



MULTI PRODUCT CATALOGUE



PT. WIRA KUSUMA SEJAHTERA

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HVAC CONTROL

HVAC CONTROL & CHILLER PLAN SYSTEM PROJECT REFERENCES



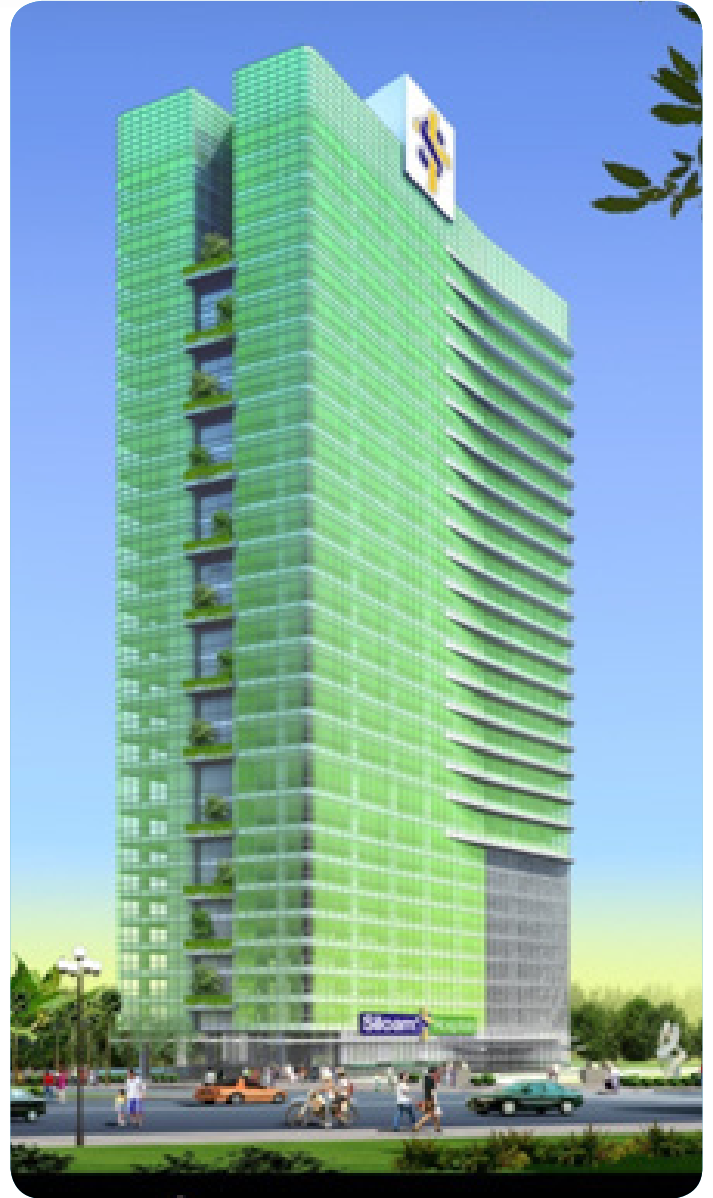
KEMANG VILLAGE MALL - JAKARTA



MALL HOLLAND VILLAGE - JAKARTA



RS ST. CAROLUS - JAKARTA



SILOAM HOSPITAL - JAKARTA



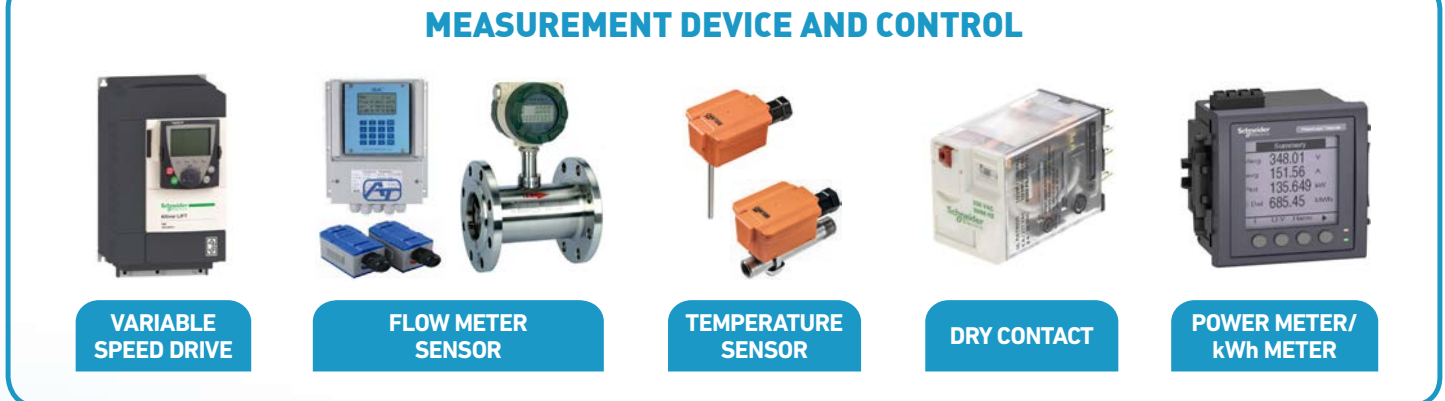
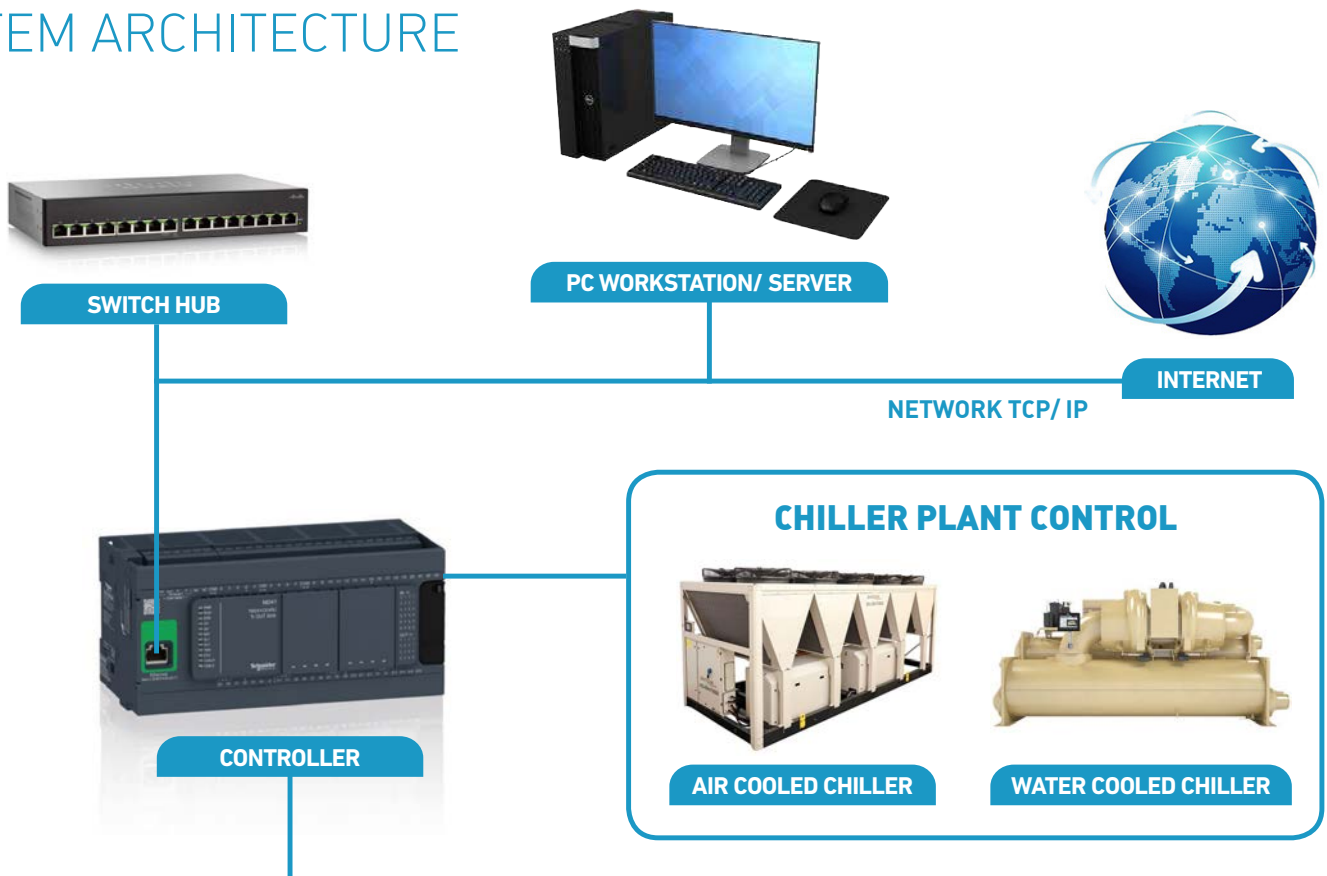
MALL TAMAN RIA - SENAYAN

HVAC CONTROL

ENERGY MANAGEMENT SYSTEM

- Control (On/ Off, scheduling, etc)
- Monitoring (Trending/ data log, reporting, etc)
- Optimizing (Data Analytic and processing, etc)
- Open Protocol
- Data Export
- Energy Saving/ Efficiency

SYSTEM ARCHITECTURE



Brand Supported:

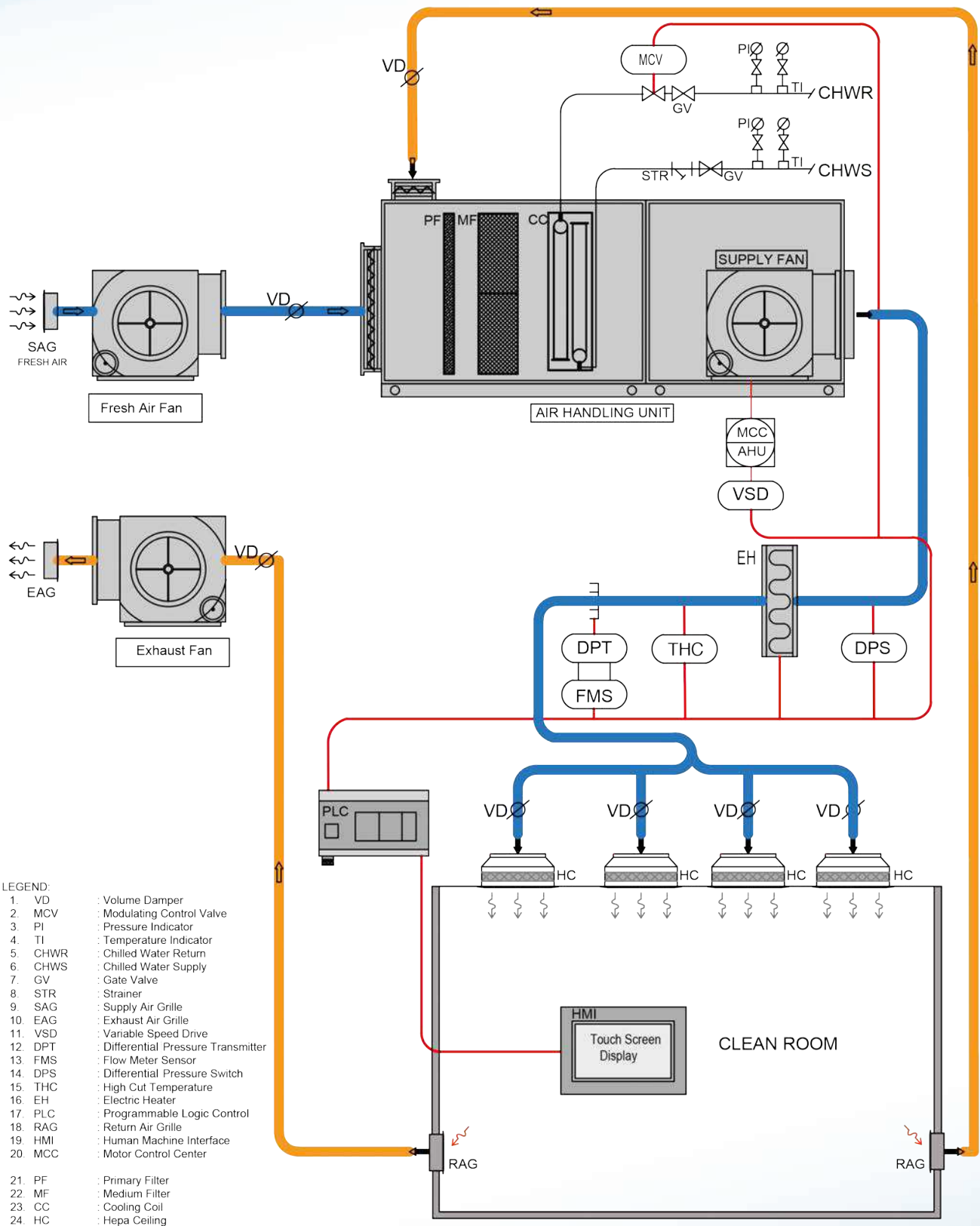


Open Protocol:



HVAC CONTROL

CLEAN ROOM CONTROL FOR OPERATING THEATRE



CHILLED WATER SYSTEM (CW)

STANDARD AIR HANDLING UNIT (SAHU)



SPECIFICATIONS

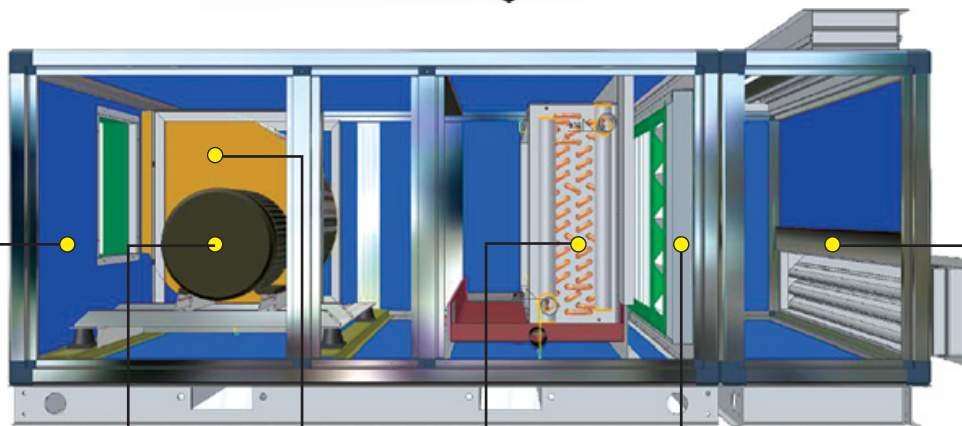
NO	MODEL	AIR FLOW RATE (CFM)		ESP [inWg]		TOTAL COOLING CAPACITY (kW)		DIMENSION (mm)			NETT WEIGHT (KG)
		MIN	MAX	MIN	MAX	MIN	MAX	HEIGHT	WIDTH	DEPTH	
1	F-SAHU 0613-4R H1	850	2100	0,32	4,40	9,92	17,03	700	1300	900	191
	F-SAHU 0613-6R H1	850	2100	0,32	4,20	11,4	23,08				198
	F-SAHU 0613-8R H1	850	2100	0,4	4,00	12,18	25,82				205
2	F-SAHU 0616-4R H1	2150	3100	0,4	4,40	20,74	26,56	700	1600	900	238
	F-SAHU 0616-6R H1	2150	3100	0,4	4,20	26,4	34,62				248
	F-SAHU 0616-8R H1	2150	3100	0,4	4,00	28,9	36,75				257
3	F-SAHU 0916-4R H1	3150	5150	0,6	5,20	31,05	42,9	1000	1600	1400	318
	F-SAHU 0916-6R H1	3150	5150	0,6	5,00	56	56				332
	F-SAHU 0916-8R H1	3150	5150	0,6	4,60	42,93	59,98				352
4	F-SAHU 0918-4R H1	5200	5950	0,6	5,60	46,58	50,58	1000	1800	1400	386
	F-SAHU 0918-6R H1	5200	5950	0,8	5,20	59,8	62,84				408
	F-SAHU 0918-8R H1	5200	5950	0,8	5,00	63,62	70,71				427
5	F-SAHU 1318-4R H1	6000	8750	0,6	5,60	57,94	74,37	1400	1800	1600	460
	F-SAHU 1318-6R H1	6000	8750	0,8	5,40	72,14	92,39				487
	F-SAHU 1318-8R H1	6000	8750	0,8	5,20	76,9	104,01				511
6	F-SAHU 1519-4R H1	9000	11300	0,8	5,60	83,3	96,5	1550	1800	1600	574
	F-SAHU 1519-6R H1	9000	11300	0,8	5,40	101,57	120,25				604
	F-SAHU 1519-8R H1	9000	11300	0,8	5,20	112,95	135,43				648
7	F-SAHU 1523-4R H1	11350	13450	0,8	5,20	105,25	106,01	1550	2250	1600	628
	F-SAHU 1523-6R H1	11350	13450	1,0	4,80	128,58	146,03				678
	F-SAHU 1523-8R H1	11350	13450	1,0	4,60	143,19	163,96				713
8	F-SAHU 1923-4R H1	13500	18000	1,0	6,00	131,34	142,79	2000	2250	1900	828
	F-SAHU 1923-6R H1	13500	18000	1,2	5,80	158,39	195,93				883
	F-SAHU 1923-8R H1	13500	18000	1,2	5,60	174,08	219,61				953
9	F-SAHU 2025-4R H1	18050	20500	1,2	6,40	152,55	165,25	2050	2450	1900	919
	F-SAHU 2025-8R H1	18050	20500	1,4	5,80	227,3	251,69				1051
10	F-SAHU 2127-4R H1	20600	24200	1,4	6,40	179,47	198,8	2150	2700	2000	990
11	F-SAHU 2133-3R H1	24250	30000	1,4	6,60	189,13	214,18	2150	3300	2000	1406
	F-SAHU 2133-4R H1	24250	30000	1,4	6,40	224,16	257,32				1486

Conditions:

1. Entering Air Temperature 26.7 °CDB / 19.4 °CWB
2. Entering / Leaving Water Temperature 7/12 °C

CHILLED WATER SYSTEM (CW)

MODULAR AIR HANDLING UNIT (FMA)



CABINET

- Extruded Aluminum with Thermal Break
- Double Skinned Panel
- External 0.5mm and Internal 0.5mm GI Sheet
- 25mm thickness option 50mm
- Density 40kg/m3 PU Insulation

BLOWER

- Forward, Backward Curve, Airfoil Fan, EC Fan, Plug Fan
- Belt Driven
- Flexible Canvas Discharge Connection
- Internal Mounted Motor

FILTERS

- Flat or Pre-filter
 - ** Washable R15 (75-80% Arr.)
 - ** Washable R29 (80-85% Arr.)
- Bag Filters (21" Depth)
 - ** 80-85% Eff.
 - ** 90-95% Eff.
- Filter Frame
 - ** Sliding
 - ** UHF

MIXING BOX SECTION

- Control Return and Fresh Air Intake Volume
- Single Plate Oppose Damper
- Manual Adjust, Able to Connect for Motorize Operation
- Electrical Heater
- Empty Section

MOTOR

- Single Motor
- NBK Fixed Pulley
- Option:
 - ** Taper Lock Pulley
 - ** Variable Pitch Pulley Available (2 grooves)
- Internal Isolator
 - ** 1" or 2" Deflection Spring Isolator for Fan Size 400 and Above
 - ** Rubber Mounting for Fan Size 355 and Below
- Heavy Duty Mounting Frame
- Front or Top Discharge

COIL TYPE

- Chilled Water Cooling Coil
- DX Coil
- Hot Water Heating Coil
- Coil Material (standard)
 - ** 3/8" & 1/2" Tube
 - ** Aluminum Fin
 - ** Frame: GI
 - ** Steel Header
- Options
 - ** SS 304 Drain Pan
 - ** Hydrophilic
 - ** Copper/ SS Header
 - ** Stainless Steel Frame
- Rippled Corrugated Fin, 8/10/12 FPI
- Coil Rows - 2 to 14

MODULAR AIR HANDLING UNIT (FMA)

SPECIFICATIONS

NO	MODEL			ROW/Fpi	AIR FLOW RATE		CAPACITY				UNIT DIMENSION		
					CFM		(kW)		(kW)		mm	mm	mm
					MIN.	MAX.	MIN.		MAX.		HEIGHT	WIDTH	DEPTH
							TOTAL	SENSIBLE	TOTAL	SENSIBLE			
1	FMA 0303	FMA	0303	4/12	750	850	2,43	2,43	7,76	5,87	640	680	1700
				6/12			5,27	4,83	7,76	5,87			
				8/12			6,09	5,19	11,09	7,52			
2	FMA 0305	FMA	0305	4/12	875	1280	6,59	5,63	12,43	9,12	640	870	1700
				6/12			8,37	6,49	15,77	10,83			
				8/12			9,51	6,99	17,62	11,72			
3	FMA 0405	FMA	0405	4/12	1285	1685	6,31	6,31	16,36	12,02	770	870	1700
				6/12			11,92	9,38	20,51	14,15			
				8/12			13,78	10,19	23,20	15,43			
4	FMA 0407	FMA	0407	4/12	1690	2270	9,63	9,63	24,01	17,23	770	1060	1700
				6/12			17,63	13,09	28,45	19,41			
				8/12			20,08	14,18	32,24	21,21			
5	FMA 0410	FMA	0410	4/12	2800	3375	19,88	17,39	32,77	24,07	770	1440	1800
				6/12			31,45	22,53	41,08	28,35			
				8/12			35,71	24,48	48,30	31,69			
6	FMA 0414	FMA	0414	4/12	3380	4450	28,41	22,73	43,85	32,02	770	1830	1800
				6/12			41,63	28,74	56,10	38,19			
				8/12			46,53	31,01	63,20	41,57			
7	FMA 0507	FMA	0507	4/12	2275	2795	12,73	12,73	27,14	19,95	890	1060	1800
				6/12			23,08	17,34	35,04	23,90			
				8/12			26,54	18,89	39,69	26,11			
8	FMA 0510	FMA	0510	4/12	3380	4250	24,25	21,11	41,26	30,31	890	1440	1800
				6/12			38,20	27,31	51,73	35,71			
				8/12			43,35	29,65	60,97	39,97			
9	FMA 0809	FMA	0809	4/12	3400	4950	23,90	21,23	46,98	34,87	1150	1250	1800
				6/12			38,43	27,55	61,69	42,17			
				8/12			43,36	29,75	96,58	45,94			
10	FMA 0812	FMA	0812	4/12	5000	6800	39,85	32,88	68,99	50,01	1150	1640	2000
				6/12			60,86	42,24	84,74	57,94			
				8/12			67,75	45,41	85,99	58,79			
11	FMA 0816	FMA	0816	4/12	7650	8850	63,19	50,70	87,21	63,66	1150	2020	2000
				6/12			93,12	64,43	109,01	74,87			
				8/12			104,21	69,64	126,96	83,25			
12	FMA 1010	FMA	1010	4/12	6950	7625	47,84	42,35	74,03	54,39	1440	1440	2000
				6/12			76,54	55,21	92,82	64,07			
				8/12			86,61	59,87	109,39	71,72			
13	FMA 1014	FMA	1014	4/12	8900	10125	69,64	57,45	98,30	72,20	1440	1830	2200
				6/12			105,76	73,91	126,92	86,55			
				8/12			119,30	80,18	143,79	94,61			
14	FMA 1018	FMA	1018	4/12	12425	12700	100,83	81,08	128,83	92,74	1440	2210	2200
				6/12			148,54	103,28	158,27	108,20			
				8/12			167,45	112,26	178,98	118,02			
15	FMA 1314	FMA	1314	4/12	10150	12400	82,37	66,86	122,19	89,17	1700	1830	2200
				6/12			122,08	84,99	155,43	105,99			
				8/12			138,26	92,42	176,10	115,70			
16	FMA 1316	FMA	1316	4/12	12725	13975	103,26	83,39	137,71	100,48	1700	2020	2200
				6/12			151,21	105,56	172,14	118,20			
				8/12			169,65	114,27	200,49	131,45			
17	FMA 1322	FMA	1322	4/12	17150	18575	149,11	116,07	180,35	132,45	1700	2020	2200
				6/12			213,73	146,31	226,11	156,00			
				8/12			239,83	158,66	266,48	174,73			
18	FMA 1616	FMA	1616	4/12	14000	17125	117,67	93,76	171,23	124,10	1700	2590	2400
				6/12			172,45	118,88	210,94	144,86			
				8/12			192,73	128,36	245,68	161,09			

MODULAR AIR HANDLING UNIT (FMA)

SPECIFICATIONS

NO	MODEL			ROW/Fpi	AIR FLOW RATE		CAPACITY				UNIT DIMENSION		
					CFM		(kW)		(kW)		mm	mm	mm
					MIN.	MAX.	MIN.		MAX.		HEIGHT	WIDTH	DEPTH
							TOTAL	SENSIBLE	TOTAL	SENSIBLE			
19	FMA 1622	FMA	1622	4/12	18600	22825	169,81	129,74	221,61	162,85	2020	2020	2400
				6/12			238,54	161,82	277,84	191,69			
				8/12			278,97	180,43	327,45	214,71			
20	FMA 1824	FMA	1824	4/12	22850	27500	211,92	160,51	270,99	197,74	2020	2590	2400
				6/12			294,70	199,52	338,73	232,61			
				8/12			331,12	216,62	380,58	252,58			
21	FMA 1828	FMA	1828	4/12	27525	31675	25927,00	194,54	321,31	231,36	2210	2780	2800
				6/12			355,00	240,06	394,75	269,88			
				8/12			398,87	260,91	447,53	294,90			
22	FMA 2128	FMA	2128	4/12	31700	35925	298,59	223,85	364,42	262,38	2260	3210	2800
				6/12			408,84	276,45	447,71	306,09			
				8/12			459,37	300,39	507,58	334,60			
23	FMA 2131	FMA	2131	4/12	38050	40725	358,43	267,93	374,75	282,45	2260	3210	2800
				6/12			496,25	333,92	519,34	351,94			
				8/12			548,63	359,30	581,30	381,70			
24	FMA 2228	FMA	2228	4/12	35950	38025	328,20	248,97	385,72	277,73	2510	3210	2800
				6/12			458,44	310,93	473,89	323,98			
				8/12			531,38	345,70	537,25	354,02			
25	FMA 2233	FMA	2233	4/12	42825	45675	428,21	311,34	443,46	325,87	2510	3590	2800
				6/12			N/A						
				8/12			N/A						
26	FMA 2329	FMA	2329	4/12	40750	42800	398,60	292,48	409,35	302,78	2640	3210	2800
				6/12			N/A						
				8/12			N/A						
27	FMA 2333	FMA	2333	4/12	45700	48175	453,64	330,70	474,72	346,44	2760	3780	2800
				6/12			N/A						
				8/12			N/A						

Conditions:

1. Entering Air Temperature 26.7 DB / 19.4 WB
2. Entering / Leaving Water Temperature 7/12 °C

CHILLED WATER SYSTEM (CW)

CHILLED WATER FAN COIL UNIT (FDP-CW, FBP-CW)



FDP 400-600
Draw Through Model



FDP 800-1000
Draw Through Model



FBP 400
Blow Through Model

SPECIFICATIONS

FDP - FBP 200CW - 800CW

DRAW THROUGH MODEL			UNIT	FDP 200CW	FDP 300CW	FDP 400CW	FDP 600CW	FDP 800CW
BLOW THROUGH MODEL			UNIT	FBP 200CW	FBP 300CW	FBP 400CW	FDP 600CW	FBP 800CW
Cooling Capacity	Total		Btu/h (kW)	7,686 (2.25)	11,438 (3.35)	14,450 (4.24)	21,147 (6.20)	26,460 (7.75)
	Sensible		Btu/h (kW)	5,007 (1.47)	7,686 (2.25)	9,740 (2.85)	14,269 (4.18)	17,900 (5.25)
Power Supply			V / Ph / Hz	220 - 240 / 1 / 50				
Evaporator Coil								
Coil			Type	Cross Finned Tubes				
Nominal Water Flow Rate			USgpm(l/s)	1.70 (0.107)	2.54 (0.160)	3.21 (0.202)	4.70 (0.296)	5.88 (0.371)
Water Pressure Drop			psi (kPa)	2.31 (15.9)	1.91 (13.2)	3.19 (22.0)	6.79 (46.8)	3.41 (23.5)
Blower Fan								
Type				Centrifugal Fan				
Blower Fan Qty				1	1	2	2	3
Air Flow	High		CFM (CMH)	200 (340)	300 (510)	400 (680)	600 (1,020)	800 (1,360)
	Medium		CFM (CMH)	170 (290)	230 (390)	288 (490)	483 (820)	647 (1,100)
	Low		CFM (CMH)	118 (200)	165 (280)	200 (340)	418 (710)	500 (850)
External Static Pressure			in wg (Pa)	0.12 / 0.24 / 0.32 (30 / 60 / 80)				
Blower Motor								
Type				Permanent split capacitor motor with ball bearing				
No. of Motors				1	1	1	1	2
Rated Running Current	30 Pa (0.12" wg)		Amp.	0.22	0.29	0.36	0.40	0.62
	60 Pa (0.24" wg)		Amp.	0.25	0.32	0.41	0.72	0.97
	80 Pa (0.32" wg)		Amp.	0.28	0.36	0.49	0.99	1.27
Rated Input Power	30 Pa (0.12" wg)		W	42	59	67	111	157
	60 Pa (0.24" wg)		W	50	69	83	149	205
	80 Pa (0.32" wg)		W	53	73	97	157	215
Unit								
Casing				Plain Galvanized Steel				
Insulation				Closed Cell Polyethylene				
Pipe Connection				Female 3/4"				
Condensate Drain Pipe				Male 3/4"				
Air Filter			Type	Saranet				
Unit Dimension	FDP	Width	mm (in)	794 (31.3)	794 (31.3)	994 (39.1)	1,104 (43.5)	1,394 (54.9)
		Depth	mm (in)	363 (14.3)				
		Height	mm (in)	260 (10.2)				
	FBP (Without Plenum)	Width	mm (in)	752 (29.6)	852 (33.5)	1,052 (41.4)	1,242 (48.9)	1,552 (61.1)
		Depth	mm (in)	464 (18.3)				
		Height	mm (in)	257 (10.1)				
	FBP (With Plenum)	Width	mm (in)	752 (29.6)	852 (33.5)	1,052 (41.4)	1,242 (48.9)	1,552 (61.1)
		Depth	mm (in)	480 (18.9)				
		Height	mm (in)	257 (10.1)				
Packing Dimension	FDP	Width	mm (in)	857 (33.7)	857 (33.7)	1,057 (41.6)	1,167 (45.9)	1,457 (57.4)
		Depth	mm (in)	380 (15.0)				
		Height	mm (in)	277 (10.9)				
	FBP (Without Plenum)	Width	mm (in)	752 (29.6)	852 (33.5)	1,052 (41.4)	1,242 (48.9)	1,552 (61.1)
		Depth	mm (in)	470 (18.5)				
		Height	mm (in)	263 (10.4)				
	FBP (With Plenum)	Width	mm (in)	817 (32.2)	987 (38.9)	1,117 (44)	1317 (51.8)	1,567 (61.7)
		Depth	mm (in)	520 (20.5)				
		Height	mm (in)	280 (11)				
Net Weight	FDP		kg	17	19	21	27	33
	FBP (Without Plenum)		kg	17	19	21	27	33
	FBP (With Plenum)		kg	22	24	29	34	44
Packing Weight	FDP		kg	21	22	26	30	39
	FBP (without plenum)		kg	21	22	26	30	39
	FBP (with plenum)		kg	24	26	31	36	46
Noise Level at Air Inlet			High	32,5	37,0	36,0	41,0	40,0
			Medium	29,0	32,0	31,5	39,5	37,0
			Low	24,5	27,5	26,5	33,5	32,0
Noise Level at Air Outlet			High	33,0	37,5	36,0	41,0	40,0
			Medium	29,5	32,5	31,0	39,0	38,0
			Low	25,0	28,0	26,0	33,0	32,0

Conditions:

- Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
- All specifications are subjected to change by manufacturer without prior notice.

SPECIFICATIONS

FDP - FBP 1000CW - 1650CW

DRAW THROUGH MODEL			UNIT	FDP 1000CW	FDP 1200CW	FDP 1600CW	FDP 1650CW
BLOW THROUGH MODEL			UNIT	FBP 1000CW	FBP 1200CW	FBP 1600CW	FBP 1650CW
Cooling Capacity	Total		Btu/h (kW)	31,360 (9.19)	38,618 (11.32)	51,800 (15.18)	62,500 (18.31)
	Sensible		Btu/h (kW)	21,290 (6.24)	25,973 (7.61)	35,000 (10.26)	42,000 (12.30)
Power Supply			V / Ph / Hz	220 - 240 / 1 / 50			
Evaporator Coil							
Coil			Type	Cross Finned Tubes			
Nominal Water Flow Rate			USgpm (l/s)	6.97 (0.439)	8.58 (0.541)	11.50 (0.725)	13.8 (0.870)
Water Pressure Drop			psi (kPa)	3.73 (25.7)	6.56 (45.2)	3.5 (24)	4.6 (32)
Blower Fan							
Type				Centrifugal Fan			
Blower Fan Qty				3	4	4	4
Air Flow	High		CFM (CMH)	965 (1,640)	1,200 (2,040)	1,600 (2,720)	1,650 (2,805)
	Medium		CFM (CMH)	800 (1,360)	1,024 (1,740)	1,360 (2,312)	1,400 (2,380)
	Low		CFM (CMH)	647 (1,100)	889 (1,510)	1,040 (1,768)	1,190 (2,023)
External Static Pressure			in wg (Pa)	0.12 / 0.24 / 0.32 (30 / 60 / 80)		0.24 / 0.32 (60 / 80)	
Blower Motor							
Type				Permanent split capacitor motor with ball bearing			
No. of Motors				2	2	2	2
Rated Running Current	30 Pa (0.12" wg)		Amp.	0.69	0.80	1.41	1.63
	60 Pa (0.24" wg)		Amp.	1.04	1.44	1.89	2.19
	80 Pa (0.32" wg)		Amp.	1.35	1.98	2.02	2.33
Rated Input Power	30 Pa (0.12" wg)		W	177	211	304	351
	60 Pa (0.24" wg)		W	219	281	407	470
	80 Pa (0.32" wg)		W	237	285	433	500
Unit							
Casing			Plain Galvanized Steel				
Insulation			Closed Cell Polyethylene				
Pipe Connection			Female 3/4"				
Condensate Drain Pipe			Male 3/4"				
Air Filter			Type	Saranet			
Unit Dimension	FDP	Width	mm (in)	1,524 (60.0)	1,754 (69.1)	1,754 (69.0)	
		Depth	mm (in)	363 (14.3)		363 (14.3)	
		Height	mm (in)	260 (10.2)		360 (14.2)	
	FBP (Without Plenum)	Width	mm (in)	1,852 (72.9)	1,852 (72.9)	1,852 (72.9)	
		Depth	mm (in)	464 (18.3)		464 (18.3)	
		Height	mm (in)	257 (10.1)		357 (14.1)	
	FBP (With Plenum)	Width	mm (in)	1,852 (72.9)	1,852 (72.9)	1,852 (72.9)	
		Depth	mm (in)	480 (18.9)		480 (18.9)	
		Height	mm (in)	257 (10.1)		357 (14.1)	
Packing Dimension	FDP	Width	mm (in)	1,587 (62.5)	1,817 (71.5)	1,817 (71.5)	
		Depth	mm (in)	380 (15.0)		380 (15.0)	
		Height	mm (in)	277 (10.9)		377 (14.9)	
	FBP (Without Plenum)	Width	mm (in)	1,852 (72.9)	1,852 (72.9)	1,852 (72.9)	
		Depth	mm (in)	470 (18.5)		470 (18.5)	
		Height	mm (in)	263 (10.4)		363 (14.4)	
	FBP (With Plenum)	Width	mm (in)	1,667 (56.6)	1,927 (75.9)	1,927 (75.9)	
		Depth	mm (in)	520 (20.5)		520 (20.5)	
		Height	mm (in)	280 (11)		380 (15.0)	
Net Weight	FDP		kg	34	44	48	49
	FBP (Without Plenum)		kg	34	44	48	49
	FBP (With Plenum)		kg	47	54	57	58
Packing Weight	FDP		kg	36	46	49.5	50.5
	FBP (without plenum)		kg	41	47	49.5	50.5
	FBP (with plenum)		kg	49	56	58.5	59.5
Noise Level at Air Inlet			High	41.0	43.0	44	43
			Medium	38.0	40.0	42.5	40
			Low	33.0	34.5	36.5	35
Noise Level at Air Outlet			High	41.5	43.0	44	39
			Medium	38.5	40.5	42	41
			Low	33.5	35.0	36	35

Conditions:

- Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
- All specifications are subjected to change by manufacturer without prior notice.

CHILLED WATER SYSTEM (CW)

HIGH STATIC DUCTED BLOWER CHILLED WATER SYSTEM



FDBW 40 - 50



FDBW 60 - 100



FDBW 60 - 100DS



FDBW 125 - 200DS



FDBW 250 - 300DS



FDBW 750DS

HIGH STATIC DUCTED BLOWER CHILLED WATER SYSTEM

SPECIFICATIONS

FDBW 40 - 100

SINGLE SKINNED MODEL			FDBW 40SS-3	FDBW 50SS-4	FDBW 60SS-3	FDBW 75SS-3	FDBW 100SS-4
DOUBLE SKINNED MODEL			FDBW 40DS-3	FDBW 50DS-4	FDBW 60DS-3	FDBW 75DS-3	FDBW 100DS-4
TOTAL COOLING CAPACITY	Btu/h		40.000	55.000	62.000	76.400	114.000
	kW		11,70	16,12	18,10	22,40	33,40
TOTAL SENSIBLE CAPACITY	Btu/h		28.000	38.500	43.400	53.480	79.800
	kW		8,20	11,30	12,50	15,40	22,60
INDOOR UNIT							
Casing	Material		Galvanized Steel				
	Finishing		Epoxy Polyester Powder Coating				
	Insulation		Polyethylene Foam				
Dimension (Single Skinned)	Height (H)	mm (in)	500 (19.7)	500 (19.7)	500 (19.7)	500 (19.7)	500 (19.7)
	Width (W)	mm (in)	858 (33.8)	858 (33.8)	1493 (58.8)	1493 (58.8)	1493 (58.8)
	Depth (D)	mm (in)	764 (30.1)	764 (30.1)	764 (30.1)	764 (30.1)	764 (30.1)
Dimension (Double Skinned)	Height (H)	mm (in)	760 (29.9)	760 (29.9)	647 (25.5)	647 (25.5)	647 (25.5)
	Width (W)	mm (in)	960 (37.8)	960 (37.8)	1555 (61.2)	1555 (61.2)	1555 (61.2)
	Depth (D)	mm (in)	860 (33.9)	860 (33.9)	764 (30.1)	764 (30.1)	764 (30.1)
Net Weight (Single Skinned)		kg (lb)	44 (97)	48 (105)	73 (160)	84 (185)	88 (194)
Net Weight (Double Skinned)		kg (lb)	67 (147)	89 (196)	140 (308)	150 (330)	179 (394)
Sound Power Level (Single Skinned)		dBA	62	62	65	66	71
Sound Power Level (Double Skinned)		dBA	58	58	61	62	67
EVAPORATOR COIL							
Type			Cross Finned Tubes				
Fin	Material		Aluminium				
	Rows		3	4	3	3	4
	Fins per Inch		12	12	12	12	12
EVAPORATOR BLOWER MOTOR							
Type		Squirrel Cage Induction					
Air Flow	CMH (CFM)	35.4 (1.250)	45.4 (1.600)	56.7 (2.000)	70.9 (2.500)	90.7 (3.200)	
External Static Pressure	Pa (in wg)	100 (0.4)	100 (0.4)	100 (0.4)	100 (0.4)	100 (0.4)	
Power Supply	V / Ph / Hz	220-240 / 1 / 50					
Number x Rated Running	A	1 x 1.65	1 x 3.4	2 x 1.65	2 x 1.65	2 x 3.4	
Number x Rated Power Input	kW	1 x 0.35	1 x 0.75	2 x 0.35	2 x 0.35	2 x 0.75	
CHILLED WATER & PIPE SIZES							
Type			Clean Water / H ₂ O				
Water Flow Rate	Usgpm (l/s)	8.9 (0.56)	12.2 (0.77)	13.8 (0.87)	17 (1.07)	25.3 (1.6)	
Pipe Connection Size	Inch	3/4"	3/4"	3/4"	1"	1"	
Water Pressure Drop	psi (kPa)	1.7 (11.60)	0.5 (3.10)	0.2 (1.60)	0.3 (2.20)	1.1 (7.50)	
Drain Pipe Size	mm (in)	1"					
AIR FILTER							
Type			Washable Viledon				

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
2. All specifications are subjected to change by manufacturer without prior notice.

HIGH STATIC DUCTED BLOWER CHILLED WATER SYSTEM

SPECIFICATIONS

FDBW 125 - 200

		STANDARD MODEL				STANDARD MODEL				STANDARD MODEL	
SINGLE SKINNED MODEL		FDBW 125SS-3	FDBW 125SS-4	FDBW 125SS-6	FDBW 150SS-3	FDBW 150SS-4	FDBW 150SS-6	FDBW 200SS-3	FDBW 200SS-4	FDBW 200SS-6	
DOUBLE SKINNED MODEL		FDBW 125DS-3	FDBW 125DS-4	FDBW 125DS-6	FDBW 150DS-3	FDBW 150DS-4	FDBW 150DS-6	FDBW 200DS-3	FDBW 200DS-4	FDBW 200DS-6	
TOTAL COOLING CAPACITY	Btu/h	127.000	150.000	182.000	141.000	163.000	199.200	180.000	238.500	288.300	
	kW	37,22	43,40	52,80	41,32	47,90	58,40	52,75	69,90	84,50	
TOTAL SENSIBLE CAPACITY	Btu/h	88.900	105.000	127.400	98.700	114.100	139.440	126.000	166.950	201.810	
	kW	26,06	30,77	37,34	28,93	33,44	40,87	36,93	48,93	59,15	
INDOOR UNIT											
Casing	Material	Galvanized Steel									
	Finishing	Epoxy Polyester Power Coating									
	Insulation	Polyethylene Foam									
Dimension (Single Skinned)	Height (H)	mm (in)	679 (26.7)			679 (26.7)			869 (34.2)		
	Width (W)	mm (in)	1,644 (64.7)			1,644 (64.7)			1,877 (73.9)		
	Depth (D)	mm (in)	1,089 (42.87)			1,189 (46.8)			1,039 (40.9)		
Dimension (Double Skinned)	Height (H)	mm (in)	878 (34.5)			878 (34.5)			978 (38.5)		
	Width (W)	mm (in)	1,767 (36.5)			1,767 (36.5)			2,000 (78.7)		
	Depth (D)	mm (in)	1,110 (43.7)			1,110 (43.7)			1,110 (43.7)		
Net Weight (Single Skinned)	kg (lb)	128 (282)	137 (301)	155 (341)	128 (282)	137 (301)	155 (341)	174 (383)	180 (396)	225 (495)	
Net Weight (Double Skinned)	kg (lb)	242 (533)	251 (553)	263 (579)	242 (533)	251 (553)	263 (579)	277 (610)	283 (624)	328 (328)	
Sound Power Level (Single Skinned)	dBA	77	77	77	79	79	79	85	85	85	
Sound Power Level (Double Skinned)	dBA	73	73	73	75	75	75	81	81	81	
EVAPORATOR COIL											
Type		Cross Finned Tubes			Cross Finned Tubes			Cross Finned Tubes			
Fin	Material	Aluminium			Aluminium			Aluminium			
	Rows	3	4	6	3	4	6	3	4	6	
	Fins per Inch	12			12			12			
EVAPORATOR BLOWER MOTOR											
Type		Squirrel Cage Induction									
Air Flow	CMH (CFM)	119.0 (4.200)			130.4 (4.600)			181.24 (6.400)			
External Static Pressure	PA (in wg)	150 (0.6)			150 (0.6)			200 (0.8)			
Power Supply	V / Ph / Hz	380-415 / 3 / 50									
Number x Rated Running	A	3,40	3,40	4,34	3,40	3,40	4,34	6,5	6,5	6,5	
Number x Rated Power Input	kW	1,10	1,10	2,72	1,63	1,63	2,72	3,63	3,63	3,63	
CHILLED WATER & PIPE SIZES											
Type		Clean Water / H ₂ O									
Water Flow Rate	Usgpm (l/s)	28.2 (1.78)	33.3 (2.10)	40.4 (2.55)	31.3 (1.98)	36.2 (2.30)	44.3 (2.80)	40.0 (2.53)	53.0 (3.35)	64.0 (4.04)	
Pipe Connection Size	Inch	1¼"	1¼"	1½"	1¼"	1¼"	1½"	1½"	1½"	2"	
Water Pressure Drop	psi (kPa)	4.2 (28.90)	3.1 (21.60)	2.2 (15.00)	5.3 (36.70)	4.0 (27.30)	2.7 (18.90)	1.0 (6.79)	6.1 (42.20)	4.2 (28.80)	
Drain Pipe Size	mm (in)	1"									
AIR FILTER											
Type		Washable Viledon									

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
2. All specifications are subjected to change by manufacturer without prior notice.

HIGH STATIC DUCTED BLOWER CHILLED WATER SYSTEM

SPECIFICATIONS

FDBW 250 - 350

			STANDARD MODEL					STANDARD MODEL				STANDARD MODEL			
SINGLE SKINNED MODEL			FDBW 250SS-3	FDBW 250SS-4	FDBW 250SS-6	FDBW 300SS-3	FDBW 300SS-4	FDBW 300SS-6	FDBW 350SS-3	FDBW 350SS-4	FDBW 350SS-6				
DOUBLE SKINNED MODEL			FDBW 250DS-3	FDBW 250DS-4	FDBW 250DS-6	FDBW 300DS-3	FDBW 300DS-4	FDBW 300DS-6	FDBW 350DS-3	FDBW 350DS-4	FDBW 350DS-6				
TOTAL COOLING CAPACITY		Btu/h	218.000	292.000	353.800	247.000	328.200	398.500	311.000	361.000	439.100				
		kW	63,89	85,60	103,70	72,39	96,20	116,80	91,15	105,80	128,70				
TOTAL SENSIBLE CAPACITY		Btu/h	152.600	204.400	247.660	172.900	229.740	278.950	217.700	252.700	307.370				
		kW	44,72	59,91	72,58	50,67	67,33	81,76	63,80	74,06	90,08				
INDOOR UNIT															
Casing	Material		Galvanized Steel												
	Finishing		Epoxy Polyester Power Coating												
	Insulation		Polyethylene Foam												
Dimension (Single Skinned)	Height (H)	mm (in)	1,300 (51.2)				1,300 (51.2)				1,550 (61.0)				
	Width (W)	mm (in)	1,913 (75.3)				1,913 (75.3)				2,169 (85.4)				
	Depth (D)	mm (in)	1,175 (46.3)				1,175 (46.3)				1,175 (46.3)				
Dimension (Double Skinned)	Height (H)	mm (in)	1,378 (54.2)				1,378 (54.2)				1,648 (64.8)				
	Width (W)	mm (in)	1,891 (74.4)				1,891 (74.4)				2,398 (94.4)				
	Depth (D)	mm (in)	1,180 (46.4)				1,180 (46.4)				1,628 (64.0)				
Net Weight (Single Skinned)		kg (lb)	240 (528)	250 (550)	283 (623)	254 (559)	270 (594)	303 (667)	292 (642)	320 (704)	366 (805)				
Net Weight (Double Skinned)		kg (lb)	339 (747)	349 (769)	382 (842)	339 (747)	349 (769)	382 (842)	360 (793)	388 (855)	434 (856)				
Sound Power Level (Single Skinned)		dBA	87	87	87	89	89	89	92	92	92				
Sound Power Level (Double Skinned)		dBA	83	83	83	85	85	85	88	88	88				
EVAPORATOR COIL															
Type			Cross Finned Tubes				Cross Finned Tubes				Cross Finned Tubes				
Fin	Material		Aluminium				Aluminium				Aluminium				
	Rows		3	4	6	3	4	6	3	4	6				
	Fins per Inch		12				12				12				
EVAPORATOR BLOWER MOTOR															
Type		Squirrel Cage Induction													
Air Flow		CMH (CFM)	226.56 (8.000)				254.93 (9.000)				297.45 (10.500)				
External Static Pressure		PA (in wg)	200 (0.8)				200 (0.8)				200 (0.8)				
Power Supply		V / Ph / Hz	380-415 / 3 / 50												
Number x Rated Running		A	8,33	8,33	8,33	8,33	8,33	11,3	10,9	10,9	10,9				
Number x Rated Power Input		kW	4,75	4,75	4,75	4,75	4,75	6,42	6,42	6,42	8,62				
CHILLED WATER & PIPE SIZES															
Type			Clean Water / H ₂ O												
Water Flow Rate		Usgpm (l/s)	48.4 (3.06)	64.9 (4.10)	78.6 (4.96)	54.9 (3.47)	72.9 (4.60)	88.6 (5.60)	69.1 (4.36)	80.2 (5.06)	97.36 (6.16)				
Pipe Connection Size		Inch	2"	2"	2½"	2"	2"	2½"	2½"	2½"	2½"				
Water Pressure Drop		psi (kPa)	0.7 (4.80)	4.4 (30.00)	3.0 (20.60)	0.9 (6.21)	5.6 (38.90)	3.9 (26.70)	1.0 (7.07)	0.8 (5.28)	0.5 (3.66)				
Drain Pipe Size		mm (in)	1"												
AIR FILTER															
Type			Washable Viledon												

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
2. All specifications are subjected to change by manufacturer without prior notice.

HIGH STATIC DUCTED BLOWER CHILLED WATER SYSTEM

SPECIFICATIONS

FDBW 400 - 450

		STANDARD MODEL				STANDARD MODEL		
SINGLE SKINNED MODEL		FDBW 400SS-3	FDBW 400SS-4	FDBW 400SS-6	FDBW 450SS-3	FDBW 450SS-4	FDBW 450SS-6	
DOUBLE SKINNED MODEL		FDBW 400DS-3	FDBW 400DS-4	FDBW 400DS-6	FDBW 450DS-3	FDBW 450DS-4	FDBW 450DS-6	
TOTAL COOLING CAPACITY	Btu/h	345.000	406.000	496.000	396.000	467.000	568.000	
	kW	101,11	118,99	145,37	116,06	136,87	166,47	
TOTAL SENSIBLE CAPACITY	Btu/h	241.500	284.200	347.200	277.200	326.900	397.600	
	kW	70,78	83,29	101,76	81,24	95,81	116,53	
INDOOR UNIT								
Casing	Material		Galvanized Steel					
	Finishing		Epoxy Polyester Power Coating					
	Insulation		Polyethylene Foam					
Dimension (Single Skinned)	Height (H)	mm (in)	1,550 (61.0)			1,550 (61.0)		
	Width (W)	mm (in)	2,321 (91.4)			2,321 (91.4)		
	Depth (D)	mm (in)	1,480 (58.3)			1,480 (58.3)		
Dimension (Double Skinned)	Height (H)	mm (in)	1,648 (64.8)			1,648 (64.8)		
	Width (W)	mm (in)	2,398 (94.4)			2,398 (94.4)		
	Depth (D)	mm (in)	1,628 (64.0)			1,628 (64.0)		
Net Weight (Single Skinned)		kg (lb)	308 (678)	330 (726)	418 (920)	315 (693)	339 (746)	440 (968)
Net Weight (Double Skinned)		kg (lb)	476 (1047)	498 (1095)	586 (1289)	544 (1196)	568 (1249)	669 (1471)
Sound Power Level (Single Skinned)		dBA	90	90	90	93	93	93
Sound Power Level (Double Skinned)		dBA	86	86	86	89	89	89
EVAPORATOR COIL								
Type		Cross Finned Tubes			Cross Finned Tubes			
Fin	Material	Aluminium			Aluminium			
	Rows	3	4	6	3	4	6	
	Fins per Inch	12	12	12	12	12	12	
EVAPORATOR BLOWER MOTOR								
Type		Squirrel Cage Induction						
Air Flow		CMH (CFM)	339,84 (12.000)			382,32 (13.500)		
External Static Pressure		PA (in wg)	200 (0,8)			250 (1,0)		
Power Supply		V / Ph / Hz	380-415 / 3 / 50					
Number x Rated Running		A	11,3	11,3	11,3	14,6	14,6	
Number x Rated Power Input		kW	6,42	6,42	6,42	8,62	8,62	
CHILLED WATER & PIPE SIZES								
Type		Clean Water / H ₂ O						
Water Flow Rate		Usgpm (l/s)	76.7 (4.84)	90.2 (5.68)	110.2 (6.96)	88.0 (5.56)	103.8 (6.55)	126.2 (7.97)
Pipe Connection Size		Inch	2½"	2½"	2½"	2½"	2½"	2½"
Water Pressure Drop		psi (kPa)	1.2 (8.42)	0.9 (6.32)	0.6 (4.43)	1.7 (11.80)	1.3 (8.81)	0.9 (6.14)
Drain Pipe Size		mm (in)	1"					
AIR FILTER								
Type		Washable Viledon						

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
2. All specifications are subjected to change by manufacturer without prior notice.

HIGH STATIC DUCTED BLOWER CHILLED WATER SYSTEM

SPECIFICATIONS

FDBW 500 - 750

			STANDARD MODEL			STANDARD MODEL			STANDARD MODEL	
SINGLE SKINNED MODEL		FDBW 500SS-3	FDBW 500SS-4	FDBW 500SS-6	FDBW 600SS-3	FDBW 600SS-4	FDBW 600SS-6	FDBW 750SS-3	FDBW 750SS-4	FDBW 750SS-6
DOUBLE SKINNED MODEL		FDBW 500DS-3	FDBW 500DS-4	FDBW 500DS-6	FDBW 600DS-3	FDBW 600DS-4	FDBW 600DS-6	FDBW 750DS-3	FDBW 750DS-4	FDBW 750DS-6
TOTAL COOLING CAPACITY	Btu/h	430.000	507.000	620.000	525.000	620.000	755.000	648.000	765.000	934.100
	kW	126,03	148,59	181,71	153,87	181,71	221,28	189,92	224,21	270.00
TOTAL SENSIBLE CAPACITY	Btu/h	301.000	354.900	434.000	367.500	434.000	528.500	453.600	535.500	634.000
	kW	88,22	104,02	127,20	107,71	127,20	154,89	132,94	156,95	185.81
INDOOR UNIT										
Casing	Material	Galvanized Steel								
	Finishing	Epoxy Polyester Power Coating								
	Insulation	Polyethylene Foam								
Dimension (Single Skinned)	Height (H)	mm (in)	1,550 (61.0)			1,975 (77.8)			2,250 (88.6)	
	Width (W)	mm (in)	2,321 (91.4)			2,321 (91.4)			2,321 (91.4)	
	Depth (D)	mm (in)	1,480 (58.3)			1,830 (72.0)			1,830 (72.0)	
Dimension (Double Skinned)	Height (H)	mm (in)	1,648 (64.8)			2,147 (84.5)			2,360 (92.9)	
	Width (W)	mm (in)	2,398 (94.4)			2,199 (86.5)			2,199 (86.5)	
	Depth (D)	mm (in)	1,628 (64.0)			2,060 (81.1)			2,060 (81.1)	
Net Weight (Single Skinned)	kg (lb)	328 (722)	350 (770)	398 (876)	980 (2,156)	999 (2,198)	1,096 (2,411)	1,061 (2,334)	1,084 (2,385)	1,234 (2,715)
Net Weight (Double Skinned)	kg (lb)	495 (1,089)	517 (1,137)	565 (1,243)	815 (1,793)	834 (1,834)	931 (2,048)	863 (1,898)	886 (1,949)	1,036 (2,279)
Sound Power Level (Single Skinned)	dBA	96	96	96	89	89	89	93	93	93
Sound Power Level (Double Skinned)	dBA	92	92	92	85	85	85	89	89	89
EVAPORATOR COIL										
Type		Cross Finned Tubes			Cross Finned Tubes			Cross Finned Tubes		
Fin	Material	Aluminium			Aluminium			Aluminium		
	Rows	3	4	6	3	4	6	3	4	6
	Fins per Inch	12	12	12	12	12	12	12	12	12
EVAPORATOR BLOWER MOTOR										
Type		Squirrel Cage Induction								
Air Flow	CMH (CFM)	424.80 (15.000)			509.76 (18.000)			637.20 (22.500)		
External Static Pressure	PA (in wg)	250 (1.00)			300 (1.20)			350 (1.40)		
Power Supply	V / Ph / Hz	380-415 / 3 / 50								
Number x Rated Running	A	21,4	21,4	21,4	21,4	21,4	21,4	28,5	28,5	28,5
Number x Rated Power Input	kW	12,44	12,44	12,44	12,44	12,44	12,44	16,78	16,78	16,78
CHILLED WATER & PIPE SIZES										
Type		Clean Water / H ₂ O								
Water Flow Rate	Usgpm (l/s)	95.5 (6.03)	112.7 (7.11)	137.8 (8.70)	116.7 (7.37)	137.8 (8.70)	167.8 (10.6)	144.0 (9.09)	170.0 (10.7)	207.6 (13.1)
Pipe Connection Size	Inch	2½"	2½"	2½"	2 X 2"	2 X 2"	2 X 2"	2 X 2"	2 X 2"	2 X 3"
Water Pressure Drop	psi (kPa)	2.0 (13.50)	1.5 (10.20)	1.0 (7.14)	1.8 (12.10)	1.3 (9.04)	0.9 (6.32)	1.9 (13.10)	1.4 (9.82)	1.0 (6.89)
Drain Pipe Size	mm (in)	1"								
AIR FILTER										
Type		Washable Viledon								

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, chilled water 7°C in - 12°C out.
2. All specifications are subjected to change by manufacturer without prior notice.

CHILLED WATER SYSTEM (CW)

AIR COOLED MINI CHILLER (FMAC)



FMAC 06/50

SPECIFICATIONS

R410A

MODEL		FMAC 03/25	FMAC 04/30	FMAC 05/40	FMAC 06/50	FMAC 07/65	FMAC 10/85	FMAC 12/100	FMAC 15/125
Nominal Cooling Capacity	Btu/hr	25.000	35.000	40.000	50.000	65.000	85.000	100.000	125.000
	kcal/hr	6.300	8.820	10.080	12.600	16.380	21.420	25.200	31.500
	Watt	7.325	10.255	11.720	14.650	19.045	24.906	29.301	36.626
Dimension	Height (H)	mm (in)	1,000 (39.4)	1,000 (39.4)	1,230 (48.4)	946 (37.2)	977 (38.5)	977 (38.5)	1,072 (42.2)
	Width (W)	mm (in)	1,000 (39.4)	1,000 (39.4)	970 (38.2)	1,300 (51.2)	1,184 (46.1)	1,184 (46.1)	1,188 (46.8)
	Depth (D)	mm (in)	350 (13.8)	350 (13.8)	350 (13.8)	500 (19.7)	950 (37.4)	950 (37.4)	995 (39.2)
Net Weight		kg (lb)	89 (196)	89 (196)	116 (255)	163 (359)	153 (337)	153 (336)	224 (493)
Evaporator									
Type			Tube in tube coaxial coil						
Nominal Water Flow		l/s	0,35	0,49	0,56	0,70	0,91	1,19	1,75
Coaxical Pressure Drop VS Nominal		kPa	11	26	37	24	20	19	34,95
Water Line (Hydraulic Kit)									
Pump		TYPE	Horizontal Multistage End-Suction						
Power Supply		V/Ph/Hz	200 - 240 / 1 / 50						
Power Input		KW	0,5	0,5	0,5	0,5	0,5	0,67	0,67
Running Current		Amp	3,1	3,1	3,1	3,1	3,1	4,4	4,4
Water Flow Rate		GPM (l/s)	5.56 (0.35)	7.78 (0.49)	8.89 (0.56)	11.11 (0.7)	14.44 (0.91)	18.89 (1.19)	22.22 (1.4)
Installation Pipe Connection		mm (in)	3/4"				1"		
Head		m	22	22	22	29	29	27	23
Tank Material			Black Mild Steel						
Capacity/ Volume		liters	15				32		
Refrigerant Control			Capillary Tube				Thermostic Expansion Valve		
OUTDOOR UNIT		FC 30	FC 40	FC 50	FC 60	FC 75	FC 100	FC 125	FC 150
Compressor Type		Scroll							
Power Supply		V / Ph / Hz	220-240/ 1/ 50						
Rated Running Current		A	14,8	6	7,7	8,6	11,8	15,8	18
Rated Power Input		kW	3,0	3,31	4,41	4,97	6,48	9,12	10,44
Refrigerant Type		R 410 A							

Conditions:

1. Nominal cooling condition: water inlet 12°C, water outlet 7°C Ambient 35°C
2. All specifications are subjected to change by manufacturer without prior notice

CHILLED WATER SYSTEM (CW)

AIR COOLED MODULAR CHILLER (FMC)



FMC 040A

SPECIFICATIONS

FMC R407C & R410A

MODEL			AIR COOLED MODULAR CHILLER (SCROLL) WITH HEAT RECOVERY			
TYPE R407C			FMC 020A-E2	FMC 030A-E2	FMC 040A-E2	FMC 060A-E2
TYPE R410A			FMC 020A-E3	FMC 030A-E3	FMC 040A-E3	FMC 060A-E3
R407C	Cooling Capacity	Kw	57	86	114	171
	Total Input Power	Kw	18,7	28,0	37,3	56
	Heat Recovery	Kw	18	26,7	35,6	53,4
R410A	Cooling Capacity	Kw	62	93	124	188
	Total Input Power	Kw	21,3	32,5	42,6	65
	Heat Recovery	Kw	23	34,5	46	69
Power Supply			380V/3Ph/50Hz			
Air Cooled Heat Exchanger						
Fan Qty			2	2	4	4
Fan Power		Kw	1,3	2,5	2,6	5
Compressor		Type	Hermetic Scroll			
		Qty	2	3	4	6
Shell and Tube Evaporator						
Water Flow		m3/h	10,7	16,0	21,3	32
		gpm	47,0	70,5	94,0	143
Pressure Head Loss		kPa	40	40	40	40
Pipe Diameter		Inch	2.0 "	2.5 "	2.5 "	3.0"
Heat Recovery		Type	Coaxial Tube Type			
Water Flow		m3/h	1,3	2,0	2,6	4,0
		gpm	5,8	8,7	11,6	17,4
Pressure Head Loss		kPa	15	15	15	15
Pipe Diameter		Inch	3/4 "	1"		1.5"
Outline Dimension		Length	2000	2000	2000	2000
		Width	900	1080	1800	2004
		Height	2100	2300	2100	2366
Refrigerant Control		Type	Thermostatic Expansion Valve			
Refrigerant Charge	R407C	Kg	14	21	27	41
	R410A	Kg	15	22	30	45
Unit Weight		Kg	800	950	1600	1900

Note:

1. Uses high efficiency heat exchanger Shell & tube and hydrophilic aluminium fin, to achieve optimum heat transfer result
2. Nominal cooling condition: water inlet 12°C, water outlet 7°C Ambient 35°C
3. Uses quality steel panel and is treated electrophosphate coatings, tough and elegant;
4. Heat Recovery base on entering water 35°C and leaving 50°C

CHILLED WATER SYSTEM (CW)

WATER COOLED MODULAR CHILLER (FMCW)



FMCW 070

SPECIFICATIONS

R410A

MODEL			FMCW	FMCW	FMCW	FMCW	FMCW	FMCW
			020X-E3	020A-E3	030A-E3	055A-E3	070A-E3	100A-E3
Cooling Capacity	kW		72,5	72,5	108,5	200	242	363
Input Power	kW		15,6	15,6	23,3	40,8	49,8	75
Operating Current	A		28,4	28,4	42,5	68,4	84	125
Capacity Regulating			0-50%-100%		0-33%-66%-100%	0-50%-100%		
Power Supply		V / Ph / Hz	380V/3/50					
Compressor	Type		Hermetic Scroll Compressor					
	Start Up		Direct Start				Direct On Line	
	Qty	Set	2	2	3	2	2	3
Refrigerant	Type		R410a					
	Charge	kg	10	12	18	33	42	63
	Controller Type		External Equalizer Thermostlc Expansion Valve					
Evaporator	Type		Plate Heat Exhanger	High Efficiency Shell and Tube Heat Exchanger				
	Water Flow Rate	m³/h	12,5	12,5	18,7	34,4	38	56
	Pressure Drop	kPa	50	50	50	50	50	60
	Connection Pipe	DN	50	65	65	80	80	125
	Connection Type		2" Inner Taper Pipe Thread	Soft Hoop			Flange	
Condenser	Type		High Efficiency Shell and Tube Heat Exchanger					
	Water Flow Rate	m³/h	15,6	15,6	23,3	43	50	76
	Pressure Drop	kPa	50	50	50	50	50	65
	Connection Pipe	DN	50	65	65	100	100	125
	Type		2" Inner Taper Pipe Thread	Soft Hoop			Flange	
Dimension	Length	mm	1260	2000	2000	2400	2350	3375
	Width	mm	580	565	565	770	1022	1230
	Height	mm	1215	1380	1380	1840	1907	1946
Weight	Transportation Weight	kg	550	550	630	1330	1330	1950
	Operation Weight	kq	650	650	730	1450	1450	2170

- Above Capacity based on chilled water outlet temperature 7°C, cooling water inlet temperature 30°C
- Chiled Water outlet temprature range 5-15°C, inlet and outlet water different in temperature 3.5-8°C
- Cooling water outlet temperature 25-40°C, inlet and outlet water different in temperature 3.5-8°C
- Heat Recovery Inlet Temperature 40°C

CHILLED WATER SYSTEM (CW)

CHILLED WATER CASSETTE (FFC-CA)



SPECIFICATIONS

MODEL		INDOOR UNIT	FUJIAIRE CHILLED WATER CEILING CASSETTE TYPE			
			FFC-300CA/4	FFC-400CA/4	FFC-500CA/4	FFC-600CA/4A
Cooling Capacity		kW	2.7	3.6	4.5	5.4
Heating Capacity		kW	4.1	5.4	6.8	8.1
Power Source		V / Ph / Hz	220-240V / 1Ø / 50Hz			
Fan Motor	Rated Input Power	W	50	57	67	90
Air Flow		CFM / CMH	300 / 510	400 / 680	500 / 850	600 / 1,020
Noise Level	Indoor	dB (A) ± 3	39	40	42	44
Water Flow Volume		CMH	0.6	0.7	0.9	1.2
Hydraulic Resistance		kPa	26	27	29	31
Max. Working Pressure		MPa	1.6	1.6	1.6	1.6
Inlet / Outlet Water Pipe		inch	Rc 3/4" (DN20)			
Drain Pipe		inch	R 3/4" (DN20)			
Net Dimensions (W x H x D)	Indoor (Body)	mm ± 5	615 x 263 x 615	615 x 263 x 615	615 x 263 x 615	835 x 250 x 835
	Indoor (Front Panel)	mm ± 5	650 x 55 x 650	650 x 55 x 650	650 x 55 x 650	950 x 55 x 950
Packing Dimensions (W x H x D)	Indoor (Body)	mm ± 5	700 x 330 x 700	700 x 330 x 700	700 x 330 x 700	910 x 310 x 910
	Indoor (Front Panel)	mm ± 5	710 x 80 x 710	710 x 80 x 710	710 x 80 x 710	1,000 x 100 x 1,000
Net Weight		kg ± 0.5	20 / 3	20 / 3	21 / 3	25 / 5
Gross Weight		kg ± 0.5	22 / 5	22 / 5	22 / 5	28 / 7

MODEL		INDOOR UNIT	FUJIAIRE CHILLED WATER CEILING CASSETTE TYPE			
			FFC-800CA/4A	FFC-1000CA/4A	FFC-1200CA/4A	FFC-1400CA/4A
Cooling Capacity		kW	7.2	9.0	10.8	12.6
Heating Capacity		kW	10.8	13.5	16.2	18.9
Power Source		V / Ph / Hz	220-240V / 1Ø / 50Hz			
Fan Motor	Rated Input Power	W	131	145	186	225
Air Flow		CFM / CMH	800 / 1,360	1,000 / 1,700	1,200 / 2,040	1,400 / 2,380
Noise Level	Indoor	dB (A) ± 3	45	48	50	51
Water Flow Volume		CMH	1.4	1.7	1.8	2.3
Hydraulic Resistance		kPa	34	36	39	42
Max. Working Pressure		MPa	1.6	1.6	1.6	1.6
Inlet / Outlet Water Pipe		inch	Rc 3/4" (DN20)			
Drain Pipe		inch	R 3/4" (DN20)			
Net Dimensions (W x H x D)	Indoor (Body)	mm ± 5	835 x 250 x 835	835 x 290 x 835	835 x 290 x 835	835 x 250 x 835
	Indoor (Front Panel)	mm ± 5	950 x 55 x 950	950 x 55 x 950	950 x 55 x 950	950 x 55 x 950
Packing Dimensions (W x H x D)	Indoor (Body)	mm ± 5	910 x 310 x 910	910 x 350 x 910	910 x 350 x 910	910 x 310 x 910
	Indoor (Front Panel)	mm ± 5	1,000 x 100 x 1,000	1,000 x 100 x 1,000	1,000 x 100 x 1,000	1,000 x 100 x 1,000
Net Weight		kg ± 0.5	26 / 5	27 / 5	28 / 5	28 / 5
Gross Weight		kg ± 0.5	29 / 7	31 / 7	33 / 7	33 / 7

* All specifications are subjected to change by the manufacturer without prior notice.

* Nominal cooling & heating capacities are based on the following conditions:

Cooling : 27°C DB / 19°C WB Air Inlet Temp 7°C / 12°C Water Inlet / Outlet Temp

Heating : 21°C DB 60°C Water Inlet Temp

CHILLED WATER SYSTEM (CW)

CHILLED WATER WALL MOUNTED (FFC-WM)



WALL MOUNTED

SPECIFICATIONS

MODEL	INDOOR UNIT	FFC-300WM/4	FFC-400WM/4	FFC-500WM/4	FFC-600WM/4	FFC-800WM/4
Cooling Capacity	kW	2.7	3.6	4.5	5.4	7.2
Heating Capacity	kW	4.1	5.4	6.8	8.1	10.8
Power Source	Rated Input Power	V / Ph / Hz				
Fan Motor	W	41	50	55	62	137
Air Flow	CFM / CMH	300 / 510	400 / 680	500 / 850	600 / 1,020	800 / 1,360
Noise Level	dB (A) ± 3	42	46	49	49	51
Water Flow Volume	CMH	0.6	0.8	1.0	1.1	1.3
Hydraulic Resistance	kPa	12	20	37	39	28
Max. Working Pressure	MPa	1.6	1.6	1.6	1.6	1.6
Inlet/ Outlet Water Pipe	inch	Rc 3/4" (DN20)				
Drain Pipe	inch	R 3/4" (DN20)				
Net Dimensions (W x H x D)	mm ± 5	880 x 286 x 203	1095 x 312 x 215	1095 x 312 x 215	1095 x 312 x 215	1310 x 322 x 240
Packing Dimensions (W x H x D)	mm ± 5	935 x 350 x 270	1175 x 375 x 275	1175 x 375 x 275	1175 x 375 x 275	1420 x 440 x 380
Net Weight	kg ± 0.5	11	15	16	16	20
Gross Weight	kg ± 0.5	13	17	18	18	23

* All specifications are subjected to change by the manufacturer without prior notice.

* Nominal cooling & heating capacities are based on the following conditions:

Cooling : 27°C DB / 19°C WB Air Inlet Temp 7°C / 12°C Water Inlet / Outlet Temp

Heating : 21°C DB 60°C Water Inlet Temp

DIRECT EXPANSION SYSTEM (DX)

DRAW THROUGH CEILING CONCEALED (FDP)



FDP 18-E3

SPECIFICATIONS

R410A

INDOOR UNIT			FDP 09-E3	FDP 12-E3	FDP 18-E3	FDP 24-E3	FDP 30-E3
Nominal Cooling Capacity	Btu/h		9.200	12.500	18.000	24.000	30.000
	Watt		2.696	3.660	5.275	7.034	8.792
Power Source	V/Ph/Hz		220-240/1/50				
Indoor Fan Motor Power Input	Watt		73	97	157	215	237
Total Power Input	Watt		963	1100	1758	2300	3417
Casing	Type		Plain Galvanized Steel				
Evaporator Coil	Type		Cross Finned Tubes				
	Row / FPI		3/12	3/12	3/12	3/12	3/12
Blower Fan	Type		Centrifugal Fan				
	Qty		1	2	2	3	4
Air Flow (hi/med/low)	CFM		300	400	600	800	1.000
External Static Pressure	Pa		80	80	80	80	80
Blower Motor	Type		Permanent Split Capacitor Motor with Ball Bearing				
	Qty		1	1	1	2	2
Motor Rated Input Power	Watt		73	97	157	215	237
Motor Rated Running Current	A		0,36	0,49	0,99	1,27	1,35
Noise Level	db		40	41	46	47	48
Dimension	Width	mm (Inch)	794 (31.3)	994 (39.1)	1,104 (43.5)	1,394 (54.9)	1,524 (60.0)
	Depth	mm (Inch)	363 (14.3)				
	Height	mm (Inch)	260 (10.2)				
Packing Dimension	Width	mm (Inch)	857 (33.7)	1,057 (41.6)	1,167 (45.9)	1,457 (57.4)	1,587 (62.5)
	Depth	mm (Inch)	380 (15.0)				
	Height	mm (Inch)	277 (10.9)				
Nett/ Gross Weight	Kg		20/22	24/26	28/30	37/39	39/41
OUTDOOR UNIT			FL10C1H-2A1N	FL 15C1H-2A1N	FL20C1H-2A1N	FL 25C1H-2A1N	FL 30C1J-2A1N
Compressor	Type		Rotary				
Compressor Power Input	Watt		830	946	1495	1925	3020
Motor Power Input	Watt		60	67	106	160	160
Noise Level	db		54	54	54	56	59
Dimension (W*H*D)	mm		700*500*225	715*540*235	850*605*295	1010*705*430	900*835*330
Packing Dimension (W*H*D)	mm		825*550*320	851*600*335	995*690*415	1030*735*445	1030*960*440
Nett / Gross Weight	Kg		25/29	28/33	40/45	46/52	65/80
Pipe Connection	Liquid	Inch	1/4	1/4	1/4	3/8	3/8
	Gas	Inch	3/8	3/8	1/2	5/8	5/8
Refrigerant Charge	Gram		670	690	1320	1500	1920
Maximum Pipe Length Indoor - Outdoor	meter		15	15	25	25	25

Note:

1. All specifications are subjected to change by manufacturer without prior notice.
2. Performance of the unit varies according to the type of compressor used.
3. Nominal cooling capacities are based on the following conditions:
 - Cooling: Indoor 27 °C DB / 19 °C WB.
 - Outdoor 35 °C DB / 24 °C WB.

DIRECT EXPANSION SYSTEM (DX)

HIGH STATIC DUCTED BLOWER SPLIT SYSTEM (FDB)



FC 040 - 060



FC 075 - 125



FC 150



FDB 040 - 050



FDB 060 - 100



FDB 125 - 150

HIGH STATIC DUCTED BLOWER SPLIT SYSTEM (FDB)

SPECIFICATIONS

FDB 040-150 | R410A & R407C

MODEL			INDOOR UNIT		FDB 040C-SS-E3	FDB 050C-SS-E3	FDB 060C-SS-E3	FDB 075C-SS-E3	FDB 100C-SS-E3	FDB 125C-SS-E3	FDB 150C-SS-E3
			OUTDOOR UNIT		FC 040A-E3	FC 050A-E3	FC 060A-E3	FC 075A-E3	FC 100A-E3	FC 125A-E3	FC 150A-E3
TOTAL COOLING CAPACITY			R410A (E3)	Btu/h	40.000	48.500	60.000	74.500	100.000	125.000	150.000
				kW	10.55	14.21	17.58	21.83	29.31	36.64	43.96
TOTAL POWER INPUT				kW	4.07	5.67	6.32	7.89	10.75	12.48	17.33
				A	9.52	13.41	14.56	16.44	24.02	24.35	31.75
TOTAL COOLING CAPACITY			R407C (E2)	Btu/h	38.800	47.800	56.600	75.000	100.000	118.000	150.000
				kW	11.4	14.0	16.6	22.0	29.3	34.6	44.0
TOTAL POWER INPUT				kW	4.18	5.4	6.06	8.33	11.13	11.93	18.48
				A	9.88	13.28	13.98	17.63	24.30	22.56	34.20
INDOOR UNIT											
Casing			Material		Galvanized Mild Steel						
			Finishing		Epoxy Polyester Powder Coating						
			Insulation		Polyethylene Foam						
Dimension (W x H x D)			Single Skin	mm	858 x 500 x 764	858 x 500 x 764	1,493 x 500 x 764	1,493 x 500 x 764	1,493 x 500 x 764	1,644 x 679 x 1,089	1,644 x 679 x 1,089
			Double Skin	mm	920 x 647 x 764	920 x 647 x 764	1,555 x 647 x 764	1,555 x 647 x 764	1,555 x 647 x 764	1,767 x 878 x 1,110	1,767 x 878 x 1,110
Net / Gross Weight			Single Skin	kg	44 / 75	48 / 77	73 / 117	84 / 121	88 / 126	128 / 198	132 / 213
			Double Skin	kg	67 / 72	89 / 95	140 / 150	150 / 160	179 / 189	242 / 257	251 / 266
Noise Level (Sound Power)			Single Skin	dBA	62	62	65	66	71	77	79
			Double Skin	dBA	59	59	62	63	68	74	76
EVAPORATOR COIL											
Type			Cross Finned Tubes								
Fin			Material		Aluminium						
			Rows		3	4	3	3	4	3	4
			Fins per Inch		12	12	12	12	12	12	12
EVAPORATOR BLOWER											
Type / Drive			Centrifugal / Direct							Centrifugal / Belt Driven	
Air Flow			CMH (CFM)	35.4 (1,250)	45.4 (1,600)	56.7 (2,000)	70.9 (2,500)	90.7 (3,200)	119.0 (4,200)	130.4 (4,600)	
External Static Pressure			Pa (in wg)	100 (0.4)	100 (0.4)	100 (0.4)	100 (0.4)	100 (0.4)	150 (0.6)	150 (0.6)	
EVAPORATOR BLOWER MOTOR											
Power Supply			V / Ph / Hz	220-240 / 1 / 50			220-240 / 1 / 50		380-415 / 3 / 50		
Number x Rated Running Current			A	1 x 1.65	1 x 3.4	2 x 1.65	2 x 1.65	2 x 3.4	3,4	3,4	
Number x Rated Power Input			kW	1 x 0.35	1 x 0.75	2 x 0.35	2 x 0.35	2 x 0.75	1,10	1,63	
Pipe Size			Liquid	mm (in)	9.5 (¾)	9.5 (¾)	12.7 (½)	12.7 (½)	15.9 (½)	15.9 (½)	15.9 (¾)
			Gas	mm (in)	19.1 (¾)	19.1 (¾)	19.1 (¾)	25.4 (1)	28.6 (1½)	34.9 (1¾)	34.9 (1¾)
Drain Pipe Size			mm (in)	25.4 (1)							
AIR FILTER											
Type			Washable Viledon								
OUTDOOR UNIT											
Casing			Material		Electro Galvanized Mild Steel						
			Finishing		Epoxy Polyester Power Coating						
Dimension			Height (H)	mm (in)	1127	1127	1127	947 (37.3)	947 (37.3)	947 (37.3)	1,060 (41.7)
			Width (W)	mm (in)	900	900	900	1,184 (46.1)	1,184 (46.1)	1,184 (46.1)	1,188 (46.8)
			Depth (D)	mm (in)	441	441	441	953 (37.5)	953 (37.5)	953 (37.5)	1,002 (39.4)
Net Weight			kg (lb)	128	134	96	153 (337)	213 (470)	216 (476)	232 (512)	
Sound Power Level			dBA	55	57	57	77	78	80	84	
Fan Condenser Rated Power Input			kW	0.2	0.2	0.2	0.68	0.68	0.68	1.37	
Fan Condenser Rated Running Current			A	1.6	1.6	1.6	1.5	1.5	1.5	2.6	
COMPRESSOR											
Type			Scroll								
Power Supply			V / Ph / Hz	380-415 / 3 / 50							
Rated Power Input			R410A (E3)	kW	3,52	4,72	5,42	6,51	8,57	10,7	12,5
Rated Running Current				A	6,27	8,41	9,66	11,64	15,72	19,45	24
Rated Power Input			R407C (E2)	kW	3,6	4,5	5,2	7,0	9,0	10,2	13,7
Rated Running Current				A	6,6	8,3	9,1	12,8	16,0	17,7	26,5
Maximum Pipe Length (With Accessories)*			Meter	25 (45)	25 (45)	25 (45)	45 (75)	45 (75)	45 (75)	45 (75)	

*Pipe diameter adjustment is required for longer distances

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, outdoor 35 °CDB.
2. All specifications are subjected to change by manufacturer without prior notice.

HIGH STATIC DUCTED BLOWER SPLIT SYSTEM (FDB)

SPECIFICATIONS

FDB 150-350 | R410A & R407C

MODEL		INDOOR UNIT		FDB 150B2-SS-E3	FDB 200B1-SS-E3	FDB 200B2-SS-E3	FDB 250B2-SS-E3	FDB 300B2-SS-E3	FDB 300B3-SS-E3	FDB 350B3-SS-E3	
		OUTDOOR UNIT		FC 075-E3 x 2	FC 200-E3	FC 100-E3 x 2	FC 125-E3 x 2	FC 150-E3 x 2	FC 100-E3 x 3	FC 100-E3 x 1	FC 125-E3 x 2
TOTAL COOLING CAPACITY	R410A (E3)	Btu/h	149.000	200.000	200.000	250.000	300.000	300.000	350.000		
		W	43.669	58.610	58.610	73.270	87.920	87.920	102.570		
		kW	17.65	21.70	21.54	26.80	31.84	31.81	37.57		
		A	28.03	38.85	40.59	49.90	64.70	59.66	70.02		
TOTAL CURRENT RATE	R407C (E2)	Btu/h	150.000		200.000	236.000	300.000	300.000	336.000		
		W	44.0		58.6	69.2	87.9	87.9	98.5		
		kW	18.53		22.30	25.70	34.14	32.95	36.60		
		A	30.75		41.15	46.32	49.60	60.50	66.72		
INDOOR UNIT											
Casing	Material		Galvanized Mild Steel								
	Finishing		Epoxy Polyester Powder Coating								
	Insulation		Polyethylene Foam								
Dimension (W x H x D)	Single Skin	mm	1,644 x 679 x 1,089	1,877 x 869 x 1,040	1,877 x 869 x 1,040	1,913 x 1,300 x 1,175	1,913 x 1,300 x 1,175	1,913 x 1,300 x 1,175	2,169 x 1,550 x 1,175		
	Double Skin	mm	1,767 x 878 x 1,110	2,000 x 978 x 1,110	2,000 x 978 x 1,110	1,891 x 1,378 x 1,180	1,891 x 1,378 x 1,180	1,891 x 1,378 x 1,180	2,398 x 1,648 x 1,628		
Net / Gross Weight	Single Skin	kg	132 / 147	180 / 197	180 / 197	250 / 270	270 / 290	270 / 290	320 / 340		
	Double Skin	kg	251 / 266	283 / 298	283 / 298	349 / 369	360 / 380	360 / 380	388 / 408		
Noise Level (Sound Power)	Single Skin	dBA	79	85	85	87	89	89	92		
	Double Skin	dBA	75	81	81	85	87	87	90		
EVAPORATOR COIL											
Type			Cross Finned Tubes								
Fin	Material		Aluminium								
	Rows		4	4	4	4	5	5	4		
	Fin per Inch		12	12	12	12	12	12	12		
EVAPORATOR BLOWER											
Type / Drive			Centrifugal / Belt Driven								
Air Flow		CMH (CFM)	130.27 (4,600)	181.24 (6,400)	181.24 (6,400)	226.56 (8,000)	254.93(9000)	254.93(9000)	297.45(10500)		
External Static Pressure		mm aq (inwg)	15.24 (0.60)	15.24 (0.60)	15.24 (0.60)	20.32 (0.80)	20.32(0.80)	20.32(0.80)	20.32(0.80)		
EVAPORATOR BLOWER MOTOR											
Power Supply		V / Ph / Hz	380 - 415 / 3 / 50								
Number X Rated Input		kW	1,6	3,0	3,0	4,0	4,0	4,0	5,5		
Number X R. Running Current		A	3,4	6,2	6,2	8,0	8,0	8,0	10,9		
Pipe Size	Liquid	mm (in)	2 x 12.70 (1/2)	(3/4)	2 x 15.88 (5/8)	2 x 15.88 (5/8)	2 x 15.88 (5/8)	3 x 15.88 (5/8)	15.88 (5/8)	2 X 15.88 (5/8)	
	Gas	mm (in)	2 x 25.4 (1.0)	(1-3/8)	2 x 28.58 (1-1/8)	2 x 34.92 (1-3/8)	2 x 34.92 (1-3/8)	3 x 28.58 (1-1/8)	28.58 (1-1/8)	2 x 34.92 (1-3/8)	
Drain Pipe Connection		mm (in)	25.40(1.00)								
AIR FILTER											
Type			Washable Viledon								
OUTDOOR UNIT											
Casing	Material		Electro Galvanized Mild Steel								
	Finishing		Epoxy Polyester Powder								
	Insulation		Polyethylene Foam								
Dimension	Height (H)	mm (in)	947 (37.3)	1,785 (70.00)	947 (37.3)	947 (37.3)	1,060 (41.73)	947 (37.3)	947 (37.3)	947 (37.3)	
	Width (W)	mm (in)	1,184 (46.61)	970 (38.00)	1,184 (46.61)	1,184 (46.61)	1,188 (46.77)	1,184 (46.61)	1,184 (46.6)	1,184 (46.61)	
	Depth (D)	mm (in)	953 (37.52)	1251 (49.00)	953 (37.52)	953 (37.52)	1,002 (39.44)	953 (37.52)	953 (37.52)	953 (37.52)	
Net Weight		kg (lb)	2 x 153 (337)	2 x 180 (396)	2 x 180 (396)	2 x 224 (493)	2 x 258 (568)	3 x 180 (396)	180 (396)	2 x 224 (493)	
Noise Level (Sound Power)		dBA	77	72	78	80	84	78	78	80	
Fan Condenser Rated Power Input		kW	2 x 1.5	1.5	2 x 0.7	2 x 0.7	2 x 1.42	3 x 0.7	1 x 0.7	2 x 0.7	
Fan Condenser Rated Running Current		A	2 x 0.68	3.5	2 x 1.5	2 x 1.5	2 x 4.35	3 x 1.5	1 x 1.5	2 x 1.5	
COMPRESSOR											
Type			Scroll Hermetic								
Power Supply		V / Ph / Hz	380 - 415 / 3 / 50								
Rated Input	R410A (E3)	kW	6.51 x 2	17	8.57 x 2	10.70 x 2	12.50 x 2	8.57 x 3	8,57	10.70 x 2	
Rated Running Current		A	11.64 x 2	29,2	15.72 x 2	19.45 x 2	24 x 2	15.72 x 3	15.72 x 1	19.45 x 2	
Rated Input	R407C (E2)	kW	14		18	20	27	27	9	20	
Rated Running Current		A	26		32	35	53	48	16	35	
Maximum Pipe Length (With Accessories)*		Meter	45 (75)	45 (75)	45 (75)	45 (75)	45 (75)	45 (75)	45 (75)	45 (75)	

*Pipe diameter adjustment is required for longer distances

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, outdoor 35 °CDB.
2. All specifications are subjected to change by manufacturer without prior notice.

HIGH STATIC DUCTED BLOWER SPLIT SYSTEM (FDB)

SPECIFICATIONS

FDB 400-750 | R410A & R407C

MODEL	INDOOR UNIT		FDB 400B4-SS-E3	FDB 450B3-SS-E3	FDB 500B4-SS-E3	FDB 600B4-SS-E3	FDB 750B5-SS-E3
	OUTDOOR UNIT		FC 100-E3 x 4	FC 150-E3 x 3	FC 125-E3 x 4	FC 150-E3 x 4	FC 150-E3 x 5
TOTAL COOLING CAPACITY	R410A (E3)	Btu/h	400.000	450.000	500.000	600.000	750.000
		W	117.230	131.880	146.540	175.840	219.810
TOTAL POWER INPUT		kW	42.58	48.60	56.60	65.80	83.50
		A	79.86	99.45	104.50	134.10	169.85
TOTAL COOLING CAPACITY	R407C (E2)	Btu/h	400.000	450.000	472.000	600.000	750.000
		W	117.2	131.9	138.3	175.8	219.8
TOTAL POWER INPUT		kW	44.10	52.05	54.40	70.40	89.25
		A	80.90	106.80	97.34	143.90	182.10
INDOOR UNIT							
Casing	Material		Galvanized Mild Steel				
	Finishing		Epoxy Polyester Powder Coating				
	Insulation		Polyethylene Foam				
Dimension (W x H x D)	Single Skin	mm	2,321 x 1,550 x 1,480	2,321 x 1,550 x 1,480	2,321 x 1,550 x 1,480	2,321 x 1,975 x 1,830	2,321 x 2,250 x 1,830
	Double Skin	mm	2,398 x 1,648 x 1,628	2,398 x 1,648 x 1,628	2,398 x 1,648 x 1,628	2,199 x 2,147 x 2,060	2,199 x 2,360 x 2,060
Net / Gross Weight	Single Skin	kg	330 / 355	339 / 364	350 / 375	999 / 1,010	1,084 / 1,095
	Double Skin	kg	498 / 518	568 / 588	630 / 650	931 / 941	1,036 / 1,046
Noise Level (Sound Power)	Single Skin	dBA	90	93	96	89	93
	Double Skin	dBA	88	91	94	87	91
EVAPORATOR COIL							
Type			Cross Finned Tubes				
Fin	Material		Aluminium				
	Rows		4	4	5	6	6
	Fin per Inch		12	12	12	12	12
EVAPORATOR BLOWER							
Type / Drive			Centrifugal / Belt Driven				
Air Flow	CMH (CFM)		339.84 (12,000)	382.32 (13,500)	424.80 (15,000)	509.76 (18,000)	637.20 (22,500)
External Static Pressure	mm aq (in wg)		20.32 (0.80)	25.4 (1.00)	25.4 (1.00)	30.48 (1.20)	35.56 (1.40)
EVAPORATOR BLOWER MOTOR							
Power Supply	V / Ph / Hz		380 - 415 / 3 / 50				
Number X Rated Input	kW		5,5	7,5	11	11	15
Number X Rated Running Current	A		10,9	14,4	20,7	20,7	28,1
Pipe Size	Liquid	mm (in)	4 x 15.88 (5/8)	3 x 15.88 (5/8)	4 x 15.88 (5/8)	4 x 15.88 (5/8)	5 x 15.88 (5/8)
	Gas	mm (in)	4 x 28.58 (1-1/8)	3 x 34.92 (1-3/8)	4 x 34.92 (1-3/8)	4 x 34.92 (1-3/8)	5 x 34.92 (1-3/8)
Drain Pipe Connection	mm (in)		25.40 (1.0)				
AIR FILTER							
Type			Washable Viledon				
OUTDOOR UNIT							
Casing	Material		Electro Galvanized Mild Steel				
	Finishing		Epoxy Polyester Power Coating				
Dimension	Height (H)	mm (in)	947 (37.3)	1,060 (41.73)	947 (37.3)	1,060 (41.73)	1,060 (41.73)
	Width (W)	mm (in)	1,184 (46.61)	1,188 (46.77)	1,184 (46.61)	1,188 (46.77)	1,188 (46.77)
	Depth (D)	mm (in)	953 (37.52)	1,002 (39.44)	953 (37.52)	1,002 (39.44)	1,002 (39.44)
Net Weight	kg (lb)		4 x 180 (396)	3 x 258 (568)	4 x 224 (493)	4 x 258 (568)	5 x 258 (568)
Noise Level (Sound Power)	dBA		78	84	80	84	84
Fan Condenser Rated Power Input	kW		4 x 0.7	3 x 1.2	4 x 0.7	4 x 1.2	5 x 1.2
Fan Condenser Rated Running Current	A		4 x 1.5	3 x 4.35	4 x 1.5	4 x 4.35	5 x 4.35
COMPRESSOR							
Type			Scroll Hermetic				
Power Supply	V / Ph / Hz		380-415 / 3 / 50				
Rated Input	R410A (E3)	kW	8.57 x 4	12.5 x 3	10.70 x 4	12.50 x 4	12.50 x 5
Rated Running Current		A	15.74 x 4	24.00 x 3	19.45 x 4	24.00 x 4	24.00 x 5
Rated Input	R407C (E2)	kW	36	41	41	55	68
Rated Running Current		A	64	79	71	106	132
Maximum Pipe Length (With Accessories)*	Meter		45 (75)	45 (75)	45 (75)	45 (75)	45 (75)

*Pipe diameter adjustment is required for longer distances

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, outdoor 35 °CDB.
2. All specifications are subjected to change by manufacturer without prior notice.

DIRECT EXPANSION SYSTEM (DX)

WATER COOLED SPLIT SYSTEM (FWSC)



FWSC 010A



FDP 09A

SPECIFICATIONS

R410A

MODEL		FUJIAIRE WATER COOLED SPLIT SYSTEM							
INDOOR UNIT TYPE		FDP 09WSC-E3	FDP 012WSC-E3	FDP 018WSC-E3	FDP 024WSC-E3	FDP 030WSC-E3	FDB 040WSC-E3	FDB 050WSC-E3	FDB 060WSC-E3
Cooling Capacity	Btu/H	10700	13.100	19.800	27.800	30.900	46.100	52.500	60.900
Air Flow	cfm	300	400	600	800	1.000	1.250	1.600	2.000
Power Supply	V/P/Hz	1220/1/50					380/3/50		
Number of Fans			2	2	3	3	1	1	2
Fan Housing		Galvanized Steel							
Coil	Type	Seamless Copper Tube Mechanically Bonded to Configured Aluminum Fin							
Motor	Type	Split-Capacitor Motor with Ball Bearing							
Number of Motors		1	1	1	2	2	1	1	2
Rated Power Input	Watt	73	97	157	215	237	375	500	2x375
External Static Pressure	Pa	30/60/80					100	100	100
Noise Level	dB(A)	40	41	46	47	48	62	62	65
Drain Pipe		1/2"					1"	1"	1"
Refrigerant Pipe Size	Inch	3/8"	1/2"		5/8"		3/4"	3/4"	3/4"
	Inch	1/4"	1/4"		3/8"		3/8"	3/8"	1/2"
Unit Dimension (WxDxH)	mm	794*363*260	994*330*260	1104*330*260	1394*330*260	1524*330*260	853*764*500		1493*764*500
Packaging Dimension (WxDxH)	mm	857*375*277	1057*375*277	1167*375*277	1457*375*277	1587*375*277	952*852*670		1582*852*670
Net / Gross Weight	kg	20	21	25	30	39	44	55	80
OUTDOOR UNIT TYPE		FWSC 010A-E3	FWSC 015A-E3	FWSC 020A-E3	FWSC 025A-E3	FWSC 030A-E3	FWSC 040A-E3	FWSC 050A-E3	FWSC 060A-E3
Compressor model		Rotary					Scroll		
Condenser Type		Coaxial Tube in Tube							
Water Flow	m3/h	0.7	0.85	1.3	1.8	2	2.9	3.4	3.9
Water Pressure Drop	kPa	26	45	23	24	34	30	44	30
Piping Size	In	Rc 1/2	Rc 3/4				Rc 1"		
Unit Dimension (WxDxH)	mm	584*309*450		633*309*500		632*450*600	667*482*600		
Packaging Dimension (WxDxH)	mm	640*375*540		689*375*590		777*580*742	810*612*742		
Sound Level	dB(A)	37	37	41	41	41	42	42	45
Rate Power Cooling	Watt	800	1.000	1.500	2.000	2.400	3.400	3.800	4.500
Nett / Gross Weight	Kg	63	63	70	71	84	90	97	105

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °C DB, 19.4 °C WB.
2. Entering water temperature 30°C and Leaving water temperature 35 °C.
3. All specifications are subjected to change by manufacturer without prior notice.

DIRECT EXPANSION SYSTEM (DX)

HORIZONTAL WATER COOLED PACKAGE, HANGING TYPE

SPECIFICATIONS

R407C

MODEL		FWH 015A-SS-E2	FWH 020A-SS-E2	FWH 024A-SS-E2	FWH 030A-SS-E2	FWH 040A-SS-E2	FWH 050A-SS-E2	FWH 060A-DS-E2	FWH 065A-DS-E2	FWH 085A-DS-E2	FWH 100A-DS-E2	FWH 125A-DS-E2	FWH 150A-DS-E2
Nominal Cooling Capacity	Kw	3,81	5,86	6,92	8,79	10,55	12,90	16,12	19,05	24,91	32,34	37,81	48,07
	Btu/h	13.000	20.000	23.600	30.000	36.000	44.000	55.000	65.000	85.000	110.000	129.000	164.000
Air Volume	CMH	650	1050	1360	1700	2100	2200	2700	3300	5000	5500	7000	7500
	CFM	382	618	800	1000	1235	1294	1588	1941	2941	3235	4118	4412
External Static Pressure	Pa	15/30	15/30	15/30	15/30/50	15/30/50	30/50/80	30/50/80	30/50/80	100	120	150	150
Power Supply		220V/1P/50Hz						380V/3P/50Hz					
Unit Total Input Power (Cooling)	Kw	0,93	1,6	1,75	2,55	2,75	3,22	4,2	4,9	6,8	8,9	10,2	11,5
Unit Total Nominal Current (Cooling)	A	4,8	8,1	8,9	12,2	12,5	8,2	10,4	12,9	13	14	16,6	18,4
Compressor Model Type		Rotary Type				Scroll Type							
Refrigerant	Type	R407C											
Charge	Kg	0,72	1,11	1,31	1,67	2,00	2,44	3,06	3,61	4,72	6,11	7,17	9,11
Water Heat Exchanger	Type	High Efficiency Screw Coaxial Tube in Tube Heat Exchanger						High Efficiency Screw Coaxial Tube in Tube Heat Exchanger					
Water Flow rate	CMH	0,8	1,3	1,2	1,9	2,3	2,8	3,5	4,1	5,4	6,3	8,1	10,4
Water Pressure drop	KPa	10	15	24	16	16	17	22	29	18	24	28	24
Water Piping	In	G3/4				G1				G1-1/4			
Noise Level	dB(A)	36	42	43	43	44	42	43	46	46	53	54	55
Nett / Gross Weight	Kg	86	115	119	156	166	215	220	230	302	312	355	375
Outline Dimension (W*D*H)	mm	975*660*470	1125*710*520	1150*810*620	1250*810*620		1450*910*650			1900*1060*700		2187*1163*700	
Packing Dimension (W*D*H)	mm	1076*831*656	1226*881*716		1395*1006*860		1601*1146*870			2051*1296*920		2338*1396*920	

R410A

MODEL		FWH 010A-SS-E3	FWH 015A-SS-E3	FWH 020A-SS-E3	FWH 024A-SS-E3	FWH 030A-SS-E3	FWH 040A-SS-E3	FWH 050A-SS-E3	FWH 060A-DS-E3	FWH 065A-DS-E3	FWH 085A-DS-E3	FWH 100A-DS-E3	FWH 125A-DS-E3	FWH 150A-DS-E3	
Nominal Cooling Capacity	Kw	3.14	3.84	5.81	8.14	9.05	13.50	15.40	17.85	19.05	24.91	32.24	38.10	48.36	
	Btu/h	10.700	13.100	19.800	27.800	30.900	46.100	52.500	60.900	65.000	85.000	110.000	130.000	165.000	
Air Volume	CMH	500	650	1050	1360	1700	2100	2200	2700	3300	5000	5500	7000	7500	
	CFM	294	382	618	800	1000	1235	1294	1588	1941	2941	3235	4118	4412	
External Static Pressure	Pa	15/30	15/30	15/30	15/30	15/30/50	15/30/50	30/50/80	30/50/80	30/50/80	100	120	150	150	
Power Supply		220V/1P/50Hz						380V/3P/50Hz							
Unit Total Input Power (Cooling)	Kw	0,87	1,11	1,64	2,21	2,63	3,72	4,56	5,29	5,29	7,90	9,50	11,50	13,50	
Unit Total Nominal Current (Cooling)	A	4,02	5,31	7,92	10,07	12,18	7,14	10,11	11,65	11,72	10,51	13,98	17,36	22,22	
Compressor Model Type		Rotary Type						Scroll Type							
Refrigerant	Type	R410A													
Charge	Kg	0.65	0.78	1.11	1.33	1.67	2.17	2.56	3.11	3.67	4.72	6.11	7.22	9.17	
Water Heat Exchanger	Type	High Efficiency Screw Coaxial Tube in Tube Heat Exchanger									High Efficiency Screw Coaxial Tube in Tube Heat Exchanger				
Water Flow rate	CMH	0.70	0.85	1.30	1.80	2.00	2.90	3.40	3.90	4.20	5.40	6.90	8.20	10.40	
Water Pressure drop	KPa	26	45	23	24	34	30	44	30	35	20	27	30	26	
Water Piping	In	G3/4						G1				G1-1/4			
Noise Level	dB(A)	43	36	42	43	43	44	42	43	46	46	53	54	55	
Nett / Gross Weight	Kg	84	86	115	119	156	166	215	220	230	302	312	355	375	
Outline Dimension (W*D*H)	mm	975*660*470		1125*710*520	1150*810*620	1250*810*620			1450*910*650			1900*1060*700		2187*1163*700	
Packing Dimension (W*D*H)	mm	1094*841*666		1226*881*716		1395*1006*860			1601*1146*870			2051*1296*920		2338*1396*920	

HORIZONTAL WATER COOLED PACKAGE, HANGING TYPE



FWH 015A



FWH 150A

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °C DB, 19.4 °C WB.
2. Entering water temperature 30°C and Leaving water temperature 35 °C.
3. All specifications are subjected to change by manufacturer without prior notice.

DIRECT EXPANSION SYSTEM (DX)

WATER COOLED PACKAGE, FLOOR TYPE (FWP)



FWP 160A-DS

R410A

SPECIFICATIONS

MODEL			FUJIAIR WATER COOLED PACKAGE, FLOOR TYPE, R410A							
SINGLE SKINNED TYPE			FWP-070A-SS-E3	FWP-085A-SS-E3	FWP-100A-SS-E3	FWP-125A-SS-E3	FWP-135A-SS-E3	FWP-160A-SS-E3	FWP-205A-SS-E3	FWP-235A-SS-E3
DOUBLE SKINNED TYPE			FWP-070A-DS-E3	FWP-085A-DS-E3	FWP-100A-DS-E3	FWP-125A-DS-E3	FWP-135A-DS-E3	FWP-160A-DS-E3	FWP-205A-DS-E3	FWP-235A-DS-E3
Cooling Capacity		Btu/H (kW)	221.400 (64.9)	286.200 (83.9)	354.800 (104)	412.800 (121)	447.000 (131)	539.000 (158)	685.800 (201)	853.000 (250)
Air Volume		CMH (CFM)	12000 (7000)	15000 (8800)	18000 (10500)	21000 (12300)	23000 (13500)	27000 (15900)	32000 (18800)	44000 (26000)
Unit Esp		Pa	100	150	200	250	250	250	250	350
Noise Level	Single Skin	dB(A)	72	74	76	77	78	79	81	80
	Double Skin	dB(A)	69	71	73	74	75	76	78	77
Power Supply		V / Ph / Hz	380 / 3 / 50							
Total Input Power		kW	18,1	19,7	28,4	34,1	18,5	50,1	64,2	77,8
Refrigerant	Type		R410A							
	Flow		Thermostatic Expansion Valve							
	Charge	Kg	4.0x2	4.5x2	3.8x2+2x1	4.1x3	4.1x2+7x1	4.1x4	4.1x5	5.1x5
Comprea-ssor	Type		High Efficiency Scroll Compressor							
	Quantity	Unit	2	2	3	3	3	4	5	5
Evaporator		Type	Inner Groove Copper Tube, Aluminium Slit Fin							
Condenser	Type		COAXIAL TUBE							
	Water Flow Rate	CMH	13,5	17	21,6	25,1	27	33,1	40,7	52,2
	Water Resistance	KPa	38	42	35	42	40	46	50	55
	Inlet Outlet	DNmm	50	50	65	65	65	80	80	96
	Water Pipe									
Fan Blower	Type		Low Noise Double Air Inlet Centrifugal Fan							
	Drive Method		Belt Drive							
	Motor Power	kW	3	3	4	5,5	7,5	11	15	18,5
Air Filter	Type		Nylon Filter							
	Dimension	mm	458 x 593	613 x 577	605 x 508	605 x 508	503 x 583	503 x 628	510 x 670	580 x 885
	Quantity	Unit	6	6	8	8	12	12	12	9
Controller			Microprocessor Auto Control							
Single Skinned	Dimension (W*D*H)	mm	1850 x 1000 x 1530	1800 x 1000 x 1780	2100 x 1200 x 1780	2310 x 1210 x 1900	2410 x 1260 x 2050	2590 x 1260 x 2050	2760 x 1410 x 2050	3010 x 1610 x 2350
	Net / Gross Weight	Kg	750	1100	1330	1570	1620	750	1910	2200
Double Skinned	Dimension (W*D*H)	mm	1850 x 1000 x 1530	1800 x 1000 x 1780	2100 x 1200 x 1780	2310 x 1210 x 1900	2410 x 1260 x 2050	2590 x 1260 x 2050	2760 x 1410 x 2050	3010 x 1610 x 2350
	Net / Gross Weight	Kg	800	1150	1400	1650	1700	1900	2000	2300

Note:

1. Cooling condition: Return air temperature: 27°C DB / 19°C WB; Condensing water inlet / outlet temperature 30°C / 35°C
2. Standard unit is based on top air discharge and without electrical heater.
It is optional for electrical heater add-on and side discharge.
3. Plenum Casing Construction: 25mm thickneA-SS double skin PU foaming panel
4. All specification are subjected to change by manufacturer without prior notice

WATER COOLED PACKAGE, FLOOR TYPE (FWP)



FWP 160A-DS

SPECIFICATIONS

R407C

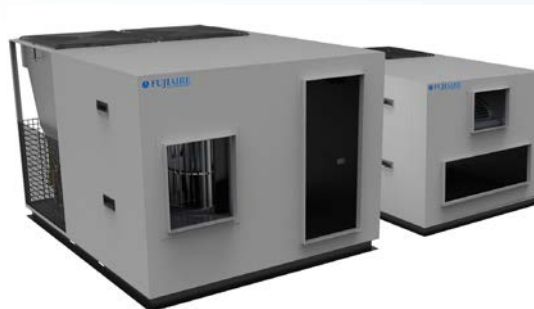
MODEL			FUJIAIR WATER COOLED PACKAGE, FLOOR TYPE, R407C						
SINGLE SKINNED TYPE			FWP-070A-SS-E2	FWP-085A-SS-E2	FWP-100A-SS-E2	FWP-125A-SS-E2	FWP-135A-SS-E2	FWP-160A-SS-E2	FWP-205A-SS-E2
DOUBLE SKINNED TYPE			FWP-070A-DS-E2	FWP-085A-DS-E2	FWP-100A-DS-E2	FWP-125A-DS-E2	FWP-135A-DS-E2	FWP-160A-DS-E2	FWP-205A-DS-E2
Cooling Capacity	Btu/H (kW)		221.800 (65)	283.200 (83)	327.500 (96)	402.600 (118)	436.700 (128)	528.800 (155)	679.000 (199)
Air Volume	CMH (CFM)		12000 (7000)	15000 (8800)	18000 (10500)	21000 (12300)	23000 (13500)	27000 (15900)	32000 (18800)
Unit Esp	Pa		100	150	200	250	250	250	250
Noise Level	Single Skin	dB(A)	72	74	76	77	78	79	81
	Double Skin	dB(A)	69	71	73	74	75	76	78
Power Supply	V / Ph / Hz		380 / 3 / 50						
Total Input Power	kW		17,2	21	25,8	32,5	36,3	43,5	56
Refrigerant	Type		R407C						
	Flow		Thermostatic Expansion Valve						
	Charge	Kg	11x2	14.1x1 + 9.6x1	9.6x2 + 5.5x1	11x3	11x2 + 14x1	11x4	11x5
Comprea-ssor	Type		High Efficiency Scroll Compressor						
	Quantity	Unit	2	2	3	3	3	4	5
Evaporator	Type		Inner Groove Copper Tube, Aluminium Slit Fin						
Condenser	Type		COAXIAL TUBE TYPE						
	Water Flow Rate	CMH	13,8	17	20	25,2	26,6	31,8	39,6
	Water Resistance	KPa	38	42	35	42	40	75	50
	Inlet Outlet Water Pipe	Inch	2"	2"	2"	2.5"	2.5"	3"	3"
Fan Blower	Type		Low Noise Double Air Inlet Centrifugal Fan						
	Drive Method		Belt Drive						
	Motor Power	kW	2,2	3	5,5	5,5	5,5	11	15
Air Filter	Type		Nylon Filter						
	Dimension	mm	915x805	600x700	600x600	600x676	600x754	600x754	550x754
	Quantity	Unit	2	4	6	6	6	6	8
Controller			Microprocessor Auto Control						
Single Skinned	Dimension (W*D*H)	mm	1850 x 1000 x 1530	1800 x 1000 x 1780	2100 x 1200 x 1780	2310 x 1210 x 1900	2410 x 1260 x 1950	2590 x 1260 x 2050	2760 x 1410 x 2050
	Net / Gross Weight	Kg	775	995	1580	1635	1680	1890	2000
Double Skinned	Dimension (W*D*H)	mm	1850 x 1000 x 1530	2010 x 1010 x 1750	2318 x 1218 x 1908	2318 x 1218 x 1908	2410 x 1260 x 2050	2590 x 1260 x 2050	2760 x 1410 x 2050
	Net / Gross Weight	Kg	825	1045	1650	1705	1760	1980	2090

Note:

1. Cooling condition: Return air temperature: 27°C DB / 19°C WB; Condensing water inlet / outlet temperature 30°C / 35°C
2. Standard unit is based on top air discharge and without electrical heater.
It is optional for electrical heater add-on and side discharge.
3. Plenum Casing Construction: 25mm thickneA-SS double skin PU foaming panel
4. All specification are subjected to change by manufacturer without prior notice

DIRECT EXPANSION SYSTEM (DX)

ROOFTOP PACKAGE UNIT (FRT)



FRT300

FRT150

SPECIFICATIONS

R410A

MODEL		FRT080-E2	FRT100-E2	FRT150-E2	FRT200-E2	FRT250-E2	FRT300-E2
Rated Cooling Capacity	Btu/hr (kW)	75,000 (22)	103,000 (30.2)	153,000 (44.8)	205,000 (30)	249,000 (72.9)	299,000 (87.6)
Power Supply	V / Ph / Hz	380-415 / 3 / 50					
Power Input	kW	6,25	8,45	12,90	17,30	22,20	26,00
Running Current	A	15,8	19,4	31,6	40,4	53,8	77,5
Supply Air Flow	CFM (CMH)	2,500 (4,250)	3,500 (5,950)	5,650 (9,000)	6,400 (10,800)	8,000 (13,600)	9,600 (16,300)
External Static Pressure	in W.G. (Pa)	0.4" (100)	0.4" (100)	0.8" (200)	0.8" (200)	1.2" (300)	1.2" (300)
Condenser Air Flow	CFM (CMH)	5,651 (9,600)	5,651 (9,600)	11,305 (19,207)	11,305 (19,207)	20,000 (33,979)	20,000 (33,979)
Noise Level	dBA	65	66	70	70	74	74
Compressor Type / Quantity	Type / nos	Scroll / 1	Scroll / 1	Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2
Drain Pipe Size	in (mm)	1" (25.4)	1" (25.4)	1" (25.4)	1" (25.4)	1" (25.4)	1" (25.4)
Unit Dimension (WxHxD)	mm	1,300 x 1,000 x 1,530	1,300 x 1,000 x 1,530	1,990 x 1,200 x 1,720	1,990 x 1,200 x 1,720	2,200 x 1,735 x 2,800	2,200 x 1,735 x 2,800
Net / Gross Weight	kg / kg	370 / 380	400 / 410	665 / 680	765 / 780	1,200 / 1,215	1,350 / 1,365
Controller	Type	SLM			Sequential		
Filter	Type	Washable Saran Net					
Casing	Type	Mild Steel With Epoxy Powder Coating					
Insulation	Type	PE (10mm)					

R407C

MODEL			F3RT80C7A-E2	F3RT100C7A-E2	F3RT120C7A-E2	F3RT150C7A-E2	F3RT200C7A-E2	F3RT250C7A-E2	F3RT300C7A-E2	F3RT350C7A-E2
Rated Cooling Capacity	R407C	Btu/hr (kW)	72,000 (21.1)	95,000 (27.8)	108,000 (31.7)	140,000 (41.0)	190,000 (55.7)	230,000 (67.4)	283,000 (82.9)	306,000 (89.7)
Power Supply		V / Ph / Hz	380-415 / 3 / 50							
Power Input	R407C	kW	8.8	11.4	13.3	17.5	23.6	34.4	43.5	51.4
Running Current	R407C	A	16.9	21.1	24.7	33.8	43.9	59.3	81.9	88.9
Supply Air Flow		CFM (CMH)	2,826 (4,800)	3,532 (6,000)	3,649 (6,200)	5,651 (9,600)	6,710 (11,400)	8,005 (13,600)	9,594 (16,300)	11,007 (18,700)
External Static Pressure		in W.G. (Pa)	0.4" (100)	0.4" (100)	0.4" (100)	0.8" (200)	0.8" (200)	1.2" (300)	1.2" (300)	1.2" (300)
Condenser Air Flow		CFM (CMH)	5,651 (9,600)	5,651 (9,600)	8,000 (13,592)	11,305 (19,207)	11,305 (19,207)	20,000 (33,979)	20,000 (33,979)	20,000 (33,979)
Noise Level		dBA	65	66	68	70	70	74	74	80
Compressor Type / Quantity		Type / nos	Scroll / 1	Scroll / 1	Scroll / 1	Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 2	Scroll / 3
Drain Pipe Size		in (mm)	1" (25.4)							
Unit Dimension (WxHxD)		mm	1,300 x 1,000 x 1,530	1,300 x 1,000 x 1,530	1,300 x 1,000 x 1,530	1,990 x 1,200 x 1,720	1,990 x 1,200 x 1,720	2,200 x 1,735 x 2,800	2,200 x 1,735 x 2,800	2,250 x 1,975 x 3,180
Net / Gross Weight		kg / kg	370 / 380	400 / 410	425 / 440	665 / 680	765 / 780	1,200 / 1,215	1,350 / 1,365	1,510 / 1,525
Controller		Type	SLM			Sequential				
Filter		Type	Washable Saran Net							
Casing		Type	Mild Steel With Epoxy Powder Coating							
Insulation		Type	PE (10mm)							

Conditions:

1. Nominal cooling capacities are based on the following conditions. Indoor 26.7 °CDB, 19.4 °CWB, outdoor 35 °CDB.
2. All specifications are subjected to change by manufacturer without prior notice.

DIRECT EXPANSION SYSTEM (DX)

FLOOR STANDING (FF)



SPECIFICATIONS

MODEL		INDOOR UNIT	FF20CMB-2A1N	FF25CMB-2A1N	FF30CMB-2A1N	FF36CMB-2A1N	FF50CMB-2A1N	FF60CMB-2A1N
		OUTDOOR UNIT	FL20CMB-2A1B	FL25CMB-2A1B	FL30CMB-2A1B	FL36CMB-2A1B	FL50CMB-2E1B	FL60CMB-2E1B
Cooling Capacity		Btu/hr	18,000	24,000	30,000	36,000	48,000	60,000
		kW	5.3	7.0	8.8	10.5	14.1	17.6
Power Source		V / Ph / Hz	220-240~ / 1 / 50					380 / 3 / 50
Cooling	Rated Input Power	W	1,695	2,385	3,165	3,804	5,225	6,415
	Rated Current	A	7.90	11.10	14.70	17.70	10.70	12.90
Energy Efficiency Ratio	E.E.R. (Cooling)	Btu/W.hr	10.62	10.06	9.48	9.46	9.19	9.35
Control System	Refrigerant / Flow Control	Type	R410A / Outdoor Capillary Tube					
	Operating Control	Type	Wireless Remote Controller & Panel Controller					
Fan Speed Type		Type	Hi/Me/Lo/Auto					
Compressor		Type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Refrigerant Pipe Size	Gas Valve	mm (inch)	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")
	Liquid Valve	mm (inch)	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Air Flow		CFM	647	736	765	1,177	1,265	1,265
		CMH	1,100	1,250	1,300	2,000	2,150	2,150
Noise Level	Indoor	dB(A) ± 3	≤49	≤50	≤50	≤51	≤52	≤52
	Outdoor	dB(A) ± 3	50	55	60	62	64	65
Net Dimensions (W x H x D)	Indoor	mm ± 5	510 x 1787 x 331	510 x 1787 x 331	510 x 1787 x 331	589 x 1938 x 409	589 x 1938 x 409	589 x 1938 x 409
	Outdoor	mm ± 5	800 x 555 x 290	825 x 655 x 305	900 x 700 x 337	950 x 850 x 355	940 x 1265 x 435	940 x 1265 x 435
Packing Dimension (W x H x D)	Indoor	mm ± 5	620 x 1885 x 410	620 x 1885 x 410	620 x 1885 x 410	635 x 2035 x 490	635 x 2035 x 490	635 x 2035 x 490
	Outdoor	mm ± 5	900 x 620 x 400	933 x 715 x 422	1020 x 755 x 430	1080 x 950 x 480	1060 x 1385 x 435	1060 x 1385 x 435
Net Weight	Indoor	kg ± 0.5	43	45	46	63	66	67
	Outdoor	kg ± 0.5	37	49	59	66	89	89
Gross Weight	Indoor	kg ± 0.5	51	53	54	72	76	77
	Outdoor	kg ± 0.5	41	54	65	72	99	99

- * All specifications are subjected to change by the manufacturer without prior notice.
- * Performance of the unit varies according to the type of compressor used.
- * Nominal cooling & heating capacities are based on the following conditions:
Cooling : 27°C DB / 19°C WB Indoors
35°C DB / 24°C WB Outdoors

FLOOR STANDING (FF)



FF100C1L-2A1N

SPECIFICATIONS

R410A

MODEL		INDOOR UNIT	FF75C1L-2A1N	FF100C1L-2A1N
		OUTDOOR UNIT	FC-075A-E3	FC-100A-E3
Cooling Capacity		Btu/h	70,000	96,000
		KW	20.5	28
Power Source		V/Ph/Hz	220-240/ 1/ 50	
Cooling	Rated Input Power	W	10,200	9,840
	Rated Current	A	17.7	19
Energy Efficiency Ratio	E.E.R (Cooling)	Btu/W.Hr	6.8	9.7
Control System	Refrigerant / Flow Control	Type	R410A / Indoor Capillary Tube	
	Operating Control	Type	Control Panel & Wireless Remote Controller	
Fan Speed Type		Type	Hi / Med / Lo / Auto	
Compressor		Type	Scroll	
Refrigerant Pipe Size	Gas Valve	mm (inch)	1/2"	5/8"
	Liquid Valve	mm (inch)	1"	1 1/8"
Air Flow (Hi)		CFM/CMH	2350 / 4000	2350 / 4000
Sound Power Level	Indoor (Hi/ Med/ Low)	dB ± 3	58/55/52	60/56/52
	Outdoor	dB ± 3	78	80
Net Dimension (W x H x D)	Indoor	mm	1,200 x 1,850 x 380	1,200 x 1,850 x 380
	Outdoor	mm	1,184 x 947 x 953	1,184 x 947 x 953
Packing Dimension (W x H x D)	Indoor	mm	1,260 x 1,970 x 400	1,260 x 1,970 x 400
	Outdoor	mm	1,256 x 1,102 x 1,033	1,256 x 1,102 x 1,033
Net Weight	Indoor	kg	130	130
	Outdoor	kg	153	180
Gross Weight	Indoor	kg	143	143
	Outdoor	kg	163	190

* All specification are subjected to change by the manufacturer without prior notice.

* Performance of the unit varies according to the type of compressor used.

* Nominal cooling capacities are based on the following conditions:

Cooling: 27°C DB / 19°C WB Indoors

35°C DB / 24°C WB Outdoors

DIRECT EXPANSION SYSTEM (DX)

CEILING UNIVERSAL (FE)

LIGHT COMMERCIAL SPLIT TYPE (R410A, COOLING ONLY)



SPECIFICATIONS

MODEL		INDOOR UNIT	INDOOR CEILING UNIVERSAL SPLIT TYPE				
			FE20C9H-2A1N	FE25C9H-2A1N	FE40C9H-2A1N	FE50C9H-2A1N	FE60C9H-2A1N
Cooling Capacity		Btu/hr	18,000	24,000	36,000	48,000	60,000
		kW	5.28	7.03	10.55	14.07	17.58
Cooling	Rated Input Power	W	1,730	2,390	3,730	4,870	5,710
	Rated Current	A	8.0	9.5	6.7	10.0	10.0
Energy Efficiency Ratio	E.E.R (Cooling)	Btu/W.hr	10.40	10.04	9.65	9.86	10.51
Control System	Operating Control	Type	Wired Controller (Wireless Remote Controller-Optional)				
Fan Speed		Type	Hi/Me/L0/Auto				
Air Flow (High)		CFM / CMH	559/950	765/1,300	1,177/2,000	1,236/2,100	1,648/2,800
External Static Pressure		Pa	50	50	50/80	50/80	50/80
Noise Level	Indoor	dB (A) ± 3	35-44	38-47	41-50	46-51	44-53
Net Dimension (WxHxD)	Indoor	mm ± 5	890 X 290 X 785	890 X 290 X 785	890 X 290 X 785	1,250 X 290 X 785	1,250 X 290 X 785
Packing Dimension	Indoor	mm ± 5	1,100 X 360 X 880	1,100 X 360 X 880	1,100 X 360 X 880	1,430 X 360 X 880	1,430 X 360 X 880
Weight (Net/Gross)	Indoor	kg ± 0.5	34/40	36/42	36/42	45/51	45/51

MODEL		OUTDOOR UNIT	OUTDOOR UNIVERSAL SPLIT TYPE					
			FL20C9H-2A1B	FL25C9H-2A1B	FL30C9H-2A1B	FL40C9H-2A1B	FL50C9H-2A1B	FL60C9H-2A1B
Power Source		V / Ph / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Control System	Refrigerant/Flow Control	Type	R410A / Outdoor Capillary Tube					
Compressor		Type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Refrigerant Pipe Size	Gas Valve	mm (Inch)	12.70 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")
	Liquid Valve	mm (Inch)	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Noise Level	Outdoor	dB (A) ± 3	55	60	60	60	60	60
Net Dimension	Outdoor (WxHxD)	mm ± 5	800 x 545 x 315	822 x 655 x 302	888 x 699 x 318	970 x 803 x 395	940 x 1,320 x 370	940 x 1,320 x 370
Packing Dimension	Outdoor (WxHxD)	mm ± 5	920 x 620 x 400	945 x 725 x 435	1,020 x 770 x 430	1,105 x 890 x 495	1,080 x 1,440 x 430	1,080 x 1,440 x 430
Weight (Net/Gross)	Outdoor	kg ± 0.5	36/39	45/49	55/59	68/73	95/105	105/110
Max. Pipe	Length	m	20	30	30	30	50	50
	Height	m	10	15	15	20	30	30

- * All specifications are subjected to change by the manufacturer without prior notice.
- * Performance of the unit varies according to the type of compressor used.
- * Nominal cooling & heating capacities are based on the following conditions:
Cooling: 27°C DB / 19°C WB Indoors 35°C DB / 24°C WB Outdoors
- * Operating Condition: 17°C~49°C Outdoors

DIRECT EXPANSION SYSTEM (DX)

CEILING CASSETTE (FT)

LIGHT COMMERCIAL SPLIT TYPE (R410A, COOLING ONLY)



SPECIFICATIONS

Ceiling Cassette Split Type (Cooling Only)

MODEL		INDOOR UNIT	FT20CMA-2A1N	FT25CMA-2A1N	FT30CMA-2A1N	FT36CMA-2A1N	FT50CMA-2A1N	FT60CMA-2A1N
		OUTDOOR UNIT	FL20CMA-2A1B	FL25CMA-2A1B	FL30CMA-2A1B	FL36CMA-2A1B	FL50CMA-2E1B	FL60CMA-2E1B
Cooling Capacity		Btu/hr	18,000	24,000	30,000	36,000	48,000	60,000
		kW	5.3	7.0	8.8	10.5	14.1	17.6
Power Source		V / Ph / Hz	220-240~ / 1 / 50					380 / 3 / 50
Cooling	Rated Input Power	W	1,685	2,385	3,130	3,620	4,895	6,190
	Rated Current	A	8.10	11.30	14.60	16.90	10.20	12.60
Energy Efficiency Ratio	E.E.R. (Cooling)	Btu/W.hr	10.68	10.06	9.58	9.94	9.81	9.69
Control System	Refrigerant / Flow Control	Type	R410A / Capillary Tube (OUTDOOR)					
	Operating Control	Type	Wireless Remote Control (Wired Controller-Optional)					
Fan Speed Type		Type	Hi/Me/Lo/Auto					
Compressor		Type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Gas Valve	mm (Inch)	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
Refrigerant Pipe Size	Liquid Valve	mm (Inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Air Flow (High)		CFM / CMH	794 / 1350	794 / 1350	794 / 1350	1089 / 1850	1089 / 1850	1089 / 1850
Noise Level	Indoor	dB(A) ± 3	≤45	≤45	≤45	≤51	≤51	≤51
	Outdoor	dB(A) ± 3	51	55	55	62	64	65
Net Dimension (W x H x D)	Indoor (Body)	mm ± 5	830 x 230 x 830	830 x 230 x 830	830 x 230 x 830	830 x 300 x 830	830 x 300 x 830	830 x 300 x 830
	Indoor (Front Panel)	mm ± 5	950 x 55 x 950	950 x 55 x 950	950 x 55 x 950	950 x 55 x 950	950 x 55 x 950	950 x 55 x 950
	Outdoor	mm ± 5	800 x 555 x 290	825 x 655 x 305	900 x 700 x 337	940 x 1265 x 360	940 x 1265 x 360	940 x 1265 x 360
Packing Dimension (W x H x D)	Indoor (Body)	mm ± 5	925 x 290 x 925	925 x 290 x 925	925 x 290 x 925	925 x 360 x 925	925 x 360 x 925	925 x 360 x 925
	Indoor (Front Panel)	mm ± 5	1030 x 90 x 1030	1030 x 90 x 1030	1030 x 90 x 1030	1030 x 90 x 1030	1030 x 90 x 1030	1030 x 90 x 1030
	Outdoor	mm ± 5	900 x 620 x 400	933 x 715 x 422	1030 x 750 x 437	1060 x 1385 x 435	1060 x 1385 x 435	1060 x 1385 x 435
Weight (Net/ Gross)	Body	kg ± 0.5	23/27	23/27	23/27	29/33	29/33	29/33
	Panel	kg ± 0.5	6/8	6/8	6/8	6/8	6/8	6/8
	Outdoor	kg ± 0.5	37/41	49/54	49/54	80/90	86/96	89/99
Net Weight	Indoor	kg ± 0.5	43	45	46	63	66	67
	Outdoor	kg ± 0.5	37	49	59	66	89	89
Gross Weight	Indoor	kg ± 0.5	51	53	54	72	76	77
	Outdoor	kg ± 0.5	41	54	65	72	99	99

* All specifications are subjected to change by the manufacturer without prior notice.

* Performance of the unit varies according to the type of compressor used.

* Nominal cooling & heating capacities are based on the following conditions:

Cooling: 27°C DB / 19°C WB Indoors 35°C DB / 24°C WB Outdoors

* Operating Condition: 17°C~49°C Outdoors

DIRECT EXPANSION SYSTEM (DX)

WALL MOUNTED (FW)



INDOOR FW-H SERIES



OUTDOOR 1H

SPECIFICATIONS

R410A

MODEL			FW05L1H-2A1N/ FL05L1H-2A1N	FW07L1H-2A1N/ FL07L1H-2A1N	FW10C1H-2A1N/ FL10C1H-2A1N	FW15C1H-2A1N/ FL15C1H-2A1N	FW20C1H-2A1N/ FL20C1H-2A1N	FW25C1H-2A1N/ FL25C1H-2A1N
Cooling Capacity		Btu/h	5,000	7,000	9,000	12,000	18,000	24,000
		kW	1,46	2,05	2,63	3,51	5,27	7,03
Power Source		Ph-V-Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Cooling	Rated Power Input	W	400	610	865	1100	1620	2050
	Rated Current	A	1,8	2,7	3,8	5,0	7,0	9,1
Energy Efficiency Ratio (E.E.R Cooling)		Btu/W.hr	11,89	12,68	9,72	10,25	9,76	11,38
Max. Input Consumption		W	500	680	1,180	1,500	2,100	2,800
Max. Current		A	3,00	4,50	6,50	8,00	9,50	15,40
Compressor		Type	Rotary					
Air Flow	Indoor	CFM/CMH	235/400	294/500	294/500	412/700	588/1000	794/1350
Noise Level	Indoor	dB(A)±3	36	36	36	39	42	47
	Outdoor	dB(A)±3	48	48	54	54	54	56
Net Unit Dimension	Indoor	mm±5	780×276×202	780×276×202	780×270×207	850×276×202	950×313×240	1155×315×240
	Outdoor	mm±5	668×250×435	668×250×435	700×225×500	770×304×540	914×351×608	1010×430×705
Packing Dimension	Indoor	mm±5	950×367×305	950×367×305	870×367×283	940×367×283	1045×403×330	1358×400×328
	Outdoor	mm±5	810×360×475	810×360×475	825×327×555	851×335×600	970×395×690	1030×445×735
Net / Gross Weight	Indoor	Kg	8/10	9/11	10/12	11/13	14/17	17.5/21.5
	Outdoor	Kg	21/25	21/25	25/29	28/33	40/45	46/52
Refrigerant Pipe	Gas Valve	mm (Inch)	9.53 (3/8")	9.53 (3/8")	9.53 (3/8")	9.53 (3/8")	12.70 (1/2")	15.88 (5/8")
	Liquid Valve	mm (Inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	9.53 (3/8")
	Max. Pipe Length	m	15/5	15/5	15/5	15/5	15/5	15/5

Notice:

1. All Specification are subjected to change by the manufacturer without prior notice.
2. Nominal Cooling capacities are based on the following conditions. Indoor 27 °C DB, 19 °C WB. Outdoor 35 °C DB, 24 °C WB.
3. Sound Pressure Level is measured in sound room. Somehow during actual operation, the result will be higher as a result of ambient condition.

DIRECT EXPANSION SYSTEM (DX)

AIR CURTAIN (FM)

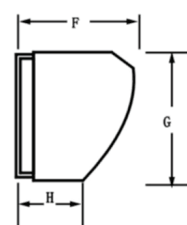
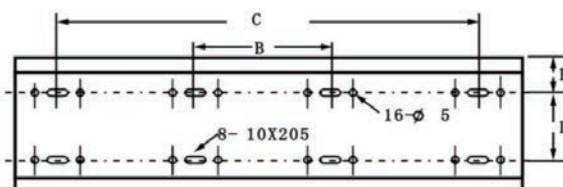


FM - 12



Remote Controller

INSTALLATION DIMENSION



Above image for sample only. Actual image may vary from image above.

MODEL	A	B	C	D	E	F	G	H
FM-1209T/Y	900	440	440	90	47	195	220	125
FM-1212T/Y	1,200	440	440	90	47	195	220	125
FM-1509T/Y	900	200	786	157	55	230	265	145
FM-1512T/Y	1,200	200	1070	157	55	230	265	145

SPECIFICATIONS

MODEL	UNIT	FM-1209T/Y	FM-1212T/Y	FM-1509T/Y	FM-1512T/Y
Length	mm (feet)	900 (3ft)	1,200 (4ft)	900 (3ft)	1,200 (4ft)
Blower Wheel Diameter	mm	115	115	141	141
Power Supply	V/Ph/Hz	220-240~/1/50	220-240~/1/50	220-240~/1/50	220-240~/1/50
Max. Input Power (Hi/Lo)	W	160/110	200/150	230/180	350/330
Outlet Velocity (Hi/Lo)	m/s	11/9	11/9	13/10	13/10
Air Volume (Hi/Lo)	CMH	1,400/1,100	1,900/1,600	2,000/1,600	2,800/2,200
	CFM	824/647	1,118/942	1,177/942	1,648/1,295
Noise Level (Hi/Lo)	dB(A)	57/55	58/56	67/65	69/67
Net Dimension (WxDxH)	mm	900 x 195 x 220	1,200 x 195 x 220	900 x 230 x 265	1,200 x 230 x 265
Packing Dimension (WxDxH)	mm	935 x 235 x 265	1,220 x 235 x 265	965 x 285 x 325	1,250 x 285 x 235
Net Weight	kg	10	12	11.5	14.5
Gross Weight	kg	11	14	13	16

Air velocity at X meters (m/s)

MODEL	At nozzle	0.5m	1m	1.5m	2m	2.5m	3m	3.5m	4m
FM-12**T/Y	10.8 m/s	9.6 m/s	7.7 m/s	6.8 m/s	5.2 m/s	4.3 m/s	3.8 m/s	3.4 m/s	3.1 m/s
FM-15**T/Y	13.5 m/s	9.2 m/s	7.3 m/s	5.7 m/s	4.3 m/s	3.7 m/s	3.2 m/s	2.8 m/s	2.5 m/s

OUR PROJECT REFERENCES

SHOPPING CENTER & INDUSTRIAL ESTATE



**PT RAPP APRIL GROUP
(PAPERMAKING ROOM)**
KERINCI, RIAU



MALL HOLLAND VILLAGE
JAKARTA



EMBARCADERO
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JAKARTA

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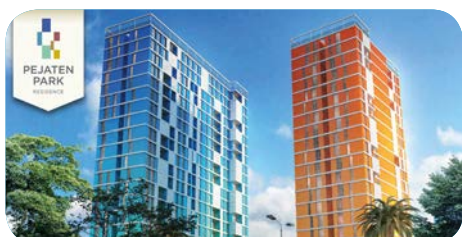
MENARA 165
JAKARTA



OAKWOOD OFFICE TOWER
SCBD, JAKARTA



KEM TOWER
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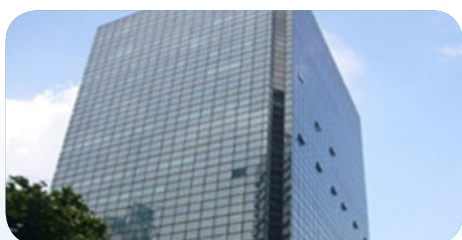
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RS ST. CAROLUS
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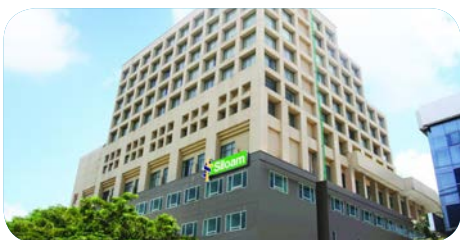
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APARTMENT & RESIDENTIAL



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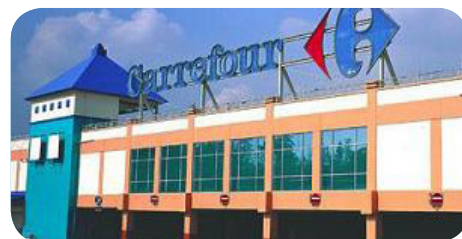
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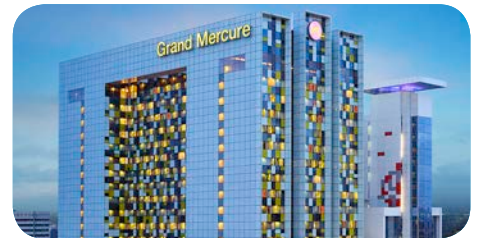
HOTEL



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CONDO & HOTEL DE PAVILJOEN
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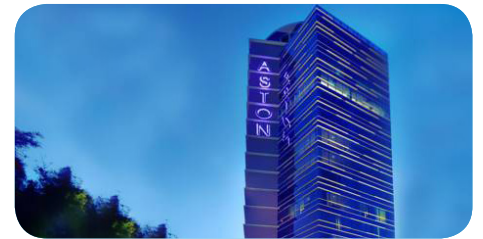
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