

Technical Specification AHU75R Split Ducted Model

Indoor Unit Model Number	AHU75R	Nominal Evaporator Air Flow (l/s)	1110
Outdoor Unit Model Number	LCU75R	Number of Compressors	1
Total Cooling Capacity (kW)*	21.01	Power Requirements (Volt / Phase)	415/3
Sensible Cooling Capacity (kW)*	16.91	Normal Max. Current (Amps / Phase)	18.5
Heating Capacity (kW)**	22.04		

*Entering air @ 27/19 °C and ambient 35 °C

** Entering air @ 21 °C DB and 7 °C ambient

Air Quantity Multiplying Factors

	% Rated Air Quantity-Nominal 1110 l/s				
	80	90	100	110	120
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

Heating Performance Data

Outdoor Coil Entering DB temp					
	0	4	8	12	18
Heating Capacity kW	18.9	20.6	22.5	24.6	28.4

Heating Performance 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

Compressor

Number Per Unit	1
Type	Scroll
RPM (Nom)	2900
Normal Max. Current (Amps / Phase)	11.6
Locked Rotor Current (Amps / Phase)	73
Displacement (m ³ /h)	13.46

Electrical Controls and Safeties

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

Standard Features

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

Evaporator

Type	Copper Tube/Aluminium Fins
Face Area (m ²)	0.52
Air Quantity (l/s)	1110

Evaporator (Indoor)

Number of Fans	2
Type	Centrifugal
Drive	Direct
Motor Voltage/Phase/Frequency	220-240/1/50
Motor (kW) Standard	2x 0.440
Max. Fan Speed (rpm)	1250

Electrical

Power Requirements	3 Phase / 415V / 50Hz
Recommend fuse size (Amps/Phase)	25

Condenser

Type	Copper Tube / Aluminium Fins
Face Area (m ²)	1.14

Condenser (Outdoor)

Number of Fans	2
Type	Axial
Drive	Direct
Type	Enclosed
Motor Watts / rpm	2x80 / 900
Motor Voltage/Phase/Frequency	240 / 1 / 50

Refrigerant System

Refrigerant Type	R410a
Charge (kg)	4.2
Line Size (mm)	
Liquid 0-10 metres	12.7
Gas 0-10 meters	19.05
Max.height difference metres	25
Max.pipe length metres	50
Service Connections	Pack valve
Expansion Control - in outdoor unit	Capillary

DUNNAIR (Aust) Pty Ltd supports a policy of continuous product improvement. Therefore specifications and designs are subject to change without prior notice.

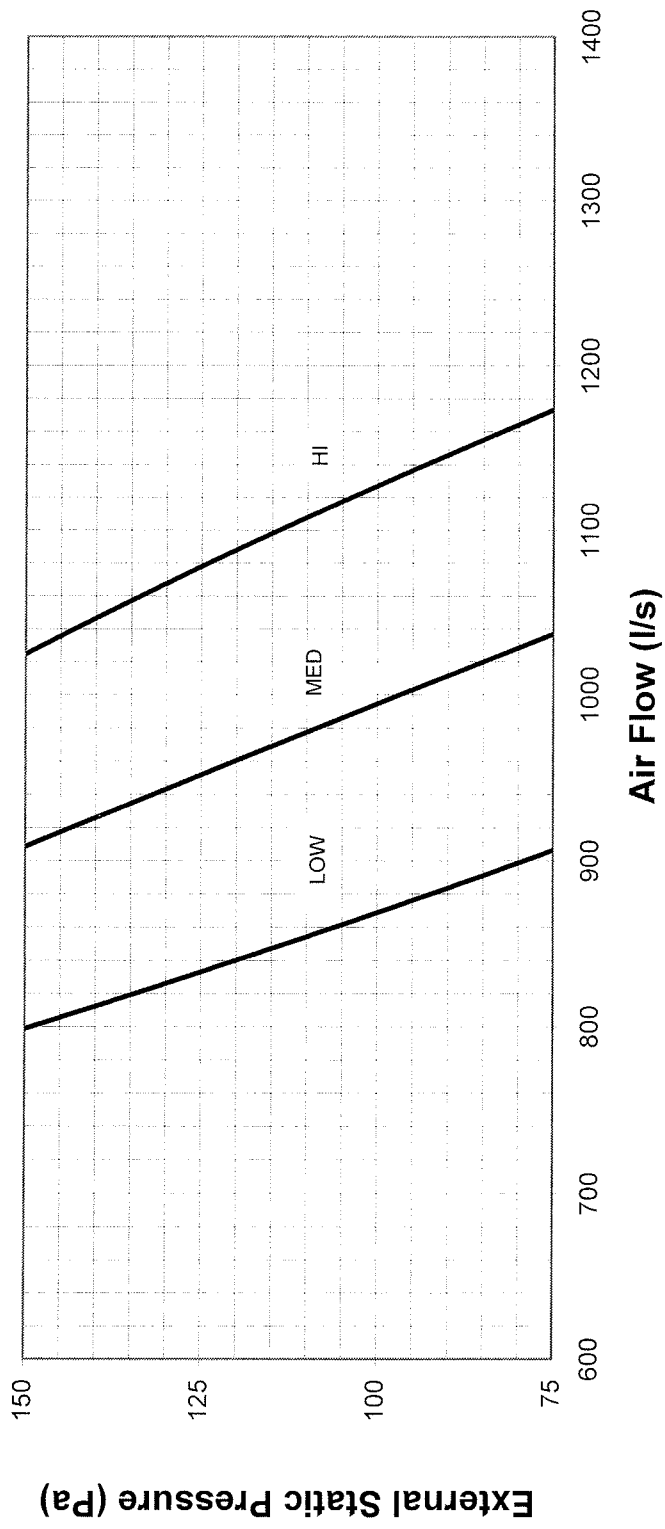
Released April 09.

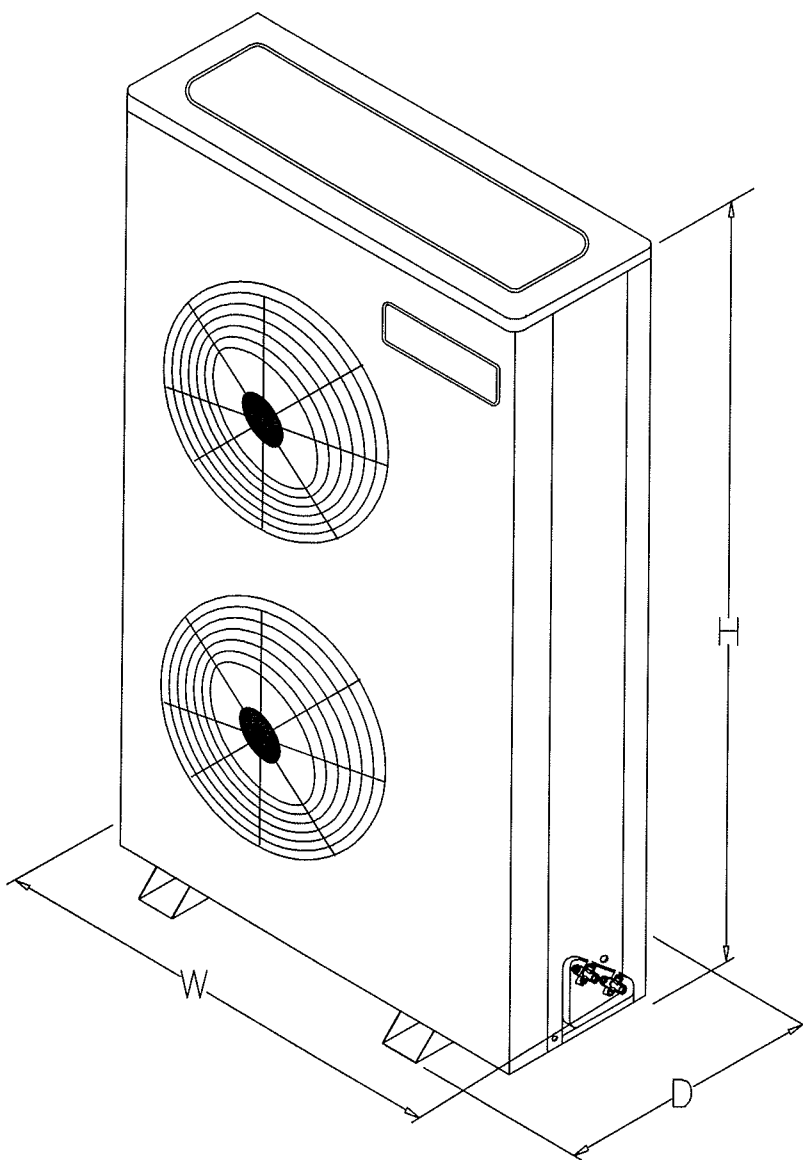
Cooling Performance Data Model AHU75R/LCU75R

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	20.58	13.13	11.00	19.52	12.61	11.40	18.31	12.01	11.70	17.01	11.36	12.10
	18	21.26	11.97	12.00	19.98	11.45	12.30	18.77	10.89	12.80	17.42	10.24	13.10
	19	22.20	10.72	12.90	21.02	10.26	13.20	19.70	9.71	13.60	18.26	9.13	14.10
	20	23.05	9.43	14.00	21.86	8.96	14.30	20.52	8.43	14.70	18.97	7.85	15.00
23	17	20.77	15.27	10.90	19.71	14.74	11.30	18.50	14.13	11.60	17.18	13.45	12.00
	18	21.28	14.26	12.00	20.21	13.74	12.30	18.95	13.13	12.70	17.58	12.46	13.10
	19	21.85	13.09	13.10	20.74	12.59	13.40	19.42	11.98	13.80	18.02	11.33	14.20
	20	22.68	11.91	14.00	21.45	11.43	14.30	19.92	10.86	14.80	18.42	10.20	15.30
	21	23.61	10.62	15.00	22.36	10.15	15.30	20.97	9.63	15.70	19.37	9.03	16.10
25	17	20.87	17.51	10.80	19.83	16.95	11.20	18.62	16.33	11.50	17.30	15.60	11.90
	18	21.42	16.36	11.90	20.31	15.82	12.30	19.11	15.23	12.60	17.74	14.53	13.00
	19	21.96	15.37	13.00	20.81	14.84	13.30	19.59	14.09	13.70	18.19	13.42	14.10
	20	22.53	14.19	14.10	21.35	13.66	14.40	20.05	13.07	14.80	18.61	12.41	15.20
	21	23.11	13.03	15.20	21.88	12.49	15.50	20.52	11.90	15.90	19.05	11.28	16.20
27	17	21.05	19.64	10.80	20.00	19.02	11.10	18.80	18.27	11.40	17.51	17.49	11.80
	18	21.54	18.59	11.80	20.44	18.01	12.20	19.21	17.37	12.50	17.90	16.65	12.90
	19	22.10	17.46	12.90	21.01	16.91	13.30	19.68	16.28	13.60	18.31	15.60	14.00
	20	22.70	16.30	14.00	21.50	15.76	14.30	20.19	15.16	14.70	18.77	14.49	15.10
	21	23.23	15.29	15.10	22.01	14.75	15.40	20.65	14.15	15.80	19.19	13.51	16.20
29	17	21.36	21.36	10.70	20.43	20.43	11.00	19.34	19.34	11.20	18.20	18.20	11.60
	18	21.75	20.66	11.80	20.68	20.02	12.10	19.35	19.31	12.40	18.21	18.21	12.80
	19	22.23	19.65	12.80	21.09	19.07	13.20	19.84	18.41	13.50	18.48	17.65	13.90
	20	22.80	18.54	13.90	21.62	17.99	14.30	20.31	17.34	14.60	18.90	16.65	15.00
	21	23.98	17.39	15.00	22.17	16.85	15.30	20.83	16.23	15.70	19.36	15.57	16.10
31	17	22.10	22.10	10.30	21.16	21.16	10.60	20.08	20.08	10.90	18.80	18.80	11.30
	18	22.11	22.11	11.60	21.16	21.16	11.90	20.09	20.09	12.20	18.88	18.88	12.50
	19	22.47	21.64	12.70	21.37	20.86	13.10	20.10	20.10	13.40	18.88	18.88	13.80
	20	22.94	20.69	13.80	21.75	20.08	14.20	20.49	19.40	14.50	19.10	18.58	15.00
	21	23.48	19.58	14.90	22.26	19.01	15.30	20.54	18.39	15.60	19.47	17.68	16.00

Capacity multipliers should be applied to above capacities to adjust for reduced or increased air flow.

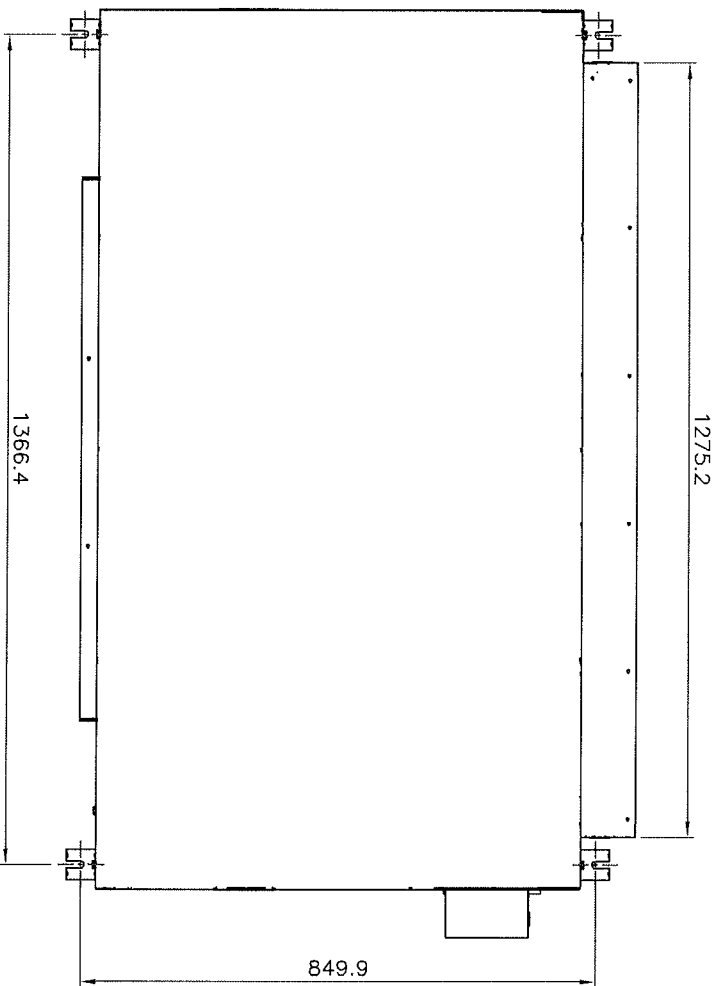
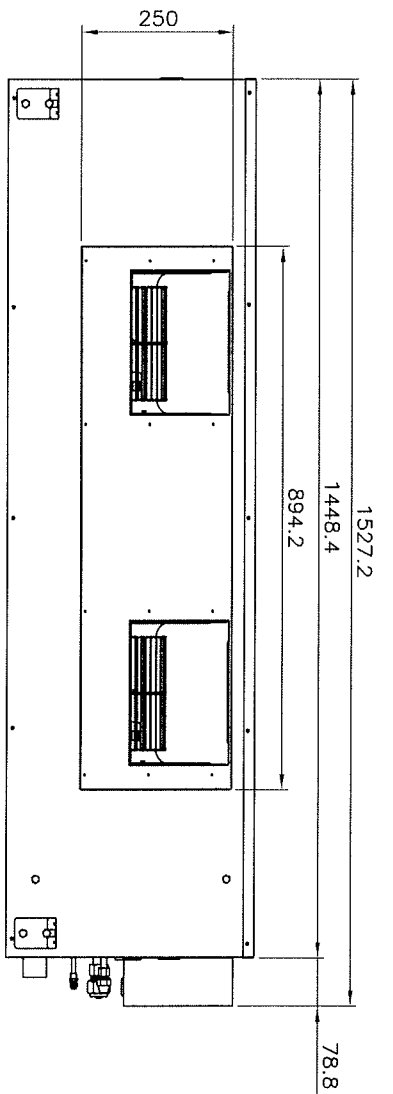
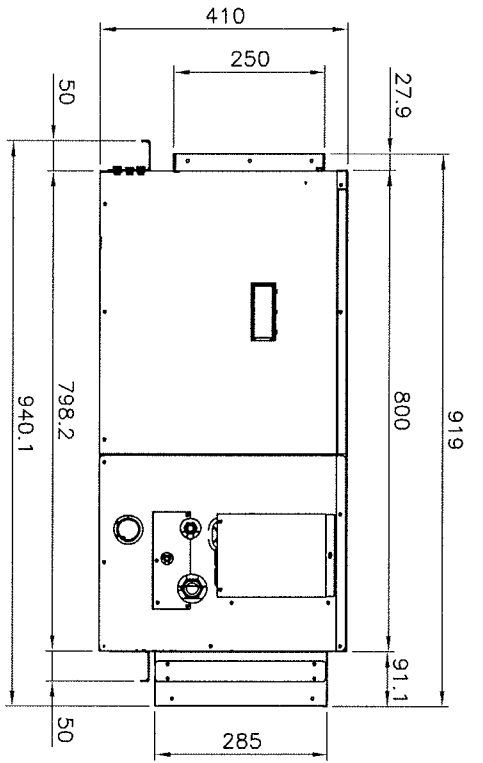
PERFORMANCE CURVE OF AHU-75(new)
(220/240 V. - 50Hz.)





MODEL	CAPACITY BTU/H (kW.)	DIMENSION (MM.)			SERVICE VALVE SIZE (mm)	
		H	W	D	LIQUID	SUCTION
LCU75	75,000 (21.98)	1350	976	400	12.7(1/2")	19.05(3/4")

PRODUCT DIMENSION LCU75



REVISION RECORD		ITEM	PART NAME	MATERIAL	SIZE	QTY.	DWG. NO.
ITEM	DESCRIPTION/DETAIL	NAME	DATE	TITLE : Product Dimension AHU75 (new) DRAWN : S.TOON CHECKED : A.CHAN APPROVED : DI MARTINO GIUSEPPE			
					PART NUMBER		
					SCALE : 1 : 13		
					UNIT : mm.		
					DRAWING No. : _		
					REV. : 0		TOOLERANCE ± 0.5

