


# ADVANCE (R-32 Series) Split Ducted Unit

## Technical Selection Data



1  
SINGLE PHASE

3  
THREE PHASE

SINGLE STAGE

ECM FAN

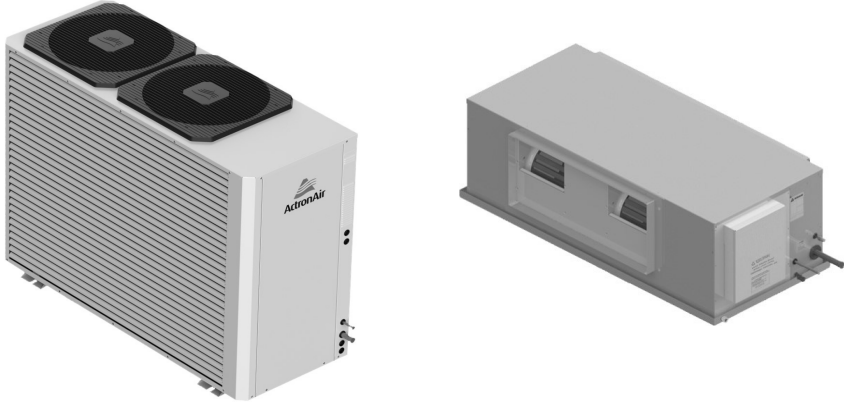
INVERTER

LOUVRE

SOFT START

ECM AXIAL FAN

R-32  
REFRIGERANT



### Model Numbers

Single Phase	Three Phase	Split Fan-Coil
CRV13AS / EVV13AS	CRV13AT / EVV13AS	EAA13AS / EFV13AS
CRV15AS / EVV15AS	CRV15AT / EVV15AS	EAA15AS / EFV15AS
CRV17AS / EVV17AS	CRV17AT / EVV17AS	EAA17AS / EFV17AS

### UNIT FEATURES

- Inverter Variable Speed Compressor and Drive Technology
- 28-100% Superior Refrigeration Operating Capacity Range
- EC High Efficiency 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 with Louvred Coil Guard
- Variable Fan Technology
- Turbo Mode

### UNIT OPTIONS

- Additional Full Coil Coat Protection
- Split Fan Coil Unit
- Vertical Fan Coil Unit
- Horizontal Discharge Condenser
- Outdoor Drain Tray

### 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, Auto 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 Controller with on-board 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).

- Supply Air Plenums are available in 2 or 3 way Configuration.
- Return Air Plenums are available with 2 x 350 mm or 2 x 400 mm or 2 x 450mm Spigots.



## SPECIFICATION SUMMARY

OUTDOOR UNIT MODEL		CRV13AS		CRV15AS		CRV17AS		CRV13AT		CRV15AT		CRV17AT	
INDOOR UNIT MODEL		EVV13AS		EVV15AS		EVV17AS		EVV13AS		EVV15AS		EVV17AS	
		(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	13.45	13.20	14.90	14.60	17.35	17.00	13.05	12.80	14.95	14.65	17.35	17.00
	Tru-Max <sup>(10)</sup>	-	14.50	-	16.50	-	18.40	-	14.50	-	16.50	-	18.50
	MINIMUM	-	4.05	-	4.48	-	4.65	-	3.93	-	4.49	-	4.65
(4) HEATING CAPACITY (kW)	RATED	13.15	13.40	15.10	15.40	17.25	17.60	13.40	13.65	15.70	16.00	18.05	18.40
	Tru-Max <sup>(10)</sup>	-	15.00	-	17.00	-	19.35	-	15.00	-	17.60	-	18.60
	MINIMUM	-	3.75	-	4.31	-	5.05	-	3.82	-	4.48	-	5.28
(3) SENSIBLE CAPACITY (kW)	RATED	11.07	10.82	12.27	11.97	14.63	14.28	10.62	10.37	12.31	12.01	14.29	13.94
(5) COOLING INPUT POWER (kW)	RATED	3.88		4.44		5.17		3.68		4.37		5.09	
(5) HEATING INPUT POWER (kW)	RATED	3.82		4.39		5.01		3.88		4.56		5.25	
EER	RATED	3.47	3.40	3.36	3.29	3.36	3.29	3.55	3.48	3.42	3.35	3.41	3.34
COP	RATED	3.44	3.51	3.44	3.51	3.44	3.51	3.45	3.52	3.44	3.51	3.44	3.50
Total Cooling Seasonal Performance Factor Residential - Hot / Average / Cold		4.27 / 4.01 / 4.12		4.06 / 3.83 / 3.93		4.38 / 4.15 / 4.31		4.39 / 3.96 / 4.02		4.36 / 3.97 / 4.05		4.33 / 3.98 / 4.07	
Heating Seasonal Performance Factor Residential - Hot / Average / Cold		3.47 / 2.08 / 1.88		3.65 / 2.70 / 2.35		3.68 / 2.35 / 2.11		4.10 / 2.41 / 2.13		4.35 / 2.88 / 2.41		3.98 / 2.61 / 2.33	
(6) INDOOR AIRFLOW (l/s) MIN. / NOMINAL / MAX.		230 / 650 / 780		260 / 770 / 920		300 / 890 / 1060		230 / 650 / 780		260 / 770 / 920		300 / 890 / 1060	
(7) OUTDOOR SOUND PRESS. LEVEL @ 3M dB(A) - Quiet / Rated / Tru.Max		45.4 / 52.4 / 54.8		47.6 / 56.4 / 56.4		47.4 / 56.4 / 56.4		45.1 / 52.0 / 54.5		47.2 / 52.7 / 55.9		47.4 / 55.9 / 55.9	
OUTDOOR SOUND POWER LEVEL dB(A) - Quiet / Rated / Tru.Max		64.1 / 71.3 / 73.6		66 / 75.1 / 75.1		65.7 / 75.1 / 75.1		63.6 / 70.5 / 72.9		65.5 / 71.4 / 74.6		65.7 / 74.6 / 74.6	
POWER SUPPLY - OUTDOOR		230V / 1Ph+N / 50Hz						400V / 3Ph+N / 50Hz					
VOLTAGE RANGE (MIN - MAX)		216V - 253V						380V - 440V					
IP RATING		IP44											
POWER SUPPLY - INDOOR		230V / 1Ph+N / 50Hz											
VOLTAGE RANGE (MIN - MAX)		216V - 253V											
IP RATING		IP20											
(2) RATED LOAD AMPS** - TOTAL		16.7		19.5		22.8		7.2		8.5		9.7	
(8) FULL LOAD AMPS OUTDOOR / INDOOR / TOTAL		27.3 / 4.3 / 31.6		30.0 / 4.3 / 34.3		34.2 / 4.3 / 38.5		9.7 / 4.3 / 14.0		11.7 / 4.3 / 16.0		13.5 / 4.3 / 17.8	
OUTDOOR AND INDOOR UNIT (TOTAL)													
FULL LOAD AMPS* - PHASE 1		31.6		34.3		38.5		14.0		16.0		17.8	
FULL LOAD AMPS* - PHASE 2 AND 3				-				7.8, 7.7		9.7, 9.7		11.6, 11.6	
(9) CIRCUIT BREAKER		32.0		40		40		16.0		20.0		20.0	
APPROXIMATE STARTING AMPS		< 45		< 45		< 45		< 45		< 45		< 45	
POWER FACTOR		0.99		0.99		0.99		0.92		0.93		0.93	
CABLE SIZE (MAIN LINE) SUGGESTED MINIMUM		6.0 mm <sup>2</sup>		10.0 mm <sup>2</sup>		10.0 mm <sup>2</sup>		2.5 mm <sup>2</sup>		2.5 mm <sup>2</sup>		2.5 mm <sup>2</sup>	
CABLE SIZE (INDOOR TO OUTDOOR WIRE) SUGGESTED MINIMUM***		1.0 mm <sup>2</sup>		1.0 mm <sup>2</sup>		1.0 mm <sup>2</sup>		1.0 mm <sup>2</sup>		1.0 mm <sup>2</sup>		1.0 mm <sup>2</sup>	
DATA CABLE FIELD WIRING (OUTDOOR TO INDOOR)		2 Core 7 / 0.30 (0.5mm <sup>2</sup> ) Twisted Shielded Data Cable											
WEIGHT (kg) -- INDOOR / OUTDOOR		44 / 148		53 / 148		61 / 155		44 / 148		53 / 148		61 / 155	

- (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 excludes indoor fan kW.  
Nett 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) TRUMAX - 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 nett input power to estimate running cost.  
Suggested minimum cable size should be used as a guide only, refer to the accordance with the latest edition of the AS/NZS 3000 "Australian/New Zealand Wiring Rules" for more details.  
\*\*\*Cable size recommendation selected in accordance to maximum conductor temperature of 75°C with wiring enclosed in air.

The local electricity authority may require limits on starting current and voltage drop, please check prior to purchase.



**CAPACITY SELECTION DATA**

**CRV13AS / EVV13AS**

**COOLING PERFORMANCE**

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW							
OUTDOOR DB - °C	INDOOR WB - °C		AT DB TEMPERATURE ONTO INDOOR COIL - °C							
			20	22	24	26	27	28	30	
25	16	14.08	8.43	10.06	11.64					
	17	14.21	7.62	9.23	10.85	12.34				
	18	14.37	6.77	8.40	10.03	11.64	12.38	13.04		
	19	14.73	5.89	7.60	9.19	10.82	11.62	12.37	13.69	
	20	15.07	4.99	6.72	8.35	9.98	10.79	11.60	13.09	
	21	15.51		5.83	7.53	9.15	9.95	10.75	12.35	
	22	15.91		4.95	6.67	8.35	9.11	9.92	11.54	
35	16	13.05	7.93	9.55	11.03					
	17	13.10	7.13	8.73	10.32	11.71				
	18	13.22	6.29	7.90	9.52	11.08	11.81			
	19	<b>13.45</b>	5.41	7.12	8.71	10.31	<b>11.07</b>	11.82		
	20	13.81	4.54	6.25	7.87	9.49	10.28	11.07	12.53	
	21	14.17		5.38	7.06	8.65	9.47	10.25	11.82	
	22	14.52		4.50	6.19	7.81	8.62	9.43	11.04	
45	16	11.69	7.29	8.89						
	17	11.70	6.48	8.10	9.64					
	18	11.79	5.69	7.28	8.89	10.35				
	19	11.89	4.84	6.46	8.08	9.65	10.38	10.95		
	20	12.15	3.97	5.67	7.26	8.86	9.64	10.39		
	21	12.46		4.80	6.48	8.04	8.83	9.64	11.10	
	22	12.81		3.93	5.63	7.22	8.02	8.81	10.37	
50	16	10.92	6.94	8.50						
	17	10.93	6.14	7.75	9.21					
	18	10.98	5.36	6.93	8.52					
	19	11.01	4.51	6.13	7.72	9.26	9.93			
	20	11.23	3.65	5.33	6.91	8.49	9.27	9.98		
	21	11.51		4.48	6.13	7.68	8.49	9.27	10.64	
	22	11.81		3.61	5.30	6.88	7.68	8.47	9.99	

**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	8.83	8.30	8.78	8.26	8.74	8.21	8.70	8.18	8.66	8.14
-6	9.81	9.03	9.76	8.98	9.70	8.92	9.64	8.87	9.58	8.81
-2	10.92	9.50	10.84	9.43	10.77	9.37	10.69	9.30	10.62	9.24
2	12.10	10.77	12.02	10.69	11.92	10.61	11.83	10.53	11.73	10.44
6	13.37	13.37	13.26	13.26	<b>13.15</b>	<b>13.15</b>	13.07	13.07	12.95	12.95
10	14.84	14.84	14.71	14.71	14.58	14.58	14.44	14.44	14.30	14.30
14	16.42	16.42	16.26	16.26	16.09	16.09	15.93	15.93	15.76	15.76
18	18.10	18.10	17.91	17.91	17.72	17.72	17.53	17.53	17.33	17.33

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	<b>650</b>	682.5	715	747.5	780
TOTAL COOLING	0.965	0.982	0.989	0.997	<b>1.000</b>	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.884	0.916	0.945	0.974	<b>1.000</b>	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	<b>1.000</b>	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	<b>1.000</b>	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	<b>1.000</b>	1.000	1.000	1.000	1.000	1.000	1.000

**NOTE:**

Correction multipliers are based on horizontal pipe runs.



# CAPACITY SELECTION DATA

# CRV15AS / EVV15AS

## COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW						
OUTDOOR DB - °C	INDOOR WB - °C		AT DB TEMPERATURE ONTO INDOOR COIL - °C						
			20	22	24	26	27	28	30
25	16	15.60	9.35	11.15	12.89				
	17	15.74	8.46	10.24	12.02	13.67			
	18	15.92	7.51	9.31	11.12	12.89	13.71	14.45	
	19	16.32	6.54	8.43	10.19	11.99	12.88	13.71	15.17
	20	16.70	5.55	7.46	9.26	11.06	11.96	12.85	14.51
	21	17.18		6.47	8.36	10.14	11.03	11.92	13.68
	22	17.62		5.50	7.40	9.26	10.10	10.99	12.78
35	16	14.46	8.79	10.58	12.22				
	17	14.51	7.91	9.68	11.44	12.98			
	18	14.65	6.98	8.76	10.56	12.28	13.08		
	19	14.90	6.01	7.89	9.65	11.43	12.27	13.10	
	20	15.30	5.04	6.94	8.72	10.52	11.40	12.26	13.88
	21	15.69		5.97	7.83	9.59	10.50	11.37	13.10
	22	16.08		5.00	6.87	8.67	9.56	10.45	12.23
45	16	12.96	8.08	9.85					
	17	12.97	7.19	8.98	10.68				
	18	13.06	6.32	8.08	9.86	11.47			
	19	13.17	5.38	7.17	8.96	10.69	11.51	12.14	
	20	13.47	4.41	6.29	8.05	9.82	10.68	11.52	
	21	13.80		5.34	7.19	8.91	9.79	10.68	12.30
	22	14.19		4.37	6.25	8.01	8.90	9.77	11.49
50	16	12.10	7.70	9.42					
	17	12.11	6.81	8.60	10.21				
	18	12.17	5.95	7.69	9.44				
	19	12.21	5.01	6.80	8.57	10.27	11.01		
	20	12.45	4.06	5.92	7.67	9.42	10.27	11.06	
	21	12.75		4.98	6.81	8.52	9.41	10.28	11.79
	22	13.09		4.01	5.89	7.63	8.51	9.39	11.07

## 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	10.13	9.52	10.08	9.48	10.03	9.43	9.99	9.39	9.94	9.34
-6	11.27	10.37	11.20	10.30	11.13	10.24	11.07	10.18	11.00	10.12
-2	12.53	10.90	12.45	10.83	12.37	10.76	12.28	10.68	12.19	10.61
2	13.90	12.37	13.80	12.28	13.69	12.18	13.58	12.09	13.47	11.99
6	15.35	15.35	15.23	15.23	15.10	15.10	15.01	15.01	14.87	14.87
10	17.05	17.05	16.90	16.90	16.74	16.74	16.58	16.58	16.42	16.42
14	18.86	18.86	18.67	18.67	18.48	18.48	18.29	18.29	18.10	18.10
18	20.78	20.78	20.57	20.57	20.35	20.35	20.14	20.14	19.90	19.90

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

### NOTE:

Correction multipliers are based on horizontal pipe runs.



**CAPACITY SELECTION DATA**

**CRV17AS / EVV17AS**

**COOLING PERFORMANCE**

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW						
OUTDOOR DB - °C	INDOOR WB - °C		AT DB TEMPERATURE ONTO INDOOR COIL - °C						
			20	22	24	26	27	28	30
25	16	18.16	11.14	13.29	15.37				
	17	18.33	10.08	12.20	14.33	16.29			
	18	18.54	8.95	11.10	13.26	15.37	16.35	17.23	
	19	19.00	7.79	10.04	12.15	14.29	15.35	16.34	18.08
	20	19.44	6.61	8.89	11.04	13.18	14.26	15.32	17.30
	21	20.00		7.71	9.96	12.09	13.15	14.21	16.31
	22	20.52		6.56	8.82	11.03	12.04	13.11	15.24
35	16	16.83	10.48	12.62	14.57				
	17	16.90	9.43	11.54	13.64	15.47			
	18	17.05	8.32	10.44	12.58	14.64	15.59		
	19	17.35	7.16	9.41	11.51	13.62	14.63	15.62	
	20	17.82	6.01	8.27	10.40	12.54	13.59	14.62	16.55
	21	18.27		7.12	9.34	11.43	12.51	13.55	15.62
	22	18.72		5.95	8.19	10.33	11.40	12.46	14.58
45	16	15.09	9.63	11.74					
	17	15.10	8.57	10.70	12.73				
	18	15.21	7.53	9.62	11.75	13.67			
	19	15.34	6.41	8.54	10.68	12.75	13.72	14.47	
	20	15.68	5.25	7.50	9.60	11.70	12.73	13.73	
	21	16.07		6.36	8.56	10.63	11.67	12.74	14.67
	22	16.52		5.20	7.45	9.55	10.61	11.65	13.70
50	16	14.09	9.17	11.23					
	17	14.10	8.11	10.24	12.17				
	18	14.17	7.09	9.16	11.26				
	19	14.21	5.97	8.10	10.21	12.24	13.12		
	20	14.49	4.84	7.05	9.14	11.22	12.24	13.18	
	21	14.85		5.94	8.11	10.15	11.22	12.25	14.05
	22	15.24		4.78	7.01	9.10	10.15	11.19	13.20

**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	11.57	11.11	11.52	11.06	11.45	11.00	11.41	10.95	11.35	10.90
-6	12.87	12.10	12.79	12.03	12.72	11.95	12.64	11.88	12.56	11.81
-2	14.32	12.74	14.22	12.66	14.13	12.57	14.02	12.48	13.93	12.39
2	15.88	14.45	15.76	14.34	15.64	14.23	15.51	14.12	15.39	14.00
6	17.54	17.54	17.39	17.39	17.25	17.25	17.15	17.15	16.99	16.99
10	19.47	19.47	19.30	19.30	19.12	19.12	18.95	18.95	18.76	18.76
14	21.54	21.54	21.33	21.33	21.11	21.11	20.90	20.90	20.68	20.68
18	23.75	23.75	23.50	23.50	23.25	23.25	23.00	23.00	22.74	22.74

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

**NOTE:**

Correction multipliers are based on horizontal pipe runs.



## CAPACITY SELECTION DATA

## CRV13AT / EVV13AS

## COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW							
OUTDOOR DB - °C	INDOOR WB - °C		AT DB TEMPERATURE ONTO INDOOR COIL - °C							
			20	22	24	26	27	28	30	
25	16	13.66	8.08	9.64	11.16					
	17	13.79	7.31	8.85	10.40	11.83				
	18	13.94	6.49	8.05	9.62	11.16	11.86	12.50		
	19	14.30	5.65	7.29	8.82	10.37	11.14	11.86	13.13	
	20	14.63	4.79	6.45	8.01	9.57	10.35	11.12	12.55	
	21	15.05		5.59	7.23	8.78	9.54	10.31	11.84	
	22	15.44		4.76	6.40	8.01	8.74	9.51	11.06	
35	16	12.66	7.60	9.16	10.57					
	17	12.71	6.84	8.37	9.90	11.23				
	18	12.83	6.04	7.58	9.13	10.63	11.32			
	19	<b>13.05</b>	5.20	6.83	8.35	9.89	<b>10.62</b>	11.34		
	20	13.40	4.36	6.00	7.55	9.10	9.86	10.61	12.01	
	21	13.74		5.16	6.77	8.30	9.08	9.83	11.33	
	22	14.08		4.32	5.94	7.50	8.27	9.04	10.58	
45	16	11.35	6.99	8.52						
	17	11.36	6.22	7.76	9.24					
	18	11.44	5.46	6.98	8.53	9.92				
	19	11.53	4.65	6.20	7.75	9.25	9.95	10.50		
	20	11.79	3.81	5.44	6.96	8.49	9.24	9.96		
	21	12.09		4.61	6.21	7.71	8.47	9.24	10.65	
	22	12.43		3.77	5.40	6.93	7.70	8.45	9.94	
50	16	10.59	6.66	8.15						
	17	10.61	5.89	7.43	8.83					
	18	10.65	5.14	6.65	8.17					
	19	10.69	4.33	5.88	7.41	8.88	9.52			
	20	10.90	3.51	5.12	6.63	8.14	8.89	9.57		
	21	11.17		4.31	5.89	7.37	8.14	8.89	10.20	
	22	11.46		3.46	5.09	6.60	7.36	8.12	9.58	

## 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	9.00	8.46	8.95	8.42	8.91	8.37	8.87	8.34	8.83	8.30
-6	10.00	9.20	9.94	9.15	9.88	9.09	9.83	9.04	9.76	8.98
-2	11.13	9.68	11.05	9.61	10.98	9.55	10.90	9.48	10.82	9.42
2	12.33	10.98	12.24	10.90	12.15	10.81	12.05	10.73	11.96	10.64
6	13.62	13.62	13.51	13.51	<b>13.40</b>	<b>13.40</b>	13.32	13.32	13.20	13.20
10	15.13	15.13	14.99	14.99	14.85	14.85	14.72	14.72	14.57	14.57
14	16.73	16.73	16.56	16.56	16.39	16.39	16.23	16.23	16.06	16.06
18	18.44	18.44	18.25	18.25	18.05	18.05	17.86	17.86	17.66	17.66

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	<b>650</b>	682.5	715	747.5	780
TOTAL COOLING	0.965	0.982	0.989	0.997	<b>1.000</b>	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.884	0.916	0.945	0.974	<b>1.000</b>	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	<b>1.000</b>	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	<b>1.000</b>	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	<b>1.000</b>	1.000	1.000	1.000	1.000	1.000	1.000

## NOTE:

Correction multipliers are based on horizontal pipe runs.



# CAPACITY SELECTION DATA

# CRV15AT / EVV15AS

COOLING PERFORMANCE									
AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW						
OUTDOOR DB - °C	INDOOR WB - °C		AT DB TEMPERATURE ONTO INDOOR COIL - °C						
			20	22	24	26	27	28	30
25	16	15.65	9.38	11.18	12.94				
	17	15.80	8.48	10.27	12.06	13.71			
	18	15.97	7.53	9.34	11.16	12.94	13.76	14.50	
	19	16.38	6.56	8.45	10.23	12.03	12.92	13.75	15.22
	20	16.75	5.56	7.48	9.29	11.10	12.00	12.89	14.56
	21	17.24		6.49	8.38	10.18	11.07	11.96	13.73
	22	17.68		5.52	7.42	9.29	10.13	11.03	12.83
35	16	14.51	8.82	10.62	12.26				
	17	14.56	7.94	9.71	11.48	13.02			
	18	14.69	7.00	8.79	10.59	12.33	13.12		
	19	<b>14.95</b>	6.03	7.92	9.68	11.47	<b>12.31</b>	13.15	
	20	15.35	5.06	6.96	8.75	10.55	11.44	12.30	13.93
	21	15.74		5.99	7.86	9.62	10.53	11.40	13.14
	22	16.13		5.01	6.90	8.70	9.59	10.49	12.27
45	16	13.00	8.11	9.88					
	17	13.01	7.22	9.01	10.72				
	18	13.11	6.34	8.10	9.89	11.51			
	19	13.21	5.40	7.19	8.99	10.73	11.54	12.18	
	20	13.51	4.43	6.31	8.08	9.85	10.72	11.55	
	21	13.85		5.35	7.21	8.94	9.82	10.72	12.34
	22	14.24		4.38	6.27	8.04	8.93	9.80	11.53
50	16	12.14	7.72	9.45					
	17	12.15	6.83	8.62	10.24				
	18	12.21	5.97	7.71	9.48				
	19	12.25	5.03	6.82	8.59	10.30	11.04		
	20	12.49	4.07	5.94	7.70	9.45	10.31	11.10	
	21	12.80		5.00	6.83	8.55	9.44	10.31	11.83
	22	13.13		4.02	5.90	7.66	8.54	9.42	11.11

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	10.54	9.91	10.49	9.86	10.43	9.81	10.39	9.76	10.34	9.72
-6	11.72	10.78	11.65	10.72	11.58	10.65	11.51	10.59	11.44	10.52
-2	13.03	11.34	12.95	11.26	12.86	11.19	12.77	11.11	12.68	11.03
2	14.45	12.86	14.35	12.77	<b>14.23</b>	12.67	14.12	12.57	14.01	12.47
6	15.96	15.96	15.83	15.83	<b>15.70</b>	<b>15.70</b>	15.61	15.61	15.46	15.46
10	17.72	17.72	17.57	17.57	17.40	17.40	17.24	17.24	17.07	17.07
14	19.60	19.60	19.41	19.41	19.21	19.21	19.01	19.01	18.82	18.82
18	21.61	21.61	21.38	21.38	21.16	21.16	20.93	20.93	20.69	20.69

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	<b>770</b>	808.5	847	885.5	920	
TOTAL COOLING	0.967	0.982	0.989	0.997	<b>1.000</b>	1.004	1.009	1.015	1.020	
SENSIBLE COOLING	0.887	0.916	0.945	0.974	<b>1.000</b>	1.024	1.046	1.072	1.092	
HEATING FACTOR	0.970	0.976	0.983	0.991	<b>1.000</b>	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	<b>1.000</b>	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	<b>1.000</b>	1.000	1.000	1.000	1.000	1.000	1.000

**NOTE:**

Correction multipliers are based on horizontal pipe runs.



## CAPACITY SELECTION DATA

CRV17AT / EVV17AS

## COOLING PERFORMANCE

AIR ENTERING		TOTAL CAPACITY kW	TOTAL SENSIBLE CAPACITY - kW							
OUTDOOR DB - °C	INDOOR WB - °C		AT DB TEMPERATURE ONTO INDOOR COIL - °C							
			20	22	24	26	27	28	30	
25	16	18.16	10.88	12.98	15.01					
	17	18.33	9.85	11.92	14.00	15.92				
	18	18.54	8.74	10.84	12.95	15.02	15.97	16.82		
	19	19.00	7.62	9.81	11.87	13.96	14.99	15.96	17.66	
	20	19.44	6.46	8.68	10.78	12.88	13.93	14.96	16.89	
	21	20.00		7.53	9.73	11.81	12.84	13.88	15.93	
	22	20.52		6.41	8.61	10.78	11.76	12.80	14.89	
35	16	16.83	10.23	12.32	14.23					
	17	16.90	9.21	11.27	13.32	15.11				
	18	17.05	8.13	10.20	12.29	14.30	15.23			
	19	<b>17.35</b>	7.00	9.19	11.24	13.31	<b>14.29</b>	15.26		
	20	17.82	5.87	8.08	10.16	12.25	13.27	14.28	16.16	
	21	18.27		6.95	9.12	11.17	12.22	13.23	15.25	
	22	18.72		5.82	8.00	10.09	11.13	12.17	14.24	
45	16	15.09	9.41	11.47						
	17	15.10	8.38	10.45	12.44					
	18	15.21	7.36	9.40	11.48	13.35				
	19	15.34	6.26	8.34	10.44	12.45	13.40	14.13		
	20	15.68	5.14	7.33	9.38	11.43	12.44	13.41		
	21	16.07		6.22	8.37	10.38	11.40	12.44	14.33	
	22	16.52		5.09	7.28	9.33	10.36	11.38	13.38	
50	16	14.09	8.96	10.97						
	17	14.10	7.93	10.01	11.89					
	18	14.17	6.93	8.95	11.00					
	19	14.21	5.84	7.92	9.97	11.96	12.82			
	20	14.49	4.73	6.89	8.93	10.96	11.96	12.88		
	21	14.85		5.80	7.93	9.92	10.96	11.97	13.73	
	22	15.24		4.67	6.85	8.89	9.91	10.93	12.90	

## 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	12.25	11.76	12.19	11.70	12.12	11.64	12.07	11.59	12.02	11.54
-6	13.62	12.80	13.54	12.73	13.46	12.65	13.38	12.58	13.29	12.50
-2	15.15	13.48	15.05	13.39	14.95	13.30	14.84	13.21	14.74	13.12
2	16.80	15.29	16.68	15.17	16.54	15.06	16.41	14.94	16.28	14.82
6	18.55	18.55	18.40	18.40	<b>18.25</b>	<b>18.25</b>	18.14	18.14	17.97	17.97
10	20.60	20.60	20.42	20.42	20.23	20.23	20.04	20.04	19.85	19.85
14	22.79	22.79	22.56	22.56	22.33	22.33	22.10	22.10	21.87	21.87
18	25.12	25.12	24.85	24.85	24.59	24.59	24.33	24.33	24.05	24.05

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	<b>890</b>	934.5	979	1023.5	1060
TOTAL COOLING	0.964	0.982	0.989	0.997	<b>1.000</b>	1.004	1.009	1.015	1.020
SENSIBLE COOLING	0.883	0.916	0.945	0.974	<b>1.000</b>	1.024	1.046	1.072	1.092
HEATING FACTOR	0.969	0.976	0.983	0.991	<b>1.000</b>	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	<b>1.000</b>	0.992	0.975	0.959	0.943	0.927	0.912
HEATING	<b>1.000</b>	1.000	1.000	1.000	1.000	1.000	1.000

## NOTE:

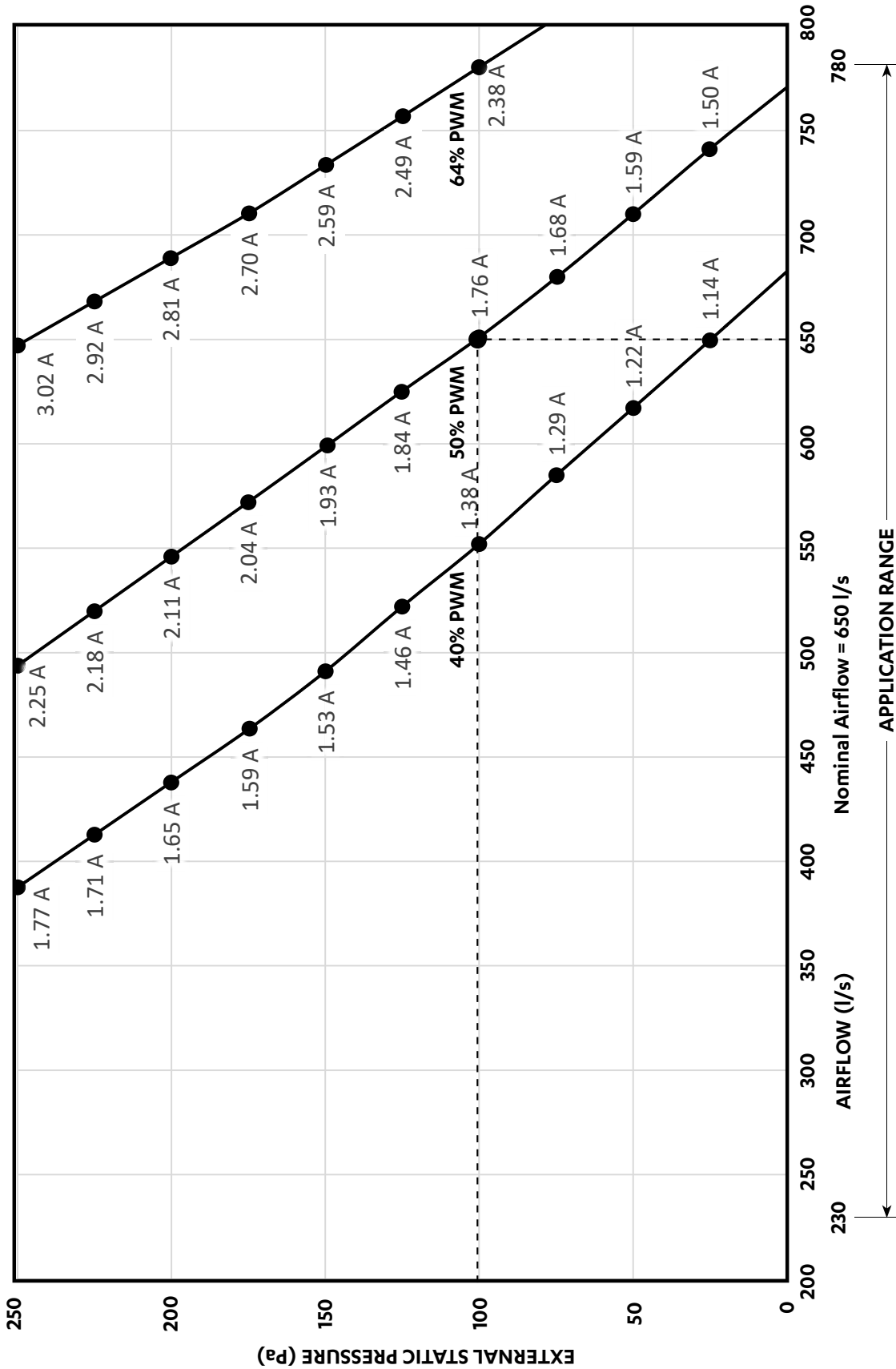
Correction multipliers are based on horizontal pipe runs.





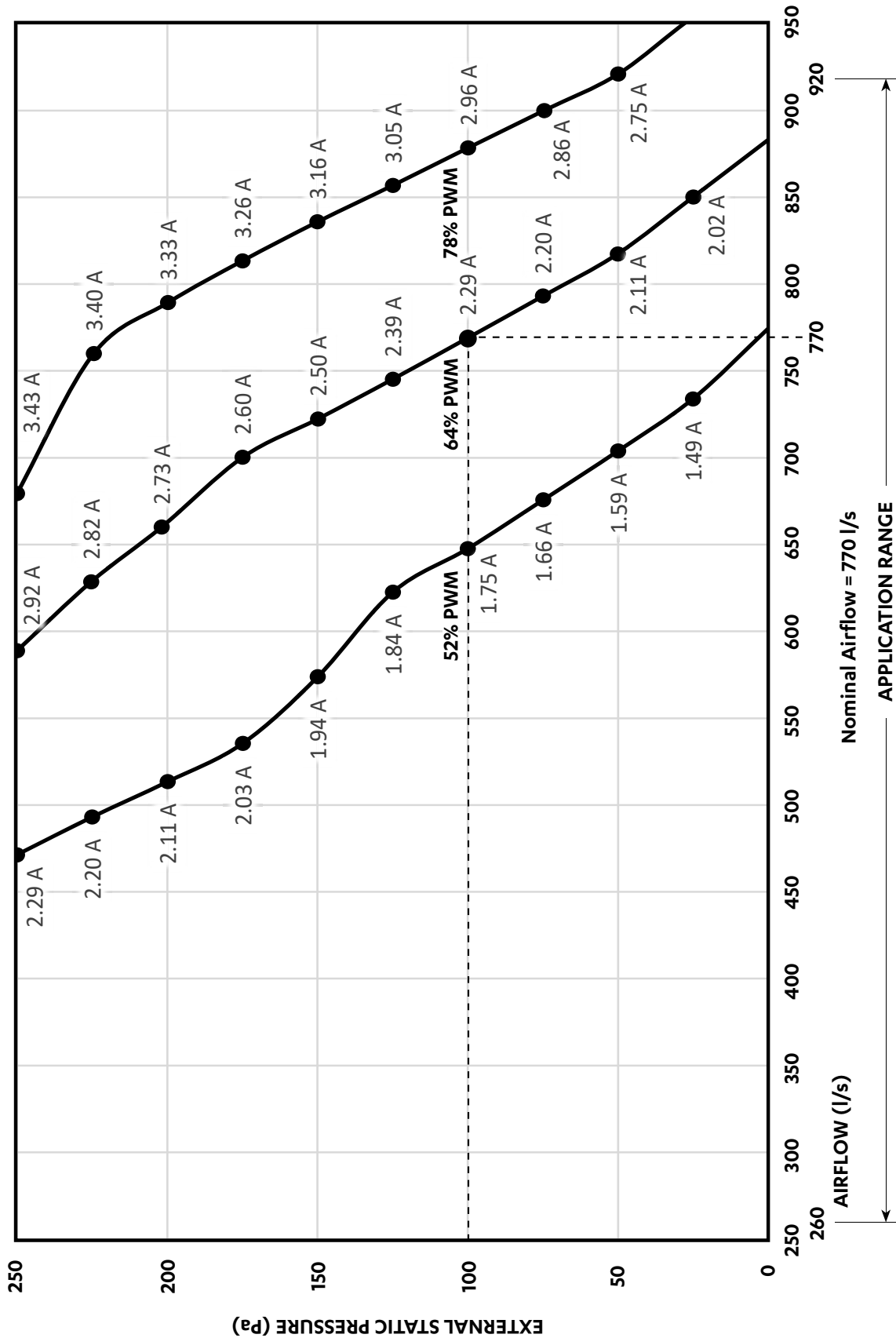
THREE SPEED FAN CURVE

EVV13AS



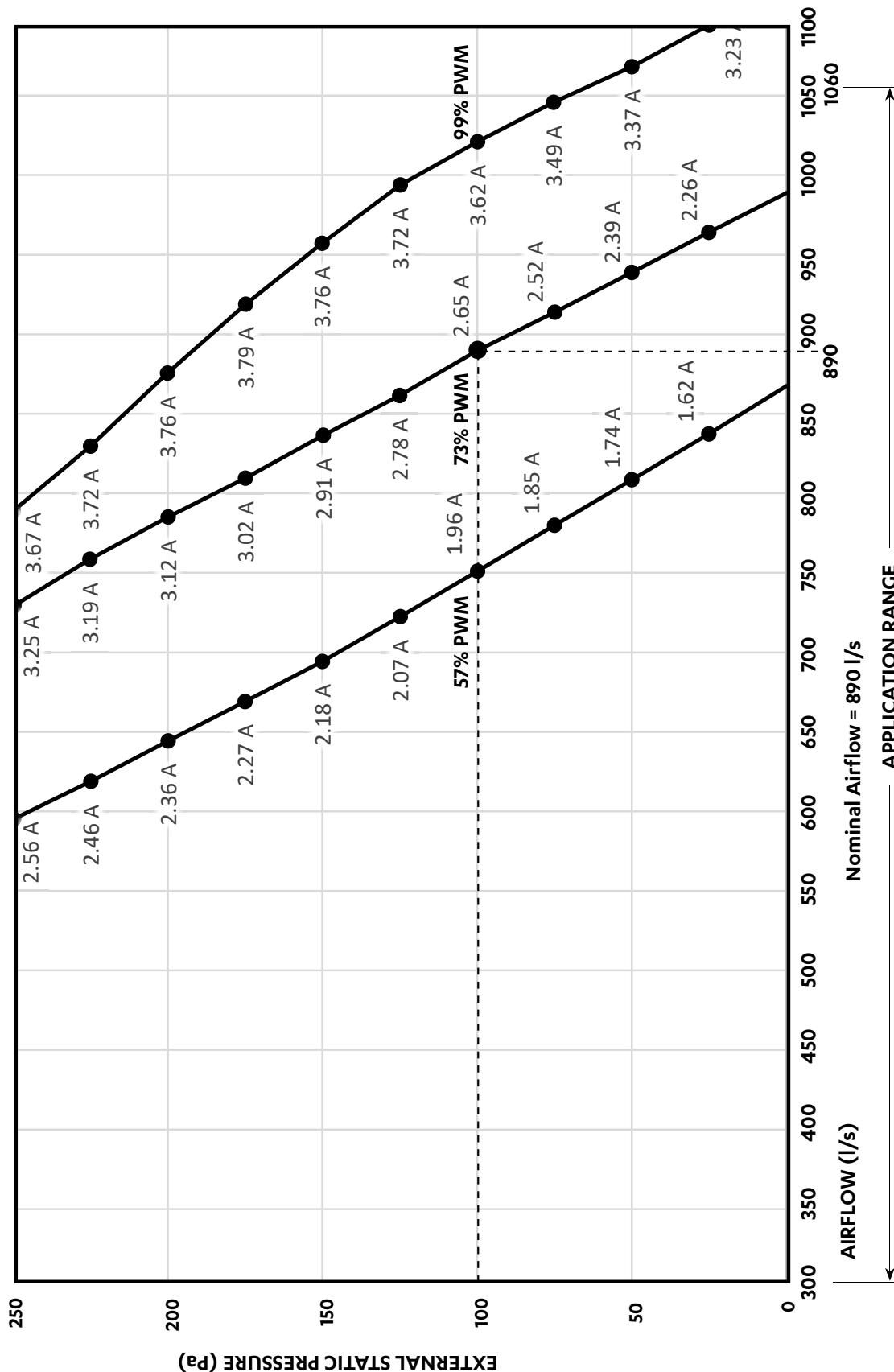
THREE SPEED FAN CURVE

EVV15AS



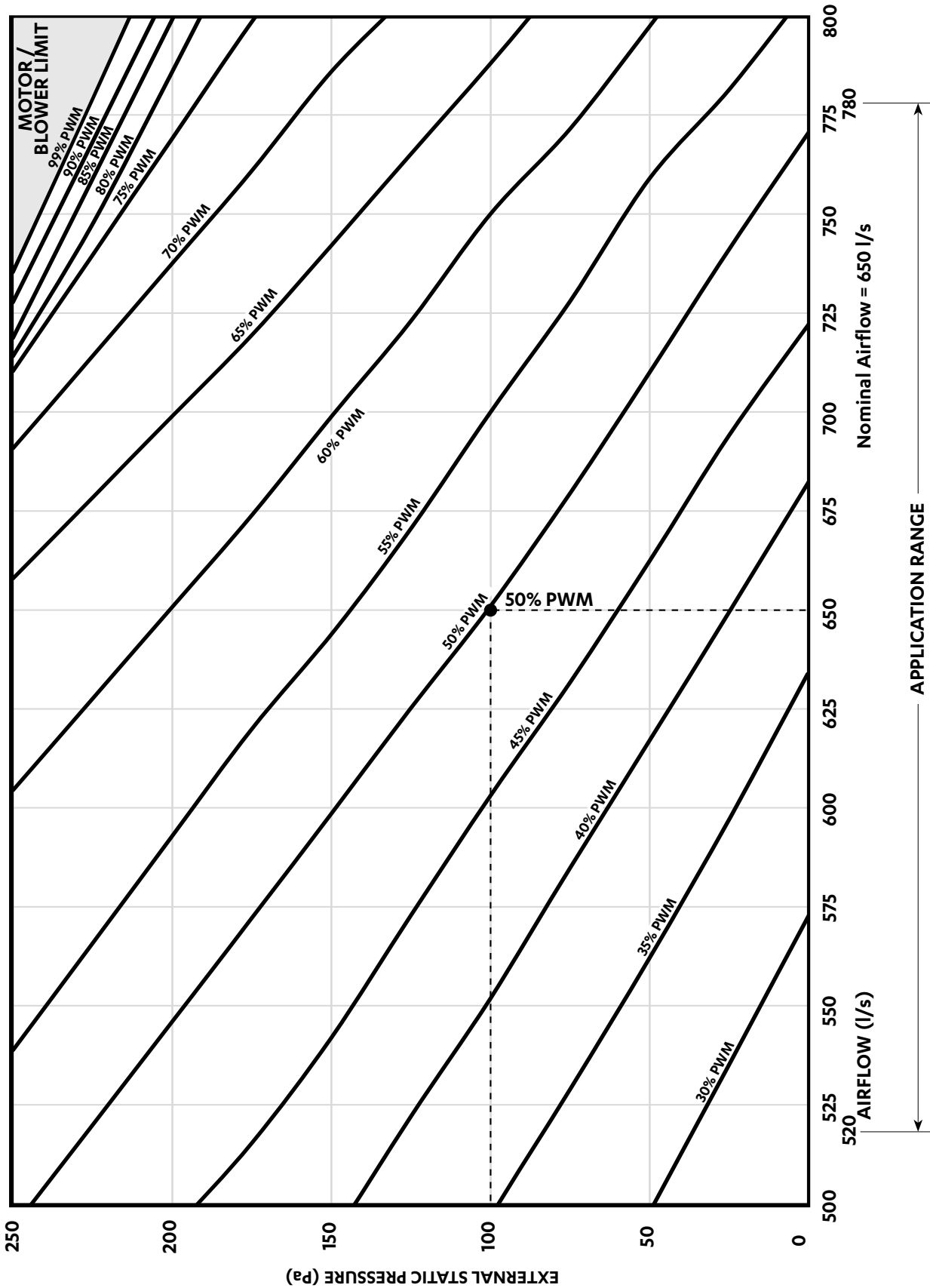
# THREE SPEED FAN CURVE

# EVV17AS



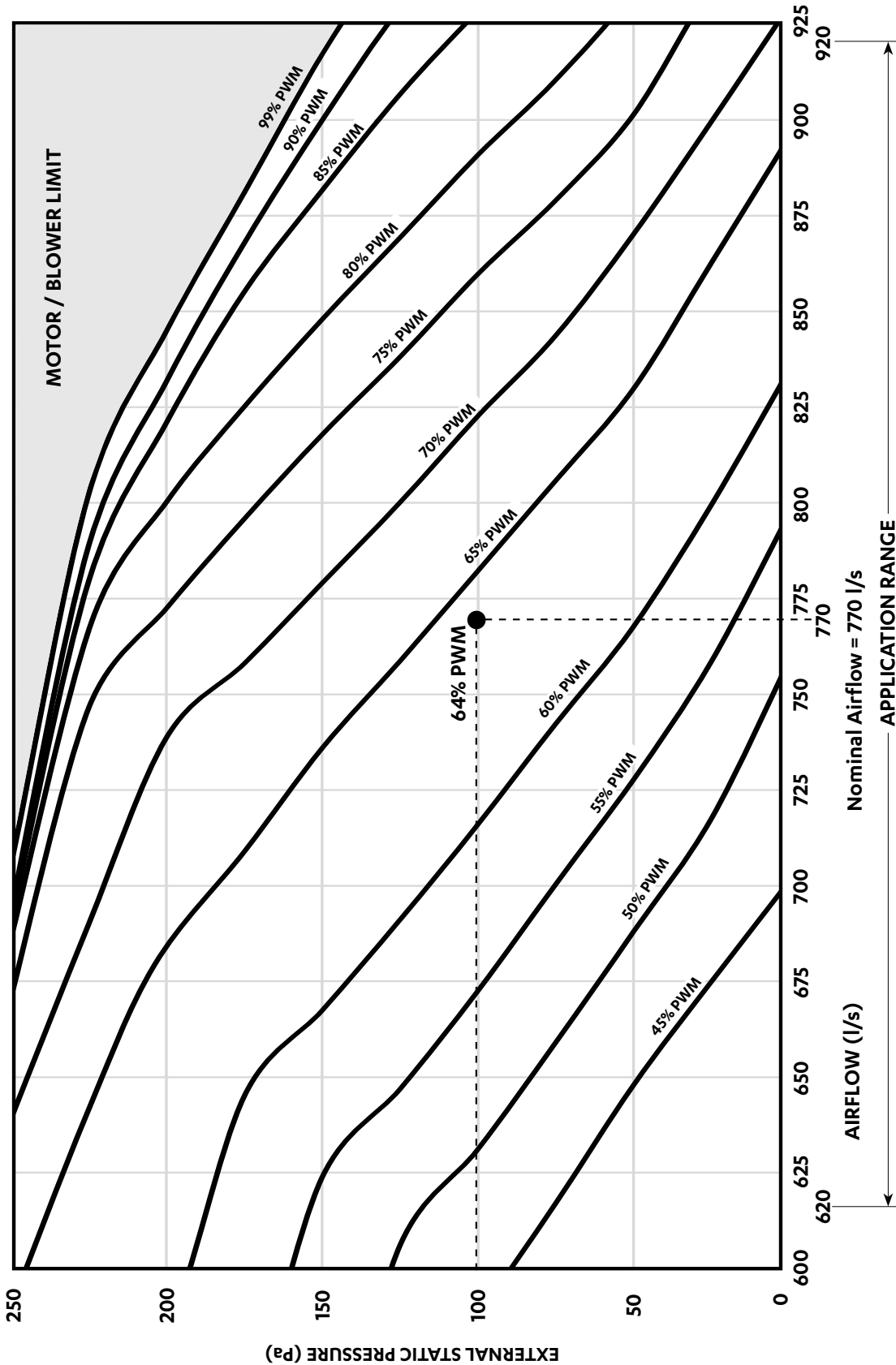
THIRD PARTY FAN CURVE

EVV13AS



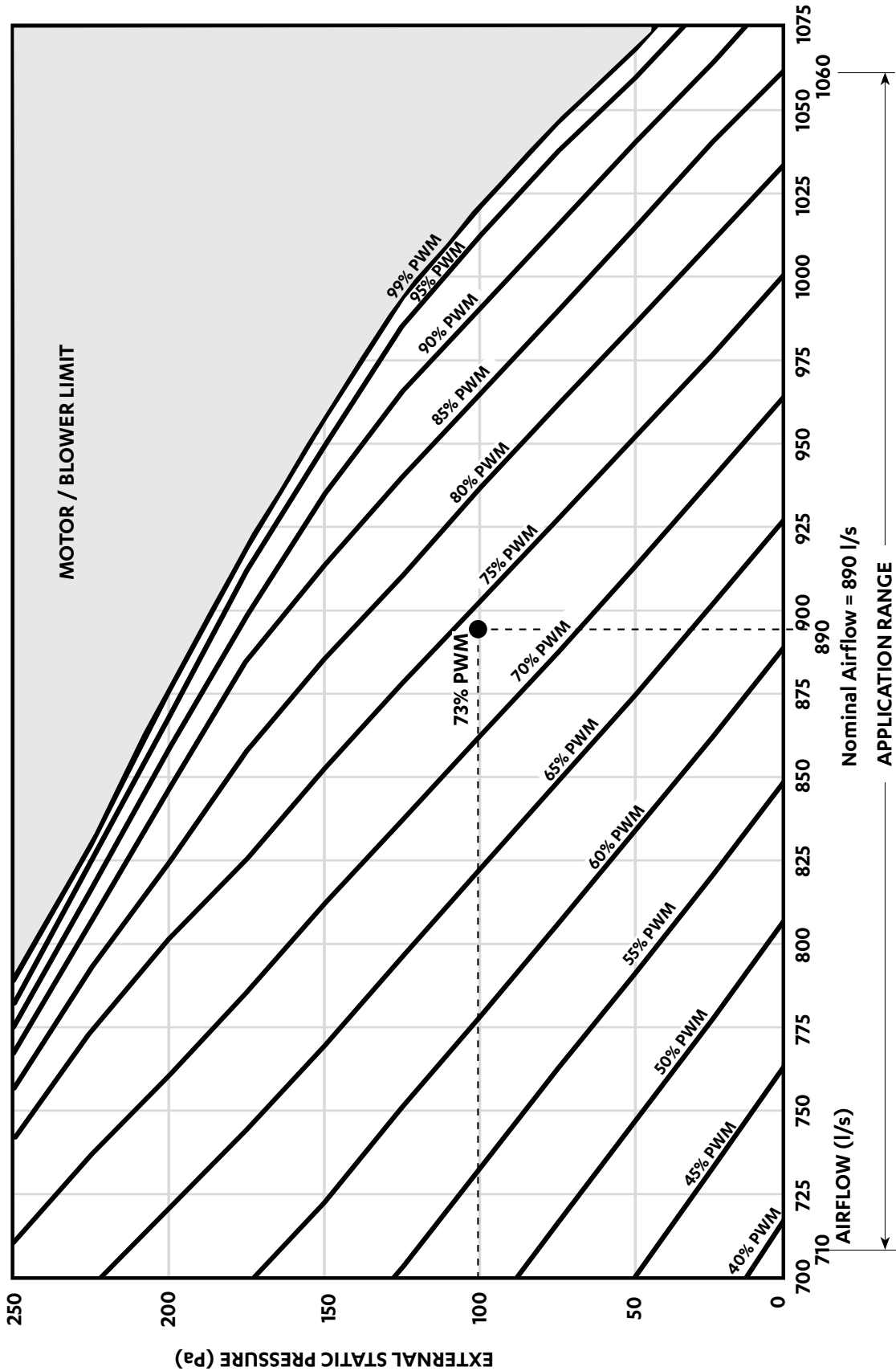
# THIRD PARTY FAN CURVE

# EVV15AS



THIRD PARTY FAN CURVE

EVV17AS



# OUTDOOR UNIT DIMENSIONS

## CRV13AS / CRV13AT / CRV15AS / CRV15AT / CRV17AS / CRV17AT

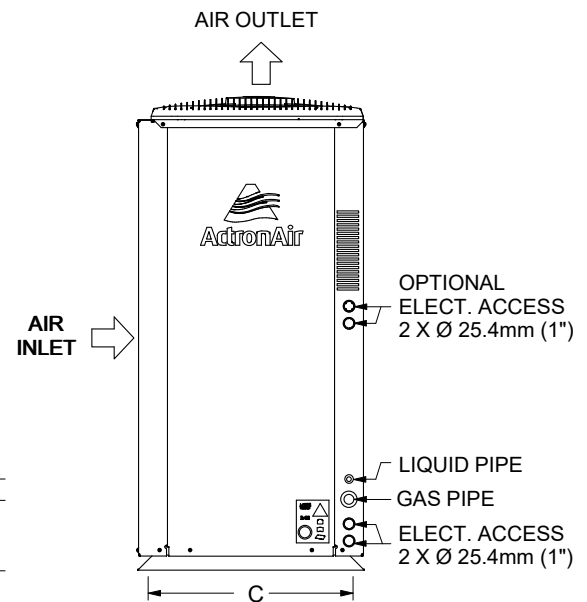
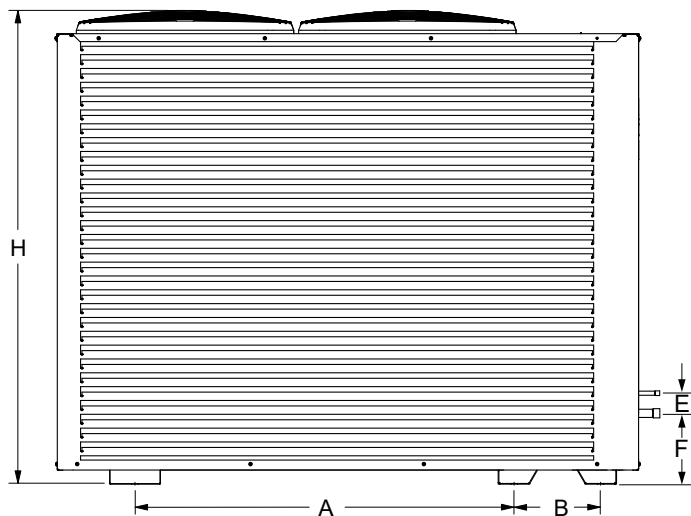
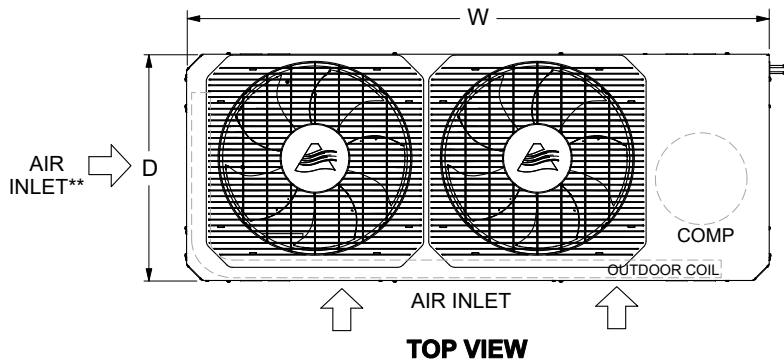
**NOTES:**

Condensation points are designed to ensure all condensation is removed efficiently to avoid water pooling with the condenser. If a single condensation drain point is required, ActronAir recommends the installation of a condenser tray. These are available as an additional accessory and are purchased separately.

Drawing is subject to change without notice.

CRV17AS / CRV17AT models shown for illustration purposes only.

\*\*Air Inlet is only for CRV17AS / CRV17AT models which have coil curve.

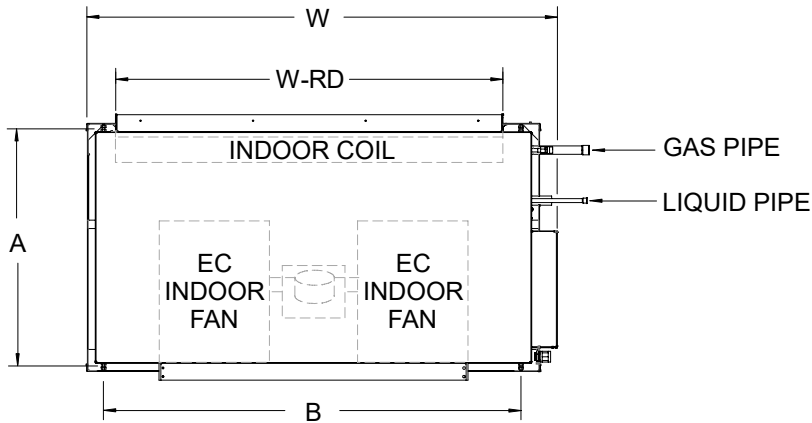


Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)			Pipe Location		Gas Pipe	Liquid Pipe
	H	W	D	A	B	C	E	F		
CRV13AS / CRV13AT	1110	1365	530	887	202	480	47	166	Ø 19.05mm (3/4") Swaged	Ø 9.53 mm (3/8") Swaged
CRV15AS / CRV15AT										
CRV17AS / CRV17AT										

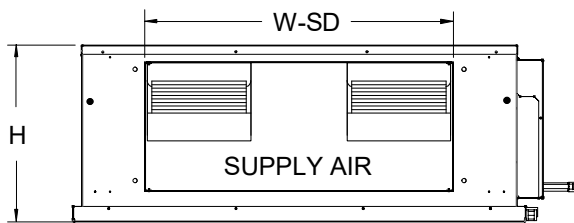


# INDOOR UNIT DIMENSIONS

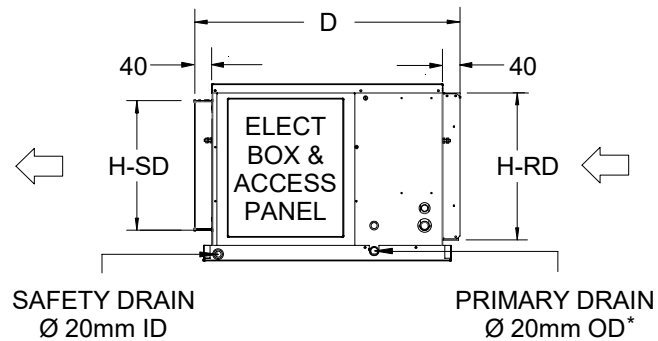
## EVV13AS / EVV15AS / EVV17AS



**TOP VIEW**



**FRONT VIEW**



**SIDE VIEW**

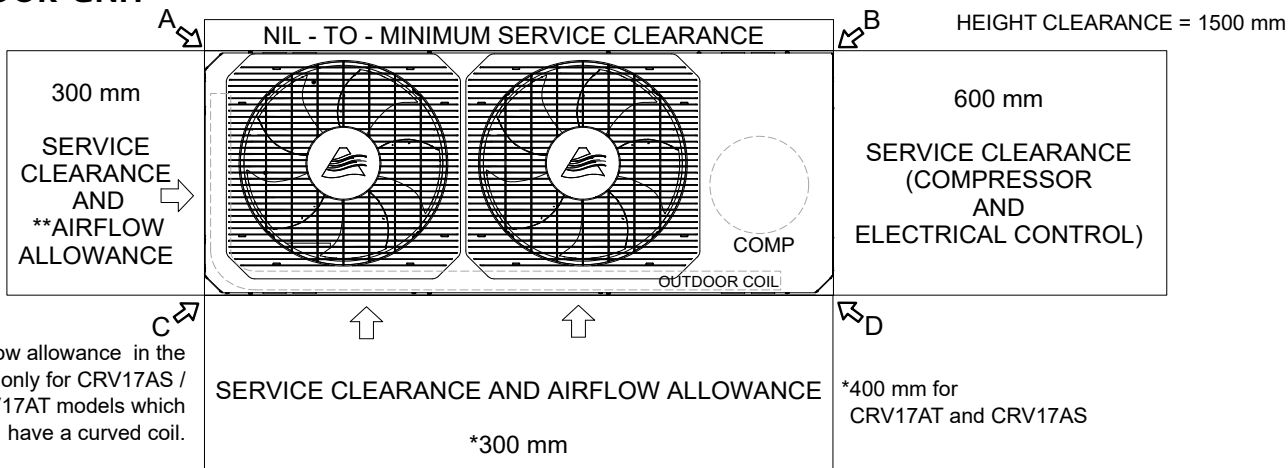
\*Ø 20mm ID for EVV17AS and EAA17AS

Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)		Supply Duct	Return Duct	Gas Pipe	Liquid Pipe
	H	W	D	A	B				
EVV13AS	412	1090	615	548	990	300 x 715	340 x 900	Ø 19.05mm (3/4")	Ø 9.52mm (3/8")
EVV15AS		1290			1190		340 x 1100		
EVV17AS	435	1420	680	603	1315		360 x 1140	Swaged	Swaged



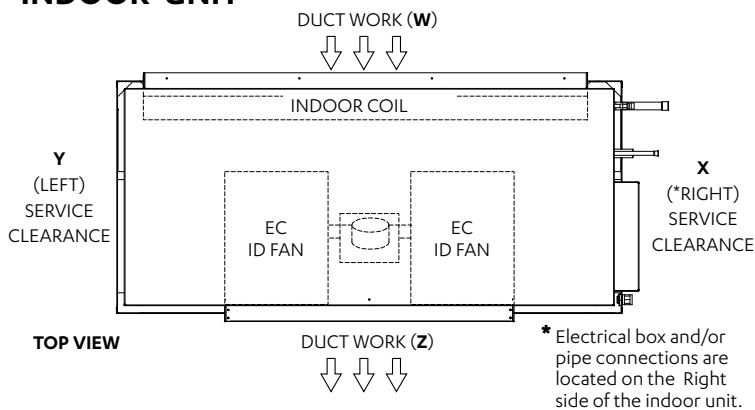
# SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

## OUTDOOR UNIT



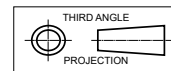
Unit Model Number	Total Weight (Kg)	Corner Weights (Kg)			
		A	B	C	D
CRV13AS	148	24	46	28	50
CRV15AS					
CRV17AS	155	36	38	30	51
CRV13AT	148	24	46	28	50
CRV15AT					
CRV17AT	155	36	38	30	51

## INDOOR UNIT



Unit Model Number	Total Weight (Kg)	Service Clearance				Height Clearance
		X	Y	W	Z	
EVV13AS	44	800	800	Duct Work		340
EVV15AS	53	800	800	Duct Work		340
EVV17AS	61	800	800	Duct Work		410

### 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 walkaway 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.
- Under all circumstances, condenser air must not recirculate back onto condenser coil. Keep all clearance free of any obstruction.
- Refer Pipe Connection Details on Specifications Sheet.
- MTG C-C DIST = Mounting Centre to Centre Distance.
- Use M12 bolt for feet mounting.
- Installation of this unit should be in accordance with Electrical Safety Standard, AS/NZS 60335.2.40.
- Additional safety provision maybe needed such as leak detector sensor and/or ventilation to meet the minimum area requirement. For more details refer to Annex GG and Annex HH of the above standard.
- Refer to R-32 Safety Manual for minimum required area of installation.

## SOUND DATA

### OUTDOOR RADIATED

**Sound Power Level (SWL)**

Model Number		Sound Power Level dB(A)	Sound Pressure Level dB(A)	Octave Band Centre Frequency (Hz), dB						
				125	250	500	1k	2k	4k	8k
CRV13AS	Tru.Max	73.6	54.8	77.4	73.7	71.8	67.9	63.3	58.4	48.4
	Rated	71.3	52.4	75.4	71.3	69.3	65.6	61.1	55.9	45.5
	Quiet	64.1	45.4	68.6	63.7	61.8	58.4	54.4	47.8	36.6
CRV15AS	Tru.Max	75.1	56.4	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Rated	75.1	56.4	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Quiet	66.0	47.6	68.9	65.6	63.9	60.5	56.4	50.3	39.0
CRV17AS	Tru.Max	75.1	56.4	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Rated	75.1	56.4	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Quiet	65.7	47.4	69.0	66.0	63.4	60.2	56.2	50.8	39.2
CRV13AT	Tru.Max	72.9	54.5	76.9	73	70.6	67.5	62.9	58.4	48.6
	Rated	70.5	52	74.7	70.8	68.1	65.1	60.7	55.9	45.5
	Quiet	63.6	45.1	67.4	63.6	61.2	58.2	54.2	48.2	36.7
CRV15AT	Tru.Max	74.6	55.9	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Rated	71.4	52.7	74.9	71.6	69.1	66.1	61.4	56.8	46.7
	Quiet	65.5	47.2	68.8	65.8	63.2	60	56	50.6	39.0
CRV17AT	Tru.Max	74.6	55.9	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Rated	74.6	55.9	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Quiet	65.7	47.4	69	66	63.4	60.2	56.2	50.8	39.2

### 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
EVV13AS	Nominal	650	69.5	70.0	68.0	67.9	63.6	61.5	57.4	49.7
EVV15AS	Nominal	770	72.4	71.9	68.9	71.7	66.4	63.6	60.1	52.6
EVV17AS	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	CRV13AS/ EVV13AS	CRV15AS/ EVV15AS	CRV17AS/ EVV17AS	CRV13AT/ EVV13AS	CRV15AT/ EVV15AS	CRV17AT/ EVV17AS
<b>INSULATION (INDOOR UNIT)</b>						
TYPE	Foil Faced Polyethylene					
	Expanded Polystyrene					
<b>OUTDOOR COIL</b>						
TUBE TYPE	Copper - Rifle Bore					
FIN TYPE	Aluminium					
FACE AREA (m sqr)	1.2	1.2	1.6	1.2	1.2	1.6
COIL COATING	Hydrophilic Blue Fin Coil Coat Protection					
<b>OUTDOOR FAN</b>						
NUMBER OF FANS x TYPE	2 x Axial / 6 Pole External Rotor / Direct Drive					
FAN SPEED CONTROL	Variable Speed					
The factory installed outdoor fans fitted to this unit will accept up to 40 Pa of external static resistance.						
<b>INDOOR COIL</b>						
TUBE TYPE	Copper - Rifle Bore					
FIN TYPE	Aluminium					
FACE AREA (m sqr)	0.34	0.41	0.48	0.34	0.41	0.48
COIL COATING	Hydrophilic Blue Fin Coil Coat Protection					
<b>INDOOR FAN</b>						
NUMBER OF FANS x TYPE	1 x Twin Deck Centrifugal / ECM Direct Drive					
DIAMETER / WIDTH (mm)	240 x 180					
MOTOR TYPE / DRIVE TYPE	Variable Speed EC Motor / Direct					
<b>COMPRESSOR</b>						
NUMBER PER UNIT x TYPE	1 x Inverter Variable Speed Scroll					
STARTING METHOD	Inbuilt Soft Starting					
<b>REFRIGERATION SYSTEM</b>						
REFRIGERANT TYPE	R-32					
EXPANSION CONTROL	Direct Expansion Orifice /EEV			Direct Expansion Orifice /EEV		
FACTORY CHARGE (grams)	3030	3270	3780	3140	3490	4200
PRE-CHARGE LENGTH (metres)	15	15	15	15	15	15
Minimum room area (m <sup>2</sup> )	4.883	5.687	7.600	5.244	6.478	9.383
Factory charge @2.4m release height						
ADDITIONAL REF. CHARGE (gram/metre)	40	40	40	40	40	40
<b>FILTER DRIER</b>						
CONNECTION SIZE AND TYPE	9.52 mm (3/8") ODF Soldered Bi-Flow					
FACTORY SUPPLIED / FITTED	No					
<b>INTERCONNECTING PIPE RUN</b>						
MAX. EQUIVALENT PIPE LENGTH (metres)	60					
MAX. VERTICAL HEIGHT DIFFERENTIAL (metres)	20 (Included in Max. Pipe Length)					
MAXIMUM REFRIGERATION CHARGE @ MAXIMUM PIPE LENGTH (GM)	4830	5070	5580	4940	5290	6000
/	/	/	/	/	/	/
MINIMUM ROOM AREA @ 2.4M RELEASE HEIGHT (M <sup>2</sup> )	12.409	13.673	16.562	12.980	14.885	19.149



## SPECIFICATIONS

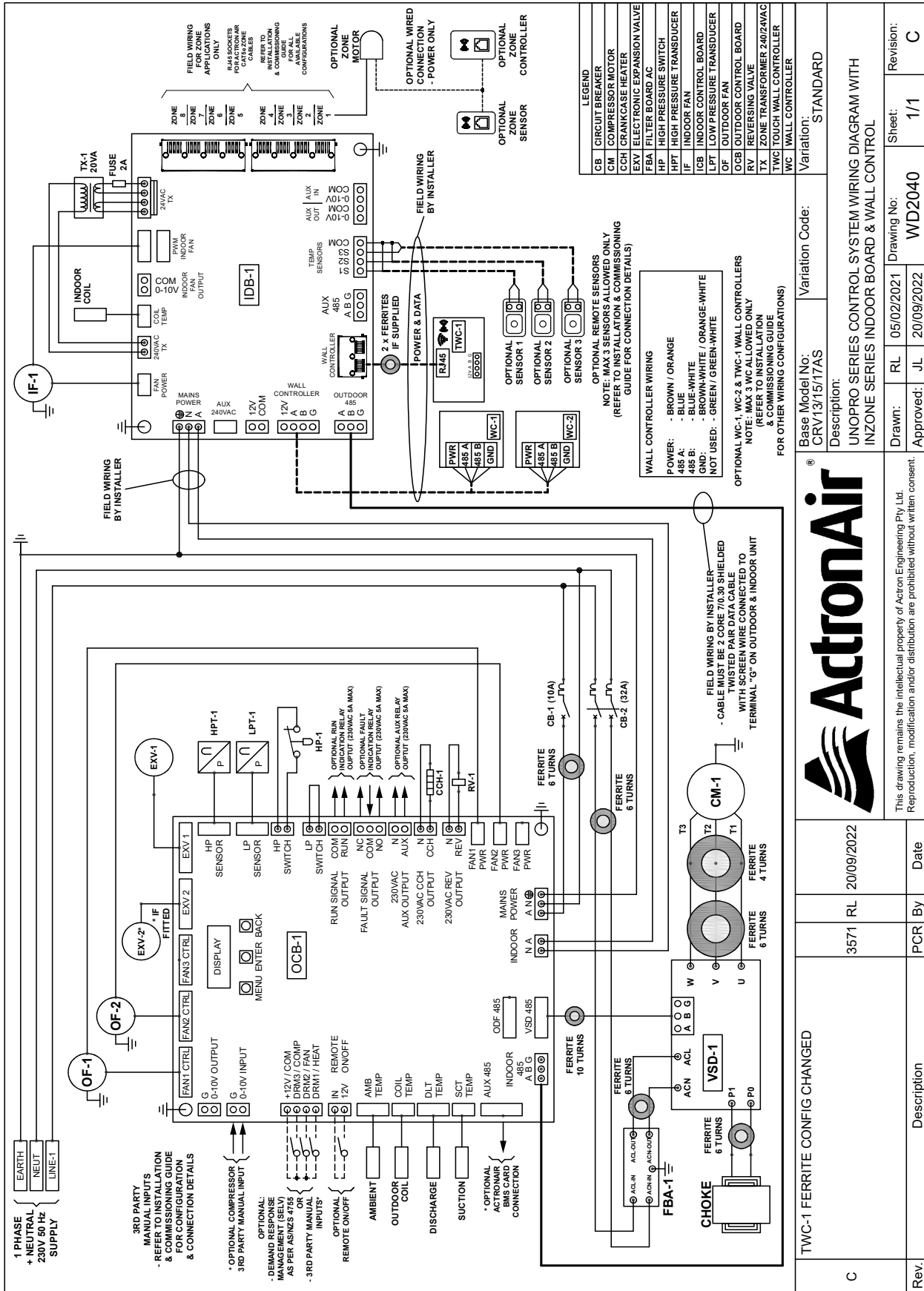
MODEL NUMBERS	CRV13AS/ EVV13AS	CRV15AS/ EVV15AS	CRV17AS/ EVV17AS	CRV13AT/ EVV13AS	CRV15AT/ EVV15AS	CRV17AT/ EVV17AS
<b>FIELD PIPE SIZES</b>						
LIQUID PIPE		9.52 mm (3/8")				
GAS PIPE		19.05 mm (3/4")				
<b>PIPE CONNECTIONS</b>						
INDOOR	LIQUID PIPE	9.52 mm (3/8") Swaged to fit 9.52 mm (3/8") field pipe				
	GAS PIPE	19.05 mm (3/4") Swaged to fit 19.05 mm (3/4") field pipe				
OUTDOOR	LIQUID PIPE	9.52 mm (3/8") Swaged to fit 9.52 mm (3/8") field pipe				
	GAS PIPE	19.05 mm (3/4") Swaged to fit 19.05 mm (3/4") field pipe				
CONNECTION TYPE		Solder				
<b>PROTECTION DEVICES</b>						
HIGH PRESSURE CUTOUT 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				
SUMP HEATER WATTS* During Compressor Off Cycle		30 W				
*Crankcase Heater is to be disconnected for pipe lengths 8 m or less.						
<b>ELECTRIC CONTROLS</b>						
DEFROST METHOD		Reverse Cycle				
DEFROST TYPE		Adaptive Demand Defrost				
CONTROL FIELD WIRING		2 Core (1 Pair) Twisted Pair, 7/0.30 (0.5mm <sup>2</sup> ) Shielded Data Cable				
MASTER/SECONDARY CONTROLLER CABLE SPECS.		Cat5e UTP (AWG 24) Data Cable				
SENSOR CABLE/WIRING SPECS.		Cat5e UTP (AWG 24) Data Cable				
<b>OPERATING RANGE</b>						
It is essential that the unit is correctly sized for the application and operates within its recommended range of operating conditions as shown below.						
<b>INDOOR AIR INTAKE TEMPERATURE</b>						
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				
<b>OUTDOOR AIR INTAKE TEMPERATURE</b>						
COOLING MODE	MAX.	52°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.



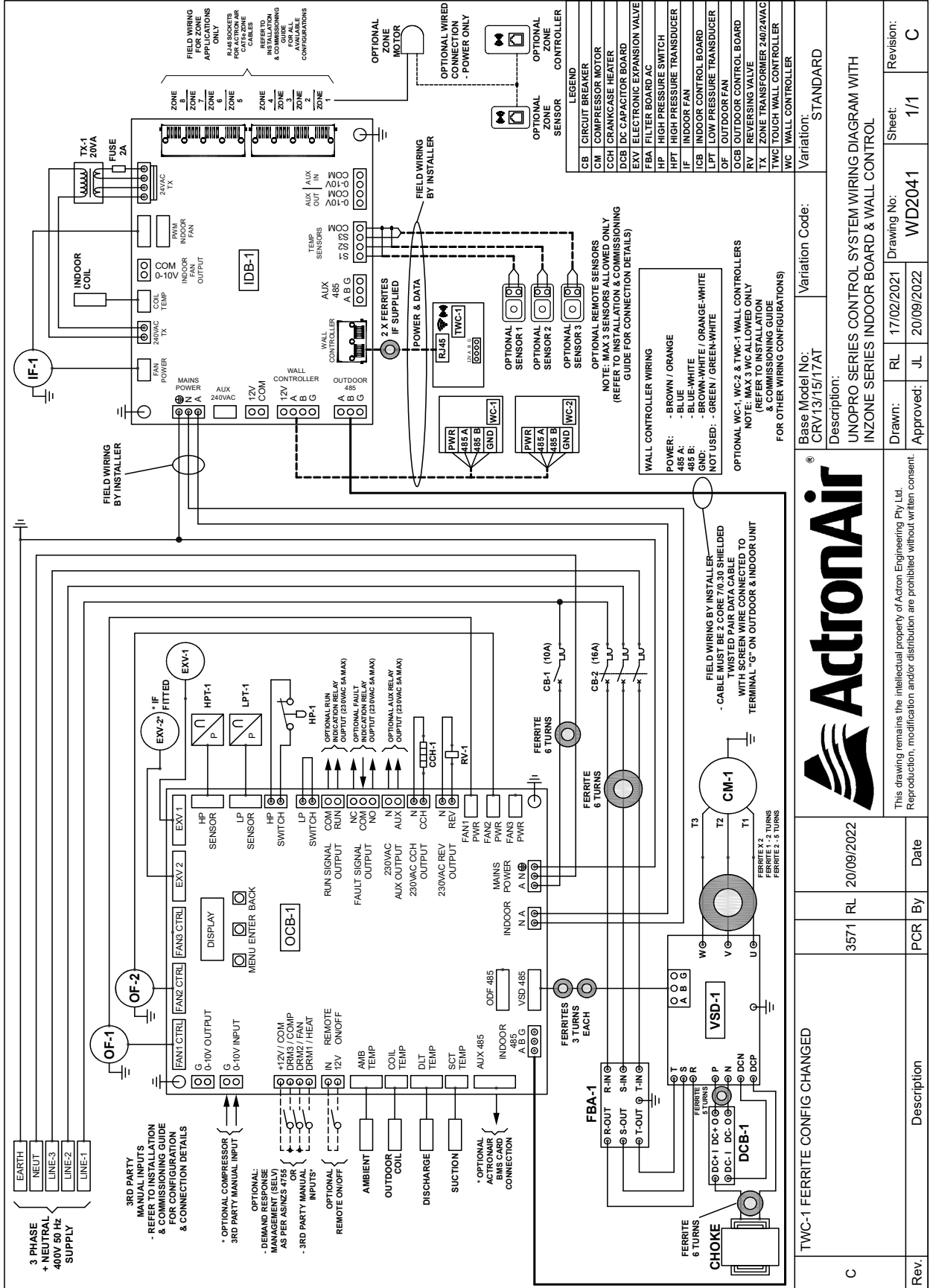
# WIRING DIAGRAM - SINGLE PHASE



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Rev.	Description	By	Date
C	TWC-1 FERRITE CONFIG CHANGED	PCR	20/09/2022

# WIRING DIAGRAM - THREE PHASE



Base Model No: CRV13/15/17AT	Variation Code: STANDARD
Description: UNOPRO SERIES CONTROL SYSTEM WIRING DIAGRAM WITH INZONE SERIES INDOOR BOARD & WALL CONTROL	
Drawn: RL	Approved: JL
Drawing No: WD2041	Sheet: 1/1
Date: 20/09/2022	Revision: C

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3571	RL	20/09/2022	PCR	By	Date
Rev.	Description				



# OUTDOOR UNIT VARIATION - DIMENSION

## OUTDOOR UNIT - HORIZONTAL DISCHARGE FANS

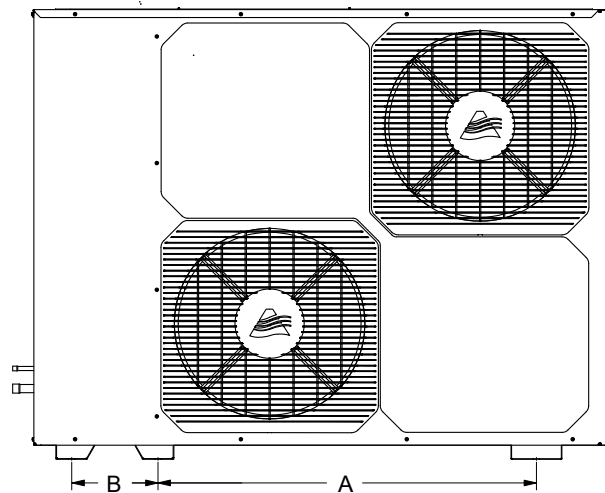
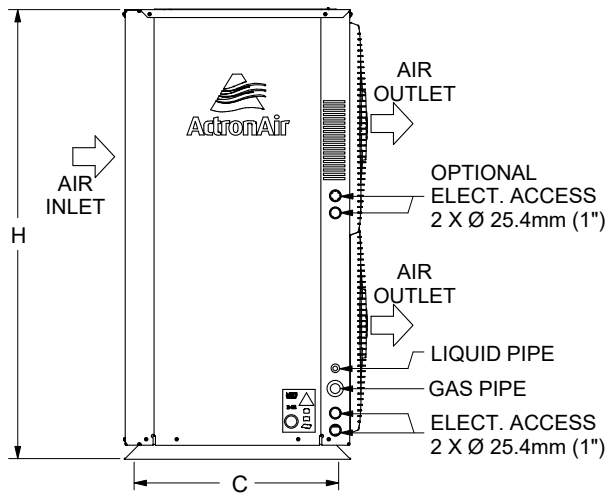
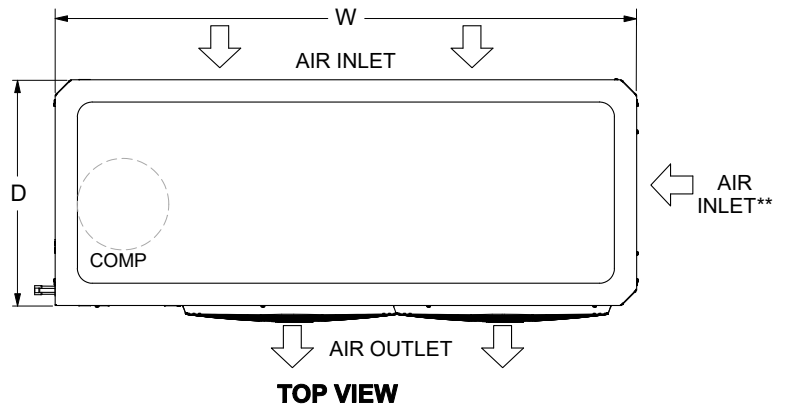
**NOTES:**

Condensation points are designed to ensure all condensation is removed efficiently to avoid water pooling with the condenser. If a single condensation drain point is required, Actronair recommends the installation of a condenser tray. These are available as an additional accessory and are purchased separately.

Drawing is subject to change without notice.

CRV17AS-H / CRV17AT-H models shown for illustration purposes only.

\*\*Air Inlet is only for CRV17AS -H/CRV17AT-H models which have coil curve .

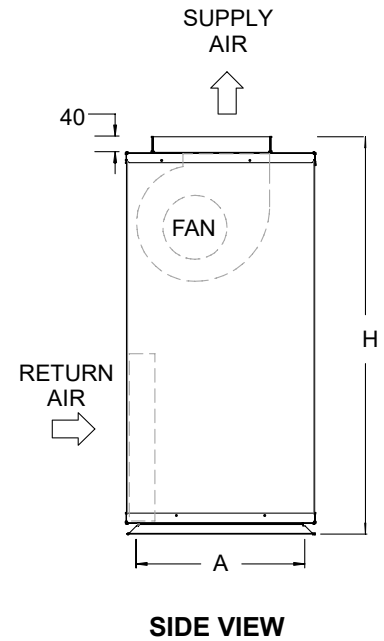
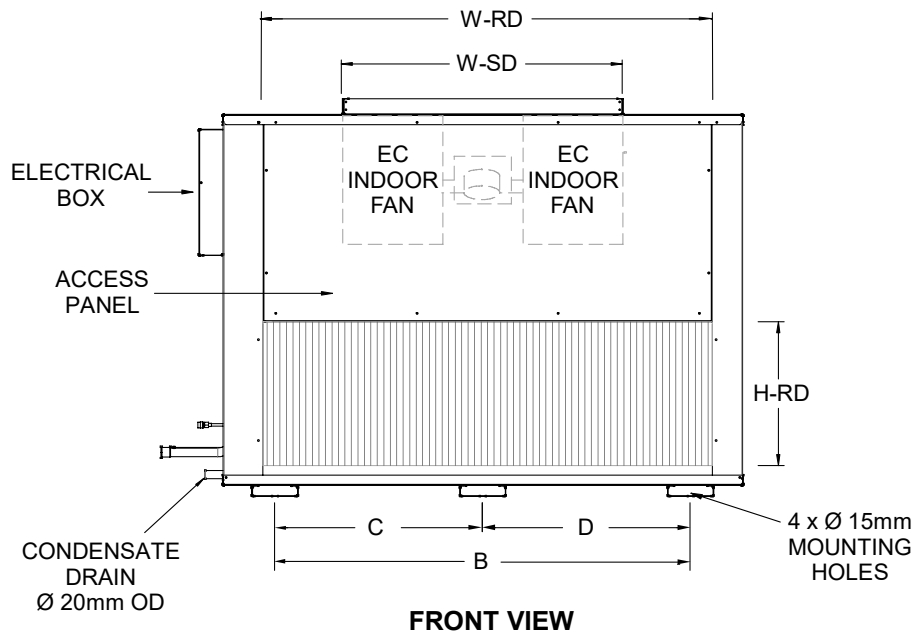
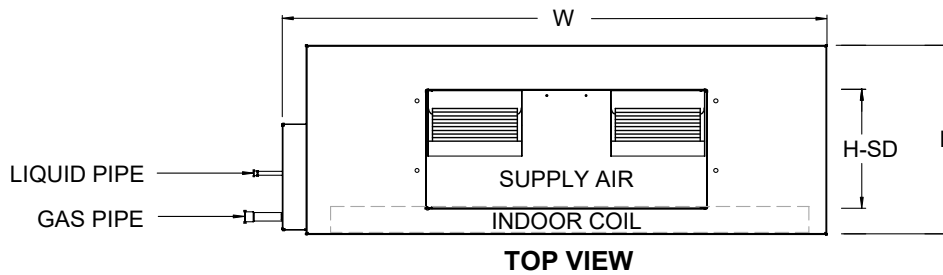


Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)			Gas Pipe	Liquid Pipe
	H	W	D	A	B	C		
CRV13AS-H / CRV13AT -H	1055	1365	570	887	202	480	Ø 19.05mm (3/4") Swaged	Ø 9.53 mm (3/8") Swaged
CRV15AS-H / CRV15AT-H								
CRV17AS-H / CRV17AT-H								



# INDOOR UNIT VARIATION - DIMENSION

## INDOOR UNIT - UPRIGHT FAN COIL WITH VERTICAL DISCHARGE

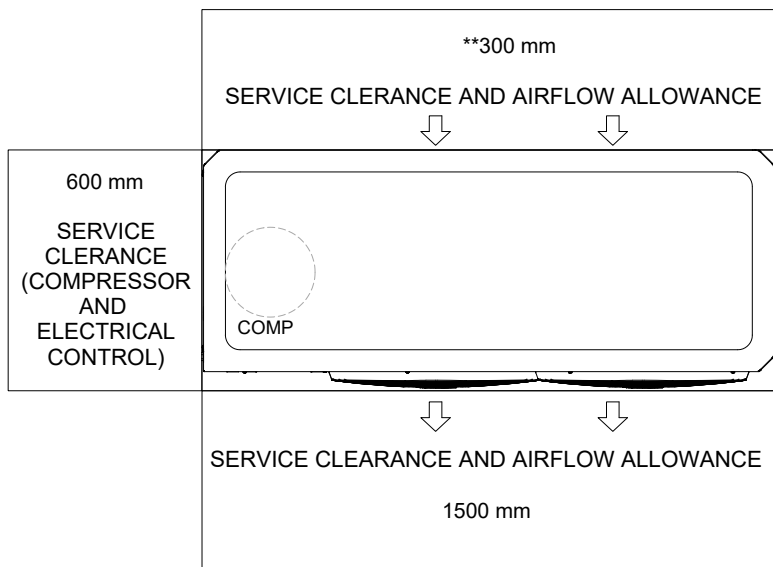


Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)				Supply Duct	Return Duct	Gas Pipe	Liquid Pipe
	H	W	D	A	B	C	D	H-SD x W-SD	H-RD x W-RD		
EVV13AS-V	875	1075	405	350	790	-	-	300 x 715	365 x 895	Ø 19.05mm (3/4") Swaged	Ø 9.52mm (3/8") Swaged
EVV15AS-V		1275			990	-	-				
EVV17AS-V	1015	1390	480	430	-	530	530		365 x 1095		



# SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

## OUTDOOR HORIZONTAL VARIATION

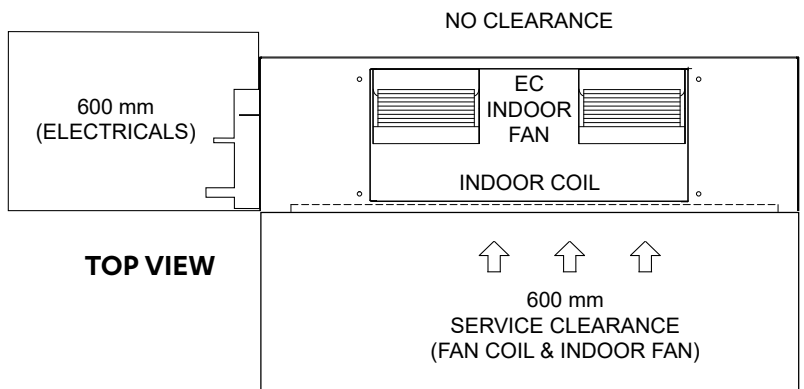


**NOTES:**  
 \*Airflow Clearance is only for CRV17AS-H/CRV17AT-H models which have coil curve.  
 \*\*400 mm for CRV17AT-H and CRV17AS-H

Unit Model Number	Total Weight (Kg)
CRV13AS-H	148
CRV15AS-H	
CRV17AS-H	155
CRV13AT-H	148
CRV15AT-H	
CRV17AT-H	155

HEIGHT CLEARANCE = 300 mm

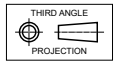
## INDOOR VERTICAL VARIATION



Unit Model Number	Total Weight (Kg)
EVV13AS-V	44
EVV15AS-V	53
EVV17AS-V	61

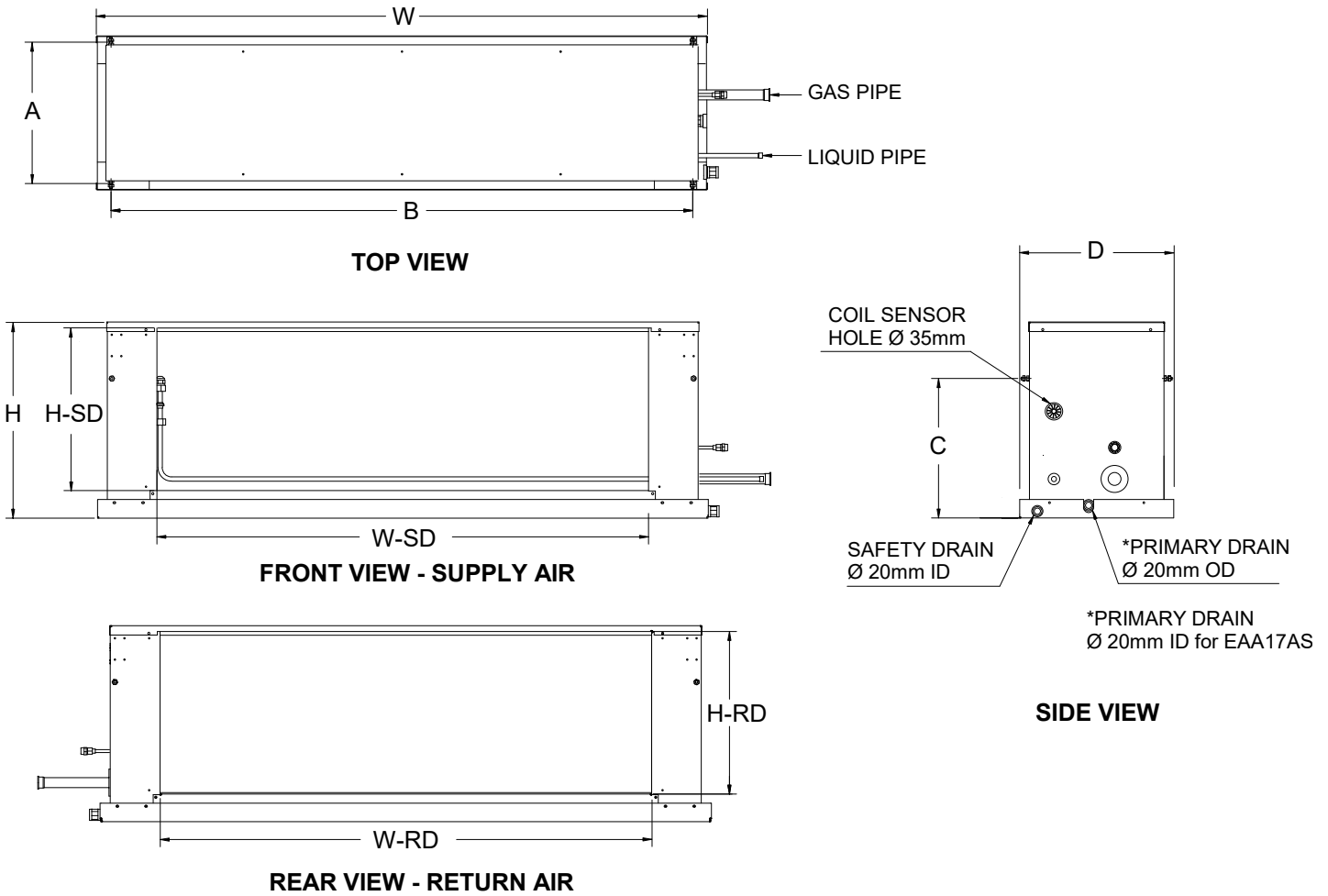
HEIGHT CLEARANCE = DUCT WORK

- 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 walkaway 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.
  - Under all circumstances, condenser air must not recirculate back onto condenser coil. Keep all clearance free of any obstruction.
  - Refer Pipe Connection Details on Specifications Sheet.
  - MTG C-C DIST = Mounting Centre to Centre Distance.
  - Use M12 bolt for feet mounting.
  - Installation of this unit should be in accordance with Electrical Safety Standard, AS/NZS 60335.2.40.
  - Additional safety provision maybe needed such as leak detector sensor and/or ventilation to meet the minimum area requirement. For more details refer to Annex GG and Annex HH of the above standard.
  - Refer to R-32 Safety Manual for minimum required area of installation.
  - For upright indoor release height shall not be less than 0.6m, wherefore no indoor pipe routing should go below 0.6 m above the floor. Refer to R-32 Safety Manual for minimum required area and R-32 refrigerant of the installation.



## TWO-PIECE FAN COIL

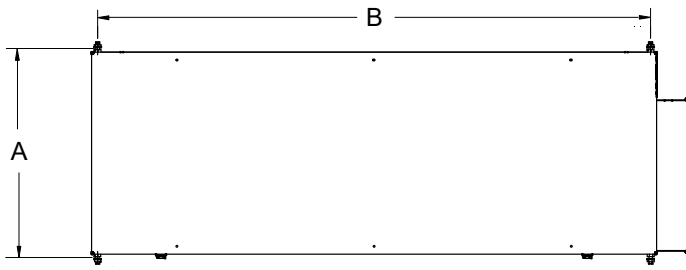
### Coil Section - EAA13AS / EAA15AS / EAA17AS



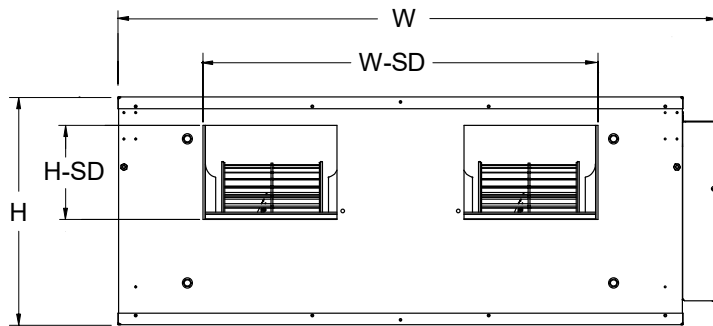
Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance (Centre to Centre /Base Foot)			Supply Duct	Return Duct	Gas Pipe	Liquid Pipe
	H	W	D	A	B	C	H-SD x W-SD	H-RD x W-RD		
EAA13AS	410	1054	342	310	990	284	345 x 900	345 x 900	Ø 19.05mm (3/4") Swaged	Ø 9.52mm (3/8") Swaged
EAA15AS		1252			1190	283				
EAA17AS	435	1360			1294	310	362 x 1094	362 x 1094		

## TWO-PIECE FAN COIL

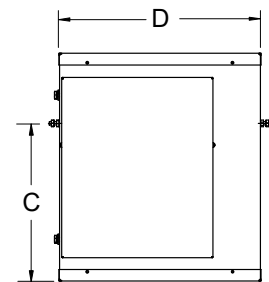
### Fan Section - EFV13AS / EFV15AS / EFV17AS



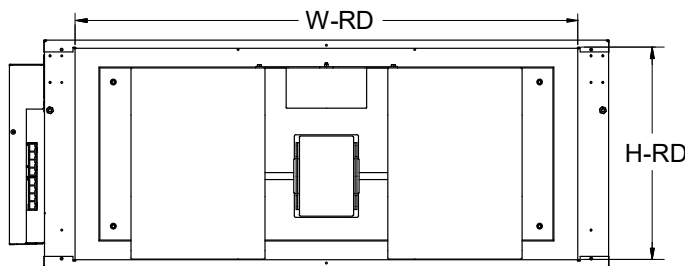
**TOP VIEW**



**FRONT VIEW - SUPPLY AIR**



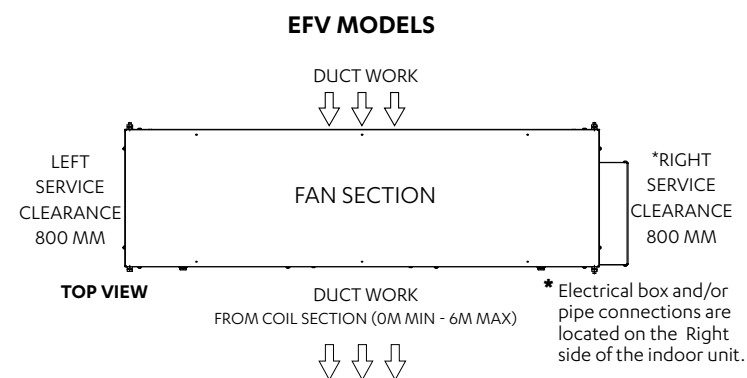
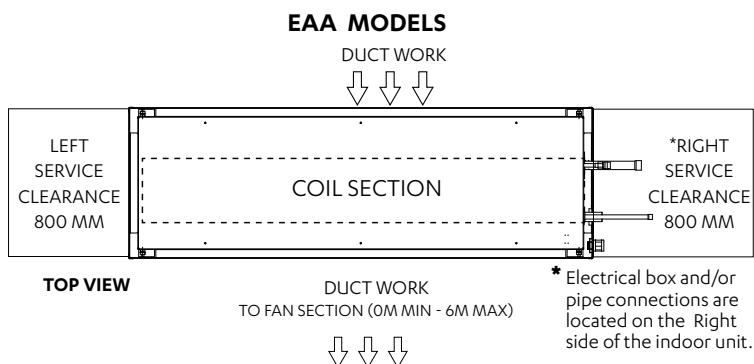
**SIDE VIEW**



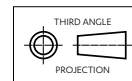
**REAR VIEW - RETURN AIR**

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
EFV13AS	408	1072	362	370	990	282	186 x 708	378 x 900
EFV15AS								
EFV17AS								

# SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS



**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 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. Installation of this unit should be in accordance with Electrical Safety Standard, AS/NZS 60335.2.40.
5. Additional safety provision maybe needed such as leak detector sensor and/or ventilation to meet the minimum area requirement. For more details refer to Annex GG and Annex HH of the above standard.
6. Refer to R-32 Safety Manual for minimum required area of installation.

Model Number	Weight (kg)	Height Clearance
EAA13AS	28.5	340
EAA15AS	37.5	
EAA17AS	45.5	410
EFV13AS	35	340
EFV15AS	44	
EFV17AS	50.5	

# ADVANCE Split Ducted Unit

## Index

- Technical Selection Data (Unit and Control Features)
- Specification Summary
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- Outdoor Unit Dimensions
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- Specifications
- Wiring Diagram - Single Phase
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- Two-Piece Fan Coil Service Clearances and Weights