










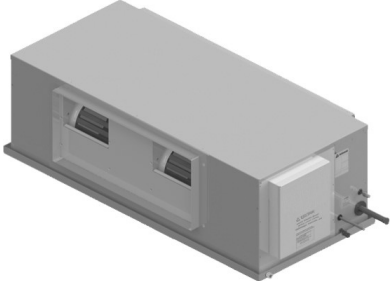


# ADVANCE B Series Split Ducted Unit

## Technical Selection Data



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

Single Phase	Three Phase	Split Fan-Coil
CRV13BS / EVV13BS	CRV13BT / EVV13BS	EAA13BS / EFV13BS
CRV15BS / EVV15BS	CRV15BT / EVV15BS	EAA15BS / EFV15BS
CRV17BS / EVV17BS	CRV17BT / EVV17BS	EAA17BS / EFV17BS
	CRV19BT / EVV19BS	EAA19BS / EFV19BS

### 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 Gateway

#### 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		CRV13BS		CRV15BS		CRV17BS	
INDOOR UNIT MODEL		EVV13BS		EVV15BS		EVV17BS	
		(1) TOTAL	(2) NETT	(1) TOTAL	(2) NETT	(1) TOTAL	(2) NETT
(3) COOLING CAPACITY (kW)	RATED	13.25	13.00	TBD	TBD	17.40	17.00
	Tru-Max <sup>(10)</sup>	-	14.50	-	TBD	-	18.50
	MINIMUM	-	4.10	-	TBD	-	4.65
(4) HEATING CAPACITY (kW)	RATED	12.60	12.85	TBD	TBD	16.80	17.20
	Tru-Max <sup>(10)</sup>	-	15.00	-	TBD	-	19.20
	MINIMUM	-	3.80	-	TBD	-	5.30
(3) SENSIBLE CAPACITY (kW)	RATED	10.91	10.66	TBD	TBD	14.51	14.11
(5) COOLING INPUT POWER (kW)	RATED	3.84		TBD		5.10	
(5) HEATING INPUT POWER (kW)	RATED	3.37		TBD		4.74	
EER	RATED	3.45	3.38	TBD	TBD	3.41	3.33
COP	RATED	3.73	3.81	TBD	TBD	3.54	3.63
Total Cooling Seasonal Performance Factor Residential - Cold / Mix / Hot		4.45 / 4.31 / 4.61		TBD / TBD / TBD		4.52 / 4.34 / 4.61	
Heating Seasonal Performance Factor Residential - Cold / Mix / Hot		3.40 / 3.87 / 4.26		TBD / TBD / TBD		3.42 / 3.94 / 4.44	
(6) INDOOR AIRFLOW (l/s) MIN. / NOMINAL / MAX.		230 / 650 / 780		260 / 770 / 920		300 / 850 / 1060	
(7) OUTDOOR SOUND PRESS. LEVEL @ 1M dB(A) - Quiet / Rated / Tru.Max		50.9 / 58.0 / 60.5		52.8 / 62.0 / 62.0		52.9 / 62.0 / 62.0	
OUTDOOR SOUND POWER LEVEL dB(A) - Quiet / Rated / Tru.Max		64.1 / 71.3 / 73.6		66.0 / 75.1 / 75.1		65.7 / 75.1 / 75.1	
INDOOR SOUND PRESSURE LEVEL dB(A) @1.5m		39.5		42.4		44.4	
POWER SUPPLY - OUTDOOR		230V / 1Ph+N / 50Hz					
VOLTAGE RANGE (MIN - MAX)		216V - 244 or 243.8V					
IP RATING		IP44					
POWER SUPPLY - INDOOR		230V / 1Ph+N / 50Hz					
VOLTAGE RANGE (MIN - MAX)		216V - 244V					
IP RATING		IP20					
(2) RATED LOAD AMPS - TOTAL		16.9		TBD		21.9	
(8) FULL LOAD AMPS OUTDOOR / INDOOR / TOTAL		27.3 / 4.3 / 31.6		TBD / TBD / TBD		30.3 / 4.2 / 34.5	
OUTDOOR AND INDOOR UNIT (TOTAL)							
FULL LOAD AMPS - PHASE 1		31.6		TBD		34.5	
FULL LOAD AMPS - PHASE 2 AND 3		-					
(9) CIRCUIT BREAKER		32.0		TBD		40.0	
APPROXIMATE STARTING AMPS		< 32		TBD		< 40	
POWER FACTOR		0.99		TBD		0.99	
DATA CABLE FIELD WIRING (OUTDOOR TO INDOOR)		2 Core 7 / 0.30 (0.5mm2) Twisted Shielded Data Cable					
WEIGHT (kg) -- INDOOR / OUTDOOR		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 circuit breaker size details.
- (10) TRUMAX - Maximum Capacity

**Notes:** Use nett input power to estimate running cost.  
 To determine the required cable size, refer to the latest edition of AS/NZS 3000 or AS/NZS 3008 wiring rules whichever applies.  
 The local electricity authority may require limits on starting current and voltage drop, please check prior to purchase.



## SPECIFICATION SUMMARY

OUTDOOR UNIT MODEL		CRV13BT		CRV15BT		CRV17BT		CRV19BT	
INDOOR UNIT MODEL		Evv13BS		Evv15BS		Evv17BS		Evv19BS	
		(1) TOTAL	(2) NETT	(1) TOTAL	(2) NETT	(1) TOTAL	(2) NETT	(1) TOTAL	(2) NETT
(3) COOLING CAPACITY (kW)	RATED	13.25	13.00	TBD	TBD	17.40	17.00	19.36	19.00
	Tru-Max <sup>(10)</sup>	-	14.50	-	TBD	-	18.70	-	21.00
	MINIMUM	-	4.10	-	TBD	-	4.65	-	6.48
(4) HEATING CAPACITY (kW)	RATED	12.60	12.85	TBD	TBD	16.80	17.20	18.64	19.00
	Tru-Max <sup>(10)</sup>	-	15.00	-	TBD	-	19.20	-	20.00
	MINIMUM	-	3.80	-	TBD	-	5.30	-	5.58
(3) SENSIBLE CAPACITY (kW)	RATED	10.91	10.66	TBD	TBD	14.68	14.28	16.13	15.77
(5) COOLING INPUT POWER (kW)	RATED	3.77		TBD		5.06		5.54	
(5) HEATING INPUT POWER (kW)	RATED	3.08		TBD		4.58		5.08	
EER	RATED	3.51	3.44	TBD	TBD	3.44	3.36	3.50	3.43
COP	RATED	4.10	4.18	TBD	TBD	3.67	3.75	3.67	3.74
Total Cooling Seasonal Performance Factor Residential - Cold / Mix / Hot		4.25 / 4.19 / 4.69		TBD / TBD / TBD		4.50 / 4.36 / 4.79		4.59 / 4.43 / 4.79	
Heating Seasonal Performance Factor Residential - Cold / Mix / Hot		3.43 / 3.96 / 4.35		TBD / TBD / TBD		3.55 / 4.02 / 4.45		3.45 / 3.96 / 4.44	
(6) INDOOR AIRFLOW (l/s) MIN. / NOMINAL / MAX.		230 / 650 / 780		260 / 770 / 920		300 / 850 / 1060		375 / 1000 / 1200	
(7) OUTDOOR SOUND PRESS. LEVEL @ 1M dB(A) - Quiet / Rated / Tru.Max		50.5 / 57.5 / 60.1		52.7 / 61.7 / 61.7		52.9 / 61.7 / 61.7		57.7 / 65.6 / 65.6	
OUTDOOR SOUND POWER LEVEL dB(A) - Quiet / Rated / Tru.Max		63.6 / 70.5 / 72.9		65.5 / 74.6 / 74.6		65.7 / 74.6 / 74.6		69.0 / 77.5 / 77.5	
INDOOR SOUND PRESSURE LEVEL dB(A) @1.5m		39.5		42.4		44.4		42.1	
POWER SUPPLY - OUTDOOR		400V / 3Ph+N / 50Hz							
VOLTAGE RANGE (MIN - MAX)		376V - 424V							
IP RATING		IP44							
POWER SUPPLY - INDOOR		230V / 1Ph+N / 50Hz							
VOLTAGE RANGE (MIN - MAX)		216V - 244V							
IP RATING		IP20							
(2) RATED LOAD AMPS - TOTAL		7.2		TBD		11.5		11.0	
(8) FULL LOAD AMPS OUTDOOR / INDOOR / TOTAL		7.89 / 3.9 / 11.7		TBD / TBD / TBD		10.8 / 4.2 / 15.0		12.48 / 4.63 / 17.1	
OUTDOOR AND INDOOR UNIT (TOTAL)									
FULL LOAD AMPS - PHASE 1		11.7		TBD		15.0		17.1	
FULL LOAD AMPS - PHASE 2 AND 3		8.8, 8.7		-		11.0, 11.0		12.8, 13.1	
(9) CIRCUIT BREAKER		16.0		TBD		16.0		20.0	
APPROXIMATE STARTING AMPS		< 16		TBD		< 16		-	
POWER FACTOR		0.92		TBD		0.93		-	
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		75 / 142	

- (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 circuit breaker size details.
- (10) TRUMAX - Maximum Capacity

**Notes:** Use nett input power to estimate running cost.  
 To determine the required cable size, refer to the latest edition of AS/NZS 3000 or AS/NZS 3008 wiring rules whichever applies.  
 The local electricity authority may require limits on starting current and voltage drop, please check prior to purchase.



**CAPACITY SELECTION DATA**

**CRV13BS / EVV13BS**

**COOLING PERFORMANCE - 100%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW											
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C											
					20	21	22	23	24	25	26	27	28	29	30	
25	16	12.73	3.25	3.92	6.13	7.27	8.41	9.55	10.69	11.83						
	17	13.18	3.26	4.04	5.71	6.77	7.83	8.89	9.95	11.01	12.06	13.12				
	18	13.63	3.28	4.16	5.29	6.27	7.25	8.22	9.20	10.18	11.16	12.13	13.11			
	19	14.07	3.29	4.28	4.87	5.77	6.66	7.56	8.45	9.35	10.25	11.14	12.04	12.94	13.83	
	20	14.52	3.30	4.39	4.45	5.26	6.08	6.89	7.71	8.52	9.34	10.15	10.97	11.78	12.60	
	21	14.96	3.32	4.51		4.76	5.50	6.23	6.96	7.70	8.43	9.16	9.90	10.63	11.36	
	22	15.41	3.33	4.62			4.91	5.57	6.22	6.87	7.52	8.17	8.83	9.48	10.13	
30	16	12.36	3.52	3.51	5.81	6.97	8.13	9.29	10.45	11.61						
	17	12.79	3.53	3.62	5.41	6.49	7.56	8.64	9.72	10.80	11.87					
	18	13.23	3.55	3.73	5.01	6.01	7.00	8.00	8.99	9.99	10.98	11.98	12.97			
	19	13.66	3.57	3.83	4.62	5.53	6.44	7.35	8.26	9.17	10.09	11.00	11.91	12.82		
	20	14.09	3.58	3.93	4.22	5.05	5.88	6.71	7.53	8.36	9.19	10.02	10.85	11.68	12.51	
	21	14.53	3.60	4.04		4.57	5.31	6.06	6.81	7.55	8.30	9.05	9.79	10.54	11.28	
	22	14.96	3.61	4.14			4.75	5.42	6.08	6.74	7.41	8.07	8.73	9.40	10.06	
35	16	11.99	3.79	3.16	5.49	6.67	7.85	9.03	10.20	11.38						
	17	12.41	3.81	3.26	5.12	6.21	7.30	8.40	9.49	10.59	11.68					
	18	12.83	3.83	3.35	4.74	5.75	6.76	7.77	8.78	9.79	10.80	11.81	12.82			
	19	13.25	3.84	3.45	4.37	5.29	6.22	7.15	8.07	9.00	9.92	10.85	11.77	12.70		
	20	13.67	3.86	3.54	3.99	4.84	5.68	6.52	7.36	8.20	9.04	9.89	10.73	11.57	12.41	
	21	14.09	3.88	3.63		4.38	5.13	5.89	6.65	7.41	8.16	8.92	9.68	10.44	11.19	
	22	14.51	3.89	3.73			4.59	5.27	5.94	6.61	7.29	7.96	8.63	9.31	9.98	
40	16	11.49	4.17	2.75	5.14	6.33	7.51	8.69	9.87	11.06						
	17	11.89	4.19	2.84	4.79	5.89	6.99	8.09	9.19	10.29	11.39					
	18	12.29	4.21	2.92	4.44	5.46	6.47	7.49	8.50	9.51	10.53	11.54				
	19	12.69	4.23	3.00	4.09	5.02	5.95	6.88	7.81	8.74	9.67	10.60	11.53	12.46		
	20	13.09	4.24	3.09	3.74	4.59	5.44	6.28	7.13	7.97	8.82	9.66	10.51	11.35	12.20	
	21	13.50	4.26	3.17		4.16	4.92	5.68	6.44	7.20	7.96	8.72	9.48	10.24	11.00	
	22	13.90	4.28	3.25			4.40	5.08	5.75	6.43	7.10	7.78	8.46	9.13	9.81	
45	16	10.96	4.59	2.39	4.80	5.99	7.17	8.36	9.54	10.72						
	17	11.34	4.61	2.46	4.48	5.58	6.68	7.78	8.88	9.98	11.08					
	18	11.73	4.63	2.53	4.15	5.17	6.18	7.20	8.21	9.23	10.24	11.26				
	19	12.11	4.65	2.60	3.83	4.76	5.69	6.62	7.55	8.48	9.41	10.34	11.27			
	20	12.49	4.67	2.67	3.50	4.35	5.19	6.04	6.89	7.73	8.58	9.43	10.27	11.12	11.96	
	21	12.88	4.69	2.74		3.94	4.70	5.46	6.22	6.98	7.75	8.51	9.27	10.03	10.79	
	22	13.26	4.71	2.81			4.21	4.88	5.56	6.24	6.91	7.59	8.27	8.95	9.62	
50	16	10.60	5.03	2.11	4.60	5.79	6.98	8.17	9.36	10.55						
	17	10.97	5.05	2.17	4.29	5.39	6.50	7.61	8.71	9.82	10.92					
	18	11.34	5.07	2.24	3.98	5.00	6.02	7.04	8.06	9.08	10.10	11.12				
	19	11.71	5.09	2.30	3.67	4.60	5.54	6.47	7.41	8.35	9.28	10.22	11.15			
	20	12.08	5.12	2.36	3.36	4.21	5.06	5.91	6.76	7.61	8.46	9.31	10.16	11.01	11.86	
	21	12.46	5.14	2.42		3.81	4.58	5.34	6.11	6.87	7.64	8.41	9.17	9.94	10.70	
	22	12.83	5.16	2.48			4.10	4.78	5.46	6.14	6.82	7.50	8.18	8.86	9.54	
Indoor Fan Power (kW)														0.25		



**CAPACITY SELECTION DATA**

**CRV13BS / EVV13BS**

**COOLING PERFORMANCE - 75%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW											
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C											
					20	21	22	23	24	25	26	27	28	29	30	
25	16	10.30	2.31	4.46	5.35	6.34	7.33	8.32	9.31	10.30						
	17	10.66	2.32	4.60	4.99	5.91	6.82	7.74	8.66	9.58	10.50					
	18	11.02	2.33	4.73	4.62	5.47	6.32	7.17	8.02	8.86	9.71	10.56				
	19	11.38	2.34	4.86	4.26	5.04	5.81	6.59	7.37	8.15	8.92	9.70	10.48	11.26		
	20	11.74	2.35	5.00	3.89	4.60	5.31	6.01	6.72	7.43	8.14	8.84	9.55	10.26	10.96	
	21	12.10	2.36	5.13		4.17	4.80	5.44	6.07	6.71	7.35	7.98	8.62	9.26	9.89	
	22	12.46	2.37	5.26			4.30	4.86	5.43	5.99	6.56	7.12	7.69	8.26	8.82	
30	16	10.00	2.50	4.00	5.07	6.08	7.08	8.09	9.10							
	17	10.35	2.51	4.12	4.73	5.66	6.60	7.53	8.47	9.40	10.34					
	18	10.70	2.52	4.24	4.38	5.24	6.11	6.97	7.83	8.70	9.56	10.42				
	19	11.05	2.54	4.36	4.04	4.83	5.62	6.41	7.20	7.99	8.78	9.58	10.37			
	20	11.40	2.55	4.47	3.69	4.41	5.13	5.85	6.57	7.29	8.01	8.73	9.45	10.17	10.89	
	21	11.74	2.56	4.59	0.00	4.00	4.64	5.29	5.94	6.59	7.23	7.88	8.53	9.18	9.82	
	22	12.09	2.57	4.71	0.00	0.00	4.16	4.73	5.31	5.88	6.46	7.03	7.61	8.18	8.76	
35	16	9.70	2.70	3.60	4.80	5.82	6.84	7.86	8.89							
	17	10.04	2.71	3.71	4.47	5.42	6.37	7.32	8.27	9.22						
	18	10.38	2.72	3.82	4.15	5.02	5.90	6.78	7.65	8.53	9.40	10.28				
	19	10.72	2.73	3.92	3.82	4.63	5.43	6.23	7.04	7.84	8.64	9.45	10.25			
	20	11.05	2.74	4.03	3.50	4.23	4.96	5.69	6.42	7.15	7.88	8.61	9.34	10.07	10.80	
	21	11.39	2.76	4.13		3.83	4.49	5.15	5.80	6.46	7.12	7.77	8.43	9.09	9.75	
	22	11.73	2.77	4.24			4.02	4.60	5.19	5.77	6.35	6.94	7.52	8.11	8.69	
40	16	9.30	2.96	3.14	4.49	5.52	6.55	7.57	8.60							
	17	9.62	2.98	3.23	4.19	5.14	6.10	7.05	8.00	8.96						
	18	9.94	2.99	3.32	3.89	4.77	5.65	6.53	7.41	8.29	9.17					
	19	10.27	3.00	3.42	3.59	4.39	5.20	6.01	6.81	7.62	8.43	9.23	10.04			
	20	10.59	3.02	3.51	3.28	4.02	4.75	5.48	6.22	6.95	7.68	8.42	9.15	9.88	0.00	
	21	10.91	3.03	3.60		3.64	4.30	4.96	5.62	6.28	6.94	7.60	8.26	8.92	9.58	
	22	11.24	3.04	3.69			3.85	4.44	5.02	5.61	6.20	6.78	7.37	7.96	8.54	
45	16	8.87	3.26	2.72	4.20	5.23	6.25	7.28	8.31							
	17	9.18	3.28	2.80	3.92	4.87	5.83	6.78	7.73	8.69						
	18	9.49	3.29	2.88	3.64	4.52	5.40	6.28	7.16	8.04	8.92					
	19	9.80	3.31	2.96	3.35	4.16	4.97	5.78	6.58	7.39	8.20	9.01				
	20	10.11	3.32	3.04	3.07	3.81	4.54	5.27	6.01	6.74	7.48	8.21	8.94	9.68		
	21	10.41	3.34	3.12		3.45	4.11	4.77	5.43	6.09	6.75	7.41	8.08	8.74	9.40	
	22	10.72	3.35	3.20			3.68	4.27	4.86	5.44	6.03	6.62	7.21	7.79	8.38	
50	16	8.58	3.57	2.40	4.02	5.06	6.09	7.12	8.16							
	17	8.88	3.59	2.47	3.75	4.71	5.67	6.63	7.59	8.55						
	18	9.18	3.61	2.55	3.48	4.37	5.26	6.14	7.03	7.91	8.80					
	19	9.48	3.62	2.62	3.21	4.03	4.84	5.65	6.46	7.27	8.09	8.90				
	20	9.78	3.64	2.69	2.95	3.68	4.42	5.16	5.90	6.64	7.37	8.11	8.85	9.59		
	21	10.08	3.65	2.76		3.34	4.00	4.67	5.33	6.00	6.66	7.33	7.99	8.65	9.32	
	22	10.37	3.67	2.83			3.59	4.18	4.77	5.36	5.95	6.54	7.13	7.72	8.31	
												Indoor Fan Power (kW)		0.25		



**CAPACITY SELECTION DATA**

**CRV13BS / EVV13BS**

**COOLING PERFORMANCE - 50%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW												
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C												
					20	21	22	23	24	25	26	27	28	29	30		
25	16	7.28	1.51	4.84	4.32	5.11	5.90	6.69									
	17	7.53	1.51	4.98	4.03	4.76	5.50	6.23	6.96								
	18	7.79	1.52	5.13	3.74	4.42	5.09	5.77	6.45	7.12							
	19	8.04	1.53	5.27	3.45	4.07	4.69	5.31	5.93	6.55	7.17	7.79					
	20	8.29	1.53	5.41	3.16	3.72	4.29	4.85	5.41	5.98	6.54	7.11	7.67	8.23			
	21	8.54	1.54	5.55		3.37	3.88	4.39	4.90	5.41	5.91	6.42	6.93	7.44	7.94		
	22	8.79	1.55	5.69			3.48	3.93	4.38	4.83	5.28	5.74	6.19	6.64	7.09		
30	16	7.07	1.63	4.34	4.10	4.90	5.70	6.51									
	17	7.32	1.64	4.46	3.82	4.57	5.31	6.06	6.81								
	18	7.56	1.65	4.59	3.55	4.24	4.92	5.61	6.30	6.99							
	19	7.81	1.65	4.72	3.27	3.90	4.53	5.17	5.80	6.43	7.06	7.69					
	20	8.05	1.66	4.85	3.00	3.57	4.15	4.72	5.29	5.87	6.44	7.02	7.59				
	21	8.29	1.67	4.97		3.24	3.76	4.27	4.79	5.31	5.82	6.34	6.86	7.37	7.89		
	22	8.54	1.68	5.10			3.37	3.83	4.29	4.74	5.20	5.66	6.12	6.58	7.04		
35	16	6.87	1.76	3.90	3.88	4.69	5.51	6.33									
	17	7.10	1.77	4.02	3.62	4.38	5.13	5.89	6.65								
	18	7.34	1.77	4.14	3.36	4.06	4.76	5.46	6.16	6.86							
	19	7.58	1.78	4.25	3.10	3.74	4.38	5.02	5.66	6.31	6.95						
	20	7.81	1.79	4.36	2.84	3.42	4.01	4.59	5.17	5.76	6.34	6.92	7.50				
	21	8.05	1.80	4.48		3.11	3.63	4.16	4.68	5.21	5.73	6.25	6.78	7.30	7.83		
	22	8.29	1.81	4.59			3.26	3.72	4.19	4.65	5.12	5.59	6.05	6.52	6.99		
40	16	6.58	1.93	3.40	3.64	4.46	5.28	6.09									
	17	6.81	1.94	3.51	3.39	4.16	4.92	5.68	6.44								
	18	7.03	1.95	3.61	3.15	3.86	4.56	5.26	5.96	6.66							
	19	7.26	1.96	3.71	2.91	3.55	4.20	4.84	5.49	6.13	6.77						
	20	7.49	1.97	3.80	2.67	3.25	3.84	4.43	5.01	5.60	6.18	6.77	7.35				
	21	7.71	1.98	3.90		2.95	3.48	4.01	4.53	5.06	5.59	6.11	6.64	7.17	7.69		
	22	7.94	1.99	4.00			3.12	3.59	4.06	4.53	5.00	5.46	5.93	6.40	6.87		
45	16	6.29	2.13	2.95	3.40	4.22	5.04	5.86									
	17	6.50	2.14	3.04	3.18	3.94	4.70	5.46	6.22								
	18	6.72	2.15	3.13	2.95	3.65	4.36	5.06	5.76	6.47							
	19	6.93	2.16	3.21	2.73	3.37	4.02	4.66	5.30	5.95	6.59						
	20	7.15	2.17	3.30	2.50	3.09	3.67	4.26	4.84	5.43	6.02	6.60					
	21	7.36	2.18	3.39		2.80	3.33	3.86	4.39	4.91	5.44	5.97	6.49	7.02	0.00		
	22	7.58	2.18	3.47			2.99	3.46	3.93	4.39	4.86	5.33	5.80	6.27	6.74		
50	16	6.08	2.33	2.61	3.26	4.08	4.91	5.73									
	17	6.29	2.34	2.69	3.05	3.81	4.58	5.34	6.11								
	18	6.50	2.35	2.76	2.83	3.54	4.24	4.95	5.66	6.36							
	19	6.71	2.36	2.84	2.62	3.26	3.91	4.56	5.21	5.85	6.50						
	20	6.92	2.37	2.92	2.40	2.99	3.58	4.17	4.76	5.35	5.93	6.52					
	21	7.13	2.38	2.99		2.72	3.25	3.78	4.31	4.84	5.37	5.90	6.43	6.96			
	22	7.34	2.39	3.06			2.91	3.38	3.86	4.33	4.80	5.27	5.74	6.21	6.68		
													Indoor Fan Power (kW)		0.38		



**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	9.77	7.93	9.72	7.89	9.67	7.85	9.63	7.82	9.58	7.78
-8	10.45	8.31	10.39	8.27	10.34	8.23	10.28	8.18	10.23	8.14
-6	11.13	8.70	11.07	8.65	11.00	8.60	10.93	8.55	10.86	8.49
-4	11.68	9.15	11.60	9.09	11.53	9.03	11.45	8.97	11.38	8.91
-2	12.22	9.58	12.13	9.52	12.05	9.45	11.96	9.39	11.88	9.32
0	12.76	10.02	12.67	9.95	12.58	9.88	12.48	9.81	12.39	9.74
2	12.99	10.76	12.89	10.68	12.79	10.59	12.69	10.51	12.59	10.43
4	12.90	11.78	12.79	11.68	12.69	11.59	12.58	11.50	12.47	11.39
6	12.80	12.80	12.70	12.70	12.59	12.59	12.51	12.51	12.40	12.40
8	13.47	13.47	13.39	13.28	13.28	13.28	13.16	13.16	13.03	13.03
10	14.21	14.21	14.09	13.96	13.96	13.96	13.83	13.83	13.69	13.69
12	14.95	14.95	14.81	14.67	14.67	14.67	14.53	14.53	14.38	14.38
14	15.72	15.72	15.57	15.41	15.41	15.41	15.25	15.25	15.09	15.09
16	16.51	16.51	16.35	16.17	16.17	16.17	16.00	16.00	15.83	15.83
18	17.33	17.33	17.15	16.97	16.97	16.97	16.79	16.79	16.60	16.60

**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	1.02
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:**

1. No allowance has been made for the effect of indoor fan motor.
2. 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.

# The Capacity Selection Data for the CRV15BS/EVV15BS to be advised



**CAPACITY SELECTION DATA**

**CRV17BS / EVV17BS**

**COOLING PERFORMANCE - 100%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW												
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C												
					20	21	22	23	24	25	26	27	28	29	30		
25	16	16.70	4.31	3.88	8.23	9.75	11.27	12.79	14.31	15.84							
	17	17.29	4.33	3.99	7.67	9.08	10.49	11.91	13.32	14.73	16.15						
	18	17.87	4.35	4.11	7.11	8.41	9.72	11.02	12.32	13.63	14.93	16.24	17.54				
	19	18.45	4.37	4.23	6.55	7.74	8.94	10.13	11.33	12.53	13.72	14.92	16.11	17.31	0.00		
	20	19.04	4.38	4.34	5.99	7.07	8.16	9.25	10.33	11.42	12.51	13.60	14.68	15.77	16.86		
	21	19.62	4.40	4.46		6.40	7.38	8.36	9.34	10.32	11.30	12.28	13.25	14.23	15.21		
	22	20.20	4.42	4.57			6.60	7.47	8.34	9.21	10.08	10.95	11.82	12.69	13.56		
30	16	16.22	4.67	3.47	7.79	9.34	10.89	12.44	13.99	15.54							
	17	16.78	4.69	3.58	7.26	8.70	10.14	11.58	13.02	14.46	15.89						
	18	17.35	4.71	3.68	6.74	8.06	9.39	10.72	12.05	13.37	14.70	16.03					
	19	17.92	4.73	3.79	6.21	7.42	8.64	9.86	11.07	12.29	13.51	14.72	15.94	17.16			
	20	18.48	4.75	3.89	5.68	6.78	7.89	9.00	10.10	11.21	12.31	13.42	14.53	15.63	16.74		
	21	19.05	4.77	3.99		6.14	7.14	8.13	9.13	10.13	11.12	12.12	13.11	14.11	15.10		
	22	19.62	4.80	4.09			6.39	7.27	8.16	9.04	9.93	10.81	11.70	12.58	13.47		
35	16	15.73	5.03	3.13	7.37	8.95	10.52	12.09	13.66	15.24							
	17	16.28	5.06	3.22	6.87	8.33	9.79	11.25	12.71	14.17	15.63						
	18	16.83	5.08	3.31	6.38	7.72	9.07	10.42	11.77	13.11	14.46	15.81					
	19	17.38	5.10	3.41	5.88	7.11	8.35	9.58	10.82	12.05	13.29	14.52	15.76	16.99			
	20	17.93	5.12	3.50	5.38	6.50	7.62	8.75	9.87	10.99	12.12	13.24	14.36	15.49	16.61		
	21	18.48	5.14	3.59	0.00	5.89	6.90	7.91	8.92	9.93	10.94	11.95	12.96	13.98	14.99		
	22	19.03	5.17	3.68	0.00	0.00	6.17	7.07	7.97	8.87	9.77	10.67	11.57	12.47	13.36		
40	16	15.07	5.53	2.72	6.91	8.49	10.07	11.65	13.22	14.80							
	17	15.60	5.56	2.81	6.44	7.91	9.37	10.84	12.31	13.77	15.24						
	18	16.12	5.58	2.89	5.98	7.33	8.68	10.04	11.39	12.74	14.10	15.45					
	19	16.65	5.61	2.97	5.51	6.75	7.99	9.23	10.47	11.71	12.95	14.20	15.44				
	20	17.17	5.63	3.05	5.04	6.17	7.30	8.43	9.56	10.68	11.81	12.94	14.07	15.20	16.32		
	21	17.70	5.66	3.13		5.59	6.61	7.62	8.64	9.65	10.67	11.68	12.70	13.72	14.73		
	22	18.23	5.68	3.21			5.92	6.82	7.72	8.62	9.53	10.43	11.33	12.23	13.14		
45	16	14.39	6.09	2.36	6.45	8.04	9.62	11.20	12.78	14.36							
	17	14.89	6.12	2.43	6.02	7.49	8.96	10.42	11.89	13.36	14.83						
	18	15.39	6.14	2.50	5.59	6.94	8.30	9.65	11.01	12.36	13.72	15.07					
	19	15.89	6.17	2.57	5.15	6.40	7.64	8.88	10.12	11.36	12.61	13.85	15.09				
	20	16.39	6.20	2.64	4.72	5.85	6.98	8.11	9.24	10.37	11.50	12.62	13.75	14.88	16.01		
	21	16.89	6.23	2.71		5.30	6.32	7.34	8.35	9.37	10.38	11.40	12.42	13.43	14.45		
	22	17.39	6.25	2.78			5.66	6.56	7.47	8.37	9.27	10.18	11.08	11.98	12.89		
50	16	13.92	6.67	2.09	6.18	7.77	9.36	10.95	12.54								
	17	14.40	6.70	2.15	5.77	7.24	8.72	10.20	11.67	13.15							
	18	14.89	6.73	2.21	5.35	6.72	8.08	9.44	10.80	12.17	13.53						
	19	15.37	6.76	2.27	4.94	6.19	7.44	8.69	9.94	11.18	12.43	13.68	14.93				
	20	15.85	6.79	2.33	4.53	5.66	6.80	7.93	9.07	10.20	11.34	12.47	13.61	14.74			
	21	16.34	6.82	2.40		5.13	6.16	7.18	8.20	9.22	10.24	11.26	12.29	13.31	14.33		
	22	16.82	6.85	2.46			5.51	6.42	7.33	8.24	9.15	10.06	10.96	11.87	12.78		
													Indoor Fan Power (kW)		0.38		



**CAPACITY SELECTION DATA**

**CRV17BS / EVV17BS**

**COOLING PERFORMANCE - 75%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW											
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C											
					20	21	22	23	24	25	26	27	28	29	30	
25	16	13.52	2.27	5.97	7.19	8.51	9.83	11.15	12.47							
	17	13.99	2.28	6.15	6.70	7.93	9.15	10.38	11.61	12.83						
	18	14.46	2.29	6.32	6.22	7.35	8.48	9.61	10.74	11.88	13.01	14.14				
	19	14.93	2.30	6.50	5.73	6.77	7.80	8.84	9.88	10.92	11.96	12.99	14.03			
	20	15.40	2.31	6.68	5.24	6.19	7.13	8.07	9.02	9.96	10.90	11.85	12.79	13.73	14.68	
	21	15.87	2.32	6.85		5.61	6.46	7.30	8.15	9.00	9.85	10.70	11.55	12.40	13.25	
	22	16.34	2.33	7.02			5.78	6.54	7.29	8.05	8.80	9.55	10.31	11.06	11.82	
30	16	13.13	2.46	5.34	6.81	8.16	9.50	10.84	12.19							
	17	13.59	2.47	5.51	6.35	7.60	8.85	10.10	11.34	12.59						
	18	14.04	2.48	5.66	5.89	7.05	8.20	9.35	10.50	11.65	12.80	13.96				
	19	14.50	2.49	5.82	5.43	6.49	7.55	8.60	9.66	10.71	11.77	12.83	13.88			
	20	14.95	2.50	5.98	4.98	5.94	6.90	7.85	8.81	9.77	10.73	11.69	12.65	13.61	14.57	
	21	15.41	2.51	6.14	0.00	5.38	6.24	7.11	7.97	8.84	9.70	10.56	11.43	12.29	13.16	
	22	15.87	2.52	6.29	0.00	0.00	5.59	6.36	7.13	7.90	8.66	9.43	10.20	10.97	11.74	
35	16	12.74	2.65	4.81	6.45	7.81	9.18	10.54	11.90							
	17	13.18	2.66	4.96	6.01	7.28	8.55	9.81	11.08	12.35						
	18	13.62	2.67	5.10	5.58	6.75	7.92	9.09	10.26	11.43	12.60					
	19	14.07	2.68	5.24	5.15	6.22	7.29	8.36	9.44	10.51	11.58	12.65	13.72			
	20	14.51	2.69	5.38	4.71	5.69	6.66	7.64	8.61	9.59	10.56	11.54	12.51	13.49	14.46	
	21	14.95	2.71	5.52		5.16	6.04	6.91	7.79	8.67	9.54	10.42	11.30	12.18	13.05	
	22	15.39	2.72	5.66			5.41	6.19	6.97	7.75	8.53	9.31	10.09	10.87	11.65	
40	16	12.21	2.91	4.19	6.04	7.41	8.78	10.15	11.52							
	17	12.63	2.92	4.32	5.64	6.91	8.18	9.46	10.73	12.00						
	18	13.06	2.94	4.45	5.24	6.41	7.58	8.76	9.93	11.11	12.28					
	19	13.48	2.95	4.57	4.83	5.91	6.98	8.06	9.14	10.21	11.29	12.37	13.44			
	20	13.90	2.96	4.69	4.43	5.41	6.38	7.36	8.34	9.32	10.30	11.28	12.26	13.23		
	21	14.32	2.98	4.81		4.90	5.78	6.66	7.55	8.43	9.31	10.19	11.07	11.95	12.83	
	22	14.75	2.99	4.93			5.18	5.97	6.75	7.53	8.32	9.10	9.88	10.67	11.45	
45	16	11.66	3.20	3.64	5.65	7.02	8.39	9.76	11.14							
	17	12.06	3.22	3.75	5.27	6.55	7.82	9.09	10.37	11.64						
	18	12.46	3.23	3.86	4.90	6.07	7.25	8.42	9.60	10.78	11.95					
	19	12.87	3.25	3.96	4.52	5.60	6.68	7.75	8.83	9.91	10.99	12.07				
	20	13.27	3.26	4.07	4.15	5.12	6.10	7.08	8.06	9.04	10.02	11.00	11.98	12.96		
	21	13.67	3.28	4.17		4.65	5.53	6.41	7.30	8.18	9.06	9.94	10.82	11.71	12.59	
	22	14.08	3.29	4.28			4.96	5.74	6.53	7.31	8.10	8.88	9.66	10.45	11.23	
50	16	11.28	3.51	3.21	5.41	6.79	8.17	9.55	10.93	0.00	0.00	0.00	0.00	0.00	0.00	
	17	11.67	3.53	3.31	5.06	6.34	7.62	8.90	10.18	11.46	0.00	0.00	0.00	0.00	0.00	
	18	12.06	3.54	3.41	4.70	5.88	7.06	8.24	9.42	10.61	11.79	0.00	0.00	0.00	0.00	
	19	12.45	3.56	3.50	4.34	5.42	6.50	7.59	8.67	9.75	10.84	11.92	0.00	0.00	0.00	
	20	12.84	3.57	3.59	3.98	4.96	5.95	6.93	7.92	8.90	9.89	10.87	11.86	0.00	0.00	
	21	13.23	3.59	3.69		4.50	5.39	6.28	7.16	8.05	8.94	9.82	10.71	11.60	12.48	
	22	13.62	3.60	3.78			4.83	5.62	6.41	7.20	7.99	8.77	9.56	10.35	11.14	
Indoor Fan Power (kW)														0.38		



**CAPACITY SELECTION DATA**

**CRV17BS / EVV17BS**

**COOLING PERFORMANCE - 50%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW													
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C													
					20	21	22	23	24	25	26	27	28	29	30			
25	16	9.58	1.48	6.48	5.81	6.87	7.92	8.97										
	17	9.91	1.48	6.67	5.42	6.40	7.38	8.36	9.34									
	18	10.24	1.49	6.86	5.04	5.94	6.84	7.75	8.65	9.55								
	19	10.56	1.50	7.05	4.65	5.48	6.30	7.13	7.96	8.79	9.62	10.44						
	20	10.89	1.50	7.24	4.26	5.01	5.77	6.52	7.27	8.02	8.78	9.53	10.28					
	21	11.22	1.51	7.43		4.55	5.23	5.91	6.58	7.26	7.94	8.62	9.29	9.97	10.65			
	22	11.55	1.52	7.61			4.69	5.29	5.89	6.50	7.10	7.70	8.30	8.91	9.51			
30	16	9.30	1.60	5.81	5.51	6.58	7.66	8.73										
	17	9.62	1.61	5.98	5.15	6.14	7.14	8.13	9.13									
	18	9.94	1.62	6.15	4.78	5.70	6.62	7.54	8.46	9.37								
	19	10.26	1.62	6.32	4.41	5.26	6.10	6.94	7.78	8.63	9.47							
	20	10.58	1.63	6.49	4.05	4.81	5.58	6.34	7.11	7.88	8.64	9.41	10.17					
	21	10.90	1.64	6.65	0.00	4.37	5.06	5.75	6.44	7.13	7.82	8.51	9.20	9.88	10.57			
	22	11.22	1.65	6.82	0.00	0.00	4.54	5.15	5.77	6.38	6.99	7.60	8.22	8.83	9.44			
35	16	9.03	1.73	5.23	5.22	6.31	7.40	8.49										
	17	9.34	1.73	5.38	4.88	5.89	6.90	7.91	8.92									
	18	9.65	1.74	5.54	4.53	5.46	6.40	7.33	8.26	9.20								
	19	9.96	1.75	5.69	4.18	5.04	5.90	6.75	7.61	8.46	9.32							
	20	10.27	1.76	5.84	3.84	4.62	5.39	6.17	6.95	7.73	8.50	9.28	10.06					
	21	10.58	1.77	5.99		4.19	4.89	5.59	6.29	6.99	7.69	8.39	9.09	9.79	10.49			
	22	10.89	1.77	6.14			4.39	5.01	5.64	6.26	6.88	7.50	8.12	8.75	9.37			
40	16	8.66	1.90	4.56	4.90	5.99	7.09	8.18										
	17	8.96	1.91	4.70	4.58	5.59	6.61	7.62	8.64									
	18	9.25	1.92	4.83	4.25	5.19	6.13	7.07	8.00	8.94								
	19	9.55	1.92	4.96	3.93	4.79	5.65	6.51	7.37	8.23	9.09							
	20	9.84	1.93	5.09	3.61	4.39	5.17	5.95	6.73	7.51	8.29	9.08						
	21	10.14	1.94	5.22		3.99	4.69	5.39	6.10	6.80	7.50	8.21	8.91	9.61				
	22	10.44	1.95	5.35			4.21	4.84	5.46	6.09	6.71	7.34	7.96	8.59	9.21			
45	16	8.27	2.09	3.96	4.59	5.68	6.77	7.87										
	17	8.55	2.10	4.08	4.29	5.30	6.32	7.33	8.35									
	18	8.84	2.11	4.19	3.98	4.92	5.86	6.80	7.74	8.68								
	19	9.12	2.12	4.31	3.68	4.54	5.40	6.26	7.12	7.98	8.84							
	20	9.40	2.13	4.42	3.38	4.17	4.95	5.73	6.51	7.29	8.08	8.86						
	21	9.68	2.14	4.53		3.79	4.49	5.20	5.90	6.60	7.31	8.01	8.71	9.42				
	22	9.97	2.15	4.64			4.03	4.66	5.29	5.91	6.54	7.16	7.79	8.41	9.04			
50	16	8.01	2.29	3.50	4.40	5.50	6.60	7.70										
	17	8.28	2.30	3.60	4.11	5.13	6.15	7.18	8.20									
	18	8.55	2.31	3.70	3.82	4.77	5.71	6.65	7.60	8.54								
	19	8.83	2.32	3.80	3.54	4.40	5.27	6.13	7.00	7.86	8.72							
	20	9.10	2.33	3.91	3.25	4.04	4.82	5.61	6.39	7.18	7.97	8.75						
	21	9.37	2.34	4.00		3.67	4.38	5.09	5.79	6.50	7.21	7.92	8.62	9.33				
	22	9.65	2.35	4.10			3.93	4.56	5.19	5.82	6.45	7.08	7.71	8.34	8.96			
														Indoor Fan Power (kW)	0.38			



**CAPACITY SELECTION DATA**

**CRV17BS / EVV17BS**

**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	13.37	10.78	13.31	10.72	13.24	10.67	13.18	10.62	13.12	10.57
-8	14.12	11.25	14.05	11.20	13.97	11.13	13.90	11.08	13.83	11.02
-6	14.87	11.74	14.78	11.67	14.70	11.60	14.61	11.53	14.51	11.46
-4	15.73	12.42	15.62	12.33	15.52	12.25	15.43	12.18	15.32	12.09
-2	16.57	13.08	16.46	12.99	16.34	12.90	16.22	12.81	16.11	12.72
0	17.41	13.75	17.29	13.66	17.17	13.56	17.04	13.46	16.91	13.36
2	17.70	14.69	17.57	14.59	17.43	14.47	17.29	14.36	17.15	14.24
4	17.41	15.91	17.27	15.78	17.13	15.65	16.99	15.52	16.84	15.38
6	17.11	17.11	16.97	16.97	16.83	16.83	16.73	16.73	16.57	16.57
8	18.01	18.01	17.90	17.75	17.75	17.75	17.59	17.59	17.42	17.42
10	19.00	19.00	18.84	18.66	18.66	18.66	18.49	18.49	18.31	18.31
12	19.99	19.99	19.80	19.62	19.62	19.62	19.42	19.42	19.23	19.23
14	21.02	21.02	20.82	20.60	20.60	20.60	20.39	20.39	20.18	20.18
16	22.08	22.08	21.86	21.63	21.63	21.63	21.39	21.39	21.17	21.17
18	23.18	23.18	22.94	22.70	22.70	22.70	22.45	22.45	22.19	22.19

**AIRFLOW CORRECTION MULTIPLIER**

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	712	756.5	801	845.5	<b>890</b>	934.5	979	1023.5	1060
TOTAL COOLING	0.965	0.982	0.989	0.997	<b>1.000</b>	1.004	1.009	1.015	1.02
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:**

1. No allowance has been made for the effect of indoor fan motor.
2. 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**

**CRV13BT / EVV13BS**

**COOLING PERFORMANCE - 100%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW											
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C											
					20	21	22	23	24	25	26	27	28	29	30	
25	16	12.73	3.19	3.99	6.22	7.38	8.53	9.69	10.85	12.01						
	17	13.18	3.20	4.12	5.79	6.87	7.94	9.02	10.09	11.17	12.24					
	18	13.63	3.22	4.24	5.37	6.36	7.35	8.34	9.34	10.33	11.32	12.31	13.31			
	19	14.07	3.23	4.36	4.94	5.85	6.76	7.67	8.58	9.49	10.40	11.31	12.22	13.13	14.04	
	20	14.52	3.24	4.47	4.51	5.34	6.17	6.99	7.82	8.65	9.48	10.30	11.13	11.96	12.78	
	21	14.96	3.26	4.59		4.83	5.58	6.32	7.07	7.81	8.55	9.30	10.04	10.79	11.53	
	22	15.41	3.27	4.71			4.98	5.65	6.31	6.97	7.63	8.29	8.96	9.62	10.28	
30	16	12.36	3.46	3.58	5.89	7.07	8.25	9.42	10.60	11.78						
	17	12.79	3.47	3.69	5.49	6.58	7.67	8.77	9.86	10.96	12.05					
	18	13.23	3.49	3.79	5.08	6.09	7.10	8.11	9.12	10.13	11.14	12.15	13.16			
	19	13.66	3.50	3.90	4.68	5.61	6.53	7.46	8.38	9.31	10.24	11.16	12.09	13.01		
	20	14.09	3.52	4.01	4.28	5.12	5.96	6.80	7.65	8.49	9.33	10.17	11.01	11.85	12.69	
	21	14.53	3.53	4.11		4.63	5.39	6.15	6.91	7.66	8.42	9.18	9.94	10.69	11.45	
	22	14.96	3.55	4.22			4.82	5.49	6.17	6.84	7.51	8.19	8.86	9.53	10.21	
35	16	11.99	3.72	3.22	5.57	6.77	7.96	9.16	10.35	11.55						
	17	12.41	3.74	3.32	5.19	6.30	7.41	8.52	9.63	10.74	11.85					
	18	12.83	3.76	3.41	4.81	5.84	6.86	7.89	8.91	9.94	10.96	11.99				
	19	13.25	3.77	3.51	4.43	5.37	6.31	7.25	8.19	9.13	10.07	11.01	11.95	12.89		
	20	13.67	3.79	3.61	4.05	4.90	5.76	6.61	7.47	8.32	9.18	10.03	10.89	11.74	12.59	
	21	14.09	3.81	3.70		4.44	5.21	5.98	6.75	7.52	8.28	9.05	9.82	10.59	11.36	
	22	14.51	3.82	3.79			4.66	5.34	6.03	6.71	7.39	8.08	8.76	9.44	10.13	
40	16	11.49	4.09	2.81	5.22	6.42	7.62	8.82	10.02	11.22						
	17	11.89	4.11	2.89	4.86	5.98	7.09	8.21	9.32	10.44	11.55					
	18	12.29	4.13	2.98	4.51	5.54	6.57	7.60	8.63	9.65	10.68	11.71				
	19	12.69	4.15	3.06	4.15	5.10	6.04	6.98	7.93	8.87	9.82	10.76	11.70	12.65		
	20	13.09	4.17	3.14	3.80	4.66	5.51	6.37	7.23	8.09	8.95	9.80	10.66	11.52	12.38	
	21	13.50	4.19	3.22		4.22	4.99	5.76	6.53	7.30	8.08	8.85	9.62	10.39	11.17	
	22	13.90	4.20	3.31			4.46	5.15	5.83	6.52	7.21	7.89	8.58	9.27	9.95	
45	16	10.96	4.51	2.43	4.87	6.07	7.28	8.48	9.68	10.88						
	17	11.34	4.53	2.51	4.54	5.66	6.77	7.89	9.01	10.12	11.24					
	18	11.73	4.55	2.58	4.21	5.24	6.27	7.30	8.33	9.36	10.39	11.43				
	19	12.11	4.57	2.65	3.88	4.83	5.77	6.72	7.66	8.61	9.55	10.49	11.44			
	20	12.49	4.59	2.72	3.55	4.41	5.27	6.13	6.99	7.85	8.70	9.56	10.42	11.28	12.14	
	21	12.88	4.61	2.79		3.99	4.77	5.54	6.31	7.09	7.86	8.63	9.41	10.18	10.95	
	22	13.26	4.63	2.87			4.27	4.95	5.64	6.33	7.01	7.70	8.39	9.08	9.76	
50	16	10.60	4.94	2.15	4.66	5.87	7.08	8.29	9.50							
	17	10.97	4.96	2.21	4.35	5.47	6.59	7.72	8.84	9.96						
	18	11.34	4.98	2.28	4.03	5.07	6.11	7.14	8.18	9.21	10.25	11.29				
	19	11.71	5.00	2.34	3.72	4.67	5.62	6.57	7.52	8.47	9.42	10.37	11.32			
	20	12.08	5.03	2.40	3.40	4.27	5.13	5.99	6.86	7.72	8.58	9.45	10.31	11.18	12.04	
	21	12.46	5.05	2.47		3.87	4.64	5.42	6.20	6.97	7.75	8.53	9.31	10.08	10.86	
	22	12.83	5.07	2.53			4.15	4.85	5.54	6.23	6.92	7.61	8.30	8.99	9.68	
														Indoor Fan Power (kW)	0.25	



**CAPACITY SELECTION DATA**

**CRV13BT / EVV13BS**

**COOLING PERFORMANCE - 75%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW												
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C												
					20	21	22	23	24	25	26	27	28	29	30		
25	16	10.30	2.27	4.54	5.43	6.43	7.44	8.44	9.45								
	17	10.66	2.28	4.68	5.06	5.99	6.92	7.86	8.79	9.72	10.65						
	18	11.02	2.29	4.82	4.69	5.55	6.41	7.27	8.13	8.99	9.85	10.72					
	19	11.38	2.30	4.95	4.32	5.11	5.90	6.69	7.48	8.27	9.05	9.84	10.63				
	20	11.74	2.31	5.09	3.95	4.67	5.38	6.10	6.82	7.54	8.25	8.97	9.69	10.41	11.13		
	21	12.10	2.32	5.22		4.23	4.87	5.52	6.16	6.81	7.45	8.10	8.75	9.39	10.04		
	22	12.46	2.33	5.35			4.36	4.93	5.51	6.08	6.65	7.23	7.80	8.38	8.95		
30	16	10.00	2.46	4.07	5.14	6.16	7.19	8.21	9.23								
	17	10.35	2.47	4.19	4.79	5.74	6.69	7.64	8.59	9.54							
	18	10.70	2.48	4.32	4.44	5.32	6.20	7.07	7.95	8.82	9.70	10.58					
	19	11.05	2.49	4.44	4.09	4.90	5.70	6.50	7.31	8.11	8.91	9.72	10.52				
	20	11.40	2.50	4.56	3.75	4.48	5.21	5.94	6.67	7.40	8.13	8.86	9.59	10.32	11.05		
	21	11.74	2.51	4.68		4.05	4.71	5.37	6.02	6.68	7.34	8.00	8.65	9.31	9.97		
	22	12.09	2.52	4.79			4.22	4.80	5.38	5.97	6.55	7.14	7.72	8.30	8.89		
35	16	9.70	2.65	3.66	4.87	5.90	6.94	7.98	9.02								
	17	10.04	2.66	3.78	4.54	5.50	6.46	7.43	8.39	9.35							
	18	10.38	2.67	3.89	4.21	5.10	5.99	6.87	7.76	8.65	9.54						
	19	10.72	2.68	3.99	3.88	4.69	5.51	6.32	7.14	7.95	8.77	9.58	10.40				
	20	11.05	2.69	4.10	3.55	4.29	5.03	5.77	6.51	7.25	7.99	8.74	9.48	10.22	10.96		
	21	11.39	2.71	4.21		3.88	4.55	5.22	5.89	6.55	7.22	7.89	8.56	9.22	9.89		
	22	11.73	2.72	4.32			4.07	4.67	5.26	5.85	6.45	7.04	7.63	8.23	8.82		
40	16	9.30	2.91	3.19	4.56	5.60	6.64	7.68	8.73								
	17	9.62	2.92	3.29	4.25	5.22	6.19	7.15	8.12	9.09							
	18	9.94	2.94	3.39	3.94	4.84	5.73	6.62	7.52	8.41	9.30						
	19	10.27	2.95	3.48	3.64	4.45	5.27	6.09	6.91	7.73	8.55	9.37	10.19				
	20	10.59	2.96	3.57	3.33	4.07	4.82	5.56	6.31	7.05	7.79	8.54	9.28	10.03			
	21	10.91	2.98	3.67		3.69	4.36	5.03	5.70	6.37	7.04	7.71	8.38	9.05	9.72		
	22	11.24	2.99	3.76			3.90	4.50	5.10	5.69	6.29	6.88	7.48	8.07	8.67		
45	16	8.87	3.20	2.77	4.26	5.30	6.35	7.39	8.43								
	17	9.18	3.22	2.85	3.97	4.94	5.91	6.88	7.85	8.82							
	18	9.49	3.23	2.94	3.69	4.58	5.47	6.37	7.26	8.16	9.05						
	19	9.80	3.25	3.02	3.40	4.22	5.04	5.86	6.68	7.50	8.32	9.14					
	20	10.11	3.26	3.10	3.11	3.86	4.60	5.35	6.09	6.84	7.59	8.33	9.08	9.82			
	21	10.41	3.28	3.18		3.50	4.17	4.84	5.51	6.18	6.85	7.52	8.19	8.86	9.54		
	22	10.72	3.29	3.26			3.73	4.33	4.93	5.52	6.12	6.72	7.31	7.91	8.50		
50	16	8.58	3.51	2.45	4.08	5.13	6.18	7.23	8.27								
	17	8.88	3.53	2.52	3.81	4.78	5.75	6.73	7.70	8.68							
	18	9.18	3.54	2.59	3.53	4.43	5.33	6.23	7.13	8.03	8.93						
	19	9.48	3.56	2.66	3.26	4.08	4.91	5.73	6.56	7.38	8.20	9.03					
	20	9.78	3.57	2.74	2.99	3.74	4.48	5.23	5.98	6.73	7.48	8.23	8.98	9.73			
	21	10.08	3.59	2.81		3.39	4.06	4.74	5.41	6.08	6.76	7.43	8.11	8.78	9.46		
	22	10.37	3.60	2.88			3.64	4.24	4.84	5.44	6.04	6.64	7.23	7.83	8.43		
													Indoor Fan Power (kW)		0.25		



**CAPACITY SELECTION DATA**

**CRV13BT / EVV13BS**

**COOLING PERFORMANCE - 50%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW													
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C													
					20	21	22	23	24	25	26	27	28	29	30			
25	16	7.28	1.48	4.93	4.38	5.18	5.98	6.79										
	17	7.53	1.48	5.07	4.09	4.83	5.58	6.32	7.06									
	18	7.79	1.49	5.22	3.79	4.48	5.17	5.85	6.54	7.23								
	19	8.04	1.50	5.37	3.50	4.13	4.76	5.39	6.02	6.65	7.28	7.91						
	20	8.29	1.50	5.51	3.20	3.77	4.35	4.92	5.49	6.06	6.64	7.21	7.78					
	21	8.54	1.51	5.65		3.42	3.94	4.45	4.97	5.48	6.00	6.51	7.03	7.55	8.06			
	22	8.79	1.52	5.79			3.53	3.99	4.44	4.90	5.36	5.82	6.28	6.73	7.19			
30	16	7.07	1.60	4.41	4.15	4.97	5.79	6.60										
	17	7.32	1.61	4.55	3.88	4.63	5.39	6.15	6.90									
	18	7.56	1.62	4.68	3.60	4.30	4.99	5.69	6.39	7.09								
	19	7.81	1.62	4.81	3.32	3.96	4.60	5.24	5.88	6.52	7.16	7.80						
	20	8.05	1.63	4.94	3.04	3.62	4.20	4.79	5.37	5.95	6.53	7.12	7.70					
	21	8.29	1.64	5.06		3.28	3.81	4.33	4.86	5.38	5.91	6.43	6.96	7.48	8.00			
	22	8.54	1.65	5.19			3.41	3.88	4.35	4.81	5.28	5.74	6.21	6.68	7.14			
35	16	6.87	1.73	3.98	3.93	4.76	5.59	6.42										
	17	7.10	1.73	4.09	3.67	4.44	5.21	5.98	6.75									
	18	7.34	1.74	4.21	3.41	4.12	4.83	5.54	6.25	6.96								
	19	7.58	1.75	4.33	3.14	3.79	4.45	5.10	5.75	6.40	7.05							
	20	7.81	1.76	4.44	2.88	3.47	4.06	4.66	5.25	5.84	6.43	7.02	7.61					
	21	8.05	1.77	4.56		3.15	3.68	4.22	4.75	5.28	5.81	6.34	6.88	7.41	7.94			
	22	8.29	1.77	4.67			3.30	3.77	4.25	4.72	5.19	5.67	6.14	6.61	7.09			
40	16	6.58	1.90	3.47	3.69	4.52	5.35	6.18										
	17	6.81	1.91	3.57	3.44	4.21	4.99	5.76	6.53									
	18	7.03	1.92	3.67	3.20	3.91	4.62	5.34	6.05	6.76								
	19	7.26	1.92	3.77	2.95	3.60	4.26	4.91	5.57	6.22	6.87							
	20	7.49	1.93	3.87	2.71	3.30	3.89	4.49	5.08	5.68	6.27	6.86	7.46					
	21	7.71	1.94	3.97		3.00	3.53	4.06	4.60	5.13	5.67	6.20	6.74	7.27	0.00			
	22	7.94	1.95	4.07			3.17	3.64	4.12	4.59	5.07	5.54	6.02	6.49	6.97			
45	16	6.29	2.09	3.01	3.45	4.28	5.11	5.95										
	17	6.50	2.10	3.10	3.22	3.99	4.77	5.54	6.31									
	18	6.72	2.11	3.19	2.99	3.71	4.42	5.13	5.85	6.56								
	19	6.93	2.12	3.27	2.76	3.42	4.07	4.73	5.38	6.03	6.69							
	20	7.15	2.13	3.36	2.54	3.13	3.72	4.32	4.91	5.51	6.10	6.70						
	21	7.36	2.14	3.45		2.84	3.38	3.91	4.45	4.98	5.52	6.05	6.59	7.12				
	22	7.58	2.15	3.53			3.03	3.51	3.98	4.46	4.93	5.41	5.88	6.36	6.84			
50	16	6.08	2.29	2.66	3.31	4.14	4.98	5.82										
	17	6.29	2.30	2.74	3.09	3.86	4.64	5.42	6.20									
	18	6.50	2.31	2.81	2.87	3.59	4.30	5.02	5.74	6.46								
	19	6.71	2.32	2.89	2.65	3.31	3.97	4.62	5.28	5.94	6.60							
	20	6.92	2.33	2.97	2.43	3.03	3.63	4.23	4.82	5.42	6.02	6.62						
	21	7.13	2.34	3.04		2.75	3.29	3.83	4.37	4.91	5.44	5.98	6.52	7.06				
	22	7.34	2.35	3.12			2.95	3.43	3.91	4.39	4.87	5.35	5.82	6.30	6.78			
													Indoor Fan Power (kW)		0.25			



**CAPACITY SELECTION DATA**

**CRV13BT / EVV13BS**

**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	9.60	7.93	9.55	7.89	9.50	7.85	9.46	7.82	9.41	7.78
-8	10.21	8.31	10.16	8.27	10.10	8.23	10.05	8.18	10.00	8.14
-6	10.83	8.70	10.76	8.65	10.70	8.60	10.64	8.55	10.57	8.49
-4	11.38	9.10	11.30	9.04	11.23	8.98	11.16	8.93	11.09	8.87
-2	11.92	9.49	11.84	9.43	11.76	9.36	11.67	9.30	11.59	9.23
0	12.46	9.89	12.38	9.82	12.29	9.75	12.20	9.67	12.11	9.60
2	12.75	10.63	12.66	10.55	12.56	10.47	12.46	10.38	12.36	10.30
4	12.78	11.72	12.67	11.62	12.58	11.53	12.47	11.43	12.36	11.33
6	12.80	12.80	12.70	12.70	12.59	12.59	12.51	12.51	12.40	12.40
8	13.47	13.47	13.39	13.28	13.28	13.28	13.16	13.16	13.03	13.03
10	14.21	14.21	14.09	13.96	13.96	13.96	13.83	13.83	13.69	13.69
12	14.95	14.95	14.81	14.67	14.67	14.67	14.53	14.53	14.38	14.38
14	15.72	15.72	15.57	15.41	15.41	15.41	15.25	15.25	15.09	15.09
16	16.51	16.51	16.35	16.17	16.17	16.17	16.00	16.00	15.83	15.83
18	17.33	17.33	17.15	16.97	16.97	16.97	16.79	16.79	16.60	16.60

**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	1.02
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:**

1. No allowance has been made for the effect of indoor fan motor.
2. 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.





# The Capacity Selection Data for the CRV15BT/EVV15BS to be advised

**CAPACITY SELECTION DATA**

**CRV17BT / EVV17BS**

**COOLING PERFORMANCE - 100%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW											
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C											
					20	21	22	23	24	25	26	27	28	29	30	
25	16	16.70	4.27	3.91	8.62	10.22	11.82	13.42	15.02	16.62						
	17	17.29	4.29	4.03	8.04	9.52	11.01	12.49	13.98	15.46	16.95					
	18	17.87	4.31	4.15	7.45	8.82	10.19	11.56	12.93	14.30	15.67	17.04				
	19	18.45	4.33	4.26	6.86	8.12	9.37	10.63	11.89	13.14	14.40	15.66	16.91	18.17		
	20	19.04	4.35	4.38	6.27	7.41	8.55	9.70	10.84	11.98	13.12	14.27	15.41	16.55	17.70	
	21	19.62	4.37	4.49		6.71	7.74	8.77	9.79	10.82	11.85	12.88	13.91	14.94	15.96	
	22	20.20	4.38	4.61			6.92	7.83	8.75	9.66	10.58	11.49	12.41	13.32	14.23	
30	16	16.22	4.63	3.50	8.17	9.80	11.42	13.05	14.68							
	17	16.78	4.65	3.61	7.61	9.13	10.64	12.15	13.66	15.17	16.68					
	18	17.35	4.67	3.71	7.06	8.45	9.85	11.24	12.64	14.03	15.43	16.82				
	19	17.92	4.69	3.82	6.50	7.78	9.06	10.34	11.62	12.89	14.17	15.45	16.73			
	20	18.48	4.71	3.92	5.95	7.11	8.27	9.43	10.60	11.76	12.92	14.08	15.25	16.41	17.57	
	21	19.05	4.73	4.03		6.44	7.48	8.53	9.57	10.62	11.67	12.71	13.76	14.81	15.85	
	22	19.62	4.75	4.13			6.69	7.62	8.55	9.48	10.41	11.34	12.27	13.20	14.13	
35	16	15.73	4.99	3.15	7.73	9.38	11.03	12.68	14.34							
	17	16.28	5.01	3.25	7.20	8.74	10.27	11.81	13.34	14.87						
	18	16.83	5.03	3.34	6.68	8.10	9.51	10.93	12.34	13.76	15.18	16.59				
	19	17.38	5.05	3.44	6.15	7.45	8.75	10.05	11.35	12.65	13.94	15.24	16.54			
	20	17.93	5.08	3.53	5.63	6.81	7.99	9.17	10.35	11.53	12.71	13.89	15.07	16.25	17.43	
	21	18.48	5.10	3.62		6.17	7.23	8.29	9.35	10.42	11.48	12.54	13.60	14.67	15.73	
	22	19.03	5.12	3.72			6.47	7.41	8.36	9.30	10.25	11.19	12.13	13.08	14.02	
40	16	15.07	5.48	2.75	7.24	8.90	10.56	12.22	13.88							
	17	15.60	5.51	2.83	6.75	8.29	9.83	11.37	12.91	14.45						
	18	16.12	5.53	2.91	6.26	7.68	9.10	10.53	11.95	13.37	14.79					
	19	16.65	5.56	3.00	5.77	7.07	8.38	9.68	10.99	12.29	13.59	14.90	16.20			
	20	17.17	5.58	3.08	5.28	6.47	7.65	8.84	10.02	11.21	12.39	13.58	14.76	15.95	17.13	
	21	17.70	5.61	3.16		5.86	6.92	7.99	9.06	10.12	11.19	12.26	13.33	14.39	15.46	
	22	18.23	5.63	3.24			6.20	7.15	8.09	9.04	9.99	10.94	11.89	12.84	13.78	
45	16	14.39	6.04	2.38	6.76	8.42	10.08	11.75	13.41							
	17	14.89	6.06	2.46	6.31	7.85	9.39	10.93	12.48	14.02						
	18	15.39	6.09	2.53	5.85	7.28	8.70	10.12	11.55	12.97	14.39					
	19	15.89	6.12	2.60	5.40	6.70	8.01	9.31	10.62	11.92	13.23	14.53	15.84			
	20	16.39	6.14	2.67	4.94	6.13	7.31	8.50	9.69	10.87	12.06	13.25	14.43	15.62		
	21	16.89	6.17	2.74		5.55	6.62	7.69	8.76	9.82	10.89	11.96	13.03	14.10	15.16	
	22	17.39	6.20	2.81			5.93	6.88	7.83	8.78	9.72	10.67	11.62	12.57	13.52	
50	16	13.92	6.61	2.10	6.48	8.15	9.82	11.49	13.16							
	17	14.40	6.64	2.17	6.04	7.59	9.14	10.69	12.24	13.80						
	18	14.89	6.67	2.23	5.61	7.04	8.47	9.90	11.33	12.76	14.20					
	19	15.37	6.70	2.29	5.17	6.48	7.80	9.11	10.42	11.73	13.04	14.36				
	20	15.85	6.73	2.36	4.74	5.93	7.12	8.31	9.51	10.70	11.89	13.09	14.28	15.47		
	21	16.34	6.76	2.42		5.37	6.45	7.52	8.60	9.67	10.74	11.82	12.89	13.96	15.04	
	22	16.82	6.79	2.48			5.77	6.73	7.68	8.64	9.59	10.55	11.50	12.46	13.41	
														Indoor Fan Power (kW)	0.38	



**CAPACITY SELECTION DATA**

**CRV17BT / EVV17BS**

**COOLING PERFORMANCE - 75%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW												
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C												
					20	21	22	23	24	25	26	27	28	29	30		
25	16	13.52	3.04	4.45	7.53	8.92	10.31	11.70	13.08								
	17	13.99	3.05	4.59	7.02	8.31	9.60	10.89	12.18	13.46							
	18	14.46	3.06	4.72	6.51	7.70	8.89	10.08	11.27	12.46	13.65						
	19	14.93	3.08	4.85	6.00	7.09	8.18	9.27	10.36	11.45	12.54	13.63	14.72				
	20	15.40	3.09	4.98	5.49	6.48	7.47	8.46	9.45	10.45	11.44	12.43	13.42	14.41			
	21	15.87	3.10	5.11		5.87	6.76	7.66	8.55	9.44	10.33	11.22	12.12	13.01	13.90		
	22	16.34	3.12	5.24			6.05	6.85	7.64	8.43	9.23	10.02	10.81	11.61	12.40		
30	16	13.13	3.29	3.99	7.14	8.55	9.96	11.37	12.79								
	17	13.59	3.31	4.11	6.66	7.97	9.28	10.59	11.90	13.21							
	18	14.04	3.32	4.23	6.17	7.38	8.59	9.80	11.01	12.22	13.43						
	19	14.50	3.33	4.35	5.69	6.80	7.91	9.02	10.13	11.24	12.35	13.46					
	20	14.95	3.35	4.46	5.21	6.22	7.23	8.23	9.24	10.25	11.26	12.27	13.28	14.29			
	21	15.41	3.36	4.58		5.63	6.54	7.45	8.36	9.26	10.17	11.08	11.99	12.90	13.80		
	22	15.87	3.38	4.70			5.86	6.66	7.47	8.28	9.08	9.89	10.70	11.51	12.31		
35	16	12.74	3.55	3.59	6.76	8.19	9.62	11.06	12.49								
	17	13.18	3.56	3.70	6.30	7.63	8.96	10.29	11.62	12.96							
	18	13.62	3.58	3.81	5.85	7.07	8.30	9.53	10.76	11.99	13.22						
	19	14.07	3.59	3.91	5.39	6.52	7.64	8.77	9.90	11.02	12.15	13.27					
	20	14.51	3.61	4.02	4.93	5.96	6.98	8.01	9.03	10.05	11.08	12.10	13.13	14.15			
	21	14.95	3.63	4.12		5.40	6.32	7.24	8.17	9.09	10.01	10.93	11.85	12.77	13.70		
	22	15.39	3.64	4.23			5.66	6.48	7.30	8.12	8.94	9.76	10.58	11.40	12.22		
40	16	12.21	3.90	3.13	6.33	7.77	9.21	10.65	12.09								
	17	12.63	3.92	3.23	5.91	7.24	8.58	9.92	11.25	12.59							
	18	13.06	3.93	3.32	5.48	6.72	7.95	9.18	10.42	11.65	12.89						
	19	13.48	3.95	3.41	5.06	6.19	7.32	8.45	9.58	10.71	11.84	12.97					
	20	13.90	3.97	3.50	4.63	5.66	6.69	7.72	8.75	9.77	10.80	11.83	12.86	13.89			
	21	14.32	3.99	3.59		5.13	6.06	6.98	7.91	8.83	9.76	10.69	11.61	12.54	13.46		
	22	14.75	4.00	3.68			5.43	6.25	7.07	7.90	8.72	9.54	10.36	11.19	12.01		
45	16	11.66	4.29	2.72	5.92	7.36	8.80	10.24									
	17	12.06	4.31	2.80	5.52	6.86	8.20	9.54	10.88								
	18	12.46	4.33	2.88	5.13	6.36	7.60	8.83	10.07	11.30							
	19	12.87	4.35	2.96	4.73	5.86	7.00	8.13	9.26	10.39	11.53	12.66					
	20	13.27	4.37	3.04	4.34	5.37	6.40	7.42	8.45	9.48	10.51	11.54	12.57				
	21	13.67	4.39	3.12	0.00	4.87	5.79	6.72	7.65	8.57	9.50	10.43	11.35	12.28	13.21		
	22	14.08	4.41	3.19	0.00	0.00	5.19	6.02	6.84	7.66	8.49	9.31	10.13	10.96	11.78		
50	16	11.28	4.70	2.40	5.67	7.12	8.57	10.02									
	17	11.67	4.72	2.47	5.29	6.64	7.98	9.33	10.67								
	18	12.06	4.74	2.54	4.91	6.16	7.40	8.64	9.88	11.12							
	19	12.45	4.76	2.61	4.54	5.68	6.81	7.95	9.09	10.23	11.37						
	20	12.84	4.79	2.68	4.16	5.19	6.23	7.26	8.30	9.33	10.37	11.40	12.44				
	21	13.23	4.81	2.75		4.71	5.64	6.58	7.51	8.44	9.37	10.30	11.23	12.17	13.10		
	22	13.62	4.83	2.82			5.06	5.89	6.72	7.54	8.37	9.20	10.03	10.86	11.68		
Indoor Fan Power (kW)															0.38		



**CAPACITY SELECTION DATA**

**CRV17BT / EVV17BS**

**COOLING PERFORMANCE - 50%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW													
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C													
					20	21	22	23	24	25	26	27	28	29	30			
25	16	9.58	1.98	4.84	6.09	7.19	8.30	9.41										
	17	9.91	1.99	4.98	5.68	6.71	7.74	8.76	9.79									
	18	10.24	2.00	5.12	5.27	6.22	7.17	8.12	9.07	10.02								
	19	10.56	2.01	5.27	4.86	5.74	6.61	7.48	8.35	9.22	10.09							
	20	10.89	2.02	5.41	4.46	5.25	6.04	6.83	7.62	8.41	9.20	9.99	10.79					
	21	11.22	2.02	5.54		4.76	5.47	6.19	6.90	7.61	8.32	9.03	9.75	10.46	11.17			
	22	11.55	2.03	5.68			4.91	5.54	6.17	6.81	7.44	8.07	8.71	9.34	9.97			
30	16	9.30	2.15	4.33	5.77	6.90	8.03	9.15										
	17	9.62	2.16	4.46	5.39	6.43	7.48	8.53	9.57									
	18	9.94	2.17	4.59	5.00	5.97	6.93	7.90	8.87	9.83								
	19	10.26	2.18	4.72	4.62	5.50	6.39	7.27	8.16	9.04	9.93							
	20	10.58	2.18	4.84	4.23	5.04	5.84	6.65	7.45	8.26	9.06	9.87						
	21	10.90	2.19	4.97		4.57	5.30	6.02	6.75	7.47	8.19	8.92	9.64	10.37				
	22	11.22	2.20	5.09			4.75	5.39	6.04	6.68	7.33	7.97	8.61	9.26	9.90			
35	16	9.03	2.31	3.90	5.47	6.61	7.76	8.90										
	17	9.34	2.32	4.02	5.10	6.17	7.23	8.29										
	18	9.65	2.33	4.14	4.74	5.72	6.70	7.68	8.66	9.64								
	19	9.96	2.34	4.25	4.38	5.28	6.18	7.07	7.97	8.87	9.77							
	20	10.27	2.35	4.36	4.01	4.83	5.65	6.47	7.28	8.10	8.92	9.73						
	21	10.58	2.36	4.47	0.00	4.39	5.12	5.86	6.59	7.33	8.06	8.80	9.53	10.27				
	22	10.89	2.37	4.58	0.00	0.00	4.60	5.25	5.90	6.56	7.21	7.86	8.52	9.17	9.83			
40	16	8.66	2.54	3.40	5.13	6.28	7.43	8.58										
	17	8.96	2.55	3.51	4.79	5.86	6.92	7.99										
	18	9.25	2.57	3.61	4.45	5.44	6.42	7.40	8.39									
	19	9.55	2.58	3.70	4.11	5.01	5.92	6.82	7.72	8.62	9.53							
	20	9.84	2.59	3.80	3.77	4.59	5.41	6.23	7.05	7.88	8.70	9.52						
	21	10.14	2.60	3.90		4.17	4.91	5.65	6.39	7.13	7.86	8.60	9.34	10.08				
	22	10.44	2.61	4.00			4.41	5.06	5.72	6.38	7.03	7.69	8.35	9.00	9.66			
45	16	8.27	2.80	2.96	4.80	5.95	7.10	8.25										
	17	8.55	2.81	3.04	4.48	5.55	6.62	7.69										
	18	8.84	2.82	3.13	4.17	5.15	6.14	7.12	8.11									
	19	9.12	2.84	3.21	3.85	4.76	5.66	6.56	7.47	8.37								
	20	9.40	2.85	3.30	3.54	4.36	5.18	6.00	6.82	7.64	8.47	9.29						
	21	9.68	2.86	3.38		3.96	4.70	5.44	6.18	6.92	7.66	8.40	9.14					
	22	9.97	2.87	3.47			4.22	4.88	5.53	6.19	6.85	7.51	8.16	8.82	9.48			
50	16	8.01	3.07	2.61	4.60	5.76	6.91											
	17	8.28	3.08	2.69	4.30	5.37	6.45	7.52										
	18	8.55	3.09	2.76	4.00	4.99	5.98	6.97	7.96									
	19	8.83	3.11	2.84	3.70	4.61	5.51	6.42	7.33	8.24								
	20	9.10	3.12	2.92	3.40	4.22	5.05	5.87	6.70	7.52	8.35							
	21	9.37	3.13	2.99		3.84	4.58	5.32	6.07	6.81	7.55	8.30	9.04					
	22	9.65	3.15	3.06			4.11	4.78	5.44	6.10	6.76	7.42	8.08	8.74	9.40			
														Indoor Fan Power (kW)	0.38			



**CAPACITY SELECTION DATA**

**CRV17BT / EVV17BS**

**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	13.08	10.82	13.02	10.77	12.95	10.71	12.89	10.66	12.83	10.61
-8	14.13	11.32	14.05	11.26	13.98	11.20	13.90	11.14	13.83	11.08
-6	15.18	11.83	15.09	11.76	15.01	11.69	14.92	11.62	14.82	11.54
-4	16.25	12.58	16.14	12.50	16.03	12.42	15.93	12.34	15.83	12.26
-2	17.29	13.57	17.18	13.48	17.06	13.39	16.94	13.29	16.82	13.20
0	18.35	14.56	18.22	14.46	18.09	14.36	17.96	14.25	17.82	14.14
2	18.53	15.47	18.39	15.36	18.25	15.24	18.10	15.12	17.96	15.00
4	17.82	16.29	17.67	16.16	17.53	16.03	17.39	15.89	17.23	15.75
6	17.10	17.10	16.96	16.96	16.82	16.82	16.72	16.72	16.56	16.56
8	18.00	18.00	17.89	17.74	17.74	17.74	17.58	17.58	17.41	17.41
10	18.99	18.99	18.83	18.65	18.65	18.65	18.48	18.48	18.30	18.30
12	19.98	19.98	19.79	19.61	19.61	19.61	19.41	19.41	19.22	19.22
14	21.01	21.01	20.81	20.59	20.59	20.59	20.38	20.38	20.17	20.17
16	22.07	22.07	21.85	21.62	21.62	21.62	21.38	21.38	21.16	21.16
18	23.17	23.17	22.93	22.69	22.69	22.69	22.44	22.44	22.18	22.18

**AIRFLOW CORRECTION MULTIPLIER**

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	712	756.5	801	845.5	<b>890</b>	934.5	979	1023.5	1060
TOTAL COOLING	0.965	0.982	0.989	0.997	<b>1.000</b>	1.004	1.009	1.015	1.02
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:**

1. No allowance has been made for the effect of indoor fan motor.
2. 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**

**CRV19BT / EVV19BS**

**COOLING PERFORMANCE - 100%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW											
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C											
					20	21	22	23	24	25	26	27	28	29	30	
25	16	18.20	4.69	3.88	9.03	10.66	12.29	13.91	15.54	17.17						
	17	18.86	4.71	4.01	8.42	9.93	11.45	12.96	14.47	15.99	17.50					
	18	19.52	4.72	4.13	7.81	9.21	10.61	12.01	13.41	14.81	16.20	17.60	19.00			
	19	20.18	4.74	4.25	7.20	8.49	9.77	11.05	12.34	13.62	14.91	16.19	17.48	18.76	20.04	
	20	20.83	4.76	4.38	6.59	7.76	8.93	10.10	11.27	12.44	13.61	14.78	15.95	17.12	18.29	
	21	21.49	4.78	4.50		7.04	8.09	9.15	10.20	11.26	12.31	13.37	14.42	15.48	16.53	
	22	22.15	4.79	4.62			7.25	8.19	9.13	10.07	11.02	11.96	12.90	13.84	14.78	
30	16	17.67	5.08	3.48	8.60	10.25	11.89	13.54	15.19	16.83						
	17	18.31	5.10	3.59	8.02	9.55	11.08	12.61	14.14	15.68	17.21					
	18	18.95	5.12	3.70	7.44	8.86	10.27	11.69	13.10	14.52	15.93	17.35	18.76			
	19	19.59	5.14	3.81	6.86	8.16	9.46	10.76	12.06	13.36	14.66	15.96	17.25	18.55		
	20	20.23	5.16	3.92	6.28	7.47	8.65	9.83	11.02	12.20	13.38	14.56	15.75	16.93	18.11	
	21	20.86	5.18	4.03		6.77	7.84	8.90	9.97	11.04	12.11	13.17	14.24	15.31	16.38	
	22	21.50	5.20	4.14			7.03	7.98	8.93	9.88	10.83	11.78	12.74	13.69	14.64	
35	16	17.14	5.48	3.13	8.18	9.85	11.51	13.17	14.83	16.49						
	17	17.76	5.50	3.23	7.63	9.18	10.72	12.27	13.81	15.36	16.91					
	18	18.38	5.52	3.33	7.08	8.51	9.94	11.37	12.80	14.22	15.65	17.08				
	19	19.00	5.54	3.43	6.53	7.84	9.15	10.47	11.78	13.09	14.40	15.71	17.02			
	20	19.62	5.56	3.53	5.98	7.18	8.37	9.57	10.76	11.95	13.15	14.34	15.54	16.73	17.93	
	21	20.24	5.58	3.63		6.51	7.59	8.66	9.74	10.82	11.90	12.98	14.05	15.13	16.21	
	22	20.86	5.60	3.72			6.80	7.76	8.72	9.68	10.65	11.61	12.57	13.53	14.49	
40	16	16.42	6.02	2.73	7.71	9.37	11.03	12.69	14.36	16.02						
	17	17.01	6.05	2.81	7.19	8.74	10.28	11.83	13.37	14.91	16.46					
	18	17.61	6.07	2.90	6.68	8.10	9.53	10.96	12.39	13.81	15.24	16.67				
	19	18.20	6.09	2.99	6.16	7.47	8.78	10.09	11.40	12.71	14.02	15.33	16.64	17.95		
	20	18.79	6.11	3.07	5.64	6.84	8.03	9.22	10.42	11.61	12.80	14.00	15.19	16.39	17.58	
	21	19.38	6.14	3.16		6.20	7.28	8.36	9.43	10.51	11.59	12.66	13.74	14.82	15.89	
	22	19.97	6.16	3.24			6.53	7.49	8.45	9.41	10.37	11.33	12.29	13.25	14.21	
45	16	15.67	6.63	2.36	7.25	8.90	10.56	12.21	13.87	15.52						
	17	16.24	6.65	2.44	6.76	8.30	9.84	11.38	12.92	14.46	15.99					
	18	16.80	6.68	2.52	6.28	7.70	9.12	10.55	11.97	13.39	14.81	16.23				
	19	17.36	6.70	2.59	5.79	7.10	8.41	9.71	11.02	12.32	13.63	14.93	16.24			
	20	17.93	6.73	2.66	5.31	6.50	7.69	8.88	10.07	11.26	12.45	13.63	14.82	16.01	17.20	
	21	18.49	6.75	2.74		5.90	6.97	8.04	9.12	10.19	11.26	12.34	13.41	14.48	15.55	
	22	19.06	6.78	2.81			6.25	7.21	8.17	9.12	10.08	11.04	11.99	12.95	13.91	
50	16	13.68	6.21	2.20	6.72	8.35	9.97	11.60	13.22							
	17	13.93	6.12	2.28	6.22	7.72	9.21	10.71	12.20	13.70						
	18	14.17	6.03	2.35	5.72	7.08	8.45	9.82	11.19	12.55	13.92					
	19	14.42	5.95	2.42	5.21	6.45	7.69	8.93	10.17	11.41	12.65	13.89				
	20	14.66	5.86	2.50	4.71	5.82	6.93	8.04	9.15	10.26	11.37	12.48	13.60			
	21	14.91	5.77	2.58		5.19	6.17	7.15	8.13	9.12	10.10	11.08	12.06	13.05	14.03	
	22	15.15	5.68	2.67			5.41	6.26	7.12	7.97	8.82	9.68	10.53	11.39	12.24	
														Indoor Fan Power (kW)	0.36	



**CAPACITY SELECTION DATA**

**CRV19BT / EVV19BS**

**COOLING PERFORMANCE - 75%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW												
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C												
					20	21	22	23	24	25	26	27	28	29	30		
25	16	14.73	3.33	4.42	7.88	9.30	10.71	12.12	13.53								
	17	15.26	3.35	4.56	7.35	8.67	9.98	11.29	12.61	13.92	15.23						
	18	15.78	3.36	4.70	6.82	8.04	9.25	10.47	11.68	12.89	14.11	15.32					
	19	16.31	3.37	4.84	6.30	7.41	8.52	9.64	10.75	11.87	12.98	14.10	15.21				
	20	16.84	3.38	4.98	5.77	6.78	7.80	8.81	9.83	10.84	11.86	12.87	13.89	14.90	15.92		
	21	17.37	3.40	5.12		6.15	7.07	7.98	8.90	9.81	10.73	11.65	12.56	13.48	14.39		
	22	17.90	3.41	5.25			6.34	7.16	7.97	8.79	9.60	10.42	11.24	12.05	12.87		
30	16	14.30	3.61	3.96	7.51	8.94	10.37	11.80	13.22								
	17	14.81	3.63	4.08	7.01	8.34	9.66	10.99	12.32	13.65							
	18	15.33	3.64	4.21	6.50	7.73	8.96	10.19	11.41	12.64	13.87	15.10					
	19	15.84	3.65	4.33	6.00	7.13	8.26	9.38	10.51	11.64	12.76	13.89	15.02				
	20	16.35	3.67	4.46	5.50	6.52	7.55	8.58	9.60	10.63	11.66	12.68	13.71	14.74	15.76		
	21	16.87	3.68	4.58		5.92	6.85	7.77	8.70	9.63	10.55	11.48	12.40	13.33	14.26		
	22	17.38	3.70	4.70			6.14	6.97	7.79	8.62	9.45	10.27	11.10	11.92	12.75		
35	16	13.87	3.90	3.56	7.15	8.59	10.03	11.47	12.92	0.00							
	17	14.37	3.91	3.68	6.67	8.01	9.35	10.69	12.03	13.37	0.00						
	18	14.87	3.92	3.79	6.19	7.43	8.67	9.91	11.15	12.39	13.63	14.87	0.00				
	19	15.37	3.94	3.90	5.71	6.85	7.99	9.13	10.27	11.40	12.54	13.68	14.82	0.00			
	20	15.87	3.95	4.01	5.24	6.27	7.31	8.35	9.38	10.42	11.46	12.49	13.53	14.57	15.60		
	21	16.36	3.97	4.12		5.69	6.63	7.56	8.50	9.43	10.37	11.30	12.24	13.17	14.11		
	22	16.86	3.98	4.23			5.95	6.78	7.62	8.45	9.28	10.12	10.95	11.78	12.62		
40	16	13.29	4.28	3.10	6.74	8.18	9.62	11.06	12.50								
	17	13.77	4.30	3.20	6.29	7.63	8.97	10.31	11.65	12.99							
	18	14.25	4.31	3.30	5.84	7.08	8.32	9.56	10.79	12.03	13.27						
	19	14.72	4.33	3.40	5.39	6.53	7.67	8.80	9.94	11.08	12.21	13.35	14.49				
	20	15.20	4.35	3.50	4.94	5.98	7.01	8.05	9.09	10.12	11.16	12.19	13.23	14.26			
	21	15.68	4.36	3.59		5.43	6.36	7.30	8.23	9.17	10.10	11.03	11.97	12.90	13.84		
	22	16.15	4.38	3.69			5.71	6.54	7.38	8.21	9.04	9.88	10.71	11.54	12.37		
45	16	12.69	4.71	2.69	6.34	7.77	9.21	10.64	12.08								
	17	13.14	4.73	2.78	5.92	7.25	8.59	9.92	11.25	12.59							
	18	13.60	4.75	2.86	5.50	6.73	7.96	9.20	10.43	11.66	12.90						
	19	14.05	4.77	2.95	5.07	6.21	7.34	8.47	9.61	10.74	11.87	13.00					
	20	14.51	4.78	3.03	4.65	5.69	6.72	7.75	8.78	9.81	10.85	11.88	12.91	13.94			
	21	14.96	4.80	3.12		5.16	6.10	7.03	7.96	8.89	9.82	10.75	11.68	12.61	13.54		
	22	15.41	4.82	3.20			5.47	6.30	7.13	7.96	8.79	9.62	10.45	11.28	12.11		
50	16	11.08	4.41	2.51	5.88	7.29	8.70	10.11									
	17	11.28	4.35	2.59	5.44	6.74	8.04	9.34	10.64								
	18	11.48	4.29	2.68	5.01	6.19	7.38	8.57	9.75	10.94							
	19	11.68	4.23	2.76	4.57	5.64	6.72	7.80	8.87	9.95	11.02						
	20	11.88	4.16	2.85	4.13	5.10	6.06	7.02	7.99	8.95	9.92	10.88	11.84				
	21	12.07	4.10	2.94		4.55	5.40	6.25	7.10	7.96	8.81	9.66	10.51	11.37			
	22	12.27	4.04	3.04			4.74	5.48	6.22	6.96	7.70	8.44	9.18	9.93	10.67		
Indoor Fan Power (kW)																0.36	



**CAPACITY SELECTION DATA**

**CRV19BT / EVV19BS**

**COOLING PERFORMANCE - 50%**

AIR ENTERING		TOTAL CAPACITY KW	TOTAL INPUT KW	TOTAL EER KW	TOTAL SENSIBLE CAPACITY - KW													
OUTDOOR DB - °C	INDOOR WB - °C				AT DB TEMPERATURE ONTO INDOOR COIL - °C													
					20	21	22	23	24	25	26	27	28	29	30			
25	16	10.41	2.17	4.79	6.36	7.49	8.62	9.74										
	17	10.78	2.18	4.94	5.94	6.99	8.04	9.08	10.13									
	18	11.15	2.19	5.09	5.52	6.49	7.46	8.42	9.39	10.36								
	19	11.53	2.20	5.24	5.10	5.99	6.87	7.76	8.65	9.54	10.43	11.32						
	20	11.90	2.21	5.39	4.67	5.48	6.29	7.10	7.91	8.72	9.53	10.34	11.15					
	21	12.27	2.21	5.54		4.98	5.71	6.44	7.17	7.90	8.64	9.37	10.10	10.83	11.56			
	22	12.64	2.22	5.68			5.13	5.78	6.43	7.09	7.74	8.39	9.04	9.69	10.34			
30	16	10.12	2.36	4.29	6.07	7.21	8.35	9.49										
	17	10.47	2.37	4.43	5.66	6.72	7.78	8.84	9.90									
	18	10.83	2.37	4.56	5.26	6.24	7.22	8.20	9.18	10.16								
	19	11.19	2.38	4.70	4.86	5.76	6.66	7.56	8.46	9.36	10.26	11.16						
	20	11.55	2.39	4.83	4.46	5.28	6.10	6.92	7.74	8.56	9.38	10.19	11.01					
	21	11.91	2.40	4.96		4.80	5.54	6.28	7.01	7.75	8.49	9.23	9.97	10.71	11.45			
	22	12.27	2.41	5.09			4.98	5.63	6.29	6.95	7.61	8.27	8.93	9.59	10.25			
35	16	9.82	2.54	3.86	5.78	6.93	8.08	9.23										
	17	10.17	2.55	3.99	5.39	6.46	7.53	8.60										
	18	10.51	2.56	4.11	5.01	6.00	6.99	7.98	8.97	9.96								
	19	10.86	2.57	4.23	4.63	5.54	6.45	7.36	8.27	9.17	10.08							
	20	11.21	2.58	4.35	4.25	5.08	5.91	6.73	7.56	8.39	9.21	10.04						
	21	11.56	2.59	4.47		4.62	5.36	6.11	6.86	7.60	8.35	9.09	9.84	10.59				
	22	11.91	2.60	4.59			4.82	5.49	6.15	6.82	7.48	8.15	8.81	9.48	10.14			
40	16	9.41	2.79	3.37	5.45	6.60	7.75	8.90										
	17	9.74	2.80	3.48	5.09	6.16	7.23	8.30	9.37									
	18	10.08	2.81	3.58	4.73	5.72	6.71	7.70	8.69	9.67								
	19	10.41	2.82	3.69	4.38	5.28	6.19	7.10	8.00	8.91	9.82							
	20	10.74	2.83	3.79	4.02	4.84	5.67	6.50	7.32	8.15	8.98	9.80	10.63					
	21	11.08	2.84	3.89		4.40	5.15	5.90	6.64	7.39	8.13	8.88	9.62	10.37				
	22	11.41	2.86	4.00			4.63	5.29	5.96	6.62	7.29	7.95	8.62	9.28	9.95			
45	16	8.99	3.07	2.92	5.13	6.27	7.42	8.57										
	17	9.31	3.09	3.02	4.79	5.86	6.92	7.99	9.05									
	18	9.62	3.10	3.11	4.46	5.44	6.43	7.41	8.40	9.38								
	19	9.94	3.11	3.20	4.12	5.03	5.93	6.83	7.74	8.64	9.55							
	20	10.26	3.12	3.29	3.79	4.61	5.43	6.26	7.08	7.90	8.73	9.55						
	21	10.58	3.13	3.38		4.19	4.94	5.68	6.42	7.17	7.91	8.65	9.39	10.14				
	22	10.90	3.14	3.47			4.44	5.10	5.76	6.43	7.09	7.75	8.41	9.08	9.74			
50	16	7.87	2.88	2.73	4.76	5.89	7.01											
	17	8.00	2.84	2.82	4.42	5.45	6.49	7.52										
	18	8.14	2.80	2.91	4.07	5.01	5.96	6.91	7.86									
	19	8.28	2.76	3.00	3.72	4.58	5.44	6.29	7.15	8.01								
	20	8.42	2.72	3.10	3.37	4.14	4.91	5.68	6.45	7.22	7.99							
	21	8.56	2.68	3.20		3.70	4.38	5.06	5.74	6.42	7.10	7.78	8.46					
	22	8.70	2.64	3.30			3.86	4.45	5.04	5.63	6.22	6.81	7.40	7.99	8.58			
Indoor Fan Power (kW)																0.36		





**CAPACITY SELECTION DATA**

**CRV19BT / EVV19BS**

**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	12.33	11.98	12.27	11.93	12.21	11.86	12.16	11.81	12.10	11.76
-8	13.40	12.50	13.34	12.44	13.26	12.37	13.19	12.30	13.12	12.24
-6	14.48	13.03	14.40	12.95	14.31	12.87	14.23	12.80	14.13	12.71
-4	15.57	13.56	15.46	13.47	15.36	13.38	15.27	13.30	15.16	13.21
-2	16.63	14.07	16.52	13.98	16.41	13.88	16.29	13.78	16.18	13.69
0	17.71	14.59	17.59	14.49	17.46	14.39	17.33	14.28	17.20	14.18
2	18.40	15.68	18.26	15.56	18.12	15.44	17.97	15.32	17.83	15.20
4	18.68	17.32	18.52	17.18	18.38	17.04	18.23	16.90	18.06	16.75
6	18.95	18.95	18.80	18.80	18.64	18.64	18.53	18.53	18.36	18.36
8	19.94	19.94	19.83	19.83	19.66	19.66	19.48	19.48	19.29	19.29
10	21.04	21.04	20.86	20.86	20.66	20.66	20.47	20.47	20.27	20.27
12	22.13	22.13	21.92	21.92	21.72	21.72	21.50	21.50	21.29	21.29
14	23.27	23.27	23.04	23.04	22.81	22.81	22.58	22.58	22.34	22.34
16	24.44	24.44	24.19	24.19	23.94	23.94	23.68	23.68	23.44	23.44
18	25.65	25.65	25.39	25.39	25.12	25.12	24.85	24.85	24.56	24.56

**AIRFLOW CORRECTION MULTIPLIER**

% VARIATION	-20%	-15%	-10%	-5%	Nominal	5%	10%	15%	20%
INDOOR AIRFLOW (l/s)	850	893	945	998	<b>1000</b>	1103	1155	1208	1250
TOTAL COOLING	0.968	0.98	0.99	0.997	<b>1.000</b>	1.004	1.008	1.012	1.018
SENSIBLE COOLING	0.883	0.914	0.94	0.972	<b>1.000</b>	1.023	1.045	1.073	1.094
HEATING FACTOR	0.968	0.972	0.981	0.99	<b>1.000</b>	1.01	1.02	1.031	1.04

**NOTES:**

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

**PIPE LENGTH CORRECTION MULTIPLIER**

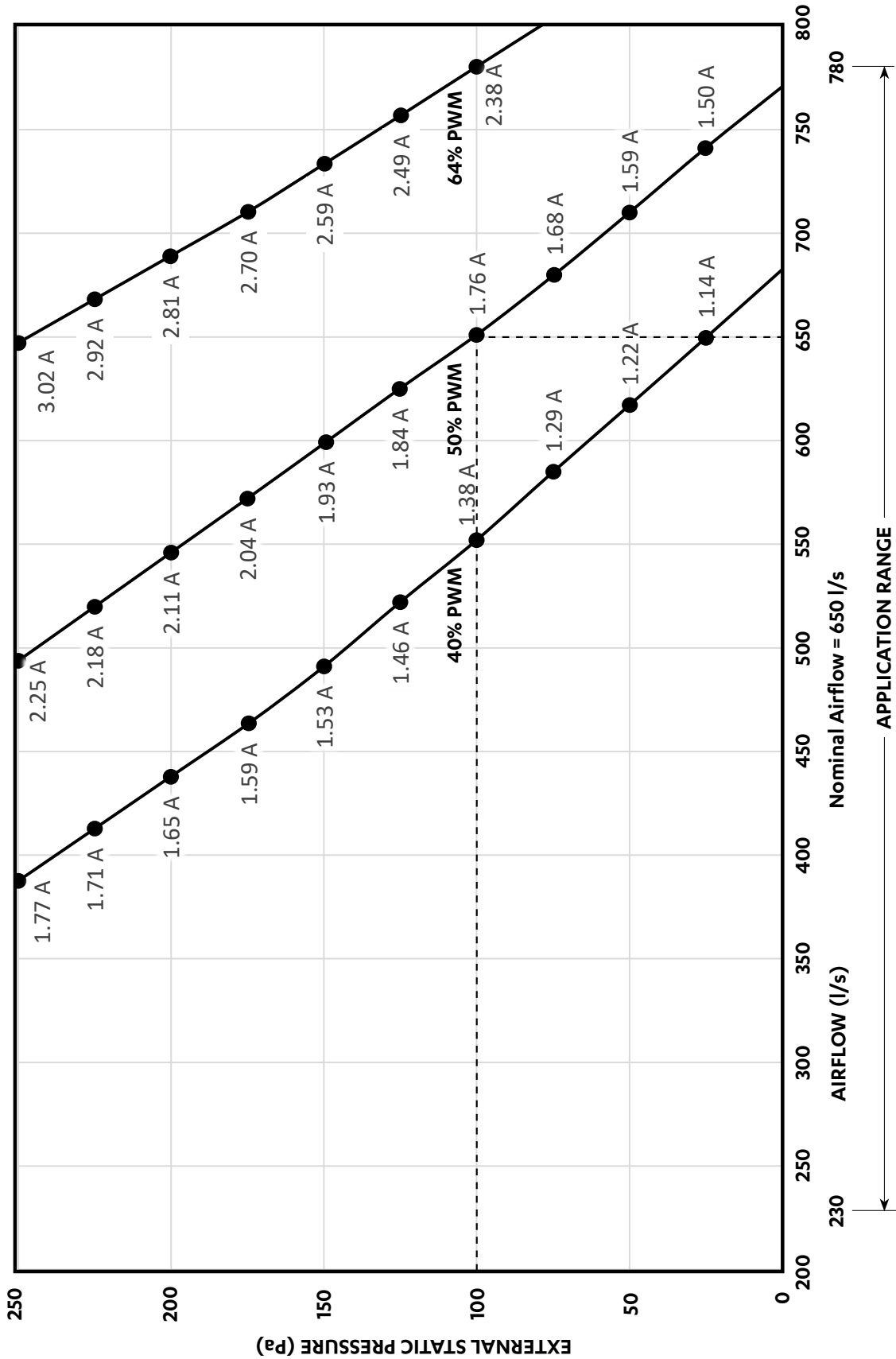
	5m	10m	20m	30m	40m	50m
COOLING	<b>1.000</b>	0.991	0.974	0.959	0.941	0.924
HEATING	<b>1.000</b>	1.000	1.000	1.000	1.000	1.000

**NOTE:** Correction multipliers are based on horizontal pipe runs.



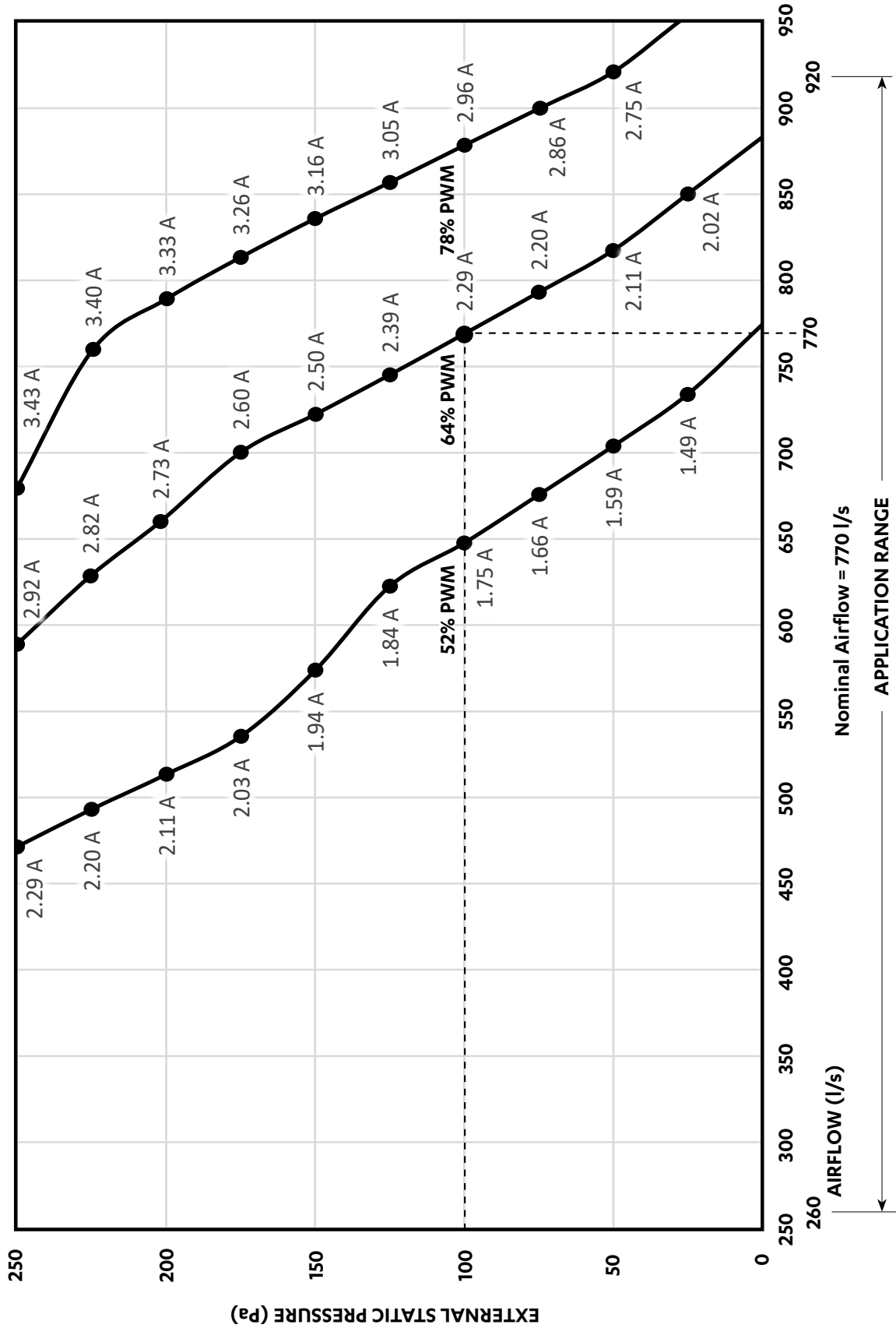
THREE SPEED FAN CURVE

EVV13BS



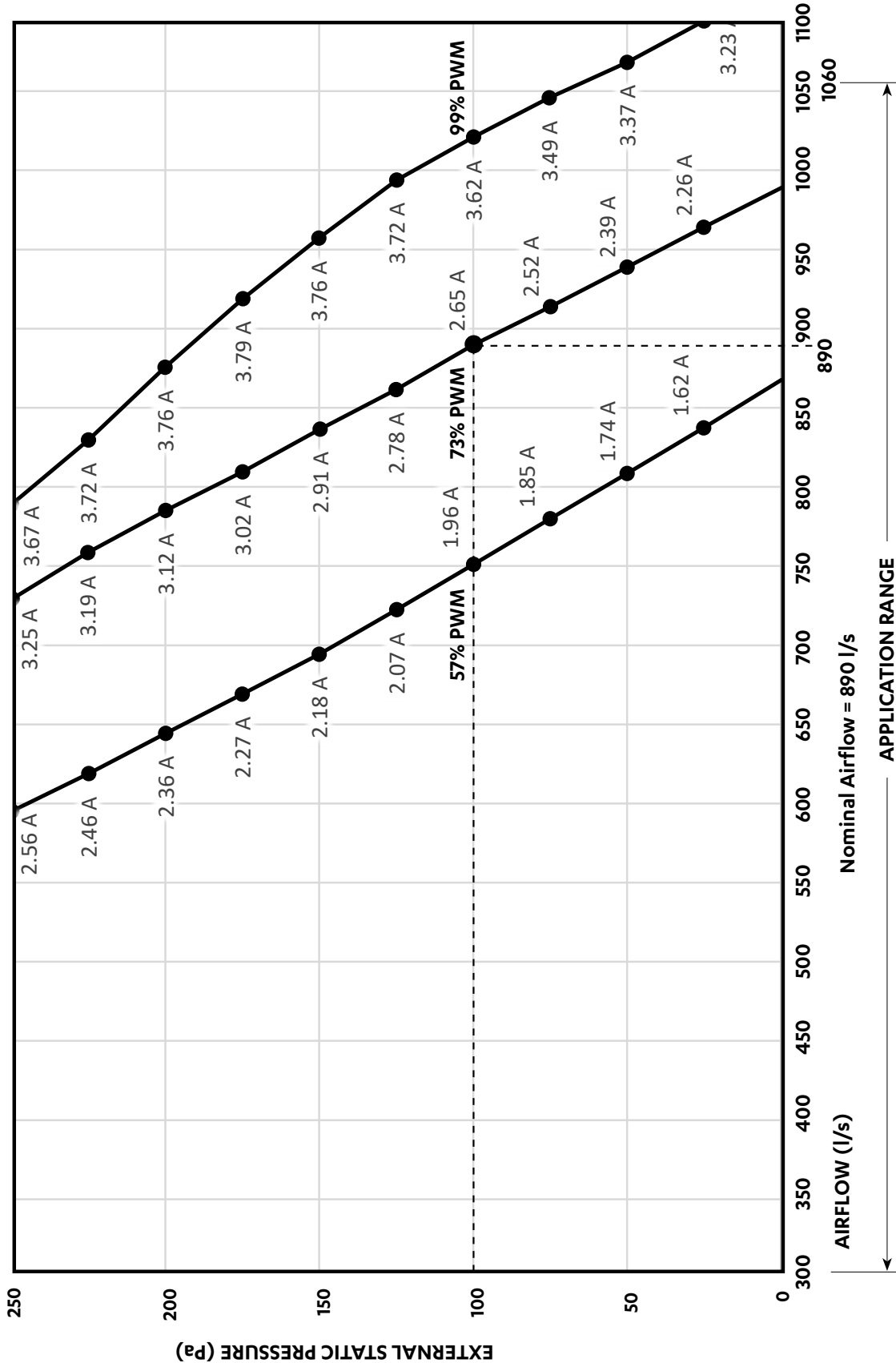
THREE SPEED FAN CURVE

EVV15BS



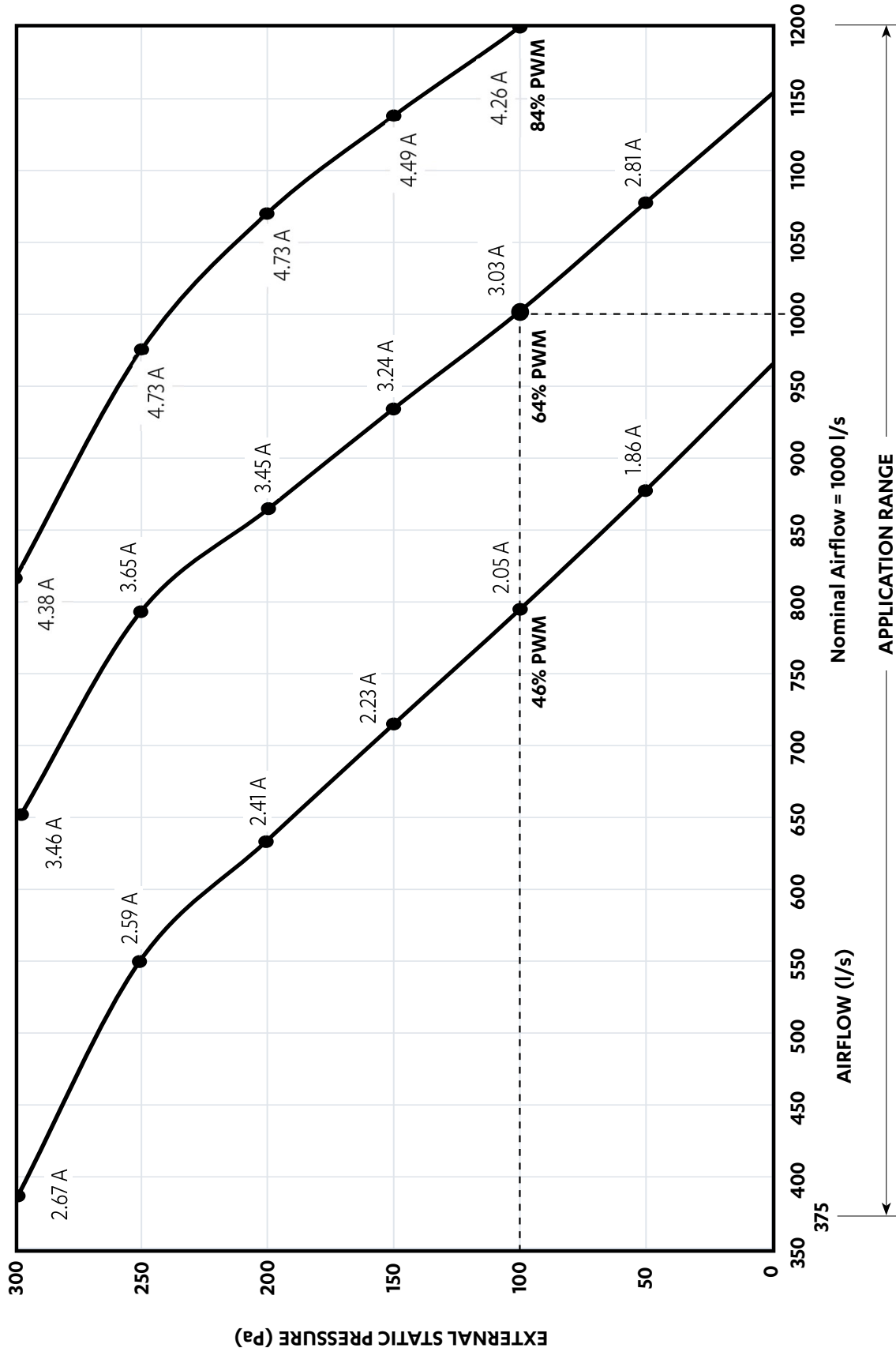
THREE SPEED FAN CURVE

EVV17BS



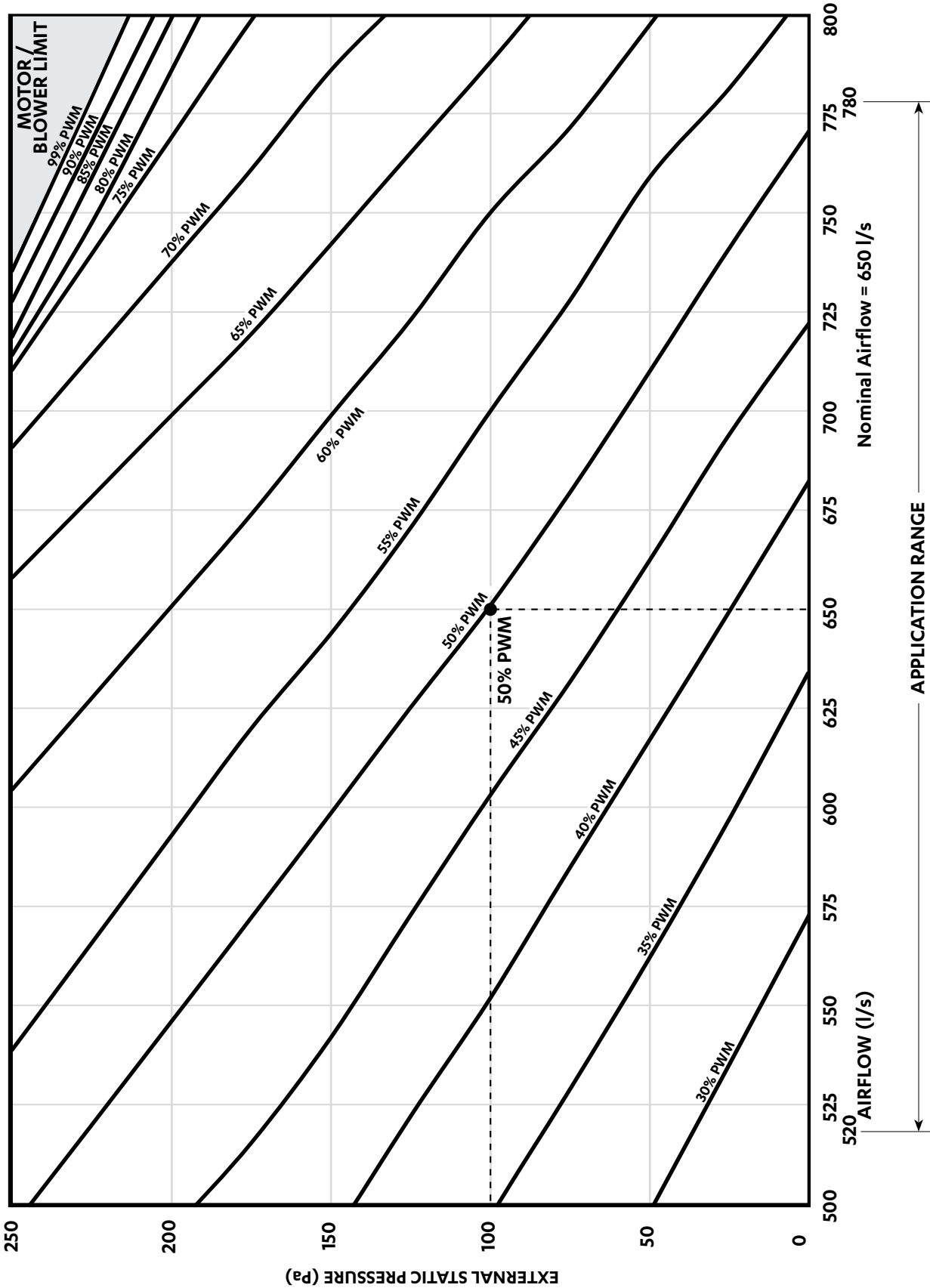
THREE SPEED FAN CURVE

EVV19BS



THIRD PARTY FAN CURVE

EVV13BS



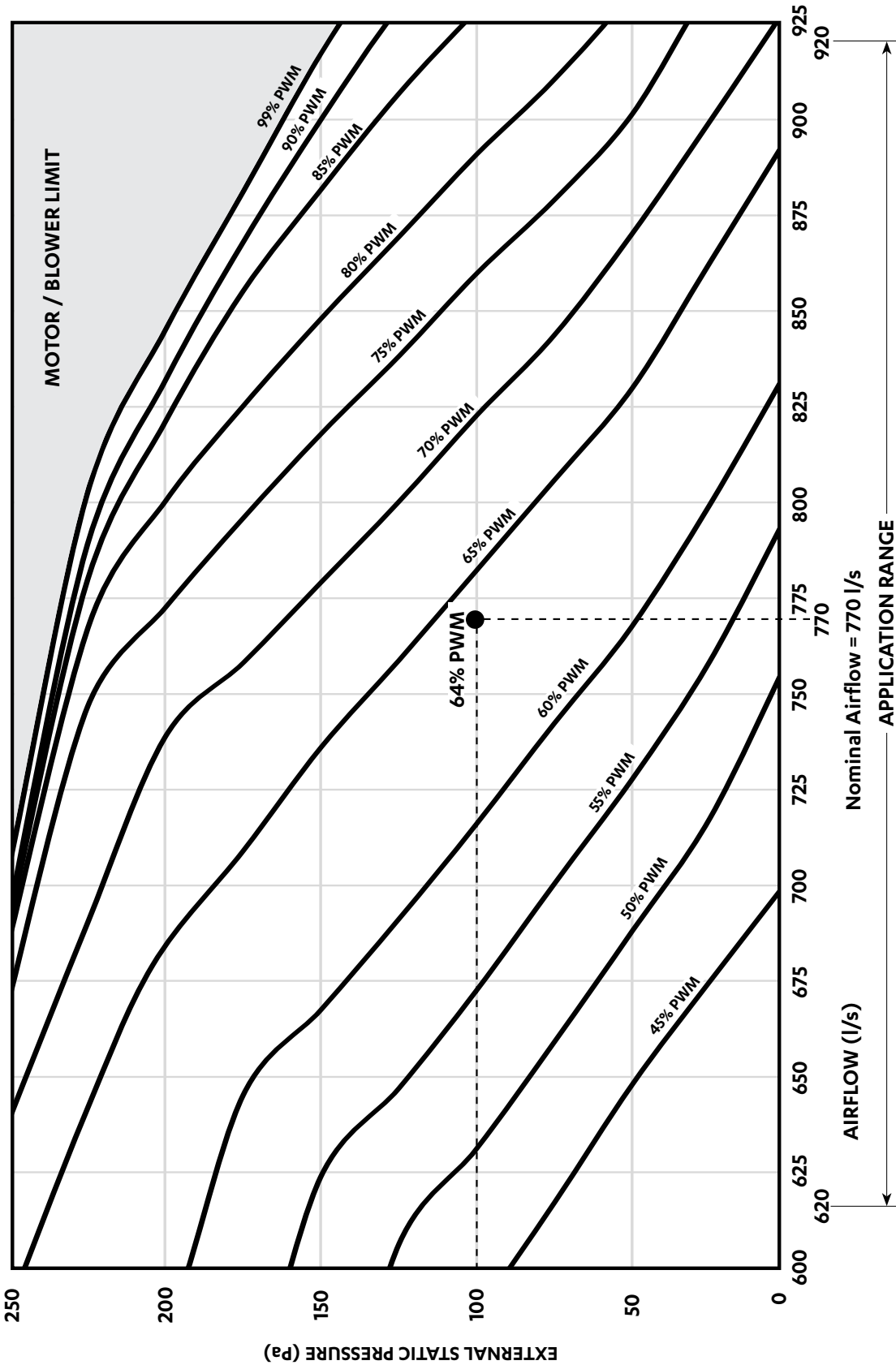
NOTE

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

EVV15BS



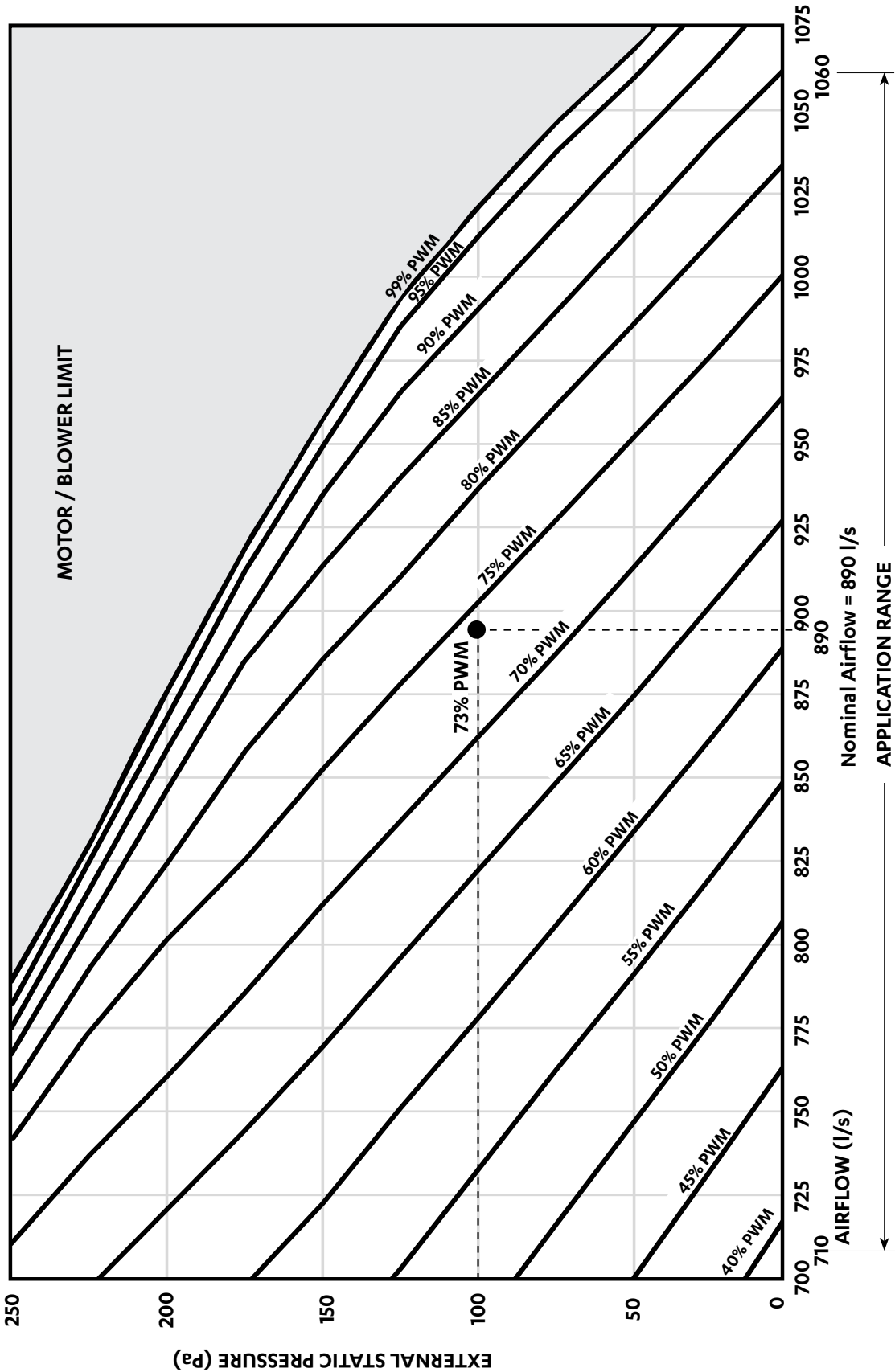
NOTE

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

EVV17BS



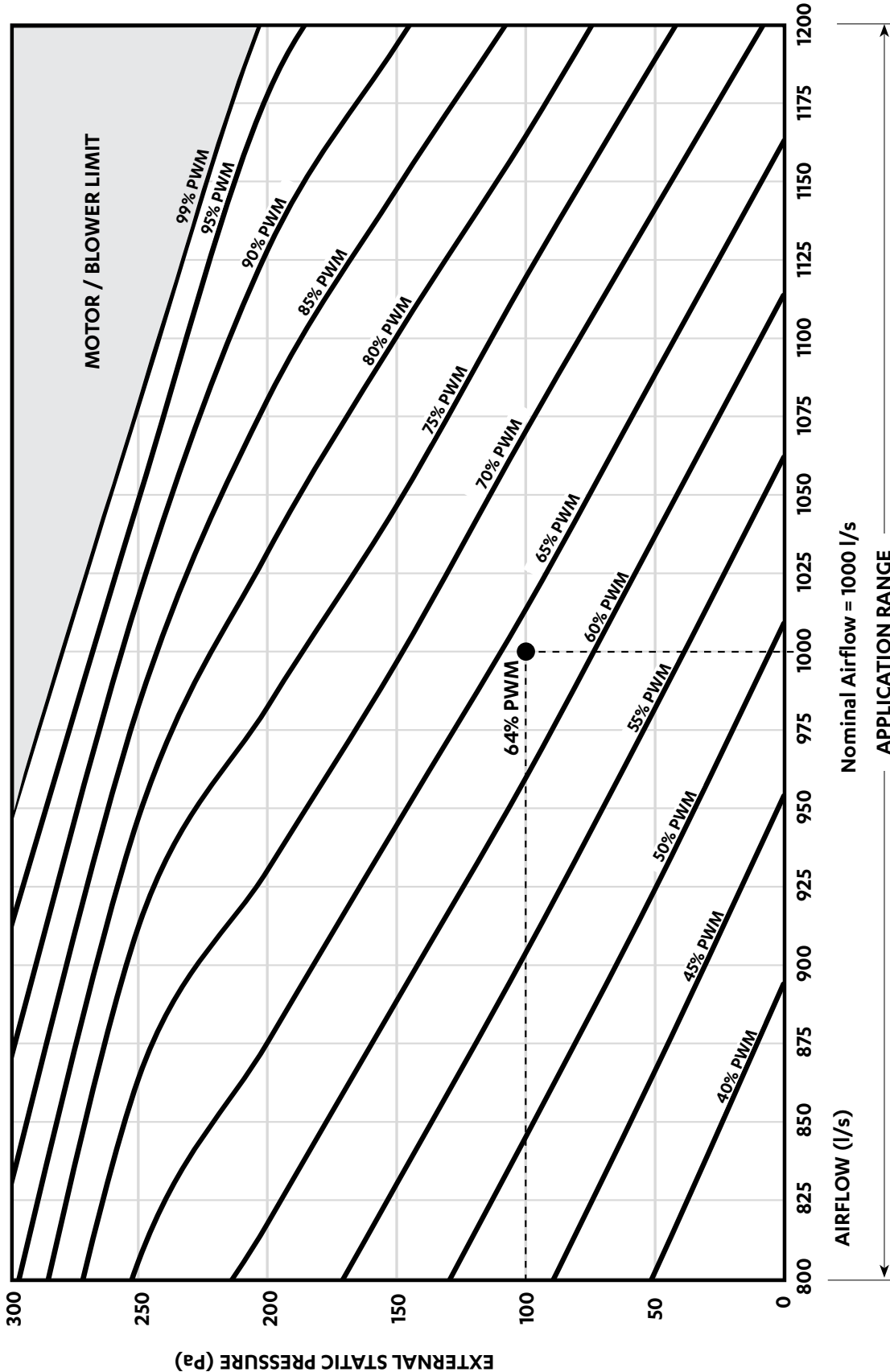
**NOTE**  
 Fan Performance Data and Fan Curve shown is at dry coil and with no air filters installed. Consider external static pressure drop specific to your design requirements. Airflow should be reduced with respect to the moisture content in the air. Please review filter manufacturer for application.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





THIRD PARTY FAN CURVE

EVV19BS



**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

### CRV13BS / CRV13BT / CRV15BS / CRV15BT / CRV17BS / CRV17BT / CRV19BT

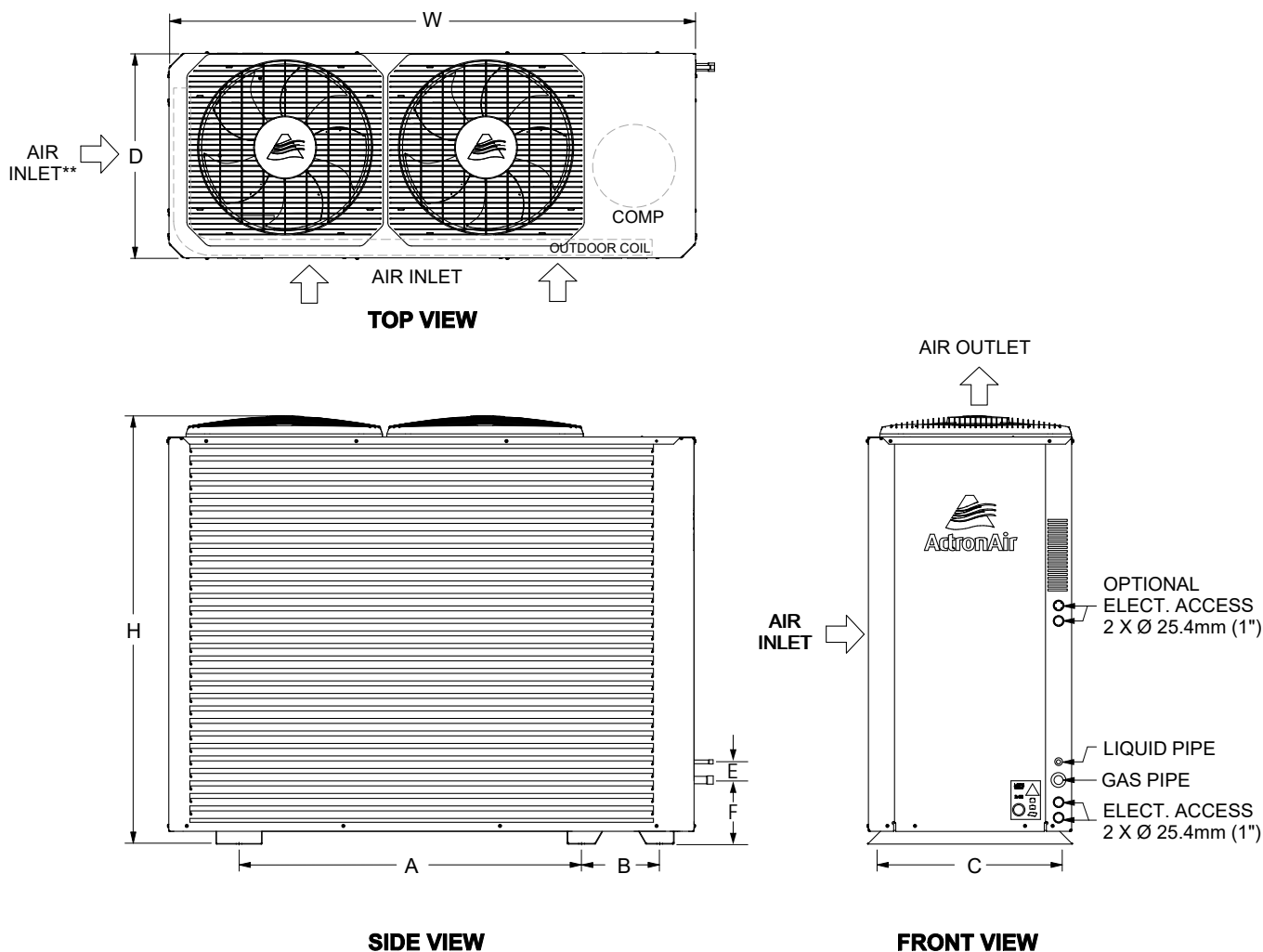
**NOTES:**

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.

CRV17BS / CRV17BT models shown for illustration purposes only.

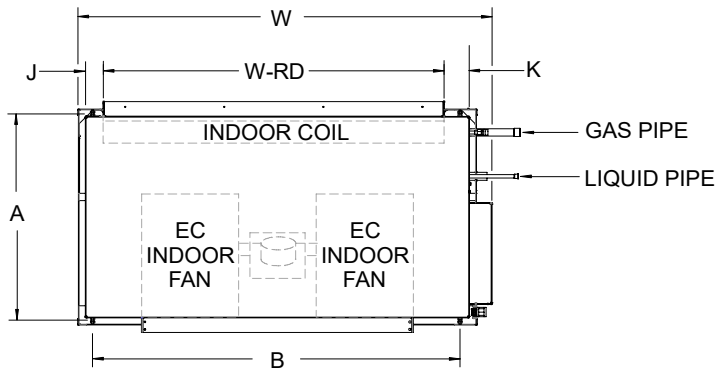
\*\*Air Inlet is only for CRV17BS /CRV17BT /CRV19BT models which have coil curve.



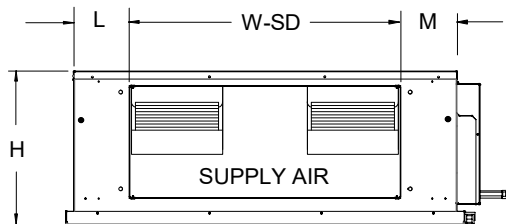
Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)			Pipe Location		Gas Pipe Swaged	Liquid Pipe Swaged
	H	W	D	A	B	C	E	F		
CRV13BS / CRV13BT	1110	1365	530	887	202	480	47	166	Ø 19.05mm (3/4")	Ø 9.52 mm (3/8")
CRV15BS / CRV15BT										
CRV17BS / CRV17BT										
CRV19BT										

# INDOOR UNIT DIMENSIONS

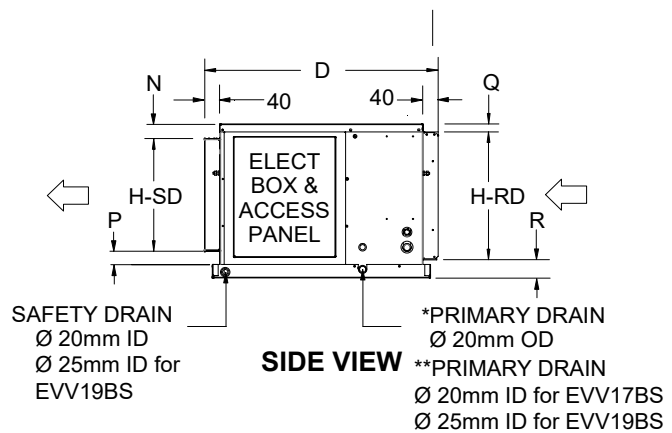
## EVV13BS / EVV15BS / EVV17BS / EVV19BS



**TOP VIEW**



**FRONT VIEW**



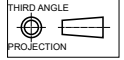
**NOTES:**  
 Drawing is subject to change without notice.  
 Image shown is for illustration purpose only.  
 Actual unit may vary depending on unit model.

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		
EVV13BS	412	1090	615	548	990	300 x 715	340 x 900	Ø 19.05mm (3/4")	Ø 9.52mm (3/8")
EVV15BS		1290			1190		340 x 1100		
EVV17BS	435	1420	680	603	1315		360 x 1140		
EVV19BS	485	1470	695	645	1346	380 x 715	410 x 1190	Ø 22.22mm (7/8")	Ø 12.7mm (1/2") Cut to fit 9.52mm (3/8") field pipe

Unit Model Number	Dimensions							
	J	K	L	M	N	P	Q	R
EVV13BS	47	65	248.5	248.5	40	72	22	50
EVV15BS	47	65	248.5	248.5	40	72	22	50
EVV17BS	79	118	311	311	25	110	25	50
EVV19BS	80	120	337.5	337.5	35	70	25	50

## INDOOR UNIT DIMENSIONS

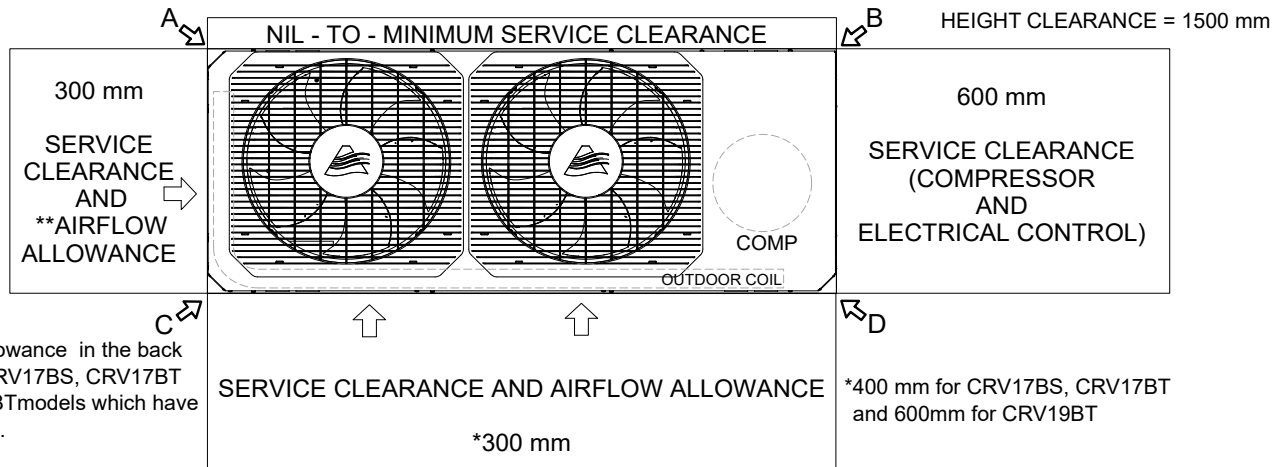
### NOTES:



1. Do not scale drawing. All dimensions are in mm unless 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.
  - 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 AS/NZS 60335.2.40.
5. During installation ensure that the Minimum Floor Area of the smallest room is satisfied based on the Release height, or the maximum R-32 Charge amount is not exceeded.
6. Where a minimum area is not satisfied, the installer must provide additional control measure/s such as but not limited to ventilation, shut-off valves, and safety alarm in place as per AS/NZS 60335.2.40 standard for the installation to be acceptable. These control measures are not provided by ActronAir and must be determined by the installer based on individual installation requirements.
7. Refer to R-32 Safety Manual for further safety guides.

# SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

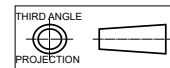
## OUTDOOR UNIT



\*\*Air flow allowance in the back is only for CRV17BS, CRV17BT and CRV19BT models which have a curved coil.

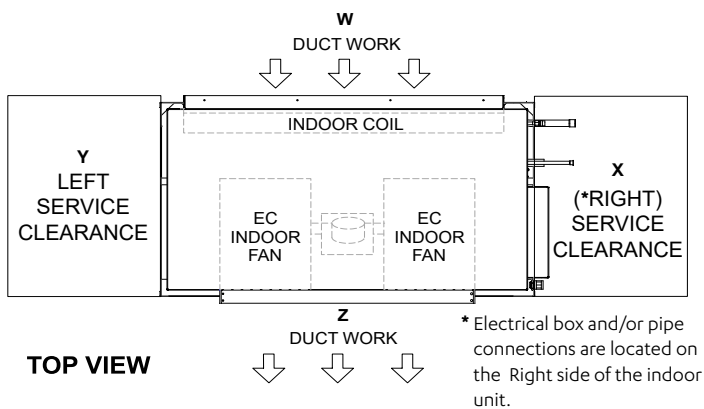
Unit Model Number	Total Weight (Kg)	Corner Weights (Kg)			
		A	B	C	D
CRV13BS	148	24	46	28	50
CRV15BS					
CRV17BS	155	36	38	30	51
CRV13BT	148	24	46	28	50
CRV15BT					
CRV17BT	155	36	38	30	51
CRV19BT	142	18	30	48	45

### 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.
- Use M12 bolt for feet mounting.
- 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
- Refer to R-32 Safety Manual for minimum required area of installation.

## INDOOR UNIT



Unit Model Number	Total Weight (Kg)	Service Clearance				Height Clearance
		X	Y	W	Z	
EVV13BS	44	800	800	Duct Work	340	
EVV15BS	53	800	800	Duct Work	340	
EVV17BS	61	800	800	Duct Work	410	
EVV19BS	72	800	800	Duct Work	410	

## SOUND DATA

### OUTDOOR RADIATED

#### Sound Power Level (SWL)

Model Number		Overall Sound Power Level dB(A)	Sound Pressure Level dB(A) @ 1M	Octave Band Centre Frequency (Hz), dB						
				125	250	500	1k	2k	4k	8k
CRV13BS	Tru.Max	73.6	60.5	77.4	73.7	71.8	67.9	63.3	58.4	48.4
	Rated	71.3	58.0	75.4	71.3	69.3	65.6	61.1	55.9	45.5
	Quiet	64.1	50.9	68.6	63.7	61.8	58.4	54.4	47.8	36.6
CRV15BS	Tru.Max	75.1	62.0	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Rated	75.1	62.0	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Quiet	66.0	52.8	68.9	65.6	63.9	60.5	56.4	50.3	39.0
CRV17BS	Tru.Max	75.1	62.0	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Rated	75.1	62.0	79.5	76.6	72.9	69.2	64.3	59.7	54.9
	Quiet	65.7	52.9	69.0	66.0	63.4	60.2	56.2	50.8	39.2
CRV13BT	Tru.Max	72.9	60.1	76.9	73.0	70.6	67.5	62.9	58.4	48.6
	Rated	70.5	57.5	74.7	70.8	68.1	65.1	60.7	55.9	45.5
	Quiet	63.6	50.5	67.4	63.6	61.2	58.2	54.2	48.2	36.7
CRV15BT	Tru.Max	74.6	61.7	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Rated	74.6	61.7	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Quiet	65.5	52.7	68.8	65.8	63.2	60.0	56.0	50.6	39.0
CRV17BT	Tru.Max	74.6	61.7	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Rated	74.6	61.7	78.2	75.1	72.5	69.3	64.5	60.1	50.7
	Quiet	65.7	52.9	69.0	66.0	63.4	60.2	56.2	50.8	39.2

#### Sound Power Level (SWL)

Model Number		Overall Sound Power Level dB(A)	Octave Band Frequency Sound Power Level / dB								Sound Pressure Level dB(A) @1m	
			63	125	250	500	1k	2k	4k	8k	C	H
CRV19BT	Tru.Max	77.5	79.5	83.1	79.5	76.3	72.7	67.7	63.0	55.4	65.4	65.6
	Rated	77.5	79.5	83.1	79.5	76.3	72.7	67.7	63.0	55.4	65.4	65.6
	Quiet	69.0	76.2	74.0	70.4	68.1	64.1	59.7	54.7	45.7	57.0	57.7

## SOUND DATA

### INDOOR OUTLET

#### Sound Power Level (SWL)

Model Number	Airflow Setting	Airflow l/s	Air Outlet Overall Sound Power Level dB(A)	Air Outlet Octave Band Frequency Sound Power Level / dB								Case Radiated Sound Pressure Level @1.5m
				63	125	250	500	1k	2k	4k	8k	
EVV13BS	Nominal	650	69.5	71.0	70.0	68.0	67.9	63.6	61.5	57.4	49.7	39.5
EVV15BS	Nominal	770	72.4	74.7	71.9	68.9	71.7	66.4	63.6	60.1	52.6	42.4
EVV17BS	Nominal	850	74.4	75.7	74.8	73.6	71.5	68.9	66.5	63.5	56.3	44.4
EVV19BS	Nominal	1000	72.1	72.8	72.0	67.9	70.3	66.3	64.3	61.3	55.1	42.0

**NOTE:**

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

## SPECIFICATIONS

### SINGLE PHASE

MODEL NUMBERS	CRV13BS/ EVV13BS	CRV15BS/ EVV15BS	CRV17BS/ EVV17BS
<b>DIMENSIONAL SPECIFICATION</b>			
Outdoor Overall Dimensions (mm)	Depth	530	
	Height	1110	
	Width	1365	
Indoor Overall Dimensions (mm)	Depth	615	680
	Height	412	435
	Width	1090	1420
Primary Condensate Drain Connection - Size		20mm OD	
Safety Tray Connection - Size		20mm ID	
Air Duct	Supply Duct H x W - (mm)	300 x 715	
	Return Duct H x W - (mm)	340 x 900	360 x 1140
WEIGHT (kg) -- INDOOR / OUTDOOR		44 / 148	61 / 155
<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
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
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		
FACTORY CHARGE (grams)	2790	TBD	3320
PRE-CHARGE LENGTH (metres)	15	15	15
Minimum room area (m <sup>2</sup> )	5.508	TBD	6.978
Factory charge @2.2m release height	40	40	40
ADDITIONAL REF. CHARGE (gram/metre)	40	40	40
<b>FILTER DRIER</b>			
CONNECTION SIZE AND TYPE	9.52 mm (3/8") ODF Soldered Bi-Flow		
FACTORY SUPPLIED / FITTED	No		



**SPECIFICATIONS**

MODEL NUMBERS		CRV13BS/ EVV13BS	CRV15BS/ EVV15BS	CRV17BS/ EVV17BS
<b>FIELD PIPE SIZES</b>				
LIQUID PIPE		9.52 mm (3/8")		
GAS PIPE		19.05 mm (3/4")		
<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)		4593	TBD	5117
/		/		/
MINIMUM ROOM AREA @ 2.2m RELEASE HEIGHT (m <sup>2</sup> )		13.354		16.575
<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 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		
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 (0.5mm2) 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.	-15°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 an accessible location between the return air grille and the unit. ActronAir does not supply or make any provisions for return air filter.



## SPECIFICATIONS

**THREE PHASE**

MODEL NUMBERS	CRV13BT/ EVV13BS	CRV15BT/ EVV15BS	CRV17BT/ EVV17BS	CRV19BT/ EVV19BS	
<b>DIMENSIONAL SPECIFICATION</b>					
Outdoor Overall Dimensions (mm)	Depth	530			
	Height	1110			
	Width	1365			
Indoor Overall Dimensions (mm)	Depth	615	615	680	645
	Height	412	412	435	485
	Width	1090	1290	1420	1470
Primary Condensate Drain Connection - Size		20mm OD		20mm ID	25mm ID
Safety Tray Connection - Size		20mm ID			25mm ID
Air Duct	Supply Duct H x W - (mm)	300 x 715			715 x 380
	Return Duct H x W - (mm)	340 x 900	340 x 1100	360 x 1140	1190 x 410
WEIGHT (kg) -- INDOOR / OUTDOOR		44 / 148	53 / 148	61 / 155	75 / 142
<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	1.6
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	0.55
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		256 x 420	
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			
FACTORY CHARGE (grams)		2350	TBD	3560	4570
PRE-CHARGE LENGTH (metres)		15	15	15	15
Minimum room area (m <sup>2</sup> )		4.639	TBD	8.023	13.221
Factory charge @2.2m release height					
ADDITIONAL REF. CHARGE (gram/metre)		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			



## SPECIFICATIONS

MODEL NUMBERS		CRV13BT/ EVV13BS	CRV15BT/ EVV15BS	CRV17BT/ EVV17BS	CRV19BT/ EVV19BS
<b>FIELD PIPE SIZES</b>					
LIQUID PIPE		9.52 mm (3/8")			
GAS PIPE		19.05 mm (3/4")			22.22mm (7/8") Swaged
<b>INTERCONNECTING PIPE RUN</b>					
MAX. EQUIVALENT PIPE LENGTH (metres)		60			50
MAX. VERTICAL HEIGHT DIFFERENTIAL (metres)		20 (Included in Max. Pipe Length)			
MAXIMUM REFRIGERATION CHARGE @ MAXIMUM PIPE LENGTH (gm)		4148	TBD	5362	5970
/		/		/	/
MINIMUM ROOM AREA @ 2.2m RELEASE HEIGHT (m <sup>2</sup> )		10.892		18.200	22.562
<b>PIPE CONNECTIONS</b>					
INDOOR	LIQUID PIPE	9.52 mm (3/8") Swaged to fit 9.52 mm (3/8") field pipe			12.7mm (1/2") Swaged
	GAS PIPE	19.05 mm (3/4") Swaged to fit 19.05 mm (3/4") field pipe			22.22mm (7/8") Swaged
OUTDOOR	LIQUID PIPE	9.52 mm (3/8") Swaged to fit 9.52 mm (3/8") field pipe			9.52mm (3/8") Swaged
	GAS PIPE	19.05 mm (3/4") Swaged to fit 19.05 mm (3/4") field pipe			22.22mm (7/8") Swaged
CONNECTION TYPE		Solder			
<b>PROTECTION DEVICES</b>					
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			
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.	-15°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 an accessible location between the return air grille and the unit. ActronAir does not supply or make any provisions for return air filter.

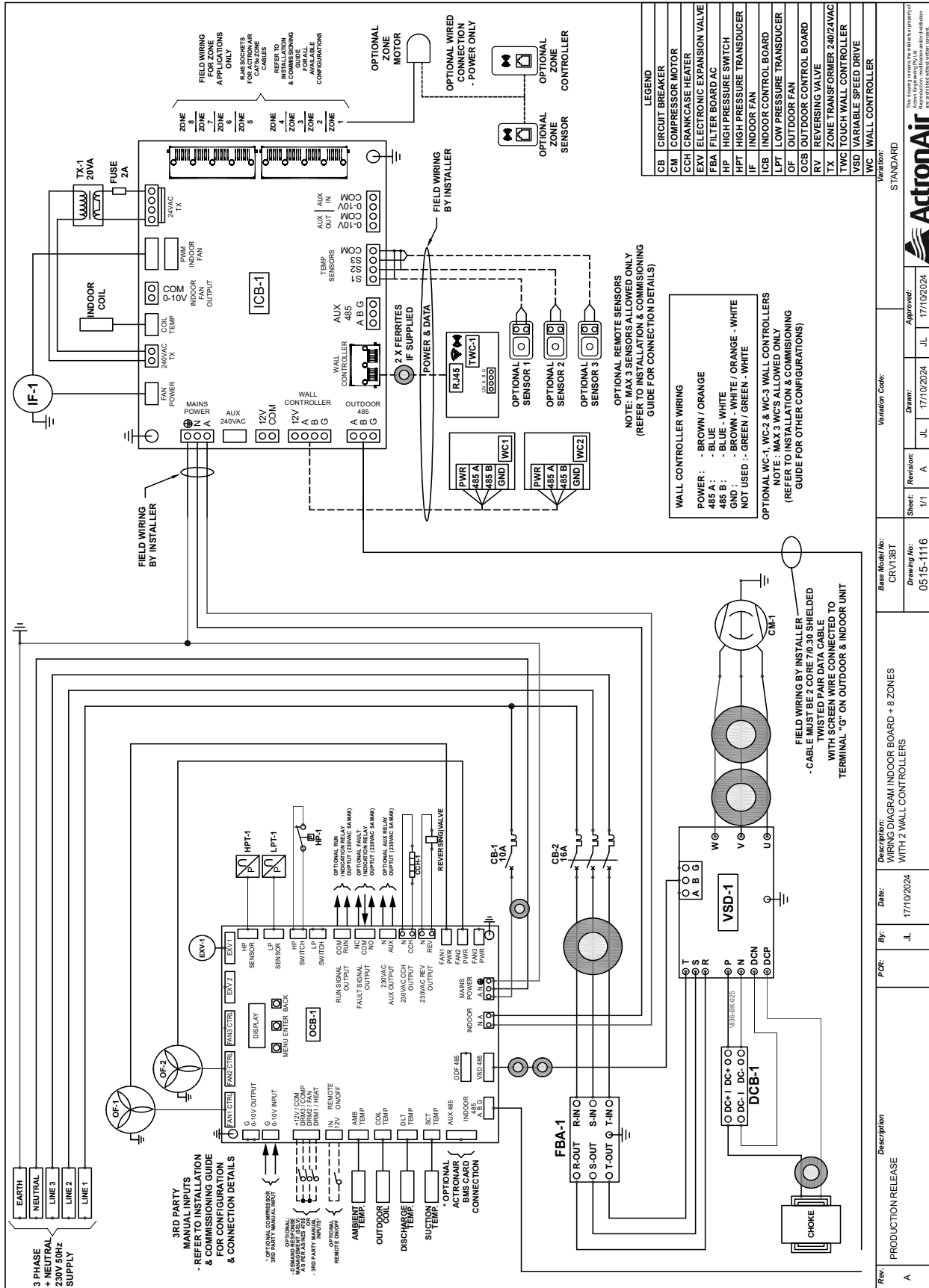








# WIRING DIAGRAM - THREE PHASE (CRV13BT)



Rev:	A	Description:	PRODUCTION RELEASE
PCB:	JL	Date:	17/10/2024
By:	JL	Drawn:	17/10/2024
Approved:	JL	17/10/2024	
Sheet:	1/1	Revision:	A
Base Model/No:	CRV13BT	Drawing No:	0515-1116
Description:		WIRING DIAGRAM INDOOR BOARD + 8 ZONES WITH 2 WALL CONTROLLERS	
Version:	STANDARD	ActronAir	



## WIRING DIAGRAM - THREE PHASE (CRV15BT)

**The Wiring Diagram for the  
CRV15BT to be advised**







# OUTDOOR UNIT VARIATION - DIMENSION

## OUTDOOR UNIT - HORIZONTAL DISCHARGE FANS

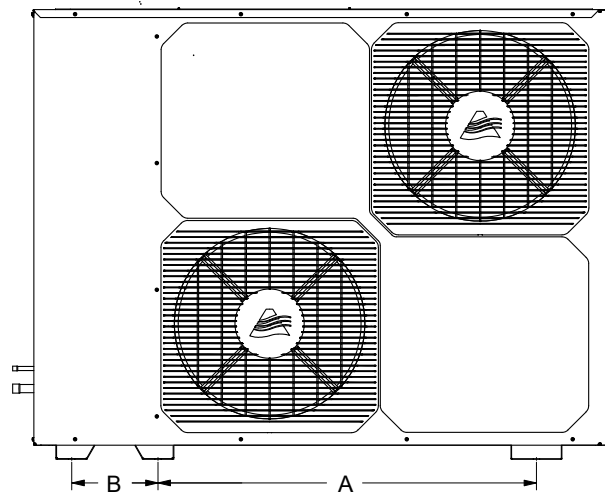
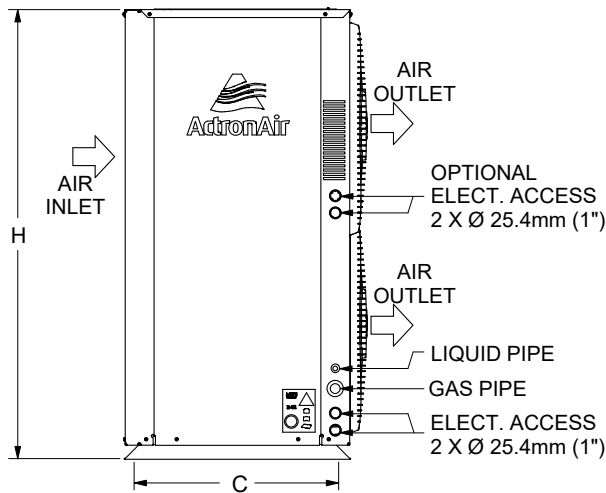
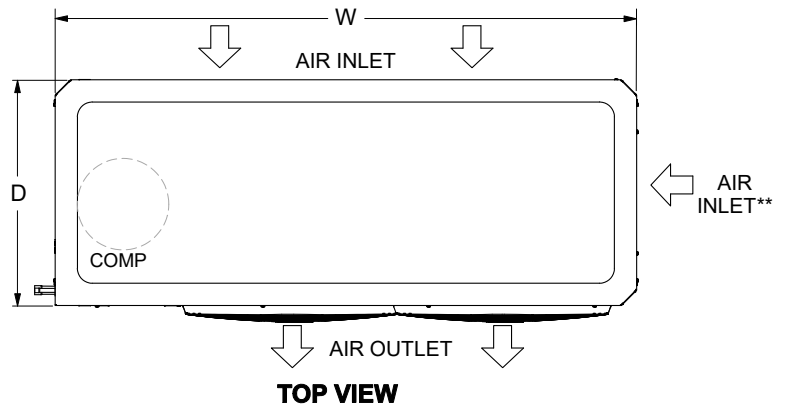
**NOTES:**

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.

CRV17BS-H / CRV17BT-H models shown for illustration purposes only.

\*\*Air Inlet is only for CRV17BS -H/CRV17BT-H and CRV19BT-H models which have coil curve .

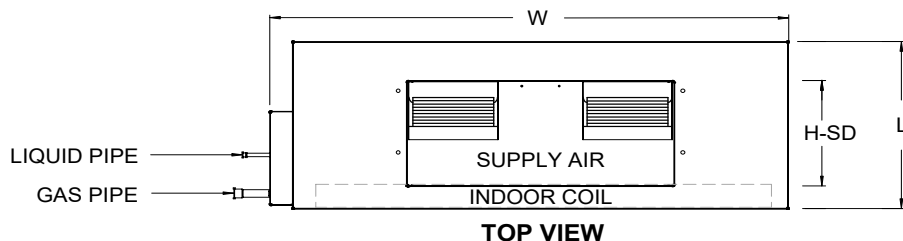


Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)			Gas Pipe Swaged	Liquid Pipe Swaged
	H	W	D	A	B	C		
CRV13BS-H / CRV13BT -H	1055	1365	570	887	202	480	Ø 19.05mm (3/4")	Ø 9.52 mm (3/8")
CRV15BS-H / CRV15BT-H								
CRV17BS-H / CRV17BT-H								
CRV19BT-H								



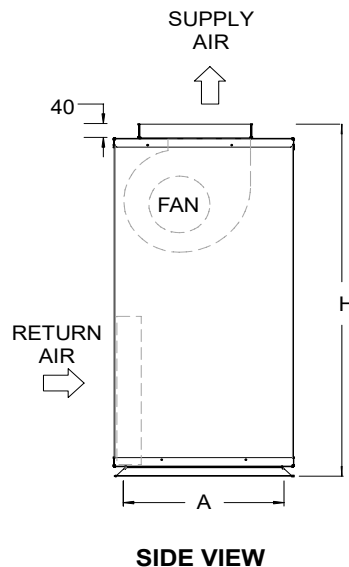
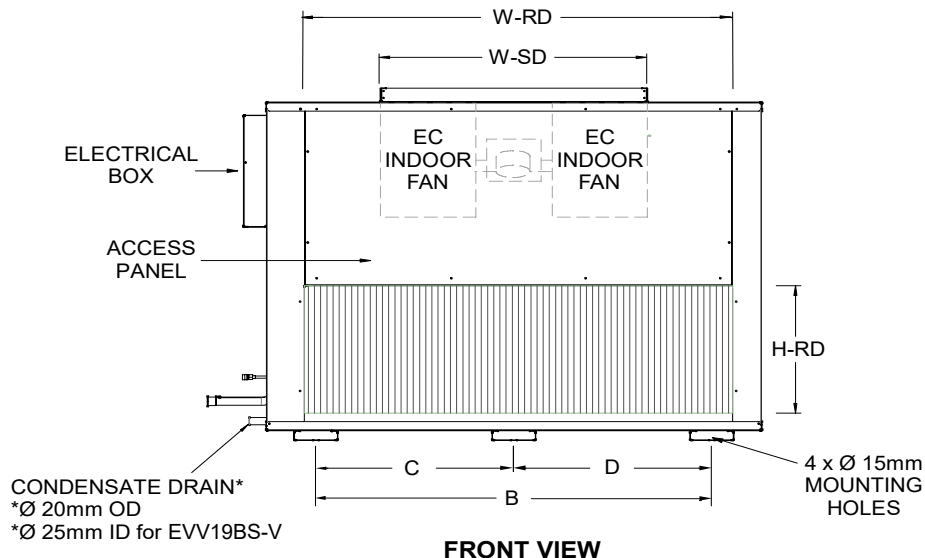
## INDOOR UNIT VARIATION - DIMENSION

### INDOOR UNIT - UPRIGHT FAN COIL WITH VERTICAL DISCHARGE



**NOTES:**

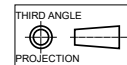
Drawing is subject to change without notice. Image shown is for illustration purpose only. Actual unit may vary depending on unit model.



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		
EVV13BS-V	875	1075	405	350	790	-	-	300 x 715	365 x 895	Ø 19.05mm (3/4")	Ø 9.52mm (3/8")
EVV15BS-V		1275			990	-	-				
EVV17BS-V	1015	1390	480	430	-	530	530	365 x 1095			
EVV19BS-V	1066	1434	483	430	1056	528	528	380 x 717	405 x 1198	Ø 22.22mm (7/8")	

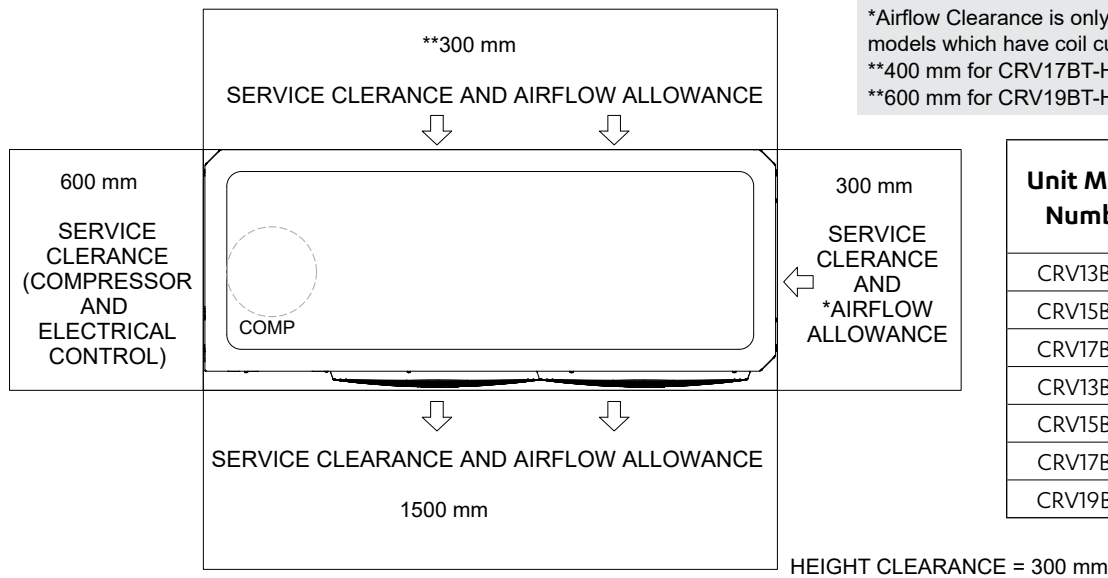
**NOTES:**

- Do not scale drawing. All dimensions are in mm unless specified. Refer to corresponding unit dimensional drawing for mounting hole details.
- 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.
- 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.
- Refer to R-32 Safety Manual for minimum required area and R-32 refrigerant of the installation.



# SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

## OUTDOOR HORIZONTAL VARIATION

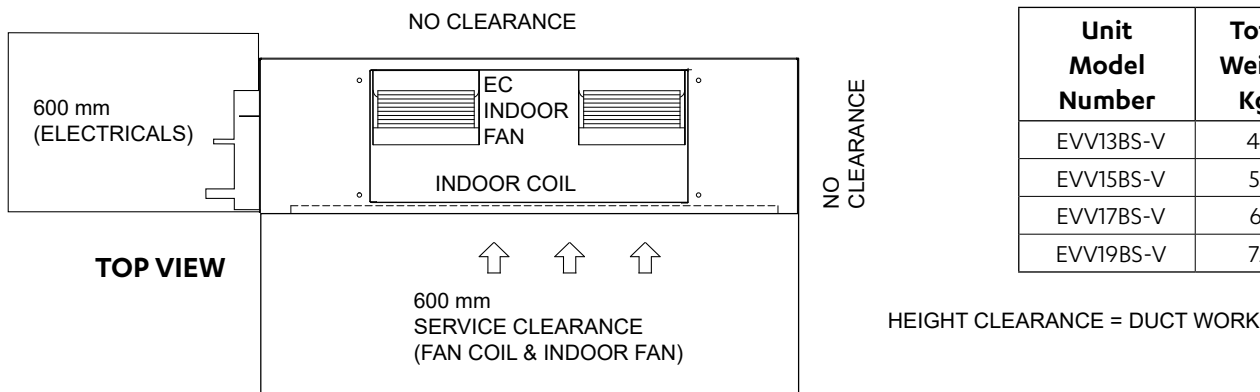


**NOTES:**

\*Airflow Clearance is only for CRV17BS-H/CRV17BT-H models which have coil curve.  
 \*\*400 mm for CRV17BT-H/CRV17BS-H  
 \*\*600 mm for CRV19BT-H

Unit Model Number	Total Weight (Kg)
CRV13BS-H	148
CRV15BS-H	
CRV17BS-H	155
CRV13BT-H	148
CRV15BT-H	
CRV17BT-H	155
CRV19BT-H	142

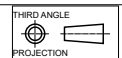
## INDOOR VERTICAL VARIATION



Unit Model Number	Total Weight (Kg)
EVV13BS-V	44
EVV15BS-V	53
EVV17BS-V	61
EVV19BS-V	72

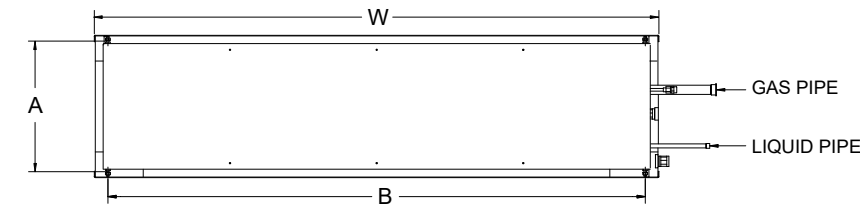
**NOTES:**

- 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.
- Use M12 bolt for feet mounting.
- 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.
- Refer to R-32 Safety Manual for minimum required area and R-32 refrigerant of the installation.

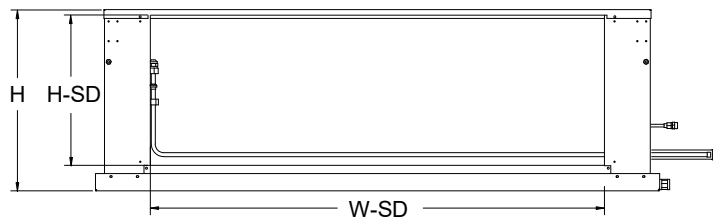


## TWO-PIECE FAN COIL

### Coil Section - EAA13BS / EAA15BS / EAA17BS / EAA19BS



**TOP VIEW**



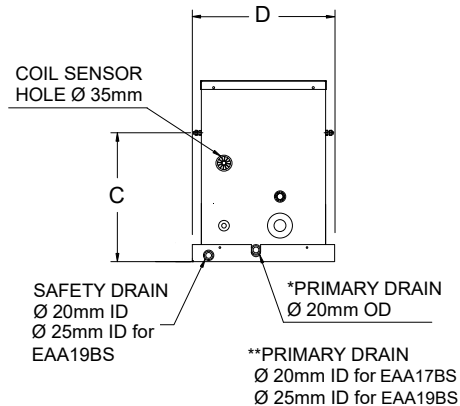
**FRONT VIEW - SUPPLY AIR**



**REAR VIEW - RETURN AIR**

**NOTES:**

Drawing is subject to change without notice. Image shown is for illustration purpose only. Actual unit may vary depending on unit model.

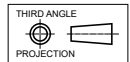


**SIDE VIEW**

Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance (Centre to Centre /Base Foot )			Supply Duct	Return Duct	Gas Pipe (Swaged)	Liquid Pipe (Swaged)
	H	W	D	A	B	C	H-SD x W-SD	H-RD x W-RD		
EAA13BS	410	1054	342	310	990	284	345 x 900	345 x 900	Ø 19.05mm (3/4")	Ø 9.52mm (3/8")
EAA15BS		1252			283					
EAA17BS	435	1360			310					
EAA19BS	487	1410	343	310	1345	361	411 x 1094	411 x 1094	Ø 22.22mm (7/8")	

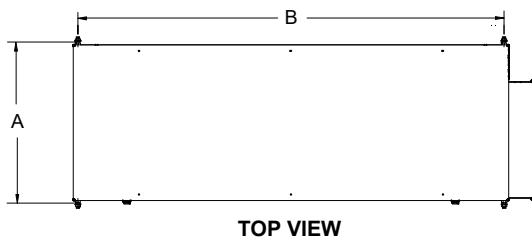
**NOTES:**

1. Do not scale drawing. All dimensions are in mm unless 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 AS/NZS 60335.2.40.
5. During installation ensure that the Minimum Floor Area of the smallest room is satisfied based on the Release height, or the maximum R-32 Charge amount is not exceeded.
6. Where a minimum area is not satisfied, the installer must provide additional control measure/s such as but not limited to ventilation, shut-off valves, and safety alarm in place as per AS/NZS 60335.2.40 standard for the installation to be acceptable. These control measures are not provided by ActronAir and must be determined by the installer based on individual installation requirements.
7. Refer to R-32 Safety Manual for further safety guides.



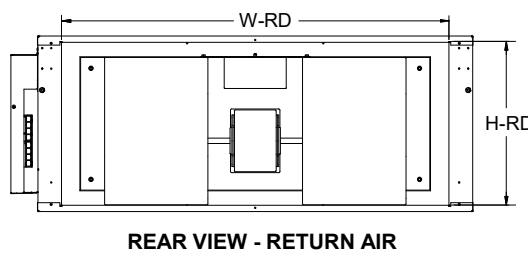
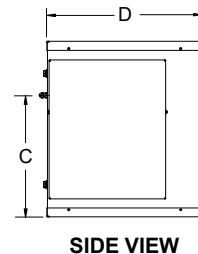
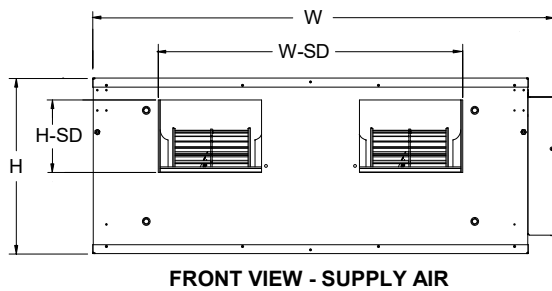
## TWO-PIECE FAN COIL

### Fan Section - EFV13BS / EFV15BS / EFV17BS / EFV19BS



**NOTES:**

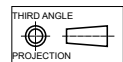
Drawing is subject to change without notice. Image shown is for illustration purpose only. Actual unit may vary depending on unit model.



Unit Model Number	Overall Nominal Dimension (OA)			Mounting Distance Base Foot (Centre to Centre)			Supply Duct	Return Duct
	H	W	D	A	B	C	H-SD x W-SD	H-RD x W-RD
EFV13BS	408	1072	362	370	990	282	186 x 708	378 x 900
EFV15BS								
EFV17BS								
EFV19BS	483	1269	412	422	1185	358	305 x 734	453 x 1195

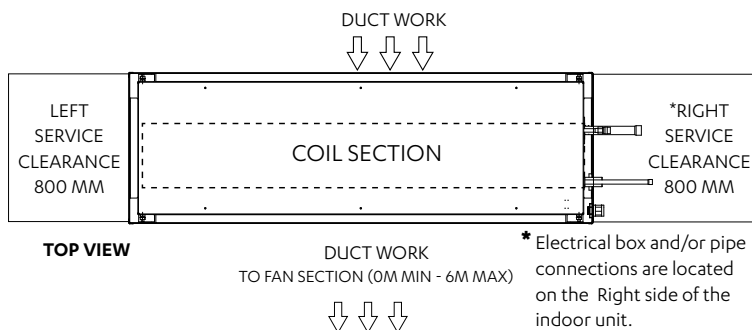
**NOTES:**

1. Do not scale drawing. All dimensions are in mm unless 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 AS/NZS 60335.2.40.
5. During installation ensure that the Minimum Floor Area of the smallest room is satisfied based on the Release height, or the maximum R-32 Charge amount is not exceeded.
6. Where a minimum area is not satisfied, the installer must provide additional control measure/s such as but not limited to ventilation, shut-off valves, and safety alarm in place as per AS/NZS 60335.2.40 standard for the installation to be acceptable. These control measures are not provided by ActronAir and must be determined by the installer based on individual installation requirements.
7. Refer to R-32 Safety Manual for further safety guides.

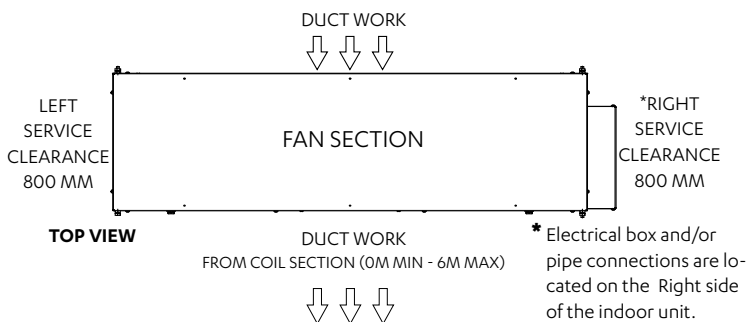


# SERVICE CLEARANCES, AIRFLOW ALLOWANCES AND WEIGHTS

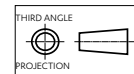
## EAA MODELS



## EFV MODELS



### 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.
- 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.
- Refer to R-32 Safety Manual for minimum required area of installation.

Model Number	Weight (kg)	Height Clearance
EAA13BS	28.5	340
EAA15BS	37.5	
EAA17BS	45.5	410
EAA19BS	42.5	410
EFV13BS	35.0	340
EFV15BS	44.0	
EFV17BS	50.5	
EFV19BS	42.0	410



# ADVANCE 2B Split Ducted Unit

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