



Models: e700 to e9600

DDe-AHU Basic Double Skin Air Handling Unit

Air Flow: From 350 to 9600 l/s



DDe-AHU: ECONOMICAL AHU

BASIC DOUBLE SKIN AIR HANDLING UNIT



Available in 12 models, with air flow from 350 l/s to 9600 l/s and the capacity between 14.0 kW and 254.9 kW use for chilled water system.

The high strength extruded aluminum construction and incorporating with injection fiber plastic corner pieces to form a rigid frame for the air handling unit to provide maximum strength to withstand the high pressure. The external clip methods to hold the double skin PU insulation panel is easy for access during maintenance and prevent air leakage.

Excellent Thermal Barrier:

All the framework are insulated with 25mm thick double skin PU insulation panel to create a thermal barrier between the internal and external surfaces. The 40kg/m³ of polyurethane foam (PU) create the optimum insulation performance and rigidity.

Designed by J & E Hall Refrigeration Malaysia in accordance to the BS EN 1886.

Fan Section with Top or Front Inverted Fan Discharge Option which directly mounted to the panel (fig. 01)

Adjustable motor bracket with rubber pad under the motor to absorb the vibration.

Drive package are select to meet the application.



(fig. 01)

Available in 4 and 6 rows Coil using 3/8" copper tube with option right or left hand pipe connection, all the coil comes with aluminum fins and steel header. (fig. 02)



(fig. 02)

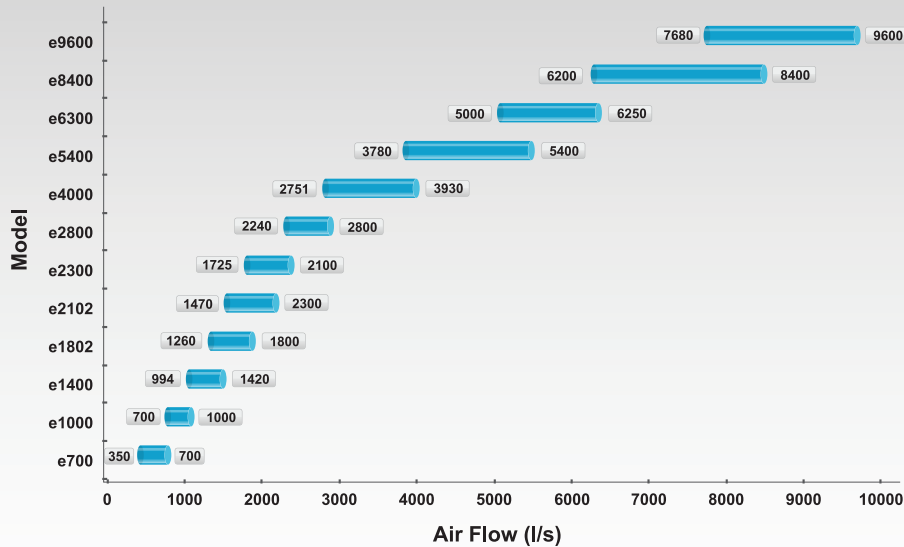
No internal isolator, need to add isolator externally at site.

Available with washable Synthetic Flat Filter (80-85% average Arrestance) in an aluminum frame supported by wire rod. Exclusive bonding technology and high dust holding capacity with low resistance to airflow. (fig. 03)



(fig. 03)

e-AHU Specification



Model	Air Flow (l/s)	
	Range	
e700	350	700
e1000	700	1000
e1400	994	1420
e1802	1260	1800
e2102	1470	2100
e2300	1725	2300
e2800	2240	2800
e4000	2751	3930
e5400	3780	5400
e6300	5000	6250
e8400	6200	8400
e9600	7680	9600

e-AHU Specification

MODEL			e700		e1000		e1400		e1802	
			4R	6R	4R	6R	4R	6R	4R	6R
FAN SIZE			AT 7-7 S		AT 9-9 S		AT10/10 S		AT 9-9 G2L	
CASING	MATERIAL		DOUBLE SKIN PU FOAM INSULATION PANEL, WALLS THICKNESS INT 0.5mm PRE-PAINTED STEEL - EXT 0.5mm GI							
	INSULATION		PU FOAM, 25mm, 40kg/m³							
DIMENSION (CABINET)	HEIGHT (H)	mm	512		612		612		612	
	WIDTH (W)	mm	1170		1170		1538		1935	
	DEPTH (D)	mm	873		873		873		873	
DIMENSION (PACKING)	HEIGHT (H)	mm	777		877		877		877	
	WIDTH (W)	mm	1482		1482		1850		2225	
	DEPTH (D)	mm	1196		1196		1196		1196	
COIL										
CONSTRUCTION	COIL TYPE		3/8" PLAIN TUBE							
	COIL DUTY		COOLING							
	HEAT TRANSFER FLUID		WATER							
	TUBE MATERIAL		COPPER							
	FIN MATERIAL		ALUMINIUM							
	FIN HEIGHT	mm	356		457		457		457	
	FIN LENGTH	mm	875		875		1243		1640	
CONFIGURATION	TUBES HIGH		14		18		18		18	
	ROWS DEEP		4	6	4	6	4	6	4	6
	FINS PER METER	FPM	472	472	472	472	472	472	472	472
	FINS PER INCH	FPI	12	12	12	12	12	12	12	12
	NUMBER OF CIRCUIT		11	14	14	18	18	18	18	27
AIR SIDE	AIR FLOW	l/s total	700	700	1000	1000	1420	1420	1800	1800
	ENTERING AIR	°C DB/WB	26.7/19.4	26.7/19.4	26.7/19.4	26.7/19.4	26.7/19.4	26.7/19.4	26.7/19.4	26.7/19.4
	LEAVING AIR	°C DB/WB	14.7/13.8	12.2/12.0	14.9/13.9	12.5/12.2	14.76/13.83	12.12/11.8	14.4/13.5	12.1/11.8
	TOTAL CAPACITY	kW	14.00	17.90	19.50	24.90	28.10	37.10	35.60	47.30
	SENSIBLE CAPACITY	kW	10.30	12.40	14.50	17.30	20.70	25.30	27.10	32.20
	FACE VELOCITY	m/s	2.25	2.25	2.50	2.50	2.50	2.50	2.40	2.40
	AIR PRESSURE DROP	Pa	108	162	129	194	129	194	121	181
WATER SIDE	WATER FLOW	l/s total	0.665	0.855	0.929	1.185	1.340	1.770	1.790	2.251
	ENTERING WATER	°C	7	7	7	7	7	7	7	7
	LEAVING WATER	°C	12	12	12	12	12	12	12	12
	TUBE VELCITY	m/s	0.98	0.99	1.07	1.06	1.2	1.58	1.61	1.35
	WATER PRESSURE DROP	kPa	11.7	14.38	14.25	17.49	15.2	38.2	40.08	35.7
BLOWER										
TYPE/DRIVE			DIDW / BELT DRIVEN							
BLOWER MATERIAL			ZINC COATED STEEL							
BLOWER DIAMETER		mm (in)	177.8 (7)		228.6 (9)		254 (10)		228.6 (9)	
BLOWER LENGTH		mm (in)	177.8 (7)		228.6 (9)		254 (10)		228.6 (9)	
AIR FLOW		l/s (CFM)	700 (1483)		1000 (2119)		1420 (3009)		1800 (3814)	
BLOWER MOTOR										
TYPE			SQUIRREL CAGE INDUCTION							
POWER SUPPLY		V / Ph / Hz	415 / 3 / 50							
RATED RUNNING CURRENT (AT 415V)		A	3.45		4.84		4.761		6.47	
RATED OUTPUT POWER (MAX.)		kW	1.5		2.2		2.2		3	
MOTOR POLES			4 POLES							
FILTER QUANTITY										
TYPE	WASHABLE R29	16"20"2	2		-		-		-	
		20"20"2	-		2		2		-	
		20"24"2	-		-		-		3	

e-AHU Specification

	MODEL		e2102		e2300		e2800		e4000		
			4R	6R	4R	6R	4R	6R	4R	6R	
FAN SIZE			AT 10-10 G2L		AT15/15 S		AT15/15 S		AT18/18 S		
CASING	MATERIAL		DOUBLE SKIN PU FOAM INSULATION PANEL, WALLS THICKNESS INT 0.5mm PRE-PAINTED STEEL - EXT 0.5mm GI								
	INSULATION		PU FOAM, 25mm, 40kg/m ³								
DIMENSION (CABINET)	HEIGHT (H)	mm	612		932		932		1283		
	WIDTH (W)	mm	2199		1538		1770		1770		
	DEPTH (D)	mm	873		973		973		1180		
DIMENSION (PACKING)	HEIGHT (H)	mm	877		1206		1206		1500		
	WIDTH (W)	mm	2490		1850		2060		2060		
	DEPTH (D)	mm	1196		1250		1250		1482		
COIL											
CONSTRUCTION	COIL TYPE		3/8" PLAIN TUBE								
	COIL DUTY		COOLING								
	HEAT TRANSFER FLUID		WATER								
	TUBE MATERIAL		COPPER								
	FIN MATERIAL		ALUMINIUM								
	FIN HEIGHT	mm	457		762		762		1067		
	FIN LENGTH	mm	1904		1243		1475		1475		
	TUBES HIGH		18		30		30		42		
CONFIGURATION	ROWS DEEP		4		4		4		4		
	FINS PER METER	FPM	472		472		472		472		
	FINS PER INCH	FPI	12		12		12		12		
	NUMBER OF CIRCUIT		36		30		30		45		
AIR SIDE	AIR FLOW	l/s total	2100		2300		2800		3930		
	ENTERING AIR	°C DB/WB	26.7/19.4		26.7/19.4		26.7/19.4		26.7/19.4		
	LEAVING AIR	°C DB/WB	15.0/14.1		14.69/13.79		14.51/13.59		14.61/13.69		
	TOTAL CAPACITY	kW	40.00		45.90		57.60		79.63		
	SENSIBLE CAPACITY	kW	30.10		33.73		41.71		58.03		
	FACE VELOCITY	m/s	2.41		2.43		2.49		2.50		
	AIR PRESSURE DROP	Pa	122		123		129		129		
	WATER FLOW	l/s total	1.904		2.186		2.743		3.399		
	ENTERING WATER	°C	7		7		7		7		
	LEAVING WATER	°C	12		12		12		12		
WATER SIDE	TUBE VELCTY	m/s	0.85		1.18		1.48		1.46		
	WATER PRESSURE DROP	kPa	14.39		14.60		25.40		18.00		
			52.52		37.00		18.00		24.90		
BLOWER											
TYPE/DRIVE			DIDW / BELT DRIVEN								
BLOWER MATERIAL			ZINC COATED STEEL								
BLOWER DIAMETER			mm (in)	254 (10)		381 (15)		381 (15)		457.2 (18)	
BLOWER LENGTH			mm (in)	254 (10)		381 (15)		381 (15)		457.2 (18)	
AIR FLOW			l/s (CFM)	2100 (4450)		2300 (4873)		2800 (5932)		3930 (8327)	
BLOWER MOTOR											
TYPE			SQUIRREL CAGE INDUCTION								
POWER SUPPLY			V / Ph / Hz	415 / 3 / 50							
RATED RUNNING CURRENT (AT 415V)			A	6.47		7.97		7.97		14.65	
RATED OUTPUT POWER (MAX.)			kW	3		4		4		7.5	
MOTOR POLES			4 POLES								
FILTER QUANTITY											
TYPE	WASHABLE R29	24"24"2	-		2		2		4		
		20"24"2	4		-		1		2		
		12"24"2	-		1		-		-		

MODEL			e5400		e6300		e8400		e9600		
FAN SIZE			4R		6R		4R		6R		
CASING			ADH 500 R		ADH 560 R		ADH 710 R		ADH 710 R		
COIL			DOUBLE SKIN PU FOAM INSULATION PANEL, WALLS THICKNESS INT 0.5mm PRE-PAINTED STEEL - EXT 0.5mm GI								
CONSTRUCTION			PU FOAM, 25mm, 40kg/m ³								
DIMENSION (CABINET)	HEIGHT (H)	mm	1550		1550		1983		2080		
	WIDTH (W)	mm	1935		2199		2199		2395		
DIMENSION (PACKING)	DEPTH (D)	mm	1400		1498		1930		1930		
	HEIGHT (H)	mm	1800		1800		2150		2250		
DIMENSION (PACKING)	WIDTH (W)	mm	2225		2490		2150		2500		
	DEPTH (D)	mm	1680		1780		2140		2140		
INDOOR UNIT											
CONSTRUCTION	COIL TYPE		3/8" PLAIN TUBE								
	COIL DUTY		COOLING								
CONSTRUCTION	HEAT TRANSFER FLUID		WATER								
	TUBE MATERIAL		COPPER								
CONSTRUCTION	FIN MATERIAL		ALUMINIUM								
	FIN HEIGHT	mm	1321		1321		1778		1829		
CONSTRUCTION	FIN LENGTH	mm	1640		1904		1904		2100		
	TUBES HIGH		52		52		70		72		
CONFIGURATION	ROWS DEEP		4		6		4		6		
	FINS PER METER	FPM	472		472		472		472		
CONFIGURATION	FINS PER INCH	FPI	12		12		12		12		
	NUMBER OF CIRCUIT		52		78		70		105		
AIR SIDE	AIR FLOW	I/s total	5400		6250		8400		9600		
	ENTERING AIR	°C DB/WB	26.7/19.4		26.7/19.4		26.7/19.4		26.7/19.4		
AIR SIDE	LEAVING AIR	°C DB/WB	14.4/13.5		14.3/13.4		14.3/13.4		15.00/14.07		
	TOTAL CAPACITY	kW	112.74		132.4		177.95		221.79		
AIR SIDE	SENSIBLE CAPACITY	kW	81.11		94.64		127.22		150.69		
	FACE VELOCITY	m/s	2.49		2.49		2.48		2.5		
AIR SIDE	AIR PRESSURE DROP	Pa	129		193		128		192		
	WATER FLOW	I/s total	5.37		6.633		8.476		10.6		
WATER SIDE	ENTERING WATER	°C	7		7		7		7		
	LEAVING WATER	°C	12		12		12		12		
WATER SIDE	TUBE VELOCITY	m/s	1.67		1.96		1.96		1.63		
	WATER PRESSURE DROP	kPa	34.7		24.4		37.8		37.7		
BLOWER											
TYPE/DRIVE			DIDW / BELT DRIVEN								
BLOWER MATERIAL			ZINC COATED STEEL								
BLOWER DIAMETER			mm (in)	500 (19.68)		560 (22.05)		710 (27.95)		710 (27.95)	
BLOWER LENGTH			mm (in)	500 (19.68)		560 (22.05)		710 (27.95)		710 (27.95)	
AIR FLOW			I/s (CFM)	5400 (11441)		6250 (13243)		8400 (17800)		9600 (20341)	
BLOWER MOTOR											
TYPE			SQUIRREL CAGE INDUCTION								
POWER SUPPLY			V / Ph / Hz	415 / 3 / 50							
RATED RUNNING CURRENT (AT 415V)			A	21.06		21.06		21.06		27.47	
RATED OUTPUT POWER (MAX.)			kW	11		11		11		15	
MOTOR POLES			4 POLES								
FILTER QUANTITY											
TYPE	WASHABLE R29	24"24"2	-		6		9		9		
		20"24"2	-		-		-		3		
		12"24"2	-		2		3		-		
		20"25"2	6		-		-		-		
		16"25"2	2		-		-		-		