

Total Commercial
Refrigeration Solutions
from the experts



LOW TEMPERATURE CONDENSING UNITS



MAJOR APPLICATIONS: • FISHERIES • VACCINES • FROZEN FOODS • ICE CREAM

Air Cooled Refrigeration Condensing Units

With

HERMETIC RECIP. / SCROLL / SEMI--HERMETIC COMPRESSOR

Low Temperature : 50Hz



Features



ENVIRONMENT FRIENDLY

- CFC free R404a refrigerants for improving sustainability



ECONOMICAL & CONVENIENT

- Sleek and enclosed design for reciprocating hermetic range
- Robust footprint for semi hermetic range
- Factory engineered product to reduce field installation
- Flexibility for pump down to recover refrigerant
- Easy access for trouble shooting



RELIABLE

- Suction accumulator to protect against liquid flood back
- Check valve in discharge line to ensure unidirectional refrigerant flow with two stage Carlyle Compressors
- High/low pressure protection
- Oil safety switch and separator for proper lubrication*

Note: *For models with capacity >7.4 KW



ENERGY EFFICIENCY

- Best in class COP with energy efficient semi-hermetic two stage Carlyle compressors and economizer
- Ergonomic design for hermetic range offering
- Cool motor winding with liquid injection system for two stage Carlyle compressors



ELECTRICAL SAFETY

- All safety interlocks installed and prewired at factory in select models
- MCB/Contactors for ease of installation as integrated control panel
- Voltage scanner with display to protect against voltage fluctuations and phase reversal in select models
- Phase sequence controller to protect against phase reversal in select models

APPLICATIONS:

ICE CREAM

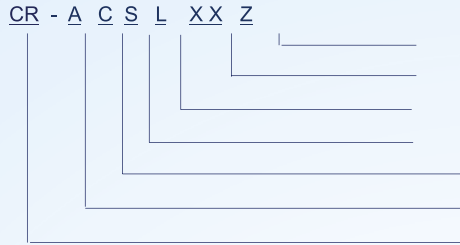
FISHERIES

VACCINES

FROZEN FOODS

MANY MORE...

Model Description



Refrigerant Z - R404a, Y - R134a, X - R22
 Capacity in kW / 10 *
 L low temperature, M Medium temperature
 Compressor Type, S: Semi hermetic, C:Scroll, H:Hermetic recip
 Compressor make, C: Carlyle, D: Danfoss, E: Emerson, T: Tecumseh , S: Sanyo
 Type of condenser W - Water cooled, A - Air cooled
 Carrier Refrigeration

SELECTION DATA

Description	Condensing temp, °C	Compressor Capacity kW					Power consumption, kW					
		Saturated Suction temperature, °C					Saturated Suction temperature, °C					
		-20	-23.3	-25	-30	-35	-20	-23.3	-25	-30	-35	
Category No. 1												
CR-AEHL023Z SLK NXG Single Stage (Hermetic Recip.)	35	3.73	3.26	2.97	2.11	1.26	1.71	1.56	1.48	1.24	0.99	
	40	3.36	2.94	2.68	1.93	1.17	1.94	1.78	1.70	1.45	1.21	
	45	2.99	2.62	2.40	1.74	1.09	2.16	1.99	1.91	1.67	1.42	
	48.9	2.71	2.37	2.17	1.60	1.02	2.34	2.16	2.08	1.83	1.59	
	55	2.30	1.98	1.76	1.11	0.46	2.55	2.38	2.28	1.99	1.70	
CR-AEHL025Z SLK NXG Single Stage (Hermetic Recip.)	35	3.59	3.14	2.93	2.31	1.67	2.05	1.89	1.82	1.67	1.62	
	40	3.17	2.75	2.55	1.97	1.39	2.26	2.08	2.01	1.86	1.80	
	45	2.87	2.47	2.28	1.75	1.11	2.42	2.25	2.17	2.02	1.91	
	48.9	2.41	2.06	1.90	1.45	0.81	2.66	2.48	2.41	2.26	2.15	
	55	2.11	1.76	1.60	1.11	0.46	2.87	2.68	2.61	2.46	2.31	
CR-ATHL 025Z SLK CDU , 1Phase Single Stage (Hermetic Recip.)	35	4.12	3.44	3.12	2.32	1.71	2.36	2.17	2.07	1.80	1.57	
	40	3.65	3.05	2.78	2.09	1.57	2.41	2.21	2.11	1.83	1.59	
	45	3.22	2.70	2.47	1.86	1.40	2.46	2.25	2.15	1.86	1.61	
	48.9	2.92	2.45	2.24	1.68	1.26	2.51	2.29	2.18	1.87	1.62	
	55	2.54	2.12	1.92	1.40	0.81	2.57	2.33	2.21	1.89	1.29	
CR-AEHL038Z Single Stage (Hermetic Recip.)	35	5.52	4.72	4.35	3.31	2.40	3.13	2.88	2.60	2.32	2.15	
	40	5.04	4.29	3.94	2.97	2.11	3.28	3.01	2.71	2.47	2.23	
	45	4.71	3.99	3.65	2.71	1.86	3.45	3.15	2.83	2.59	2.34	
	48.9	4.52	3.80	3.47	2.52	1.66	3.55	3.25	2.92	2.72	2.57	
	55	4.28	3.54	3.19	2.19	1.26	3.71	3.39	3.09	2.89	2.74	
CR-ADCL063Z CDU Two Stage (Scroll with Economizer)	35	7.69	6.77	6.34	5.18	4.20	3.71	3.61	3.56	3.38	3.21	
	40	7.50	6.62	6.20	5.08	4.12	4.05	3.94	3.87	3.68	3.48	
	45	7.29	6.45	6.05	4.97	4.04	4.44	4.31	4.24	4.02	3.80	
	48.9	7.10	6.3	5.90	4.86	3.95	4.80	4.65	4.57	4.33	4.09	
	55	6.71	5.95	5.58	4.60	3.74	5.50	5.33	5.24	4.96	4.69	
Category No. 2		Evaporator Capacity kW ,Saturated Suction temperature, °C					Power consumption, kW ,Saturated Suction temperature, °C					
		-23.3	-25	-30	-35	-40	-23.3	-25	-30	-35	-40	
CR-ADCL076Z Two Stage (Scroll with Economizer)	35	10.49	9.89	8.24	6.80	5.53	5.13	5.05	4.81	4.57	4.35	
	40	10.25	9.66	8.07	6.66	5.42	5.59	5.50	5.23	4.97	4.72	
	45	9.98	9.42	7.89	6.52	-	6.11	6.02	5.71	5.41	-	
	50	9.65	9.11	7.64	6.33	-	6.76	6.64	6.30	5.97	-	
	55	9.19	8.68	-	-	-	7.56	7.44	-	-	-	
CR-ACSL074Z Single Stage (Semi-Hermetic)	35	15.37	14.13	10.93	8.35	6.27	8.41	8.07	7.09	6.13	5.23	
	40	13.75	12.62	9.73	7.39	5.52	8.73	8.36	7.30	6.27	5.32	
	45	12.17	11.15	8.55	6.46	4.79	9.02	8.63	7.48	6.39	5.39	
	50	10.61	9.70	7.40	5.55	4.07	9.29	8.86	7.64	6.49	5.45	
	54.4	9.25	8.44	6.40	4.77	3.46	9.49	9.04	7.76	6.57	5.49	
CR-ACSL136Z Single Stage (Semi-Hermetic)	35	31.01	28.32	21.29	15.41	10.53	17.87	17.08	14.74	12.42	10.15	
	40	27.82	25.31	18.78	13.34	8.82	18.21	17.34	14.77	12.26	9.82	
	45	24.58	22.27	16.26	11.27	7.14	18.36	17.40	14.63	11.92	9.32	
	50	21.29	19.18	13.73	9.22	5.50	18.33	17.30	14.32	11.44	8.69	
	54.4	18.34	16.42	11.48	7.42	4.09	18.20	17.11	13.96	10.92	8.04	
CR-ACSL074Z Two Stage (Semi-Hermetic)	35	10.49	9.91	7.89	6.18	4.78	3.92	3.83	3.43	3.09	2.77	
	40	10.30	9.68	7.65	6.11	4.71	4.23	4.11	3.65	3.34	2.98	
	45	10.00	9.39	7.57	6.03	4.64	4.47	4.34	3.93	3.57	3.17	
	50	9.75	9.15	7.48	5.95	4.56	4.71	4.57	4.18	3.79	3.33	
	54.4	9.50	8.92	7.28	5.83	4.48	4.88	4.73	4.32	3.93	3.45	
CR-ACSL086Z Two Stage (Semi-Hermetic)	35	12.26	11.51	9.13	7.13	5.49	4.44	4.29	3.80	3.39	3.03	
	40	11.95	11.22	8.83	7.03	5.40	4.67	4.50	3.93	3.55	3.16	
	45	11.58	10.86	8.72	6.92	5.31	4.85	4.67	4.13	3.70	3.27	
	50	11.27	10.57	8.61	6.82	5.21	5.05	4.85	4.32	3.85	3.39	
	54.4	10.97	10.28	8.37	6.68	5.12	5.22	5.00	4.43	3.97	3.50	

Specifications:

Category No. 2	Condensing temp, °C	Evaporator Capacity kW ,Saturated Suction temperature, °C					Power consumption, kW ,Saturated Suction temperature, °C				
		-23.3	-25	-30	-35	-40	-23.3	-25	-30	-35	-40
CR-ACSL120Z Two Stage (Semi-Hermetic)	35	16.16	15.33	12.50	9.96	7.80	6.10	5.91	5.26	4.35	4.23
	40	15.83	15.02	12.16	9.89	7.74	6.70	6.49	5.71	5.18	4.62
	45	15.42	14.63	12.09	9.83	7.68	7.27	7.02	6.26	5.64	5.00
	50	15.10	14.32	12.02	9.76	7.62	7.81	7.53	6.77	6.04	5.30
	54.4	14.79	14.03	11.77	9.65	7.57	8.19	7.88	7.02	6.27	5.46
CR-ACSL136Z Two Stage (Semi-Hermetic)	35	23.22	21.66	16.85	12.88	9.60	9.11	8.77	7.57	6.48	5.52
	40	21.74	20.24	15.56	12.06	8.90	9.32	8.96	7.61	6.61	5.63
	45	20.16	18.73	14.73	11.18	8.10	9.48	9.06	7.86	6.72	5.74
	50	18.72	17.34	13.58	10.24	7.24	9.62	9.17	7.93	6.81	5.83
	54.4	17.45	16.11	12.47	9.33	6.44	9.68	9.20	7.91	6.83	5.89

TECHNICAL DATA

MODEL	Compressor Type	Fans Nos. x watt	Total Air flow, m ³ /hr	Receiver (Liters)	Connection (Inches)		Oil Charge (Liters)	Controller	Product Dimn. LxDxH (mm)	Net Weight (Kg)
					Suction	Liquid				
CR-AEHL023Z SLK NXG	Her. Sealed ,1 Stage	1x190	3194	-	7/8"	3/8"	1.33	√	975x400x820	85
CR-AEHL025Z SLK NXG	Her. Sealed ,1 Stage	1x190	3194	-	7/8"	3/8"	1.33	√	975x400x820	86
CR-ATHL 025Z SLK ,1Ø	Her. Sealed ,1 Stage	1x190	3194	-	7/8"	3/8"	1.14	√	944x457x720	85
CR-ATHL038Z	Her. Sealed ,1 Stage	1x370	10194	7.0	1"1/8	5/8"	1.33	-	1060x700x1100	180
CR-ADCL063Z	Scroll, W Economizer	1x370	10194	7.0	1"1/8	1/2"	1.62	-	1060x700x1100	140
CR-ADCL076Z	Scroll, W Economizer	1x470	11000	7.0	1"1/8	1/2"	2.51	-	1060x700x1274	173
CR-ACSL074Z , 1 Stage	SH, Single Stage	2x710	16786	15.0	1"3/8	1/2"	3.8	-	1450x1000x860	340
CR-ACSL136Z, 1 Stage	SH, Single Stage	2x710	16786	20.0	1"5/8	5/8"	9	-	1750x1075x910	400
CR-ACSL074Z	SH, Two Stage	1x710	8393	15.0	1"3/8	5/8"	4.5 **	-	1550x1000x910	300
CR-ACSL086Z	SH, Two Stage	2x340	10398	20.0	1"3/8	5/8"	4.5 **	-	1550x1000x750	320
CR-ACSL120Z	SH, Two Stage	2x710	16786	20.0	1"5/8	5/8"	4.5 **	-	1740x1000x860	360
CR-ACSL136Z	SH, Two Stage	2x710	16786	20.0	1"5/8	5/8"	9.0**	-	1740x1100x860	450

Note:-

Performance stated above are subject to ±7% variation.

* Compressor Capacity for Single Stage , Hermetic Recip & Scroll Unit @ SST -23.3°C , Condensing 48.9°C & 4°C Return Gas Temperature. (Category No. 1)

* Evaporator Capacity for Single Stage & Two Stage Unit Semi-Hermetic & Scroll unit @ SST -30°C , Condensing 50°C & Total Superheat 19K. (Category No. 2)

Relevant Compressor manufacturer selection Software used for Capacity Calculation

** Condensing unit shipped without Oil charged in Compressor from factory

For Total power consumption add compressor and condenser fan power.

Details provided above are for information and are subject to change without notice.

Contact Carrier representative for unavailable data at specified conditions.



For more details, please contact our sales office:

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