Cooling Performance Data Model AHU24R/LCU24R

INDOOR COIL ENTERING AIR TEMP °C		OUTDOOR COIL ENTERING AIR TEMPERATURE °C											
		30°C			35°C			40°C			45°C		
		Tot Cap	Sens Cap	LWB	Tot Cap	Sens Cap	LWB	Tot Cap	Sens Cap	LWB	Tot Cap	Sens Cap	LWB
DB°C	WB°C	kW	kW	°C	kW	kW	°C	kW	kW	°C	kW	kW	°C
21	17	6.86	4.57	12.30	6.41	4.34	12.60	5.96	4.03	13.00	5.33	3.73	13.40
	18	7.04	4.12	13.40	6.58	3.90	13.70	6.06	3.65	14.00	5.43	3.35	14.40
	19	7.21	3.68	14.40	6.74	3.47	14.70	6.21	3.24	15.10	5.56	2.95	15.50
	20	7.82	3.25	15.30	7.30	3.06	15.50	6.72	2.84	15.90	6.02	2.58	16.30
23	17	6.98	5.40	12.20	6.53	5.16	12.50	6.04	4.90	12.90	5.42	4.57	13.30
	18	7.16	4.96	13.30	6.70	4.73	13.60	6.18	4.47	14.00	5.55	4.15	14.30
	19	7.30	4.56	14.30	6.85	4.35	14.60	6.31	4.10	15.00	5.67	3.78	15.40
	20	7.49	4.12	15.40	7.02	3.91	15.70	6.46	3.66	16.10	5.80	3.36	16.50
	21	7.72	3.69	16.40	7.19	3.49	16.70	6.60	3.24	17.10	5.93	2.97	17.50
25	17	7.07	6.26	12.10	6.64	6.01	12.40	6.14	5.70	12.80	5.55	5.33	13.20
	18	7.24	5.84	13.20	6.80	5.61	13.50	6.27	5.32	13.90	5.65	4.97	14.20
	19	7.42	5.40	14.20	6.97	5.18	14.50	6.43	4.91	14.90	5.77	4.57	15.20
	20	7.62	4.95	15.30	7.14	4.73	15.60	6.58	4.47	15.90	5.91	4.15	16.30
	21	7.77	4.56	16.40	7.28	4.35	16.70	6.73	4.09	17.10	6.04	3.79	17.40
27	17	7.22	6.99	11.90	6.75	6.72	12.30	6.29	6.29	12.60	5.75	5.75	13.00
	18	7.35	6.68	13.00	6.91	6.42	13.30	6.39	6.09	13.70	5.81	5.67	14.10
	19	7.51	6.28	14.10	7.03	6.20	14.40	6.52	5.74	14.80	5.89	5.40	15.20
	20	7.69	5.84	15.20	7.22	5.61	15.50	6.68	5.34	15.90	6.02	5.01	16.30
	21	7.89	5.40	16.30	7.40	5.17	16.60	6.82	4.90	16.90	6.16	4.59	17.30
29	17	7.45	7.45	11.70	7.05	7.04	12.00	6.58	6.58	12.30	6.04	6.04	12.80
	18	7.54	7.35	12.90	7.05	7.04	13.20	6.59	6.59	13.50	6.04	6.04	13.90
	19	7.63	7.10	14.00	7.19	6.82	14.30	6.67	6.46	14.60	6.05	6.05	15.10
	20	7.79	6.71	15.10	7.31	6.45	15.40	6.79	6.17	15.80	6.14	5.77	16.20
	21	7.97	6.28	16.20	7.49	6.04	16.60	6.91	5.76	16.80	6.25	5.42	17.10
31	17	7.76	7.76	11.40	7.34	7.34	11.70	6.87	6.87	12.10	6.32	6.32	12.60
	18	7.76	7.76	12.70	7.35	7.35	12.90	6.88	6.88	13.30	6.33	6.33	13.70
	19	7.76	7.76	13.90	7.35	7.35	14.10	6.88	6.88	14.50	6.33	6.33	14.90
	20	7.92	7.49	15.00	7.46	7.19	15.30	6.95	6.79	15.70	6.33	6.33	16.10
	21	8.07	7.12	16.10	7.58	6.86	16.40	7.05	6.56	16.80	6.42	6.18	17.20

Capacity multipliers should to above capacitities to adjust for reduced or increased air flow.

Technical Specification AHU24R Split Ducted Model

Indoor Unit Model Number	AHU24R	Nominal Evaporator Air Flow (l/s)	472
Outdoor Unit Model Number	LCU24R	Number of Compressors	1
Total Cooling Capacity (kW)*	7.03	Power Requirements (Volt / Phase)	220-240/1
Sensible Cooling Capacity (kW)*	6.2	Normal Max. Current (Amps / Phase)	13.8
Heating Capacity (kW)**	7.24		
*Entering are @ 27/19 °C and ambient 35 °C		** Entering air @ 21 °C DB and 7 °C ambient	

Air Quantity Multiplying Factors

	% Rated Air Quantity-Nominal 472 l/s				
Capacity	80	90	100	110	120
Total	0.95	0.98	1.00	1.02	1.04
Sensible	0.89	0.95	1.00	1.05	1.09

Evaporator

Type	Copper Tube/Aluminium Fins
Face Area (m^2)	0.21
Air Quantity (l/s)	472

Heating Preformance Data

Outdoor Coil Entering DB temp					
	0	4	8	12	18
Heating Capacity kW	6.2	6.8	7.5	8.2	9.4

Evaporator (Indoor)

Number of Fans	2
Type	Centrifugal
Drive	Direct
Motor Voltage/Phase/Frequency	220-240/1/50
Motor (kW) Standard	0.25
Max. Fan Speed (rpm)	1250

Heating Preformance Correction

% Rated Air Quality	Multiplier	Return Air Temp °C	Multiplier	Outdoor Air Temp °C	Approx. Defrost Factor
80	0.93	15	1.05	0	0.80
90	0.97	18	1.03	2	0.78
100	1.00	21	1.00	4-6	0.75
110	1.03	24	0.97	7	0.87
120	1.05	27	0.95	8	1.00

Electrical

Power Requirements	1 Phase / 240V / 50Hz
Recommend fuse size (Amps/Phase)	20

Condenser

Type	Copper Tube / Aluminium Fins
Face Area (m^2)	0.53

Compressor

Number Per Unit	1
Type	Rotary
RPM (Nom)	2900
Normal Max. Current (Amps / Phase)	10.9
Locked Rotor Current (Amps / Phase)	60
Displacement (m^3/h)	5.05

Condenser (Outdoor)

Number of Fans	1
Type	Axial
Drive	Direct
Type	Enclosed
Motor Watts / rpm	80 / 900
Motor Voltage/Phase/Frequency	240 / 1 / 50

Electrical Controls and Safeties

High Pressure Switch(Setting kPa)	4100	Defrost	
Low Pressure Switch(Setting kPa)	170	Initiation Tempreature (°C)	-4
Indoor Fan Overload	Internal	Termination Tempreature (°C)	10
Outdoor Fan Overload	Internal	Min. Period Between De-Ice (min)	30
Compressor Delay Timer	180 sec	Max. De-Ice Preiod (min)	10

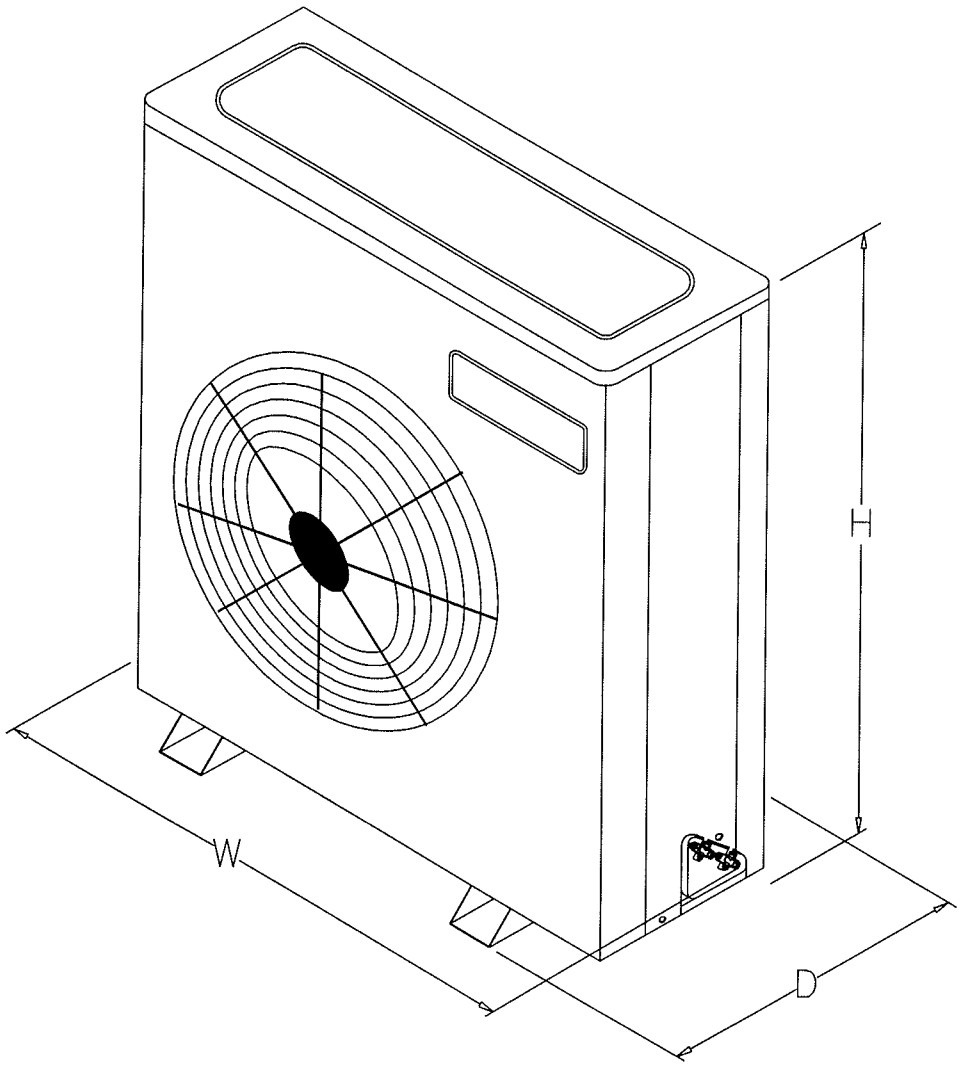
Refrigerant System

Refrigerant Type	R410a
Charge (kg)	1.9
Line Size (mm)	
Liquid 0-10 metres	9.53
Gas 0-10 meters	15.88
Max.height difference metres	25
Max.pipe length metres	50
Service Connections	Pack valve
Expansion Control - in outdoor unit	Capillary

Standard Features

Auto reset high pressure and auto reset low pressure cutouts	
Thermal overload protection on all motors	
Compressor crankcase heater	Automatic de-ice system
Limit start timer (anti short cycling)	Thermally insulated indoor unit

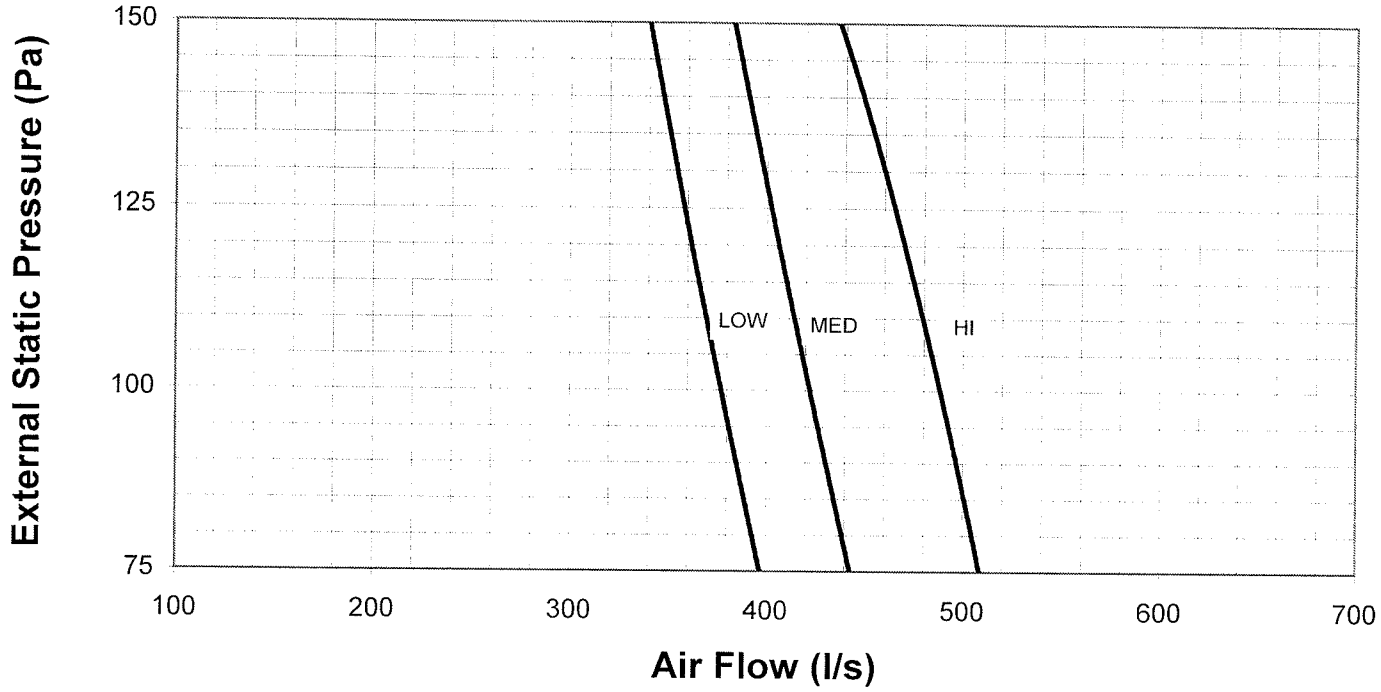
Released Apil 09.

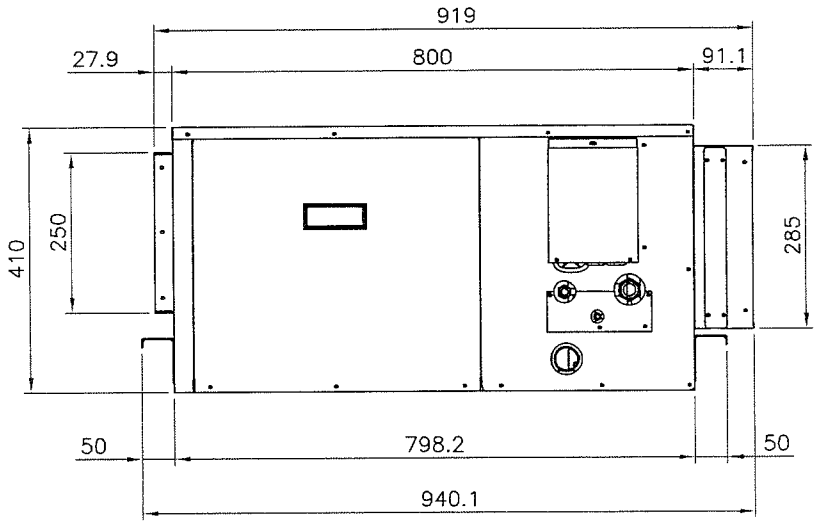


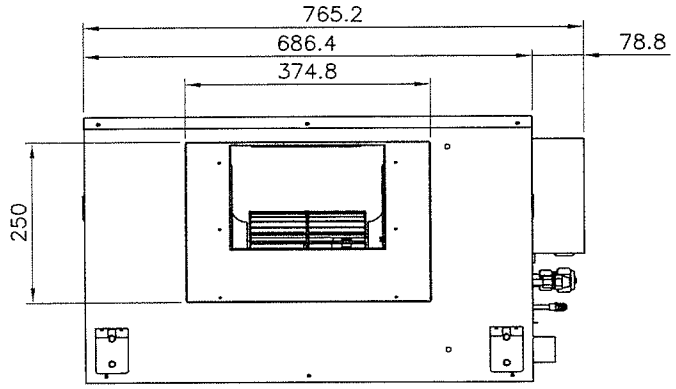
MODEL	CAPACITY BTU/H (kW.)	DIMENSION (MM.)			SERVICE VALVE SIZE (mm)	
		H	W	D	LIQUID	SUCTION
LCU 24	24,000 (7.03)	640	970	400	9.53(3/8")	15.88(5/8")

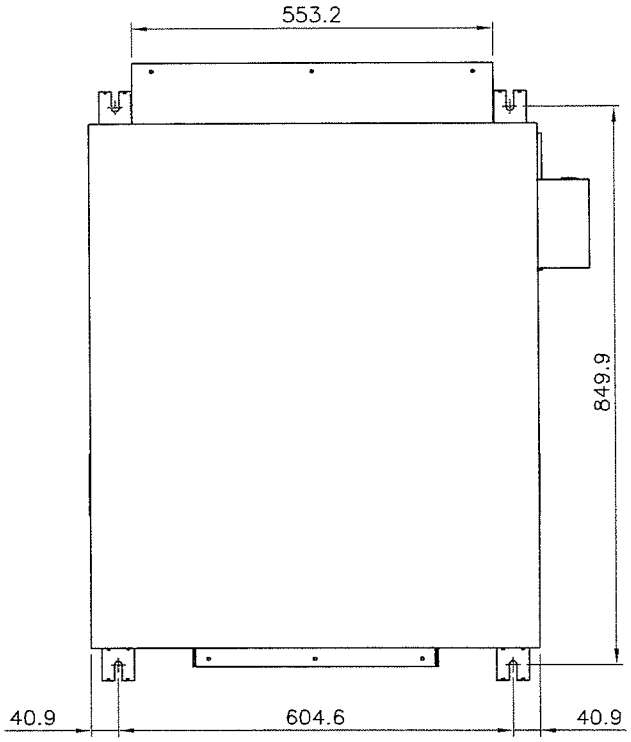
PRODUCT DIMENSION LCU24

PERFORMANCE CURVE OF AHU-24(new)
(220/240 V. - 50Hz.)









REVISION RECORD			
ITEM	DESCRIPTION/DETAIL	NAME	DATE

ITEM	PART NAME	MATERIAL	SIZE	QTY.	DWG. NO.

TITLE : Product Dimension AHU 24(new)

DRAWN : K.ANURAK	DATE :	PART NUMBER –
CHECKED : A.CHAN	DATE :	
APPROVED : DI MARTINO GIUSEPPE	DATE :	SCALE : 1 : 12

DUNNAIR (Aust) Pty Ltd

UNIT :	DRAWING No. :	REV.	TOLERANCE
mm.	–	0	± 5