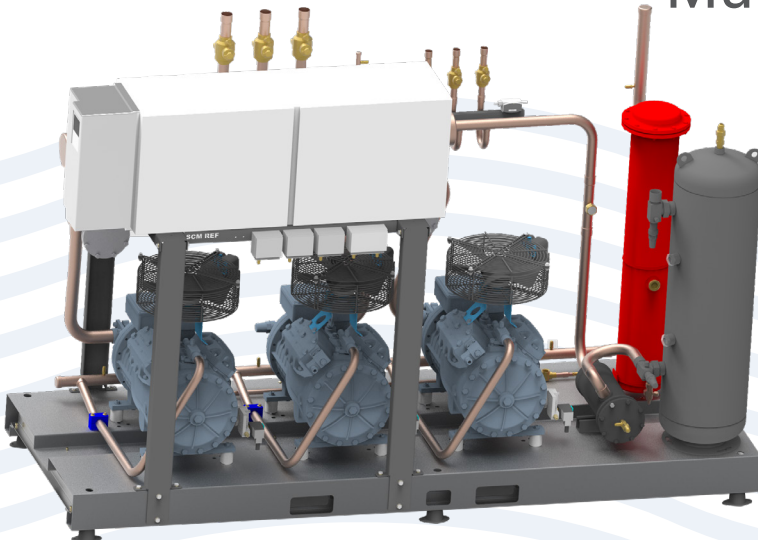




KIRBY® COMPACT RACK

Multi-Compressor HFC Rack

Smaller, lighter frame and
an efficient design



Manufactured by



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KIRBY® COMPACT RACK

Multi-Compressor HFC Rack

Introduction

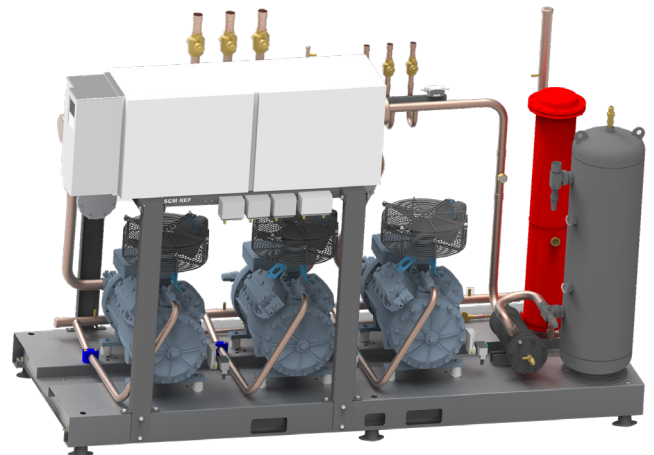
Increased interest in centralised plant applications with smaller connected loads and the development of efficient, smaller displacement compressors has allowed SCM REF Australia to develop the Kirby® Compact Rack. The application of new generation compressors on a compact frame, results in a smaller, lighter and efficient design. The overall result is a quality, high-tech unit with, lower install requirements, better low load operation and optimal performance.

Combining the advantages of a conventional rack system, and parametric control, the Kirby Compact Rack offers the simplicity of one complete unit, making it a cost-effective solution for new developments or replacement opportunities. Designed with a small footprint, this solution is ideal for applications with space constraints

Features & Benefits

The Kirby® Compact Rack range offers:

- 50L Vertical receiver with liquid level sight glasses
- Suited to all HFC refrigerants - R134a, R448A, R404A as well as many others
- Fully insulated suction header + suction filter shell
- Steel (fully painted) frame
- Common discharge header to oil separator / reservoir
- TraxOil level regulation with individual isolating valves
- High pressure safety control per compressor + high pressure / low pressure safety control per rack
- Dorin compressors
- VSD lead compressor for variable capacity control (via specific model number)
- Head cooling fans included for LT application
- Multiple field connections (liquid and suction)
- Pre-wired system with integrated controllers (Dixell or Danfoss)
- Replaceable core liquid line drier shell, sight glass and isolating valve
- Pressure transducers with isolating valves



Kirby® Compact Rack Units – Nomenclature

	CR	V	3X	H505CC Qx, Sx	924
Unit Type Compact Rack					Temprite Oil Sep Model
Variable Capacity Type V = Variable Frequency Drive Absent- Standard Fixes Speed Unit				Compressor Model HxxxCC = DORIN	
Compressor Qty					

KIRBY® COMPACT RACK UNITS R404A Performance Data

ITEM NUMBER	COMPR.	SCT (°C)	R404A CAPACITY AT 20°C RG, 2K S/C									RECEIVER CAPACITY (kg)
			LT						MT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	
3X DORIN CC COMPRESSORS												
CR3XH505CC-924	H505CC	30	7105	10040	13715	18230	23685	30175	37810	46680	56895	40.9
		40	5270	7850	11025	14900	19580	25155	31730	39405	48280	
		50	–	5835	8450	11625	15460	20055	25510	31925	39400	
CR3XH755CC-924	H755CC	30	9840	13880	18935	25140	32630	41540	52000	64150	78120	40.9
		40	7600	11145	15500	20800	27170	34755	43685	54095	66125	
		50	–	8685	12235	16520	21670	27830	35125	43690	53670	
CR3XH1201CC-926	H1201CC	30	14390	20195	27195	35590	45565	57320	71040	86920	105155	40.9
		40	10620	15935	22170	29515	38165	48315	60155	73875	89670	
		50	–	11805	17230	23490	30780	39285	49200	60720	74040	
CR3XH1501CC-926	H1501CC	30	17240	24090	32410	42340	54010	67560	83135	100860	120880	40.9
		40	12490	18865	26365	35135	45315	57035	70435	85655	102825	
		50	–	13285	19945	27535	36195	46060	57265	69950	84255	

KIRBY® COMPACT RACK UNITS R404A Performance Data

ITEM NUMBER	COMPR.	SCT (°C)	R404A CAPACITY AT 20°C RG, 2K S/C									RECEIVER CAPACITY (kg)
			LT						MT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	
4X DORIN CC COMPRESSORS												
CR4XH505CC-925	H505CC	30	9475	13390	18285	24305	31575	40235	50410	62240	75860	40.9
		40	7030	10465	14700	19870	26105	33540	42305	52540	64375	
		50	–	7780	11270	15505	20615	26740	34015	42565	52530	
CR4XH755CC-925	H755CC	30	13120	18510	25250	33520	43505	55385	69335	85535	104165	40.9
		40	10135	14865	20670	27730	36230	46340	58250	72130	88165	
		50	–	11580	16315	22025	28895	37105	46830	58255	71555	
CR4XH1201CC-926	H1201CC	30	19185	26925	36260	47455	60755	76425	94720	115895	140205	40.9
		40	14160	21245	29555	39350	50890	64420	80205	98500	119560	
		50	–	15740	22975	31320	41035	52380	65600	80960	98720	
CR4XH1501CC-926	H1501CC	30	22985	32120	43215	56450	72010	90085	110845	134480	161170	40.9
		40	16655	25150	35155	46850	60420	76045	93915	114205	137100	
		50	–	17715	26595	36715	48260	61415	76355	93270	112340	

KIRBY® COMPACT RACK UNITS R448A/R449A Performance Data

ITEM NUMBER	COMPR.	SCT (°C)	R448A/R449A CAPACITY AT 20°C RG, 0K S/C										RECEIVER CAPACITY (kg)	
			LT					MT			HT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0		5
3X DORIN CC COMPRESSORS														
CR3XH505CC-924	H505CC	30	–	8160	11545	15655	20635	26630	33795	42265	52195	63725	77010	38.1
		40	–	6565	9570	13180	17540	22800	29100	36600	45430	55750	67705	
		50	–	–	7815	10920	14660	19180	24625	31145	38880	47985	58605	
CR3XH755CC-924	H755CC	30	–	11980	16350	21695	28135	35790	44775	55200	67190	80865	96330	38.1
		40	–	9490	13275	17865	23380	29935	37645	46635	57010	68895	82405	
		50	–	–	10320	14075	18580	23950	30310	37770	46445	56460	67930	
CR3XH1201CC-926	H1201CC	30	–	15835	22205	29950	39335	50600	64000	79790	98215	119530	143985	38.1
		40	–	12575	18215	25040	33300	43245	55125	69195	85705	104905	127050	
		50	–	–	14505	20380	27490	36085	46420	58745	73310	90370	110170	
CR3XH1501CC-926	H1501CC	30	–	18905	26220	35135	45925	58875	74250	92335	113400	137730	165595	38.1
		40	–	14970	21435	29285	38800	50250	63915	80070	98995	120960	146245	
		50	–	–	16865	23620	31820	41740	53660	67850	84595	104165	126835	

KIRBY® COMPACT RACK UNITS R448A/R449A Performance Data

ITEM NUMBER	COMPR.	SCT (°C)	R448A/R449A CAPACITY AT 20°C RG, 0K S/C										RECEIVER CAPACITY (kg)	
			LT					MT			HT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0		5
4X DORIN CC COMPRESSORS														
CR4XH505CC-925	H505CC	30	–	10880	15395	20870	27510	35510	45055	56355	69590	84970	102680	38.1
		40	–	8755	12760	17570	23385	30395	38805	48795	60575	74335	90270	
		50	–	–	10420	14560	19550	25575	32835	41525	51840	63980	78135	
CR4XH755CC-925	H755CC	30	–	15975	21800	28925	37515	47720	59695	73600	89590	107820	128440	38.1
		40	–	12655	17700	23820	31170	39910	50195	62175	76015	91860	109875	
		50	–	–	13765	18765	24770	31935	40410	50355	61930	75285	90575	
CR4XH1201CC-926	H1201CC	30	–	21115	29605	39935	52445	67465	85335	106385	130950	159370	191975	38.1
		40	–	16765	24285	33385	44400	57660	73500	92260	114275	139875	169400	
		50	–	–	19340	27170	36650	48115	61890	78325	97745	120490	146895	
CR4XH1501CC-926	H1501CC	30	–	25210	34960	46845	61235	78495	99000	123110	151205	183640	220790	38.1
		40	–	19955	28580	39050	51735	67000	85220	106765	131990	161280	194990	
		50	–	–	22485	31495	42430	55655	71545	90470	112790	138885	169110	

KIRBY® COMPACT RACK UNITS R134a Performance Data

ITEM NUMBER	COMPR.	SCT (°C)	R134a CAPACITY AT 20°C RG, 2K S/C											RECEIVER CAPACITY (kg)	
			LT					MT			HT				
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5		10
3X DORIN CC COMPRESSORS															
CR3XH505CC-924	H505CC	30	-	-	-	-	10990	14665	19275	24895	31610	39510	48670	59180	47.6
		40	-	-	-	-	9020	12350	16495	21535	27565	34655	42895	52370	
		50	-	-	-	-	7180	10145	13805	18255	23570	29835	37135	45550	
CR3XH755CC-924	H755CC	30	-	-	-	-	15475	20405	26585	34130	43150	53765	66080	80215	47.6
		40	-	-	-	-	12755	17280	22910	29760	37940	47570	58755	71620	
		50	-	-	-	-	10080	14140	19165	25265	32550	41140	51150	62685	
CR3XH1201CC-926	H1201CC	30	-	-	-	-	19565	26280	34675	44910	57160	71590	88365	107655	47.6
		40	-	-	-	-	15865	21930	29435	38555	49455	62300	77265	94505	
		50	-	-	-	-	12455	17860	24475	32475	42020	53275	66420	81615	
CR3XH1501CC-926	H1501CC	30	-	-	-	-	22860	30615	40270	52015	66035	82530	101690	123700	47.6
		40	-	-	-	-	18575	25685	34440	45030	57645	72475	89710	109550	
		50	-	-	-	-	14465	20900	28725	38125	49300	62435	77720	95350	

KIRBY® COMPACT RACK UNITS R134a Performance Data

ITEM NUMBER	COMPR.	SCT (°C)	R134a CAPACITY AT 20°C RG, 2K S/C											RECEIVER CAPACITY (kg)	
			LT					MT			HT				
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5		10
4X DORIN CC COMPRESSORS															
CR4XH505CC-925	H505CC	30	-	-	-	-	14655	19555	25700	33190	42145	52675	64895	78905	47.6
		40	-	-	-	-	12025	16465	21990	28715	36750	46205	57195	69825	
		50	-	-	-	-	9575	13525	18410	24340	31425	39780	49510	60735	
CR4XH755CC-925	H755CC	30	-	-	-	-	20635	27210	35450	45510	57535	71685	88105	106950	47.6
		40	-	-	-	-	17010	23040	30545	39675	50585	63425	78345	95490	
		50	-	-	-	-	13440	18855	25550	33685	43400	54855	68195	83580	
CR4XH1201CC-926	H1201CC	30	-	-	-	-	26085	35040	46235	59885	76215	95450	117820	143540	47.6
		40	-	-	-	-	21150	29235	39250	51410	65940	83070	103015	126010	
		50	-	-	-	-	16605	23815	32635	43300	56025	71035	88560	108815	
CR4XH1501CC-926	H1501CC	30	-	-	-	-	30480	40820	53695	69350	88050	110040	135585	164930	47.6
		40	-	-	-	-	24765	34245	45920	60040	76860	96630	119615	146065	
		50	-	-	-	-	19285	27865	38300	50835	65730	83245	103630	127135	

KIRBY® COMPACT RACK UNITS

R448A/R449A, R134a, R404A Technical Data

ITEM NUMBER	COMPRESSOR						ELEC DATA- R448A			ELEC DATA- R134a			ELEC DATA- R404A		
	MODEL	DISPL (EA)	QTY	TYPE 380-420V/ 3PH/50HZ	LR A (DOL)	MCC	MOC	RLA	POWER	MOC	RLA	POWER	MOC	RLA	POWER
		M³/HR			A/PH	A/PH	A/PH	A/PH	WATTS	A/PH	A/PH	WATTS	A/PH	A/PH	WATTS
DORIN CC COMPRESSORS															
CR3XH505CC-924	H505CC	23.13	3	Y- DOL	189.0	43.5	35.1	27.9	15930	35.1	19.8	9540	40.5	30.3	17820
CR3XH755CC-924	H755CC	31.88	3	Y- DOL	258.0	58.5	52.5	39.0	21690	50.7	29.4	13320	54.0	42.3	24000
CR3XH1201CC-926	H1201CC	42.81	3	Y- DOL	404.1	84.0	66.0	51.3	28680	60.3	35.4	16350	70.5	55.5	31650
CR3XH1501CC-926	H1501CC	48.82	3	Y- DOL	511.5	102.0	87.6	68.4	33780	78.0	52.8	19050	88.8	72.3	37140
CR4XH505CC-925	H505CC	23.13	4	Y- DOL	252.0	58.0	46.8	37.2	21240	46.8	26.4	12720	54.0	40.4	23760
CR4XH755CC-925	H755CC	31.88	4	Y- DOL	344.0	78.0	70.0	52.0	28920	67.6	39.2	17760	72.0	56.4	32000
CR4XH1201CC-926	H1201CC	42.81	4	Y- DOL	538.8	112.0	88.0	68.4	38240	80.4	47.2	21800	94.0	74.0	42200
CR4XH1501CC-926	H1501CC	48.82	4	Y- DOL	682.0	136.0	116.8	91.2	45040	104.0	70.4	25400	118.4	96.4	49520

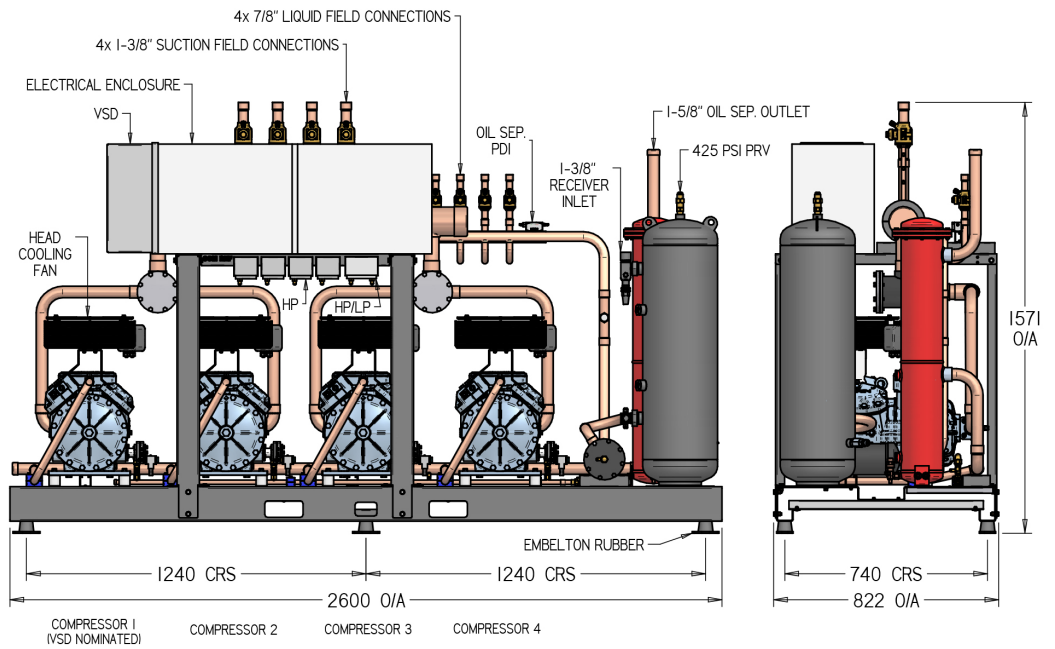
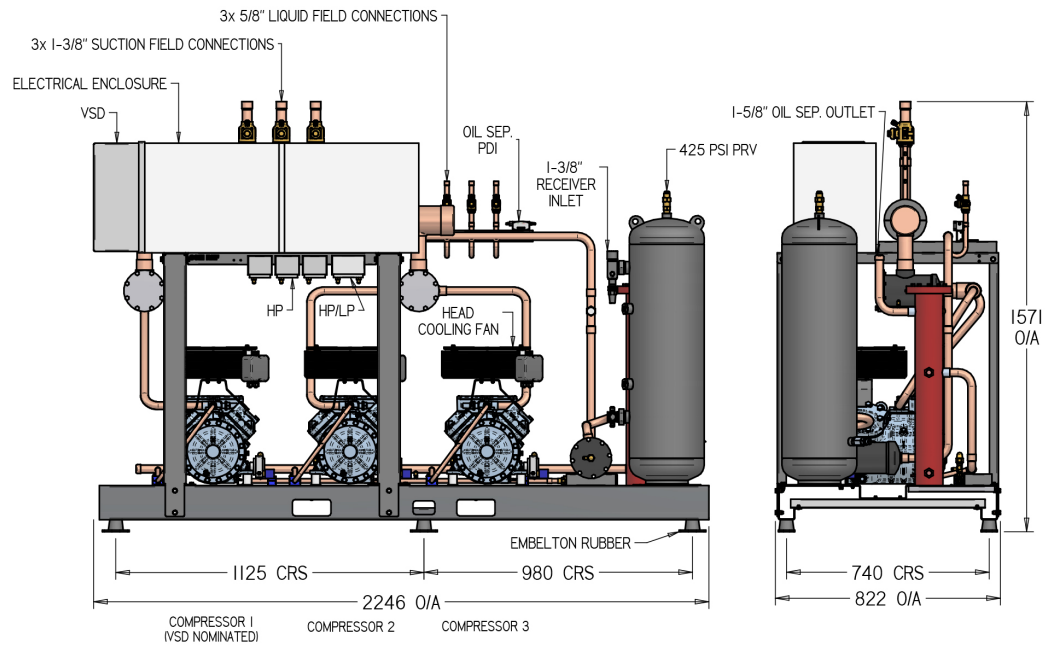
KIRBY® COMPACT RACK UNITS

Technical Data

COMPRESSOR MODEL	COMPR	GENERAL DATA				CONNECTIONS				DIMENSIONS					
		REC'R VOL	SHIP'G VOL	SHIP'G WEIGHT	INST'D WEIGHT	DISCH	LIQ RET	FIELD SUCT.	FIELD LIQ	HEIGHT	WIDTH	DEPTH	CRS "A"	CRS "B"	CRS "C"
		LTRS	m³	kg	kg	mm	mm	Qty x mm	Qty x mm	mm					
DORIN CC COMPRESSORS															
CR3XH505CC-924	H505CC	50	4.25	635	535	28.6	34.9	3 X 34.9	3 X 15.9	1571	2246	822	1125	980	740
CR3XH755CC-924	H755CC			635	535	28.6	34.9	3 X 34.9	3 X 15.9	1571	2246	822	1125	980	740
CR3XH1201CC-926	H1201CC			800	700	41.3	34.9	3 X 34.9	3 X 22.2	1571	2246	822	1125	980	740
CR3XH1501CC-926	H1501CC			805	705	41.3	34.9	3 X 34.9	3 X 22.2	1571	2246	822	1125	980	740
CR4XH505CC-925	H505CC	50	4.85	735	625	34.9	34.9	3 X 34.9	3 X 15.9	1571	2600	822	1240	1240	740
CR4XH755CC-925	H755CC			735	625	34.9	34.9	3 X 34.9	3 X 15.9	1571	2600	822	1240	1240	740
CR4XH1201CC-926	H1201CC			950	840	41.3	34.9	3 X 34.9	3 X 22.2	1571	2600	822	1240	1240	740
CR4XH1501CC-926	H1501CC			955	845	41.3	34.9	3 X 34.9	3 X 22.2	1571	2600	822	1240	1240	740

KIRBY® COMPACT RACK UNITS

R448A/R449A, R134a, R404A Physical Data



NOTES

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