fs AIRCON

UP SO AIR

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FH AH - 050 F ☐

- Scroll series
  - AH Air cooled heat pump
  - AW Air cooled chiller
- Cooling capacity(HP)
- System
  - S Single System
  - D Double System
  - T Three System
  - F Four System
  - P Composite module
- Additional function

Naming conventions

FHAW/AH Series

Air cooled scroll chiller

Power supply : 3Φ－380V－50Hz
Controller : KGP type
Compressor:
Type: Hermetic scroll compressor
Starting method: Direct on line start
Refrigerant : R22 / R407C / R410A
Refrigeration oil: R410A: KL32
R22: KL3
R407C : KL22
Refrigerant Control method:
Thermostatic expansion valve

The air cooled cooling capacity conditions:
Chilled water outlet temperature 7℃, Water flow rate 0.172m³/(h・kW), outdoor temperature 35℃ DB.
The air cooled heating capacity conditions:
Warm water outlet temperature 45℃, Water flow rate 0.172m³/(h・kW), outdoor temperature 7℃DB, 6℃WB.
Fan: Type: Direct connected axial fan
Blow Direction: Blowing sideways (008PE~012PE)
Blowing upwards (015PE~050PE)
Evaporator: Fouling factor :0.018m2・℃/kW
Others:
If you need recovery heat chiller or hot gas bypass hiller,please inform us before placing order;
Specifications are subject to change without notice for further improvement.

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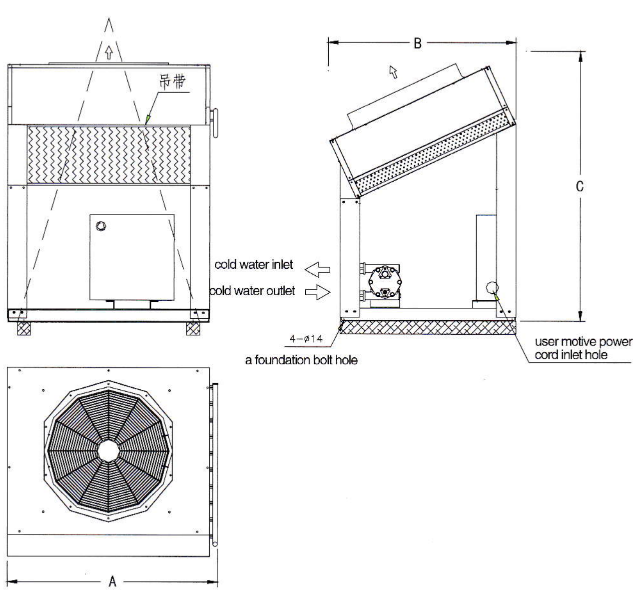
R410A

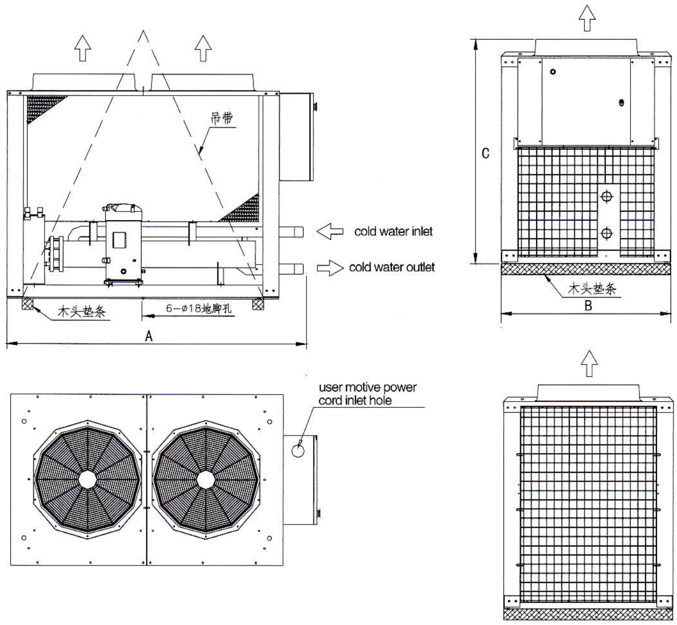
Specification

Item	Model	F HAH-	010S-P	012S-P	015S-P	025D-P	030D-P	050F-P	070D-P	080D-P
Cooling capacity		kcal/hr	24,952	29,295	37,379	52,449	76,331	104,898	177,964	201,503
		kW	29.0	34.1	43.5	61.0	88.8	122.0	207.0	234.3
Heating capacity		kcal/hr	27,545	33,645	40,906	57,595	78,782	115,190	198,769	223,037
		kW	32.0	39.1	47.6	67.0	91.6	134.0	231.2	259.4
Power consumption		kW	9.7	11.7	13.9	21.0	28.8	42.0	68.7	76.1
Power consumption		kW	9.4	11.2	13.5	20.4	25.8	40.8	68.2	74.3
Operating current		A	21.0	23.6	29.7	42.5	59.7	84.9	139.4	153.5
Starting current		A	122	146	175	151	208	301	336	374
Capacity control			[Cannot control capacity]					2-Step capacity control		
Compressor	Quantity		1	1	1	2	2	4	2	2
Refrigeration oil	Charge	L	3.4	3.4	3.4	3.4 x 2	3.4 x 2	3.4 x 4	5.3x2	5.3x2
Refrigerant	Charge	kg	6.0	6.5	12.0	13.0	15.0	13.0 x 2	19x2	22x2
Evaporator	Type		Shell -and-tube							
	Joint size		$R_2$1 1/2″	$R_2$1 1/2″	$R_2$2″	$R_2$2 1/2″	$R_2$2 1/2″	$R_2$3″	$R_2$3″	$R_2$3″
	Water flow rate	m^3/h	5.0	5.9	7.5	10.5	15.3	21.0	35.6	40.4
	Head loss	M	3.2	3.6	4.0	4.2	4.4	4.4	4.5	4.7
Fan	Power x Quantity	W	950 x 1	950 x 1	950 x 2	950 x 2	950 x 3	1100 x 3	1100 x 4	1100 x 4
	Air flow rate	m^3/min	220	220	450	450	680	916	1200	1200
Net weight		kg	350	430	790	1000	1300	2100	2400	2500
Operating weight		kg	370	450	830	1080	1380	2260	2500	2630
Unit Dimensions	Length(A)	mm	1300	1300	2280	2280	3280	3280	2750	2750
	Width(B)	mm	1160	1160	1245	1245	1245	1245	2230	2230
	Height(C)	mm	1660	1660	1660	1660	1660	1740	2530	2530

Dimension



FHAH(W) – 010、012S–P



FHAH(W) – 015S、025D–P, FHAW–030D–P

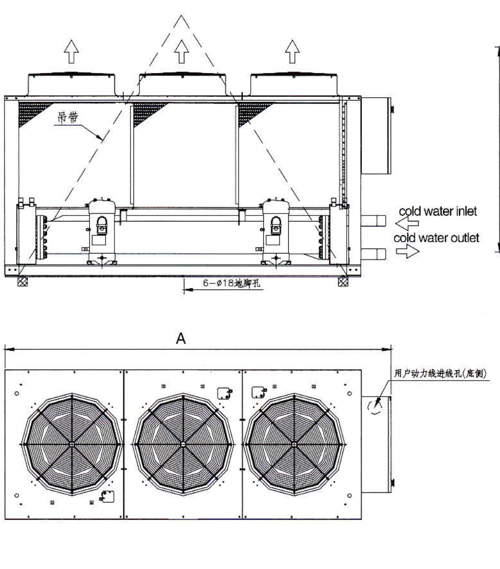
AIRCON

R410A

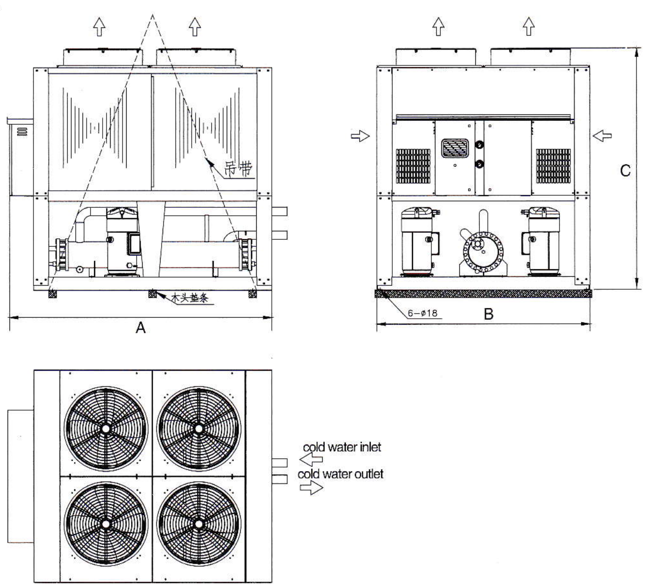
Specification

Item	Model	FHAW-	010S-P	012S-P	015S-P	025D-P	030D-P	050F-P	070D-P	080D-P
Cooling capacity		kcal/hr	24,952	29,295	37,379	52,449	76,331	104,898	177,964	201,503
		kW	29.0	34.1	43.5	61.0	88.8	122.0	207.0	234.3
Power consumption		kW	9.7	11.7	13.9	21.0	28.8	42.0	68.7	76.1
Operating current		A	21.0	23.6	29.7	42.5	58.1	84.9	139.4	153.5
Starting current		A	122	146	175	151	206	301	336	374
Capacity control			[Cannot control capacity]				2-Step capacity control			
Compressor	Quantity		1	1	1	2	2	4	2	2
Refrigeration oil	Charge	L	3.4	3.4	3.4	3.4 x 2	3.4 x 2	3.4 x 4	5.3x2	5.3x2
Refrigerant	Charge	kg	6.0	6.5	12.0	13.0	15.0	13.0 x 2	19x2	22x2
Evaporator	Type		Shell -and-tube							
	Joint size		$R_2$1 1/2″	$R_2$1 1/2″	$R_2$2″	$R_2$2 1/2″	$R_2$2 1/2″	$R_2$3″	$R_2$3″	$R_2$3″
	Water flow rate	m^3/h	5.0	5.9	7.5	10.5	15.3	21.0	35.6	40.4
	Head loss	M	3.2	3.6	4.0	4.2	4.4	4.4	4.5	4.7
Fan	Power x Quantity	W	950 x 1	950 x 1	950 x 2	950 x 2	950 x 2	1100 x 3	1100 x 4	1100 x 4
	Air flow rate	m^3/min	220	220	450	450	450	916	1200	1200
Net weight		kg	350	430	790	1000	1150	2100	2400	2500
Operating weight		kg	370	450	830	1080	1230	2260	2500	2630
Unit Dimensions	Length(A)	mm	1300	1300	2280	2280	2280	3280	2750	2750
	Width(B)	mm	1160	1160	1245	1245	1245	1245	2230	2230
	Height(C)	mm	1660	1660	1660	1660	1660	1740	2530	2530

Dimension



FHAH(W)- 050D-P



FHAH- 080D-P

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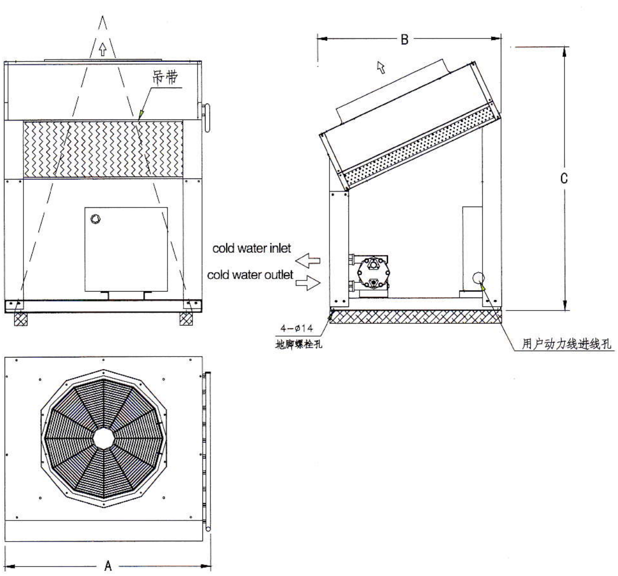
R22

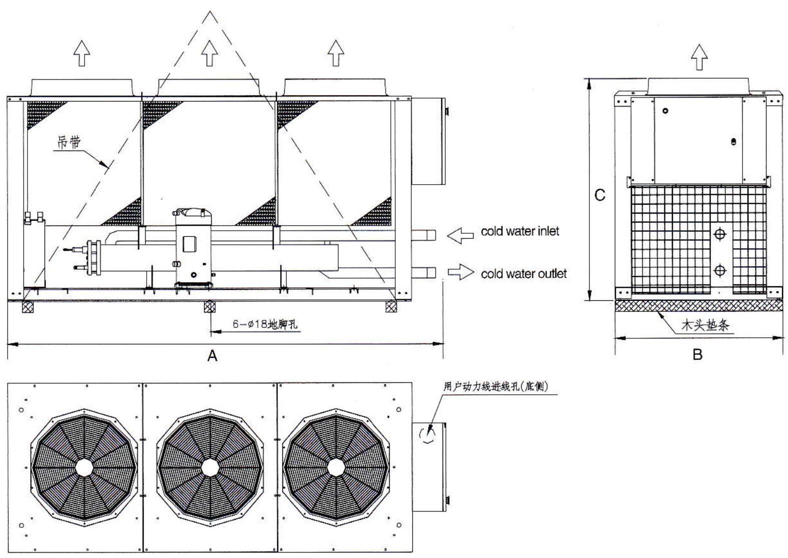
Specification

Item	Model	FHAH	010S–P	012S–P	015S–P	025D–P	030D–P	050F–P
Cooling capacity		kcal/hr	25,333	31,224	37,963	55,902	77,523	111,804
		kW	29.5	36.3	44.2	65.0	90.2	130.0
Heating capacity		kcal/hr	28,072	35,314	41,617	60,452	80,151	120,905
		kW	32.6	41.1	48.4	70.3	93.2	140.6
Power consumption		kW	9.5	11.6	14.0	20.7	29.1	41.4
Power consumption		kW	8.8	10.7	13.7	19.5	26.1	39.0
Operating current		A	20.5	23.3	29.9	41.9	60.1	83.7
Starting current		A	118	144	176	149	210	297
Capacity control			[	Cannot control capacity	]	2–Step capacity control		
Compressor	Quantity		1	1	1	2	2	4
Refrigeration oil	Charge	L	3.3	3.3	6.6	3.3 × 2	6.6 × 2	3.3 × 4
Refrigerant	Charge	kg	7.8	9.8	12	17.8	23.8	35.6
Evaporator	Type		Shell –and–tube					
	Joint size		R_2 1 1/2″	R_2 1 1/2″	R_2 2″	R_2 2 1/2″	R_2 2 1/2″	R_2 2 1/2″
	Water flow rate	m^3/h	5.1	6.3	7.6	11.2	15.6	22.4
	Head loss	M	3.2	3.6	4.0	4.2	4.4	4.4
Fan	Power × Quantity	W	950 x 1	950 x 1	950 x 2	950 x 2	950 x 3	1100 x 3
	Air flow rate	m^3/min	220	220	450	450	680	916
Net weight		kg	350	430	790	1000	1300	1800
Operating weight		kg	370	450	830	1080	1380	1880
Unit Dimensions	Length(A)	mm	1300	1300	2280	2280	3280	3280
	Width(B)	mm	1160	1160	1245	1245	1245	1245
	Height(C)	mm	1660	1660	1660	1660	1660	1740

Dimension



FHAH(W) – 010、012S–P



FHAH–030D–P

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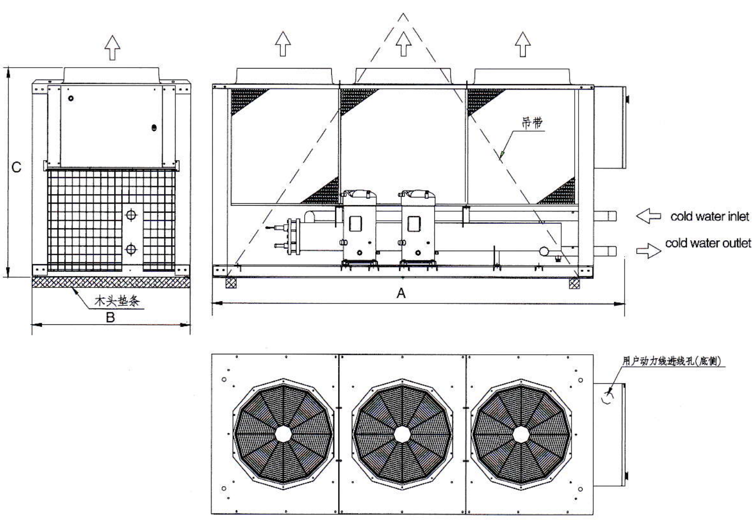
R22

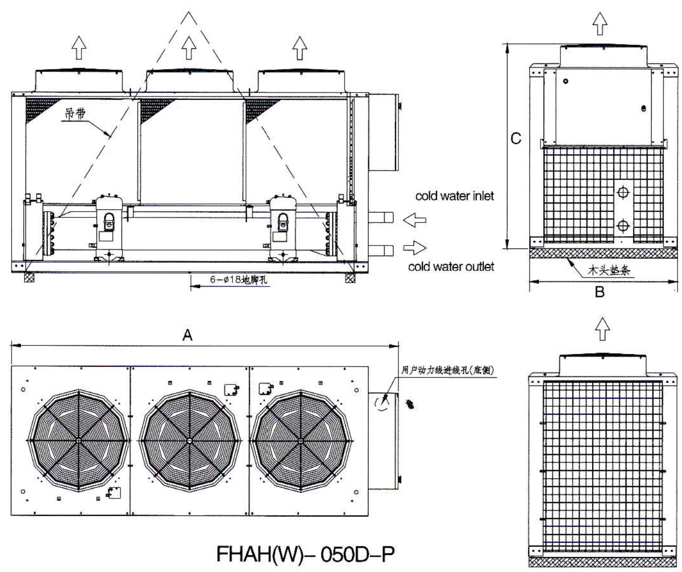
Specification

Item	Model	FHAW	010S-P	012S-P	015S-P	025D-P	030D-P	040D-P	050F-P
Cooling capacity		kcal/hr	25,333	31,224	37,963	55,902	77,523	96,313	111,804
		kW	29.5	36.3	44.2	65.0	90.2	112.0	130.0
Power consumption		kW	9.5	11.6	14.0	20.7	29.1	36.3	41.4
Operating current		A	20.5	23.3	29.9	41.9	58.6	74.0	83.7
Starting current		A	118	144	176	149	208	261	297
Capacity control			[Cannot control capacity]				2-Step capacity control		
Compressor	Quantity		1	1	1	2	2	4	4
Refrigeration oil	Charge	L	3.3	3.3	6.6	3.3 × 2	6.6 × 2	6.6 × 2	3.3 × 4
Refrigerant	Charge	kg	7.8	9.8	12	17.8	23.8	31.7	35.6
Evaporator	Type		Shell -and-tube						
	Joint size		R_2 1 1/2″	R_2 1 1/2″	R_2 2″	R_2 2 1/2″	R_2 2 1/2″	R_2 2 1/2″	R_2 3″
	Water flow rate	m^3/h	5.1	6.3	7.6	11.2	15.6	19.3	22.4
	Head loss	m	3.2	3.6	4.0	4.2	4.4	4.4	4.4
Fan	Power × Quantity	W	950 x 1	950 x 1	950 x 2	950 x 2	950 x 2	950 x 3	1100 x 3
	Air flow rate	m^3/min	220	220	450	450	450	680	916
Net weight		kg	350	430	790	1000	1150	1300	1800
Operating weight		kg	370	450	830	1080	1230	1380	1880
Unit Dimensions	Length(A)	mm	1300	1300	2280	2280	2280	3280	3280
	Width(B)	mm	1160	1160	1245	1245	1245	1245	1245
	Height(C)	mm	1660	1660	1660	1660	1660	1660	1740

Dimension



FHAW- 040D-P



FHAH(W)- 050D-P

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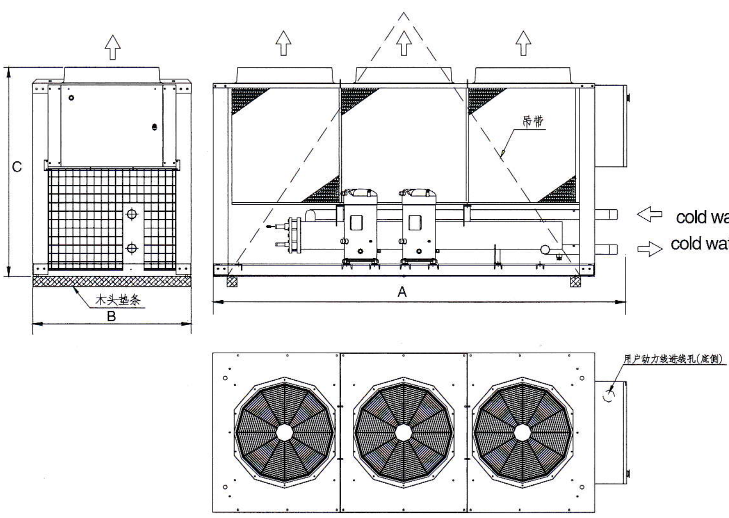
R407C

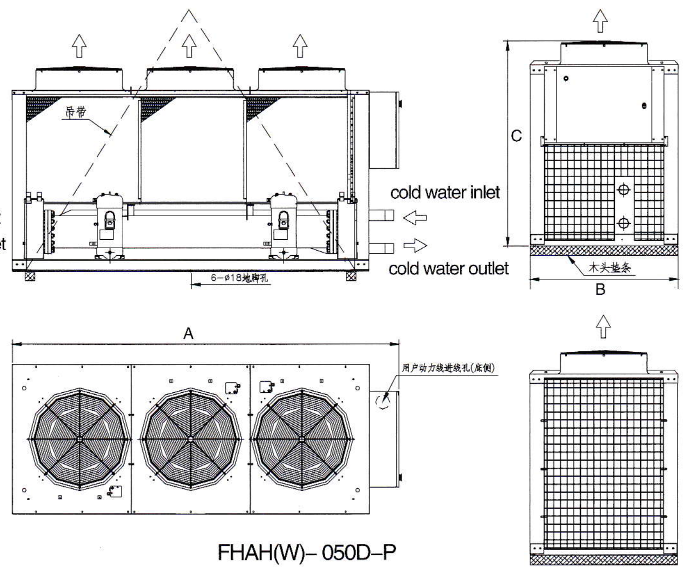
Specification

Item	Model	FHAH/AW-	010S-P	012S-P	015S-P	025D-P	030D-P	050F-P
Cooling capacity		kcal/hr	25,304	28,985	35,778	53,307	72,996	106,615
		kW	29.0	33.7	41.6	62.0	84.9	124.0
Heating capacity		kcal/hr	26,966	31,198	38,479	55,802	77,684	111,605
		kW	31.4	36.3	44.8	64.9	90.3	129.8
Power consumption		kW	9.8	11.4	14.1	20.4	28.2	40.8
Power consumption		kW	9.1	10.8	13.2	19.8	26.5	39.7
Operating current		A	21.2	22.9	30.1	41.4	58.6	82.6
Starting current		A	123	142	177	147	204	293
Capacity control			[Cannot control capacity]			2 –Step capacity control		
Compressor	Quantity		1	1	1	2	2	4
Refrigeration oil	Charge	L	3.3	3.3	6.6	3.3 × 2	6.6 × 2	3.3 × 4
Refrigerant	Charge	kg	7.8	9.8	12	17.8	23.8	35.6
Evaporator	Type		Shell –and–tube					
	Joint size		R_2 1 1/2″	R_2 1 1/2″	R_2 2″	R_2 2 1/2″	R_2 2 1/2″	R_2 3″
	Water flow rate	m^3/h	5.0	5.8	7.2	10.7	14.7	21.4
	Head loss	M	3.2	3.6	4.0	4.2	4.4	4.4
Fan	Power × Quantity	W	950 x 1	950 x 1	950 x 2	950 x 2	950 x 3	1100 x 3
	Air flow rate	m^3/min	220	220	450	450	680	916
Net weight		kg	350	430	790	1000	1300	1800
Operating weight		kg	370	450	830	1080	1380	1880
Unit Dimensions	Length(A)	mm	1300	1300	2280	2280	3280	3280
	Width(B)	mm	1160	1160	1245	1245	1245	1245
	Height(C)	mm	1660	1660	1660	1660	1660	1740

Dimension



FHAW- 040D-P



FHAH(W)- 050D-P

Ver: SP–B002–04–EN–CABD