



Kirby® Fridgebox™ Series IV Outdoor Condensing Unit

World class technology
packaged in a flexible design



Medium temperature applications



Exclusively distributed by





Introduction & Overview

The latest generation Kirby® Fridgebox™ Series IV builds on Kirby's reputation of extremely durable, low maintenance refrigeration products. Built on a compact and highly flexible platform the Kirby® Fridgebox™ includes features such as indoor or outdoor installation, side discharge fans and dual pressure controls.

The inclusion of Copeland's latest generation of scroll compressors guarantees the lowest levels of noise and vibration whilst delivering optimum performance across a wide range of ambient temperatures.

Market Segments

- Retail
- Cold storage
- Convenience
- Hospitality
- Process
- Industry

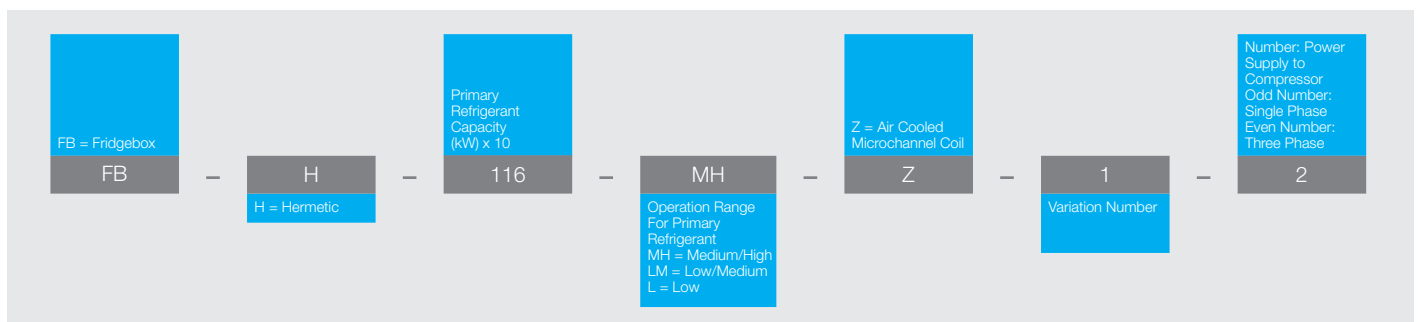


Features & Benefits

The Kirby® Fridgebox™ Series IV Condensing Units offer premium inclusions and is install ready:

- Latest generation Copeland ZB scroll compressors (fixed speed) offer reduced noise, increased durability and reliability
- High efficiency Hypercore™ microchannel condenser coil technology boosts efficiency and reduces the required refrigerant charge to limit environmental impact
- Condenser fan speed controller
- Pre-wired with MP15 protection saves time during installation
- Removable panels offer easy access for installation and servicing
- Engineered for Australia's harsh conditions guarantees operation up to 43°C ambient
- Compact and light footprint for easy installation

Nomenclature



R404A Medium Temperature Performance Data

PRODUCT NUMBER	AMB. TEMP. °C	CAPACITY RATING IN WATTS										REC'R CAP IN KG
		SST IN °C										
		LT				MT			HT			
		-35	-30	-25	-20	-15	-10	-5	0	5	10	
FBH043MHZ1-2	30		1620	2070	2590	3150	3760	4420	5130	5900	6750	6.8
	35		1450	1860	2340	2870	3440	4050	4710	5420	6180	
	40		1270	1650	2100	2580	3110	3680	4290	4930	5620	
	43		1160	1530	1950	2410	2910	3450	4030	4640	5280	
FBH051MHZ1-2	30		2160	2630	3180	3790	4470	5210	6030	6920	7900	6.8
	35		2000	2430	2940	3500	4130	4820	5580	6420	7330	
	40		1830	2230	2690	3210	3790	4430	5140	5910	6750	
	43			2110	2550	3040	3590	4200	4870	5610	6400	
FBH066MHZ1-2	30		2670	3290	4020	4850	5790	6840	8000	9280	10690	8.9
	35		2480	3050	3720	4490	5360	6330	7400	8580	9880	
	40		2280	2810	3430	4130	4930	5820	6800	7890	9070	
	43		2160	2660	3250	3920	4670	5510	6440	7470	8590	
FBH075MHZ1-2	30		3110	3800	4610	5540	6580	7750	9040	10470	12050	8.9
	35		2880	3520	4270	5130	6090	7180	8380	9710	11180	
	40		2640	3240	3920	4710	5600	6600	7720	8950	10310	
	43		2500	3060	3720	4470	5310	6260	7320	8490	9790	
FBH086MHZ1-2	30		3580	4380	5320	6390	7590	8910	10350	11930	13670	8.9
	35		3300	4040	4910	5890	7000	8230	9580	11060	12680	
	40		3020	3700	4500	5400	6410	7550	8810	10200	11700	
	43		2850	3500	4250	5100	6060	7140	8350	9680	11100	
FBH103MHZ1-2	30		4370	5330	6440	7690	9080	10600	12260	14030	15930	8.9
	35		4050	4940	5950	7110	8390	9800	11340	12990	14750	
	40		3730	4540	5470	6520	7700	9000	10420	11950	13570	
	43			4300	5180	6170	7290	8520	9870	11320	12860	
FBH116MHZ1-2	30		5090	6180	7430	8820	10350	11990	13770	15700	17800	8.9
	35		4650	5680	6850	8160	9580	11110	12750	14510	16390	
	40		4200	5170	6280	7490	8810	10230	11730	13320	14980	
	43			4870	5930	7100	8350	9700	11110	12600		

Extended capacity envelope for low temperature applications. Suction accumulator to be installed externally of unit.

R134a Medium Temperature Performance Data

PRODUCT NUMBER	AMB. TEMP. °C	CAPACITY RATING IN WATTS										REC'R CAP IN KG
		SST IN °C										
		LT				MT			HT			
		-35	-30	-25	-20	-15	-10	-5	0	5	10	
FBH043MHZ1-2	30				1590	1990	2460	2990	3590	4260	4970	7.8
	35				1490	1870	2310	2820	3400	4030	4710	
	40					1750	2170	2650	3200	3800	4450	
	46						2040	2500	3020	3590	4210	
FBH051MHZ1-2	30				1630	2100	2660	3310	4040	4830	5650	7.8
	35				1570	2010	2530	3150	3840	4600	5370	
	40					1910	2400	2990	3650	4370	5100	
	46						2290	2840	3480	4160	4860	
FBH066MHZ1-2	30				2310	2880	3570	4370	5290	6310	7440	10.4
	35				2190	2740	3400	4170	5040	6020	7100	
	40				2080	2600	3230	3970	4800	5740	6760	
	46					2480	3080	3790	4590	5480	6450	
FBH075MHZ1-2	30				2330	3000	3790	4690	5690	6790	7960	10.4
	35				2180	2820	3570	4440	5420	6480	7600	
	40				2020	2630	3360	4200	5140	6160	7250	
	46					2460	3170	3980	4890	5880	6930	
FBH086MHZ1-2	30				3060	3850	4790	5860	7060	8360	9760	10.4
	35				2900	3660	4550	5570	6710	7960	9300	
	40					3460	4310	5280	6370	7560	8840	
	46						4090	5020	6060	7200	8420	
FBH103MHZ1-2	30				3670	4660	5800	7080	8500	10040	11720	11.4
	35				3480	4430	5530	6760	8110	9580	11170	
	40					4210	5260	6430	7710	9110	10620	
	46						5020	6140	7360	8690	10120	
FBH116MHZ1-2	30				4450	5550	6830	8290	9900	11650	13510	10.4
	35				4220	5250	6460	7850	9380	11040	12820	
	40					4950	6100	7400	8850	10430	12120	
	46						5760	7000	8380	9890	11500	



Sound Data

PRODUCT NUMBER	PROVISIONAL DATA			
	100% FAN SPEED		60% FAN SPEED	
	LwA	LpA 3m	LwA	LpA 3m
FBH043MHZ1-2	76.4	55.9	69.7	49.2
FBH051MHZ1-2	76.4	55.9	69.7	49.2
FBH066MHZ1-2	79.8	59.3	72.9	52.4
FBH075MHZ1-2	79.8	59.3	72.9	52.4
FBH086MHZ1-2	79.9	59.4	73.6	53.1
FBH103MHZ1-2	80.2	59.7	75.1	54.6
FBH116MHZ1-2	80.3	59.8	75.9	55.4

Notes:

- LwA: Sound power level, dB(A)
- LpA: Sound pressure level, dB(A)
- 60% fan speed corresponds to approximately 38°C condensing running condition for R404A LMH models

Electrical Specifications

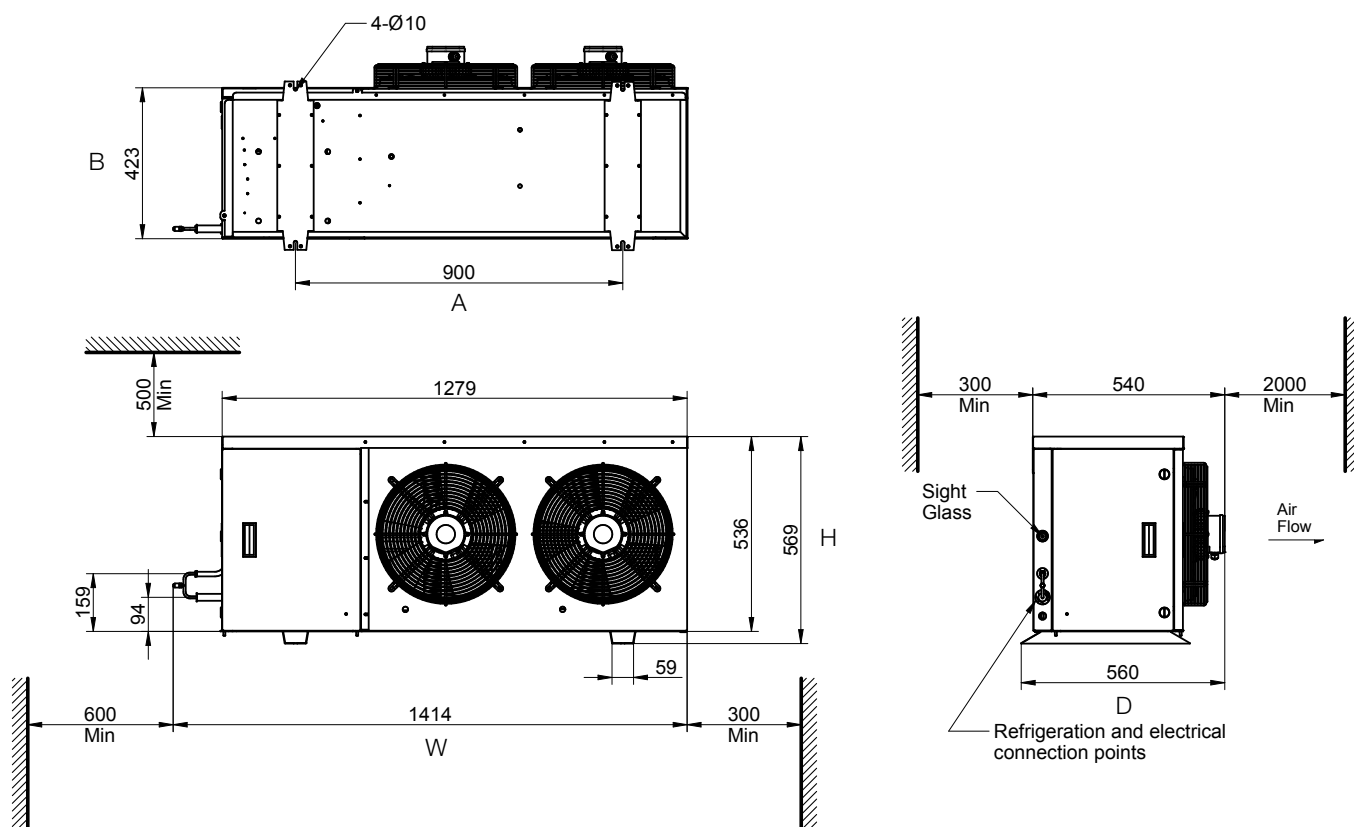
PRODUCT NUMBER	COMPRESSOR		FAN				UNIT ELECTRICAL DATA			
	MODEL	DISPL. (m3/hr)	DIA	QTY	RLA (A/Ph)	AIRFLOW	MCC (Amps/Ph)	LRA (Amps/Ph)	RLA (Amps/Ph)	INPUT (Watts)
FBH043MHZ1-2	ZB15KQE-TFD	5.9	350	2	0.82	1010	6.5	27.6	4.8	2,120
FBH051MHZ1-2	ZB19KQE-TFD	6.8	350	2	0.82	1010	8.1	33.6	5.8	2,440
FBH066MHZ1-2	ZB21KQE-TFD	8.6	500	1	2	1910	9.2	42.0	7.0	2,970
FBH075MHZ1-2	ZB26KQE-TFD	9.9	500	1	2	1910	10.9	48.0	7.8	3,400
FBH086MHZ1-2	ZB30KQE-TFD	11.6	500	1	2	1910	12.3	51.3	9.4	3,790
FBH103MHZ1-2	ZB38KQE-TFD	14.5	500	1	2	1910	14.8	67.5	11.3	4,670
FBH116MHZ1-2	ZB45KQE-TFD	17.2	500	1	2	1910	15.1	76.0	11.5	5,260



Dimensional Data

PRODUCT NUMBER	RECEIVER VOLUME (l)	CONNECTIONS		DIMENSIONS					APPROX.WEIGHT		SHIPPING VOL. (m³)
		LIQUID (mm)	SUCTION (mm)	H (mm)	W (mm)	D (mm)	A (mm)	B (mm)	UNPACKED (kg)	PACKED (kg)	
FBH043MHZ1-2	8.2	12.7	19.0	569	1414	560	900	423	84	99	0.81
FBH051MHZ1-2	8.2	12.7	19.0	569	1414	560	900	423	86	101	0.81
FBH066MHZ1-2	10.9	12.7	19.0	729	1491	575	960	423	83	103	1.04
FBH075MHZ1-2	10.9	12.7	19.0	729	1491	575	960	423	84	104	1.04
FBH086MHZ1-2	10.9	12.7	22.2	729	1491	575	960	423	93	113	1.04
FBH103MHZ1-2	10.9	12.7	22.2	729	1491	575	960	423	94	114	1.04
FBH116MHZ1-2	10.9	12.7	22.2	729	1491	575	960	423	96	116	1.04

FBH043M & FBH051M



Supporting Documentation

CL280A.doc - Fridgebox Series IV Installation Handbook

smart@ccess

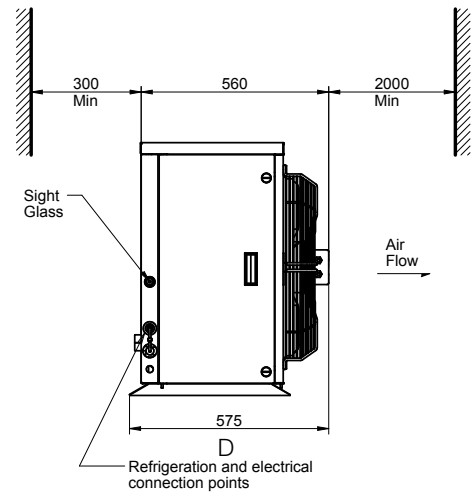
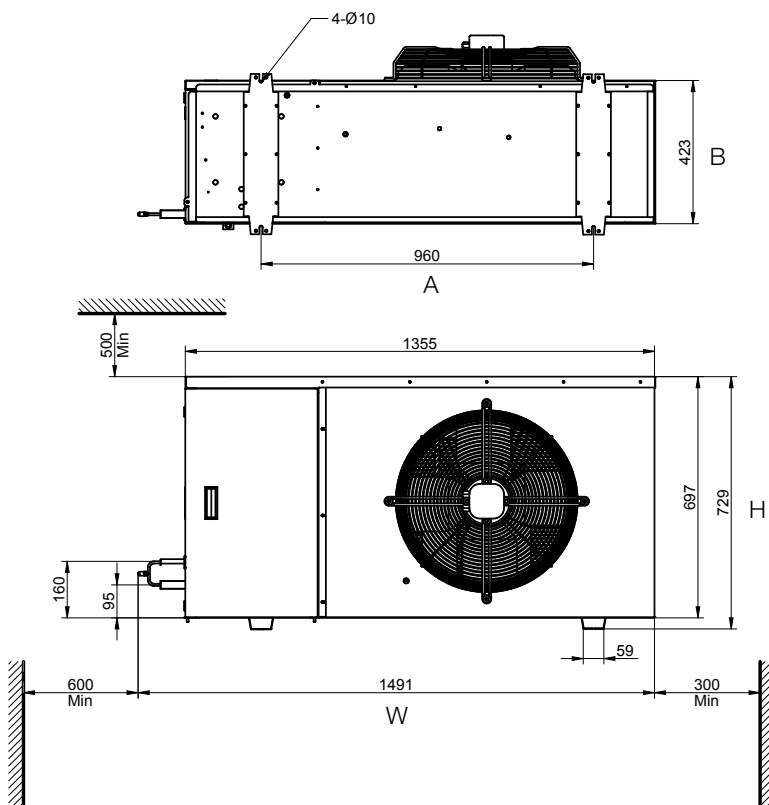
Product Specification

- Supported through smart@ccess with product selection and heatload information
- Complementary Kirby Project Tool assists with project estimations



Dimensional Data

FBH066M, FBH075M, FBH086M, FBH103M & FBH116M



Also available

Kirby® Digital Scroll Fridgebox™ - Variable Load Perfection

The Kirby® Fridgebox range is extended to include the Digital Scroll Fridgebox™ Outdoor Condensing Unit range with Copeland Scroll Digital™ compressor.

The new Kirby® Digital Scroll Fridgebox™ with Copeland Scroll Digital™ compressor matched to highly efficient micro channel condensers achieves best in class capacity and close temperature modulation, excellent COP's and system efficiency.

With its wide variable capacity between 20% and 100%, the Copeland Scroll Digital™ compressor is unmatched by any other compressor technology on the market today.

The Dixell XC Controller is included for ultimate controllability.

The Kirby® Digital Scroll Fridgebox™ is suited to the convenience sector, coolrooms and a variety of cabinet applications.

Speak to your Kirby engineer for more information.





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