

PIONEER®

Air Conditioning & Heat Pump Systems

The "right choice" for those who want the "Best"....

FYB-M22

DC INVERTER++ SPECIFICATIONS

(DC Inverter Heat Pump)

Floor Console Mount Split Systems

(9,000 through 12,000 BTU/Hr.)

20.0~20.5 SEER - DC Inverter++



STANDARD ACCESSORIES:
• LCD WIRELESS CONTROLLER

AVAILABLE VOLTAGES:
• G : 208~230/1/60 (009-048)

AVAILABLE REFRIGERANTS:
• F : R410A ONLY



STANDARD FEATURES

- DESIGNED FOR VERTICAL FLOOR MOUNTED INSTALLATION
- COOLING ONLY OR HEAT PUMP APPLICATIONS
- ULTRA SLIM FULLY CASED COMPACT CABINET DESIGN
- FLOOR MOUNTED OR LOW WALL ATTACHED POSITIONS
- FULL ABS PLASTIC CASING FOR INDOOR UNITS
- AUTO SWEEP AIR DISCHARGE LOUVER TECHNOLOGY
- DIGITAL LCD SCREEN WIRELESS REMOTE CONTROLLER
- ULTRA QUIET AIR DELIVERY WITH HIGH PERFORMANCE
- VARIABLE SPEED ECM INDOOR FAN MOTORS
- HEAVY GAUGE CLOSED CELL INTERNAL RUBBER INSULATION
- AUTO-RESTART WITH MEMORY FOR POWER OUTAGES
- TIMER FOR PRESET STARTING AND STOPPING
- AUTO CHANGEOVER, DRY AND FAN ONLY MODES
- SEASON SENSITIVE OPERATIONAL LOGIC
- SELF LEARNING TIME-DEMAND DEFROST
- AUTOMATIC SWING DIRECTIONAL LOUVERS
- THREE + AUTO SPEED PSC BLOWER MOTOR
- DIGITAL MOTOR SPEED CONTROL SYSTEM
- WHISPER QUIET INDOOR MOTOR WITH BALL BEARINGS
- HIGH AIR FLOW VOLUME FOR QUICK PERFORMANCE
- ULTRA HIGH EFFICIENCY GROOVED COPPER TUBES
- ENHANCED LOUVERED HYDROPHILIC ALUMINUM FINNS
- LATEST TECHNOLOGIES IN DC INVERTER DRIVER SYSTEM
- DYNAMICALLY BALANCED ULTRA QUIET SCIROCCO BLOWERS
- ANTI MILDEW TREATMENT ON BLOWER WHEELS
- SUPERIOR ENERGY EFFICIENCY AND PERFORMANCE
- FULLY VARIABLE SPEED COMPRESSORS FOR ALL MODELS
- FULLY CHARGED WITH ENVIRONMENTALLY FRIENDLY R410A GAS
- PRECISION CONTROLLED COMPRESSOR AND FAN MOTORS
- ULTRA GALVANIZED SHEET METAL PARTS
- HEAVY COAT OF BAKED ENAMEL PAINT FOR THE OUTDOOR UNIT
- DURABLE OUTDOOR FAN WITH HIGH GLASS CONTENT
- EXTRA DURABLE, PERMANENTLY LUBRICATED OUTDOOR MOTOR
- INTERNAL OVERLOAD PROTECTION FOR MOTORS
- FLARE TYPE REFRIGERANT CONNECTIONS
- FULL OPERATING CHARGE OF REFRIGERANT
- STANDARDIZED CABINET DESIGN FOR ALL MODELS
- EASY ACCESS FOR PIPING AND WIRING CONNECTIONS
- HIGHEST GRADE COMPONENTS FOR LONG LIFE EXPECTANCY
- AMPLE AVAILABILITY OF SPARE PARTS AND ACCESSORIES

MODEL SERIES			FYB and UYB SERIES, Inverter ++ Version (17.0 to 21.5 SEER Range) Floor / Ceiling / Low-Wall Ductless Split Systems				
INDOOR UNIT INSTALLATION POSSIBILITIES			Floor Console or Low Wall Mount		Ceiling Suspended (Horizontal) / Floor Console or Low Wall Mount (Vertical)		
System Set Model Number			FYB018GMFILCAD	UYB018GMFILCAD	UYB024GMFILCAD	UYB036GMFILCBD	UYB048GMFILCBD
System Set Code			22022710003178	22022710003576	22022710003276	22022710003536	22022710003537
Indoor Unit Model Number			FB018GMFILDFHE	UB018GMFILCFHD	UB024GMFILCFHD	UB036GMFILCFHD	UB048GMFILCFHD
Indoor Unit Code			22022611000024	22022711000996	22022711000421	22022711000659	22022711000658
Outdoor Unit Model Number			YN012GMFI22RPE	YN018GMFI22RPE	YN024GMFI22RPE	YN036GMFI18RUE	YN048GMFI18RUE
Outdoor Unit Code			22022016016322	22022016018180	22022016016500	22023116000121	22023116000122
Power supply		V, Ph, Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz	208/230V, 1Ph, 60Hz
Cooling Performance	Rated Capacity (Min ~ Max Range)	BTU / h	12,000 (2,850 ~ 13,000)	18,000 (6,200 ~ 18,000)	24,000 (7,700 ~ 25,500)	36,000 (11,476 ~ 36,000)	48,000 (15,861 ~ 48,000)
	Rated Power Input	W	923	1,450	1,920	4,509	5,170
	Rated Current	A	4.22	6.29	8.78	20.6	23.6
	EER / EER2	BTU / W	13 / 13	12.5 / 12.5	12.5 / 12.5	8 / 8.5	9.3 / 9.3
	SEER / SEER2	BTU / W	21.5 / 22.7	21.5 / 23	20 / 21.2	17 / 19	18 / 18.9
Heating Performance	Rated Capacity (Min ~ Max Range)	BTU / h	12,000 (2,250 ~ 14,800)	20,000 (8,100 ~ 20,000)	24,000 (11,600 ~ 30,900)	38,000 (11,467 ~ 38,000)	50,000 (12,159 ~ 50,000)
	Rated Power Input	W	1,000	2,010	1,920	3,978	5,861
	Rated Current	A	4.58	8.51	/	18.2	25.5
	COP	W / W	3.52	2.92	3.66	2.80	2.50
	HSPF / HSPF2	BTU / W	10 / 10.2	10.5 / 10	11.2 / 10.3	10 / 9	11 / 10
Low Heating Capacity (@17F)	BTU / h	6,900	12,300	12,000	22,000	29,000	
MINIMUM CIRCUIT AMPACITY (Full Set)	A	13	19	22	30	36.5	
MAX.FUSE (Full Set)	A	15	30	30	45	50	
Indoor Fan Motor	Model		ZKFP-20-8-2-1	ZKFN-90-8-1	ZKFN-90-8-1	ZKFN-115-8-1	ZKFN-90-8-1
	Brand		Weiling	Weiling	Weiling	Weiling	Weiling
	Speed (Hi / Md / Lo / Min)	RPM	730 / 630 / 490	950 / 850 / 750	1,350 / 1,260 / 1,120	1,300 / 1,150 / 800	1,320 / 1,200 / 1,120
Indoor Air Flow (Hi / Md / Lo)	m3 / h	620 / 541 / 421	932 / 825 / 715	1,290 / 1,204 / 11017	1,762 / 1,559 / 1,084	2,300 / 1,900 / 1,700	
Indoor Air Flow (Hi / Md / Lo)	CFM	365 / 318 / 248	548 / 485 / 421	759 / 708 / 598	1,036 / 917 / 638	1,353 / 1,118 / 1000	
Indoor Noise Level (Hi / Md / Lo)	dB(A)	43.0 / 39.0 / 33.0	47.0 / 43.5 / 40.5	51.0 / 47.0 / 42.0	51.5 / 48.0 / 40.5	55.0 / 49.5 / 44.5	
Indoor Unit Dimensions, shown FB Model Vertical UB Model Horizontal	Net Dimensions (W*D*H)	mm	700 x 210 x 600	1,068 x 675 x 235	1,068 x 675 x 235	1,285 x 675 x 235	1,650 x 675 x 235
	Net Dimensions (W*D*H)	Inches	27"-1/2 x 8"-1/4 x 23"-5/8	42" x 26"-1/2 x 9"-1/4	42" x 26"-1/2 x 9"-1/4	50"-5/8 x 26"-1/2 x 9"-1/4	65" x 26"-1/2 x 9"-1/4
	Packing Dimensions (W*D*H)	mm	780 x 300 x 685	1,145 x 755 x 318	1,145 x 755 x 318	1,360 x 755 x 318	1,725 x 755 x 318
	Packing Dimensions (W*D*H)	Inches	30"-3/4 x 11"-3/4 x 27"	45"-1/8 x 29"-3/4 x 12"-1/2	45"-1/8 x 29"-3/4 x 12"-3/8	53"-1/2 x 29"-3/4 x 12"-3/8	67"-7/8 x 29"-3/4 x 12"-3/8
	Net / Gross Weight	Kg	14.8 / 18.6	25.9 / 31.0	27.5 / 32.7	31.3 / 37.0	39.8/46.4
	Net / Gross Weight	Lbs	32.6 / 41.0	57.1 / 68.3	60.6 / 72.1	69.0 / 81.6	87.7/102.29
Outdoor Fan Motor	Model		ZKFN-34-10-1	ZKFN-80-8-3	ZKFN-120-8-2	ZKFN-120-8-2	ZKFN-85-8-22-5 (Two)
	Brand		Weiling	Weiling	Weiling	Weiling	Weiling
	Speed (Hi / Md / Lo / Min)	RPM	800 / - / 600	810 / - / 720	900 / 810 / 450 / 360	950 / 800 / 500	850 / 750 / 650 / 550
Outdoor Air Flow (H)	m3 / h	2,200	3,500	3,800	5,100	7,650	
Outdoor Air Flow (H)	CFM	1294	2,058	2,235	3,000	4,500	
Outdoor Noise Level (H)	dB(A)	53.5	59.0	61.0	63.5	65.0	
Compressor	Model		KSK103D33UEZ3	KSN140D58UFZ	KTM240D43UKT	KTF310D43UMT	KTQ420D1UMU
	Type		ROTARY	ROTARY	Twin-ROTARY	ROTARY	ROTARY
	Brand		GMCC	GMCC	GMCC	GMCC	GMCC
	Rated Current (RLA)	A	6.4	12.0	15.4	23.5	28
Refrigerant Oil / Oil Amount	Ozs	ESTER OIL VG74, 10.5 Ozs	ESTER OIL VG74, 15 Ozs	ESTER OIL VG74, 21 Ozs	ESTER OIL VG74, 34 Ozs	ESTER OIL VG74, 47 Ozs	
Outdoor Unit	Net Dimensions (W*D*H)	mm	765 x 303 x 555	890 x 342 x 673	946 x 410 x 810	946 x 410 x 810	952 x 415 x 1,333
	Net Dimensions (W*D*H)	Inches	30"-1/8 x 11"-7/8 x 21"-7/8	35" x 13"-1/2 x 26"-1/2	37"-1/4 x 16"-1/8 x 31"-7/8	37"-1/4 x 16"-1/8 x 31"-7/8	37"-1/2 x 16"-3/8 x 52"-1/2
	Packing Dimensions (W*D*H)	mm	887 x 337 x 610	995 x 398 x 740	1090 x 500 x 885	1090 x 500 x 885	1095 x 495 x 1,480
	Packing Dimensions (W*D*H)	Inches	34"-7/8 x 13"-1/4 x 24"	39"-1/8 x 15"-5/8 x 29"-1/8	42"-7/8 x 19"-5/8 x 34"-7/8	42"-7/8 x 19"-5/8 x 34"-7/8	43"-1/8 x 19"-1/2 x 58"-1/2
	Net / Gross Weight	Kg	28.9 / 31.3	42.8 / 45.8	56.6 / 61.2	70.5 / 75.4	99.4 / 113.0
	Net / Gross Weight	Lbs	63.7 / 69.0	94.4 / 101	124.8 / 134.9	155.4 / 166.2	219.1 / 249.1
Refrigerant Type		R410A	R410A	R410A	R410A	R410A	
Expansion Device Type, Location		EXV, Outdoor	EXV, Outdoor	EXV, Outdoor	EXV, Outdoor	EXV, Outdoor	
Factory Charged Weight (Optimized for 16" Line Set)	Ozs	38.1	56.4	82.9	113.0	159.0	
Adjustment Charge (Ea. Foot length for <10' or >25')	Ozs/Ft.	0.16	0.16	0.32	0.32	0.32	
Design pressure	PSIG	550 / 340	550 / 340	550 / 340	550 / 340	550 / 340	
Refrigerant Piping	Liquid Side/ Gas Side (OD)	Inch	1/4" / 1/2"	1/4" / 1/2"	3/8" / 5/8"	3/8" / 5/8"	3/8" / 5/8"
	Max. Refrigerant Pipe Length	m	25	30	50	65	65
	Max. Refrigerant Pipe Length	Ft.	82	100	164	213	213
	Max. Height Difference	m	10	10	25	30	30
	Max. Height Difference	Ft.	33	66	82	100	100
Condensate Drain Connection Diameter	mm (In)	OD Φ 16mm (5/8")	OD Φ 25mm (1")	OD Φ 25mm (1")	OD Φ 25mm (1")	OD Φ 25mm (1")	
Inteconnecting Cable Specs		AWG 16# x 4 (TC-ER)	AWG 16# x 4 (TC-ER)	AWG 16# x 4 (TC-ER)	AWG 16# x 3 & 22# x 2Shielded	AWG 16# x 3 & 22# x 2Shielded	
Controller Included		LCD Wireless	LCD Wireless	LCD Wireless	LCD Wireless	LCD Wireless	
Temperature Ranges	Indoor Temperature Setting Range	°C / °F	17~30 / 62~86	17~30 / 62~86	17~30 / 62~86	17~30 / 62~86	17~30 / 62~86
	Indoor Min Heat (Vacation Mode)	°C / °F	8 / 46	8 / 46	8 / 46	8 / 46	8 / 46
	Outdoor Ambient Range (Cooling)	°C / °F	-15 ~ +50 / +5 ~ +122	-15 ~ +50 / +5 ~ +122	-15 ~ +50 / +5 ~ +122	-15 ~ +50 / +5 ~ +122	-15 ~ +50 / +5 ~ +122
	Outdoor Ambient Range (Heating)	°C / °F	-25 ~ +24 / -13 ~ +75	-25 ~ +24 / -13 ~ +75	-25 ~ +24 / -13 ~ +75	-25 ~ +24 / -13 ~ +75	-25 ~ +24 / -13 ~ +75
Recommended Application Area Size (Min-Max)	m2	15~30	15~30	15~30	15~30	15~30	
Based on average variables for cooling operation	Sq.Ft	215~430	325~650	430~860	650~1,300	860~1,720	

Specifications and data listed herein are subject to change without notice due to constant product and engineering improvements. Always refer to the equipment nameplate for applicable exact information. Ratings are based on laboratory tests, performed in accordance with the applicable AHRI Standards for Variable Speed Mini Split Single Zone Heat Pump Systems.