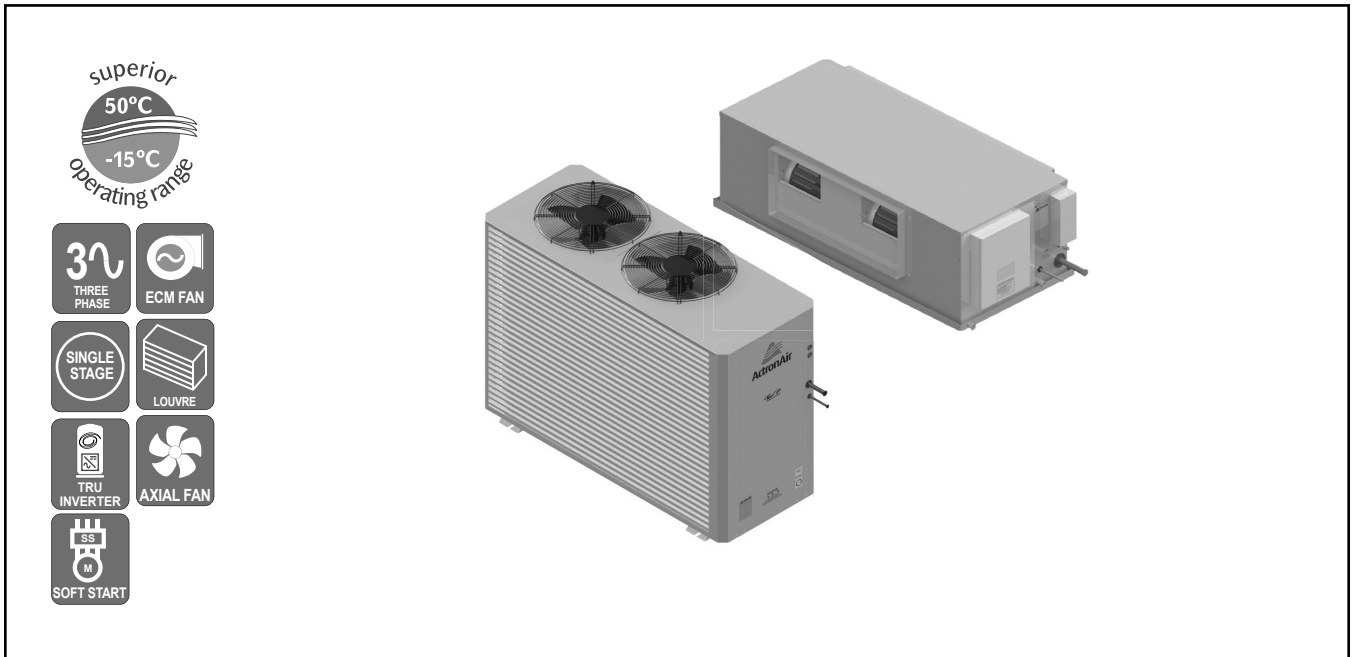


ESP PLATINUM QUE SPLIT DUCTED UNIT



3 Phase
1 Stage
21.55 kW

UNIT FEATURES

- Tru-Inverter™ Variable Speed Compressor & Drive Technology.
- 20-100% Superior Refrigeration Operating Capacity Range.
- ECM High Efficiency Indoor Fan Motor.
- Compressor Soft Start via Variable Speed Drive Control.
- High Performance Heat Exchangers.
- Hydrophilic Blue Fin Coil Coat Protection - Indoor and Outdoor Coils
- Powder Coated Outdoor Unit with Louvred Coil Guard.
- Pre-charged with R-410A Refrigerant.
- Integrated Fan Coil Safety Tray.
- Adaptive Demand Defrost.
- Overheat Safety Protection / Anti-Freeze Protection - Indoor Coil.
- Active Power Factor Correction.
- Bi-Flow Electronic Expansion Valves.
- 8Z-VAQ Fitted, Ready for up to 8 Zones.
- Zone Kit for Control up to 8 Zones.

CONTROLLER FEATURES

- 5.7" HD colour touch screen.
- 7-Day Scheduler and 2 Master Timers.
- On board Temperature and Humidity Sensors.
- Dual Setpoint Auto Mode.
- Contant Indoor Fan Speed.
- 3 Speed Indoor Fan + Auto Mode.
- Away and Quiet Modes.
- Quick and Easy to follow System Set-up.
- In-built Wi-Fi and Over-The-Air (OTA) Updates.*
- Energy History Monitoring.*
- Coloured Diagnostic Dashboard and On Screen-Fault Indication.

UNIT / CONTROL OPTIONS

- Dual Wall Control Operation.**
- Up to 8 Zones Control.
- VAV or Non-VAV Zone Options.
- Zone Control and Remote Sensor Options.
- Que Connect Apps for Remote Access (iOS and Android).*
- Additional Full Coil Coat Protection.
- Horizontal Discharge Condenser

PLENUMS (Optional)

- Supply Air Plenums are Available in a 2 way or 3 way Configuration (See Accessories Sec. for details of Spigots availability)
- Return Air Plenum is Available with 2 x 450 mm.

UNIT COMPLIANCE

- AS/NZS 3823.2 (MEPS)
- AS/NZS 4755.3.1 (DRM 1, 2 and 3)
- AS/NZS CISPR 14.1 (EMC)
- AS/NZS 60335.1 (ELECTRICAL APPLIANCE SAFETY)
- AS/NZS 60335.2.40 (ELECTRICAL APPLIANCE SAFETY - AIR CONDITIONERS)

SPECIFICATION SUMMARY

OUTDOOR UNIT MODEL	CRQ5-24AT		
INDOOR UNIT MODEL	ERQ5-24AS		
		(1) TOTAL	(2) NETT
(3) COOLING CAPACITY (kW)	MINIMUM	5.30	5.20
	RATED	21.55	21.00
	TRUMAX (9)	24.80	24.00
(4) HEATING CAPACITY (kW)	MINIMUM	4.90	5.00
	RATED	22.50	23.00
	TRUMAX (9)	24.25	25.00
(3) SENSIBLE CAPACITY (kW)	RATED	17.98	17.43
(5) COOLING INPUT POWER (kW)	RATED	6.10	
(5) HEATING INPUT POWER (kW)	RATED	6.57	
EER	RATED	3.53	3.44
COP	RATED	3.42	3.50
(6) INDOOR AIRFLOW (l/s) - MIN. / NOMINAL / MAX.	880 / 1100 / 1320		
MINIMUM AIRFLOW WHEN IN MODULATION (l/s)	290		
OUTDOOR SOUND PRESS. LEVEL @ 3M dB(A) - LOW / HIGH	43.0 / 60.0		
OUTDOOR SOUND POWER LEVEL dB(A) - LOW / HIGH	63.8 / 79.6		
POWER SUPPLY - OUTDOOR	400V/3Ph+N/50Hz		
POWER SUPPLY - INDOOR	230V/1Ph+N/50Hz		
(2) RATED LOAD AMPS -- OUTDOOR / INDOOR / TOTAL	8.4 / 3.8 / 12.2		
(7) FULL LOAD AMPS -- OUTDOOR / INDOOR / TOTAL	16.6 / 6.0 / 22.6		
(8) CIRCUIT BREAKER AND CABLE AMPS	25.0		
APPROXIMATE STARTING AMPS	< 45		
POWER FACTOR	0.96		
WEIGHT (kg) -- INDOOR / OUTDOOR	80 / 214		

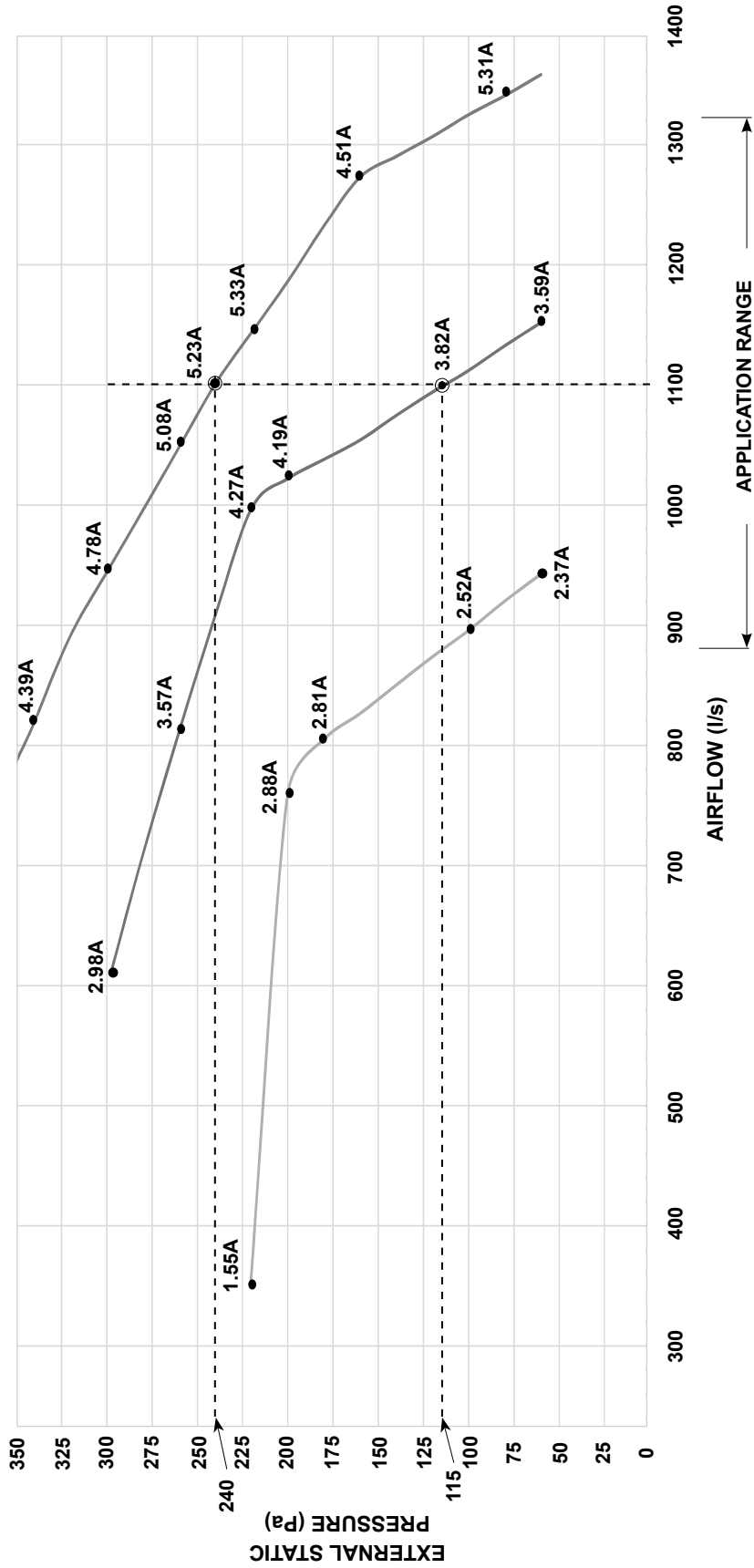
- (1) Based on unit rating excluding indoor fan kW.
- (2) Measured and tested in accordance with AS/NZS 3823.1.2.
- (3) At 27°C DB / 19°C WB entering air temperatures and 35°C ambient.
- (4) At 20°C DB entering air temperature and 7°C DB / 6°C WB ambient.
- (5) Total input power excludes indoor fan kW. Nett input power includes indoor fan kW.
- (6) Max. - Min. airflow application range.
- (7) Full Load Amps are based on compressor and fan motors' maximum expected current.
- (8) See Specifications sheet for cable size and circuit breaker size details.
- (9) TRUMAX - Maximum Capacity.

Note: Use nett input power to estimate running cost.

*Wi-Fi connection with internet required.

**Wi-Fi connection required.





(Airflow can be lower during ESP Auto Fan Mode. See Page 1.)

Performance Fan Curve shown is at Dry Coil Condition for FD 9X7 AM 1/2 HP ECM

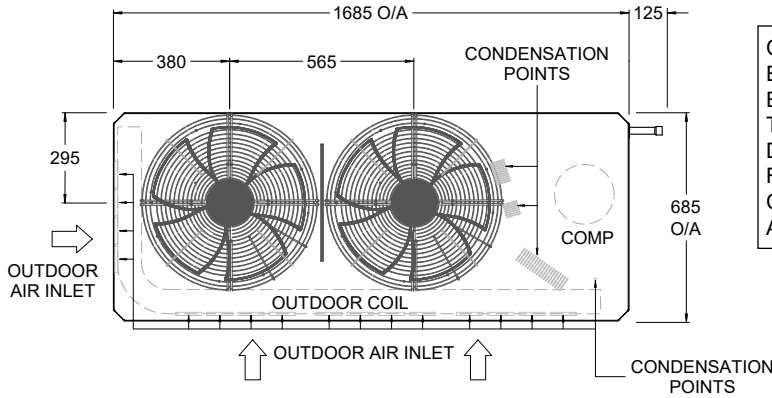
21.55 kW
3 Phase
1 Stage



OUTDOOR UNIT DIMENSIONS

CRQ5-24AT

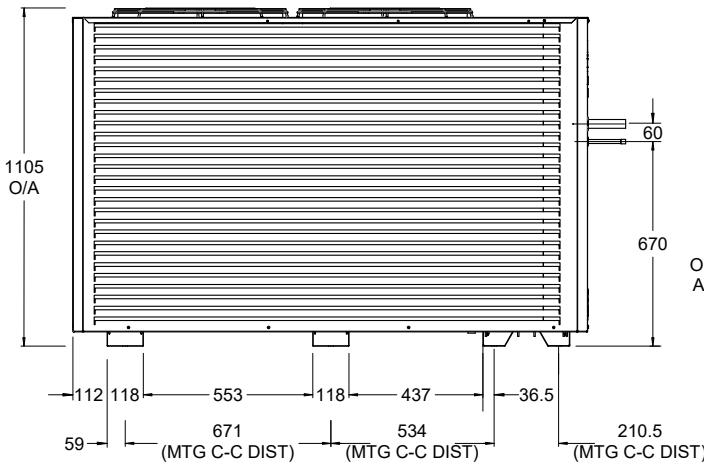
C OUTDOOR UNIT - STANDARD MODEL



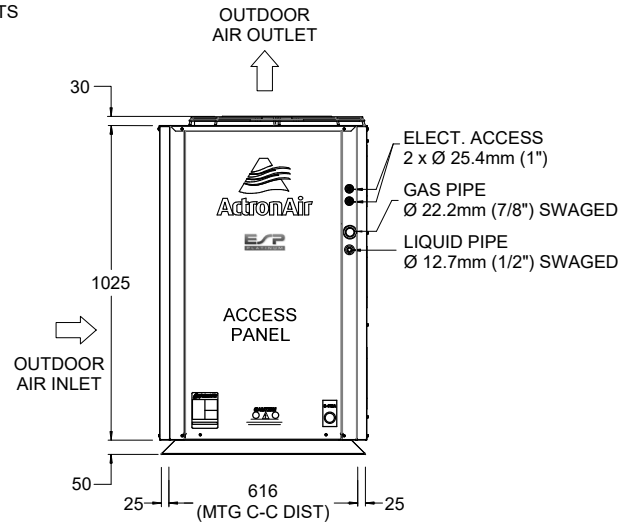
TOP VIEW

CONDENSATION POINTS ARE DESIGNED TO ENSURE ALL CONDENSATION IS REMOVED EFFICIENTLY TO AVOID WATER POOLING WITHIN 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.

** DRAWING IS SUBJECT TO CHANGE WITHOUT NOTICE**



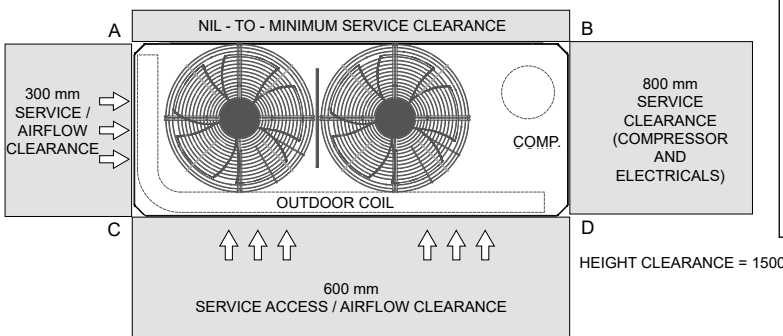
SIDE VIEW



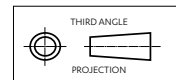
FRONT VIEW

UNIT MODEL NUMBER	UNIT WEIGHT (kg)	CORNER WEIGHTS (kg)			
		A	B	C	D
CRQ5-24AT	214	58	42	20	94

MINIMUM SERVICE ACCESS AREAS AND AIRFLOW CLEARANCES



NOTES:

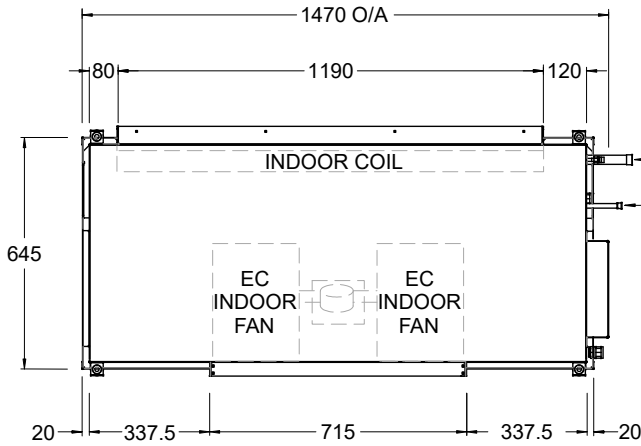


- Do not scale drawing. All dimensions are in mm unless specified. Refer to corresponding unit dimensional drawing for mounting hole details.
- Service Access Areas and Spaces for Airflow Clearances given are suggested minimum based on the condition that the spaces around the units are free from any obstructions and a walkway passage of 1000 mm between the units or between the unit and the outside perimeter is available.
- Minimum service access areas and spaces for airflow clearances are responsibilities of the installer, ActronAir will not be held liable for any extra charges incurred due to lack of access and space for airflow.
- Under all circumstances, condenser air must not recirculate back onto condenser coil. Keep all clearance free of any obstructions.
- Maximum External Static of Outdoor Fans is 5 Pa.
- STACKING OF UNITS: Ensure that minimum airflow and clearances are met.
- Refer to pipe Connection Details on Specifications Sheet.
- MTG C-C DIST = Mounting Centre to Centre Distance.
- Use M12 bolt for feet mounting.

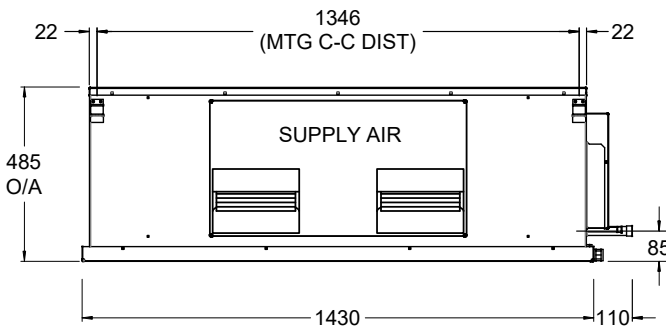


21.55 kW
3 Phase 1 Stage

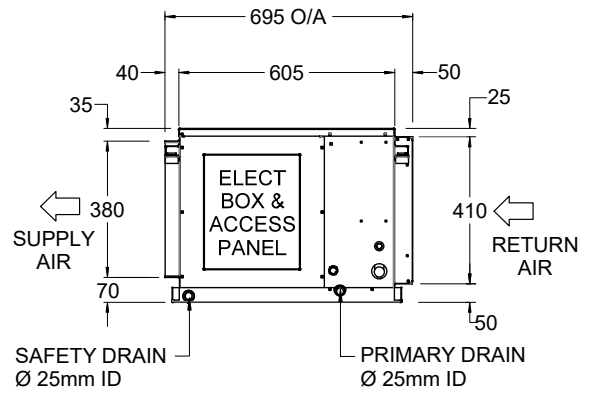
INDOOR UNIT - STANDARD MODEL



TOP VIEW



FRONT VIEW



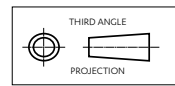
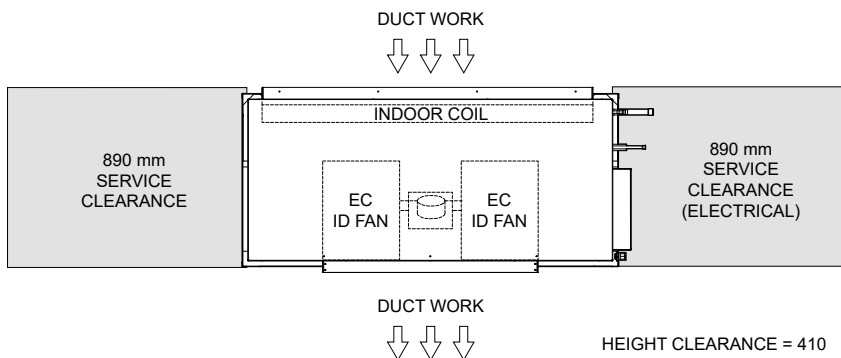
SIDE VIEW

OVERALL NOMINAL DIMENSION (H x W x L)
 = 485 x 1470 x 695
 SUPPLY DUCT (H x W) = 380 x 715
 RETURN DUCT = 410 x 1190
 USE M12 BOLT FOR FEET MOUNTING
 DRAIN CONNECTION = 25mm ID

3 Phase
 1 Stage
 21.55 kW

UNIT MODEL NUMBER	UNIT WEIGHT
ERQ5-24AS	80

MINIMUM SERVICE ACCESS AREAS AND AIRFLOW CLEARANCES



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 given 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.

Outdoor Radiated

Sound Power Level (SWL)

Fan Speed	Sound Power Level dB(A)	Octave Band Centre Frequency (Hz), dB						
		125	250	500	1k	2k	4k	8k
Low	63.8	66.4	68.7	61.5	52.1	49.7	48.1	46.5
High	79.6	81.0	80.2	77.3	74.7	70.2	63.9	54.8

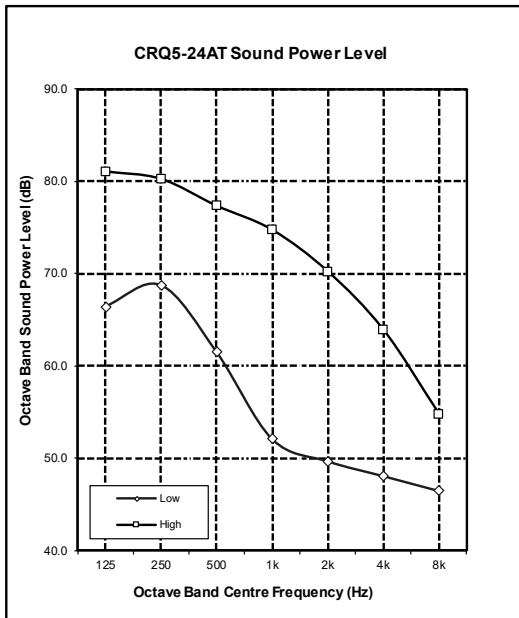
Indoor Outlet

Sound Power Level (SWL)

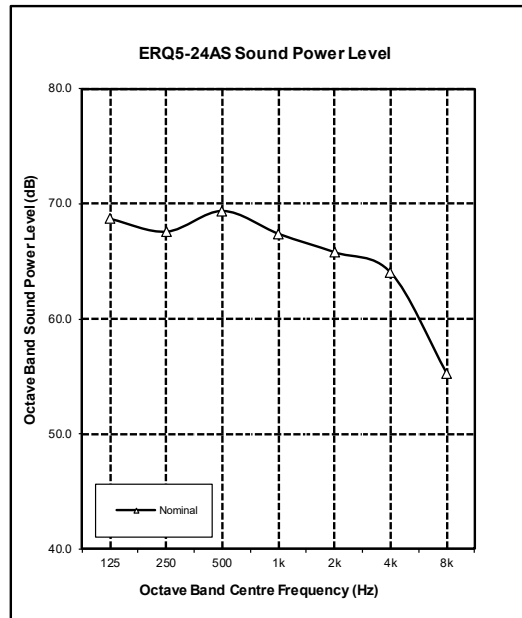
Airflow Setting	Airflow Li/s	Sound Power Level dB(A)	Octave Band Centre Frequency (Hz), dB						
			125	250	500	1k	2k	4k	8k
Nominal	1100	72.8	68.7	67.6	69.4	67.4	65.8	64.0	55.2

21.55 kW
3 Phase 1 Stage

OUTDOOR RADIATED



INDOOR OUTLET



NOTES:

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

SPECIFICATIONS

CRQ5-24AT / ERQ5-24AS

CONSTRUCTION

CABINET (Indoor Unit)	0.5 - 1.2 mm Galvanized Steel
CABINET (Outdoor Unit)	0.9 - 1.2 mm Galvanized Steel
SURFACE FINISH (Outdoor Unit)	65 μ Baked Polyester Powder Coat

INSULATION

TYPE - (Indoor Unit)	Foil Faced Polyethylene Expanded Polystyrene
----------------------	---

SOUND LEVEL * dB(A)

SOUND PRESS. - Low / High	43.0 / 60.0
SOUND POWER LEVEL - Low / High	63.8 / 79.6

* Sound data are based on outdoor fan's manufacturer sound level data.

ELECTRICAL

OUTDOOR UNIT

Power Supply - 50 Hz	400 Volts x 3 Phase + N
Voltage Range (min - max)	380 V - 440 V
Full Load Amps*	16.6
Rated Load Amps**	8.4
Approximate Starting Amps	< 45.0
IP Rating	IP44

INDOOR UNIT

Power Supply - 50 Hz	230 Volts x 1 Phase + N
Voltage Range (min - max)	216 V - 253 V
Full Load Amps*	6.0
IP Rating	IP20

OUTDOOR & INDOOR UNIT (TOTAL)

Full Load Amps* - Phase 1	22.6
Full Load Amps* - Phase 2 & 3	14.4 & 14.4
Rated Load Amps**	12.2

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

* Full Load Amps are based on Compressor and Fan Motor's maximum expected current.

** Rated Load Amps are measured and tested in accordance with AS/NZS3823.1.2.

CABLE SIZE & CIRCUIT BREAKER SIZE

Suggested minimum cable size should be used as a guide only, refer to AS/NZS 3000 "Australian/New Zealand Wiring Rules" for more details.

Cable Size (main line)	4.0 mm ² (SUGGESTED MINIMUM)
Cable Size (indoor to outdoor wire)	1.5 mm ² (SUGGESTED MINIMUM)
Circuit Breaker Size	25.0 Amps
Data Cable Field Wiring (Outdoor-to-Indoor)	2 Core 7 / 0.30 (0.5mm ²) Twisted Shielded Data Cable

OUTDOOR COIL

TUBE TYPE	Copper - Rifle Bore
FIN TYPE	Aluminium - Wave
FACE AREA (m sqr)	2.02
FIN SPACING (per m)	472
COIL COATING	Hydrophilic Blue Fin Coil Coat Protection

OUTDOOR FAN

NUMBER OF FANS x TYPE	2 x Axial
NUMBER OF BLADES PER FAN	5
DIAMETER (mm)	500
OUTPUT kW (each)	0.27
MOTOR TYPE / DRIVE TYPE	6 Pole External Rotor / Direct
FAN SPEED CONTROL	3 Speed via Capacitor

The standard type outdoor fans fitted to this unit will only accept 5Pa of external static resistance.

INDOOR COIL

TUBE TYPE	Copper - Rifle Bore
FIN TYPE	Aluminium - Louvre
FACE AREA (m sqr)	0.41
FIN SPACING (per m)	472
COIL COATING	Hydrophilic Blue Fin Coil Coat Protection

INDOOR FAN

NUMBER OF FANS x TYPE	1 x Twin Deck Centrifugal EC Fan
DIAMETER (mm)	240 x 180
INPUT kW (each)	0.55
MOTOR TYPE / DRIVE TYPE	Variable Speed EC Motor / Direct
FAN SPEED CONTROL	Electronic Control

COMPRESSOR

NUMBER PER UNIT x TYPE	1 x Variable Speed Scroll (Hermetic)
FULL LOAD AMPS	14.4
STARTING METHOD	Soft Start via Variable Speed Drive

REFRIGERATION SYSTEM

REFRIGERANT TYPE	R-410A
EXPANSION CONTROL	Direct Expansion Orifice / EEV
FACTORY CHARGE (grams)	9350
PRE-CHARGE LENGTH (metres)	15
ADDITIONAL REF. CHARGE (gm/m)	100

FILTER DRIER

CONNECTION SIZE & TYPE	12.7 mm (1/2") ODF Soldered Bi-Flow
FACTORY SUPPLIED / FITTED	No

See Installation Section for complete Filter Drier specifications.

INTERCONNECTING PIPE RUN

MAX PIPE LENGTH (metres)	60
MAX. VERTICAL LENGTH (metres)	20 (Included in Max. Pipe Length)
FIELD PIPE SIZES	
Liquid Pipe	12.7 mm (1/2")
Gas Pipe	25.4 mm (1")

PIPE CONNECTIONS

Outdoor	Liquid Pipe	12.7 mm (1/2") Swaged to fit 12.7 mm (1/2") field pipe
	Gas Pipe	22.2 mm (7/8") Swaged to fit 25.4 mm (1") field pipe
Indoor	Liquid Pipe	12.7 mm (1/2") Swaged to fit 12.7 mm (1/2") field pipe
	Gas Pipe	25.4 mm (1") No swage I.D. will fit 25.4 mm (1") field pipe O.D.

CONNECTION TYPE

Solder
Insulate both gas and liquid pipes separately.

PROTECTION DEVICES 8.3 / 3.8 / 12.1

HIGH PRESSURE CUTOUT SWITCH	Nonadjustable (Automatic Reset)
LOW PRESSURE CUTOUT SWITCH	Nonadjustable (Automatic Reset)
COMPRESSOR MOTOR TEMP.	Internal Thermal Cut-Out
INDOOR FAN OVERLOAD	Internal Thermal Cut-Out
OUTDOOR FAN OVERLOAD	Internal Thermal Cut-Out
SUMP HEATER WATTS*	37W during compressor off cycle

*Crankcase Heater is to be disconnected for pipe lengths 8m or less.

ELECTRONIC CONTROLS

DEFROST METHOD	Reverse Cycle
DEFROST TYPE	Adaptive Demand Defrost
CONTROL CIRCUIT BREAKER	16.0 Amps
MASTER/SECONDARY CONTROLLER CABLE SPECS.	Cat5e with RJ45 Connectors and cable boots.

OPERATING RANGE

It is essential that the unit is correctly sized for the application and operates within its recommended range of operating conditions as shown below.

MODE	RANGE	INDOOR AIR INTAKE TEMPERATURE	OUTDOOR AIR INTAKE TEMPERATURE
Cooling	Max.	30°C DB / 22°C WB	50°C DB
	Min.	20°C DB / 16°C WB	15°C DB
Heating	Max.	24°C DB	19.5°C DB / 18°C WB
	Min.	16°C DB	-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 accessible location between the return air grille and the unit.
ActronAir does not supply or make any provisions for return air filter.

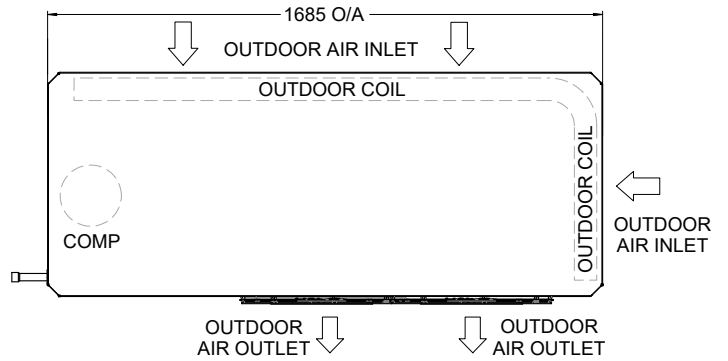
3 Phase
1 Stage

21.55 kW



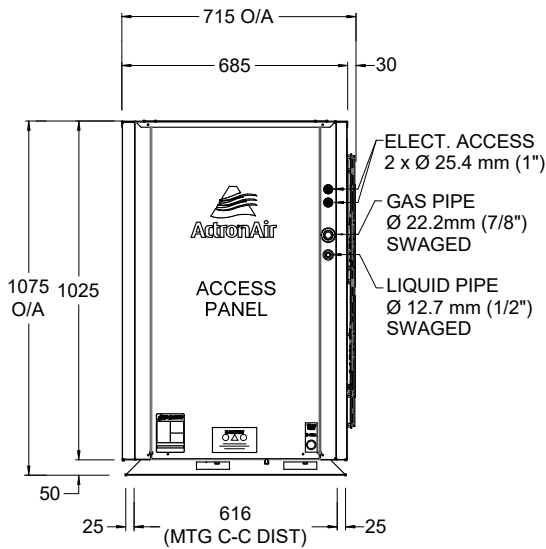
OUTDOOR UNIT - HORIZONTAL DISCHARGE FANS

OVERALL NOMINAL DIMENSION (H x W x D)
= 1075 x 1685 x 715

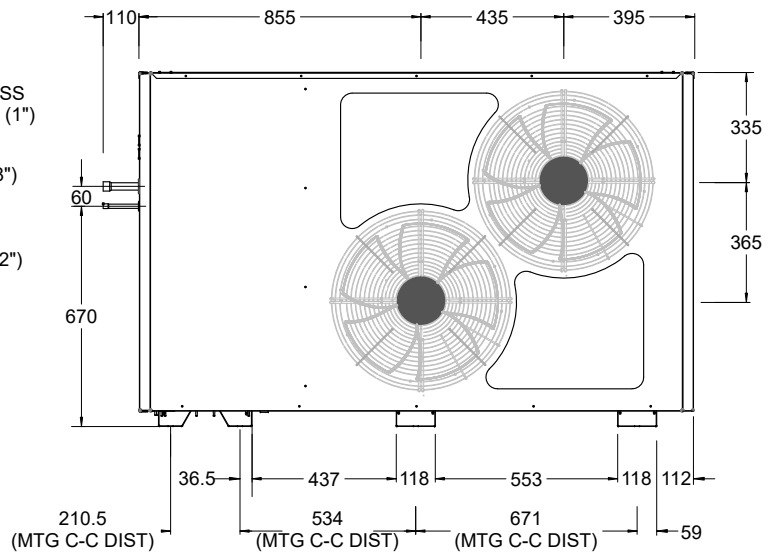


TOP VIEW

3 Phase
1 Stage
21.55 kW

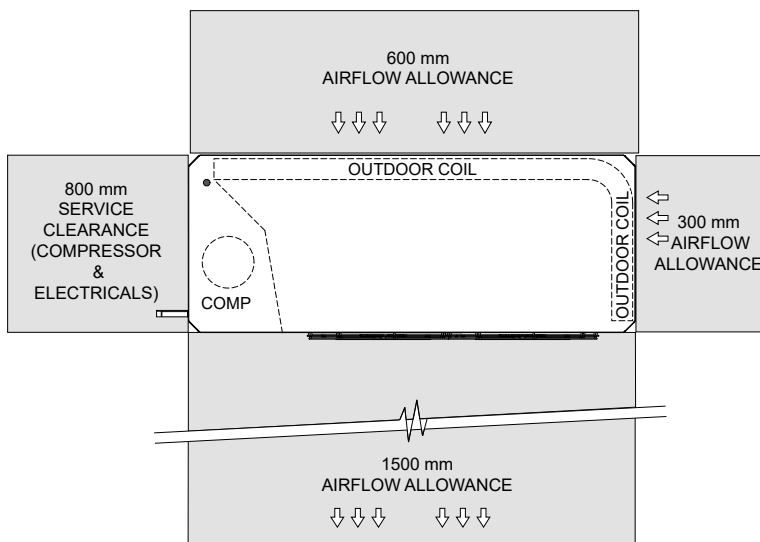


SIDE VIEW



FRONT VIEW

MINIMUM SERVICE ACCESS CLEARANCES & AIRFLOW SPACE ALLOWANCES



TOP VIEW

HEIGHT CLEARANCE = 450

THIRD ANGLE
PROJECTION

NOTES:

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- STACKING OF UNITS: Ensure that minimum airflow and clearances are met.
- Refer to pipe Connection Details on Specifications Sheet.
- MTG C-C DIST = Mounting Centre to Centre Distance.
- Use M12 bolt for feet mounting.

