

Cooling Performance Data Model AHU36R/LCU36R

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	10.46	6.61	10.90	9.91	6.33	11.20	9.30	6.03	11.60	8.63	5.70	12.00
	18	10.77	6.04	11.90	10.16	5.77	12.20	9.53	5.48	12.70	8.83	5.15	13.10
	19	11.29	5.43	12.80	10.70	5.18	13.30	10.03	4.90	13.60	9.24	4.60	14.00
	20	11.73	4.79	13.90	11.10	4.54	14.20	10.38	4.26	14.60	9.64	3.97	15.00
23	17	10.53	7.75	10.80	9.98	7.47	11.10	9.38	7.08	11.50	8.69	6.73	11.80
	18	10.81	7.17	11.90	10.25	6.89	12.20	9.60	6.57	12.60	8.90	6.23	12.90
	19	11.10	6.59	12.90	10.52	6.32	13.30	9.84	6.00	13.60	9.13	5.67	14.00
	20	11.54	6.01	13.90	10.86	5.76	14.20	10.08	5.45	14.70	9.34	5.13	15.10
	21	12.01	5.38	14.90	11.30	5.14	15.30	10.61	4.85	15.70	9.82	4.56	16.10
25	17	10.60	8.79	10.70	10.08	8.52	11.00	9.42	8.16	11.40	8.75	7.80	11.70
	18	10.89	8.22	11.80	10.35	7.96	12.10	9.67	7.62	12.40	8.97	7.27	12.80
	19	11.17	7.72	12.80	10.60	7.45	13.20	9.92	7.11	13.60	9.23	6.72	13.90
	20	11.45	7.13	13.90	10.83	6.84	14.30	10.18	6.55	14.60	9.42	6.21	15.00
	21	11.74	6.55	15.00	11.10	6.28	15.40	10.43	5.99	15.70	9.66	5.65	16.10
27	17	10.70	9.87	10.60	10.13	9.54	11.00	9.72	9.29	11.20	8.88	8.73	11.70
	18	10.94	9.32	11.70	10.34	9.01	12.00	9.93	8.79	12.20	9.07	8.34	12.80
	19	11.23	8.76	12.80	10.55	8.41	13.10	9.98	8.14	13.40	9.26	7.79	13.80
	20	11.52	8.26	13.90	10.90	7.89	14.20	10.23	7.59	14.50	9.49	7.24	14.90
	21	11.81	7.68	14.90	11.16	7.39	15.20	10.48	7.08	15.60	9.72	6.75	16.00
29	17	10.79	10.78	10.50	10.31	10.31	10.80	9.79	9.79	11.10	9.20	9.20	11.50
	18	11.04	10.37	11.60	10.47	10.04	11.90	9.87	9.65	12.20	9.20	9.20	12.70
	19	11.29	9.84	12.70	10.68	9.54	12.90	10.08	9.22	13.40	9.30	8.85	13.80
	20	11.55	9.27	13.70	10.95	8.99	14.10	10.30	8.69	14.50	9.57	8.32	14.90
	21	11.86	8.72	14.80	11.24	8.43	15.10	10.54	8.12	15.50	9.81	7.77	16.00
31	17	11.18	11.18	10.10	10.67	10.67	10.40	10.16	10.16	10.80	9.55	9.55	11.20
	18	11.19	11.19	11.40	10.69	10.69	11.70	10.17	10.17	12.10	9.57	9.57	12.50
	19	11.55	10.96	12.40	10.82	10.53	12.90	10.16	10.12	13.20	9.58	9.58	13.70
	20	11.82	10.46	13.60	11.05	10.07	14.00	10.39	9.73	14.40	9.68	9.32	14.80
	21	11.91	9.80	14.70	11.30	9.51	15.00	10.63	9.21	15.50	9.88	8.84	15.90

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

Technical Specification AHU36R Split Ducted Model

Indoor Unit Model Number	AHU36R	Nominal Evaporator Air Flow (l/s)	555
Outdoor Unit Model Number	LCU36R	Number of Compressors	1
Total Cooling Capacity (kW)*	10.55	Power Requirements (Volt / Phase)	220-240/1
Sensible Cooling Capacity (kW)*	8.41	Normal Max. Current (Amps / Phase)	19.4
Heating Capacity (kW)**	10.73		

*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 555 l/s				
	80	90	100	110	120
Capacity	0.95	0.98	1.00	1.02	1.04
Total	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	9.5	10.2	11	11.9	13.5

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	Rotary
RPM (Nom)	2900
Normal Max. Current (Amps / Phase)	16.1
Locked Rotor Current (Amps / Phase)	96
Displacement (m ³ /h)	7.06

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	
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)	0.33
Air Quantity (l/s)	555

Evaporator (Indoor)

Number of Fans	1
Type	Centrifugal
Drive	Direct
Motor Voltage/Phase/Frequency	220-240/1/50
Motor (kW) Standard	440
Max. Fan Speed (rpm)	1250

Electrical

Power Requirements	1 Phase / 240V / 50Hz
Recommend fuse size (Amps/Phase)	25

Condenser

Type	Copper Tube / Aluminium Fins
Face Area (m ²)	0.72

Condenser (Outdoor)

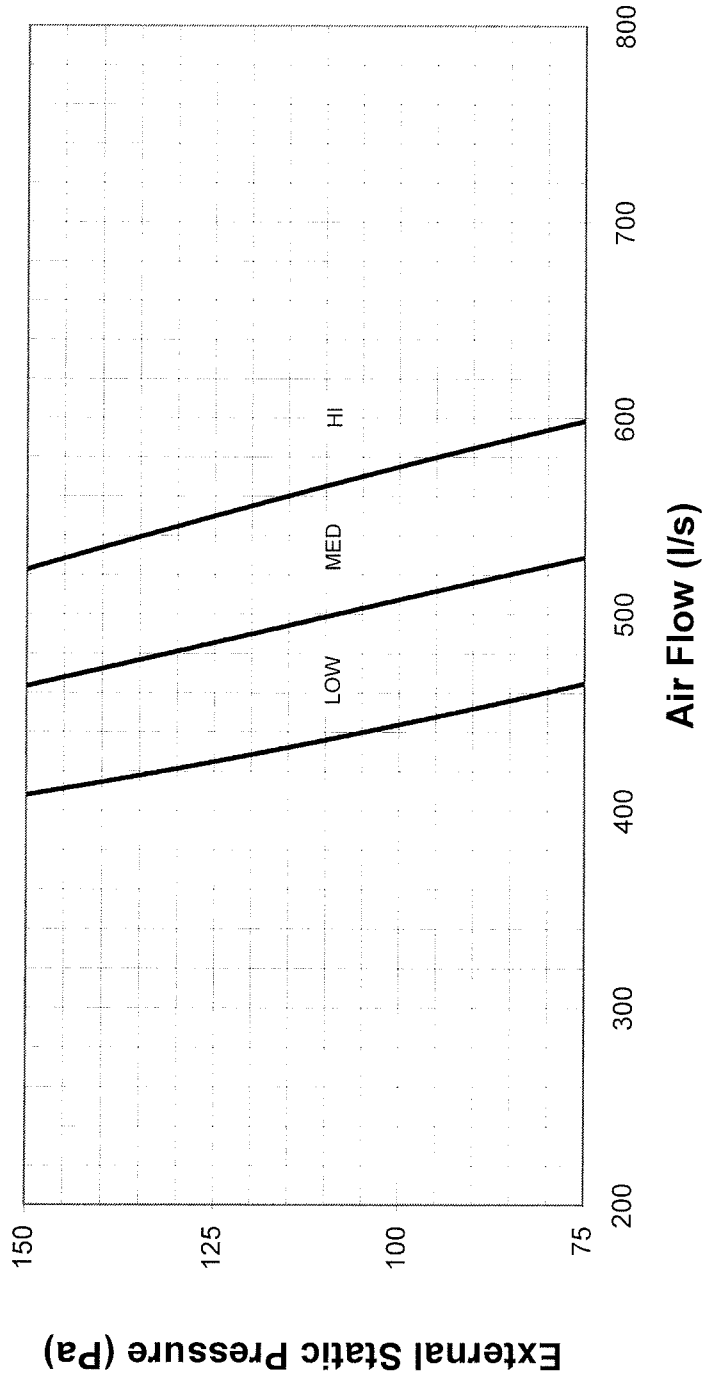
Number of Fans	1
Type	Axial
Drive	Direct
Type	Enclosed
Motor Watts / rpm	80 / 900
Motor Voltage/Phase/Frequency	240 / 1 / 50

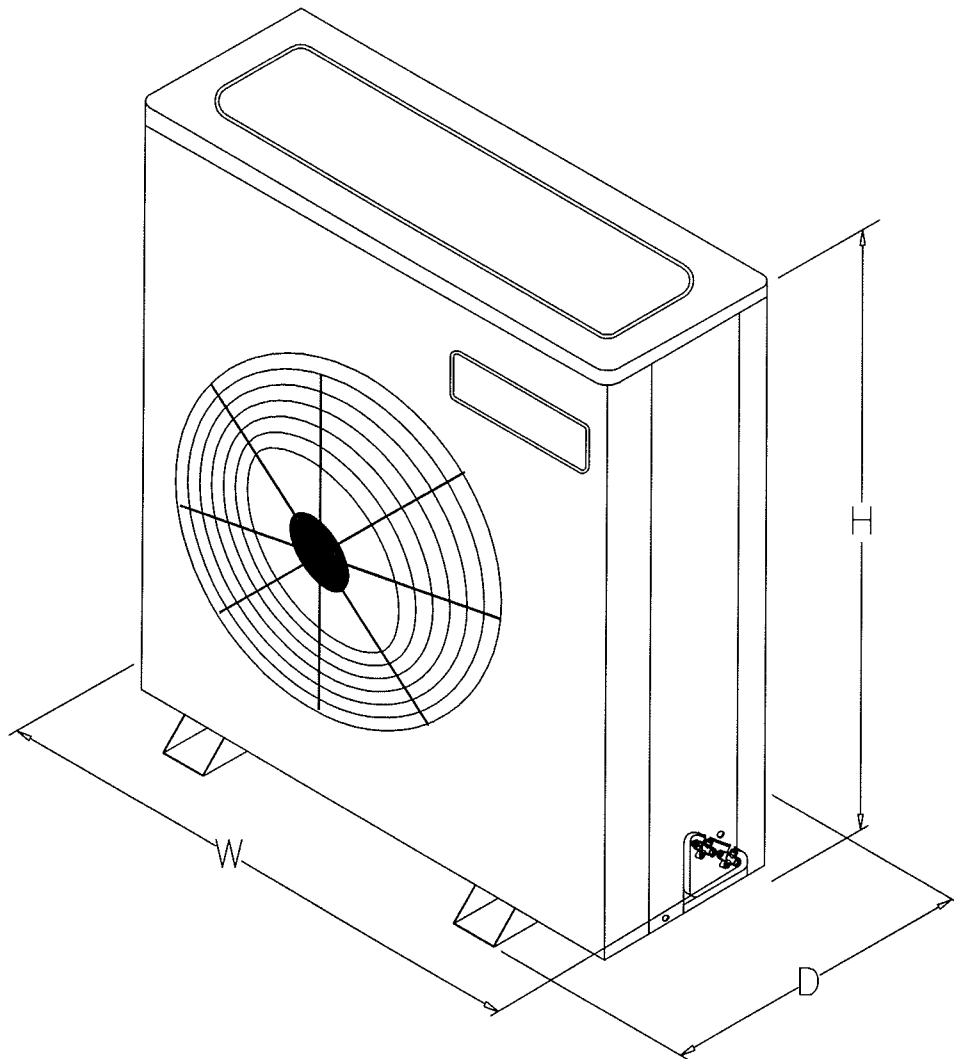
Refrigerant System

Refrigerant Type	R410a
Charge (kg)	2.4
Line Size (mm)	
Liquid 0-10 metres	9.53
Gas 0-10 metres	15.88
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.

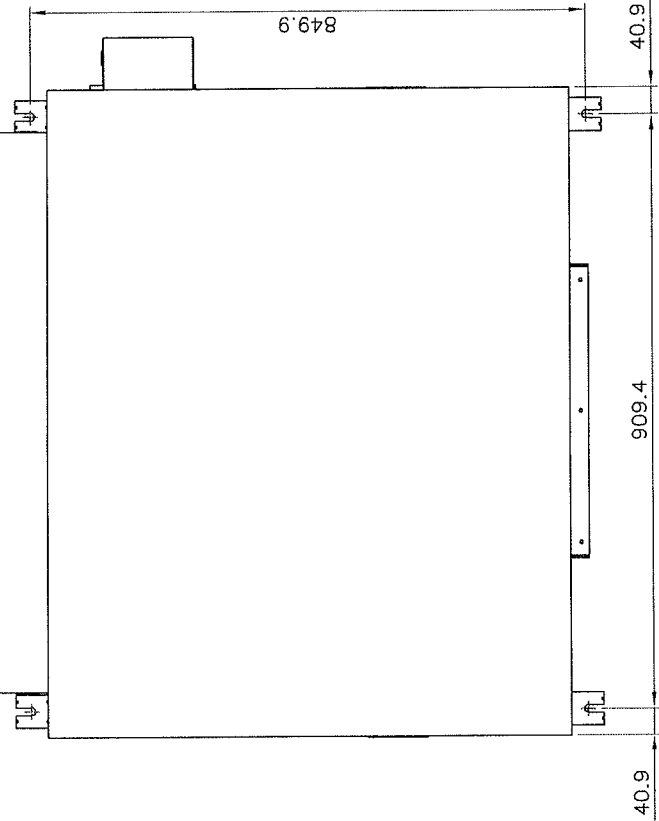
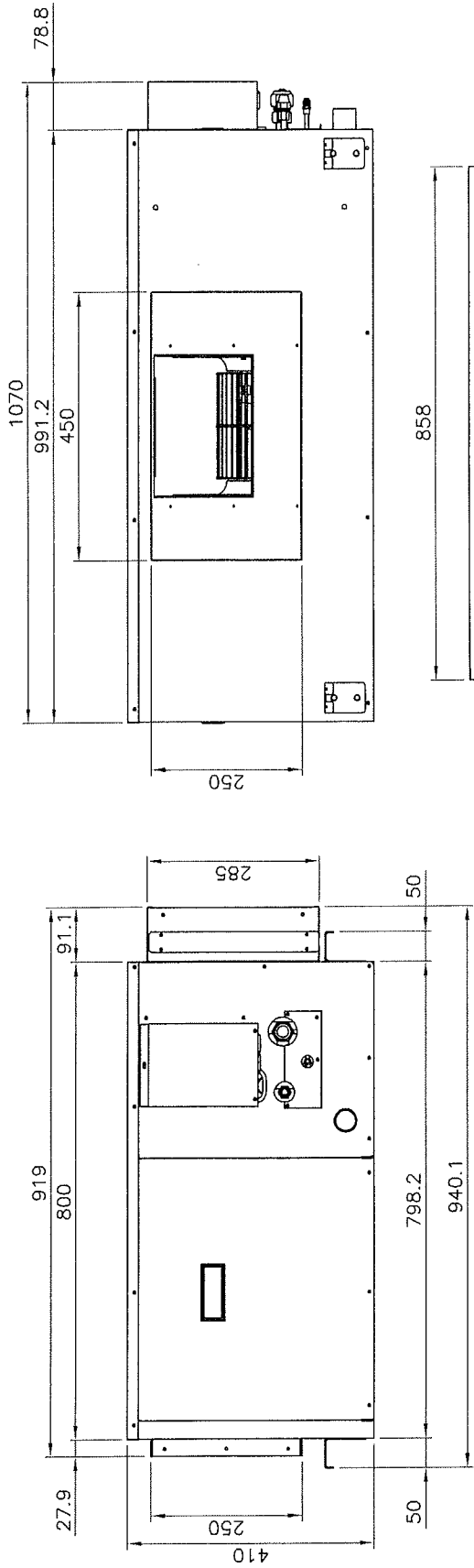
PERFORMANCE CURVE OF AHU-36(new)
(220/240 V. - 50Hz.)





MODEL	CAPACITY BTU/H (kW.)	DIMENSION (MM.)			SERVICE VALVE SIZE (mm)	
		H	W	D	LIQUID	SUCTION
LCU 36	36,000 (10.55)	795	970	400	9.53(3/8")	15.88(5/8")

PRODUCT DIMENSION LCU36



REVISION RECORD		ITEM	PART NAME	MATERIAL	SIZE	QTY.	DWG. NO.
DESCRIPTION/DETAIL	NAME	DATE	TITLE : Product Dimension AHU 36(new)				
			DRAWN :	DATE :	PART NUMBER		
			K.ANURAK		-		
			CHECKED :	DATE :			
			A.CHAN				
			APPROVED :	DATE :	SCALE :	1 : 12	
			DI MARTINO GIUSEPPE				
			UNIT :	mm.	DRAWING No. :	-	
					REV. :	0	TOLERANCE
							± 5

