



Introduction & Overview

The new Kirby® Digital Scroll Fridgebox™ with Copeland Scroll Digital™ compressor matched to highly efficient Hypercore 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™ Scroll compressor is unmatched by any other compressor technology on the market today. The Dixell XC Controller is included for ultimate controllability.

Market Segments

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



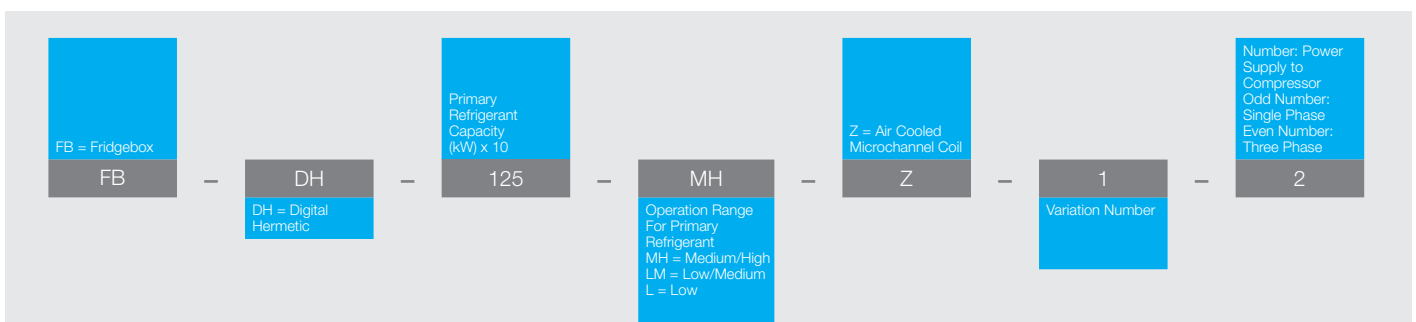
Features & Benefits

The Kirby® Digital Scroll Fridgebox™ Condensing Units offers premium inclusions and is install ready:

- Latest generation Copeland ZB Digital scroll compressors offer capacity modulation from 20% - 100%, perfectly matching demand whilst maximising system efficiency and performance
- High efficiency Hypercore™ microchannel condenser coil technology boosts efficiency and reduces the required refrigerant charge to limit environmental impact
- Dixell XC controller ensures optimal performance of the Digital scroll compressor
- Multi speed fan perfectly matches compressor modulation
- Oil safety control switch
- 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 45°C ambient



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			
	-20	-15	-10	-5	0	5	10		
FBDH066MHZ1-2	30	3990	4750	5680	6780	7980	9250	10540	8.9
	35	3760	4500	5390	6390	7470	8600	9760	
	40	3510	4240	5070	5970	6920	7900	8940	
	45		4000	4780	5580	6400	7250	8160	
FBDH088MHZ1-2	30	5380	6380	7540	8850	10290	11840	13460	8.9
	35	5040	5970	7030	8220	9530	10930	12380	
	40	4670	5520	6480	7550	8720	9950	11240	
	45		5110	5980	6930	7950	9040	10170	
FBDH103MHZ1-2	30	6530	7700	9060	10620	12310	14040	15710	8.9
	35	6150	7220	8490	9940	11510	13120	14680	
	40	5740	6720	7880	9200	10650	12130	13570	
	45		6250	7310	8520	9840	11210	12540	
FBDH116MHZ1-2	30	7610	8930	10460	12190	14030	15910	17730	8.9
	35	7160	8380	9790	11390	13110	14860	16540	
	40		7790	9080	10550	12130	13730	15260	
	45		7230	8410	9750	11210	12680		
FBDH125MHZ1-2	30	8190	9560	11130	12890	14740	16580	18280	8.9
	35	7680	8930	10370	11970	13670	15340	16870	
	40		8260	9550	11000	12530	14020		
	45			8790	10080	11450			

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			
	-20	-15	-10	-5	0	5	10		
FBDH066MHZ1-2	30	2230	2810	3450	4190	5040	6010	7120	10.4
	35	2150	2700	3320	4020	4820	5740	6790	
	40	2060	2590	3180	3840	4590	5460	6440	
	46	1970	2480	3030	3640	4340	5150	6070	
FBDH088MHZ1-2	30	2780	3520	4390	5400	6560	7850	9290	10.4
	35	2650	3350	4180	5150	6250	7490	8860	
	40	2500	3170	3960	4880	5930	7110	8410	
	46	2350	2970	3720	4590	5580	6690	7920	
FBDH103MHZ1-2	30	3550	4570	5640	6800	8090	9550	11200	10.4
	35	3410	4410	5430	6540	7760	9140	10700	
	40	3270	4240	5220	6260	7410	8700	10160	
	46		4050	4980	5960	7020	8220	9580	
FBDH116MHZ1-2	30	4200	5250	6450	7820	9380	11120	13030	10.4
	35	4000	5000	6150	7460	8940	10600	12430	
	40	3790	4730	5820	7060	8470	10040	11780	
	46		4450	5470	6640	7970	9450	11090	
FBDH125MHZ1-2	30	4670	5790	7110	8610	10300	12160	14180	10.4
	35	4460	5520	6770	8200	9800	11560	13480	
	40		5240	6420	7760	9270	10930	12730	
	46			6040	7300	8700	10240	11930	

Electrical Specifications

PRODUCT NUMBER	COMPRESSOR		CONDENSER FAN				UNIT ELECTRICAL DATA			
	MODEL	DISPL. (m3/hr)	DIA	QTY	RLA (A/Ph)	NOM INPUT (Watts)	MCC (Amps/Ph)	LRA (Amps/Ph)	RLA (Amps/Ph)	NOM INPUT (WATTS)
FBDH066MHZ1-2	ZBD21KQE-TFD	5.92	500	1	2	470	8.7	42.0	6.4	2,800
FBDH088MHZ1-2	ZBD29KQE-TFD	6.81	500	1	2	470	9.9	50.0	7.6	3,620
FBDH103MHZ1-2	ZBD38KQE-TFD	8.6	500	1	2	470	13.3	66.0	9.5	4,600
FBDH116MHZ1-2	ZBD45KQE-TFD	9.9	500	1	2	470	13.4	76.0	10.8	5,400
FBDH125MHZ1-2	ZBD48KQE-TFD	11.6	500	1	2	470	16.0	102.0	12.4	5,880

Sound Data

PRODUCT NUMBER	PROVISIONAL DATA			
	100% FAN SPEED		60% FAN SPEED	
	LwA	LpA 3m	LwA	LpA 3m
FBDH066MHZ1-2	79.8	59.8	72.9	52.9
FBDH088MHZ1-2	79.7	59.7	71.7	51.7
FBDH103MHZ1-2	81.7	61.7	80.4	60.4
FBDH116MHZ1-2	81.7	61.7	80.4	60.4
FBDH125MHZ1-2	81.7	61.7	80.4	60.4

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

Supporting Documentation

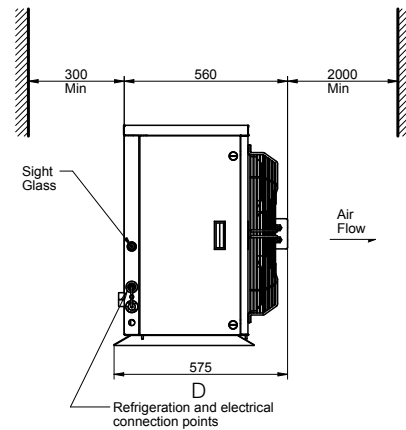
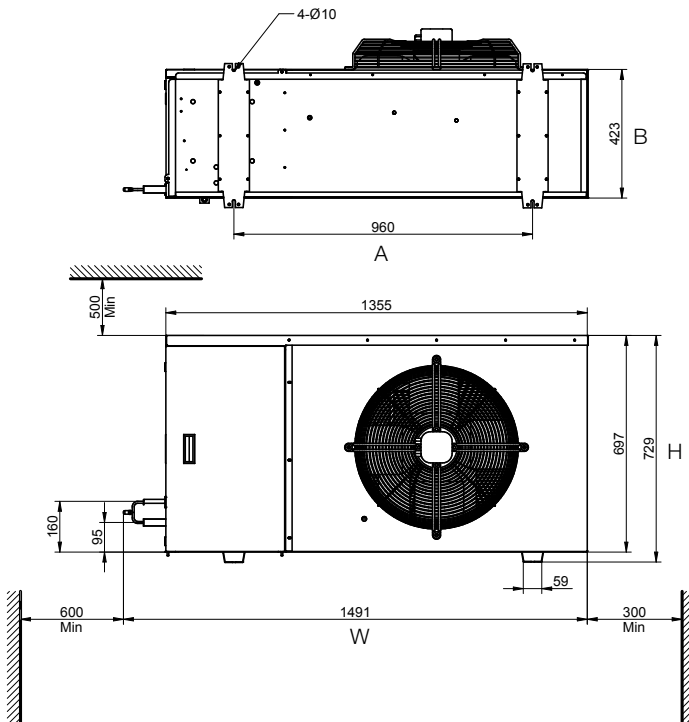
IM-003A-1.doc - Heatcraft Fridgebox With Digital Scroll Compressor Handbook

Product Specification **smart@ccess**

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

Dimensional Data

PRODUCT NUMBER	CONNECTIONS		DIMENSIONS					APPROX. WEIGHT		SHIPPING VOL. (m ³)
	LIQUID (mm)	SUCTION (mm)	H (mm)	W (mm)	D (mm)	A (mm)	B (mm)	UNPACKED (kg)	PACKED (kg)	
FBDH066MHZ1-2	12.7	19.0	729	1491	575	960	423	83	103	1.04
FBDH088MHZ1-2	12.7	19.0	729	1491	575	960	423	93	113	1.04
FBDH103MHZ1-2	12.7	22.2	729	1491	575	960	423	94	114	1.04
FBDH116MHZ1-2	12.7	22.2	729	1491	575	960	423	96	116	1.04
FBDH125MHZ1-2	12.7	22.2	729	1491	575	960	423	97	117	1.04



13 23 50
heatcraft.com.au

0800 653 330
heatcraft.co.nz

