

Ceiling Cassette Type (900x900) With Brushless DC Motor



FWKE-E



Wireless Remote Controller BRC52A



Wired Remote Controller BRC51A

- › Comfortable
- › Energy Saving
- › Low Noise
- › Low Maintenance & No Brush Sparking
- › 4 Pipe System Available*
- › Modulating Fan Speed Control
- › Optimum Air Discharge
- › Multi Comfort - 3 Air Swing Pattern Control

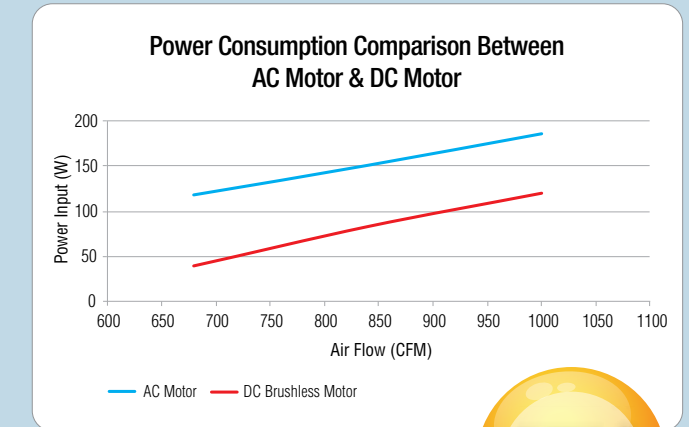
- › Branch Duct Connection
- › Low Height Design
- › Built In High Head Drain Pump & Water Flow Switch
- › Superior Sound Level
- › Fresh Air Intake
- › Low Water Pressure Drop
- › Sleep Function For Cool And Heat Mode
- › Choices Of Wired Or Wireless Remote Controller



Energy Saving

Compared to the traditional AC motor, DC motor offers the advantages of lower power input, higher efficiency and hence more energy saving.

- Brushless DC motor has less internal resistance and better heat dissipation in the stator coils. As a result, it has higher operating efficiencies since heat can more efficiently dissipate via the stationary motor housing.
- With the green building and development being so welcomed now, this Ceiling Cassette type with Brushless DC motor gives you another excellent option to consider.



Energy Saving Maximum

67%

Recommended Applications

Ceiling Cassette type fan coil with Brushless DC motor provides a green and pleasant environment.



Office



Home



Restaurant

Low Noise

Due to no brushes or a mechanical commutator, it has less shaft friction or inertia and hence less audible noise as low as 16 dBA.



Low Maintenance & No Brush Sparking

Brushless DC motor does not use carbon brushes or a mechanical commutator, thus, it is low maintenance and non-sparking.

4 Pipe System Available*

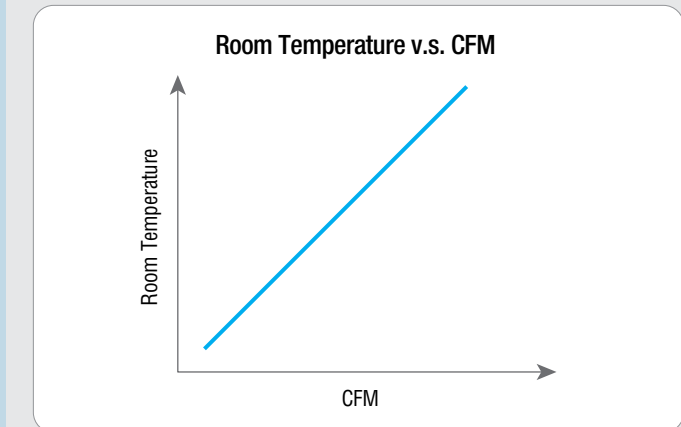
4 pipe system allows a distribution system that contains both hot water supply with return lines and a chilled water supply with return lines.

* FWKE-EH model

Modulating Fan Speed Control

Fan speed modulates steplessly based on room temperature to reduce the difference between room temperature and set temperature and hence provides maximum comfort and reduces energy consumption.

* Available in auto fan mode



Specification for Ceiling Cassette Type ~ 50Hz (2 Pipe System)

MODEL	FWKE05E				FWKE08E				FWKE11E						
	QUIET	LOW	MEDIUM	HIGH	QUIET	LOW	MEDIUM	HIGH	QUIET	LOW	MEDIUM	HIGH			
NOMINAL COOLING CAPACITY	Btu/h	8200	11900	15900	20100	15200	19800	24700	30000	21000	26800	33100	40100		
	W	2400	3500	4650	5900	4550	5800	7250	8800	6150	7850	9700	11750		
NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	5800	8700	11700	15400	11000	14500	18500	21900	14600	18900	23800	28600		
	W	1710	2540	3440	4510	3220	4260	5410	6430	4270	5540	6970	8370		
NOMINAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	11300	15200	19800	24200	18400	23900	30400	38200	24100	31600	39100	46700		
	W	3300	4450	5800	7100	5400	7000	8900	11200	7050	9250	11450	13700		
FAN INPUT POWER	W	7	12	19	37	17	26	50	90	23	39	83	120		
NOMINAL RUNNING CURRENT	A	0.11	0.13	0.19	0.26	0.19	0.28	0.43	0.74	0.21	0.35	0.55	0.95		
POWER SOURCE	V/Ph/Hz	220-240 / 1 / 50													
REFRIGERANT TYPE		N/A													
CONTROL	AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER (UP & DOWN)													
		LCD WIRELESS MICRO-COMPUTER REMOTE CONTROL													
AIR FLOW	CFM	220	350	470	620	420	560	720	890	510	680	870	1060		
EXTERNAL STATIC PRESSURE (H/M/L)	Pa	N/A													
NOMINAL WATER FLOW RATE	USGPM	1.84	2.68	3.56	4.52	3.41	4.44	5.55	6.74	4.71	6.01	7.43	9.00		
	Litres/min	6.96	10.15	13.48	17.10	12.90	16.81	21.02	25.51	17.83	22.76	28.12	34.06		
HEAD LOSS (COOLING)	kPa	5	10	15	24	7	9	14	20	15	22	30	41		
HEAD LOSS (HEATING) : 50°C	kPa	4	8	13	21	5	8	12	18	12	20	26	37		
MAX. WORKING PRESSURE	kPa	1608													
SURFACE AIR VELOCITY	m/s	0.27	0.42	0.60	0.64	0.43	0.55	0.68	0.81	0.45	0.57	0.71	0.83		
SOUND PRESSURE LEVEL	dBA	16	23	31	37	31	37	42	47	34	41	46	51		
UNIT DIMENSION - () WITH PANEL H X W X D	mm	265 X 820 X 820 (340 X 990 X 990) 300 X 820 X 820 (375 X 990 X 990)													
PACKING DIMENSION - () PANEL H X W X D	mm	341 X 916 X 916 (125 X 1020 X 1020) 376 X 916 X 916 (125 X 1020 X 1020)													
UNIT WEIGHT	kg	26 + 4				28 + 4				32 + 4					
CONDENSATE DRAIN SIZE	mm	19.05													
PIPE CONNECTION	mm	19.05													
FAN	TYPE	TURBO FAN													
	DRIVE	DIRECT													
FAN SPEED	RPM	200	280	360	450	350	440	550	660	400	510	630	750		
FAN MOTOR	TYPE	BLDC													
	INDEX OF PROTECTION (IP)	IP20				IP20				IP20					
	INSULATION GRADE	E				E				E					
	RATED RUNNING CURRENT	A	0.11	0.13	0.19	0.26	0.19	0.28	0.43	0.74	0.21	0.35	0.55	0.95	
	STARTING CURRENT	A	1.5				2.2				2.2				
	MOTOR OUTPUT	W	70				70				100				
POLES		8				8				8					
COIL	TUBE	MATERIAL	COPPER												
		DIAMETER	mm	7.00											
	FIN	MATERIAL	ALUMINUM												
		FACE AREA	m²	0.39				0.37				0.46			
		ROW		2				3				3			
WATER VOLUME	Litre	1.36				1.97				2.35					
AIR QUALITY	FILTER	TYPE	WASHABLE SARANET FILTER												
		QUANTITY	pc	1											
CASING	COLOUR	LIGHY GREY													

NOTE:
A) BASED ON EUROVENT CONDITIONS
B) ADDITIONAL 10W IS REQUIRED FOR CONDENSATE DRAIN PUMP
C) SOUND PRESSURE LEVEL IS TESTED AS PER JIS STANDARD AS BELOW:
FWKE05E MODEL - 1.4M BELOW THE FACE CENTER OF AIR RETURN OF THE UNIT
FWKE08/11E MODEL - 1.5M BELOW THE FACE CENTER OF AIR RETURN OF THE UNIT

MODE	COOLING	HEATING
ENTERING AIR TEMPERATURE	27°C DB / 19°C WB	20°C DB
ENTERING WATER TEMPERATURE	7°C	50°C (2 Pipes System) 70°C (4 Pipes System)
LEAVING WATER TEMPERATURE	12°C	45°C (2 Pipes System) 60°C (4 Pipes System)

ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

Specification for Ceiling Cassette Type ~ 50HZ (4 Pipe System)

MODEL	FWKE05EH				FWKE08EH				FWKE11EH						
	QUIET	LOW	MEDIUM	HIGH	QUIET	LOW	MEDIUM	HIGH	QUIET	LOW	MEDIUM	HIGH			
NOMINAL COOLING CAPACITY	Btu/h	6800	9600	12300	15000	13300	17100	20800	24600	17700	22200	26400	30700		
	W	2000	2800	3600	4400	3900	5000	6100	7200	5200	6500	7750	9000		
NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	5300	7600	10200	13100	9900	13000	16600	19600	13300	16700	20700	24500		
	W	1560	2240	2990	3850	2910	3810	4850	5750	3890	4900	6060	7170		
NOMINAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	12800	17200	21700	26100	21800	27300	32800	38200	31900	39100	46200	53400		
	W	3750	5050	6350	7650	6400	8000	9600	11200	9350	11450	13550	15650		
FAN INPUT POWER	W	7	12	19	37	17	26	50	90	23	39	83	120		
NOMINAL RUNNING CURRENT	A	0.11	0.13	0.19	0.26	0.19	0.28	0.43	0.74	0.21	0.35	0.55	0.95		
POWER SOURCE	V/Ph/Hz	220-240 / 1 / 50													
REFRIGERANT TYPE		N/A													
CONTROL	AIR DISCHARGE OPERATION	4 WAY AUTOMATIC LOUVER (UP & DOWN)													
		LCD WIRELESS MICRO-COMPUTER REMOTE CONTROL													
AIR FLOW	CFM	220	350	470	620	420	560	720	890	510	680	870	1060		
EXTERNAL STATIC PRESSURE (H/M/L)	Pa	N/A													
NOMINAL WATER FLOW RATE (COOLING)	USGPM	1.53	2.14	2.76	3.37	2.99	3.83	4.67	5.51	3.98	4.98	5.93	6.89		
	Litres/min	5.80	8.12	10.44	12.75	11.31	14.49	17.68	20.87	15.07	18.84	22.47	26.09		
NOMINAL WATER FLOW RATE (HEATING)	USGPM	1.44	1.93	2.43	2.93	2.45	3.06	3.68	4.29	3.58	4.38	5.19	5.99		
	Litres/min	5.44	9.20	9.20	11.09	9.28	13.91	13.91	16.23	13.55	16.60	19.64	22.68		
HEAD LOSS (COOLING)	kPa	5	9	13	18	6	10	15	19	12	19	24	32		
HEAD LOSS (HEATING) : 50°C	kPa	7	10	17	22	13	18	25	32	21	30	39	52		
MAX. WORKING PRESSURE	kPa	1608													
SURFACE AIR VELOCITY	m/s	0.27	0.42	0.60	0.64	0.43	0.55	0.68	0.81	0.45	0.57	0.71	0.83		
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FAN MOTOR	TYPE	BLDC													
	INDEX OF PROTECTION (IP)	IP20				IP20				IP20					
	INSULATION GRADE	E				E				E					
	RATED RUNNING CURRENT	A	0.11	0.13	0.19	0.26	0.19	0.28	0.43	0.74	0.21	0.35	0.55	0.95	
	STARTING CURRENT	A	1.5				2.2				2.2				
	MOTOR OUTPUT	W	70				70				100				
POLES		8				8				8					
COIL	TUBE	MATERIAL	COPPER												
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