEED FAN CURVE

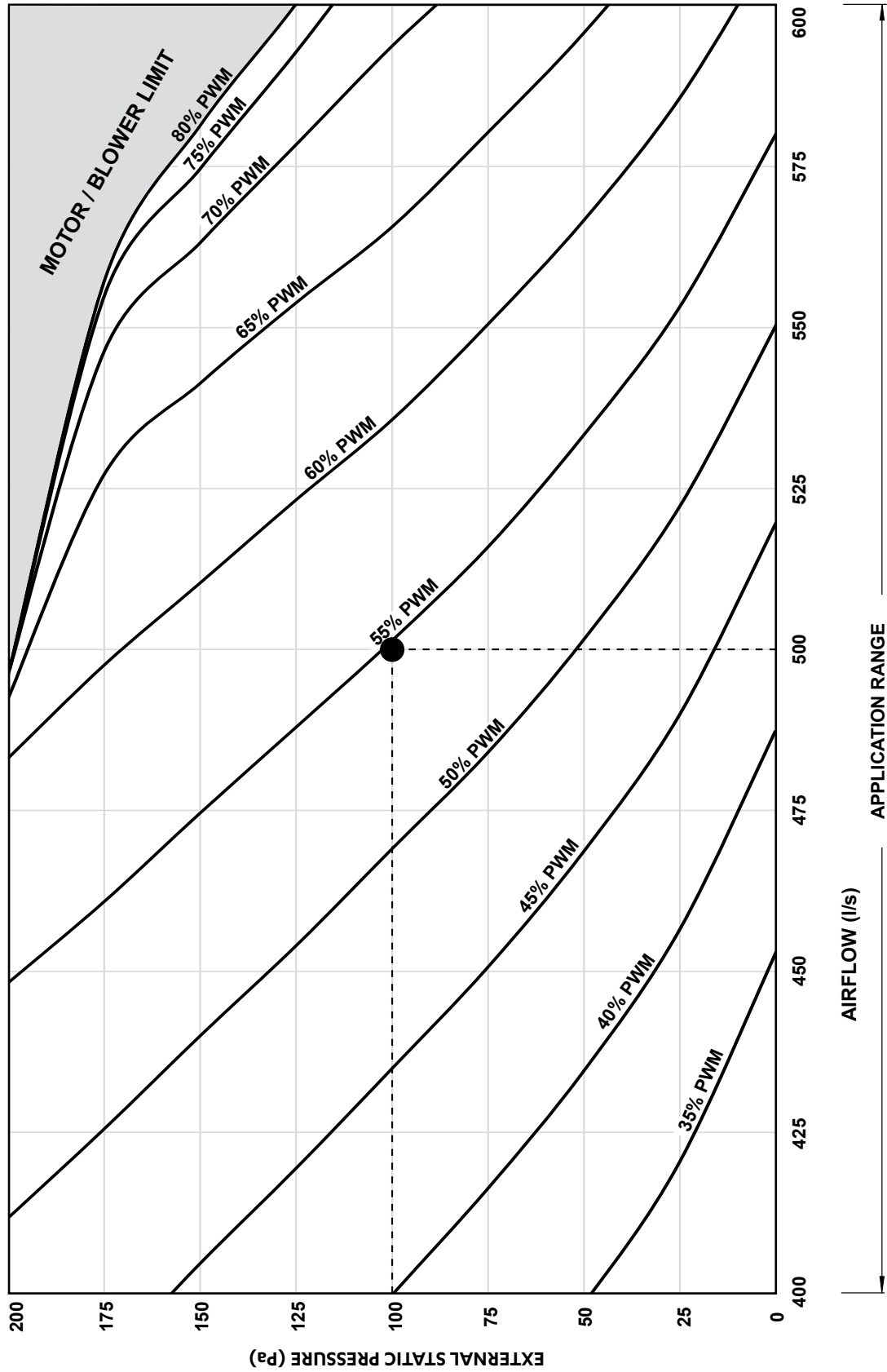
EVA15AS



THREE SPEED FAN CURVE

EVA17AS





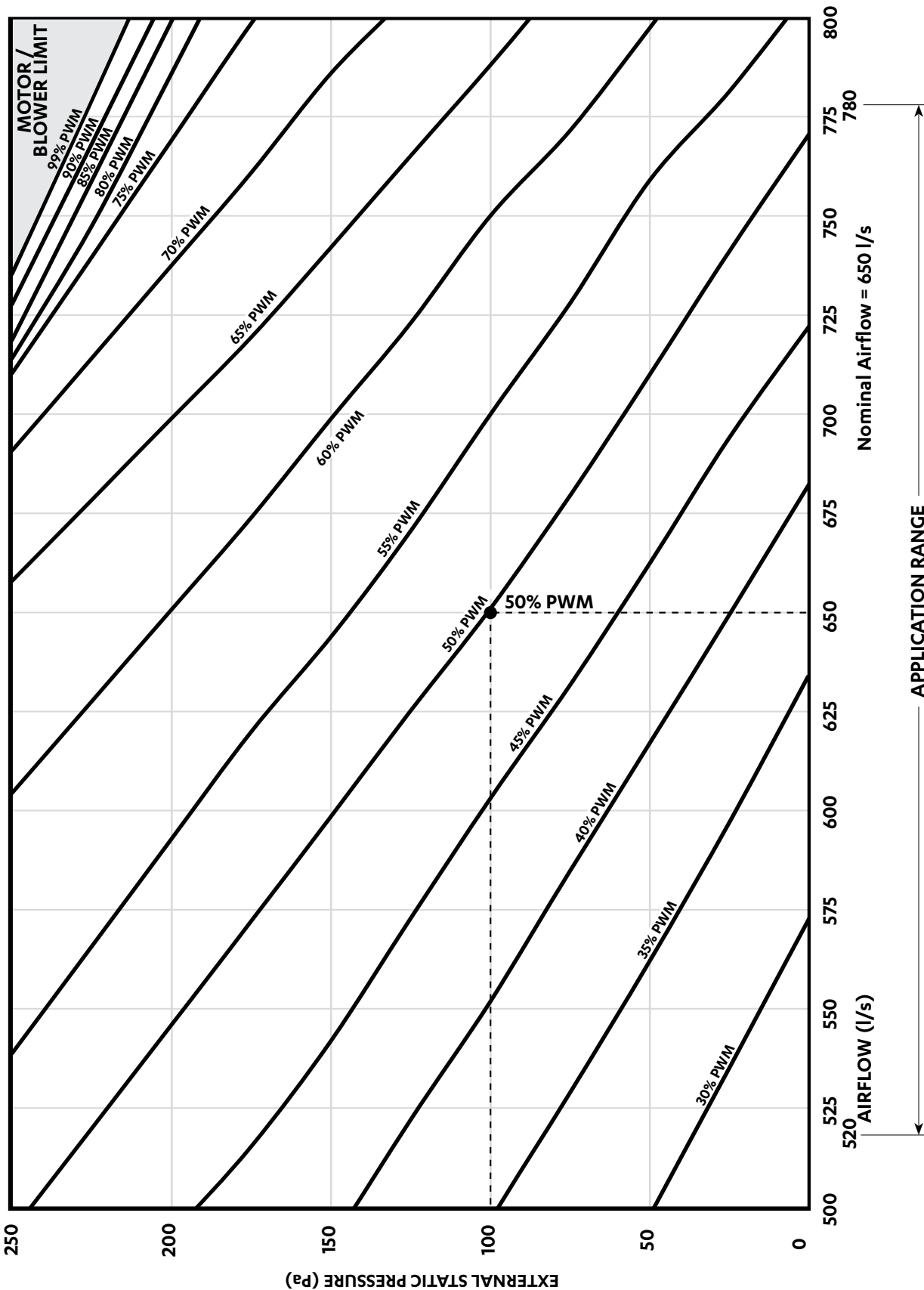
NOTE

Fan Performance Data and Fan Curve shown is at dry coil and with no air filters installed. Consider external static pressure drop specific to your design requirements. Airflow should be reduced with respect to the moisture content in the air. Please review filter manufacturer for application. 2.5 m/s face velocity point will occur outside the application range.



THIRD PARTY FAN CURVE

EVA13AS



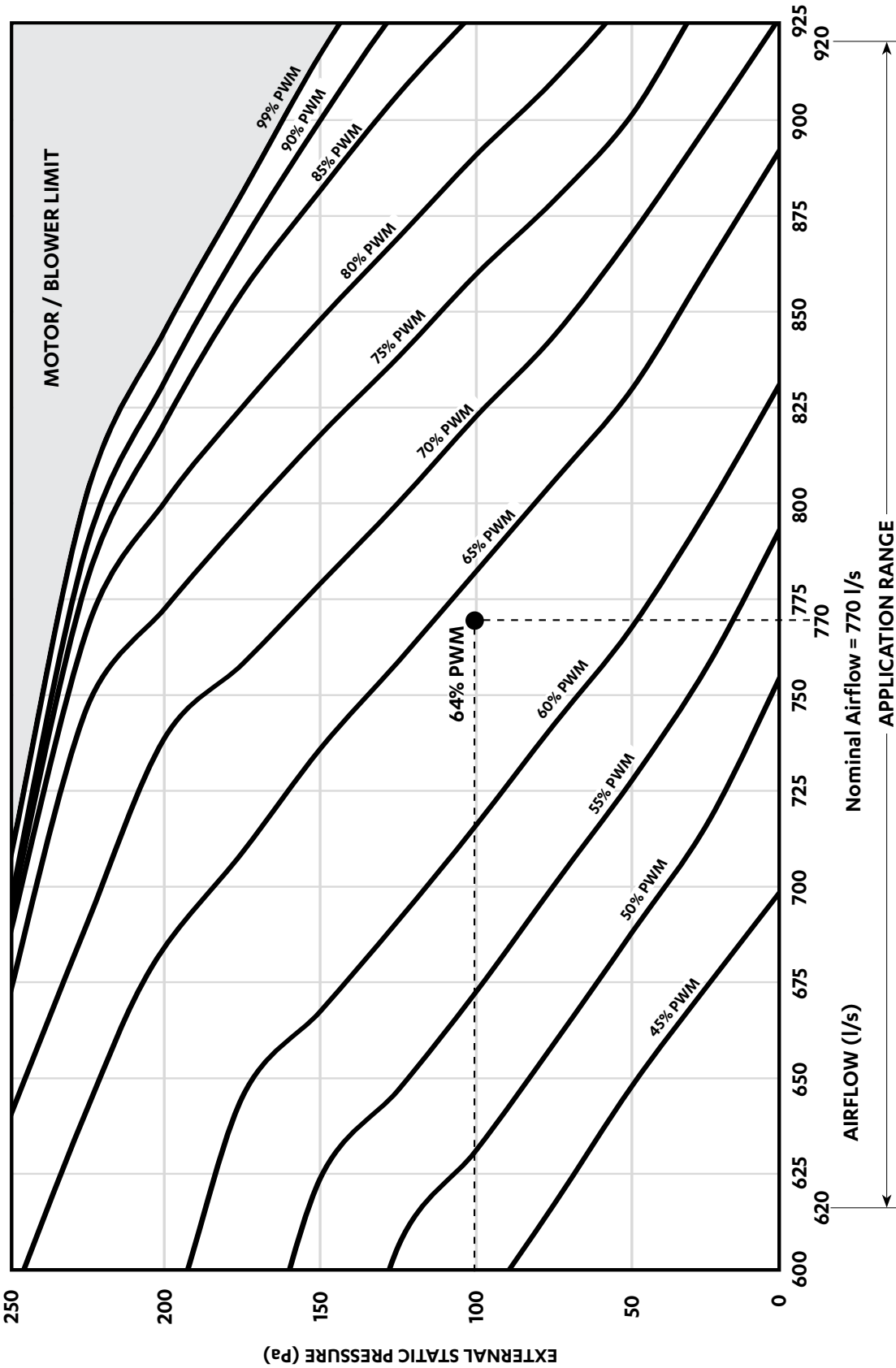
NOTE

Fan Performance Data and Fan Curve shown is at dry coil and with no air filters installed. Consider external static pressure drop specific to your design requirements. Airflow should be reduced with respect to the moisture content in the air. Please review filter manufacturer for application. 2.5 m/s face velocity point will occur outside the application range.



THIRD PARTY FAN CURVE

EVA15AS

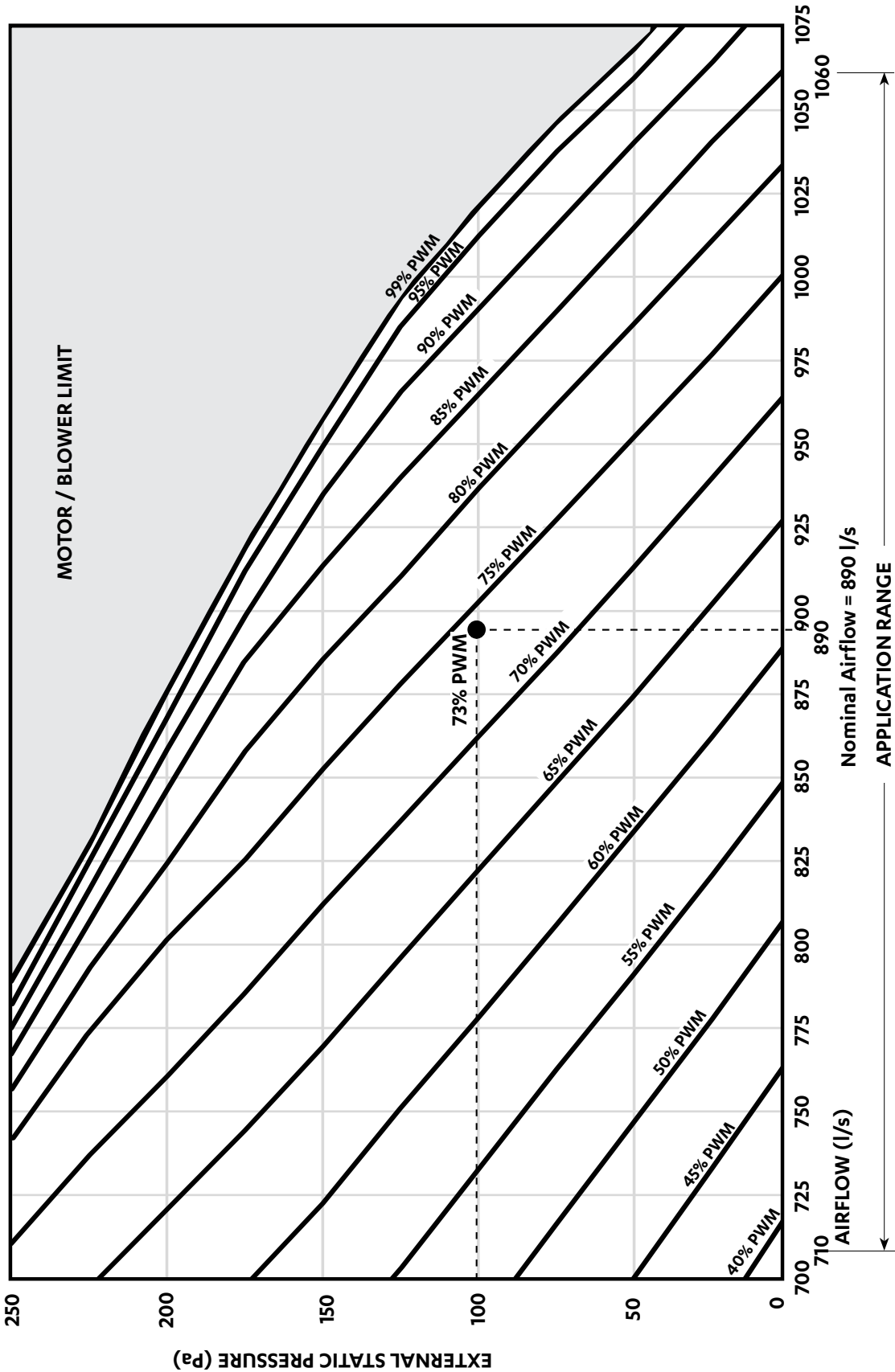


NOTE
 Fan Performance Data and Fan Curve shown is at dry coil and with no air filters installed. Consider external static pressure drop specific to your design requirements. Airflow should be reduced with respect to the moisture content in the air. Please review filter manufacturer for application. 2.5 m/s face velocity point will occur outside the application range.



THIRD PARTY FAN CURVE

EVA17AS



NOTE
 Fan Performance Data and Fan Curve shown is at dry coil and with no air filters installed. Consider external static pressure drop specific to your design requirements. Airflow should be reduced with respect to the moisture content in the air. Please review filter manufacturer for application. 2.5 m/s face velocity point will occur outside the application range.

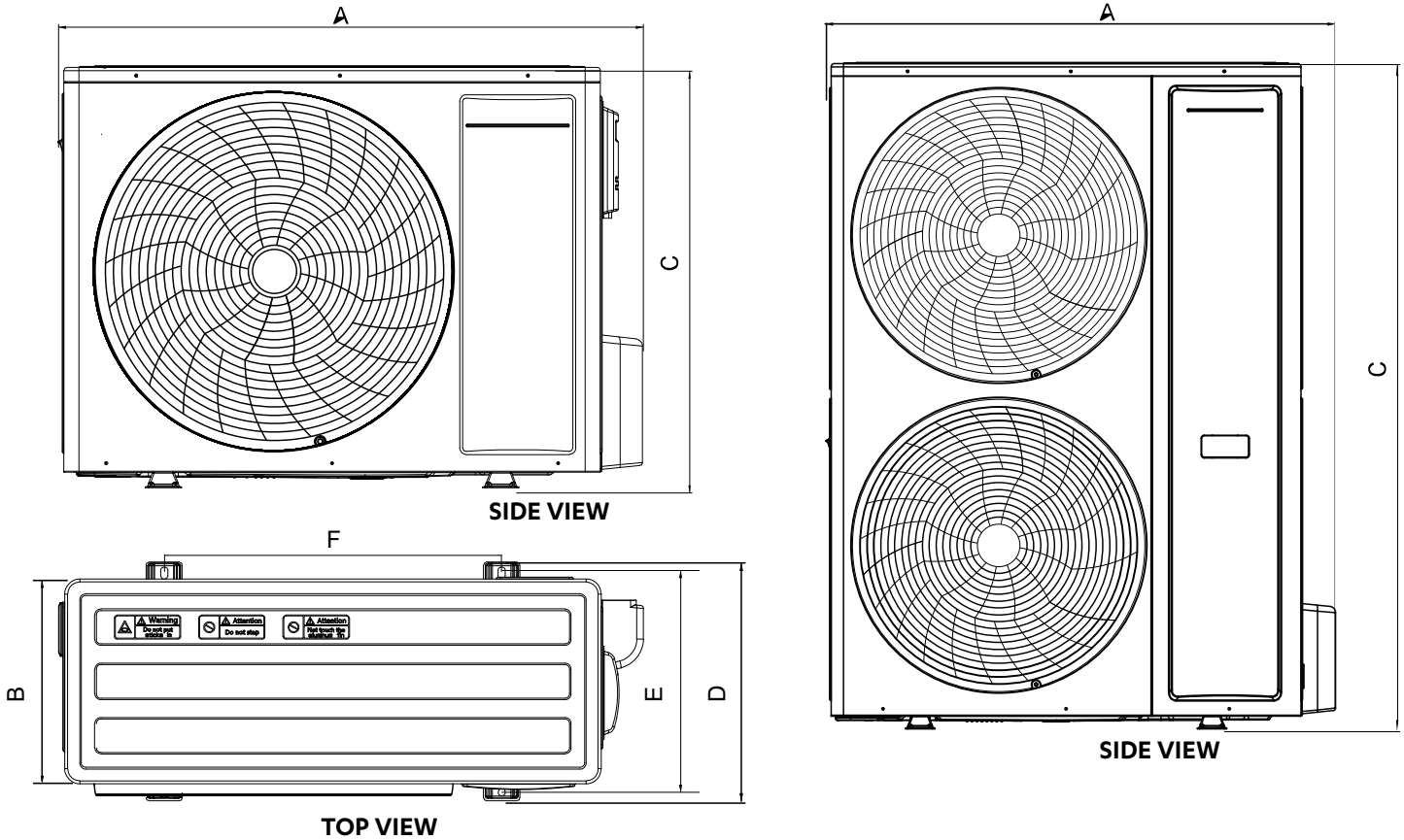


OUTDOOR UNIT DIMENSIONS

CRS10AS / CRS13AS / CRS15AS / CRS17AS / CRS13AT / CRS15AT / CRS17AT

NOTES:

Drawing is subject to change without notice.
 CRS10AS / CRS17AS models shown for illustration purposes only.



Model Number	Unit Dimensions (mm)				MTG C-C DIST (mm)*	
	A	B	C	D	E	F
CRS10AS	990	370	790	426	394	610
CRS13AS / CRS13AT	1020	340	997	396	368	590
CRS15AS / CRS15AT	1020	340	1350	396	368	590
CRS17AS / CRS17AT	1020	340	1350	396	368	590

Note: CRS10AS has a single fan configuration

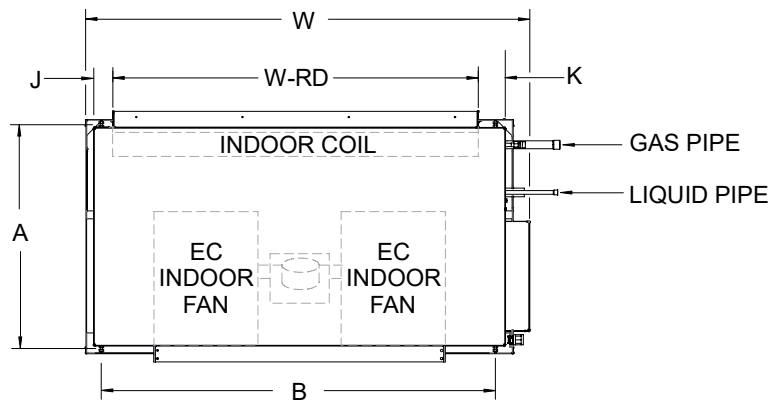
* MTG C-C DIST - Mounting Distance Base Foot (Centre to Centre)

INDOOR UNIT DIMENSIONS

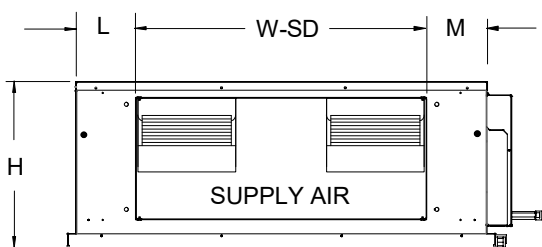
EVA10AS / EVA13AS / EVA15AS / EVA17AS

NOTES:

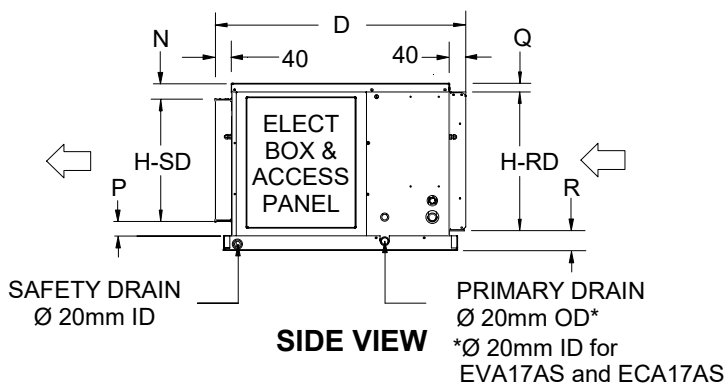
Drawing is subject to change without notice.
 Image shown is for illustration purpose only. Actual unit may vary depending on unit model.
 EVA10AS has a single fan configuration.



TOP VIEW



FRONT VIEW



SIDE VIEW

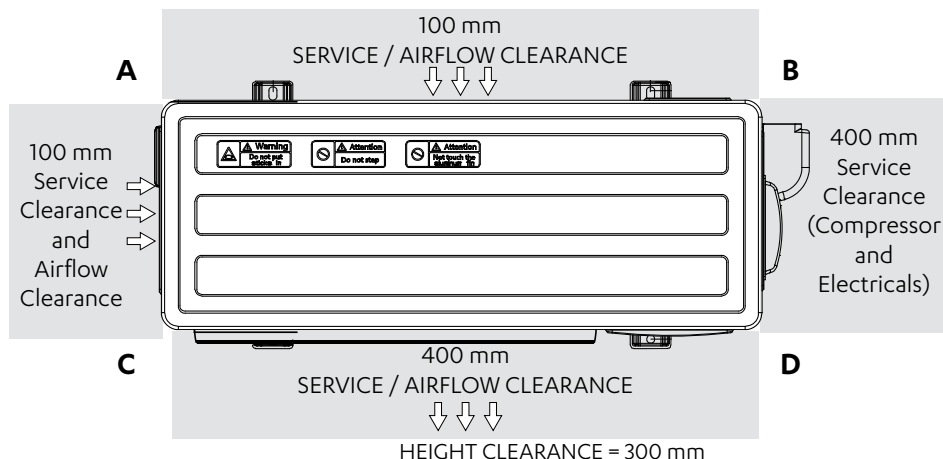
Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)		Supply Duct	Return Duct	Gas Pipe (Swaged)	Liquid Pipe (Swaged)
	H	W	D	A	B	H-SD x W-SD	H-RD x W-RD		
EVA10AS	410	850	595	535	750	175 X 235**	340 X 660	Ø 15.88mm (5/8")	Ø 9.52mm (3/8")
EVA13AS	412	1090	615	548	990	300 x 715	340 x 900		
EVA15AS		1290			1190		340 x 1100		
EVA17AS	435	1420	680	603	1315		360 x 1140		

** NO FLANGE

Unit Model Number	Dimensions							
	J	K	L	M	N	P	Q	R
EVA10AS	45	65	267.5	267.5	42	193	20	50
EVA13AS	47	65	248.5	248.5	40	72	22	50
EVA15AS	47	65	248.5	248.5	40	72	22	50
EVA17AS	79	118	311	311	25	110	25	50

SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

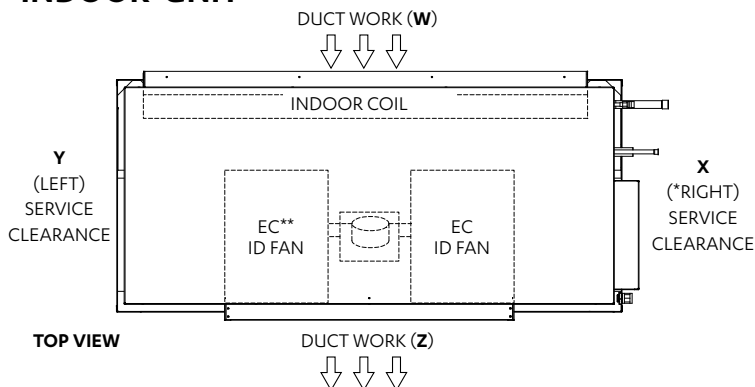
OUTDOOR UNIT



- The Service and Airflow clearances of the outdoor unit represent the minimum area recommended to ensure the designed operational performance range of the system and for safe or adequate serviceability of the system.
- The performance is influenced by the outdoor unit air intake temperatures therefore it's important to refer to the capacity selection data in this document to gain a full understanding of the effects that could lead to substandard performance if neglected.

Model Number	Net Weight	Gross Weight
CRS10AS	64	69
CRS13AS / CRS13AT	85	95
CRS15AS / CRS15AT	99	109
CRS17AS / CRS17AT	110	120

INDOOR UNIT



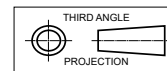
NOTES:

*Electrical box and/or pipe connections are located on the Right side of the indoor unit.

** EVA10AS has only one EC FAN

Unit Model Number	Total Weight (Kg)	Service Clearance				Height Clearance
		X	Y	W	Z	
EVA10AS	36	800	800	Duct Work	340	
EVA13AS	44	800	800	Duct Work	340	
EVA15AS	53	800	800	Duct Work	340	
EVA17AS	61	800	800	Duct Work	410	

NOTES:



1. Do not scale drawing.
2. Service Access Areas and Spaces for Airflow Clearances are suggested minimum based on the condition that the spaces around the units are free from any obstructions and a walkway passage of 1000 mm between the units or between the unit and the outside perimeter is available.
3. Minimum service access areas and spaces for airflow clearances are responsibilities of the installer, ActronAir will not be held liable for any extra charges incurred due to lack of access and space for airflow.
 - Left Service Clearance can be 100mm minimum if Right Service Clearance is applicable.
 - Right Service Clearance can be 600mm minimum if Left Service Clearance is applicable.
 - Height Service Clearance can be 100mm minimum if Right Service Clearance is applicable.
4. Under all circumstances, condenser air must not recirculate back onto condenser coil. Keep all clearance free of any obstruction.
5. Refer Pipe Connection Details on Specifications Sheet.
6. MTG C-C DIST = Mounting Centre to Centre Distance.
7. Use M12 bolt for feet mounting.
8. For installation with release height less than or equal to 0.6m, minimum area will be computed based on release height of 0.6m.
9. Where A min (the minimum area required) is not satisfied, the installer must provide additional control measure/s in place as per AS/NZS 60335.2.40 standard for the installation to be acceptable.

The examples of controls measures are (but are not limited to): Ventilation, Shut Off Valves and Safety Alarm. These control measures are not provided by ActronAir and must be determined by the installer based on individual installation requirements.

SOUND DATA

OUTDOOR RADIATED

Sound Power Level (SWL)

Model Number		Sound Power Level dB(A)	Sound Pressure Level dB(A) @ 1m	Sound Pressure Level dB(A) @ 3m
CRS10AS	Max	69.90	58.80	53.80
	Rated	68.10	57.10	52.10
	Quiet	65.30	54.90	49.90
CRS13AS	Max	71.00	60.20	55.20
	Rated	70.00	59.20	54.20
	Quiet	64.20	52.00	47.00
CRS15AS	Max	72.00	60.10	55.10
	Rated	71.60	59.90	54.90
	Quiet	63.60	51.00	46.00
CRV17AS	Max	73.20	61.90	56.90
	Rated	72.80	61.80	56.80
	Quiet	67.30	55.10	50.10
CRS13AT	Max	71.10	59.90	54.90
	Rated	70.30	59.00	54.00
	Quiet	64.20	51.70	46.70
CRS15AT	Max	72.10	60.40	55.40
	Rated	71.80	60.10	55.10
	Quiet	63.40	50.80	45.80
CRS17AT	Max	73.10	62.00	57.00
	Rated	72.80	61.90	56.90
	Quiet	66.90	55.00	50.00

INDOOR OUTLET

Sound Power Level (SWL)

Model Number	Airflow Setting	Airflow l/s	Sound Power Level dB(A)	Octave Band Centre Frequency (Hz), dB						
				125	250	500	1k	2k	4k	8k
EVA10AS	Nominal	500	71.1	71.2	63.7	67.5	66.8	63.6	60.5	54.5
EVA13AS	Nominal	650	69.5	70.0	68.0	67.9	63.6	61.5	57.4	49.7
EVA15AS	Nominal	770	72.4	71.9	68.9	71.7	66.4	63.6	60.1	52.6
EVA17AS	Nominal	890	74.8	75.2	74.0	71.9	69.3	66.9	63.9	56.7

NOTE:

Radiated sound power levels are based on ISO 3743-1.

SPECIFICATIONS

MODEL NUMBERS	CRS10AS / EVA10AS	CRS13AS / EVA13AS	CRS15AS / EVA15AS	CRS17AS / EVA17AS	CRS13AT / EVA13AS	CRS15AT / EVA15AS	CRS17AT / EVA17AS
INSULATION (INDOOR UNIT)							
TYPE	Foil Faced Polyethylene						
	Expanded Polystyrene						
OUTDOOR COIL							
TUBE TYPE	Copper						
FIN TYPE	Aluminium						
FACE AREA (m sqr)	0.723	0.880	1.210	1.210	0.880	1.210	1.210
COIL COATING	Hydrophilic Blue Fin Coil Coat Protection						
OUTDOOR FAN							
FANS TYPE	Axial / DC Motor						
NUMBER OF FANS	1		2		1		2
FAN SPEED CONTROL	Variable Speed						
The factory installed outdoor fans fitted to this unit will accept up to 10 Pa of external static resistance.							
INDOOR COIL							
TUBE TYPE	Copper - Rifle Bore						
FIN TYPE	Aluminium						
FACE AREA (m sqr)	0.25	0.34	0.41	0.48	0.34	0.41	0.48
COIL COATING	Hydrophilic Blue Fin Coil Coat Protection						
INDOOR FAN							
FANS TYPE	Centrifugal / EC Motor						
NUMBER OF FANS	1 x Single Deck	1 x Twin Deck					
DIAMETER / WIDTH (mm)	240 x 180						
MOTOR TYPE / DRIVE TYPE	Variable Speed Drive EC Motor / Direct						
COMPRESSOR							
NUMBER PER UNIT x TYPE	1 x Twin Rotary						
STARTING METHOD	Variable Speed Drive						
REFRIGERATION SYSTEM							
REFRIGERANT TYPE	R-32						
EXPANSION CONTROL	Direct Expansion Orifice /EEV						
FACTORY CHARGE (grams)	2300	3400	3600	4100	3300	3600	4100
PRE-CHARGE LENGTH (metres)	10	15					
Minimum room area (m ²) Factory charge @2.2m release height	4.541	7.318	8.204	10.641	6.894	8.204	10.641
ADDITIONAL REF. CHARGE (gram/metre)	40						
ADDITIONAL COMPRESSOR OIL	For installations over 40 m, additional 5ml of oil is required for every additional 5 meters.						
FILTER DRIER							
CONNECTION SIZE AND TYPE	9.52 mm (3/8") ODF Soldered Bi-Flow						
FACTORY SUPPLIED / FITTED	No						
INTERCONNECTING PIPE RUN							
MAX. EQUIVALENT PIPE LENGTH (metres)	60						
MAX. VERTICAL HEIGHT DIFFERENTIAL (metres)	20 (Included in Max. Pipe Length)						
MAXIMUM REFRIGERATION CHARGE @ MAXIMUM PIPE LENGTH (GM)	4300	5200	5400	5900	5100	5400	5900
MINIMUM ROOM AREA @ 2.2m RELEASE HEIGHT (M ²)	11.705	17.117	18.459	22.036	16.465	18.459	22.036



SPECIFICATIONS

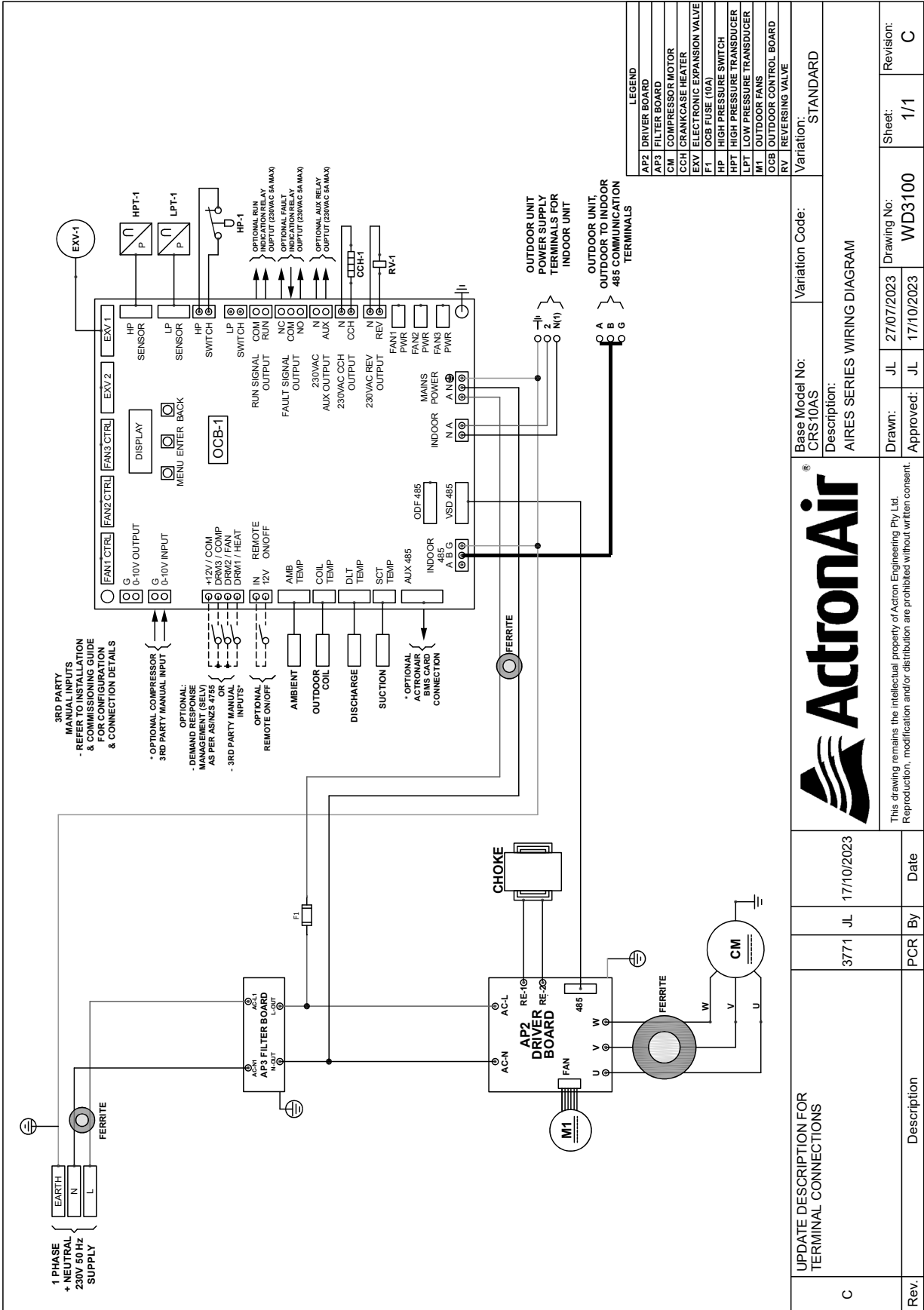
MODEL NUMBERS	CRS10AS / EVA10AS	CRS13AS / EVA13AS	CRS15AS / EVA15AS	CRS17AS / EVA17AS	CRS13AT / EVA13AS	CRS15AT / EVA15AS	CRS17AT / EVA17AS
FIELD PIPE SIZES							
LIQUID PIPE							9.52 mm (3/8")
GAS PIPE	15.88 mm (5/8")						19.05 mm (3/4")
PIPE CONNECTIONS							
INDOOR	LIQUID PIPE						9.52 mm (3/8")
	GAS PIPE	15.88 mm (5/8")					19.05 mm (3/4")
CONNECTION TYPE		Solder					
OUTDOOR	LIQUID PIPE						9.52 mm (3/8")
	GAS PIPE	15.88 mm (5/8")					19.05 mm (3/4")
CONNECTION TYPE		Flare					
PROTECTION DEVICES							
HIGH PRESSURE CUTOFF SWITCH		Nonadjustable (Automatic Reset)					
COMPRESSOR MOTOR TEMP.		Internal Thermal Cut-Out					
INDOOR FAN OVERLOAD		Internal Thermal Cut-Out					
OUTDOOR FAN OVERLOAD		Internal Thermal Cut-Out					
ELECTRIC CONTROLS							
DEFROST METHOD		Reverse Cycle					
DEFROST TYPE		Adaptive Demand Defrost					
CONTROL FIELD WIRING		2 Core (1 Pair) Twisted Pair, 7/0.30 (0.5mm ²) Shielded Data Cable					
MASTER/SECONDARY CONTROLLER CABLE SPECS.		Cat5e UTP (AWG 24) Data Cable					
SENSOR CABLE/WIRING SPECS.		Cat5e UTP (AWG 24) Data Cable					
OPERATING RANGE							
It is essential that the unit is correctly sized for the application and operates within its recommended range of operating conditions as shown below.							
INDOOR AIR INTAKE TEMPERATURE							
COOLING MODE	MAX.	30°C DB / 22°C WB					
	MIN.	20°C DB / 16°C WB					
HEATING MODE	MAX.	24°C DB					
	MIN.	16°C DB					
OUTDOOR AIR INTAKE TEMPERATURE							
COOLING MODE	MAX.	50°C DB					
	MIN.	5°C DB					
HEATING MODE	MAX.	21°C DB / 16°C WB					
	MIN.	-10°C DB					

AIR FILTERS

All return air including fresh air must have adequate filters supplied and fitted by the installing contractor. Filters must be located in accessible location between the return air grille and the unit.
ActronAir does not supply or make any provisions for return air filter.



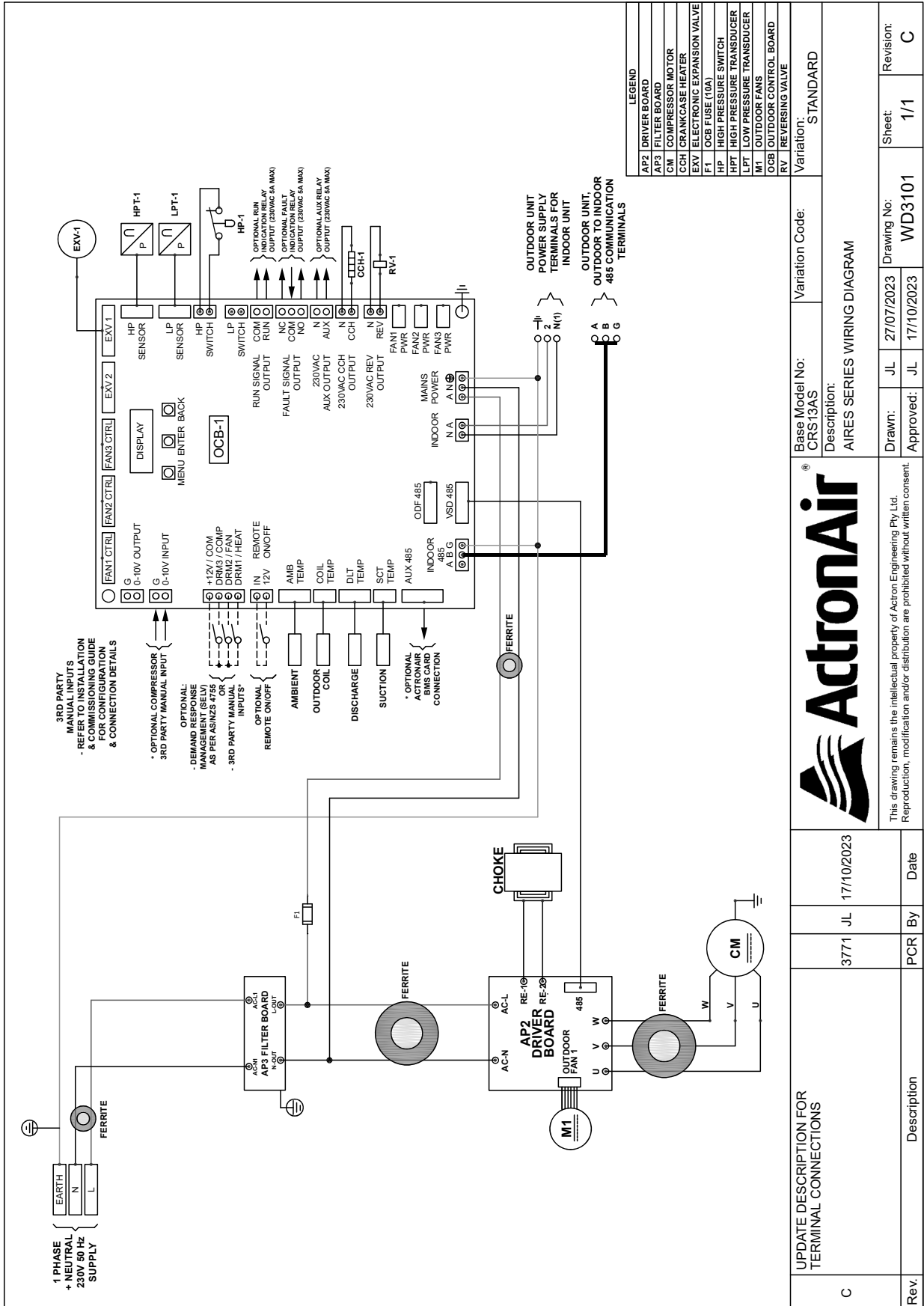
WIRING DIAGRAM - CRS10AS



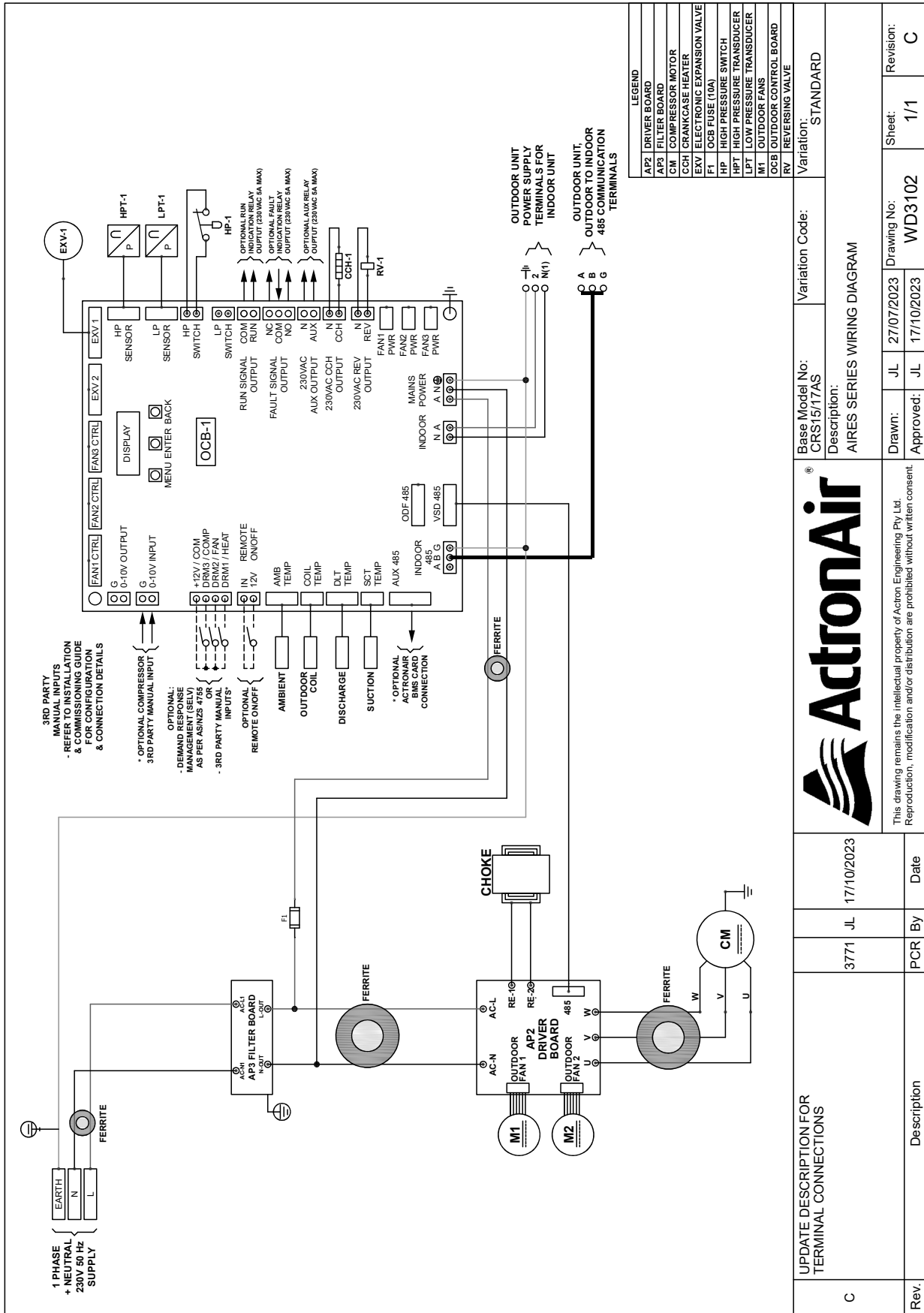
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UPDATE DESCRIPTION FOR TERMINAL CONNECTIONS	3771	JL	17/10/2023
Rev.		PCR	Date
Description		By	

WIRING DIAGRAM - CRS13AS



WIRING DIAGRAM - CRS15 - 17AS



<p>UPDATE DESCRIPTION FOR TERMINAL CONNECTIONS</p>	<p>Base Model No: CRS15/17AS Variation Code: STANDARD</p>
<p>Rev. Description</p>	<p>3771 JL 17/10/2023</p>
<p>Rev. Description</p>	<p>3771 JL 17/10/2023</p>
<p>Rev. Description</p>	<p>3771 JL 17/10/2023</p>
<p>Rev. Description</p>	<p>3771 JL 17/10/2023</p>
<p>Rev. Description</p>	<p>3771 JL 17/10/2023</p>

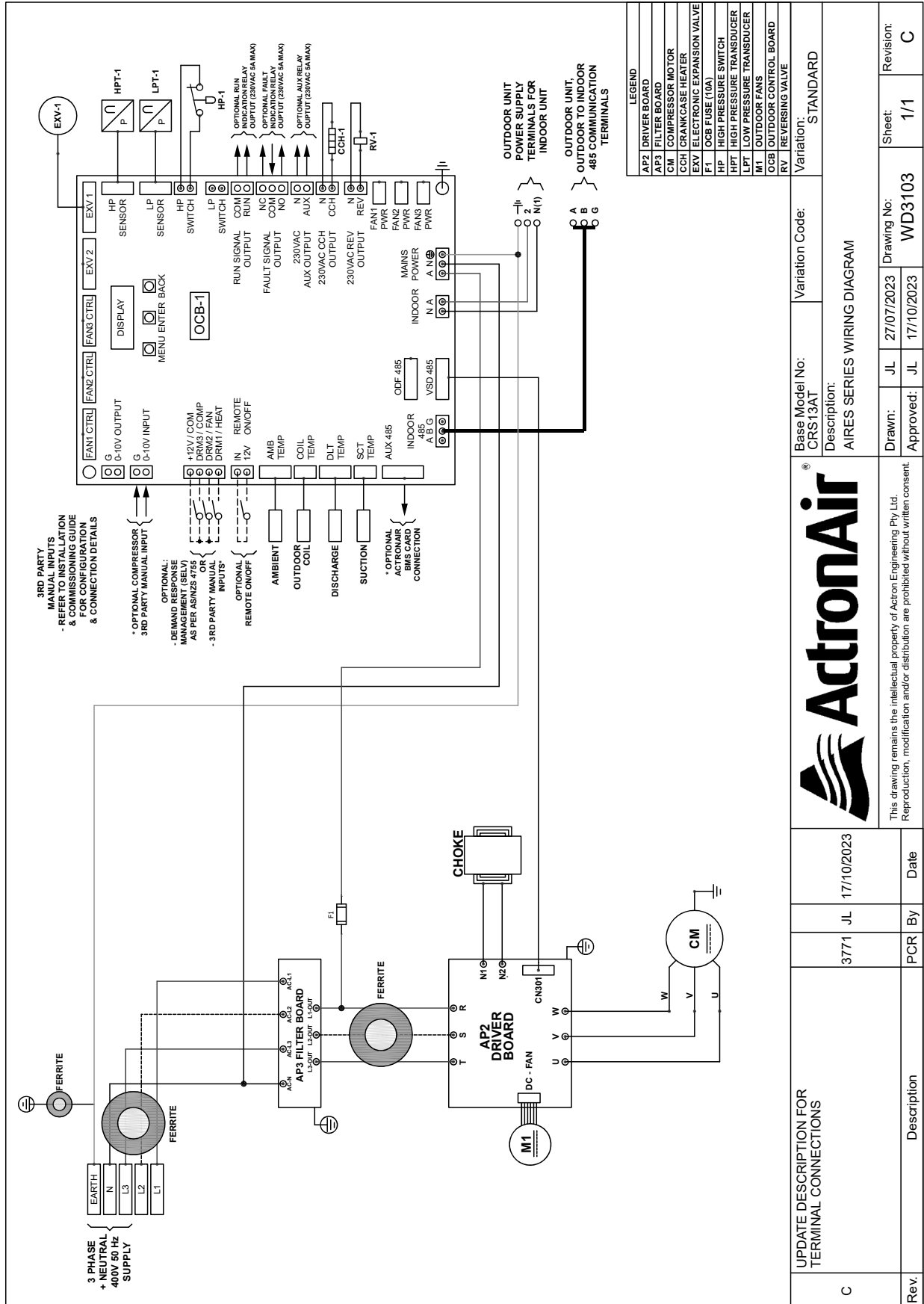


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Drawn: JL	27/07/2023	Drawing No: WD3102	Sheet: 1/1	Revision: C
Approved: JL	17/10/2023			



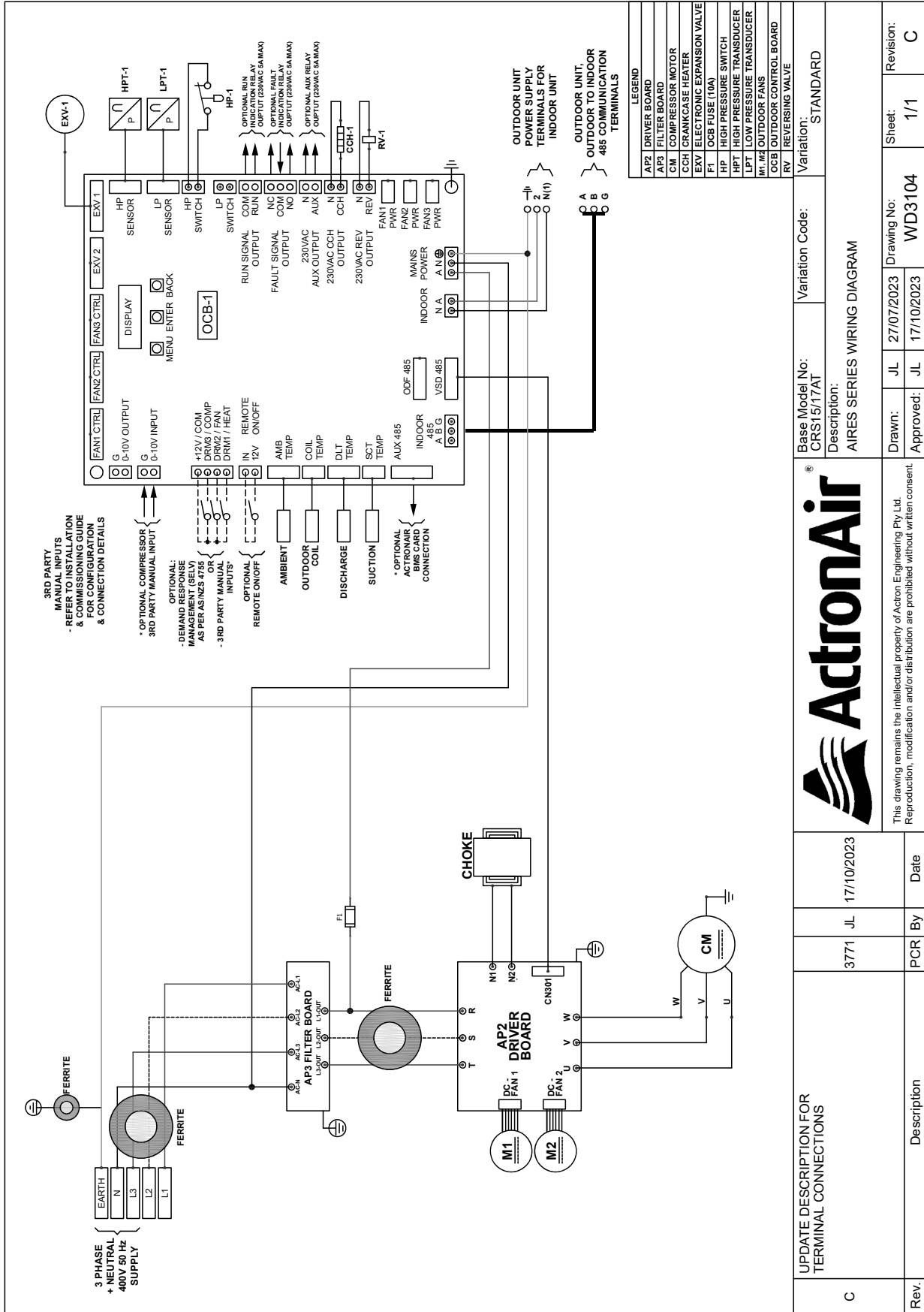
WIRING DIAGRAM - CRS13AT



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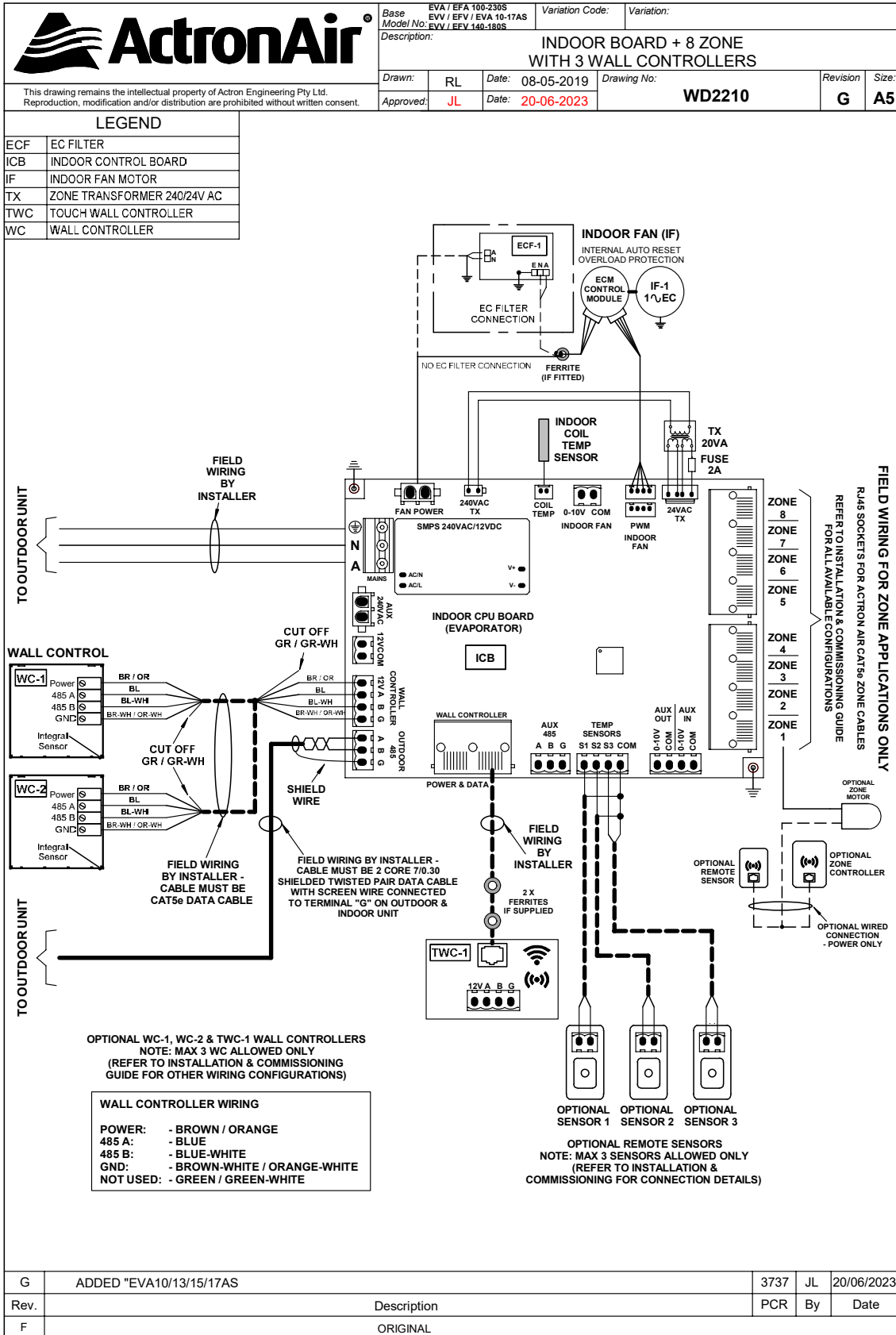
WIRING DIAGRAM - CRS15 - 17AT



C	3771	JL	17/10/2023	UPDATE DESCRIPTION FOR TERMINAL CONNECTIONS		ActronAir <small>This drawing remains the intellectual property of Actron Engineering Pty Ltd. Reproduction, modification and/or distribution are prohibited without written consent.</small>	JL	27/07/2023	JL	WD3104	Revision: 1/1	Revision: C
Rev.	Description	PCR	By	Date	Date		Base Model No: CRS15/17AT Description: AIRES SERIES WIRING DIAGRAM	Variation Code: STANDARD	Drawn:	Approved:	Drawing No: WD3104	Sheet: 1/1



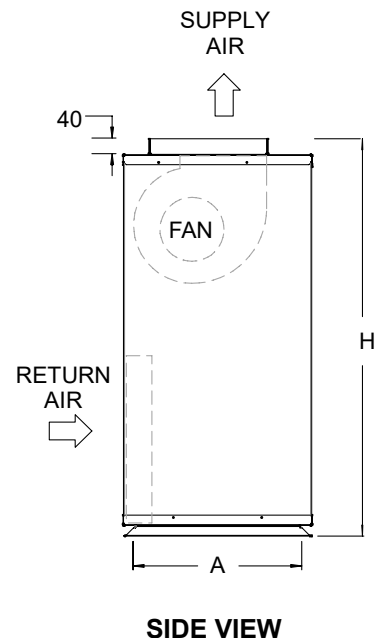
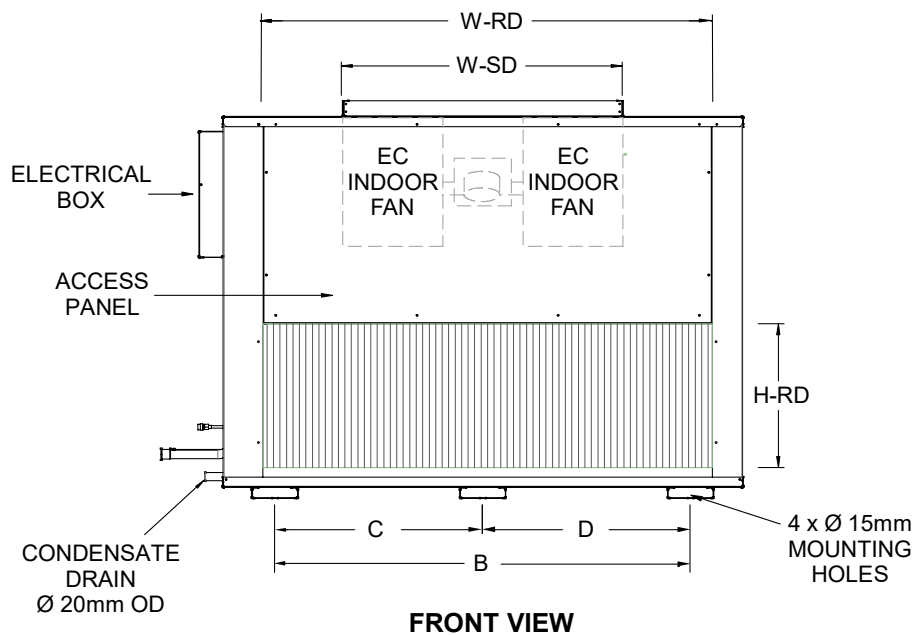
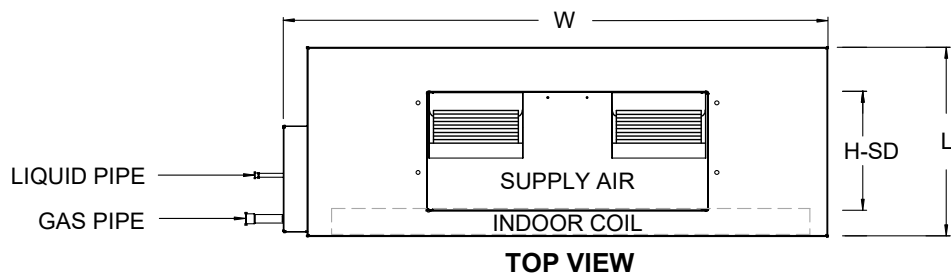
WIRING DIAGRAM - INDOOR



DESIGNS AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

INDOOR UNIT VARIATION - DIMENSION

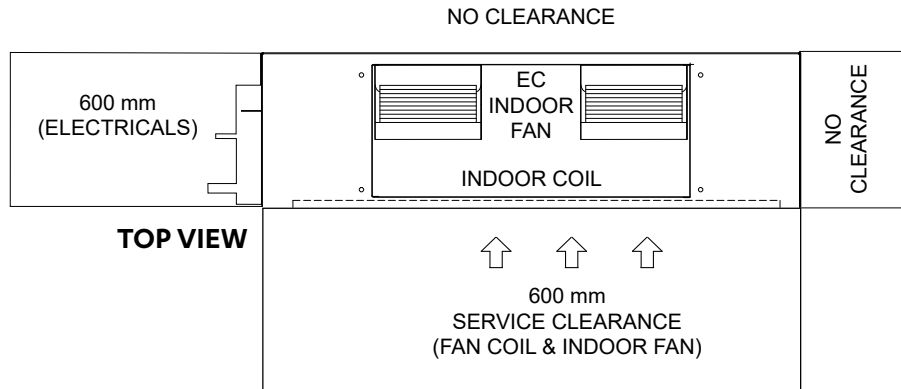
INDOOR UNIT - UPRIGHT FAN COIL WITH VERTICAL DISCHARGE



Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)				Supply Duct	Return Duct	Gas Pipe (Swaged)	Liquid Pipe (Swaged)
	H	W	L	A	B	C	D	H-SD x W-SD	H-RD x W-RD		
EVA10AS-V	870	830	405	350	545	-	-	300 x 500	365 x 650	Ø 15.88mm (5/8")	Ø 9.52mm (3/8")
EVA13AS-V	875	1075	405	350	790	-	-	300 x 715	365 x 895	Ø 19.05mm (3/4")	
EVA15AS-V		1275			990	-	-				
EVA17AS-V	1015	1390	480	430	-	530	530	365 x 1095			

SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

INDOOR VERTICAL VARIATION

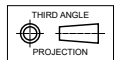


HEIGHT CLEARANCE = DUCT WORK

Unit Model Number	Total Weight Kg)
EVA10AS-V	36
EVA13AS-V	44
EVA15AS-V	53
EVA17AS-V	61

NOTES:

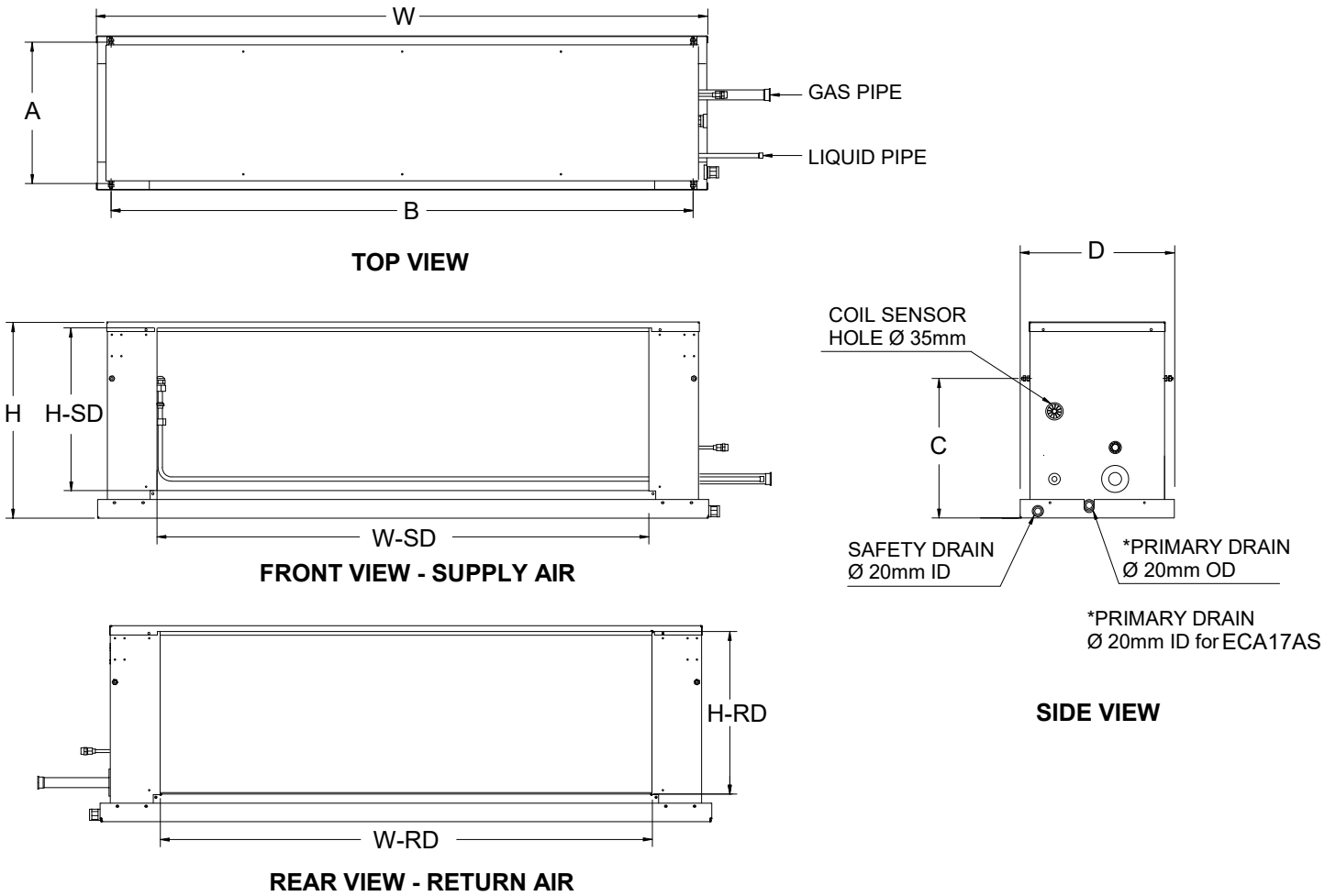
1. Do not scale drawing. All dimensions are in **mm** unless otherwise specified. Refer to corresponding unit dimensional drawing for mounting hole details.
2. Service Access Areas and Spaces for Airflow Clearances are suggested minimum based on the condition that the spaces around the units are free from any obstructions and a walkaway passage of 1000 mm between the units or between the unit and the outside perimeter is available.
3. Minimum service access areas and spaces for airflow clearances are responsibilities of the installer, ActronAir will not be held liable for any extra charges incurred due to lack of access and space for airflow.
4. Under all circumstances, condenser air must not recirculate back onto condenser coil. Keep all clearance free of any obstruction.
5. Refer Pipe Connection Details on Specifications Sheet.
6. MTG C-C DIST = Mounting Centre to Centre Distance.
7. Use M12 bolt for feet mounting.
8. For installation with release height less than or equal to 0.6m, minimum area will be computed based on release height of 0.6m.
9. Where A_{min} (the minimum area required) is not satisfied, the installer must provide additional control measure/s in place as per AS/NZS 60335.2.40 standard for the installation to be acceptable.



The examples of controls measures are (but are not limited to): Ventilation, Shut Off Valves and Safety Alarm. These control measures are not provided by ActronAir and must be determined by the installer based on individual installation requirements.

TWO-PIECE FAN COIL

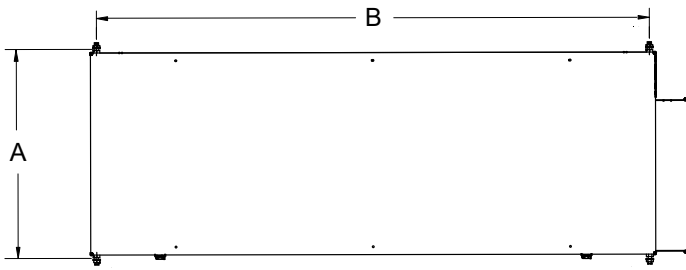
Coil Section - ECA13AS / ECA15AS / ECA17AS



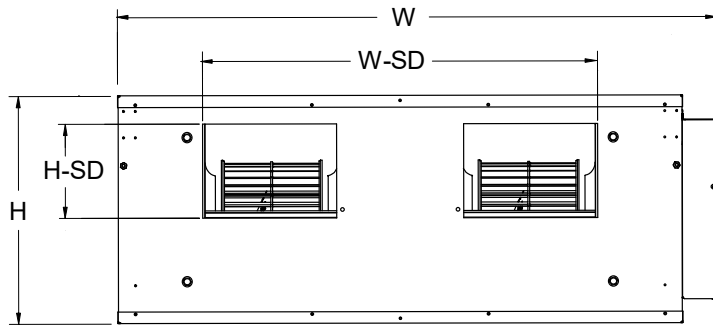
Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance (Centre to Centre /Base Foot)			Supply Duct	Return Duct	Gas Pipe	Liquid Pipe
	H	W	D	A	B	C	H-SD x W-SD	H-RD x W-RD		
ECA13AS	410	1054	342	310	990	284	345 x 900	345 x 900	Ø 19.05mm (3/4") Swaged	Ø 9.52mm (3/8") Swaged
ECA15AS		1252			1190	283				
ECA17AS	435	1360			1294	310	362 x 1094	362 x 1094		

TWO-PIECE FAN COIL

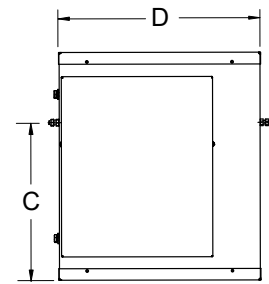
Fan Section - EFA13AS / EFA15AS / EFA17AS



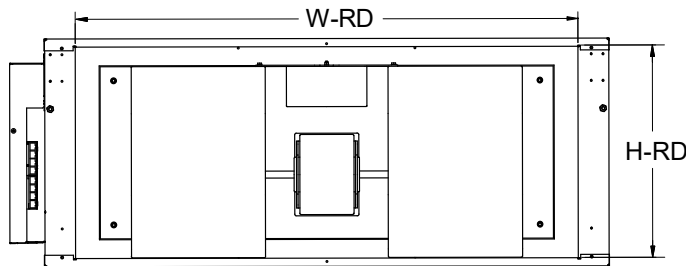
TOP VIEW



FRONT VIEW - SUPPLY AIR



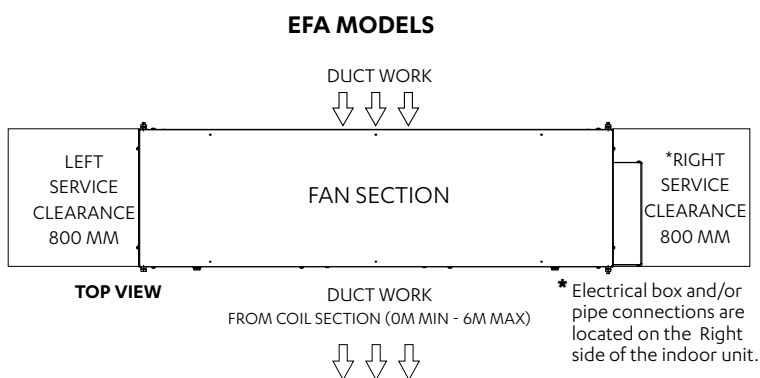
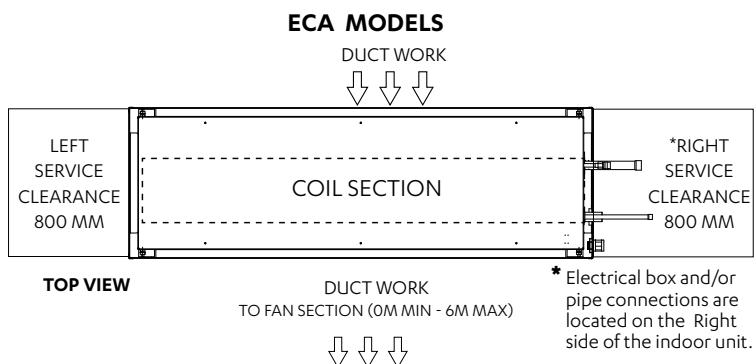
SIDE VIEW



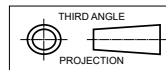
REAR VIEW - RETURN AIR

Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance (Centre to Centre / Base Foot)			Supply Duct	Return Duct
	H	W	D	A	B	C	H-SD x W-SD	H-RD x W-RD
EFA13AS	408	1072	362	370	990	282	186 x 708	378 x 900
EFA15AS								
EFA17AS								

SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS



NOTES:



- Do not scale drawing.
- All dimensions are in **mm** unless otherwise specified. Refer to corresponding unit dimensional drawing for mounting hole details.
- Service Access Areas and Spaces for Airflow Clearances are suggested minimum based on the condition that the spaces around the units are free from any obstructions and a walkway passage of 1000 mm between the units or between the unit and the outside perimeter is available.
- Minimum service access areas and spaces for airflow clearances are responsibilities of the installer, ActronAir will not be held liable for any extra charges incurred due to lack of access and space for airflow.
 - Left Service Clearance can be 100mm minimum if Right Service Clearance is applicable.
 - Right Service Clearance can be 600mm minimum if Left Service Clearance is applicable.
 - Height Service Clearance can be 100mm minimum if Right Service Clearance is applicable.
- For installation with release height less than or equal to 0.6m, minimum area will be computed based on release height of 0.6m.
- Where A min (the minimum area required) is not satisfied, the installer must provide additional control measure/s in place as per AS/NZS 60335.2.40 standard for the installation to be acceptable.

The examples of controls measures are (but are not limited to): Ventilation, Shut Off Valves and Safety Alarm. These control measures are not provided by ActronAir and must be determined by the installer based on individual installation requirements.

Model Number	Weight (kg)	Height Clearance
ECA13AS	28.5	340
ECA15AS	37.5	
ECA17AS	45.5	410
EFA13AS	35	340
EFA15AS	44	
EFA17AS	50.5	

ADVANCE Split Ducted Unit

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