KIRBY

DESIGNED FOR
LOW GWP
REFRIGERANTS



KIRBY® CENTURION

Condensing Units

Smart all-in-one solution
for commercial applications



Exclusively distributed by

KIRBY
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KIRBY® Centurion
Condensing Units

Introduction and Overview

Kirby® Centurion condensing units provide an all-in-one solution for the commercial refrigeration and air conditioning sectors that require larger capacity systems.

This innovative design offers the benefits of faster installation time and energy efficiencies gained from advanced technology within the compressor and air cooled condenser.

Suitable for retail, convenience, cold storage and industrial storage, the Kirby® Centurion range is built on a compact and highly flexible platform; showcasing Kirby's expertise in providing efficiency, environmentally friendly and reliable cooling solutions for a variety of applications.

Features & Benefits

Kirby® Centurion condensing units offer:

- High COP Dorin® H-Series Semi-Hermetic compressors.
- High efficiency remote condenser with optimised coil design and Kirby® Blue Koted fins.
- Factory pre-wired for faster installation and assured performance.
- Factory fitted accumulator and TraxOil*.
- Ease of serviceability made possible by multiple removable access panels.
- Compact footprint ensures suitability for most installations in an outdoor environment especially where floor space is at a minimum.

Kirby® Centurion condensing units can be configured with the following options:

- Head cooling fan
- Accumulator**
- TraxOil**
- Variable speed drive
- Capacity control solenoid valve
- 100 Litre receiver**
- EC Condenser Fans

* 3 Fan models only ** 4 and 6 Fan models only

Kirby® Centurion Condensing Units – Nomenclature

PP	H	100	A	A1	2

Unit Type
PP Kirby Polar Pack

Compressor Type
H Hermetic Reciprocating
S Semi Hermetic Reciprocating

Nominal Capacity

Fan Size
LM Low / Medium Temperature
LMH Low / Medium / High Temperature
MH Medium / High Temperature

Condenser Type & Variation
A Air cooled

Power Supply & Release Number
Odd Single Phase Supply
Even Three Phase Supply

CENTURION CONDENSING UNITS
R448A Performance Data

MODEL	DISPLACE-MENT (M3/HR)	AMBIENT TEMPER-ATURE (°C)	CAPACITY WATTS @ SST (°C)												RECEIVER CAPACITY (KG)
			LT						MT			HT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	
LOW / MEDIUM TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CS)															
PPS543LMA1-2	85.01	35	-	-	-	15,520	20,410	26,240	33,100	41,100	50,330	-	-	-	60.3
		45	-	-	-	-	16,750	21,780	27,760	34,760	42,750	-	-	-	
PPS740LMA1-2	113.74	35	-	-	-	20,800	27,200	34,840	43,870	54,420	66,630	-	-	-	60.3
		45	-	-	-	-	22,250	28,880	36,800	46,150	57,000	-	-	-	
PPS803LMA1-2	127.52	35	-	-	-	22,700	29,710	38,080	47,970	59,530	72,910	-	-	-	60.3
		45	-	-	-	-	24,230	31,480	40,150	50,350	62,080	-	-	-	
PPS950LMA1-2	153.52	35	-	-	-	27,700	35,740	45,260	56,450	69,450	84,360	-	-	-	60.3
		45	-	-	-	-	29,610	37,870	47,620	58,910	71,760	-	-	-	
LOW / MEDIUM / HIGH TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CC)															
PPS491LMHA1-2	75.83	35	-	-	-	-	18,220	23,460	29,590	36,670	44,790	54,020	64,420	-	60.3
		45	-	-	-	-	14,960	19,510	24,850	31,050	38,140	46,120	54,960	-	
PPS551LMHA1-2	85.01	35	-	-	-	15,180	20,050	25,800	32,550	40,370	49,310	59,420	70,670	-	60.3
		45	-	-	-	-	16,400	21,400	27,290	34,110	41,870	50,530	59,970	-	
PPS747LMHA1-2	113.74	35	-	-	-	-	27,070	34,550	43,350	53,560	65,320	78,720	93,860	-	60.3
		45	-	-	-	-	22,380	28,880	36,580	45,580	55,920	67,610	80,620	-	
PPS825LMHA1-2	127.52	35	-	-	-	23,260	30,230	38,450	48,050	59,170	71,910	86,360	102,550	-	60.3
		45	-	-	-	-	25,000	32,170	40,610	50,390	61,540	74,000	87,630	-	

- Liquid entering temperature with inherent sub-cooling average 2-3°C, return vapour temperature of 20°C. Return vapour temperature should never exceed 20°C for any refrigerant.
- Low temperature applications should be restricted to 20K return vapour superheat.
- All capacity data based on continuous condenser fan operation without the consideration of fan speed control.

For the latest refrigerant performance data, equipment selections and application support, use Kirby Select™ or the Quick Select Tools available through the Kirby smart@ccess customer portal. These tools provide the most current selection information across a wide range of traditional and lower-GWP refrigerants.



CENTURION CONDENSING UNITS
R513a Performance Data

MODEL	DISPLACE-MENT (M3/HR)	AMBIENT TEMPER-ATURE (°C)	CAPACITY WATTS @ SST (°C)												RECEIVER CAPACITY (KG)
			LT						MT			HT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	
LOW / MEDIUM / HIGH TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CC)															
PPS332LMHA1-4		35	-	-	-	-	-	8990	11780	15050	18850	23240	28220	33790	31.2
		45	-	-	-	-	-	-	10010	12960	16390	20330	24780	29750	
LOW / MEDIUM - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CC)															
PPS 373 MHA1-5		35	-	-	-	-	-	17,900	22,575	27,810	33,670	40,200	47,450	55,340	33.5
		45	-	-	-	-	-	15,070	19,340	24,120	29,445	35,360	41,875	-	
PPS421LMA1-5		35	-	-	-	-	-	12,960	16,365	20,255	24,695	29,735	35,370	41,520	33.5
		45	-	-	-	-	-	-	13,915	17,450	21,490	26,035	31,105	36,625	
PPS 477 LMA1-5		35	-	-	-	-	13,010	16,915	21,315	26,255	31,780	37,890	44,555	51,665	33.5
		45	-	-	-	-	-	14,285	18,290	22,785	27,775	33,275	39,255	45,670	
PPS492MHA1-3		35	-	-	-	-	18,050	23,350	29,350	36,130	43,750	52,280	61,710	71,990	57.7
		45	-	-	-	-	14,680	19,530	24,980	31,120	38,020	45,690	54,110	-	
PPS 543 LMA1-3		35	-	-	-	-	-	18,230	23,050	28,510	34,710	41,700	49,480	57,960	57.7
		45	-	-	-	-	-	15,340	19,750	24,730	30,340	36,650	43,640	51,210	
PPS803LMA1-3		35	-	-	-	-	-	26,950	34,140	42,340	51,630	62,120	73,810	86,510	57.7
		45	-	-	-	-	-	22,560	29,140	36,590	45,030	54,490	64,980	76,380	
PPS 950 LMA1-3		35	-	-	-	-	24,570	31,990	40,400	49,930	60,750	72,900	86,340	100,810	57.7
		45	-	-	-	-	-	26,650	34,360	43,110	52,970	64,000	76,190	-	

• Liquid entering temperature with inherent sub-cooling average 2-3°C, return vapour temperature of 20°C. Return vapour temperature should never exceed 20°C for any refrigerant.
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CENTURION CONDENSING UNITS
R513A Performance Data

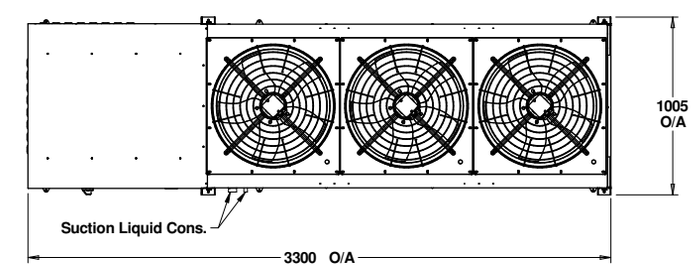
MODEL	DISPLACE-MENT (M3/HR)	AMBIENT TEMPER-ATURE (°C)	CAPACITY WATTS @ SST (°C)												RECEIVER CAPACITY (KG)
			LT						MT			HT			
			-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	
LOW / MEDIUM TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CS)															
PPS543LMA1-2	85.01	35	-	-	-	-	-	18,230	23,050	28,510	34,710	41,700	49,480	57,960	57.7
		45	-	-	-	-	-	15,340	19,750	24,730	30,340	36,650	43,640	51,210	
PPS803LMA1-2	127.52	35	-	-	-	-	-	26,950	34,140	42,340	51,630	62,120	73,810	86,510	57.7
		45	-	-	-	-	-	22,560	29,140	36,590	45,030	54,490	64,980	76,380	
PPS950LMA1-2	153.52	35	-	-	-	-	24,570	31,990	40,400	49,930	60,750	72,900	86,340	100,810	57.7
		45	-	-	-	-	-	26,650	34,360	43,110	52,970	64,000	76,190	-	
MEDIUM / HIGH TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CS)															
PPS492MHA1-2	113.74	35	-	-	-	-	18,050	23,350	29,350	36,130	43,750	52,280	61,710	71,990	57.7
		45	-	-	-	-	14,680	19,530	24,980	31,120	38,020	45,690	54,110	-	

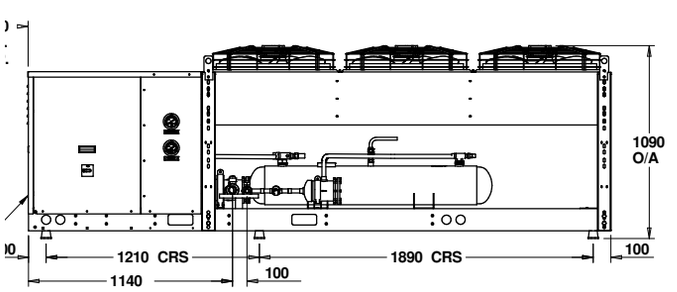
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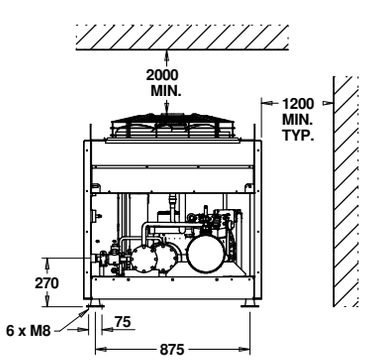
CENTURION CONDENSING UNITS
Physical Data

MODEL	DIMENSIONS (MM)			MOUNTING HOLE (MM)			WEIGHT (KG)	
	HEIGHT	WIDTH	DEPTH	A	B	C	NET	GROSS
LOW / MEDIUM TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CS)								
PPS421LMA1-4	1,090	1,005	3,300	1,890	1,210	950	560	610
PPS477LMA1-4	1,090	1,005	3,300	1,890	1,210	950	570	620
PPS543LMA1-2	1,270	2,230	2,500	1,504	895	2,180	920	970
PPS740LMA1-2	1,270	2,230	3,240	2,239	895	2,180	1,070	1,120
PPS803LMA1-2	1,270	2,230	3,240	2,239	895	2,180	1,070	1,120
PPS950LMA1-2	1,270	2,230	3,240	2,239	895	2,180	1,090	1,140
LOW / MEDIUM / HIGH TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CC)								
PPS332LMHA1-4	1,090	1,005	3,300	1,890	1,210	950	500	550
PPS491LMHA1-2	1,270	2,230	2,500	1,504	895	2,180	920	970
PPS551LMHA1-2	1,270	2,230	2,500	1,504	895	2,180	920	970
PPS747LMHA1-2	1,270	2,230	3,240	2,239	895	2,180	1,070	1,120
PPS825LMHA1-2	1,270	2,230	3,240	2,239	895	2,180	1,080	1,130
MEDIUM / HIGH TEMPERATURE - DORIN SEMI-HERMETIC RECIPROCATING COMPRESSORS (CS)								
PPS373MHA1-4	1,090	1,005	3,300	1,890	1,210	950	570	620
PPS492MHA1-2	1,270	2,230	2,500	1,504	895	2,180	920	970

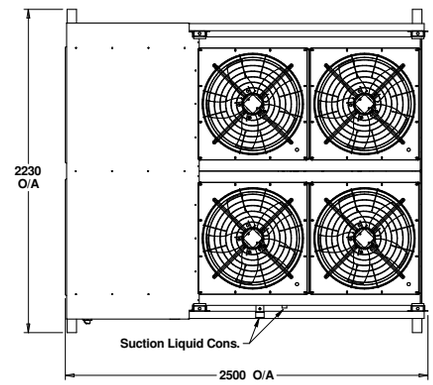
3 Fan Models

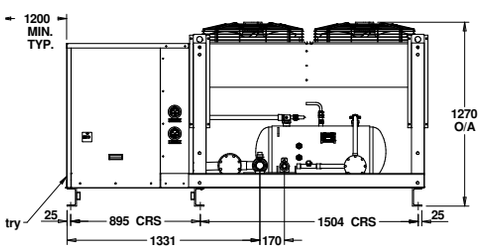


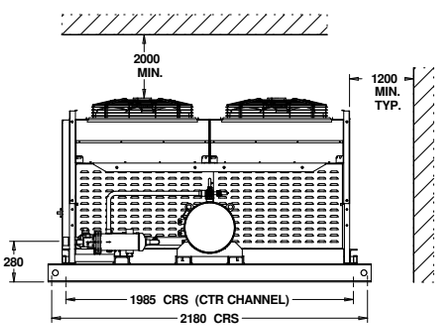




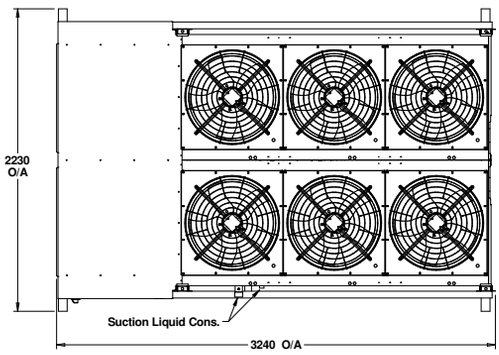
4 Fan Models

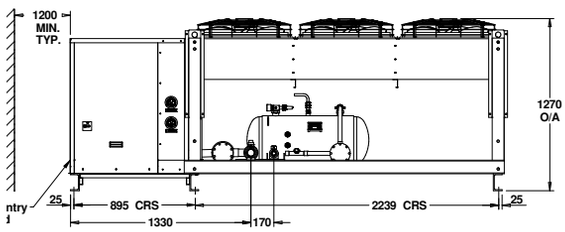


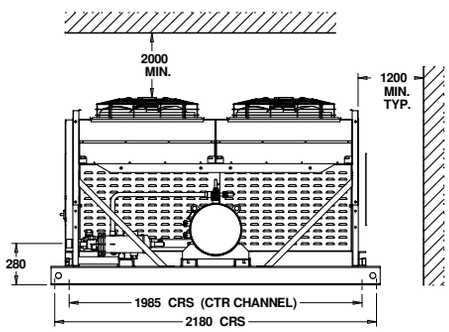




6 Fan Models







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KIRBYCenturion_0421