

LU1/LU0

Air Cooled Condensing Units - Technical Catalog



 **CENTURY**
REFRIGERATION
DIVISION RAE CORPORATION

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Standard Features

- Dependable hi-efficiency scroll compressor
- Direct drive condenser fans
- Liquid receiver with relief valves
- Receiver inlet and outlet valves
- High pressure safety
- Low pressure operating control
- Crankcase heater
- Corrosion resistant fan guard
- Compressor contactor
- Compressor overload protection
- Fan motor overload protection
- Removable access panels
- NEMA 3R weatherproof electrical panel
- Hinged control panel access
- Prewired controls
- Compressor service valves
- Low profile
- Liquid injection kit (on XL models only)
- Run/Pumpdown switch

Applications

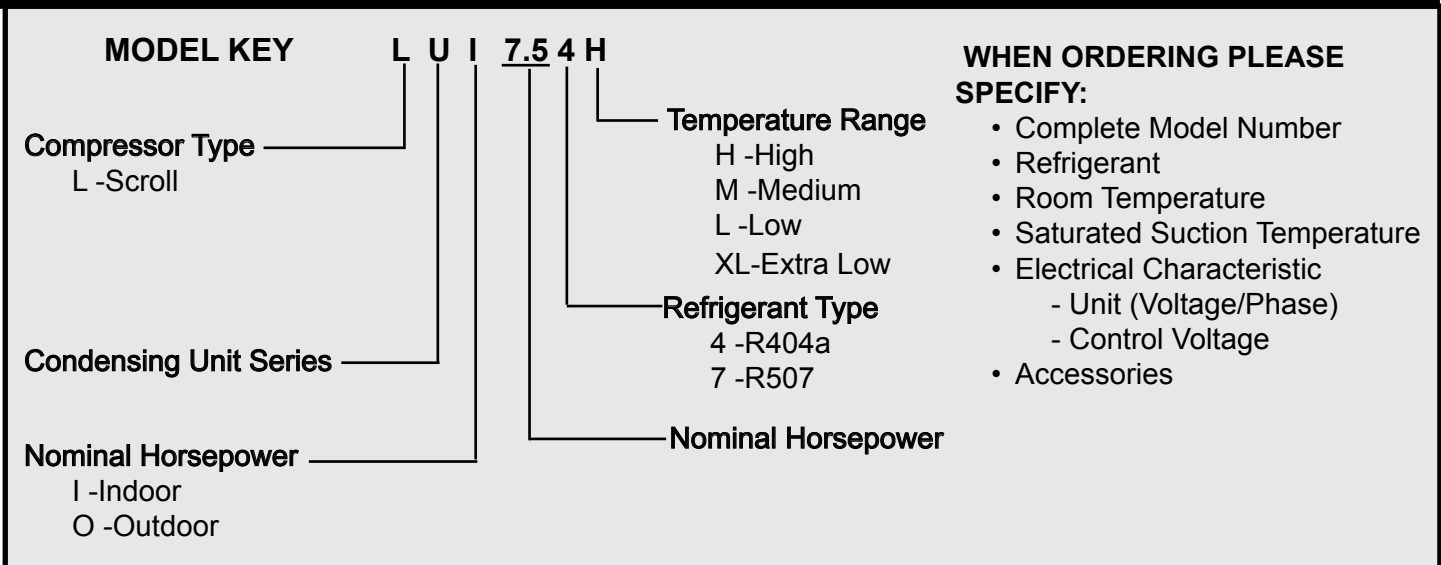
Century's "LUI" and "LUO" Series outdoor air cooled condensing units are specifically designed for commercial and industrial refrigeration duty cooling applications. They come completely pre-piped and wired with low profile and horizontal air discharge. They also utilize a unique vertical condenser and

coil design as well as high volume condenser fans to maximize unit performance. The "LUO" Series condensing unit is suitable for mounting at ground level or rooftop and the "LUI" Series is suitable for indoor mounting.

Available Options

- A-20 flood control
- Sight glass
- Liquid line drier (sealed)
- Liquid line drier (replacement core)
- Liquid line solenoid
- Suction filter (sealed)
- Suction accumulator
- Time clock
- Fused defrost contactor (1 per unit)
- Control circuit transformer
- Single phase unit w/capacitor through 5HP
- Fused evaporator fan contactor (1 per unit)
- Disconnect

Nomenclature



Construction

Cabinet

The rugged, industrial grade cabinet is constructed of heavy gauge, mill galvanized steel. Easily removable top and side panels are provided for convenient component access. Compressors are mounted low in the cabinet for ease of service.

Condensers

Coils are seamless copper tube with die stamped aluminum plate fins, galvanized steel frames and tube sheets. Coils are computer selected for refrigeration applications to provide optimum heat transfer at a minimum T.D. Each unit is provided with a separate, sub-cooling circuit to maximize unit performance.

Condenser fan motors are industrial duty 1140 RPM, ball bearing, weather resistant, three phase with inherent electrical protection. Condenser fan blades are of finished aluminum with a corrosion-resistant coated hub.

Coils are mounted vertically with fans arranged for draw through, horizontal discharge air flow. Each fan assembly is equipped with a sturdy poly-coated steel fan guard.

Liquid Receiver

Receivers are selected to provide pumpdown capacity (with condenser coil) considering a nominal 50ft. equivalent line length and a matching evaporator. Receivers smaller than 6 inches are U.L. listed. All larger receivers are ASME stamped. Each receiver is equipped with inlet and outlet service valves, and pressure relief device.

Compressors

U.L. listed, hermetic, energy efficient, scroll compressors are applied throughout the line. Each compressor is equipped with suction and discharge service valves with gauge ports, inherent three phase overload protection, oil level sight glass, and crankcase heater.

Controls

All condensing units are wired to operate on a one-time pumpdown cycle. Run/pumpdown switch is provided as standard.

All electrical control components are enclosed within a heavy-gauge weatherproof, hinged panel to provide maximum weather protection and enhance service analysis.

All units have individually numbered control conductors. Also standard are adjustable, refrigeration grade, separate high and low pressure switches (high-manual reset); and an individually numbered terminal strip for field connections. Conductors and fusing are selected per N.E.C. standards. Notably all Century control components are selected to be readily available through refrigeration wholesalers throughout the country. O.E.M. type controls are judicially avoided.

R-404a - Low Temp		Model Numbers		
		LUI/LUO 3.04	LUI/LUO 3.54	LUI/LUO 4.04
Compressor Model Number		ZF09K4E	ZF11K4E	ZF13K4E
Compressor Motor Protection		INHERENT		
Unit MCA ¹	208-230/1/60 V	21.1	29.1	34.4
	208-230/3/60 V	14.4	17.5	18.9
	460/3/60 V	7.4	9.2	10.1
Compressor RLA / LRA	208-230/1/60 V	14.3	20.7	25.0
	208-230/3/60 V	9.6	12.1	13.2
	460/3/60 V	5.0	6.4	7.1
Total Number of Condenser Fan Motors		1	1	1
Size of Motor (HP)		0.25	0.25	0.25
Diameter of Blade (in.)		20	20	20
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	1.4	1.4
	230/3/60 V	1.4	1.4	1.4
	460/3/60 V	0.7	0.7	0.7
Receiver Size per circuit (in.)		6x28	6x28	6x28
Receiver Capacity 80% Full per circuit (lbs.) ²		20.7	20.7	20.7
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	12	12.5	12.5
	w/ Flood Control ³	16	16.5	16.5
Suction Connection per circuit - ODS (in.) ⁷		7/8	1 1/8	1 1/8
Liquid Line Connection per circuit - ODS (in.)		0.5	0.5	0.5
Unit Shipping Weight - Approximate (lbs.)		436	448	512
Unit Operating Weight - Approximate (lbs.) ⁶		391	402	467

Capacity Ratings			Unit Model Numbers					
Ambient Temp.	Temp Range	Suction Temp.	LUI/LUO 3.04		LUI/LUO 3.54		LUI/LUO 4.04	
			Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴
85° F	L	0° F	15,564	2.83	18,701	3.29	21,420	3.71
		-10° F	12,981	2.63	15,640	3.03	17,843	3.43
		-20° F	10,666	2.47	12,860	2.81	14,584	3.20
	XL	-25° F	9,601	2.40	11,574	2.72	13,084	3.10
		-30° F	8,586	2.34	10,368	2.63	11,664	3.01
		-40° F	6,727	2.25	8,152	2.49	9,063	2.87
95° F	L	0° F	14,223	3.05	17,014	3.56	19,396	4.03
		-10° F	11,901	2.85	14,287	3.29	16,185	3.75
		-20° F	9,812	2.69	11,811	3.07	13,276	3.52
	XL	-25° F	8,840	2.63	10,656	2.98	11,949	3.41
		-30° F	7,924	2.57	9,560	2.89	10,688	3.33
		-40° F	6,212	2.48	7,543	2.75	8,403	3.18
105° F	L	0° F	12,803	3.29	-	-	-	-
		-10° F	10,749	3.10	12,843	3.59	14,443	4.12
		-20° F	8,894	2.95	10,653	3.37	11,918	3.89
	XL	-25° F	8,037	2.89	9,638	3.27	10,774	3.78
		-30° F	7,207	2.83	8,668	3.19	9,703	3.69
		-40° F	5,656	2.75	6,864	3.04	7,778	3.54

1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.

2 - Based on 80% full at 90°F ambient.

3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)

4 - KW is for the unit.

5 - Rated in accordance with ANSI/AHRI Standard 520-2004.

6 - Operating weight reflects flooded refrigerant charge.

7 - Size based on mounted optional suction line trim.

“-” - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R-404a - Low Temp		Model Numbers			
		LUI/LUO 5.04	LUI/LUO 6.04	LUI/LUO 7.54	LUI/LUO 10.04
Compressor Model Number		ZF15K4E	ZF18K4E	ZF25K4E	ZF34K5E
Compressor Motor Protection		INHERENT			
Unit MCA¹	208-230/1/60 V	37.6	-	-	-
	208-230/3/60 V	26	29.6	36.6	-
	460/3/60 V	12.3	12.3	16.4	23.9
Compressor RLA / LRA	208-230/1/60 V	27.5	-	-	-
	208-230/3/60 V	18.9	21.8	26.7	-
	460/3/60 V	8.9	8.9	11.9	17.9
Total Number of Condenser Fan Motors		1	1	1	1
Size of Motor (HP)		0.25	0.25	0.5	0.5
Diameter of Blade (in.)		20	20	24	24
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	-	-	-
	230/3/60 V	1.4	1.4	2	-
	460/3/60 V	0.7	0.7	1.0	1.0
Receiver Size per circuit (in.)		6x28	6x28	6x28	6x36
Receiver Capacity 80% Full per circuit (lbs.)²		20.7	20.7	20.7	27
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	13	14	14	17
	w/ Flood Control ³	20	22	22	30
Suction Connection per circuit - ODS (in.)⁷		1 1/8	1 1/8	1 1/8	1 3/8
Liquid Line Connection per circuit - ODS (in.)		0.5	0.5	0.5	0.625
Unit Shipping Weight - Approximate (lbs.)		538	570	715	813
Unit Operating Weight - Approximate (lbs.)⁶		492	526	670	768

Capacity Ratings			Unit Model Numbers							
Ambient Temp.	Temp Range	Suction Temp.	LUI/LUO 5.04		LUI/LUO 6.04		LUI/LUO 7.54		LUI/LUO 10.04	
			Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴
85° F	L	0° F	26,066	4.63	32,096	5.29	40,131	6.81	51,931	8.34
		-10° F	21,828	4.24	26,847	4.85	33,308	6.19	43,381	7.68
		-20° F	17,997	3.90	22,114	4.48	27,238	5.59	35,616	7.05
	XL	-25° F	16,222	3.75	19,906	4.33	24,476	5.31	31,989	6.77
		-30° F	14,547	3.62	17,823	4.19	21,897	5.03	28,525	6.49
95° F	L	0° F	23,604	5.06	29,323	5.68	36,818	7.27	47,307	9.00
		-10° F	19,847	4.65	24,639	5.23	30,631	6.60	39,716	8.30
		-20° F	16,434	4.28	20,401	4.86	25,150	5.95	32,728	7.64
	XL	-25° F	14,863	4.12	18,433	4.70	22,665	5.64	29,448	7.33
		-30° F	13,356	3.96	16,536	4.56	20,351	5.33	26,288	7.03
105° F	L	0° F	-	-	-	-	-	-	-	-
		-10° F	17,751	5.10	22,329	5.65	27,924	7.02	35,747	8.99
		-20° F	14,785	4.71	18,601	5.27	23,054	6.32	29,612	8.29
	XL	-25° F	13,395	4.52	16,867	5.10	20,892	5.97	26,699	7.95
		-30° F	12,079	4.34	15,181	4.97	18,869	5.63	23,891	7.62
		-40° F	9,615	4.00	11,986	4.75	15,318	4.94	18,469	6.98

- 1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.
- 2 - Based on 80% full at 90°F ambient.
- 3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)
- 4 - KW is for the unit.
- 5 - Rated in accordance with ANSI/AHRI Standard 520-2004.
- 6 - Operating weight reflects flooded refrigerant charge.
- 7 - Size based on mounted optional suction line trim.
- “-” - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R404a - High Temp		Model Numbers				
		LUI/LUO 2.04H	LUI/LUO 2.54H	LUI/LUO 3.04H	LUI/LUO 3.54H	LUI/LUO 4.04H
Compressor Model Number		ZB15KCE	ZB19KCE	ZB21KCE	ZB26KCE	ZB30KCE
Compressor Motor Protection		INHERENT				
Unit MCA ¹	208-230/1/60 V	22.8	25.6	29.1	32.7	36.7
	208-230/3/60 V	13.5	14.9	17.5	18.9	22.0
	460/3/60 V	7.4	7.4	8.8	9.2	10.6
Compressor RLA / LRA	208-230/1/60 V	15.7	17.9	20.7	23.6	26.8
	208-230/3/60 V	8.9	10.0	12.1	13.2	15.7
	460/3/60 V	5.0	5.0	6.1	6.4	7.5
Total Number of Condenser Fan Motors		1	1	1	1	1
Size of Motor (HP)		0.25	0.25	0.25	0.25	0.25
Diameter of Blade (in.)		20	20	20	20	20
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	1.4	1.4	1.4	1.4
	230/3/60 V	1.4	1.4	1.4	1.4	1.4
	460/3/60 V	0.7	0.7	0.7	0.7	0.7
Receiver Size per circuit (in.)		6x28	6x28	6x28	6x28	6x28
Receiver Capacity 80% Full per circuit (lbs.) ²		20.7	20.7	20.7	20.7	20.7
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	12	12.5	13	13	14
	w/ Flood Control ³	16	17	20	20	22
Suction Connection per circuit - ODS (in.) ⁷		7/8	1 1/8	1 1/8	1 1/8	1 1/8
Liquid Line Connection per circuit - ODS (in.)		1/2	1/2	1/2	1/2	1/2
Unit Shipping Weight - Approximate (lbs.)		428	428	436	448	512
Unit Operating Weight - Approximate (lbs.) ⁶		383	383	391	402	467

Capacity Ratings		Unit Model Numbers									
Ambient Temp.	Suction Temp.	LUI/LUO 2.04H		LUI/LUO 2.54H		LUI/LUO 3.04H		LUI/LUO 3.54H		LUI/LUO 4.04H	
		Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴
85° F	0° F	11,093	2.21	13,977	2.65	16,812	3.10	19,403	3.63	23,058	4.12
	10° F	13,598	2.27	16,851	2.76	20,267	3.22	23,388	3.78	28,133	4.29
	20° F	16,349	2.34	20,019	2.87	24,076	3.36	27,750	3.95	33,609	4.48
	25° F	17,808	2.37	21,704	2.93	26,075	3.43	30,082	4.03	36,485	4.58
	30° F	19,341	2.41	23,444	2.99	28,164	3.50	32,454	4.12	39,430	4.69
	45° F	24,244	2.52	29,023	3.18	34,859	3.73	40,111	4.40	48,755	5.05
95° F	0° F	9,936	2.48	12,673	2.96	15,239	3.46	17,593	4.06	20,821	4.54
	10° F	12,239	2.55	15,283	3.07	18,376	3.59	21,189	4.22	25,454	4.72
	20° F	14,756	2.61	18,157	3.18	21,830	3.73	25,139	4.39	30,437	4.91
	25° F	16,071	2.65	19,673	3.24	23,652	3.80	27,234	4.47	33,022	5.01
	30° F	17,469	2.68	21,261	3.30	25,530	3.88	29,428	4.56	35,699	5.12
	45° F	21,904	2.79	-	-	-	-	-	-	-	-
105° F	0° F	8,695	2.79	-	-	-	-	-	-	-	-
	10° F	10,801	2.86	13,636	3.41	16,389	4.00	18,878	4.71	22,639	5.19
	20° F	13,068	2.92	-	-	-	-	-	-	-	-
	25° F	14,259	2.95	-	-	-	-	-	-	-	-
	30° F	-	-	-	-	-	-	-	-	-	-
	45° F	-	-	-	-	-	-	-	-	-	-

1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.

2 - Based on 80% full at 90°F ambient.

3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)

4 - KW is for the unit.

5 - Rated in accordance with ANSI/AHRI Standard 520-2004.

6 - Operating weight reflects flooded refrigerant charge.

7 - Size based on mounted optional suction line trim.

"-" - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R404a - High Temp					
		LUI/LUO 5.04H	LUI/LUO 6.04H	LUI/LUO 7.54H	LUI/LUO 9.04H
Compressor Model Number		ZB38KCE	ZB45KCE	ZB57KCE	ZB66KCE
Compressor Motor Protection		INHERENT			
Unit MCA ¹	208-230/1/60 V	42.1	-	-	-
	208-230/3/60 V	30.0	31.3	47.6	40.7
	460/3/60 V	13.2	14.1	20.5	23.4
Compressor RLA / LRA	208-230/1/60 V	31.1	-	-	-
	208-230/3/60 V	22.1	22.5	35.5	30.0
	460/3/60 V	9.6	10.1	15.2	17.5
Total Number of Condenser Fan Motors		1	1	1	1
Size of Motor (HP)		0.25	0.5	0.5	0.5
Diameter of Blade (in.)		20	24	24	24
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	-	-	-
	230/3/60 V	1.4	2.0	2.0	2.0
	460/3/60 V	0.7	1	1	1
Receiver Size per circuit (in.)		6x36	8x36	8x36	8x36
Receiver Capacity 80% Full per circuit (lbs.) ²		27	56	56	56
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	17	23	23	25
	w/ Flood Control ³	30	36	36	42
Suction Connection per circuit - ODS (in.) ⁷		1 3/8	1 3/8	1 3/8	1 5/8
Liquid Line Connection per circuit - ODS (in.)		5/8	5/8	5/8	5/8
Unit Shipping Weight - Approximate (lbs.)		538	570	715	776
Unit Operating Weight - Approximate (lbs.) ⁶		492	526	670	731

Capacity Ratings									
Ambient Temp.	Suction Temp.	LUI/LUO 5.04H		LUI/LUO 6.04H		LUI/LUO 7.54H		LUI/LUO 9.04H	
		Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴
85° F	0° F	27,430	4.81	33,205	5.76	42,265	6.93	48,161	8.48
	10° F	33,632	5.02	40,082	5.99	50,703	7.47	57,910	8.93
	20° F	40,420	5.25	47,634	6.24	59,897	8.03	68,443	9.41
	25° F	43,996	5.37	51,652	6.36	64,727	8.31	73,932	9.67
	30° F	47,658	5.51	55,801	6.50	69,662	8.60	79,625	9.92
	45° F	59,092	6.00	69,179	6.91	85,253	9.46	97,598	10.67
95° F	0° F	24,744	5.31	30,171	6.43	38,885	7.54	43,755	9.39
	10° F	30,364	5.53	36,395	6.67	46,473	8.12	52,627	9.84
	20° F	36,573	5.76	43,251	6.92	54,583	8.71	62,097	10.32
	25° F	39,826	5.89	46,924	7.04	58,869	9.00	67,030	10.57
	30° F	43,155	6.03	50,661	7.18	63,229	9.30	72,141	10.81
	45° F	53,661	6.51	-	-	-	-	-	-
105° F	0° F	22,035	5.85	-	-	-	-	-	-
	10° F	27,036	6.09	32,520	7.43	41,788	8.84	-	-
	20° F	32,566	6.33	-	-	-	-	-	-
	25° F	-	-	-	-	-	-	-	-
	30° F	-	-	-	-	-	-	-	-
	45° F	-	-	-	-	-	-	-	-

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- 2 - Based on 80% full at 90°F ambient.
- 3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)
- 4 - KW is for the unit.
- 5 - Rated in accordance with ANSI/AHRI Standard 520-2004.
- 6 - Operating weight reflects flooded refrigerant charge.
- 7 - Size based on mounted optional suction line trim.
- "-" - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R-507 - Low Temp		Model Numbers		
		LUI/LUO 3.07	LUI/LUO 3.57	LUI/LUO 4.07
Compressor Model Number		ZF09K4E	ZF11K4E	ZF13K4E
Compressor Motor Protection		INHERENT		
Unit MCA¹	208-230/1/60 V	21.1	29.1	34.4
	208-230/3/60 V	14.4	17.5	18.9
	460/3/60 V	7.4	9.2	10.1
Compressor RLA / LRA	208-230/1/60 V	14.3	20.7	25.0
	208-230/3/60 V	9.6	12.1	13.2
	460/3/60 V	5.0	6.4	7.1
Total Number of Condenser Fan Motors		1	1	1
Size of Motor (HP)		0.25	0.25	0.25
Diameter of Blade (in.)		20	20	20
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	1.4	1.4
	230/3/60 V	1.4	1.4	1.4
	460/3/60 V	0.7	0.7	0.7
Receiver Size per circuit (in.)		6x28	6x28	6x28
Receiver Capacity 80% Full per circuit (lbs.)²		20.7	20.7	20.7
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	12	12.5	12.5
	w/ Flood Control ³	16	16.5	16.5
Suction Connection per circuit - ODS (in.)⁷		7/8	1 1/8	1 1/8
Liquid Line Connection per circuit - ODS (in.)		0.5	0.5	0.5
Unit Shipping Weight - Approximate (lbs.)		436	448	512
Unit Operating Weight - Approximate (lbs.)⁶		391	402	467

Capacity Ratings			Unit Model Numbers					
Ambient Temp.	Temp Range	Suction Temp.	LUI/LUO 3.07		LUI/LUO 3.57		LUI/LUO 4.07	
			Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴
85° F	L	0° F	15,944	2.90	19,313	3.64	21,907	3.80
		-10° F	13,314	2.69	16,186	3.35	18,273	3.51
		-20° F	10,943	2.52	13,346	3.10	14,954	3.27
	XL	-25° F	9,851	2.45	12,026	2.99	13,418	3.17
		-30° F	8,817	2.39	10,777	2.90	11,965	3.08
		-40° F	6,914	2.29	8,485	2.74	9,308	2.93
95° F	L	0°	14,543	3.12	17,521	3.94	19,815	4.13
		-10° F	12,198	2.92	14,748	3.64	16,561	3.84
		-20° F	10,060	2.75	12,219	3.39	13,604	3.60
	XL	-25° F	9,074	2.69	11,040	3.29	12,248	3.49
		-30° F	8,134	2.63	9,919	3.19	10,959	3.40
		-40° F	6,382	2.53	7,838	3.03	8,630	3.25
105° F	L	0° F	13,092	3.37	-	-	-	-
		-10° F	11,009	3.17	13,196	3.98	14,762	4.22
		-20° F	9,122	3.01	10,987	3.73	12,204	3.98
	XL	-25° F	8,235	2.95	9,957	3.62	11,037	3.87
		-30° F	7,393	2.89	8,961	3.52	9,945	3.78
		-40° F	5,802	2.81	7,116	3.35	7,988	3.62

1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.

2 - Based on 80% full at 90°F ambient.

3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)

4 - KW is for the unit.

5 - Rated in accordance with ANSI/AHRI Standard 520-2004.

6 - Operating weight reflects flooded refrigerant charge.

7 - Size based on mounted optional suction line trim.

“-” - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R-507 - Low Temp		Model Numbers			
		LUI/LUO 5.07	LUI/LUO 6.07	LUI/LUO 7.57	LUI/LUO 10.07
Compressor Model Number		ZF15K4E	ZF18K4E	ZF25K4E	ZF34K5E
Compressor Motor Protection		INHERENT			
Unit MCA¹	208-230/1/60 V	37.6	-	-	-
	208-230/3/60 V	26	29.6	36.6	-
	460/3/60 V	12.3	12.3	16.4	23.9
Compressor RLA / LRA	208-230/1/60 V	27.5	-	-	-
	208-230/3/60 V	18.9	21.8	26.7	-
	460/3/60 V	8.9	8.9	11.9	17.9
Total Number of Condenser Fan Motors		1	1	1	1
Size of Motor (HP)		0.25	0.25	0.5	0.5
Diameter of Blade (in.)		20	20	24	24
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	-	-	-
	230/3/60 V	1.4	1.4	2	-
	460/3/60 V	0.7	0.7	1.0	1.0
Receiver Size per circuit (in.)		6x28	6x28	6x28	6x36
Receiver Capacity 80% Full per circuit (lbs.)²		20.7	20.7	20.7	27
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	13	14	14	17
	w/ Flood Control ³	20	22	22	30
Suction Connection per circuit - ODS (in.)⁷		1 1/8	1 1/8	1 1/8	1 3/8
Liquid Line Connection per circuit - ODS (in.)		0.5	0.5	0.5	0.625
Unit Shipping Weight - Approximate (lbs.)		538	570	715	813
Unit Operating Weight - Approximate (lbs.)⁶		492	526	670	768

Capacity Ratings			Unit Model Numbers							
Ambient Temp.	Temp Range	Suction Temp.	LUI/LUO 5.07		LUI/LUO 6.07		LUI/LUO 7.57		LUI/LUO 10.07	
			Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴
85° F	L	0° F	26,661	4.75	32,846	5.42	40,720	7.06	53,136	8.55
		-10° F	22,359	4.34	27,535	4.96	34,198	6.48	44,488	7.85
		-20° F	18,442	3.99	22,689	4.58	28,225	6.00	36,536	7.21
	XL	-25° F	16,640	3.84	20,443	4.42	25,459	5.79	32,820	6.92
		-30° F	14,924	3.70	18,306	4.28	22,805	5.62	29,291	6.63
		-40° F	11,806	3.45	14,324	4.08	17,876	5.35	22,673	6.10
95° F	L	0°	24,116	5.19	30,012	5.82	37,149	7.57	48,405	9.22
		-10° F	20,311	4.76	25,256	5.35	31,326	6.98	40,658	8.50
		-20° F	16,843	4.39	20,920	4.97	26,020	6.48	33,551	7.82
	XL	-25° F	15,236	4.21	18,906	4.81	23,524	6.28	30,192	7.50
		-30° F	13,706	4.05	16,978	4.67	21,149	6.10	26,980	7.18
		-40° F	10,869	3.76	13,348	4.45	16,636	5.82	20,879	6.59
105° F	L	0° F	-	-	-	-	-	-	-	-
		-10° F	18,144	5.23	22,871	5.78	28,319	7.52	36,596	9.20
		-20° F	15,139	4.82	19,061	5.39	23,678	7.01	30,328	8.48
	XL	-25° F	13,719	4.63	17,290	5.22	21,487	6.80	27,379	8.12
		-30° F	12,373	4.44	15,579	5.08	19,370	6.62	24,502	7.78
		-40° F	9,862	4.09	12,314	4.86	15,334	6.33	18,962	7.12

- 1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.
- 2 - Based on 80% full at 90°F ambient.
- 3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)
- 4 - KW is for the unit.
- 5 - Rated in accordance with ANSI/AHRI Standard 520-2004.
- 6 - Operating weight reflects flooded refrigerant charge.
- 7 - Size based on mounted optional suction line trim.
- “-” - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R507 - High Temp		Model Numbers				
		LUI/LUO 2.07H	LUI/LUO 2.57H	LUI/LUO 3.07H	LUI/LUO 3.57H	LUI/LUO 4.07H
Compressor Model Number		ZB15KCE	ZB19KCE	ZB21KCE	ZB26KCE	ZB30KCE
Compressor Motor Protection		INHERENT				
Unit MCA¹	208-230/1/60 V	22.8	25.6	29.1	32.7	36.7
	208-230/3/60 V	13.5	14.9	17.5	18.9	22.0
	460/3/60 V	7.4	7.4	8.8	9.2	10.6
Compressor RLA / LRA	208-230/1/60 V	15.7	17.9	20.7	23.6	26.8
	208-230/3/60 V	8.9	10.0	12.1	13.2	15.7
	460/3/60 V	5.0	5.0	6.1	6.4	7.5
Total Number of Condenser Fan Motors		1	1	1	1	1
Size of Motor (HP)		0.25	0.25	0.25	0.25	0.25
Diameter of Blade (in.)		20	20	20	20	20
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	1.4	1.4	1.4	1.4
	230/3/60 V	1.4	1.4	1.4	1.4	1.4
	460/3/60 V	0.7	0.7	0.7	0.7	0.7
Receiver Size per circuit (in.)		6x28	6x28	6x28	6x28	6x28
Receiver Capacity 80% Full per circuit (lbs.)²		20.7	20.7	20.7	20.7	20.7
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	12	12.5	13	13	14
	w/ Flood Control ³	16	17	20	20	22
Suction Connection per circuit - ODS (in.)⁷		7/8	1 1/8	1 1/8	1 1/8	1 1/8
Liquid Line Connection per circuit - ODS (in.)		1/2	1/2	1/2	1/2	1/2
Unit Shipping Weight - Approximate (lbs.)		428	428	436	448	512
Unit Operating Weight - Approximate (lbs.)⁶		383	383	391	402	467

Capacity Ratings		Unit Model Numbers									
Ambient Temp.	Suction Temp.	LUI/LUO 2.07H		LUI/LUO 2.57H		LUI/LUO 3.07H		LUI/LUO 3.57H		LUI/LUO 4.07H	
		Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴	Capacity	KW⁴
85° F	0° F	11,740	2.17	14,317	2.72	17,093	3.21	19,892	3.72	22,556	4.19
	10° F	14,216	2.24	17,257	2.83	20,602	3.34	23,949	3.88	27,521	4.36
	20° F	16,935	2.33	20,476	2.95	24,444	3.49	28,382	4.05	32,913	4.55
	25° F	18,387	2.37	22,197	3.01	26,470	3.56	30,730	4.14	35,732	4.65
	30° F	19,891	2.42	23,949	3.07	28,586	3.64	33,184	4.23	38,619	4.76
	45° F	24,767	2.56	29,600	3.27	35,328	3.88	40,949	4.52	47,817	5.12
95° F	0° F	10,688	2.41	12,983	3.03	15,496	3.59	18,002	4.17	20,351	4.62
	10° F	12,924	2.49	15,637	3.14	18,663	3.73	21,678	4.33	24,909	4.80
	20° F	15,399	2.58	18,553	3.27	22,141	3.87	25,684	4.50	29,786	4.99
	25° F	16,711	2.62	20,099	3.33	23,986	3.95	27,821	4.59	32,355	5.09
	30° F	18,088	2.67	21,719	3.39	25,886	4.03	30,022	4.69	34,981	5.20
	45° F	22,518	2.81	-	-	-	-	-	-	-	-
105° F	0° F	9,561	2.69	-	-	-	-	-	-	-	-
	10° F	11,567	2.77	13,935	3.50	16,624	4.15	19,290	4.83	22,133	5.29
	20° F	13,799	2.85	-	-	-	-	-	-	-	-
	25° F	-	-	-	-	-	-	-	-	-	-
	30° F	-	-	-	-	-	-	-	-	-	-
	45° F	-	-	-	-	-	-	-	-	-	-

- 1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.
- 2 - Based on 80% full at 90°F ambient.
- 3 - Based on 50 ft. of equivalent refrigerant line piping. (Does not include the evaporator.)
- 4 - KW is for the unit.
- 5 - Rated in accordance with ANSI/AHRI Standard 520-2004.
- 6 - Operating weight reflects flooded refrigerant charge.
- 7 - Size based on mounted optional suction line trim.
- "-" - Consult your local Century Representative.

NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

R507 - High Temp					
		LUI/LUO 5.07H	LUI/LUO 6.07H	LUI/LUO 7.57H	LUI/LUO 9.07H
Compressor Model Number		ZB38KCE	ZB45KCE	ZB57KCE	ZB66KCE
Compressor Motor Protection		INHERENT			
Unit MCA ¹	208-230/1/60 V	42.1	-	-	-
	208-230/3/60 V	30.0	31.3	47.6	40.7
	460/3/60 V	13.2	14.1	20.5	23.4
Compressor RLA / LRA	208-230/1/60 V	31.1	-	-	-
	208-230/3/60 V	22.1	22.5	35.5	30.0
	460/3/60 V	9.6	10.1	15.2	17.5
Total Number of Condenser Fan Motors		1	1	1	1
Size of Motor (HP)		0.25	0.5	0.5	0.5
Diameter of Blade (in.)		20	24	24	24
Condenser Fan Motor Amps (each)	208/3/60 V	1.4	-	-	-
	230/3/60 V	1.4	2.0	2.0	2.0
	460/3/60 V	0.7	1	1	1
Receiver Size per circuit (in.)		6x36	8x36	8x36	8x36
Receiver Capacity 80% Full per circuit (lbs.) ²		27	56	56	56
Unit Operating Charge per circuit (approx. lbs.)	Standard ³	17	23	23	25
	w/ Flood Control ³	30	36	36	42
Suction Connection per circuit - ODS (in.) ⁷		1 3/8	1 3/8	1 3/8	1 5/8
Liquid Line Connection per circuit - ODS (in.)		5/8	5/8	5/8	5/8
Unit Shipping Weight - Approximate (lbs.)		538	570	715	776
Unit Operating Weight - Approximate (lbs.) ⁶		492	526	670	731

Capacity Ratings									
		LUI/LUO 5.07H		LUI/LUO 6.07H		LUI/LUO 7.57H		LUI/LUO 9.07H	
Ambient Temp.	Suction Temp.	Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴	Capacity	KW ⁴
85° F	0° F	28,108	4.93	34,013	5.90	43,367	7.09	49,330	8.70
	10° F	34,462	5.14	41,050	6.14	51,963	7.65	59,247	9.17
	20° F	41,330	5.39	48,726	6.40	61,298	8.23	69,926	9.67
	25° F	44,985	5.52	52,829	6.53	66,156	8.53	75,514	9.93
	30° F	48,674	5.66	57,065	6.67	71,174	8.83	81,307	10.19
	45° F	60,336	6.16	70,564	7.11	86,899	9.72	99,452	10.97
95° F	0° F	25,341	5.43	30,910	6.59	39,833	7.73	44,774	9.63
	10° F	31,091	5.66	37,240	6.84	47,533	8.32	53,785	10.10
	20° F	37,356	5.91	44,248	7.09	55,854	8.92	63,440	10.59
	25° F	40,676	6.04	47,946	7.23	60,150	9.23	68,382	10.86
	30° F	44,073	6.19	51,756	7.38	64,580	9.54	73,576	11.11
	45° F	-	-	-	-	-	-	-	-
105° F	0° F	22,552	6.00	-	-	-	-	-	-
	10° F	27,662	6.23	33,280	7.61	42,723	9.06	-	-
	20° F	33,267	6.49	-	-	-	-	-	-
	25° F	-	-	-	-	-	-	-	-
	30° F	-	-	-	-	-	-	-	-
	45° F	-	-	-	-	-	-	-	-

- 1 - MCA (Minimum Circuit Ampacity) is calculated based on all concurrent loads applied to the circuit. (Largest load x 1.25 + 100% of all other loads including the control circuit.) Unit cooler amperages not included.
- 2 - Based on 80% full at 90°F ambient.
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- 7 - Size based on mounted optional suction line trim.
- "-" - Consult your local Century Representative.

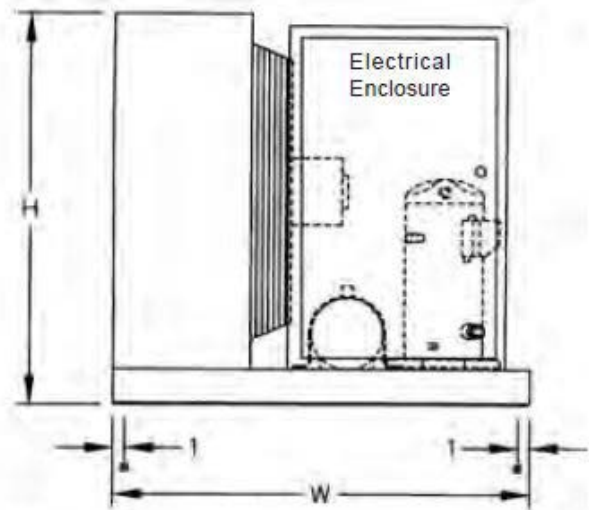
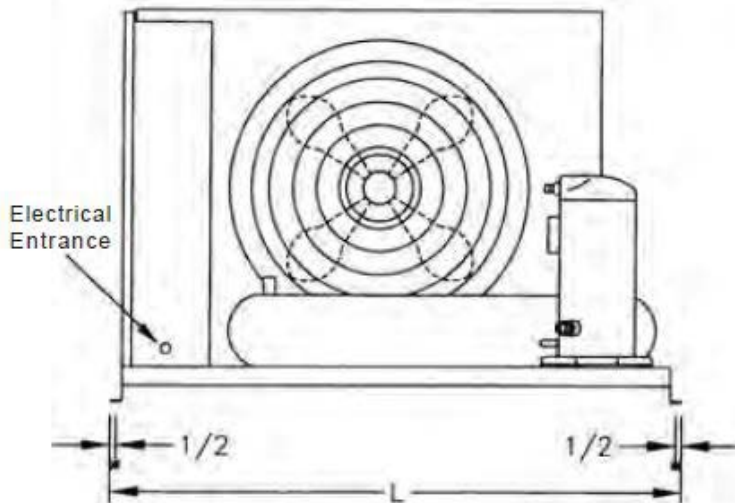
NOTE: Compressor amps are based on the maximum cataloged suction temperature for the condensing unit. Limiting the operation to this envelope is required via a MOP expansion valve or other means.

Dimensional Data

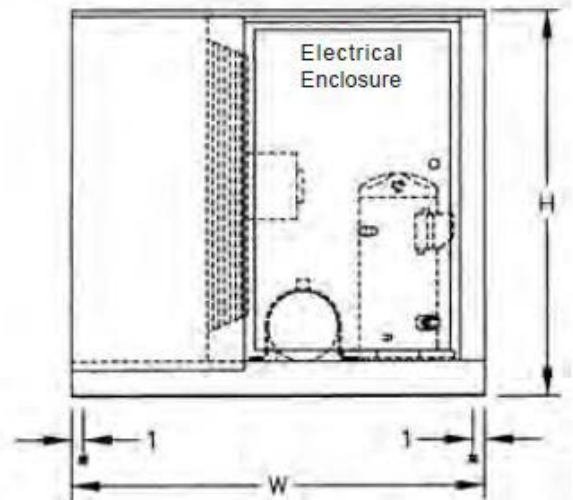
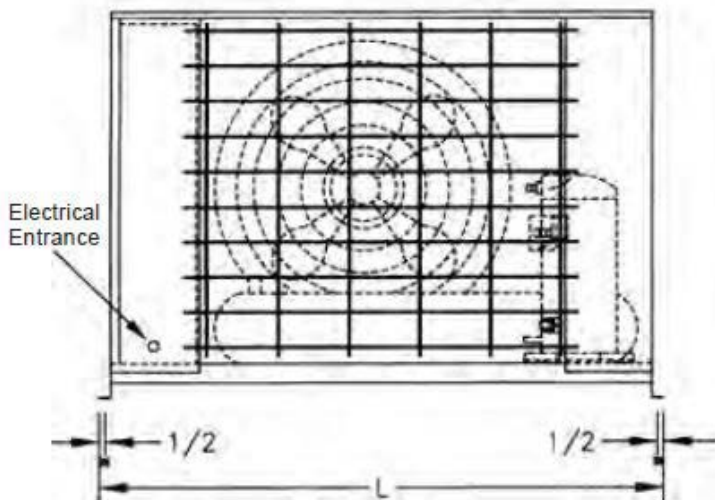
Hi Temp Unit Model Numbers	L	W	H
LUI/LUO 2.02H	38"	35"	33 1/8"
LUI/LUO 2.52H	38"	35"	33 1/8"
LUI/LUO 3.02H	38"	35"	33 1/8"
LUI/LUO 3.52H	38"	35"	33 1/8"
LUI/LUO 4.02H	48"	35"	33 1/8"
LUI/LUO 4.52H	48"	35"	33 1/8"
LUI/LUO 5.02H	48"	35"	33 1/8"
LUI/LUO 6.02H	48"	35"	33 1/8"
LUI/LUO 7.52H	48"	35"	33 1/8"
LUI/LUO 9.02H	48"	35"	33 1/8"

Lo Temp Unit Model Numbers	L	W	H
LUI/LUO 3.04	38"	35"	33 1/8"
LUI/LUO 3.54	38"	35"	33 1/8"
LUI/LUO 4.04	38"	35"	33 1/8"
LUI/LUO 5.04	38"	35"	33 1/8"
LUI/LUO 6.04	48"	35"	33 1/8"
LUI/LUO 7.54	48"	35"	33 1/8"
LUI/LUO 10.04	48"	35"	33 1/8"

INDOOR UNIT



OUTDOOR UNIT



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