

Concealed Ceiling Type Fan Coil Unit Service Manual

(GC201406-I)

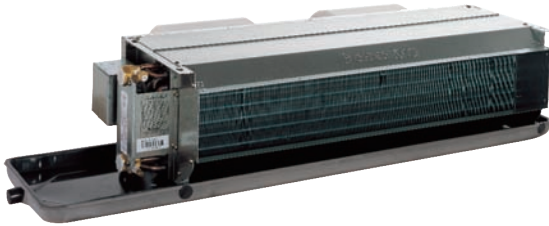
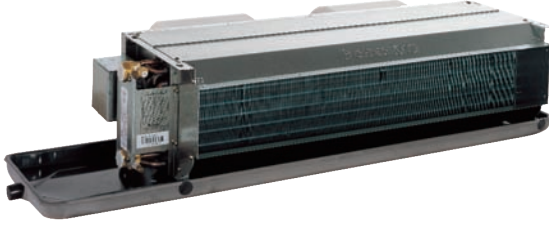
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PRODUCT

PRODUCT

1 Models list

Model name	Product code	Cooling capacity (W)	Air flow volume (m ³ /h)	Power supply (V, Ph, Hz)	Remarks
FP-34WA-K	EM51000130	1850	340	220-240V-1Ph-50Hz	
	EM51000010				
FP-51WA-K	EM51000140	2800	510		
	EM51000020				
FP-68WA-K	EM51000150	3600	680		
	EM51000030				
FP-85WA-K	EM51000160	4500	850		
	EM51000040				
FP-102WA-K	EM51000170	5500	1020		
	EM51000050				
FP-136WA-K	EM51000180	7350	1360		
	EM51000060				
FP-170WA-K	EM51000190	9200	1700		
	EM51000070				
FP-204WA-K	EM51000200	11000	2040		
	EM51000080				
FP-34WAH-K	EM51000290	1850	340		
	EM51000400				
FP-51WAH-K	EM51000400	2800	510		
	EM51000330				
FP-68WAH-K	EM51000350	3600	680		
	EM51000450				
FP-85WAH-K	EM51000450	4500	850		
	EM51000360				
FP-102WAH-K	EM51000420	5500	1020		
	EM51000340				
FP-136WAH-K	EM51000430	7350	1360		
	EM51000320				
FP-170WAH-K	EM51000440	9200	1700		
	EM51000370				
FP-204WAH-K	EM51000460	11000	2040		
	EM51000380				
FP-34WAS-R	EM51000640	2190	340	220V-1Ph-50Hz/60Hz	
	EM51000950				
FP-51WAS-R	EM51000660	3370	510		
	EM51000960				
FP-68WAS-R	EM51000680	4280	680		
	EM51000970				
FP-85WAS-R	EM51000700	5040	850		
	EM51000980				
FP-102WAS-R	EM51000560	6460	1020		
	EM51000990				
FP-136WAS-R	EM51000581	8170	1360		
	EM51001000				
FP-170WAS-R	EM51000600	10740	1700		
	EM51001010				
FP-204WAS-R	EM51000620	12160	2040		
	EM51001020				
FP-238WAS-R	EM51000870	12400	2380		
	EM51001190				
FP-272WAS-R	EM51000880	13500	2720		
	EM51001200				
FP-306WAS-R	EM51000890	16000	3060		
	EM51001210				
FP-340WAS-R	EM51000900	17000	3400		
	EM51001220				

Model name	Product code	Cooling capacity (W)	Air flow volume (m ³ /h)	Power supply (V, Ph, Hz)	Remarks
FP-34WAF-R	EM51000710	2110	320	220V-1Ph-50Hz/60Hz	
	EM51001110				
FP-51WAF-R	EM51000720	3820	490		
	EM51001120				
FP-68WAF-R	EM51000730	4850	650		
	EM51001130				
FP-85WAF-R	EM51000740	5710	810		
	EM51001140				
FP-102WAF-R	EM51000750	7320	970		
	EM51001150				
FP-136WAF-R	EM51000760	9260	1290		
	EM51001160				
FP-170WAF-R	EM51000770	11400	1610		
	EM51001170				
FP-204WAF-R	EM51000780	12600	1940		
	EM51001180				
FP-238WAF-R	EM51000510	14280	2380		
	EM51000550				
FP-272WAF-R	EM51000540	16000	2720		
	EM51000570				
FP-306WAF-R	EM51000530	18700	3060		
	EM51000590				
FP-340WAF-R	EM51000520	19800	3400		
	EM51000610				
FP-34WAT-R	EM51000790	1950	320	220V-1Ph-50Hz/60Hz	
	EM51001030				
FP-51WAT-R	EM51000800	3070	490		
	EM51001040				
FP-68WAT-R	EM51000810	3880	650		
	EM51001050				
FP-85WAT-R	EM51000820	4550	810		
	EM51001060				
FP-102WAT-R	EM51000830	5820	970		
	EM51001070				
FP-136WAT-R	EM51000840	7350	1290		
	EM51001080				
FP-170WAT-R	EM51000850	9650	1610		
	EM51001090				
FP-204WAT-R	EM51000860	10960	1940		
	EM51001100				
FP-238WAT-R	EM51000910	12350	2380		
	EM51000630				
FP-272WAT-R	EM51000920	13490	2720		
	EM51000650				
FP-306WAT-R	EM51000930	15670	3060		
	EM51000670				
FP-340WAT-R	EM51000940	16530	3400		
	EM51000690				
FP-51WA5S-K	EM51001340	2850	510	220-240V-1Ph-50Hz	
	EM51001370				
FP-68WA5S-K	EM51001350	4280	680		
	EM51001380				
FP-102WA5S-K	EM51001360	6460	1020		
	EM51001390				

2 Nomenclature of the unit

FP	-	34	W	A	H	□	-	K
1		2	3	4	5	6		7

NO.	Description	Options
1	Fan coil	
2	Air flow volume	Number×10 m ³ /h
3	Structure type	W horizontal
4	Installation way	A :Concealed ceiling type
5	ESP	H:high ESP, default:standard
6	The row number of coil	default: two rows; S: three rows; F: four rows T: three and one rows
7	Power supply	K:220-240V-1Ph-50Hz; R:220V-1Ph-50Hz/60Hz

FP-68WA-k:Concealed ceiling fan coil unit with a nominal airflow volume of 680m³/h.

Note: face the air inlet of the unit, it is left type ("Z" for short) when the water in/outlet pipe is on the left side of the unit, otherwise is right side, "Y" for short.

3 Function

- ◆ Novel pattern: the exposed skin plates of unit look so elegant and luxurious that they can be taken as the indoor decorations.
- ◆ Low noise: Dynamic principles have been adopted for the design of the fan blades so as to make sure the air volume is enough and running noise is considerably low.
- ◆ Durable filter screen: The durable filter screen shares a cleaning cycle 20 times longer than that of the conventional filter screen, needless to clean it frequently.
- ◆ Microcomputer control: The unit is able to automatically adjust the fan speed in accordance with the indoor ambient temperature to meet a wide range of users' requirements.
- ◆ Small height of the unit, saving much installation space
- ◆ Large cooling (heating) capacity, low noise, three-speed motor which can adjust the air volume and meet a wide range of users' requirements.
- ◆ Excellent material, stringent process control, which guarantee the hi-quality and long life of the unit.

4 Specification

Model			FP-34WA-K	FP-51WA-K	FP-68WA-K	FP-85WA-K
Code			EM51000010	EM51000020	EM51000030	EM51000040
Air flow volume		m ³ /h	340	510	680	850
		CFM	200	300	400	500
External statics pressure		Pa	12	12	12	12
Capacity	Cooling	kW	1.85	2.8	3.6	4.5
	Heating	kW	3.05	4.4	5.5	7
Rows of cooling/heating coil			2	2	2	2
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz
	Input	kW	0.037	0.045	0.062	0.07
Water system	Water flow volume	L/s	0.1	0.14	0.17	0.21
		GPM	0.44	0.616	0.748	0.924
	Pressure drop	kPa	12	21	16	23
		Ft-WG	4	7	5.3	7.7
Coil	Face area	m ²	0.1	0.126	0.151	0.167
	Face velocity	m/s	0.94	1.12	1.25	1.41
Motor	Type		Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor
	Quantity		1	1	1	1
	Total rated output	kW	0.037	0.045	0.062	0.07
	Current	A	0.17	0.20	0.28	0.32
Fan	Type		Forward multi-vane low noise centrifugal Fan	Forward multi-vane low noise centrifugal Fan	Forward multi-vane low noise centrifugal Fan	Forward multi-vane low noise centrifugal Fan
	Quantity		1	2	2	2
Sound pressure level		dB(A)	35	38	40	42
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	881x510x245	1011x510x245	1131x510x245	1211x510x245
Package dimension (WxDxH)		mm	900x560x275	1030x560x275	1150x560x275	1230x560x275
Net weight		kg	14	15	16.5	18
Gross weight		kg	17	19.5	21	22
Loading quantity		20'GP	224	223.5	172	158
		40'GP	448	447	344	316
		40'HQ	490	482	386	355
Optionals	Wireless remote controller		Y512	Y512	Y512	Y512
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF31	HF32	HF33	HF34
	Plenum without filter		HF41	HF42	HF43	HF44

Model		FP-102WA-K	FP-136WA-K	FP-170WA-K	FP-204WA-K	
Code		EM51000050	EM51000060	EM51000070	EM51000080	
Air flow volume	m ³ /h	1020	1360	1700	2040	
	CFM	600	800	1000	1200	
External statics pressure	Pa	12	12	12	12	
Capacity	Cooling	kW	5.5	7.35	9.2	11
	Heating	kW	8.9	11	14	17
Rows of cooling/heating coil		3	2	3	3	
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz
	Input	kW	0.096	0.12	0.145	0.185
Water system	Water flow volume	L/s	0.27	0.6	0.45	0.5
		GPM	1.188	2.64	1.98	2.2
	Pressure drop	kPa	36	38	38	40
		Ft-WG	12.0	12.7	12.7	13.3
Coil	Face area	m ²	0.167	0.286	0.286	0.286
	Face velocity	m/s	1.70	1.32	1.65	1.98
Motor	Type		Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor
	Quantity		1	2	2	2
	Total rated output	kW	0.096	0.12	0.145	0.185
	Current	A	0.44	0.55	0.66	0.84
Fan	Type		Forward multi-vane low noise centrifugal Fan	Forward multi-vane low noise centrifugal Fan	Forward multi-vane low noise centrifugal Fan	Forward multi-vane low noise centrifugal Fan
	Quantity		2	3	4	4
Sound pressure level		dB(A)	44	46	48	50
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1211x510x245	1761x510x245	1761x510x245	1761x510x245
Package dimension (WxDxH)		mm	1230x560x275	1780x560x275	1780x560x275	1780x560x275
Net weight		kg	19	28.5	34	35
Gross weight		kg	24	35	39	40
Loading quantity	20'GP		158	110	110	110
	40'GP		316	220	220	220
	40'HQ		355	247	247	247
Optionals	Wireless remote controller		Y512	Y512	Y512	Y512
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF34	HF36	HF36	HF36
	Plenum without filter		HF44	HF46	HF46	HF46

Model			FP-34WAH-K	FP-51WAH-K	FP-68WAH-K	FP-85WAH-K
Code			EM51000290	EM51000330	EM51000350	EM51000360
Air flow volume	m ³ /h		340	510	680	850
	CFM		200	300	400	500
External statics pressure	Pa		30	30	30	30
Capacity	Cooling	kW	1.85	2.8	3.6	4.5
	Heating	kW	3.05	4.4	5.5	7
Rows of cooling/heating coil			2	2	2	2
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz
	Input	kW	0.042	0.055	0.068	0.08
Water system	Water flow volume	L/s	0.1	0.14	0.17	0.21
		GPM	0.44	0.616	0.748	0.924
	Pressure drop	kPa	12	21	16	23
		Ft-WG	4	7	5.3	7.7
Coil	Face area	m ²	0.1	0.126	0.151	0.167
	Face velocity	m/s	0.94	1.12	1.25	1.41
Motor	Type		Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor
	Quantity		1	1	1	1
	Total rated output	kW	0.037	0.045	0.062	0.07
	Current	A	0.17	0.20	0.28	0.32
Fan	Type		Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan
	Quantity		1	2	2	2
Sound pressure level		dB(A)	38	40	42	44
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	881x510x245	1011x510x245	1131x510x245	1211x510x245
Package dimension (WxDxH)		mm	900x560x275	1030x560x275	1150x560x275	1230x560x275
Net weight		kg	14	15	16.5	18
Gross weight		kg	17	19.5	21	22
Loading quantity		20'GP	224	223.5	172	158
		40'GP	448	447	344	316
		40'HQ	490	482	386	355
Optionals	Wireless remote controller		Y512	Y512	Y512	Y512
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF31	HF32	HF33	HF34
	Plenum without filter		HF41	HF42	HF43	HF44

Model			FP-102WAH-K	FP-136WAH-K	FP-170WAH-K	FP-204WAH-K
Code			EM51000340	EM51000320	EM51000370	EM51000380
Air flow volume	m ³ /h		1020	1360	1700	2040
	CFM		600	800	1000	1200
External statics pressure	Pa		30	30	30	30
Capacity	Cooling	kW	5.5	7.35	9.2	11
	Heating	kW	8.9	11	14	17
Rows of cooling/heating coil			3	2	3	3
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz
	Input	kW	0.102	0.14	0.158	0.195
Water system	Water flow volume	L/s	0.27	0.6	0.45	0.5
		GPM	1.188	2.64	1.98	2.2
	Pressure drop	kPa	36	38	38	40
		Ft.WG	12.0	12.7	12.7	13.3
Coil	Face area	m ²	0.167	0.286	0.286	0.286
	Face velocity	m/s	1.70	1.32	1.65	1.98
Motor	Type		Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor
	Quantity		1	2	2	2
	Total rated output	kW	0.096	0.12	0.145	0.185
	Current	A	0.44	0.55	0.66	0.84
Fan	Type		Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan
	Quantity		2	3	4	4
Sound pressure level		dB(A)	46	47	49	52
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1211x510x245	1761x510x245	1761x510x245	1761x510x245
Package dimension (WxDxH)		mm	1230x560x275	1780x560x275	1780x560x275	1780x560x275
Net weight		kg	19	28.5	34	35
Gross weight		kg	24	35	39	40
Loading quantity	20'GP		158	110	110	110
	40'GP		316	220	220	220
	40'HQ		355	247	247	247
Optionals	Wireless remote controller		Y512	Y512	Y512	Y512
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF34	HF36	HF36	HF36
	Plenum without filter		HF44	HF46	HF46	HF46

Model			FP-34WAS-R	FP-51WAS-R	FP-68WAS-R	FP-85WAS-R
Code			EM51000640	EM51000660	EM51000680	EM51000700
			EM51000950	EM51000950	EM51000970	EM51000980
Air flow volume		m ³ /h	340	510	680	850
		CFM	200	300	400	500
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	2.19	3.37	4.28	5.04
	Heating	kW	3.29	5.06	6.42	7.56
Rows of cooling/heating coil			3	3	3	3
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.037	0.059	0.072	0.087
Water system	Water flow volume	L/s	0.11	0.169	0.215	0.253
		GPM	2	3	3	4
	Pressure drop	kPa	10	15	25	30
		Ft-WG	3.28	4.92	8.20	9.84
Coil	Face area	m ²	0.1	0.126	0.151	0.167
	Face velocity	m/s	0.94	1.12	1.25	1.41
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		1	1	1	1
	Total rated output	kW	0.044	0.059	0.072	0.087
	Current	A	0.20	0.27	0.33	0.40
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan
	Quantity		1	2	2	2
Sound pressure level		dB(A)	38	40	42	44
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	838x510x245	968x510x245	1088x510x245	1168x510x245
Package dimension (WxDxH)		mm	903x575x278	1033x575x278	1153x575x278	1233x575x278
Net weight		kg	15	16	18	19.5
Gross weight		kg	19	20.5	23	24.5
Loading quantity		20'GP	220	190	190	190
		40'GP	448	394	394	394
		40'HQ	490	434	434	434
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF31	HF32	HF33	HF34
	Plenum without filter		HF41	HF42	HF43	HF44

Model			FP-102WAS-R	FP-136WAS-R	FP-170WAS-R	FP-204WAS-R	
Code			EM51000560	EM51000580	EM51000600	EM51000620	
			EM51000990	EM51001000	EM51001010	EM51001020	
Air flow volume		m ³ /h	1020	1360	1700	2040	
		CFM	600	800	1000	1200	
External statics pressure		Pa	30	30	30	30	
Capacity	Cooling	kW	6.46	8.17	10.74	12.16	
	Heating	kW	9.7	12.2	16.1	18.24	
Rows of cooling/heating coil			3	3	3	3	
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	
	Input	kW	0.108	0.156	0.174	0.212	
Water system	Water flow volume		L/s	0.325	0.370	0.554	0.570
			GPM	5	6	9	9
	Pressure drop		kPa	40	20	38	45
			Ft-WG	13.12	6.56	12.46	14.76
Coil	Face area	m ²	0.2	0.286	0.306	0.306	
	Face velocity	m/s	1.42	1.32	1.54	1.85	
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	
	Quantity		1	2	2	2	
	Total rated output	kW	0.108	0.156	0.174	0.212	
	Current	A	0.49	0.71	0.79	0.96	
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	
	Quantity		2	3	4	4	
Sound pressure level		dB(A)	46	47	49	52	
Connection pipe size	Water inlet &outlet pipe	inch	3/4"(innergroove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	
Outline dimension (WxDxH)		mm	1328x510x245	1718x510x245	1878x510x245	1878x510x245	
Package dimension (WxDxH)		mm	1393x575x278	1783x575x278	1943x575x278	1943x575x278	
Net weight		kg	21	30	33	34	
Gross weight		kg	26	35	38.5	39.5	
Loading quantity		20'GP	190	105	95	95	
		40'GP	394	220	196	196	
		40'HQ	434	247	220	220	
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A	
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	
	Plenum with filter		HF35	HF36	HF37	HF37	
	Plenum without filter		HF45	HF46	HF47	HF47	

Model		FP-238WAS-R	FP-272WAS-R	FP-306WAS-R	FP-340WAS-R	
Code		EM51000870	EM51000880	EM51000890	EM51000900	
		EM51001190	EM51001200	EM51001210	EM51001220	
Air flow volume		m ³ /h	2380	2720	3060	3400
		CFM	1400	1600	1800	2000
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	12.4	13.5	16	17
	Heating	kW	19.5	21.3	24.8	26.1
Rows of cooling/heating coil			3	3	3	3
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.38	0.475	0.535	0.64
Water system	Water flow volume	L/s	0.57	0.64	0.74	0.79
		GPM	9	10	12	13
	Pressure drop	kPa	45	27.9	37.5	41.2
		Ft-WG	14.76	9.15	12.3	13.5
Coil	Face area	m ²	0.381	0.381	0.457	0.457
	Face velocity	m/s	1.74	1.98	1.86	2.07
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		2	2	2	2
	Total rated output	kW	0.38	0.475	0.535	0.64
	Current	A	1.73	2.16	2.43	2.91
Fan	Type		Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan
	Quantity		3	3	3	3
Sound pressure level		dB(A)	56	59	62	63
Connection pipe size	Water inlet & outlet pipe	inch	1"(inner groove)	1"(inner groove)	1"(inner groove)	1"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1671x595x354	1671x595x354	1921x595x354	1921x595x354
Package dimension (WxDxH)		mm	1753x665x383	1753x665x383	1953x665x383	1953x665x383
Net weight		kg	48	48	52	52
Gross weight		kg	55	55	60	60
Loading quantity		20'GP	65	65	60	60
		40'GP	140	140	130	130
		40'HQ	166	166	153	153
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF28	HF28	HF29	HF29
	Plenum without filter		HF48	HF48	HF49	HF49

Model			FP-34WAF-R	FP-51WAF-R	FP-68WAF-R	FP-85WAF-R
Code			EM51000710	EM51000720	EM51000730	EM51000740
			EM51001110	EM51001120	EM51001130	EM51001140
Air flow volume		m ³ /h	320	490	650	810
		CFM	188	289	383	477
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	2.11	3.82	4.85	5.71
	Heating	kW	3.7	5.7	7.2	8.5
Rows of cooling/heating coil			4	4	4	4
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.044	0.059	0.08	0.087
Water system	Water flow volume	L/s	0.11	0.17	0.21	0.29
		GPM	2	3	3	5
	Pressure drop	kPa	10.6	23.3	18.2	38
		Ft·WG	3.48	7.64	5.97	12.46
Coil	Face area	m ²	0.1	0.126	0.151	0.167
	Face velocity	m/s	0.89	1.08	1.20	1.35
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		1	1	1	1
	Total rated output	kW	0.044	0.059	0.08	0.087
	Current	A	0.20	0.27	0.36	0.40
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan
	Quantity		1	2	2	2
Sound pressure level		dB(A)	40	42	44	47
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	881x510x245	1011x510x245	1131x510x245	1211x510x245
Package dimension (WxDxH)		mm	903x563x290	1033x563x290	1153x563x290	1233x563x290
Net weight		kg	14.4	17.2	19.2	20.5
Gross weight		kg	18.9	21.9	24.1	25.6
Loading quantity		20'GP	220	190	170	158
		40'GP	448	392	344	316
		40'HQ	490	434	386	355
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF31	HF32	HF33	HF34
	Plenum without filter		HF41	HF42	HF43	HF44

Model			FP-102WAF-R	FP-136WAF-R	FP-170WAF-R	FP-204WAF-R
Code			EM51000750	EM51000760	EM51000770	EM51000780
			EM51001150	EM51001160	EM51001170	EM51001180
Air flow volume		m ³ /h	970	1290	1610	1940
		CFM	571	760	948	1043
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	7.32	9.26	11.4	12.6
	Heating	kW	10.9	13.8	18.2	20.6
Rows of cooling/heating coil			4	4	4	4
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.108	0.156	0.174	0.212
Water system	Water flow volume	L/s	0.32	0.39	0.50	0.52
		GPM	5	6	8	8
	Pressure drop	kPa	56.5	16.8	28	29.4
		Ft-WG	18.53	5.51	9.18	9.64
Coil	Face area	m ²	0.2	0.286	0.306	0.306
	Face velocity	m/s	1.35	1.25	1.46	1.76
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		1	2	2	2
	Total rated output	kW	0.108	0.156	0.174	0.212
	Current	A	0.49	0.71	0.79	0.96
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan
	Quantity		2	3	4	4
Sound pressure level		dB(A)	49	50	51	52
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1371x510x245	1761x510x245	1921x510x245	1921x510x245
Package dimension (WxDxH)		mm	1393x563x290	1783x563x290	1943x563x290	1943x563x290
Net weight		kg	23.2	34.2	37.5	37.5
Gross weight		kg	28.7	40.5	44	44
Loading quantity		20'GP	130	105	95	95
		40'GP	268	220	196	196
		40'HQ	301	247	220	220
Optional	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF35	HF36	HF37	HF37
	Plenum without filter		HF45	HF46	HF47	HF47

Model			FP-238WAF-R	FP-272WAF-R	FP-306WAF-R	FP-340WAF-R
Code			EM51000510	EM51000540	EM51000530	EM51000520
			EM51000550	EM51000570	EM51000590	EM51000610
Air flow volume		m ³ /h	2380	2720	3060	3400
		CFM	1400	1600	1800	2000
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	14.28	16	18.7	19.8
	Heating	kW	21.42	24	28.05	29.7
Rows of cooling/heating coil			4	4	4	4
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.38	0.475	0.535	0.64
Water system	Water flow volume	L/s	0.59	0.65	0.8	0.84
		GPM	9	10	13	13
	Pressure drop	kPa	21.8	26.6	42.1	46.4
		Ft-WG	7.15	8.72	13.81	15.22
Coil	Face area	m ²	0.381	0.381	0.457	0.457
	Face velocity	m/s	1.74	1.98	1.86	2.07
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		2	2	2	2
	Total rated output	kW	0.38	0.475	0.535	0.64
	Current	A	1.73	2.16	2.43	2.91
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan
	Quantity		3	3	3	3
Sound pressure level		dB(A)	56	58	60	61
Connection pipe size	Water inlet & outlet pipe	inch	1"(inner groove)	1"(inner groove)	1"(inner groove)	1"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1671x595x354	1671x595x354	1921x595x354	1921x595x354
Package dimension (WxDxH)		mm	1753x653x395	1753x653x395	1953x653x395	1953x653x395
Net weight		kg	52	52	59	59
Gross weight		kg	60	60	66	66
Loading quantity		20'GP	65	65	60	60
		40'GP	140	140	130	130
		40'HQ	166	166	153	153
Optional	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF28	HF28	HF29	HF29
	Plenum without filter		HF48	HF48	HF49	HF49

Model			FP-34WAT-R	FP-51WAT-R	FP-68WAT-R	FP-85WAT-R
Code			EM51000790	EM51000800	EM51000810	EM51000820
			EM51001030	EM51001040	EM51001050	EM51001060
Air flow volume		m ³ /h	320	490	650	810
		CFM	188	289	383	477
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	1.95	3.07	3.88	4.55
	Heating	kW	1.76	2.49	3.17	3.83
Rows of cooling/heating coil			3/1	3/1	3/1	3/1
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.044	0.059	0.08	0.087
Water system	Water flow volume	L/s	0.11	0.17	0.21	0.29
		GPM	2	3	3	5
	Pressure drop	kPa	16	23.3	18.2	38
		Ft-WG	5.25	7.64	5.97	12.46
Coil	Face area	m ²	0.1	0.126	0.151	0.167
	Face velocity	m/s	0.89	1.08	1.20	1.35
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		1	1	1	1
	Total rated output	kW	0.044	0.059	0.08	0.087
	Current	A	0.20	0.27	0.36	0.40
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan
	Quantity		1	2	2	2
Sound pressure level		dB(A)	40	42	44	47
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	881x510x245	1011x510x245	1131x510x245	1211x510x245
Package dimension (WxDxH)		mm	903x563x290	1033x563x290	1153x563x290	1233x563x290
Net weight		kg	14.4	17.2	19.2	20.5
Gross weight		kg	18.9	21.9	24.1	25.6
Loading quantity		20'GP	220	190	170	158
		40'GP	448	392	344	316
		40'HQ	490	434	386	355
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF31	HF32	HF33	HF34
	Plenum without filter		HF41	HF42	HF43	HF44

Model			FP-102WAT-R	FP-136WAT-R	FP-170WAT-R	FP-204WAT-R
Code			EM51000830	EM51000840	EM51000850	EM51000860
			EM51001070	EM51001080	EM51001090	EM51001100
Air flow volume		m ³ /h	970	1290	1610	1940
		CFM	571	760	948	1043
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	5.82	7.35	9.65	10.96
	Heating	kW	4.85	6.69	7	8.85
Rows of cooling/heating coil			3/1	3/1	3/1	3/1
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.108	0.156	0.174	0.212
Water system	Water flow volume	L/s	0.32	0.39	0.50	0.52
		GPM	5	6	8	8
	Pressure drop	kPa	56.5	16.8	28	29.4
		Ft-WG	18.53	5.51	9.18	9.64
Coil	Face area	m ²	0.2	0.286	0.306	0.306
	Face velocity	m/s	1.35	1.25	1.46	1.76
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		1	2	2	2
	Total rated output	kW	0.108	0.156	0.174	0.212
	Current	A	0.49	0.71	0.79	0.96
Fan	Type		Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan	Forward multi- vane low noise centrifugal fan
	Quantity		2	3	4	4
Sound pressure level		dB(A)	49	50	51	52
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)	3/4"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1371x510x245	1761x510x245	1921x510x245	1921x510x245
Package dimension (WxDxH)		mm	1393x563x290	1783x563x290	1943x563x290	1943x563x290
Net weight		kg	23.2	34.2	37.5	37.5
Gross weight		kg	28.7	40.5	44	44
Loading quantity		20'GP	130	105	95	95
		40'GP	268	220	196	196
		40'HQ	301	247	220	220
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF35	HF36	HF37	HF37
	Plenum without filter		HF45	HF46	HF47	HF47

Model		FP-238WAT-R	FP-272WAT-R	FP-306WAT-R	FP-340WAT-R	
Code		EM51000910	EM51000920	EM51000930	EM51000940	
		EM51000630	EM51000650	EM51000670	EM51000690	
Air flow volume		m ³ /h	2380	2720	3060	3400
		CFM	1400	1600	1800	2000
External statics pressure		Pa	30	30	30	30
Capacity	Cooling	kW	12.35	13.49	15.67	16.53
	Heating	kW	12.97	14.17	16.46	17.36
Rows of cooling/heating coil			3/1	3/1	3/1	3/1
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz	220-240V-1Ph-50Hz/ 220-230V-1Ph-60Hz
	Input	kW	0.38	0.475	0.535	0.64
Water system	Water flow volume	L/s	0.59	0.65	0.80	0.84
		GPM	9	10	13	13
	Pressure drop	kPa	21.8	26.6	42.1	46.4
Ft-WG		7.15	8.72	13.81	15.22	
Coil	Face area	m ²	0.381	0.381	0.457	0.457
	Face velocity	m/s	1.74	1.98	1.86	2.07
Motor	Type		Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor	Isolation E Capacitor startup three- speed Motor
	Quantity		2	2	2	2
	Total rated output	kW	0.38	0.475	0.535	0.64
	Current	A	1.73	2.16	2.43	2.91
Fan	Type		Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan
	Quantity		3	3	3	3
Sound pressure level		dB(A)	56	58	60	61
Connection pipe size	Water inlet & outlet pipe	inch	1"(inner groove)	1"(inner groove)	1"(inner groove)	1"(inner groove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	1671x595x354	1671x595x354	1921x595x354	1921x595x354
Package dimension (WxDxH)		mm	1753x653x395	1753x653x395	1953x653x395	1953x653x395
Net weight		kg	52	52	59	59
Gross weight		kg	60	60	66	66
Loading quantity		20'GP	65	65	60	60
		40'GP	140	140	130	130
		40'HQ	166	166	153	153
Optionals	Wireless remote controller		N/A	N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0
	Plenum with filter		HF28	HF28	HF29	HF29
	Plenum without filter		HF48	HF48	HF49	HF49

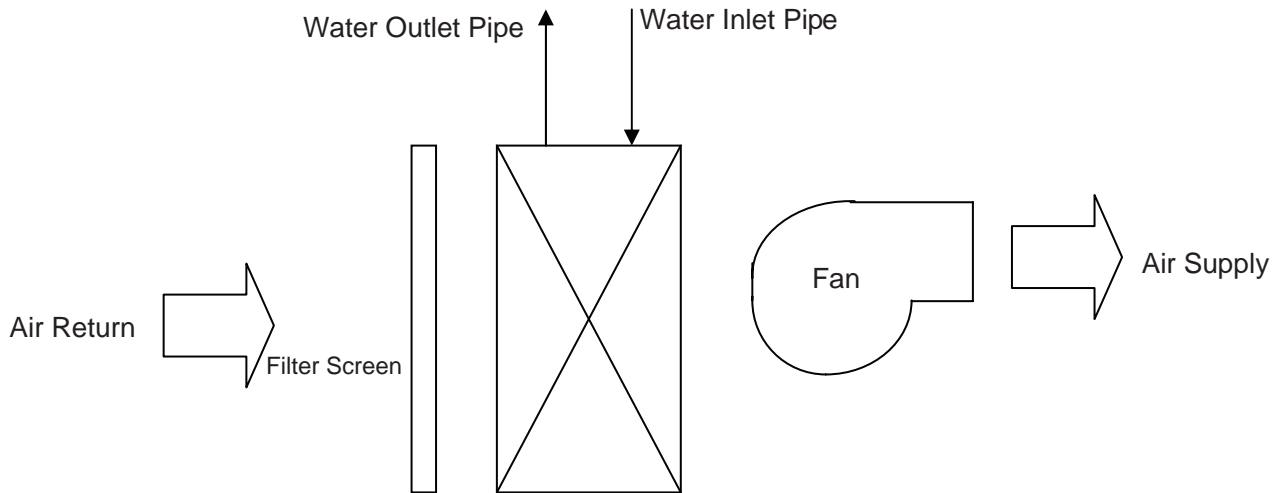
Model			FP-51WA5S-K	FP-68WA5S-K	FP-102WA5S-K
Code			EM51001340	EM51001350	EM51001360
			EM51001370	EM51001380	EM51001390
Air flow volume		m ³ /h	510	680	1020
		CFM	300	400	600
External statics pressure		Pa	50	50	50
Capacity	Cooling	kW	2.85	4.28	6.46
	Heating	kW	5.06	6.42	9.70
Rows of cooling/heating coil			3	3	3
Power system	Type	V-Ph-Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz	220-240V-1Ph-50Hz
	Input	kW	0.062	0.078	0.115
Water system	Water flow volume	L/s	0.169	0.215	0.325
		GPM	3	3	5
	Pressure drop	kPa	15	25	40
		Ft.WG	4.92	8.20	13.12
Coil	Face area	m ²	0.13	0.15	0.17
	Face velocity	m/s	1.12	1.25	1.7
Motor	Type		Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor	Isolation E Capacitor startup three-speed Motor
	Quantity		1	1	1
	Total rated output	kW	0.062	0.078	0.115
	Current	A	0.28	0.35	0.52
Fan	Type		Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan	Forward multi-vane low noise centrifugal fan
	Quantity		2	2	2
Sound pressure level		dB(A)	44	46	49
Connection pipe size	Water inlet & outlet pipe	inch	3/4"(inner groove)	3/4"(inner groove)	3/4"(innergroove)
	Condensed water drain pipe	inch	3/4"(outer groove)	3/4"(outer groove)	3/4"(outer groove)
Outline dimension (WxDxH)		mm	968x510x245	1088x510x245	1328x510x245
Package dimension (WxDxH)		mm	1033x575x278	1153x575x278	1393x575x278
Net weight		kg	16.5	18	22
Gross weight		kg	21	22	27
Loading quantity		20'GP	190	190	190
		40'GP	394	394	394
		40'HQ	434	434	434
Optionals	Wireless remote controller		N/A	N/A	N/A
	Wired remote controller		Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0		
	Plenum with filter		HF32	HF33	HF35
	Plenum without filter		HF42	HF43	HF45

Note:

- ① The water working temperature is from 7°C (44.6°F) to 60°C (140°F).
- ② The temperature exchange efficiency and enthalpy exchange efficiency are tested under these testing conditions as below:
Cooling efficiency: air 27°C(80.6°F) DB, 19.5°C(67.1°F) WB, water temperature in 7°C(44.6°F), water out 12°C(53.6°F).
Heating efficiency: air 21°C (69.8°F) DB, Water temperature: 60°C (140°F).
- ③ The operating water pressure of the models above is no more than 0.25MPa.
- ④ The airflow volume is tested when the ESP is 0 Pa.

5 Working principle

The cool (hot) water go in the fan coil and make heat exchange with the indoor circulated air (outdoor air), to realize cooling(heating), dehumidifying, filtrating or purifying. The processed air will be supplied to indoor directly or by air duct.





CONTROL

CONTROL

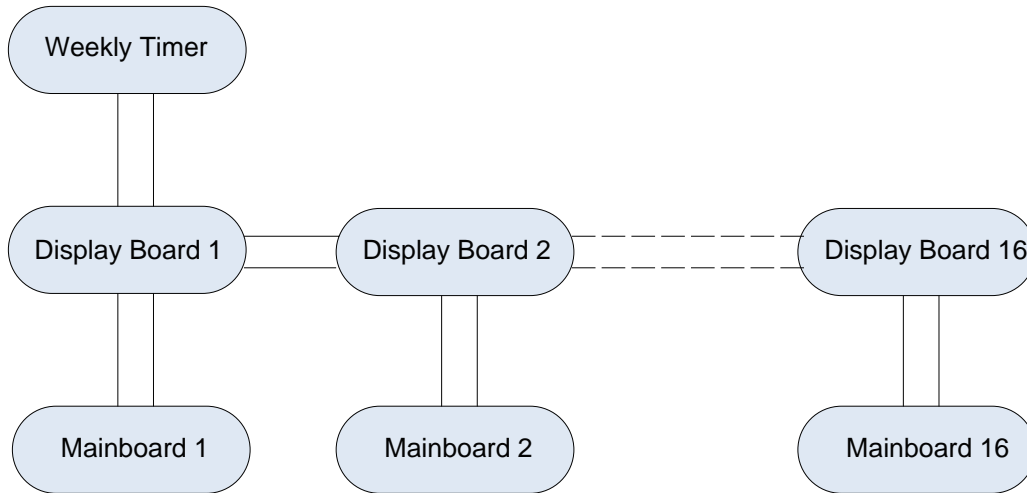
1 Control logic

(1) Independent control system, the logic is showed as below:



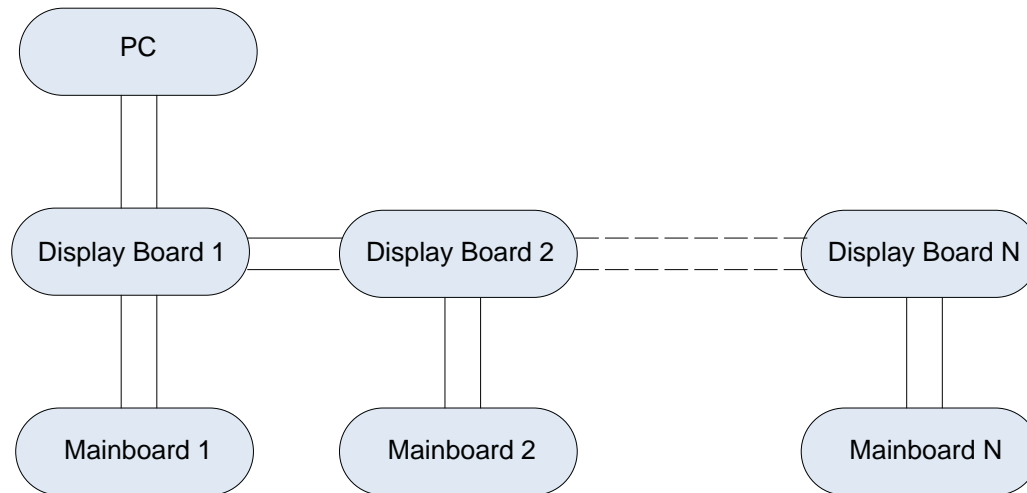
(2) AC connected with weekly timer

The control system is made up of one weekly timer and 16 units, one weekly time could max. control 16 units, and independently control the on/off time of every unit. The logic is showed as below:



2 AC connected with PC (long distance monitoring)

Long distance monitoring system could max. control 255 units and independently control the operation mode, fan speed, on/off of the unit, the control logic is as below:



3 AC control principle sketch

Following components could be controlled by the FCU: water pump (cassette type), water valve, fan, swing fan (cassette, horizontal exposed, vertical exposed), auxiliary electric heater and water overflow protection signal. The communication data between mainboard and display board is 485, the display board could be controlled by wireless remote controller.

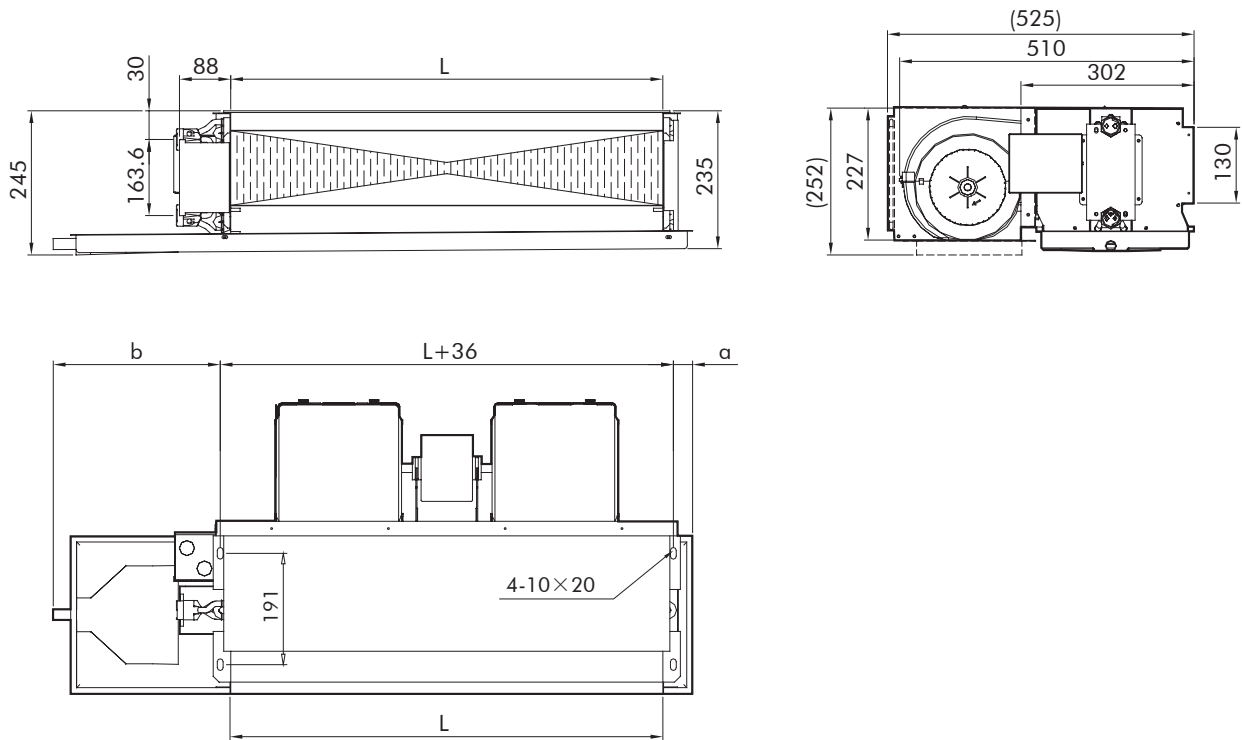
Note: concealed ceiling FCU is excluded in above information.



INSTALLATION

INSTALLATION

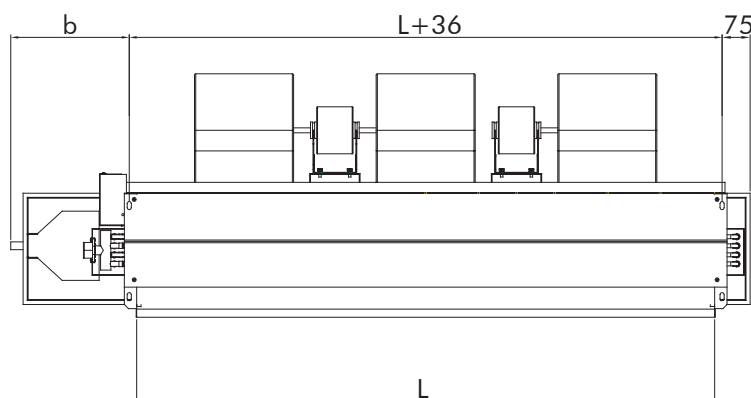
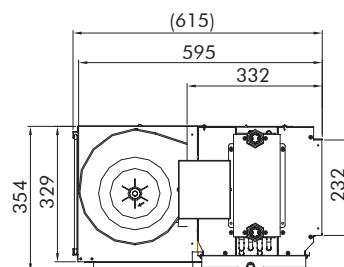
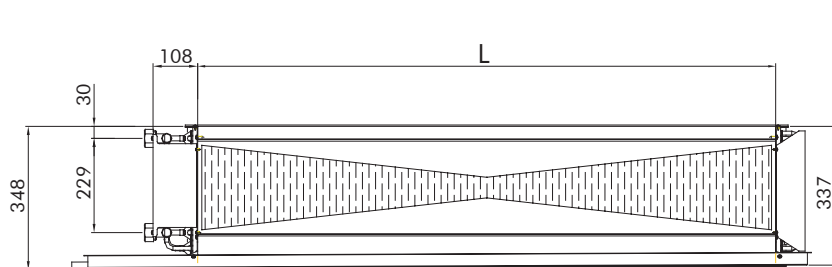
1 Installation side



Unit:mm

Model	L	a	b	b*(With Curate Drain Pan)	Width	Height
FP-34WA(H)-K	490	45	310	180	510(525)	245(252)
FP-51WA(H)-K	620	45	310			
FP-68WA(H)-K	740	45	310			
FP-85WA(H)-K	820	45	310			
FP-102WA(H)-K	820	45	310			
FP-136WA(H)-K	1400	75	250			
FP-170WA(H)-K	1400	75	250			
FP-204WA(H)-K	1400	75	250			
FP-34WA*-R	490	45	310			
FP-51WA*-R	620	45	310			
FP-68WA*-R	740	45	310			
FP-85WA*-R	820	45	310			
FP-102WA*-R	980	45	310			
FP-136WA*-R	1400	75	250			
FP-170WA*-R	1500	75	310			
FP-204WA*-R	1500	75	310			
FP-51WA5S-K	620	45	310	180	510(525)	245(252)
FP-68WA5S-K	740	45	310			
FP-102WA5S-K	980	45	310			

Note: "*" represent "S" or "F" or "T"



Unit:mm

Model	L	b	b*(With Curate Drain Pan)	Width	Height
FP-238WA*-R	1250	310	180	595(615)	329(354)
FP-272WA*-R	1250	310			
FP-306WA*-R	1500	310			
FP-340WA*-R	1500	310			

Note: "*" represent "S" or "F" or "T"

2 Features

- ◆ Small enthalpy difference, meeting higher comfort and more accurate control requirements.
- ◆ Novel and advanced structure design.
- ◆ Low profile, saving much installation space.
- ◆ Powerful cooling/heating capacity, low noise, three-speed air flow, serving a wider application range.
- ◆ Excellent material, strict production process control, to ensure top quality and extended service life.
- ◆ Molded and properly thermally insulated drain pan, carefree of condensate.
- ◆ Modified installation location of the air and water discharge valves, to ensure sufficient heat exchange and prevent the pipeline from cracking in winter.

3 Installation precautions

(1) The unit shall be installed securely and routinely checked for its installation reliability 3~4 times every year.

(2) The unit should be kept as far as possible away from oil fog (like, kitchen), otherwise the plastic parts would be aged and fall off, or even it would cause water leakage.

(3) The unit should be kept far away from the corrosive and inflammable gas.

(4) Enough clearance shall be left around the unit for installation and service. Moreover, the inlet and outlet should be kept far away from any barrier to guarantee the air flow can reach every corner of the room.

(5) The hanger bolt shall be capable of bearing four times of the weight of the unit. If not so, it must be reinforced prior to installation.

(6) This fan coil unit should be suspended horizontally and the hanger only bears the weight of the unit other than that of the duct and water pipe and other outer force as well.

(7) The inlet and outlet water pipe must be cleaned prior to installation. A filter must be installed at the outlet of the water pump in case that the valve it is clogged.

(8) The inlet and outlet water pipe must not be dragged and pulled forcefully and they must be sealed with the Teflon tape in case of water leakage.

(9) The pipeline must be thermally insulated to avoid generation of condensate in summer. Additionally, the inlet and outlet water pipe should be equipped with valves.

(10) Condensate can be drained out freely through the drain pipe with a gradient more than 5%.

(11) A filter must be installed at the return air input of this product and be cleaned periodically so as to guarantee normal heat exchange.

(12) As for the initial operation, it is necessary to repel air inside the coil by opening the exhaust valve located on the outlet pipe until water flows out from it.

(13) The temperature of the cold water can not be lower than 5°C, and the temperature of the hot water can not be higher than 70°C, moreover, the water quality should be qualified. The unit which has been serving for 2~3 years should be maintained thoroughly, and scale deposited inside the coil should be removed through chemical cleaning to guarantee good heat exchange performance.

(14) Duct Installation Requirements

Design and installation of the duct shall comply with related national standards.

The duct shall be designed in the way that its section area keeps constant and it shall not be diverted at the outlet of the fan.

A flexible pipe should be used between the air inlet/outlet and the duct. The weight of the duct can not be taken by the unit.

Both the supply and return air duct should be thermally insulated.

(15) Drain Pipe Installation Requirements

◆ The drain pipe and inlet/outlet pipe should be all the standard threaded connector and installed as per the related national standard. During installation, the connector should not be over tightened, otherwise it would damage the pipe head and also the connector.

◆ Installation of the inlet and outlet pipes shall be guided as per the label on the unit, and they must be installed with the flexible pipe and movable joint and also with a filter so as to prevent the heat exchanger scaling. Keep its heat exchange performance and facilitate to remove the impurity inside the pipe.

◆ Outside the unit, the inlet and outlet pipes must be equipped with valves which are used to control the water flow and switch off the cold/hot water source when servicing. Meanwhile, the weight of the water pipe should not be withstood by the unit.

◆ Drain pipe and inlet/outlet pipe all must be thermally insulated.



MAINTENANCE

MAINTENANCE

1 Error code

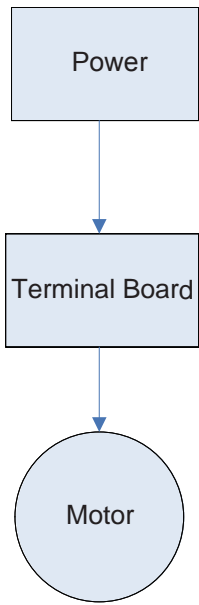
Malfunction name	Malfunction signal source
Ambient temp. sensor malfunction	F0 Alarm error code display: F0

2 Troubleshooting



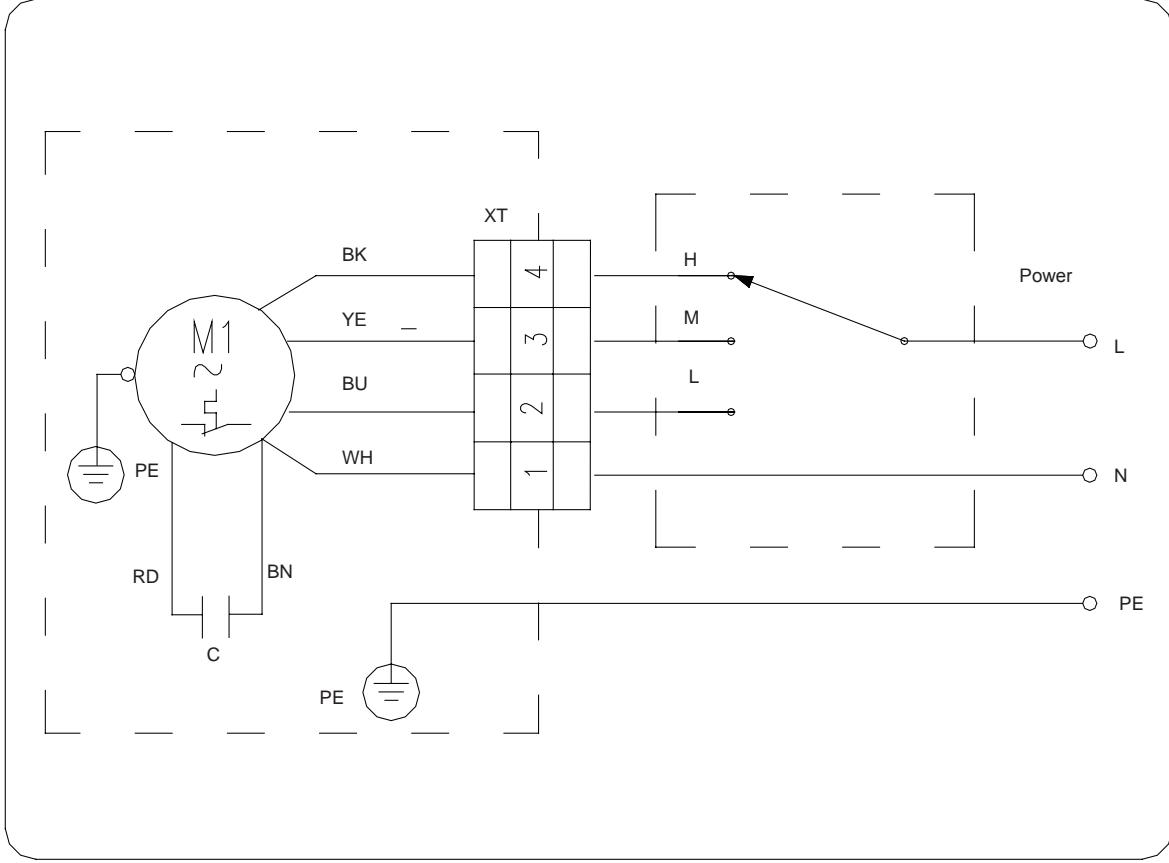
3 Power distribution

The logic in electric control box is as following:

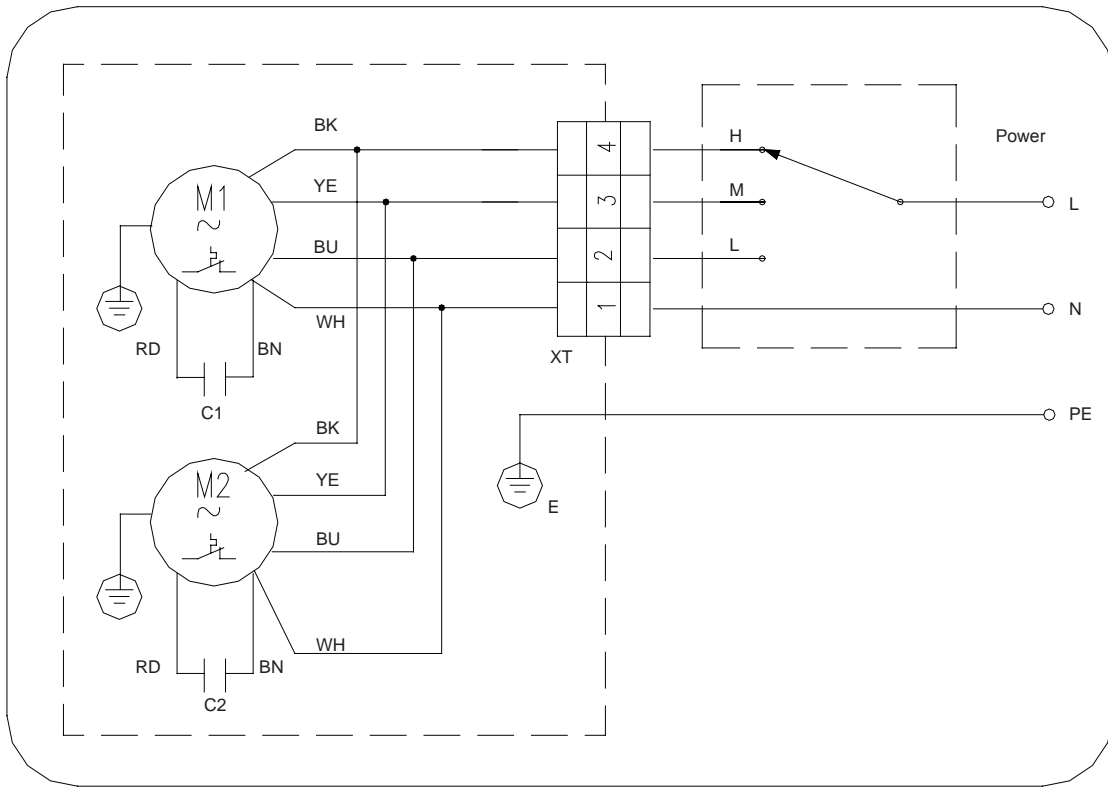


4 Wiring diagram

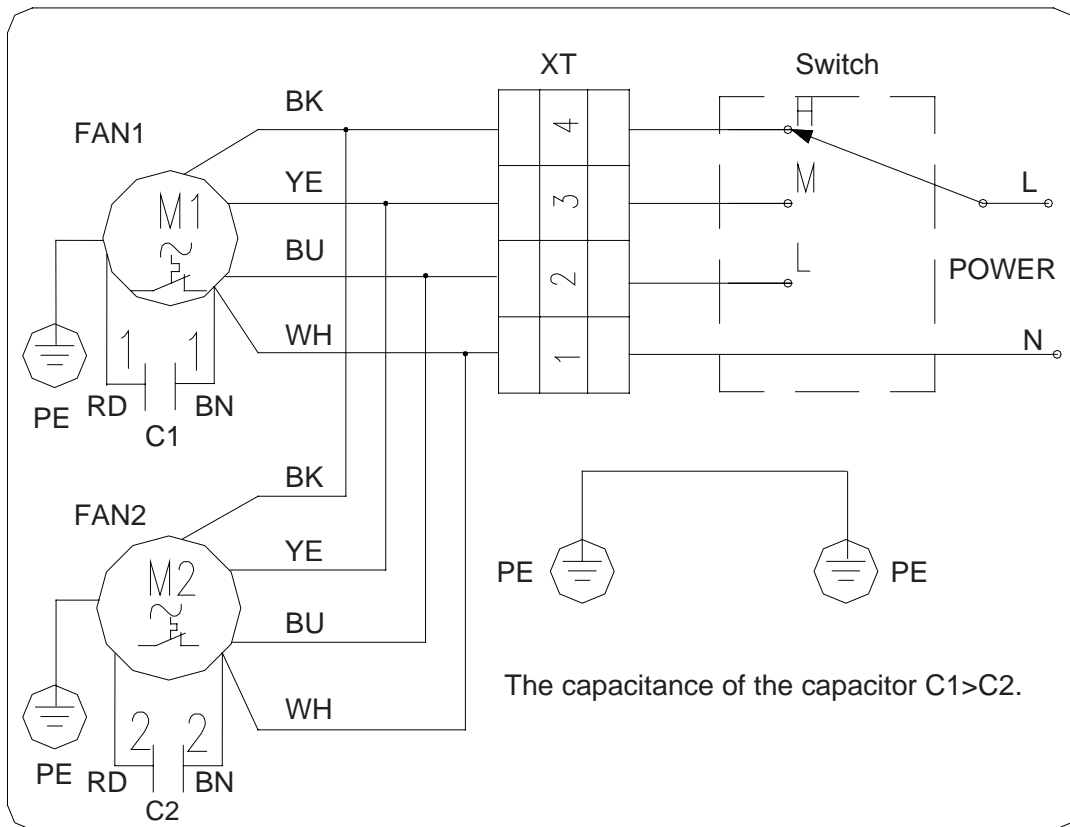
① FP-34WA-K~FP-102WA-K; FP-34WAH-K~FP-102WAH-K; FP-34WAS-R~FP-102WAS-R; FP-34WAF-R~FP-102WAF-R; FP-34WAT-R~FP-102WAT-R; FP-51WA5S-K~FP-102WA5S-K.



② FP-136WA-K~FP-204WA-K; FP-136WAH-K~FP-204WAH-K; FP-102WAS-R~FP-204WAS-R; FP-102WAF-R~FP-204WAF-R;FP-102WAT-R~FP-204WAT-R.

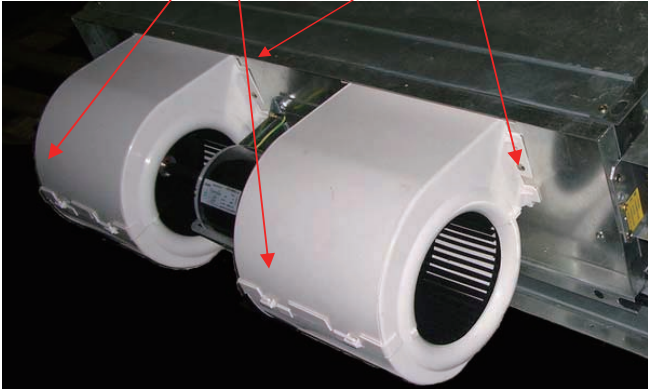
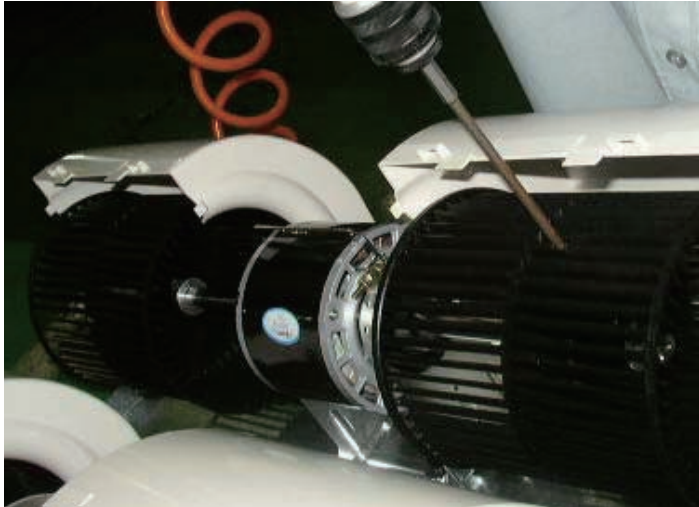


③ FP-238WAS-R~FP-340WAS-R;FP-238WAF-R~FP-340WAF-R;FP-238WAT-R~FP-340WAT-R.



5 Disassembly of key spare part

5.1 Replacement of the Motor

Steps	Graphical Representation
<p>(1) Remove the rear volute casing.</p> <ul style="list-style-type: none">● Press the rear volute casing to release the locks. (see Fig.1)● Take out the rear volute casing downwards.	<p>Locks (2 per each volute casing)</p> <p>Tapping screws(2 per each volute casing)</p>  <p>Fig. 1</p>
<p>(2) Remove the fan blades</p> <ul style="list-style-type: none">● Loosen the fixing screws with a special Allen screwdriver or spanner from the notch (see Fig.2)● Drag the fan blades out. <p>(3) Remove the front volute casing</p> <ul style="list-style-type: none">● Loosen the fixing screws (see Fig.1)● Take out the front volute casing.	 <p>Fig. 2</p>

(4) Remove the motor

- Loosen the fixing screws on the motor and remove the clamping band and the hoop (see Fig.3)
- Loosen the grounding screws and disconnect the ground wire.
- Loosen the screws on the electric box and remove the cover plate of it.
- Remove the connecting inserter of motor from the terminal board of the electric box and the capacitor.
- Cut the tie wire, disconnect the connection wire, and take out the motor.

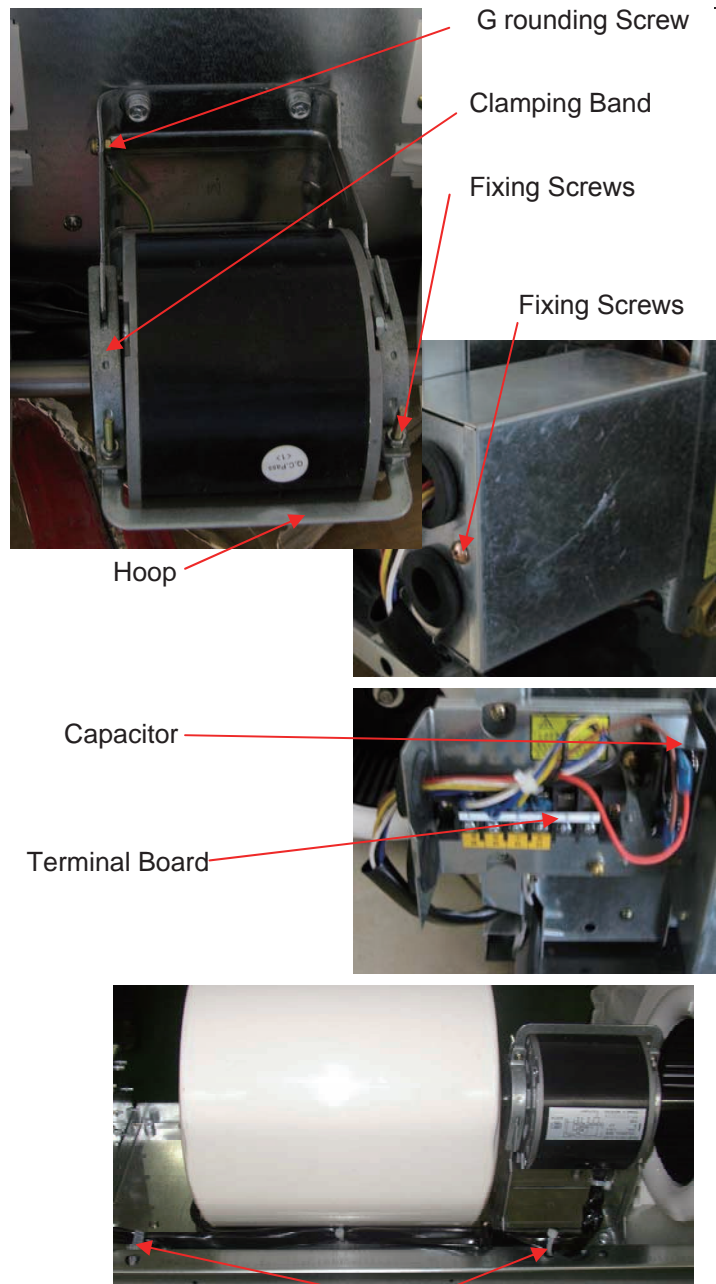


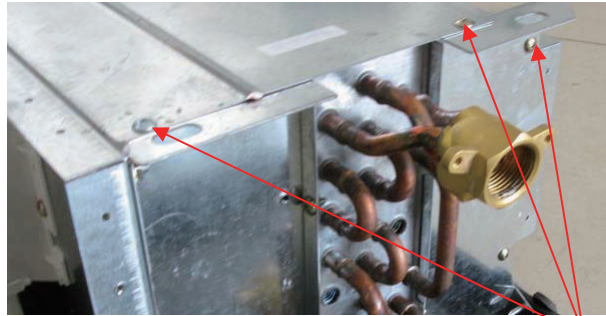
Fig.3

5.2 Replacement of the Heat Exchanger

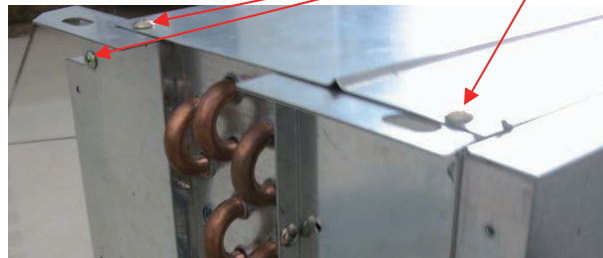
Steps	Graphical Representation
<p>(1) Remove the mounted plate of the liquid distributor and the guard plate of the heat exchanger</p> <ul style="list-style-type: none"> • Take out the cove plate of the electric box (see 5.1.1.1 and Fig 3) • Loosen one fixing screw on the soleplate of the electric box (see Fig.4) • Turn the soleplate of the electric box. • Loosen fixing screws on the mounted plate. • Loosen tapping screws on the mounted plate and the guard plate • Take out the mounted plate and the guard plate. 	<p>Fixing Screws</p> <p>Guard Plate</p> <p>Taping Screws (4)</p> <p>Fixing Screws M4(4)</p> <p>Mounted Plate</p> <p>Fig. 4</p>

(2) Remove the cover plate

- Loosen the tapping screws on the cover plate and other relative components (see Fig.5).
- Take out the cover plate.



Taping Screws



Tapping Screws

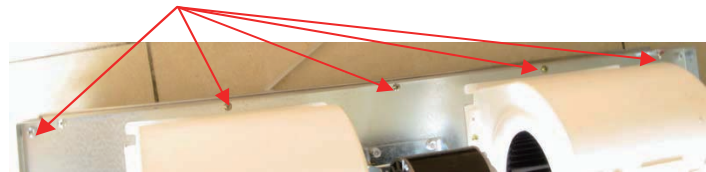
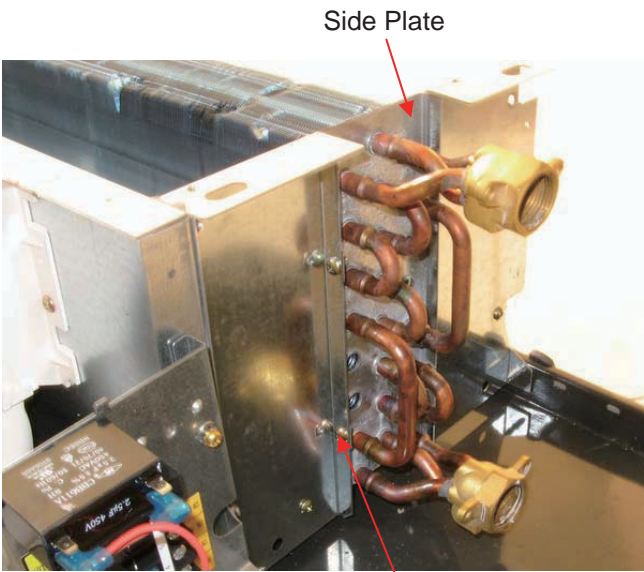


Fig.5

- (3) Remove the heat exchanger
- Loosen the tapping screws on the side plate (see Fig.6)
 - Take out the heat exchanger.



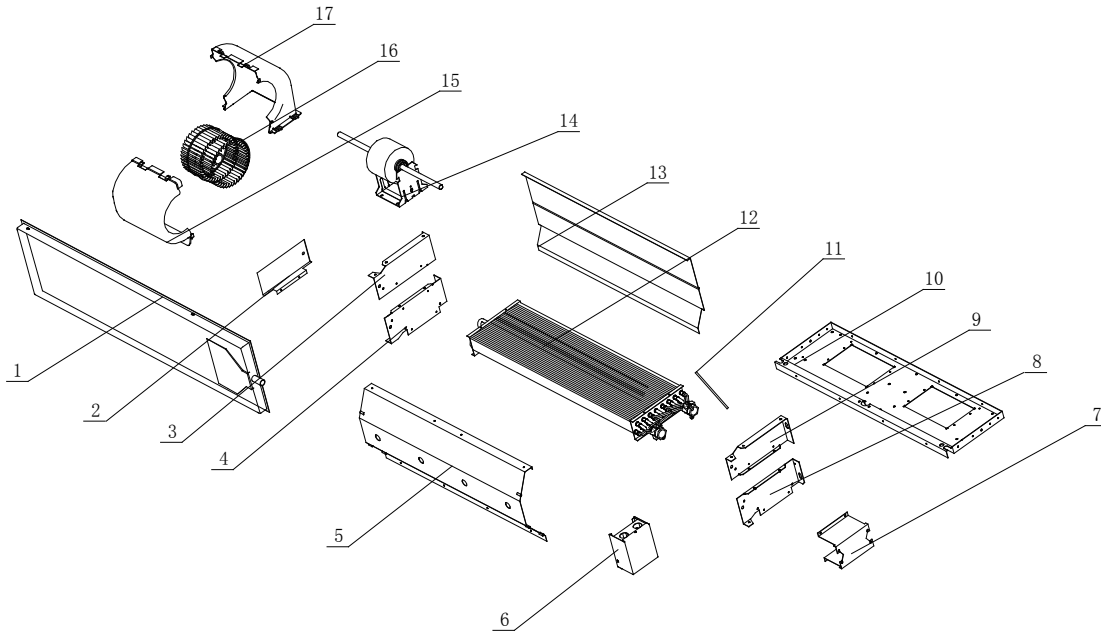
Tapping Screws (8)



Fig. 6

6 Exploded view and spare part list

FP-34WA-K;FP-51WA-K;FP-68WA-K;FP-85WA-K;FP-102WA-K;FP-136WA-K;FA-204WA-K



FP-34WA-K (EM51000010) (EM51000130)

No.	Name	Code	Quantity
1	Water Tray Assy	12418810	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229526	1
6	Electric Box Assy	01407308	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729530	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109527	1
13	Cover Board Assy	012595305	1
14	Motor	150195264	1
15	Front Propeller Housing	22202030	1
16	Centrifugal Fan	10319051	1
17	Rear Propeller Housing	22202029	1

FP-51WA-K(EM51000020) (EM51000140)

No.	Name	Code	Quantity
1	Water Tray Assy	12418811	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229528	1
6	Electric Box Assy	01407308	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729529	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	011095271	1
13	Cover Board Assy	012595306	1
14	Motor	15707302	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-68WA-K(EM51000030) (EM51000150)

No.	Name	Code	Quantity
1	Water Tray Assy	12418813	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229525	1
6	Electric Box Assy	014073081	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729527	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109525	1
13	Cover Board Assy	012595307	1
14	Motor	157073021	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-85WA-K(EM51000040) (EM51000160)

No.	Name	Code	Quantity
1	Water Tray Assy	12418814	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229527	1
6	Electric Box Assy	014073082	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729526	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	011095251	1
13	Cover Board Assy	012595308	1
14	Motor	157073022	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-102WA-K (EM51000050) (EM51000170)

No.	Name	Code	Quantity
1	Water Tray Assy	12418814	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229527	1
6	Electric Box Assy	014073083	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729526	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109526	1
13	Cover Board Assy	012595303	1
14	Motor	15019524	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-136WA-K(EM51000060) (EM51000180)

No.	Name	Code	Quantity
1	Water Tray Assy	12418817	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229524	1
6	Electric Box Assy	014073085	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729521	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109523	1
13	Cover Board Assy	012595309	1
14	Motor	157073022	1
	Motor	15707301	1
15	Front Propeller Housing	22202030	3
16	Centrifugal Fan	10319051	3
17	Rear Propeller Housing	22202029	3

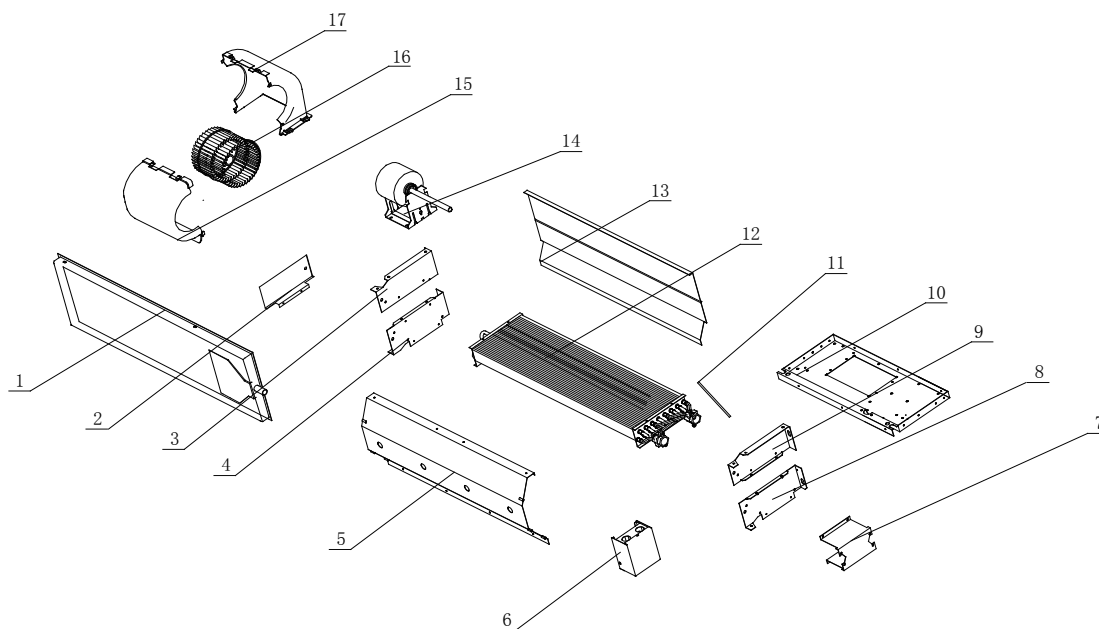
FP-170WA-K(EM51000070) (EM51000190)

No.	Name	Code	Quantity
1	Water Tray Assy	12418817	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229524	1
6	Electric Box Assy	014073088	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729522	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109528	1
13	Cover Board Assy	012595309	1
14	Motor	157073022	2
15	Front Propeller Housing	22202030	4
16	Centrifugal Fan	10319051	4
17	Rear Propeller Housing	22202029	4

FP-204WA-K (EM51000080) (EM51000200)

No.	Name	Code	Quantity
1	Water Tray Assy	12418817	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229524	1
6	Electric Box Assy	014073089	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729522	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109528	1
13	Cover Board Assy	012595309	1
14	Motor	157073024	2
15	Front Propeller Housing	22202030	4
16	Centrifugal Fan	10319051	4
17	Rear Propeller Housing	22202029	4

FP-34WAH-K;FP-51WAH-K;FP-68WAH-K;FP-85WAH-K;FP-102WAH-K;FP-136WAH-K;FP-136WAH-K;FA-204WAH-K.



FP-34WAH-K (M51000290) (EM51000390)

No.	Name	Code	Quantity
1	Water Tray Assy	12418810	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229526	1
6	Electric Box Assy	0140730812	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729530	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109527	1
13	Cover Board Assy	012595305	1
14	Motor	15707301	1
15	Front Propeller Housing	22202030	1
16	Centrifugal Fan	10319051	1
17	Rear Propeller Housing	22202029	1

FP-51WAH-K(EM51000330) (EM51000400)

No.	Name	Code	Quantity
1	Water Tray Assy	12418811	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229528	1
6	Electric Box Assy	014073081	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729529	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	011095271	1
13	Cover Board Assy	012595306	1
14	Motor	157073021	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-68WAH-K(EM51000350)

No.	Name	Code	Quantity
1	Water Tray Assy	12418813	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Base Plate	01229525	1
6	Electric Box Assy	014073082	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729527	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109525	1
13	Cover Board Assy	012595307	1
14	Motor	157073022	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-68WAH-K (EM51000410)

No.	Name	Code	Quantity
1	Water Tray Assy	12418813	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229525	1
6	Electric Box Assy	014073082	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729527	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109525	1
13	Cover Board Assy	012595307	1
14	Motor	157073022	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-85WHA-K (EM51000360) (EM51000450)

No.	Name	Code	Quantity
1	Water Tray Assy	12418814	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229527	1
6	Electric Box Assy	014073083	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729526	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	011095251	1
13	Cover Board Assy	012595308	1
14	Motor	15019523	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-102WAH-K (EM51000340) (EM51000420)

No.	Name	Code	Quantity
1	Water Tray Assy	12418814	1
2	Cooling Voil Protecting Plate	01498810	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229527	1
6	Electric Box Assy	0140730811	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01729526	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109526	1
13	Cover Board Assy	012595303	1
14	Motor	157073024	1
15	Front Propeller Housing	22202030	2
16	Centrifugal Fan	10319051	2
17	Rear Propeller Housing	22202029	2

FP-136WAH-K (EM51000320) (EM51000430)

No.	Name	Code	Quantity
1	Water Tray Assy	12418817	1
2	Cooling Voil Protecting Plate	01498813	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229524	1
6	Electric Box Assy	0140730814	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01749521	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109523	1
13	Cover Board Assy	012595309	1
14	Motor	157073024	1
15	Motor	15707301	1
16	Front Propeller Housing	22202030	3
17	Centrifugal Fan	10319051	3
18	Rear Propeller Housing	22202029	3

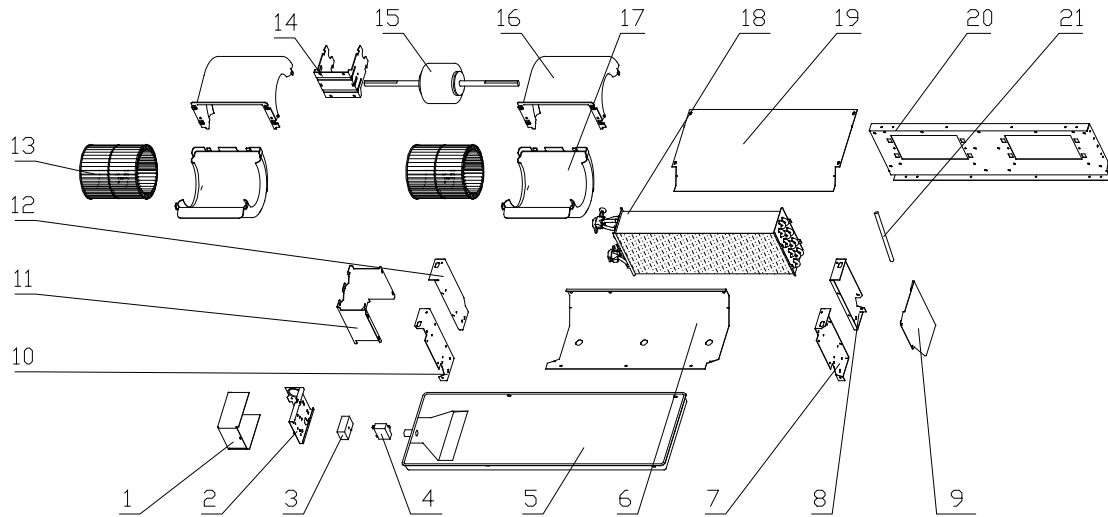
FP-170WAH-K(EM51000370) (EM51000440)

No.	Name	Code	Quantity
1	Water Tray Assy	12418817	1
2	Cooling Voil Protecting Plate	01498813	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229524	1
6	Electric Box Assy	0140730813	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01749522	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109528	1
13	Cover Board Assy	012595309	1
14	Motor	157073024	2
15	Front Propeller Housing	22202030	4
16	Centrifugal Fan	10319051	4
17	Rear Propeller Housing	22202029	4

FP-204WAH-K (EM51000380) (EM51000460)

No.	Name	Code	Quantity
1	Water Tray Assy	12418817	1
2	Cooling Voil Protecting Plate	01498813	1
3	Left Terminal Plate 1	01499524	1
4	Left Terminal Plate 2	01499527	1
5	Base Plate	01229524	1
6	Electric Box Assy	014073089	1
7	Devided (collective) Water Joint Suport	01728810	1
8	Right Terminal Plate 1	01499525	1
9	Right Terminal Plate 2	01499526	1
10	Motor Support	01749522	1
11	Air Discharge Rubber Pipe	76710060	1
12	Cooling Coil Assy	01109524	1
13	Cover Board Assy	012595309	1
14	Motor	157073025	2
15	Front Propeller Housing	22202030	4
16	Centrifugal Fan	10319051	4
17	Rear Propeller Housing	22202029	4

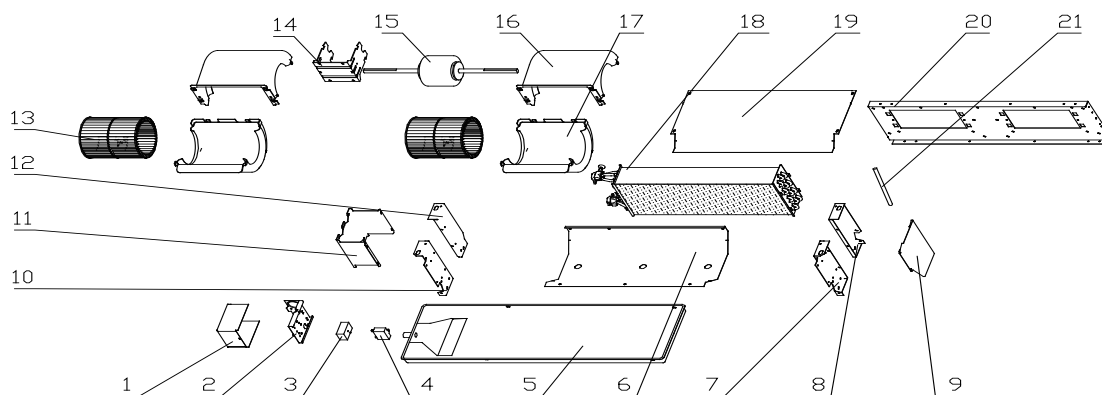
FP-34WAS-R.



FP-34WAS-R (EM51000640) (EM51000950)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010020	1
5	Water Tray Assy	12418811	1
6	Base plate	01229528	1
7	Right terminal plate 2	01499526	1
8	Right terminal plate 1	01499525	1
9	Cooling coil protecting plate	01498810	1
10	Left terminal plate 2	01499527	1
11	Liquid Distributor Retaining Plate	01728810	1
12	Left terminal plate 1	01499524	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073021	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	011095262	1
19	Cover board Assy	012595306	1
20	Motor support	01729529	1
21	Air discharge rubber pipe	76710060	1

FP-51WAS-R;FP-68WAS-R;FP-85WAS-R;FP-102WAS-R



FP-51WAS-R(EM51000660) (EM51000960)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010020	1
5	Waster tray Assy	12418811	1
6	Base plate	01229528	1
7	Right terminal plate 2	01499526	1
8	Right terminal plate 1	01499525	1
9	Cooling coil protecting plate	01498810	1
10	Left terminal plate 2	01499527	1
11	Liquid Distributor Retaining Plate	01728810	1
12	Left terminal plate 1	01499524	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073021	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil assy	011095262	1
19	Cover board assy	012595306	1
20	Motor support	01729529	1
21	Air discharge rubber pipe	76710060	1

FP-68WAS-R(EM51000680) (EM51000970)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010025	1
5	Water Tray Assy	12418813	1
6	Base plate	01229525	1
7	Right terminal plate 2	01499526	1
8	Right terminal plate 1	01499525	1
9	Cooling coil protecting plate	01498810	1
10	Left terminal plate 2	01499527	1
11	Liquid Distributor Retaining Plate	01728810	1
12	Left terminal plate 1	01499524	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073022	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	011095263	1
19	Cover board Assy	012595307	1
20	Motor support	01729527	1
21	Air discharge rubber pipe	76710060	1

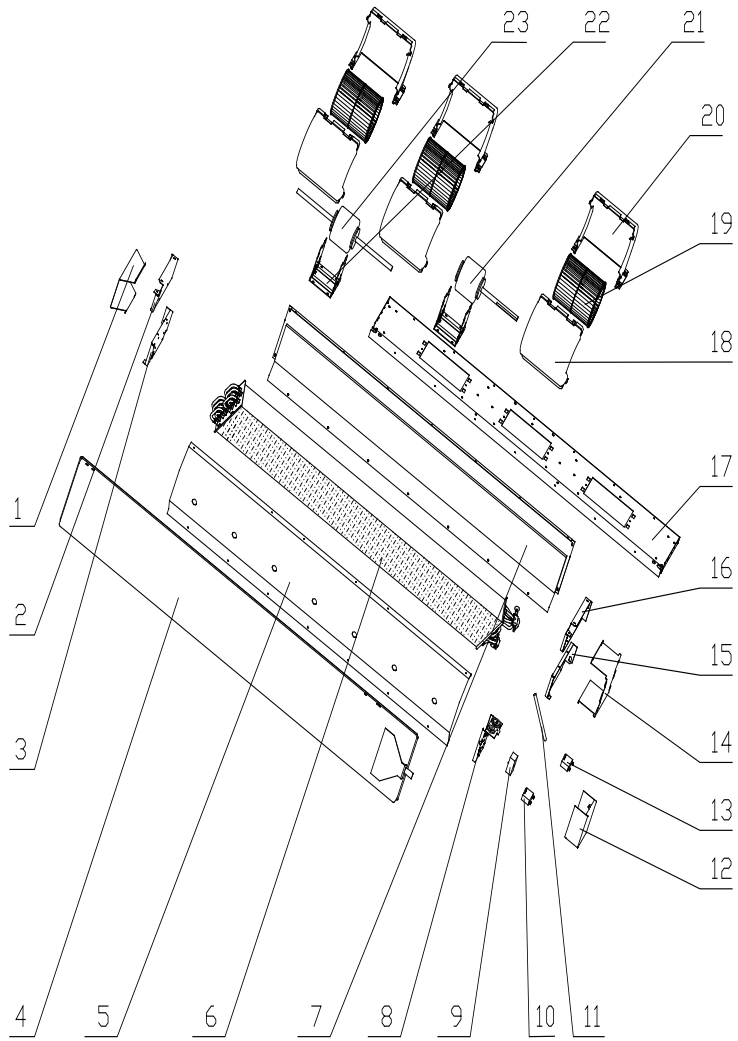
FP-85WAS-R(EM51000700) (EM51000980)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010027	1
5	Water Tray Assy	12418814	1
6	Base plate	01229527	1
7	Right terminal plate 2	01499526	1
8	Right terminal plate 1	01499525	1
9	Cooling coil protecting plate	01498810	1
10	Left terminal plate 2	01499527	1
11	Liquid Distributor Retaining Plate	01728810	1
12	Left terminal plate 1	01499524	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	15019523	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	01109526	1
19	Cover board Assy	012595308	1
20	Motor support	01729526	1
21	Air discharge rubber pipe	76710060	1

FP-102WAS-R(EM51000560) (EM51000990)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010027	1
5	Water Tray Assy	12418815	1
6	Base plate	01287303	1
7	Right terminal plate 2	01499526	1
8	Right terminal plate 1	01499525	1
9	Cooling coil protecting plate	01498810	1
10	Left terminal plate 2	01499527	1
11	Liquid Distributor Retaining Plate	01728810	1
12	Left terminal plate 1	01499524	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073024	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	011095264	1
19	Cover board Assy	0125953010	1
20	Motor support	01729525	1
21	Air discharge rubber pipe	76710060	1

FP-136WAS-R;FP-170WAS-R;FP-204WAS-R.



FP-136WAS-R(EM51000581) (EM51001000)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	01498813	1
2	Right terminal plate 1	01096005	1
3	Right terminal plate 2	01096006	1
4	Waster tray Assy	12418817	1
5	Base plate	01229524	1
6	Cooling coil Assy	01109524	1
7	Cover board Assy	012595309	1
8	Electric box base plate assembly	01287301	1
9	Terminal Board	42010265	1
10	Capacitance	33010020	1
11	Air discharge rubber pipe	76710060	1
12	Electric box cover	01419521	1
13	Capacitance	33010026	1
14	Divided (collective) Waster joint support	01728810	1
15	Left terminal plate 2	01096004	1
16	Left terminal plate1	01096003	1
17	Motor support	01749521	1
18	Rear propeller housing	22202029	3
19	Centrifugal fan	10319051	3
20	Front propeller housing	22202030	3
21	Motor	15707301	1
22	Motor support	01719521	2
23	Motor	157073024	1

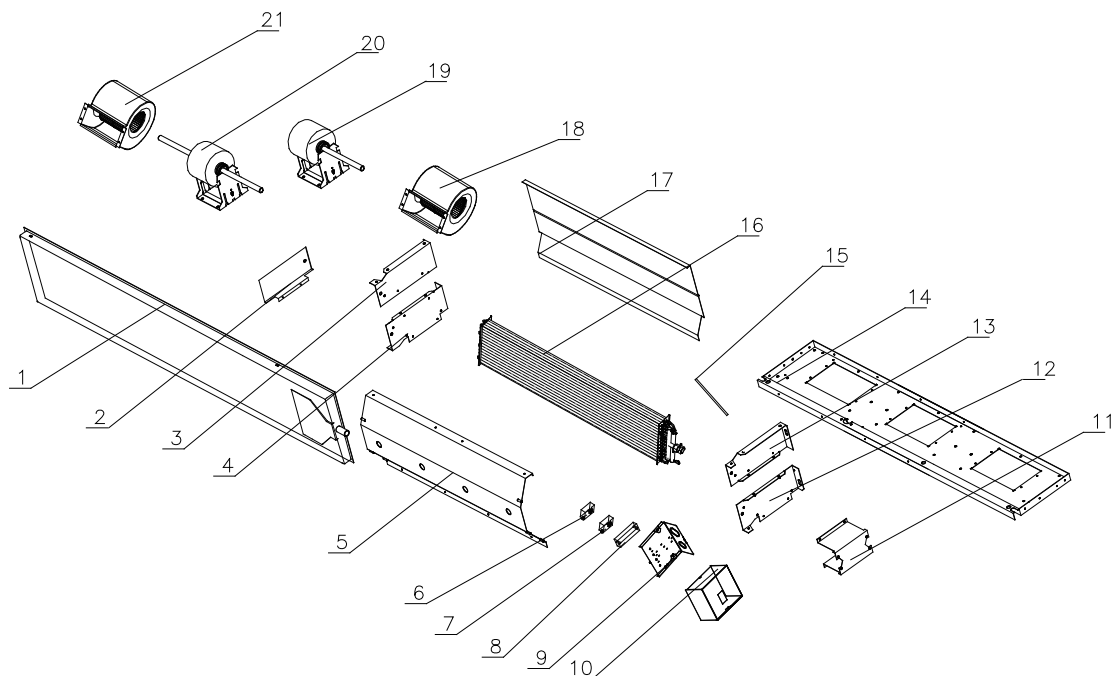
FP-170WAS-R(EM51000600) (EM51001010)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	01498813	1
2	Right terminal plate 1	01096005	1
3	Right terminal plate 2	01096006	1
4	Waster tray Assy	12418818	1
5	Base plate	01197101	1
6	Cooling coil Assy	011095241	1
7	Cover board Assy	0125953011	1
8	Electric box base plate assembly	01287301	1
9	Terminal Board	42010265	1
10	Capacitance	33010026	2
11	Air discharge rubber pipe	76710060	1
12	Electric box cover	01419521	1
13	Liquid Distributor Retaining Plate	01728810	1
14	Left terminal plate 2	01096004	1
15	Left terminal plate1	01096003	1
16	Motor support	01729522	1
17	Rear propeller housing	22202029	4
18	Centrifugal fan	10319051	4
19	Front propeller housing	22202030	4
20	Motor	157073024	2
21	Motor support	01719521	2

FP-204WAS-R(EM51000620) (EM51001020)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	01498813	1
2	Right terminal plate 1	01096005	1
3	Right terminal plate 2	01096006	1
4	Waster tray Assy	12418818	1
5	Base plate	01197101	1
6	Cooling coil Assy	011095241	1
7	Cover board Assy	0125953011	1
8	Electric box base plate assembly	01287301	1
9	Terminal Board	42010265	1
10	Capacitance	33010027	2
11	Air discharge rubber pipe	76710060	1
12	Electric box cover	01419521	1
13	Liquid Distributor Retaining Plate	01728810	1
14	Left terminal plate 2	01096004	1
15	Left terminal plate1	01096003	1
16	Motor support	01729522	1
17	Rear propeller housing	22202029	4
18	Centrifugal fan	10319051	4
19	Front propeller housing	22202030	4
20	Motor	157073025	2
21	Motor support	01719521	2

FP-238WAS-R;FP-272WAS-R;FP-306WAS-R;FP-340WAS-R.



FP-238WAS-R(EM51000870) (EM51001190)

No.	Name	Code	Quantity
1	Water tray Assy	01286422	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	02226518	1
6	Capacitor CBB61 8uF 450V	33010014	1
7	Capacitor CBB61 4uF 500V	33010013	1
8	Terminal board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric box cover board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846346	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	01126143	1
17	Cover board Assy	01266322	1
18	Fan(Left) SYP-200/190J-1	15018604	2
19	Motor PG60A	15706331	1
20	Motor PG110A	15706332	1
21	Fan(Right) SYP-200/190J-1	15018603	1

FP-272WAS-R(EM5100088) (EM51001200)

No.	Name	Code	Quantity
1	Water tray Assy	01286422	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	02226518	1
6	Capacitor CBB61 6uF/500V	33010037	1
7	Capacitor CBB61 4uF 500V	33010013	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846346	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	01126143	1
17	Cover board Assy	01266322	1
18	Fan(Right) SYP-200/190J-1	15018604	2
19	Motor PG90A	15706333	1
20	Motor PG190A	15706334	1
21	Fan(Left) SYP-200/190J-1	15018603	1

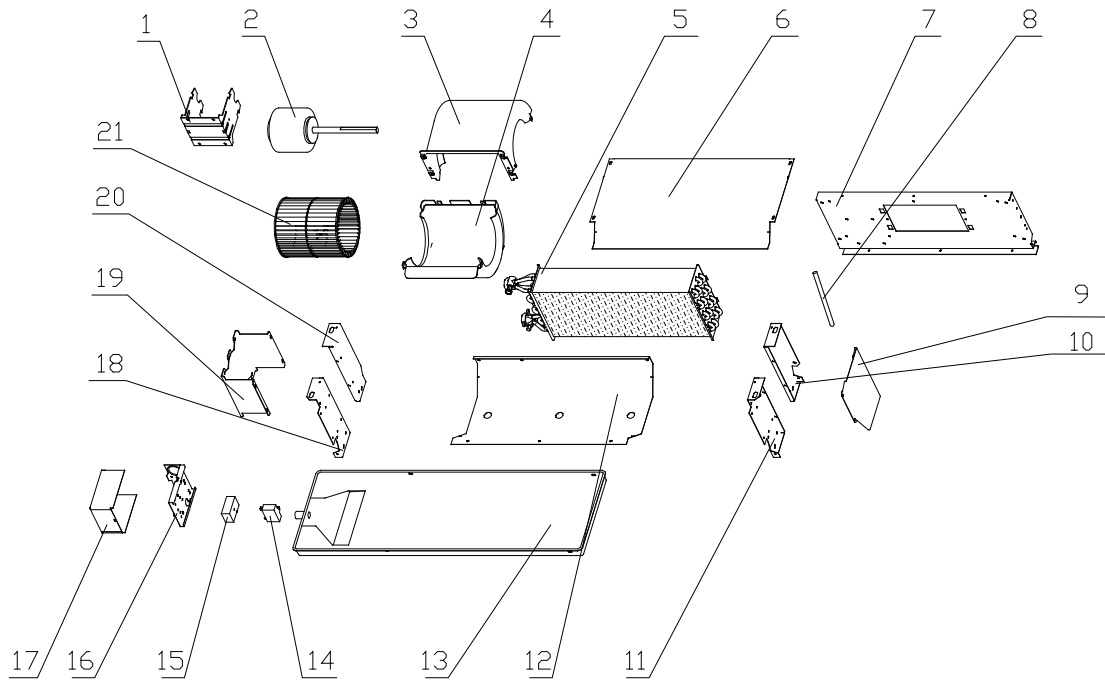
FP-306WAS-R (EM51000890) (EM51001210)

No.	Name	Code	Quantity
1	Water tray Assy	12418818	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	0222651801	1
6	Capacitor CBB61 6uF/500V	33010037	1
7	Capacitor CBB61 8uF 450V	33010014	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846353	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	0112614301	1
17	Cover board Assy	0126632201	1
18	Fan(Right) SYP-200/190J-1	15018604	2
19	Motor PG90A	15706333	1
20	Motor PG190A	15706334	1
21	Fan(Left) SYP-200/190J-1	15018603	1

FP-340WAS-R(EM51000900) (EM51001220)

No.	Name	Code	Quantity
1	Water tray Assy	12418818	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	0222651801	1
6	Capacitor CBB611A 12uF 450V	33010734	1
7	Capacitor CBB61 5uF 450V(TUV/VDE)	33010064	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846353	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	0112614301	1
17	Cover board Assy	0126632201	1
18	Fan(Right) SYP-200/190J-1	15018604	2
19	Motor PG120A	15706335	1
20	Motor PG240A	15706336	1
21	Fan(Left) SYP-200/190J-1	15018603	1

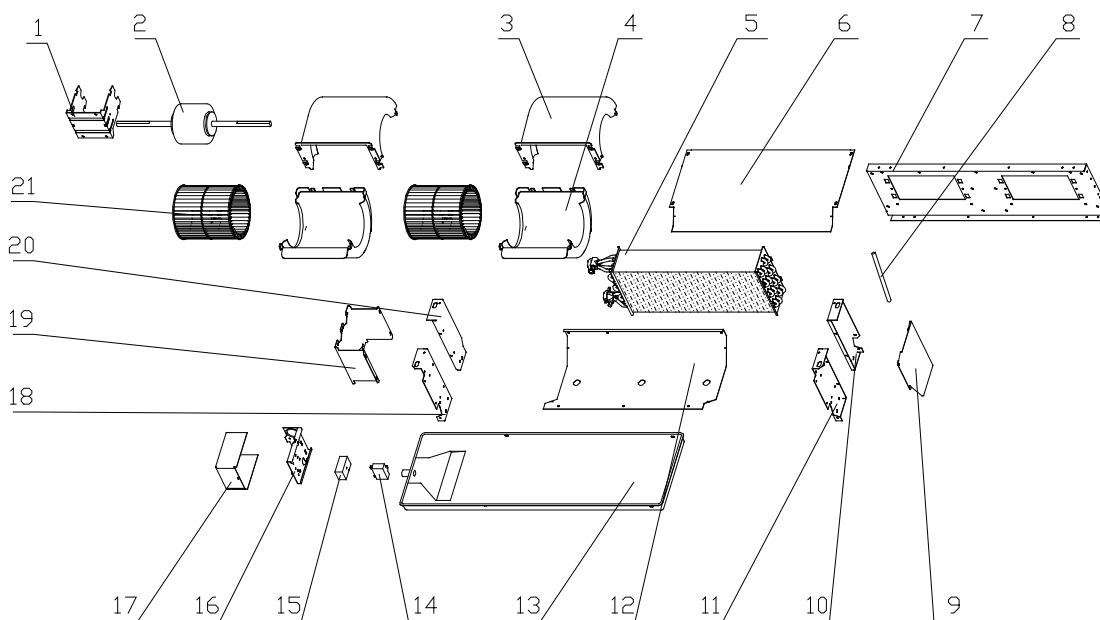
FP-34WAF-R.



FP-34WAF-R(EM51000710) (EM51001110)

No.	Name	Code	Quantity
1	Motor Support	01719521	1
2	Motor	15707301	1
3	Back helicoid	22202029	1
4	Front helicoid(off-white)	22202030	1
5	Cooling coil Assy	01126395	1
6	Cover board Assy	01266332	1
7	Motor Retaining Plate	01729530	1
8	Air discharge rubber pipe	76710060	1
9	Cooling coil protecting plate	01496426	1
10	Right terminal 2	01496430	1
11	Right terminal 1	01496429	1
12	Base plate	02226579	1
13	Water tray Assy	12418810	1
14	Capacitor	33010020	1
15	Terminal Board	42010265	1
16	Electric box base plate assembly	01287301	1
17	Electric Box Cover Plate	01419521	1
18	Left terminal 2	01496428	1
19	Liquid Distributor Retaining Plate	01847703	1
20	Left terminal 1	01496427	1
21	Impeller(black)	10319051	1

FP-51WAF-R;FP-68WAF-R;FP-85WAF-R;FP-102WAF-R.



FP-51WAF-R(EM51000720)(EM51001120)

No.	Name	Code	Quantity
1	Motor Support	01719521	1
2	Motor	157073021	1
3	Back helicoid	22202029	2
4	Front helicoid(off-white)	22202030	2
5	Cooling coil Assy	0112639501	1
6	Cover board Assy	0126633201	1
7	Motor Retaining Plate	01729529	1
8	Air discharge rubber pipe	76710060	1
9	Cooling coil protecting plate	01496426	1
10	Right terminal 2	01496430	1
11	Right terminal 1	01496429	1
12	Base plate	02226589	1
13	Water tray Assy	12418811	1
14	Capacitor	33010020	1
15	Terminal Board	42010265	1
16	Electric box base plate assembly	01287301	1
17	Electric Box Cover Plate	01419521	1
18	Left terminal 2	01496428	1
19	Liquid Distributor Retaining Plate	01847703	1
20	Left terminal 1	01496427	1
21	Impeller(black)	10319051	2

FP-68WAF-R(EM51000730) (EM51001130)

No.	Name	Code	Quantity
1	Motor Support	01719521	1
2	Motor	157073022	1
3	Back helicoid	22202029	2
4	Front helicoid(off-white)	22202030	2
5	Cooling coil assy	0112639502	1
6	Cover board assy	0126633202	1
7	Motor retaining plate	01729527	1
8	Air discharge rubber pipe	76710060	1
9	Cooling coil protecting plate	01496426	1
10	Right terminal 2	01496430	1
11	Right terminal 1	01496429	1
12	Base plate	02226588	1
13	Water tray assy	12418813	1
14	Capacitor	33010027	1
15	Terminal board	42010265	1
16	Electric box base plate assembly	01287301	1
17	Electric box cover plate	01419521	1
18	Left terminal 2	01496428	1
19	Liquid distributor retaining plate	01847703	1
20	Left terminal 1	01496427	1
21	Impeller(black)	10319051	2

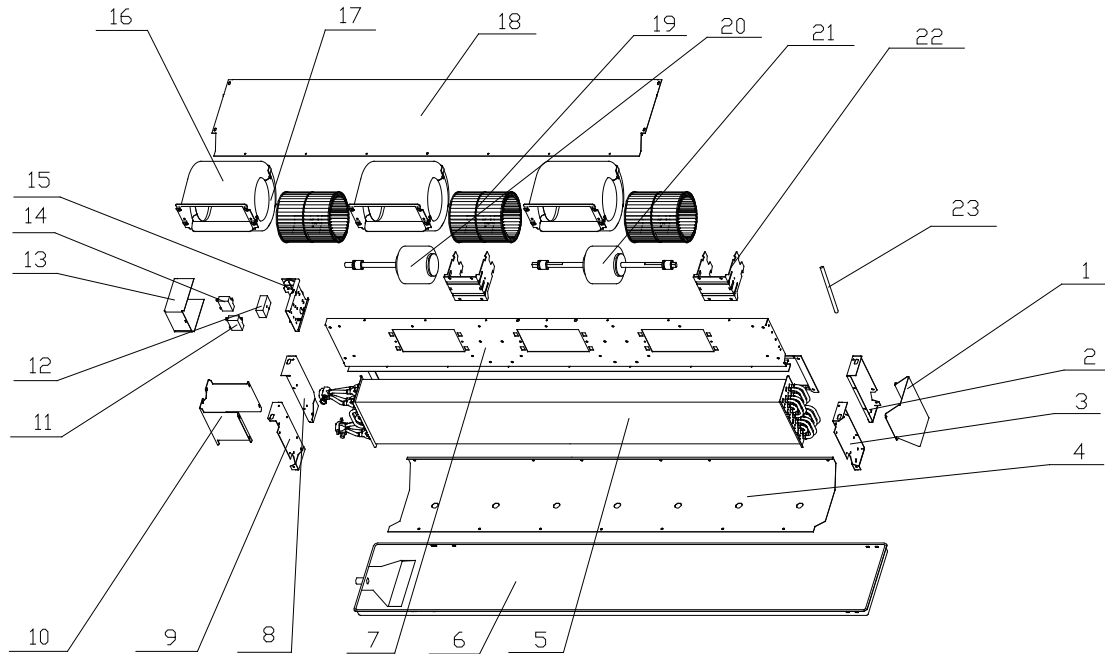
FP-85WAF-R(EM51000740)(EM51001140)

No.	Name	Code	Quantity
1	Motor support	01719521	1
2	Motor	157073025	1
3	Back helicoid	22202029	2
4	Front helicoid(off-white)	22202030	2
5	Cooling coil assy	0112639504	1
6	Cover board assy	0126633204	1
7	Motor retaining plate	01729525	1
8	Air discharge rubber pipe	76710060	1
9	Cooling coil protecting plate	01496426	1
10	Right terminal 2	01496430	1
11	Right terminal 1	01496429	1
12	Base plate	02226597	1
13	Water tray Assy	12418815	1
14	Capacitor	33010027	1
15	Terminal board	42010265	1
16	Electric box base plate assembly	01287301	1
17	Electric box cover plate	01419521	1
18	Left terminal 2	01496428	1
19	Liquid Distributor Retaining Plate	01847703	1
20	Left terminal 1	01496427	1
21	Impeller(black)	10319051	2

FP-102WAF-R(EM51000750) (EM51001150)

No.	Name	Code	Quantity
1	Motor Support	01719521	1
2	Motor	157073025	1
3	Back helicoid	22202029	2
4	Front helicoid(off-white)	22202030	2
5	Cooling coil assy	0112639504	1
6	Cover board assy	0126633204	1
7	Motor retaining plate	01729525	1
8	Air discharge rubber pipe	76710060	1
9	Cooling coil protecting plate	01496426	1
10	Right terminal 2	01496430	1
11	Right terminal 1	01496429	1
12	Base plate	02226597	1
13	Water tray assy	12418815	1
14	Capacitor	33010027	1
15	Terminal Board	42010265	1
16	Electric box base plate assembly	01287301	1
17	Electric box cover plate	01419521	1
18	Left terminal 2	01496428	1
19	Liquid distributor retaining plate	01847703	1
20	Left terminal 1	01496427	1
21	Impeller(black)	10319051	2

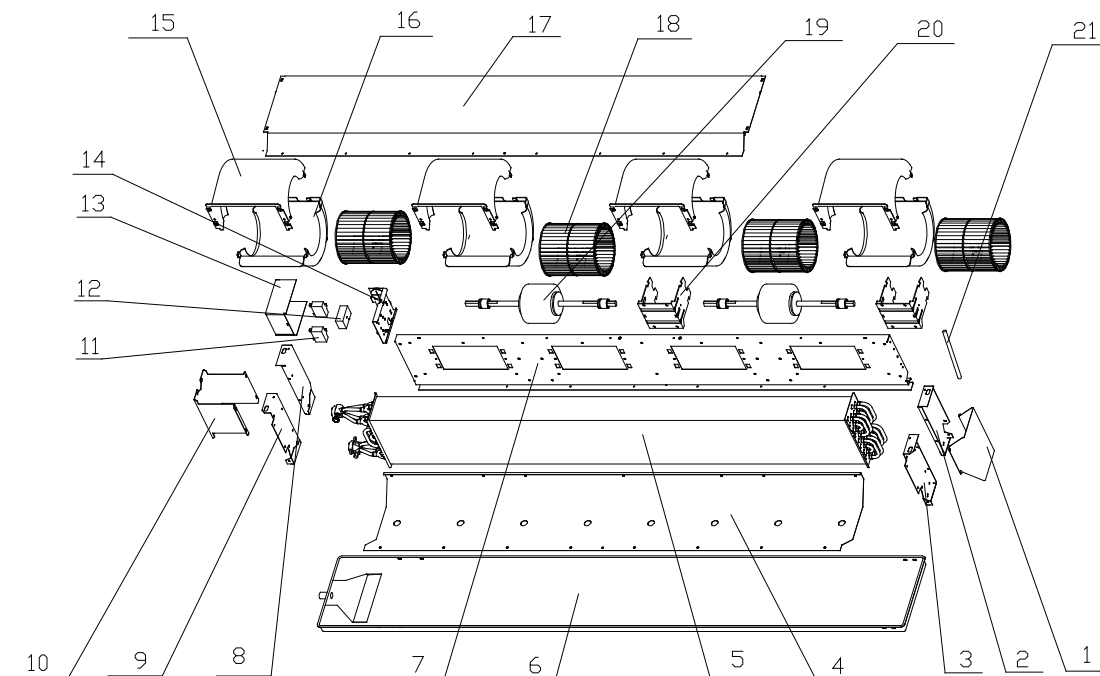
FP-136WAF-R.



FP-136WAF-R(EM51000760) (EM51001160)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	0149642601	1
2	Right terminal plate 1	01496440	1
3	Right terminal plate 2	01496439	1
4	Base plate	02226586	1
5	Cooling coil Assy	01126140	1
6	Water tray Assy	12418817	1
7	Motor Retaining Plate	01749521	1
8	Left terminal plate 1	01496442	1
9	Left terminal plate 2	01496441	1
10	Liquid Distributor Retaining Plate	0184770301	1
11	Capacitor	33010027	1
12	Terminal Board	42010265	1
13	Electric Box Cover Plate	01419521	1
14	Capacitor	33010020	1
15	Electric box base plate assembly	01287301	1
16	Back helicoid	22202029	3
17	Front helicoid(off-white)	22202030	3
18	Cover board Assy	0126633205	1
19	Impeller(black)	10319051	3
20	Motor	15707301	1
21	Motor	157073025	1
22	Motor Support	01719521	2
23	Air discharge rubber pipe	76710060	1

FP-170WAF-R;FP204WAF-R.

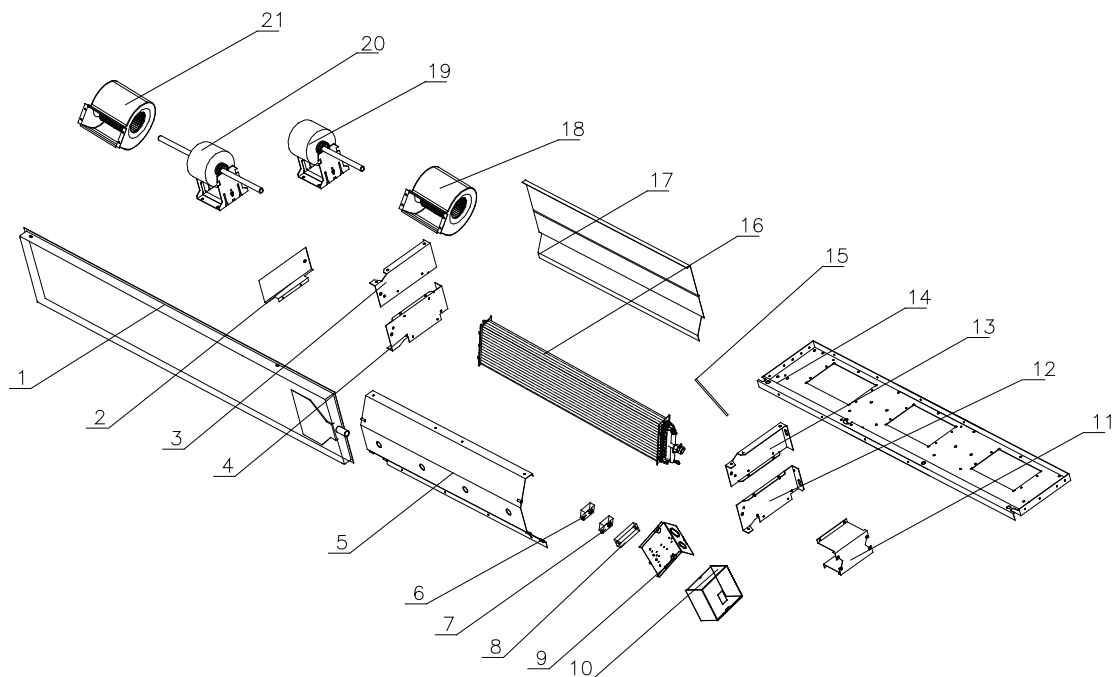


FP-170WAF-R(EM51000770) (EM51001170)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	0149642601	1
2	Right terminal plate 1	01496440	1
3	Right terminal plate 2	01496439	1
4	Base plate	02226585	1
5	Cooling coil assy	0112614001	1
6	Water tray assy	12418818	1
7	Motor retaining plate	01729522	1
8	Left terminal plate 1	01496442	1
9	Left terminal plate 2	01496441	1
10	Retaining plate	0184770301	1
11	Capacitor	33010026	2
12	Terminal board	42010265	1
13	Electric box cover plate	01419521	1
14	Electric box base plate assembly	01287301	1
15	Back helicoid	22202029	4
16	Front helicoid(off-white)	22202030	4
17	Cover board assy	0126633206	1
18	Centrifugal fan	10319051	4
19	Motor	157073025	2
20	Motor support	01719521	2
21	Air discharge rubber pipe	76710060	1

FP-204WAF-R(EM51000780) (EM51001180)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	0149642601	1
2	Right terminal plate 1	01496440	1
3	Right terminal plate 2	01496439	1
4	Base plate	02226585	1
5	Cooling coil Assy	0112614001	1
6	Water tray Assy	12418818	1
7	Motor Retaining Plate	01729522	1
8	Left terminal plate 1	01496442	1
9	Left terminal plate 2	01496441	1
10	Liquid Distributor Retaining Plate	0184770301	1
11	Capacitor	33010013	2
12	Terminal Board	42010265	1
13	Electric Box Cover Plate	01419521	1
14	Electric box base plate assembly	01287301	1
15	Back helicoid	22202029	4
16	Front helicoid(off-white)	22202030	4
17	Cover board Assy	0126633206	1
18	Impeller(black)	10319051	4
19	Motor	157073025	2
20	Motor Support	01719521	2
21	Air discharge rubber pipe	76710060	1



FP-238WAF-R(EM51000510) (EM51000550)

No.	Name	Code	Quantity
1	Water tray Assy	01286422	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	02226518	1
6	Capacitor CBB61	33010037	1
7	Capacitor CBB61	33010013	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846346	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	01126387 ① 01127662 ②	1
17	Cover board Assy	01266322	1
18	Fan(Right)	15018604	2
19	Motor PG60A	15706331	1
20	Motor PG110A	15706332	1
21	Fan(Left)	15018603	1

Notes: ① only for EM51000510 ; ② only for EM51000550

FP-272WAF-R(EM51000540) (EM51000570)

No.	Name	Code	Quantity
1	Water tray Assy	01286422	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	02226518	1
6	Capacitor CBB61	33010014	1
7	Capacitor CBB61	33010013	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846346	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	01126387 ① 01127662 ②	1
17	Cover board Assy	01266322	1
18	Fan(Right)	15018604	2
19	Motor PG60A	15706331	1
20	Motor PG110A	15706332	1
21	Fan(Left)	15018603	1

Notes: ① only for EM51000540 ; ② only for EM51000570

FP-306WAF-R(EM51000530) (EM51000590)

No.	Name	Code	Quantity
1	Water tray Assy	12418818	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	0222651801	1
6	Capacitor CBB61	33010037	1
7	Capacitor CBB61	33010014	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846353	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil assy	'0112638701 ① 01127661 ②	1
17	Cover board assy	0126632201	1
18	Fan(Right)	15018604	2
19	Motor PG60A	15706333	1
20	Motor PG110A	15706334	1
21	Fan(Left)	15018603	1

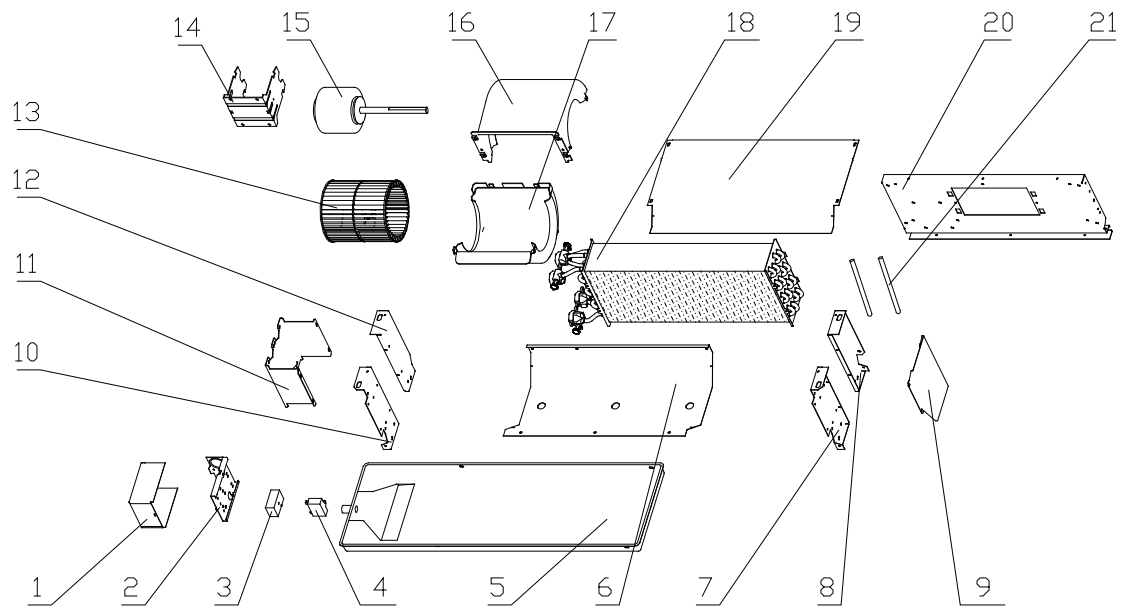
Notes: ① only for EM51000530 ; ② only for EM51000590

FP-340WAF-R(EM51000520) (EM51000610)

No.	Name	Code	Quantity
1	Water tray Assy	12418818	1
2	Cooling coil protecting plate	01496409	1
3	Left terminal plate assembly 1	01496436	1
4	Left terminal plate assembly 2	01496435	1
5	Base plate	0222651801	1
6	Capacitor CBB61	33010734	1
7	Capacitor CBB61	33010064	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric Box Cover Board	01426312	1
11	Liquid Distributor Retaining Plate	01846369	1
12	Right terminal plate assembly 1	01496434	1
13	Right terminal plate assembly 2	01496433	1
14	Motor support assembly	01846353	1
15	Air discharge rubber pipe	76710060	1
16	Cooling coil Assy	0112638701 ① '01127661 ②	1
17	Cover board Assy	0126632201	1
18	Fan(Right)	15018604	2
19	Motor PG120A	15706335	1
20	Motor PG240A	15706336	1
21	Fan(Left)	15018603	1

Notes: ① only for EM51000520 ; ② only for EM51000610

FP-34WAT-R

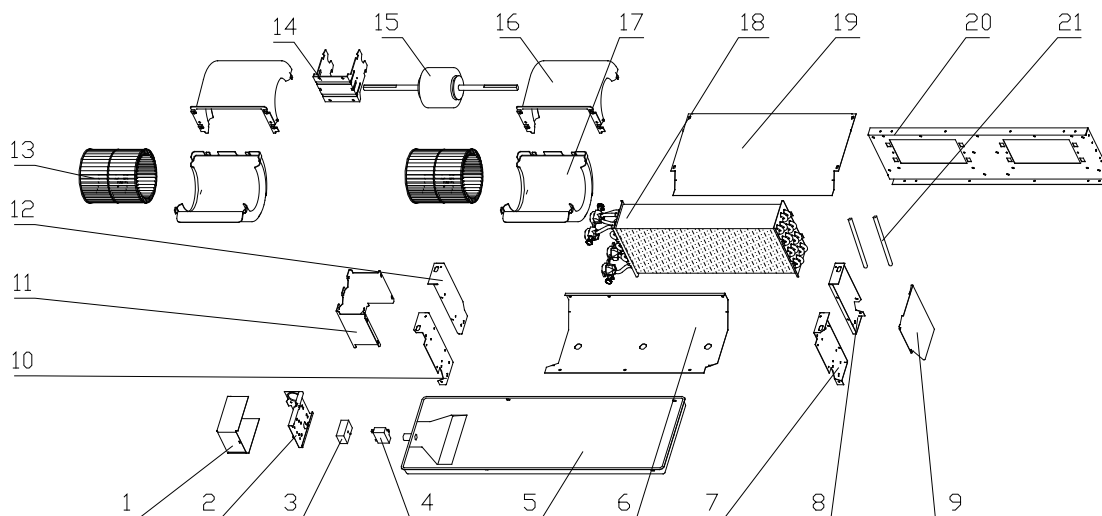


FP-34WAT-R(EM51000790) (EM51001030)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010020	1
5	Water tray Assy	12418810	1
6	Base plate	02226579	1
7	Right terminal plate 2	0149643001	1
8	Right terminal plate 1	01496429	1
9	Cooling coil protecting plate	01496426	1
10	Left terminal plate 2	0149642801	1
11	Liquid Distributor Retaining Plate	01846365	1
12	Left terminal plate 1	01496427	1
13	Centrifugal fan	10319051	1
14	Motor support	01719521	1
15	Motor	15707301	1
16	Front propeller housing	22202030	1
17	Rear propeller housing	22202029	1
18	Cooling coil Assy	01106026 ① 01126397 ②	1
19	Cover board Assy	01266332	1
20	Motor support	01729530	1
21	Air discharge rubber pipe	76710060	2

Notes: ① only for EM51000790 ; ② only for EM51001030

FP-51WAT-R;FP-68WAT-R;FP-85WAT-R;FP-102WAT-R.



FP-51WAT-R(EM51000800) (EM51001040)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal board	42010265	1
4	Capacitance	33010020	1
5	Water tray assy	12418811	1
6	Base plate	02226589	1
7	Right terminal plate 2	0149643001	1
8	Right terminal plate 1	01496429	1
9	Cooling coil protecting plate	01496426	1
10	Left terminal plate 2	0149642801	1
11	Liquid distributor retaining plate	01846365	1
12	Left terminal plate 1	01496427	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073021	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil assy	0110602601 ① 0112639701 ②	1
19	Cover board assy	0126633201	1
20	Motor support	01729529	1
21	Air discharge rubber pipe	76710060	2

Notes: ① only for EM51000800 ; ② only for EM51001040

FP-68WAT-R(EM51000810) (EM51001050)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010027	1
5	Water tray Assy	12418813	1
6	Base plate	02226588	1
7	Right terminal plate 2	0149643001	1
8	Right terminal plate 1	01496429	1
9	Cooling coil protecting plate	01496426	1
10	Left terminal plate 2	0149642801	1
11	Liquid Distributor Retaining Plate	01846365	1
12	Left terminal plate 1	01496427	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073022	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	0110602602 ① 0112639702 ②	1
19	Cover board Assy	0126633202	1
20	Motor support	01729527	1
21	Air discharge rubber pipe	76710060	2

Notes: ① only for EM51000810 ; ② only for EM51001050

FP-85WAT-R(EM51000820) (EM51001060)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010027	1
5	Water tray Assy	12418814	1
6	Base plate	02226587	1
7	Right terminal plate 2	0149643001	1
8	Right terminal plate 1	01496429	1
9	Cooling coil protecting plate	01496426	1
10	Left terminal plate 2	0149642801	1
11	Liquid Distributor Retaining Plate	01846365	1
12	Left terminal plate 1	01496427	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073024	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	0110602603 ① 0112639703 ②	1
19	Cover board Assy	0126633203	1
20	Motor support	01729526	1
21	Air discharge rubber pipe	76710060	2

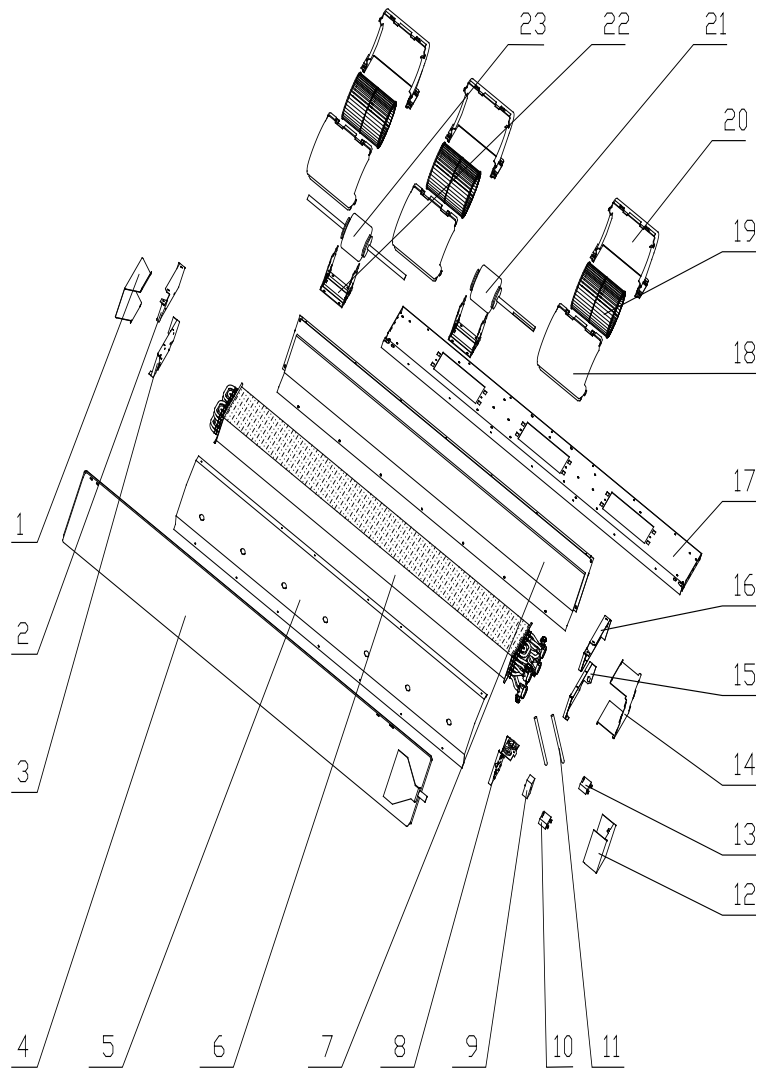
Notes: ① only for EM51000820 ; ② only for EM51001060

FP-102WAT-R(EM51000830) (EM51001070)

No.	Name	Code	Quantity
1	Electric box cover	01419521	1
2	Electric box base plate assembly	01287301	1
3	Terminal Board	42010265	1
4	Capacitance	33010027	1
5	Water tray Assy	12418815	1
6	Base plate	02226597	1
7	Right terminal plate 2	0149643001	1
8	Right terminal plate 1	01496429	1
9	Cooling coil protecting plate	01496426	1
10	Left terminal plate 2	0149642801	1
11	Liquid Distributor Retaining Plate	01846365	1
12	Left terminal plate 1	01496427	1
13	Centrifugal fan	10319051	2
14	Motor support	01719521	1
15	Motor	157073025	1
16	Front propeller housing	22202030	2
17	Rear propeller housing	22202029	2
18	Cooling coil Assy	0110602604 ① '0112639704 ②	1
19	Cover board Assy	0126633204	1
20	Motor support	01729525	1
21	Air discharge rubber pipe	76710060	2

Notes: ① only for EM51000830 ; ② only for EM51001070

FP-136WAT-R.

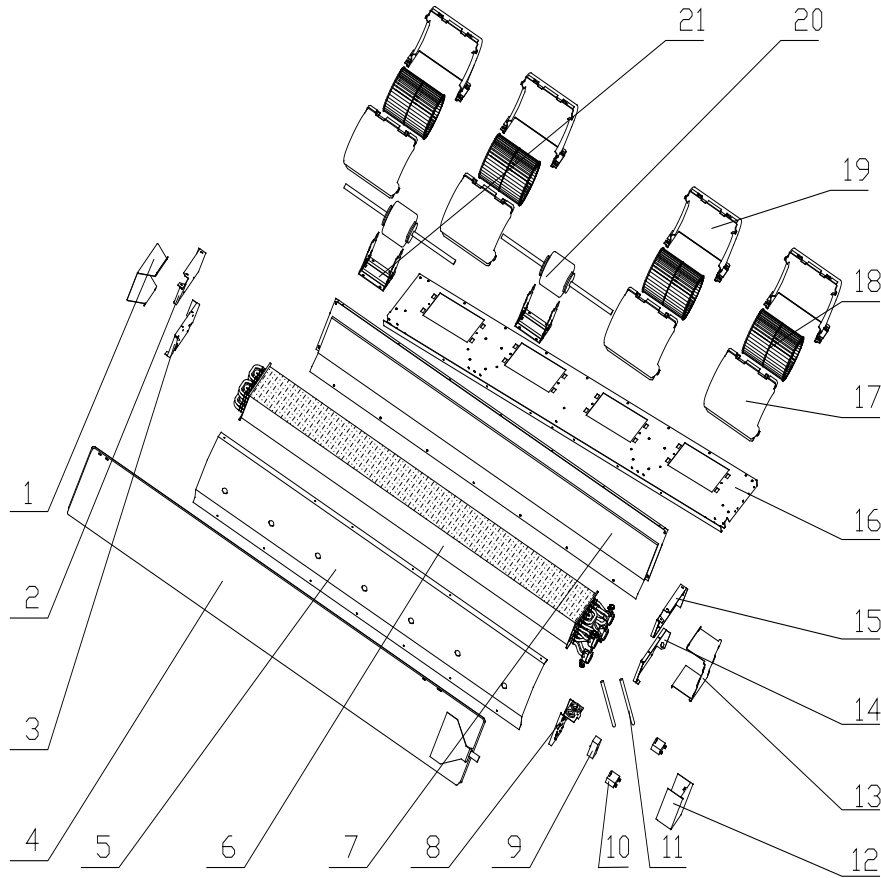


FP-136WAT-R(EM51000840) (EM51001080)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	0149642601	1
2	Right terminal plate 1	01496440	1
3	Right terminal plate 2	0149643901	1
4	Water tray Assy	12418817	1
5	Base plate	02226586	1
6	Cooling coil Assy	01106025 ① 01126398 ②	1
7	Cover board Assy	0126633205	1
8	Electric box base plate assembly	01287301	1
9	Terminal Board	42010265	1
10	Capacitance	33010020	1
11	Air discharge rubber pipe	76710060	2
12	Electric box cover	01419521	1
13	Capacitance	33010027	1
14	Liquid Distributor Retaining Plate	01846365	1
15	Left terminal plate 2	0149644101	1
16	Left terminal plate1	01496442	1
17	Motor support	01749521	1
18	Rear propeller housing	22202029	3
19	Centrifugal fan	10319051	3
20	Front propeller housing	22202030	3
21	Motor	15707301	1
22	Motor support	01719521	2
23	Motor	157073025	1

Notes: ① only for EM51000840 ; ② only for EM51001080

FP-170WAT-R;FP-204WAT-R.



FP-170WAT-R(EM51000850) (EM51001090)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	0149642601	1
2	Right terminal plate 1	01496440	1
3	Right terminal plate 2	0149643901	1
4	Water tray Assy	12418818	1
5	Base plate	02226585	1
6	Cooling coil Assy	0110602501 ① 0112639801 ②	1
7	Cover board Assy	0126633206	1
8	Electric box base plate assembly	01287301	1
9	Terminal Board	42010265	1
10	Capacitance	33010027	2
11	Air discharge rubber pipe	76710060	2
12	Electric box cover	01419521	1
13	Liquid Distributor Retaining Plate	01846365	1
14	Left terminal plate 2	0149644101	1
15	Left terminal plate1	01496442	1
16	Motor support	01729522	1
17	Rear propeller housing	22202029	4
18	Centrifugal fan	10319051	4
19	Front propeller housing	22202030	4
20	Motor	157073025	2
21	Motor support	01719521	2

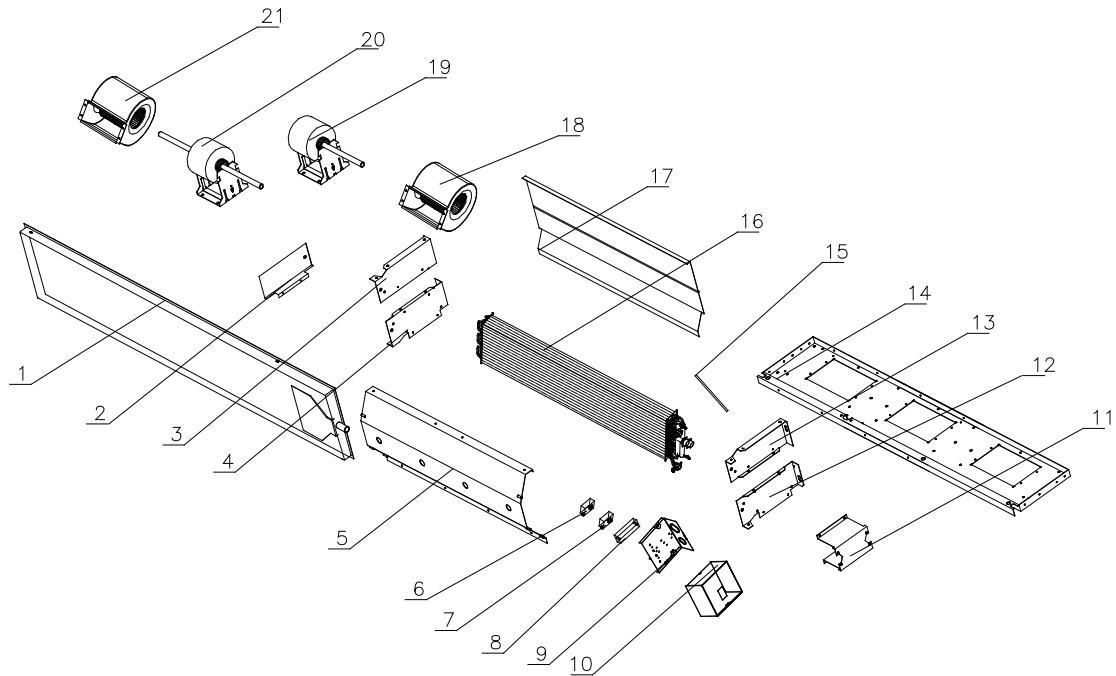
Notes: ① only for EM51000850 ; ② only for EM51001090

FP-204WAT-R(EM51000860) (EM51001100)

No.	Name	Code	Quantity
1	Cooling coil protecting plate	0149642601	1
2	Right terminal plate 1	01496440	1
3	Right terminal plate 2	0149643901	1
4	Water tray Assy	12418818	1
5	Base plate	02226585	1
6	Cooling coil Assy	0110602501 ① 0112639801 ②	1
7	Cover board Assy	0126633206	1
8	Electric box base plate assembly	01426319	1
9	Terminal board	42010265	1
10	Capacitance	33010013	2
11	Air discharge rubber pipe	76710060	2
12	Electric box cover	01419521	1
13	Liquid Distributor Retaining Plate	01846365	1
14	Left terminal plate 2	0149644101	1
15	Left terminal plate 1	01496442	1
16	Motor support	01729522	1
17	Rear propeller housing	22202029	4
18	Centrifugal fan	10319051	4
19	Front propeller housing	22202030	4
20	Motor	157073025	2
21	Motor support	01719521	2

Notes: ① only for EM51000860 ; ② only for EM51001100

FP-238WAT-R;FP-272WAT-R;FP-306WAT-R;FP-340WAT-R.



FP-238WAT-R(EM51000910) (EM51000630)

No.	Name	Code	Quantity
1	Water tray Assy	01286422	1
2	Cooling coil protecting plate	0149640901	1
3	Left terminal plate 1	01496436	1
4	Left terminal plate 2	0149643501	1
5	Base plate	02226518	1
6	Capacitance	33010013	1
7	Capacitance	33010014	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric box cover Plate	01426312	1
11	Devided (Collective) Water Joint Suport	01846370	1
12	Right terminal plate 1	01496434	1
13	Right terminal plate 2	0149643301	1
14	Motor Support Assembly	01846346	1
15	Air Discharge Rubber Pipe	76710060	2
16	Cooling coil Assy	01126098 ① 01127664 ②	1
17	Cover Board Assy	01266322	1
18	Fan	15018603	1
19	Motor	15706331	1
20	Motor	15706332	1
21	Fan	15018604	2

Notes: ① only for EM51000910 ; ② only for EM51000630

FP-272WAT-R(EM51000920) (EM51000650)

No.	Name	Code	Quantity
1	Water tray Assy	01286422	1
2	Cooling coil protecting plate	0149640901	1
3	Left terminal plate 1	01496436	1
4	Left terminal plate 2	0149643501	1
5	Base plate	02226518	1
6	Capacitance	33010037	1
7	Capacitance	33010013	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric box cover Plate	01426312	1
11	Devided (Collective) Water Joint Suport	01846370	1
12	Right terminal plate 1	01496434	1
13	Right terminal plate 2	01496434	1
14	Motor Support Assembly	01846346	1
15	Air Discharge Rubber Pipe	76710060	2
16	Cooling coil Assy	01126098 ① 01157094 ②	1
17	Cover Board Assy	01266322	1
18	Fan	15018603	1
19	Motor	15706333	1
20	Motor	15706334	1
21	Fan	15018604	2

Notes: ① only for EM51000920 ; ② only for EM51000650

FP-306WAT-R(EM51000930) (EM51000670)

No.	Name	Code	Quantity
1	Water tray Assy	12418818	1
2	Cooling coil protecting plate	0149640901	1
3	Left terminal plate 1	01496436	1
4	Left terminal plate 2	0149643501	1
5	Base plate	0222651801	1
6	Capacitance	33010037	1
7	Capacitance	33010014	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric box cover Plate	01426312	1
11	Devided (Collective) Water Joint Suport	01846370	1
12	Right terminal plate 1	01496434	1
13	Right terminal plate 2	01496434	1
14	Motor Support Assembly	01846353	1
15	Air Discharge Rubber Pipe	76710060	2
16	Cooling coil Assy	0112609801 ① 01127663 ②	1
17	Cover Board Assy	0126632201	1
18	Fan	15018603	1
19	Motor	15706333	1
20	Motor	15706334	1
21	Fan	15018604	2

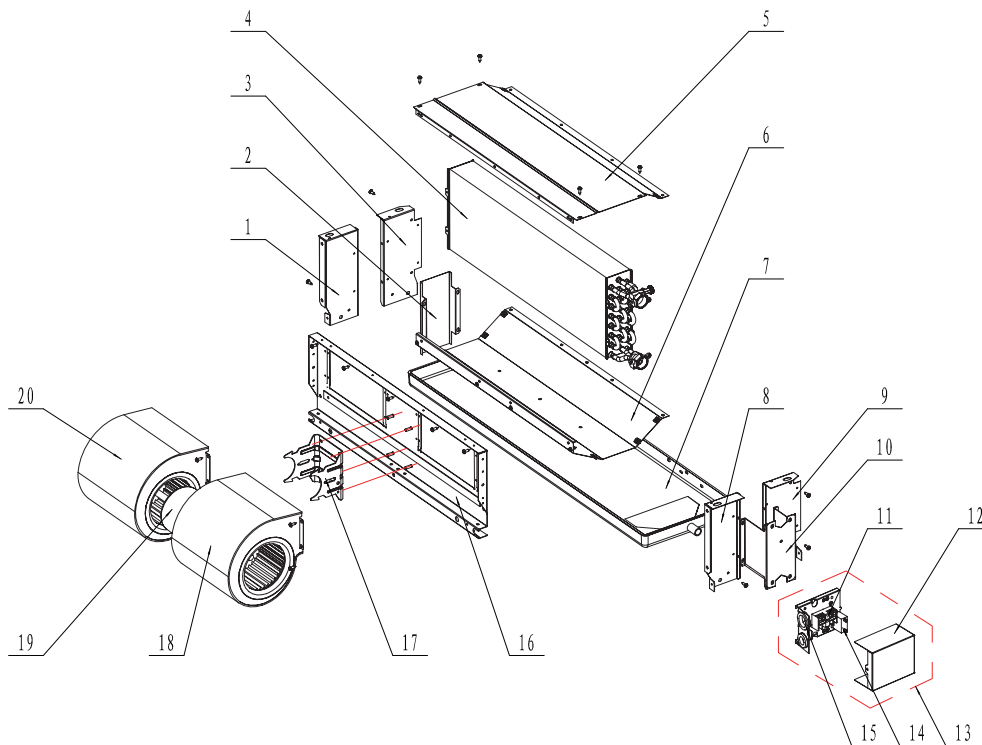
Notes: ① only for EM51000930 ; ② only for EM51000670

FP-340WAT-R(EM51000940) (EM51000690)

No.	Name	Code	Quantity
1	Water tray Assy	12418818	1
2	Cooling coil protecting plate	0149640901	1
3	Left terminal plate 1	01496436	1
4	Left terminal plate 2	0149643501	1
5	Base plate	'0222651801	1
6	Capacitance	33010734	1
7	Capacitance	33010064	1
8	Terminal Board	42010265	1
9	Electric box base plate assembly	01426310	1
10	Electric box cover Plate	01426312	1
11	Devided (Collective) Water Joint Suport	01846370	1
12	Right terminal plate 1	01496434	1
13	Right terminal plate 2	01496434	1
14	Motor Support Assembly	01846353	1
15	Air Discharge Rubber Pipe	76710060	2
16	Cooling coil Assy	0112609801 ① 01127663 ②	1
17	Cover Board Assy	0126632201	1
18	Fan	15018603	1
19	Motor	15706335	1
20	Motor	15706336	1
21	Fan	15018604	2

Notes: ① only for EM51000940 ; ② only for EM51000690

FP-51WA5S-K, FP-68WA5S-K, FP-102WA5S-K



FP-51WA5S-K(EM51001340) (EM51001370)


No.	Name	Code	Quantity
1	Right End-plate	02226000958	1
2	Surface Cooler Cover Sheet	01498810	1
3	Right End-plate	02226000960	1
4	Surface-Cooler Assy	0112644902	1
5	Cover Plate	012595261	1
6	Base Plate	01229528	1
7	Water Tray Assy	12418811	1
8	Left End-Plate	02226000961	1
9	Left End-Plate	02226000959	1
10	Devided (collective) water joint suport	01728810	1
11	Terminal Board	42010265	1
12	Electric Box Cover	01419521	1
13	Electric Box Assy	014073081	1
14	Capacitor	33010020	1
15	Cable Cross Loop	76515202	2
16	Mounting Board Sub-assy of Motor	01326000322	1
17	Supporter	01708763	1
18	Motor for Centrifugal Fan	15008813	1
19	Fan Motor	1570636003	1
20	Motor for Centrifugal Fan	15008811	1

FP-68WA5S-K(EM51001350) (EM51001380)

No.	Name	Code	Quantity
1	Right End-plate	02226000958	1
2	Surface Cooler Cover Sheet	01498810	1
3	Right End-plate	02226000960	1
4	Surface-Cooler Assy	0112644903	1
5	Cover Plate	012595271	1
6	Base Plate	01229525	1
7	Water Tray Assy	12418813	1
8	Left End-Plate	02226000961	1
9	Left End-Plate	02226000959	1
10	Devided (collective) water joint suport	01728810	1
11	Terminal Board	42010265	1
12	Electric Box Cover	01419521	1
13	Electric Box Assy	01396000939	1
14	Capacitor	33010026	1
15	Cable Cross Loop	76515202	2
16	Mounting Board Sub-assy of Motor	01326000323	1
17	Supporter	01708763	1
18	Motor for Centrifugal Fan	15008813	1
19	Fan Motor	1570636001	1
20	Motor for Centrifugal Fan	15008811	1

FP-102WA5S-K(EM51001360) (EM51001390)

No.	Name	Code	Quantity
1	Right End-plate	02226000958	1
2	Surface Cooler Cover Sheet	01498810	1
3	Right End-plate	02226000960	1
4	Surface-Cooler Assy	0112644904	1
5	Cover Plate	01267301	1
6	Base Plate	01287303	1
7	Water Tray Assy	12418815	1
8	Left End-Plate	02226000961	1
9	Left End-Plate	02226000959	1
10	Devided (collective) water joint suport	01728810	1
11	Terminal Board	42010265	1
12	Electric Box Cover	01419521	1
13	Electric Box Assy	0140730811	1
14	Capacitor	33010027	1
15	Cable Cross Loop	76515202	2
16	Mounting Board Sub-assy of Motor	01326000321	1
17	Supporter	01708763	1
18	Motor for Centrifugal Fan	15008813	1
19	Fan Motor	15706360	1
20	Motor for Centrifugal Fan	15008811	1



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