

120 Series Refrigeration Systems

Air Cooled Indoor/Outdoor Condensing Units

Hermetic / Scroll / Semi-Hermetic

½ thru 6 Hp Models



PC Refrigeration Systems

The Kolpak PC Refrigeration system includes a Kolpak condensing unit, a Kolpak evaporator assembly and is supplied charged with refrigerant sufficient for a 50' line run. The condensing unit assembly is designed to be remotely located and should be used when line runs will exceed the 40' limit when using a PCL model. Installation involves securing the evaporator assembly on the interior of the walk-in, locating the condensing unit in a suitable area near the walk-in, and installing refrigerant lines between the condensing unit assembly and the evaporator assembly, evacuating the evaporator assembly and refrigerant lines and opening the base valves provided on the condensing unit assembly. An electrician must bring power to both the condensing unit assembly and the evaporator assembly. On low and medium temperature systems the time clock is shipped loose and is to be field installed in a convenient location outside of the walk-in.

PC System consists of:

- Condensing Unit (high side assembly) ETL Listed to UL Standard 1995
- Evaporators (low side assembly) See Unit Cooler catalog for details of evaporators
- All necessary controls for proper operation of condensing unit and evaporators
- Time Clock (low temp and medium temp) shipped loose
- Refrigerant charge (high side assembly) suitable for up to 50 feet of line run

PC Refrigeration Systems

Standard Installed Components

High Side Assembly

- Liquid Line Filter/Drier
- Sight glass/Moisture Indicator
- Pressure Controls
- Low Ambient Controls (outdoor)
- Crankcase Heater (outdoor)
- Oversized Receiver
- R404A – Refrigerant Charge for up to 50' of lines
- Insulated Suction Line
- PSC Condenser Fan Motors
- Base Valves
- Time Clocks (medium & low) shipped loose
- Weatherproof Housing
- Valve at Receiver

Low Side Assembly

- Thermostatic Expansion Valve
- Solenoid Valve
- Temperature Control
- EC Fan Motors
- (See Unit Cooler catalog for details)

PCL Refrigeration Systems

The Kolpak PCL Refrigeration system is supplied completely charged and tested with a Kolpak condensing unit and a Kolpak evaporator assembly. The condensing unit assembly is designed to be remotely located. Installation involves securing the evaporator assembly on the interior of the walk-in, locating the condensing unit in a suitable area near the walk-in, and running the pre-charged refrigerant lines between the condensing unit assembly and the evaporator assembly. An electrician must bring power to both the condensing unit assembly and the evaporator assembly. On low and medium temperature systems the time clock is shipped loose and is to be field installed in a convenient location outside of the walk-in.

PCL System consists of:

- Condensing Unit (high side assembly) ETL Listed to UL Standard 1995
- Evaporators (low side assembly) See Unit Cooler catalog for details of evaporators
- Pre-Charged Line Sets (10', 20', 30', 40')
- Quick Couples for easy connection of refrigerant lines
- All necessary controls for proper operation of condensing unit and evaporators
- Time Clocks (low temp and medium temp) shipped loose
- R404A – Refrigerant charge (high side assembly) suitable for pre-charged line length selected

PCL Refrigeration Systems

Standard Installed Components

High Side Assembly

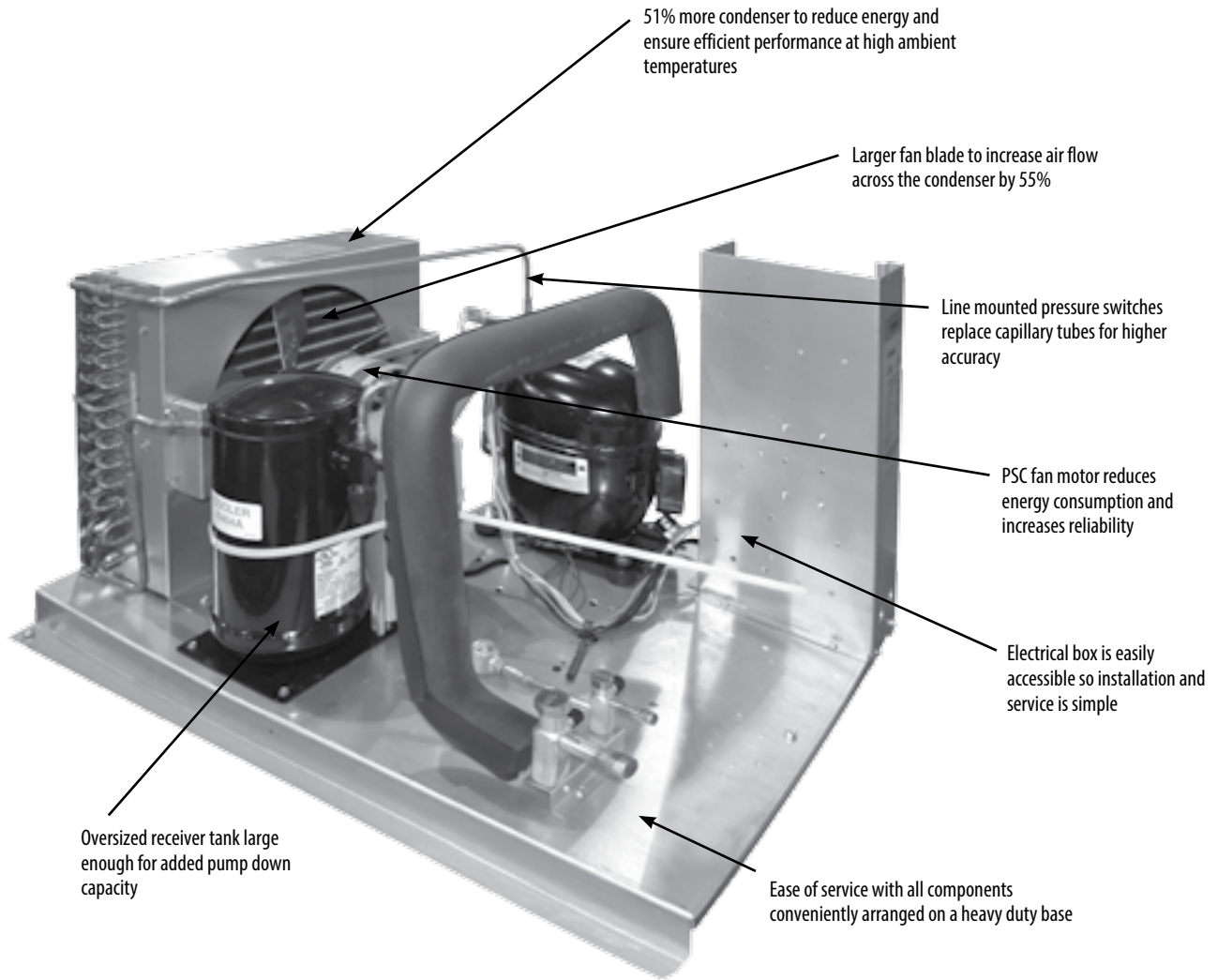
- Liquid Line Filter/Drier
- Sight glass/Moisture Indicator
- Pressure Controls
- Low Ambient Controls (outdoor)
- Crankcase Heater (outdoor)
- Oversized Receiver
- Quick Couples for easy refrigerant line connections
- Refrigerant Charge for line length selected
- Refrigerant lines in 10' sizes up to 40'
- Insulated Suction Line
- PSC Condenser Fan Motors
- Base Valves
- Time Clocks (medium & low) shipped loose
- Weatherproof Housing
- Valve at Receiver

Low Side Assembly

- Thermostatic Expansion Valve
- Solenoid Valve
- Temperature Control
- EC Fan Motors
- Quick Couples for easy refrigerant line connections
- (See Unit Cooler catalog for details)

Kolpak 120

The 120 High Side System is a high efficiency air-cooled refrigeration condensing unit designed specifically to operate on Walk-ins over a wide range of ambient temperatures.



Features and benefits of the 120 System:

Operates effectively from -20°F to +120°F without exceeding the design and safety criteria of components.

Ease of service with all components conveniently arranged on a heavy duty base to be accessible for adjustments and repairs when necessary.

Provides an efficient balance between compressor, condenser surface, air movement and controls. The units are equipped with extra condensing surface, oversized fan blades and PSC fan motors. The oversized fan blade powered by the PSC motor moves air more efficiently to use less electricity.

High accuracy pressure switches are used in place of capillary tubes to eliminate possible leakage points.

Features and Options

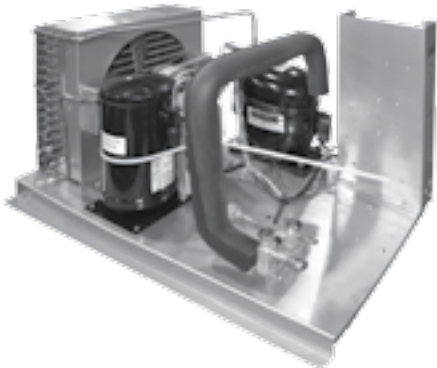
		REFRIGERATION CONDENSING UNITS					
Low Temp Scroll CU	Description	PC	PC	PC	PCL	PCL	PCL
		Hermetic	Scroll	Semi-Hermetic	Hermetic	Scroll	Semi-Hermetic
Controls	Encapsulated High Pressure Control	Std	Std	Std	Std	Std	Std
	Encapsulated Low Pressure Control	Std	NA	Std	Std	NA	Std
	Encapsulated Fan Cycle Control *	Std	Opt	NA	Std	Opt	NA
	Adjustable Low Pressure Control	Opt	Std	Opt	Opt	Std	Opt
	Adjustable Fan Cycle Control	Opt	Opt	NA	Opt	Opt	NA
	Crank Case Heater (low ambient)	Std	Std	Std	Std	Std	Std
	Flooded Head Pressure Control Valve	Opt	Std	Std	Opt	Std	Std
Condenser	Condenser (copper tube aluminum fins)	Std	Std	Std	Std	Std	Std
	Oversized Condenser for 120° Ambient operation	Std	Std	Std	Std	Std	Std
	Condenser fan motor(s) PSC	Std	Std	Std	Std	Std	Std
	Condenser fan blade(s) individually balanced	Std	Std	Std	Std	Std	Std
Receiver & Piping Components	Oversized Receiver	Std	Std	Std	Std	Std	Std
	Receiver shut off valve	Std	Std	Std	Std	Std	Std
	Base valves liquid & suction	Std	Std	Std	Std	Std	Std
	Suction line vibrasorber	Opt	Opt	Std	Opt	Opt	Std
	Discharge line vibrasorber	Opt	Opt	Std	Opt	Opt	Std
	Liquid and Suction line piping stub outs	Std	Std	Std	Std	Std	Std
	Suction accumulator (Low Temp)	Opt	Opt	Opt	Opt	Opt	Opt
	Suction accumulator (Med Temp)	Opt	Opt	Opt	Opt	Opt	Opt
	Suction filter	Opt	Opt	Opt	Opt	Opt	Opt
	Heated Insulated Receiver	Opt	Opt	Opt	Opt	Opt	Opt
	Liquid Line Drier	Std	Std	Std	Std	Std	Std
	Liquid Line Moisture indicator sight glass	Std	Std	Std	Std	Std	Std
Defrost	Defrost Lock Out (Low Temp)	Opt	Std	Opt	Opt	Std	Opt
	Time Clock shipped loose (Low Temp)	Std	Std	Std	Std	Std	Std
	Time Clock shipped loose (Med Temp)	Std	Std	Std	Std	Std	Std
	Time Clock Mtd & Wired in elec box (Low & Med)	Opt	Opt	Opt	Opt	Opt	Opt
Refrigerant	R404A – Refrigerant Charge (PC - 50')	Std	Std	Std	NA	NA	NA
	R404A – Refrigerant Charge w/ 10' Line Set')	NA	NA	NA	Std	Std	Std
	R404A – Refrigerant Line Sets (20', 30', 40')	NA	NA	NA	Opt	Opt	Opt
	Dry Nitrogen Holding Charge	NA	NA	NA	NA	NA	NA
Housing	Galvanized Steel Weather Proof Housing	Std	Std	Std	Std	Std	Std
	Electrical Control Panel with cover	Std	Std	Std	Std	Std	Std
Testing	Leak Testing prior to shipment	Std	Std	Std	Std	Std	Std
	Dielectric Testing	Std	Std	Std	Std	Std	Std
	Agency Listing to UL Std 1995 & comparable CSA Std	Std	Std	Std	Std	Std	Std

Hermetic (Air Cooled) Condensing Units

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @115/60/1						Amps @208-230/60/1					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA					MOPD
		RLA	LRA					RLA	LRA								
49M	RST45C1E	10.5	54.5	1.2	11.9	14.3	20.0	5.1	26.5	0.5	5.7	7.0	15.0	33	25-1/2	19-1/4	B
69M	RST55C1E	15.0	70.0	1.2	16.4	20.1	35.0	6.8	33.7	0.5	7.4	9.1	15.0	33	25-1/2	19-1/4	B
99M	R92J163	---	---	---	---	---	---	6.0	43	1.1	7.2	8.7	15.0	33	25-1/2	19-1/4	B
149M	CF04K6E	---	---	---	---	---	---	9.6	59.2	1.1	10.9	13.3	20.0	33	25-1/2	19-1/4	B
199M	CS12K6E	---	---	---	---	---	---	10.9	56.0	2.2	13.3	15.2	25.0	33	40-1/8	22-1/4	D
249M	CS16K6E	---	---	---	---	---	---	15.5	73.0	2.2	17.9	21.8	35.0	33	40-1/8	22-1/4	D
299M	CS18K6E	---	---	---	---	---	---	16.0	82.0	2.2	18.4	22.4	35.0	33	40-1/8	22-1/4	D
349M	CS20K6E	---	---	---	---	---	---	18.6	96.0	2.2	21.0	25.6	40.0	33	40-1/8	22-1/4	D
399M	CS27K6E	---	---	---	---	---	---	23.9	121.0	3.6	27.7	33.6	50.0	37	48-7/8	29-1/4	E
499M	CS33K6E	---	---	---	---	---	---	30.7	125.0	3.6	34.5	42.7	70.0	37	48-7/8	29-1/4	E

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @208-230/60/3						Amps @460/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA					MOPD
		RLA	LRA					RLA	LRA								
49M	RST45C1E	---	---	---	---	---	---	---	---	---	---	---	---	33	25-1/2	19-1/4	B
69M	RST55C1E	---	---	---	---	---	---	---	---	---	---	---	---	33	25-1/2	19-1/4	B
99M	R92J163	5.3	61	1.1	6.5	7.9	15.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
149M	CF04K6E	6.4	52.0	1.1	7.7	9.3	15.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
199M	CS12K6E	7.5	51.0	2.2	9.9	11.0	15.0	---	---	---	---	---	---	33	40-1/8	22-1/4	D
249M	CS16K6E	9.5	66.0	2.2	11.9	14.3	20.0	---	---	---	---	---	---	33	40-1/8	22-1/4	D
299M	CS18K6E	8.8	65.5	2.2	11.2	13.4	20.0	4.7	33.0	1.1	6.0	7.2	15.0	33	40-1/8	22-1/4	D
349M	CS20K6E	11.4	75.0	2.2	13.8	16.6	25.0	5.1	40.0	1.1	6.4	7.7	15.0	33	40-1/8	22-1/4	D
399M	CS27K6E	13.4	105.0	3.6	17.2	25.5	35.0	8.4	52.0	1.8	10.4	12.5	20.0	37	48-7/8	29-1/4	E
499M	CS33K6E	18.7	102.0	3.6	22.5	27.2	40.0	9.9	48.0	1.8	11.9	14.4	20.0	37	48-7/8	29-1/4	E

Condensing Unit Assembly



Hermetic Medium Temp (Air Cooled) Condensing Units													Physical Data				
Capacity (BTUH) @ 90°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
49M	1/2	---	---	---	---	---	---	---	4,310	4,750	5,210	5,770	6,370	5/8 OD	3/8 OD	5.8	146
69M	3/4	---	---	---	---	---	---	---	5,445	6,041	6,669	7,330	8,019	5/8 OD	3/8 OD	5.8	151
99M	1	---	---	---	---	---	---	---	7,282	8,585	9,994	11,538	13,228	5/8 OD	3/8 OD	10.4	156
149M	1-1/2	---	---	---	---	---	---	---	10,100	11,558	12,902	14,717	16,680	7/8 OD	3/8 OD	10.4	163
199M	2	---	---	---	---	---	---	---	12,400	14,200	16,100	18,200	20,500	7/8 OD	3/8 OD	10.4	211
249M	2-1/2	---	---	---	---	---	---	---	15,550	17,950	20,300	22,600	24,700	7/8 OD	3/8 OD	13.7	214
299M	3	---	---	---	---	---	---	---	17,800	20,200	22,800	25,400	28,000	7/8 OD	3/8 OD	13.7	216
349M	3-1/2	---	---	---	---	---	---	---	18,800	21,100	23,600	26,500	30,000	7/8 OD	3/8 OD	19.7	260
399M	4	---	---	---	---	---	---	---	25,100	29,000	33,300	37,900	42,900	1-1/8 OD	1/2 OD	19.7	400
499M	5	---	---	---	---	---	---	---	29,000	33,100	37,400	42,000	46,700	1-1/8 OD	1/2 OD	19.7	400

Capacity (BTUH) @ 100°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
49M	1/2	---	---	---	---	---	---	---	3,910	4,310	4,720	5,230	5,780	5/8 OD	3/8 OD	5.8	146
69M	3/4	---	---	---	---	---	---	---	4,905	5,443	5,937	6,533	7,149	5/8 OD	3/8 OD	5.8	151
99M	1	---	---	---	---	---	---	---	5,804	6,963	8,229	9,610	11,133	5/8 OD	3/8 OD	10.4	156
149M	1-1/2	---	---	---	---	---	---	---	8,893	10,120	11,480	13,142	14,918	7/8 OD	3/8 OD	10.4	163
199M	2	---	---	---	---	---	---	---	10,800	12,500	14,300	16,300	18,400	7/8 OD	3/8 OD	10.4	211
249M	2-1/2	---	---	---	---	---	---	---	13,450	15,650	17,800	19,900	21,800	7/8 OD	3/8 OD	13.7	214
299M	3	---	---	---	---	---	---	---	15,400	17,600	20,000	22,300	24,700	7/8 OD	3/8 OD	13.7	216
349M	3-1/2	---	---	---	---	---	---	---	16,250	18,350	20,650	23,200	26,500	7/8 OD	3/8 OD	19.7	260
399M	4	---	---	---	---	---	---	---	21,600	25,100	29,000	33,300	37,600	1-1/8 OD	1/2 OD	19.7	400
499M	5	---	---	---	---	---	---	---	25,300	28,900	32,800	36,900	41,100	1-1/8 OD	1/2 OD	19.7	400

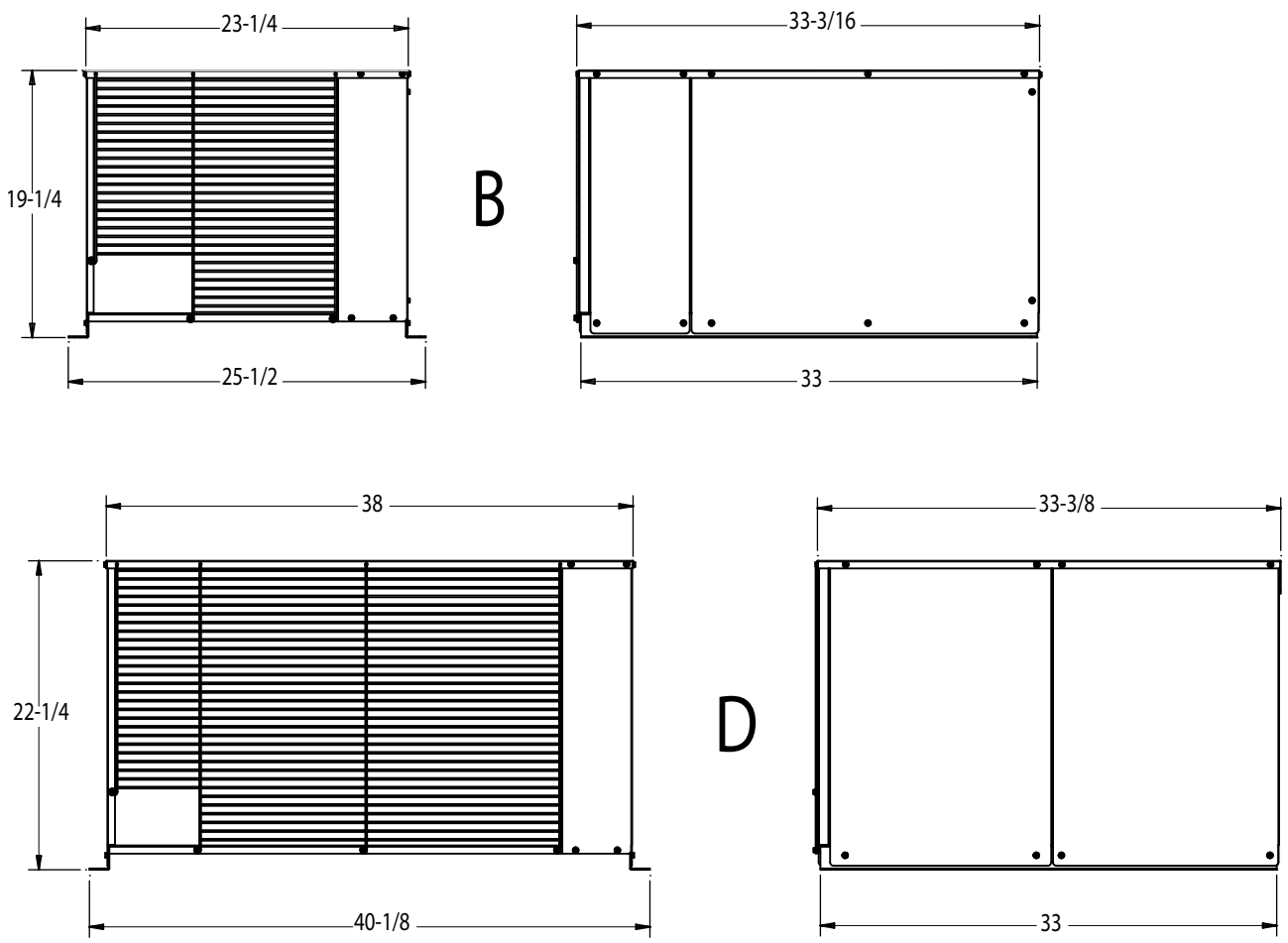
Capacity (BTUH) @ 110°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
49M	1/2	---	---	---	---	---	---	---	3,500	3,850	4,200	4,660	5,150	5/8 OD	3/8 OD	5.8	146
69M	3/4	---	---	---	---	---	---	---	4,326	4,805	5,321	5,861	6,420	5/8 OD	3/8 OD	5.8	151
99M	1	---	---	---	---	---	---	---	4,445	5,434	6,548	7,799	9,198	5/8 OD	3/8 OD	10.4	156
149M	1-1/2	---	---	---	---	---	---	---	7,665	8,750	9,874	11,437	13,298	7/8 OD	3/8 OD	10.4	163
199M	2	---	---	---	---	---	---	---	9,310	10,800	12,500	14,300	16,200	7/8 OD	3/8 OD	10.4	211
249M	2-1/2	---	---	---	---	---	---	---	11,400	13,400	15,350	17,250	18,950	7/8 OD	3/8 OD	13.7	214
299M	3	---	---	---	---	---	---	---	13,100	15,100	17,200	19,300	21,400	7/8 OD	3/8 OD	13.7	216
349M	3-1/2	---	---	---	---	---	---	---	13,700	15,600	17,700	20,100	23,000	7/8 OD	3/8 OD	19.7	260
399M	4	---	---	---	---	---	---	---	18,600	21,700	25,100	28,900	33,000	1-1/8 OD	1/2 OD	19.7	400
499M	5	---	---	---	---	---	---	---	21,600	24,900	28,300	31,900	35,600	1-1/8 OD	1/2 OD	19.7	400

Capacity (BTUH) @ 120°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
49M	1/2	---	---	---	---	---	---	---	3,050	3,360	3,680	4,100	4,560	5/8 OD	3/8 OD	5.8	146
69M	3/4	---	---	---	---	---	---	---	3,819	4,241	4,706	5,187	5,693	5/8 OD	3/8 OD	5.8	151
99M	1	---	---	---	---	---	---	---	3,291	4,119	5,073	6,148	7,368	5/8 OD	3/8 OD	10.4	156
149M	1-1/2	---	---	---	---	---	---	---	6,339	7,329	8,459	9,879	11,534	7/8 OD	3/8 OD	10.4	163
199M	2	---	---	---	---	---	---	---	7,680	9,080	10,600	12,300	14,200	7/8 OD	3/8 OD	10.4	211
249M	2-1/2	---	---	---	---	---	---	---	9,420	11,200	13,000	14,750	16,350	7/8 OD	3/8 OD	13.7	214
299M	3	---	---	---	---	---	---	---	10,800	12,600	14,500	16,400	18,400	7/8 OD	3/8 OD	13.7	216
349M	3-1/2	---	---	---	---	---	---	---	11,400	13,100	15,000	17,100	---	7/8 OD	3/8 OD	19.7	260
399M	4	---	---	---	---	---	---	---	15,100	17,800	20,800	24,100	27,800	1-1/8 OD	1/2 OD	19.7	400
499M	5	---	---	---	---	---	---	---	18,500	21,400	24,500	27,600	30,900	1-1/8 OD	1/2 OD	19.7	400

Low Temp R404A Hermetic (Air Cooled) Condensing Units													Low Temperature				
		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @208-230/60/1						Amps @208-230/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA**	MOPD	Compressor		Cond FLA	Total CU	MCA**					MOPD
		RLA	LRA					RLA	LRA								
69L	M4FF-0080	9.0	43.0	1.1	9.9	12.4	20.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
99L	CF04K6E	9.6	59.2	1.1	10.8	14.3	20.0	6.4	52.0	1.1	7.6	9.2	15.0	33	25-1/2	19-1/4	B
149L	CF06K6E	11.4	59.2	1.1	12.6	15.6	25.0	6.4	52.0	1.1	7.1	9.4	15.0	33	25-1/2	19-1/4	B
199L	CF09K6E	16.7	87.0	1.1	18.1	22.3	35.0	10.2	72.2	1.1	11.6	14.2	20.0	33	25-1/2	19-1/4	B
249L	CF09K6E	16.7	87.0	2.2	19.2	23.4	40.0	10.2	72.2	2.2	12.6	15.1	25.0	33	40-1/8	22-1/4	D
299L	CF12K6E	19.0	105.0	2.2	21.4	26.2	40.0	11.9	85.0	2.2	14.3	17.3	25.0	33	40-1/8	22-1/4	D

**MCA & MOPD does not include the electrical load from the evaporator(s) (evaporator fan motor and defrost heater amps). If time clock for low temp models is factory mounted contact the factory for specific details.

Condensing Unit Assembly



Low Temp R404A Hermetic (Air Cooled) Condensing Units														Physical Data			
Capacity (BTUH) @ 90°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
69L	3/4	2,110	2,560	3,020	3,490	3,980	4,440	4,980	5,490	6,010	6,550	7,100	---	5/8 OD	3/8 OD	5.8	169
99L	1	3,021	3,511	4,342	5,006	5,832	6,621	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	173
149L	1-1/2	4,869	6,024	6,949	8,119	9,270	10,131	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	177
199L	2	7,366	8,884	10,155	11,735	13,318	14,542	---	---	---	---	---	---	7/8 OD	3/8 OD	10.2	186
249L	2-1/2	8,019	9,762	11,533	13,305	14,701	17,296	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	213
299L	3	10,034	11,810	13,828	15,793	18,400	20,672	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	219

Capacity (BTUH) @ 100°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
69L	3/4	1,770	2,200	2,620	3,060	3,500	3,920	4,410	4,860	5,330	5,810	6,290	---	5/8 OD	3/8 OD	5.8	169
99L	1	1,839	2,888	3,433	4,226	4,813	5,568	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	173
149L	1-1/2	3,968	4,839	5,702	6,698	7,814	8,612	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	177
199L	2	6,323	7,498	8,662	8,538	11,475	12,951	---	---	---	---	---	---	7/8 OD	3/8 OD	10.2	186
249L	2-1/2	7,000	8,158	9,913	11,335	12,949	14,542	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	213
299L	3	8,530	10,100	11,990	13,976	16,060	18,550	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	219

Capacity (BTUH) @ 110°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
69L	3/4	---	1,840	2,230	2,630	3,020	3,400	3,830	4,230	4,640	5,060	5,480	---	5/8 OD	3/8 OD	5.8	169
99L	1	1,750	2,298	2,717	3,198	3,943	4,442	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	173
149L	1-1/2	3,096	3,716	4,431	5,364	5,939	7,212	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	177
199L	2	---	5,845	7,270	8,346	9,096	10,720	---	---	---	---	---	---	7/8 OD	3/8 OD	10.2	186
249L	2-1/2	5,851	6,928	7,975	9,500	11,026	12,554	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	213
299L	3	6,833	8,399	10,100	11,620	13,296	15,940	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	219

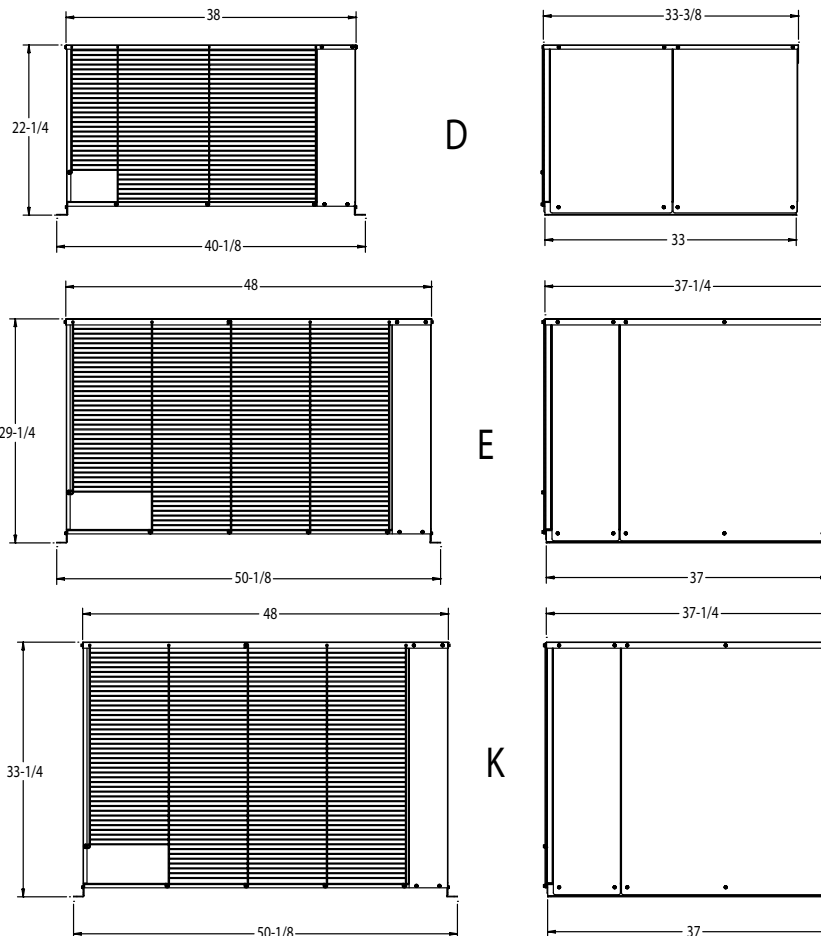
Capacity (BTUH) @ 120°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-25	-20	-15	-10	-5	0F	5F	10F	15F	20F	25F	30F	SUC	LIQ		
69L	3/4	---	---	---	2,200	2,550	2,880	3,260	---	---	---	---	---	5/8 OD	3/8 OD	5.8	169
99L	1	---	1,527	2,041	2,390	2,797	3,481	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	173
149L	1-1/2	2,050	2,806	3,410	4,107	5,015	5,585	---	---	---	---	---	---	5/8 OD	3/8 OD	10.2	177
199L	2	---	---	5,620	6,770	7,625	8,587	---	---	---	---	---	---	7/8 OD	3/8 OD	10.2	186
249L	2-1/2	---	5,438	6,293	7,769	9,055	10,503	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	213
299L	3	---	6,492	8,336	9,762	11,379	12,900	---	---	---	---	---	---	7/8 OD	3/8 OD	13.6	219

Scroll Medium Temp (Air Cooled) Condensing Units

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @115/60/1						Amps @208-230/60/1					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA					MOPD
		RLA	LRA					RLA	LRA								
199MZ	ZS15K4E	---	---	---	---	---	---	13.6	55	2.0	17.5	20	25	33	40-1/8	22-1/4	D
249MZ	ZS19K4E	---	---	---	---	---	---	16.4	73	2.0	20.3	25	30	33	40-1/8	22-1/4	D
299MZ	ZS21K4E	---	---	---	---	---	---	16.4	88	2.0	20.6	25	35	33	40-1/8	22-1/4	D
349MZ	ZS26K4E	---	---	---	---	---	---	20.7	109	2.0	24.9	30	45	33	40-1/8	22-1/4	D
449MZ	ZS30K4E	---	---	---	---	---	---	26.8	129	3.6	30.7	37.4	60	37	50-1/8	29-1/4	E
549MZ	ZS38K4E	---	---	---	---	---	---	31.8	169	3.6	35.7	43.7	70	37	50-1/8	33-1/4	K
599MZ	ZS45K4E	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @ 208/230/60/3						Amps @460/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA					MOPD
		RLA	LRA					RLA	LRA								
199MZ	ZS15K4E	9.3	55	2.0	12.3	14.0	20	3.8	27	1.0	4.8	15	15	33	40-1/8	22-1/4	D
249MZ	ZS19K4E	9.7	63	2.0	12.7	14.5	20	5.0	31	1.3	6.8	15	15	33	40-1/8	22-1/4	D
299MZ	ZS21K4E	11.1	77	2.0	14.1	16.2	25	5.7	39	1.3	7.5	15	15	33	40-1/8	22-1/4	D
349MZ	ZS26K4E	13.6	88	2.0	16.6	19.3	30	7.1	44	1.3	8.9	15	15	33	40-1/8	22-1/4	D
449MZ	ZS30K4E	15.0	99	3.6	18.9	22.7	35	8.2	49.5	1.8	10.1	12.2	20	37	50-1/8	29-1/4	E
549MZ	ZS38K4E	21.4	123	3.6	25.3	30.7	50	9.6	62	1.8	11.5	14.0	20	37	50-1/8	33-1/4	K
599MZ	ZS45K4E	23.9	156	3.6	27.8	33.8	50	9.3	75	1.8	11.2	13.6	20	37	50-1/8	33-1/4	K

Air Cooled Scroll



Scroll Medium Temp (Air Cooled) Condensing Units Performance Data													Physical Data				
Capacity (BTUH) @ 90°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F	SUC	LIQ		
199MZ	2	---	---	---	---	---	12,525	15,069	17,881	19,385	20,961	22,588	---	7/8 OD	1/2 OD	13.7	215
249MZ	2-1/2	---	---	---	---	---	15,285	18,437	21,960	23,855	25,802	27,892	---	1-1/8 OD	1/2 OD	13.7	230
299MZ	3	---	---	---	---	---	17,603	21,476	25,606	27,748	29,922	32,043	---	1-1/8 OD	1/2 OD	13.7	320
349MZ	3-1/2	---	---	---	---	---	21,393	25,946	30,426	33,300	35,834	38,306	---	7/8 OD	3/8 OD	13.7	335
449MZ	4-1/2	---	---	---	---	---	---	29,200	31,800	34,700	37,600	40,700	---	1-1/8 OD	1/2 OD	19.7	400
549MZ	5-1/2	---	---	---	---	---	---	36,400	39,800	43,400	47,200	51,000	---	1-1/8 OD	1/2 OD	23.0	425
599MZ	6	---	---	---	---	---	---	42,800	46,800	51,000	55,500	60,000	---	1-1/8 OD	1/2 OD	23.0	440

Capacity (BTUH) @ 100°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F	SUC	LIQ		
199MZ	2	---	---	---	---	---	11,773	14,165	16,808	18,222	19,703	21,233	---	7/8 OD	1/2 OD	13.7	215
249MZ	2-1/2	---	---	---	---	---	14,368	17,331	20,642	22,424	24,253	26,219	---	1-1/8 OD	1/2 OD	13.7	230
299MZ	3	---	---	---	---	---	16,547	20,187	24,069	26,083	28,126	30,121	---	1-1/8 OD	1/2 OD	13.7	320
349MZ	3-1/2	---	---	---	---	---	20,110	24,389	28,601	31,302	33,684	36,007	---	7/8 OD	3/8 OD	13.7	335
449MZ	4-1/2	---	---	---	---	---	---	26,900	29,400	32,100	34,800	37,700	---	1-1/8 OD	1/2 OD	19.7	400
549MZ	5-1/2	---	---	---	---	---	---	33,700	36,800	40,100	43,600	47,300	---	1-1/8 OD	1/2 OD	23.0	425
599MZ	6	---	---	---	---	---	---	39,600	43,200	47,100	51,000	55,500	---	1-1/8 OD	1/2 OD	23.0	440

Capacity (BTUH) @ 110°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F	SUC	LIQ		
199MZ	2	---	---	---	---	---	11,067	13,315	15,799	17,128	18,521	19,959	---	7/8 OD	1/2 OD	13.7	215
249MZ	2-1/2	---	---	---	---	---	13,506	16,291	19,404	21,078	22,798	24,646	---	1-1/8 OD	1/2 OD	13.7	230
299MZ	3	---	---	---	---	---	15,554	18,976	22,625	24,518	26,439	28,313	---	1-1/8 OD	1/2 OD	13.7	320
349MZ	3-1/2	---	---	---	---	---	18,903	22,926	26,885	29,424	31,663	33,847	---	7/8 OD	3/8 OD	13.7	335
449MZ	4-1/2	---	---	---	---	---	---	24,600	26,900	29,300	31,900	34,700	---	1-1/8 OD	1/2 OD	19.7	400
549MZ	5-1/2	---	---	---	---	---	---	30,800	33,600	36,700	39,900	43,300	---	1-1/8 OD	1/2 OD	23.0	425
599MZ	6	---	---	---	---	---	---	36,200	39,500	43,100	46,800	51,000	---	1-1/8 OD	1/2 OD	23.0	440

Capacity (BTUH) @ 120°F AMBIENT													Sweat Connection		REC'R @90% LBS	Ship Wt. LBS	
Model	Nom HP	SUCTION TEMPERATURE											ODS, IN.				
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F	SUC	LIQ		
199MZ	2	---	---	---	---	---	10,403	12,516	14,852	16,101	17,409	18,761	---	7/8 OD	1/2 OD	13.7	215
249MZ	2-1/2	---	---	---	---	---	12,696	15,313	18,239	19,813	21,430	23,167	---	1-1/8 OD	1/2 OD	13.7	230
299MZ	3	---	---	---	---	---	14,621	17,837	21,268	23,047	24,852	26,615	---	1-1/8 OD	1/2 OD	13.7	320
349MZ	3-1/2	---	---	---	---	---	17,769	21,550	25,272	27,658	29,763	31,816	---	7/8 OD	3/8 OD	13.7	335
449MZ	4-1/2	---	---	---	---	---	---	22,100	24,300	26,600	29,000	31,600	---	1-1/8 OD	1/2 OD	19.7	400
549MZ	5-1/2	---	---	---	---	---	---	27,800	30,400	33,200	36,200	39,300	---	1-1/8 OD	1/2 OD	23.0	425
599MZ	6	---	---	---	---	---	---	32,800	35,800	39,000	42,500	46,200	---	1-1/8 OD	1/2 OD	23.0	440

Scroll Low Temp (Air Cooled) Condensing Units

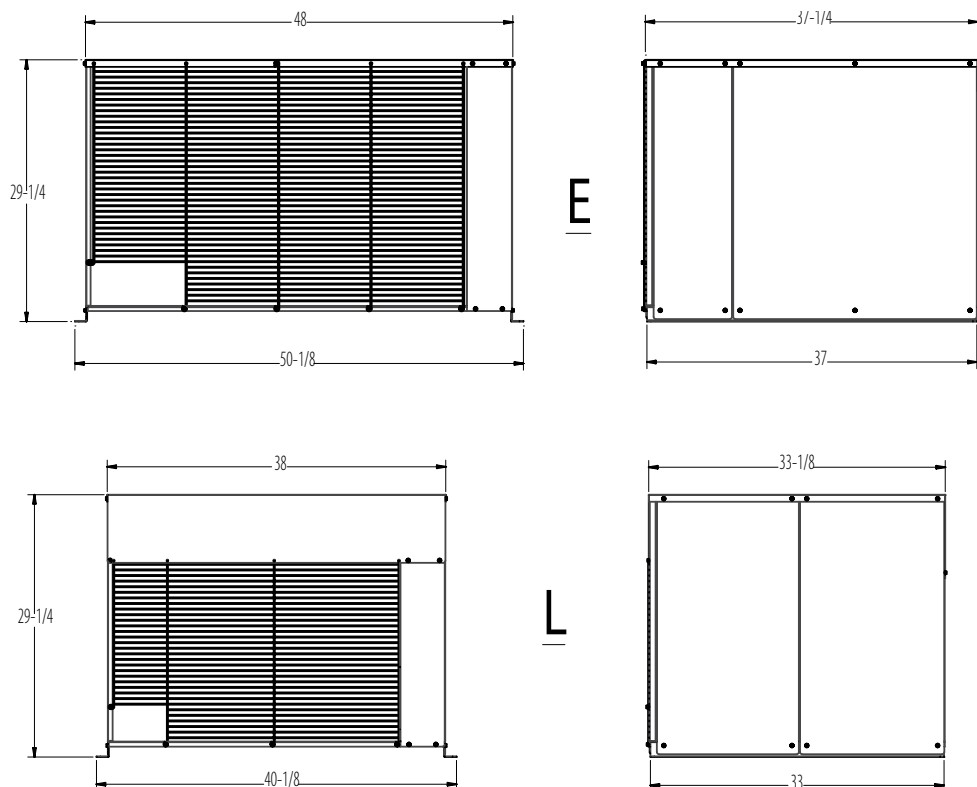
		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @208-230/60/1						Amps @ 208/230/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA**	MOPD**	Compressor		Cond FLA	Total CU	MCA**					MOPD**
		RLA	LRA					RLA	LRA								
199LZ	ZF06K4E	13.6	55	2.0	16.6	20	25	9.3	55	2.0	12.3	15	20	28-1/4	38-1/4	20-1/4	N/A
249LZ	ZF08K4E	16.4	73	2.0	19.4	25	30	9.6	63	2.0	12.6	15	20	28-1/4	38-1/4	20-1/4	N/A
299LZ	ZF09K4E	16.4	88	2.0	20.6	25	30	9.6	77	2.0	12.6	15	20	28-1/4	38-1/4	20-1/4	N/A
349LZ	ZF11K4E	20.7	109	2.0	24.9	30	40	12.1	88	2.0	15.1	19	25	28-1/4	38-1/4	20-1/4	N/A
449LZ	ZF13K4E	25.0	129	2.2	27.5	33.7	50	13.2	99	2.2	15.7	19	30	33	40-1/8	29-1/4	L
549LZ	ZF15K4E	27.5	169	3.6	31.4	38.3	60	18.9	123	3.6	22.8	27.5	45	33	50-1/8	29-1/4	E
599LZ	ZF18K4E	---	---	---	---	---	---	21.8	156	3.2	26.0	32	45	---	---	---	N/A

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @ 208/230/60/3						Amps @ 460/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA**	MOPD**	Compressor		Cond FLA	Total CU	MCA**					MOPD**
		RLA	LRA					RLA	LRA								
199LZ	ZF06K4E	---	---	---	---	---	---	4.3	27	1.0	5.8	15	15	28-1/4	38-1/4	20-1/4	N/A
249LZ	ZF08K4E	---	---	---	---	---	---	5.0	31	1.0	6.5	15	15	28-1/4	38-1/4	20-1/4	N/A
299LZ	ZF09K4E	---	---	---	---	---	---	5.7	39	1.3	7.5	15	15	28-1/4	38-1/4	20-1/4	N/A
349LZ	ZF11K4E	---	---	---	---	---	---	7.1	44	1.3	8.9	15	15	28-1/4	38-1/4	20-1/4	N/A
449LZ	ZF13K4E	---	---	---	---	---	---	8.2	49.5	1.3	10.0	15	15	33	42-1/4	32-1/4	N/A
549LZ	ZF15K4E	---	---	---	---	---	---	9.6	62	1.3	11.4	15	20	33	42-1/4	32-1/4	N/A
599LZ	ZF18K4E	---	---	---	---	---	---	9.3	70	1.3	11.1	15	20	33	42-1/4	32-1/4	N/A

**MCA & MOPD does not include the electrical load from the evaporator(s) (evaporator fan motor and defrost heater amps). If time clock for low temp models is factory mounted contact the factory for specific details.

Note: 449LZ & 549LZ (208-230/60/3) dimensions are the same as the (208-230/60/1) model

Air Cooled Scroll



Scroll Low Temp (Air Cooled) Condensing Units Performance Data														Physical Data			
Capacity (BTUH) @ 90°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-40	-30	-25	-20	-15	-10F	0F	5F	10F	15F	20F	25F	SUC	LIQ		
199LZ	2	4,522	6,293	7,076	7,900	8791	9,682	11,670	---	---	---	---	---	7/8 OD	1/2 OD	13.7	230
249LZ	2-1/2	5,974	7,952	9,249	10,362	11413	12,463	14,214	---	---	---	---	---	7/8 OD	1/2 OD	13.7	240
299LZ	3	6,716	8,930	9,970	11,701	12741	13,781	16,439	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	245
349LZ	3-1/2	8,353	10,465	11,588	12,957	14477	15,996	19,323	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	255
449LZ	4-1/2	12,257	13,778	15,500	17,323	19,147	21,173	23,199	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	405
549LZ	5-1/2	16,035	18,013	20,200	22,491	24,990	27,593	30,404	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	420
599LZ	6	14,008	18,128	20,394	22,763	25493	28,222	34,402	---	---	---	---	---	1-1/8 OD	1/2 OD	24.3	430

Capacity (BTUH) @ 100°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-40	-30	-25	-20	-15	-10F	0F	5F	10F	15F	20F	25F	SUC	LIQ		
199LZ	2	4,250	5,916	6,652	7,426	8264	9,101	10,970	---	---	---	---	---	7/8 OD	1/2 OD	13.7	230
249LZ	2-1/2	5,616	7,475	8,694	9,740	10728	11,715	13,361	---	---	---	---	---	7/8 OD	1/2 OD	13.7	240
299LZ	3	6,313	8,394	9,372	10,999	11977	12,955	15,452	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	245
349LZ	3-1/2	7,852	9,837	10,892	12,180	13608	15,036	18,163	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	255
449LZ	4-1/2	11,257	12,778	14,300	15,923	17,646	19,574	21,400	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	405
549LZ	5-1/2	14,960	16,726	18,700	20,778	23,063	25,453	27,946	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	420
599LZ	6	13,168	17,040	19,170	21,397	23963	26,529	32,338	---	---	---	---	---	1-1/8 OD	1/2 OD	24.3	430

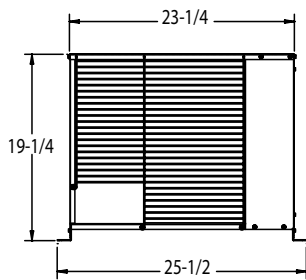
Capacity (BTUH) @ 110°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-40	-30	-25	-20	-15	-10F	0F	5F	10F	15F	20F	25F	SUC	LIQ		
199LZ	2	3,995	5,561	6,252	6,981	7768	8,555	10,312	---	---	---	---	---	7/8 OD	1/2 OD	13.7	230
249LZ	2-1/2	5,279	7,026	8,173	9,156	10084	11,012	12,559	---	---	---	---	---	7/8 OD	1/2 OD	13.7	240
299LZ	3	5,934	7,891	8,810	10,339	11258	12,177	14,525	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	245
349LZ	3-1/2	7,381	9,247	10,239	11,449	12792	14,134	17,074	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	255
449LZ	4-1/2	10,459	11,792	13,228	14,766	16,304	17,945	19,688	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	405
549LZ	5-1/2	13,920	15,607	17,400	19,298	21,407	23,622	25,942	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	420
599LZ	6	12,377	16,018	18,020	20,113	22525	24,937	30,398	---	---	---	---	---	1-1/8 OD	1/2 OD	24.3	430

Capacity (BTUH) @ 120°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-40	-30	-25	-20	-15	-10F	0F	5F	10F	15F	20F	25F	SUC	LIQ		
199LZ	2	3,756	5,227	5,877	6,562	7302	8,042	9,693	---	---	---	---	---	7/8 OD	1/2 OD	13.7	230
249LZ	2-1/2	4,962	6,604	7,682	8,606	9479	10,352	11,806	---	---	---	---	---	7/8 OD	1/2 OD	13.7	240
299LZ	3	5,578	7,417	8,281	9,718	10583	11,447	13,654	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	245
349LZ	3-1/2	6,938	8,692	9,624	10,762	12024	13,286	16,049	---	---	---	---	---	1-1/8 OD	1/2 OD	13.7	255
449LZ	4-1/2	9,453	10,658	11,955	13,345	14,735	16,218	17,793	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	405
549LZ	5-1/2	12,795	14,287	16,100	17,806	19,512	21,538	23,564	---	---	---	---	---	1-1/8 OD	1/2 OD	19.7	420
599LZ	6	11,635	15,057	16,939	18,907	21174	23,441	28,574	---	---	---	---	---	1-1/8 OD	1/2 OD	24.3	430

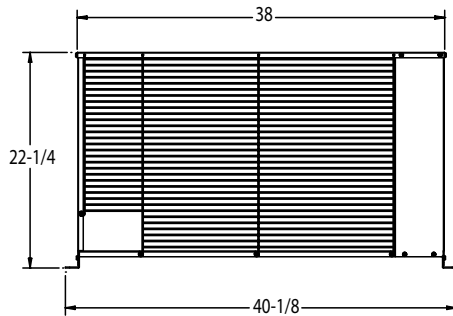
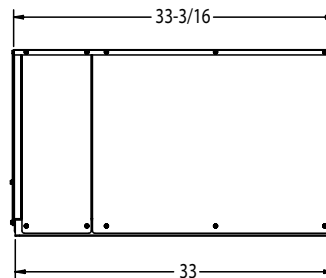
Semi-Hermetic Medium Temp (Air Cooled) Condensing Units

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @115/60/1						Amps @208-230/60/1					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA					MOPD
		RLA	LRA					RLA	LRA								
74M	KANB-007E	---	---	---	---	---	---	5.4	36.0	0.5	6.2	7.6	15.0	33	25-1/2	19-1/4	B
104M	KARB-010E	---	---	---	---	---	---	7.4	40.0	1.1	8.8	10.7	15.0	33	25-1/2	19-1/4	B
154M	KAGB-010E	---	---	---	---	---	---	7.5	40.0	1.1	8.9	11.0	15.0	33	25-1/2	19-1/4	B
204M	KAKB-021E	---	---	---	---	---	---	10.6	55.0	2.2	13.1	15.8	25.0	43	27-1/2	22-1/4	D
304M	CJAM-0300	---	---	---	---	---	---	17.0	86.0	4.1	21.1	25.7	35.0	47-1/8	40-1/8	31-3/4	H

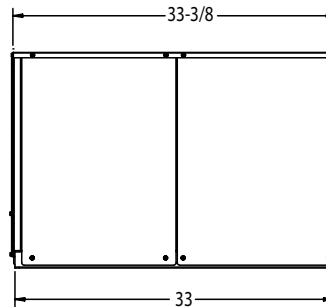
		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @208-230/60/3						Amps @460/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA					MOPD
		RLA	LRA					RLA	LRA								
74M	KANA-007E	3.5	19.9	0.5	4.3	5.2	15.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
104M	KARA-010E	4.3	27.0	1.1	5.7	6.8	15.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
154M	KAGA-010E	4.3	27.0	1.1	5.7	6.8	15.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
204M	KAKA-020E	6.8	50.0	2.2	9.3	11.0	20.0	---	---	---	---	---	---	43	27-1/2	22-1/4	D
304M	CJAM-0300	12.4	82.0	4.1	16.5	19.9	25.0	5.8	41.0	2.1	7.9	9.7	15.0	47-1/8	40-1/8	31-3/4	H



B



D



Semi-Hermetic Medium Temp (Air Cooled) Condensing Units Performance Data											Physical Data			
Capacity (BTUH) @ 90°F AMBIENT											Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE									ODS, IN.			
		-25	-20	-15	-10	-5	0F	10F	20F	25F	SUC	LIQ		
74M	3/4	---	---	---	---	3,090	3,520	4,550	5,670	6,240	5/8 OD	3/8 OD	5.8	165
104M	1	---	---	---	---	4,900	5,460	6,860	8,300	8,990	5/8 OD	3/8 OD	10.4	212
154M	1-1/2	---	---	---	---	5,730	6,440	8,030	9,820	10,850	7/8 OD	3/8 OD	10.4	258
204M	2	---	---	---	---	7,900	8,640	10,860	13,250	14,330	7/8 OD	3/8 OD	10.4	271
304M	3	---	---	---	---	14,450	16,260	20,520	25,240	27,800	1-1/8 OD	1/2 OD	46.0	463

Capacity (BTUH) @ 100°F AMBIENT											Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE									ODS, IN.			
		-25	-20	-15	-10	-5	0F	10F	20F	25F	SUC	LIQ		
74M	3/4	---	---	---	---	2,690	3,090	4,030	5,040	5,550	5/8 OD	3/8 OD	5.8	165
104M	1	---	---	---	---	4,390	4,880	6,170	7,500	8,130	5/8 OD	3/8 OD	10.4	212
154M	1-1/2	---	---	---	---	5,080	5,730	7,180	8,810	9,760	7/8 OD	3/8 OD	10.4	258
204M	2	---	---	---	---	7,060	7,730	9,760	11,900	12,820	7/8 OD	3/8 OD	10.4	271
304M	3	---	---	---	---	12,930	14,580	18,460	22,780	25,130	1-1/8 OD	1/2 OD	46.0	463

Capacity (BTUH) @ 110°F AMBIENT											Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE									ODS, IN.			
		-25	-20	-15	-10	-5	0F	10F	20F	25F	SUC	LIQ		
74M	3/4	---	---	---	---	2,300	2,660	3,520	4,410	4,860	5/8 OD	3/8 OD	5.8	165
104M	1	---	---	---	---	3,850	4,280	5,450	6,660	7,230	5/8 OD	3/8 OD	10.4	212
154M	1-1/2	---	---	---	---	4,430	5,010	6,330	7,800	8,662	7/8 OD	3/8 OD	10.4	258
204M	2	---	---	---	---	6,220	6,820	8,670	10,560	11,340	7/8 OD	3/8 OD	10.4	271
304M	3	---	---	---	---	11,410	12,880	16,380	20,280	22,410	1-1/8 OD	1/2 OD	46.0	463

Capacity (BTUH) @ 120°F AMBIENT											Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE									ODS, IN.			
		-25	-20	-15	-10	-5	0F	10F	20F	25F	SUC	LIQ		
74M	3/4	---	---	---	---	1,930	2,260	3,010	3,790	---	5/8 OD	3/8 OD	5.8	165
104M	1	---	---	---	---	3,290	3,660	4,700	---	---	5/8 OD	3/8 OD	10.4	212
154M	1-1/2	---	---	---	---	3,790	4,320	5,510	6,830	---	7/8 OD	3/8 OD	10.4	258
204M	2	---	---	---	---	5,430	5,980	7,650	9,310	---	7/8 OD	3/8 OD	10.4	271
304M	3	---	---	---	---	9,890	11,180	14,310	17,820	19,750	1-1/8 OD	1/2 OD	46.0	463

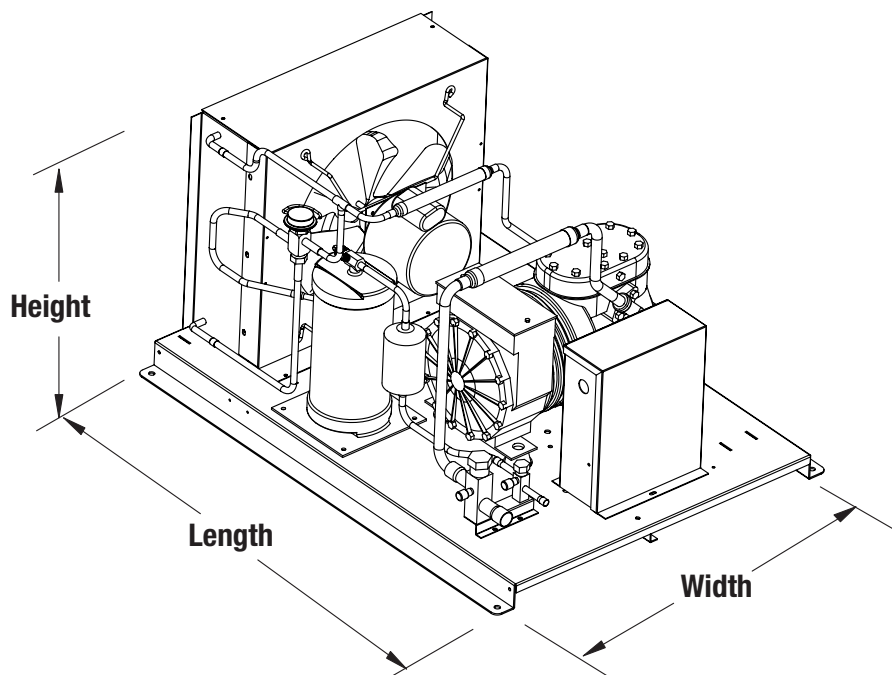
Semi-Hermetic Low Temp (Air Cooled) Condensing Units

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @115/60/1						Amps @208-230/60/1					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA**	MOPD**	Compressor		Cond FLA	Total CU	MCA**					MOPD**
		RLA	LRA					RLA	LRA								
74L	EJAL-A075	---	---	---	---	---	---	5.6	36.0	0.9	6.5	8.2	15.0	33	25-1/2	19-1/4	B
104L	EJAL-A100	---	---	---	---	---	---	6.9	40.0	0.9	7.8	9.8	15.0	33	25-1/2	19-1/4	B
154L	KALB-015E	---	---	---	---	---	---	9.9	55.0	1.1	11.3	13.8	20.0	33	25-1/2	19-1/4	B
204L	EAVB-021E	---	---	---	---	---	---	14.7	102.0	1.1	16.1	19.8	30.0	33	40-1/8	22-1/4	D
304L*	LAHB-032E	---	---	---	---	---	---	16.7	105.0	2.2	19.2	23.4	40.0	33	40-1/8	22-1/4	D
344L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
444L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
644L	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

		Electrical Data											Physical Dimensions w/ Housing				
Model	Comp Model	Amps @208-230/60/3						Amps @460/60/3					Length	Width	Height	Housing Designation	
		Compressor		Cond FLA	Total CU	MCA**	MOPD**	Compressor		Cond FLA	Total CU	MCA**					MOPD**
		RLA	LRA					RLA	LRA								
74L	EJAL-A075	3.2	19.9	0.9	4.1	5.2	15.0	---	---	---	---	---	---	33	25-1/2	19-1/4	B
104L	EJAL-A100	4.6	27.0	0.9	5.7	6.9	15.0	2.1	15.0	0.4	2.5	3.4	15.0	33	25-1/2	19-1/4	B
154L	KALA-016E	6.6	50.0	1.1	7.9	9.6	15.0	3.4	25.0	0.6	4.2	5.0	15.0	33	25-1/2	19-1/4	B
204L	EAVA-021E	7.4	50.0	1.1	8.8	10.7	15.0	3.9	26.6	0.6	4.6	5.6	15.0	33	40-1/8	22-1/4	D
304L	LAHA-032E	12.8	112.0	2.2	15.3	18.5	30.0	6.0	56.0	1.1	7.2	8.7	15.0	33	40-1/8	22-1/4	D
344L x	2DF3-030E	16.8	102.0	4.2	21.3	25.5	40.0	8.1	52.0	2.1	10.4	12.4	20.0	47-1/8	40-1/8	31-3/4	H
444L x	2DL3F20KE	26.3	161.0	4.1	30.7	37.2	60.0	10.2	60.0	2.1	12.5	15.0	25.0	47-1/8	40-1/8	31-3/4	H
644L x	CJDL-0600	28.8	161.0	4.1	32.9	40.4	60.0	10.2	60.0	2.1	12.3	15.2	20.0	47-1/8	40-1/8	31-3/4	H

*Transformer mounted and wired for 208 volt operation.
x Discus Compressor

** MCA & MOPD does not include the electrical load from the evaporator(s) (evaporator fan motor and defrost heater amps). If time clock for low temp models is factory mounted contact the factory for specific details.



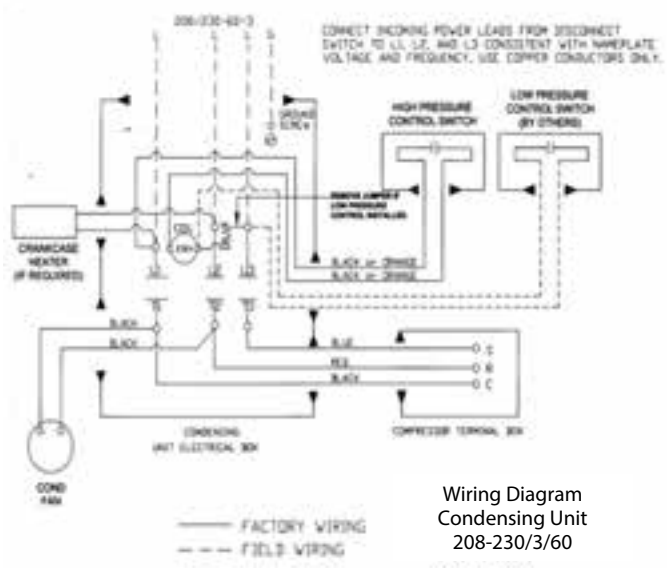
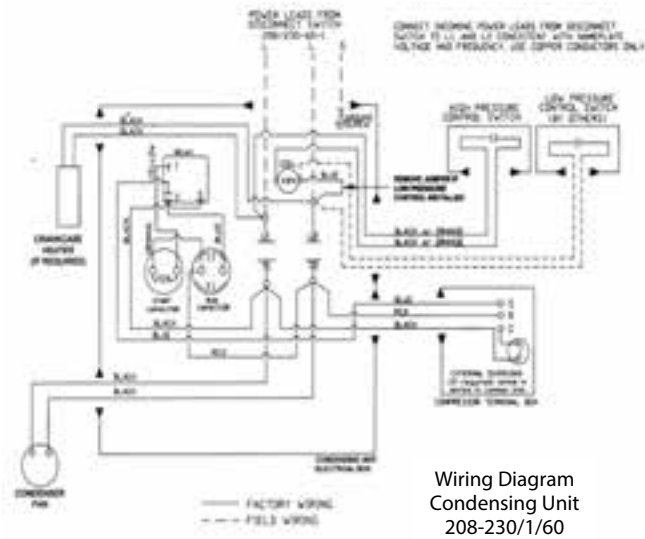
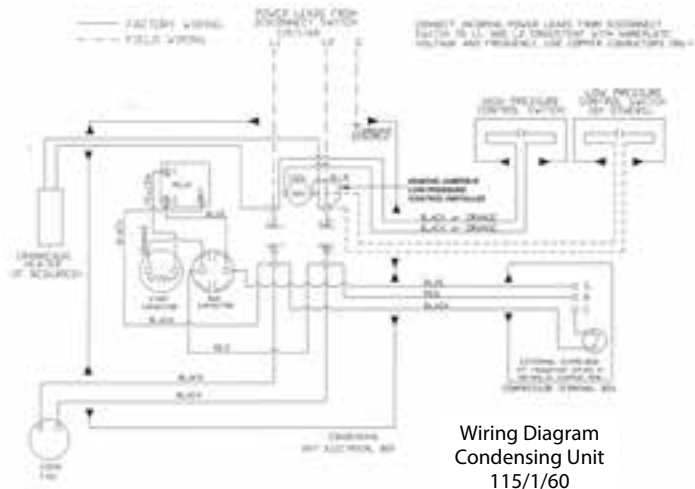
Semi-Hermetic Low Temp (Air Cooled) Condensing Units Performance Data														Physical Data			
Capacity (BTUH) @ 90°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-30	-25	-20	-15	-10	-5F	0F	10F	15F	20F	25F	30F	SUC	LIQ		
74L	3/4	2,490	2,900	3,370	3,880	4,430	4,990	5,510	---	---	---	---	---	5/8"OD	3/8"OD	5.4	157
104L	1	3,310	3,840	4,400	4,990	5,630	6,300	6,980	---	---	---	---	---	5/8"OD	3/8"OD	5.4	176
154L	1-1/2	4,710	5,580	6,490	7,460	8,520	9,690	11,000	---	---	---	---	---	7/8"OD	3/8"OD	17.2	189
204L	2	5,360	6,398	7,584	9,170	10,484	12,033	13,900	---	---	---	---	---	7/8"OD	3/8"OD	17.2	303
304L	3	8,834	10,900	13,180	14,944	17,960	20,520	22,656	---	---	---	---	---	1-1/8"OD	3/8"OD	17.2	373
344L	3	14,500	17,100	19,900	23,000	26,400	30,100	34,300	---	---	---	---	---	1-3/8"OD	1/2"OD	35	568
444L	4	17,000	19,900	23,100	26,600	30,400	34,600	39,200	---	---	---	---	---	1-3/8"OD	1/2"OD	35	589
644L	6	20,700	23,700	26,900	30,300	33,900	37,700	41,600	---	---	---	---	---	1-3/8"OD	5/8"OD	46	606

Capacity (BTUH) @ 100°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-30	-25	-20	-15	-10	-5F	0F	10F	15F	20F	25F	30F	SUC	LIQ		
74L	3/4	2,160	2,550	2,980	3,460	3,960	4,460	4,930	---	---	---	---	---	5/8"OD	3/8"OD	5.4	157
104L	1	2,890	3,380	3,890	4,420	4,990	5,590	6,200	---	---	---	---	---	5/8"OD	3/8"OD	5.4	176
154L	1-1/2	3,930	4,770	5,620	6,505	7,460	8,495	9,635	---	---	---	---	---	7/8"OD	3/8"OD	17.2	189
204L	2	4,500	5,580	6,631	7,910	9,182	10,632	12,190	---	---	---	---	---	7/8"OD	3/8"OD	17.2	303
304L	3	6,923	9,108	10,968	13,050	15,100	17,950	20,244	---	---	---	---	---	1-1/8"OD	3/8"OD	17.2	373
344L	3	12,600	14,950	17,650	20,450	23,500	26,900	30,550	---	---	---	---	---	1-3/8"OD	1/2"OD	35	568
444L	4	14,900	17,550	20,500	23,650	27,150	30,950	35,050	---	---	---	---	---	1-3/8"OD	5/8"OD	46	606
644L	6	18,700	21,500	24,400	27,600	30,900	34,400	37,900	---	---	---	---	---	1-3/8"OD	1/2"OD	35	589

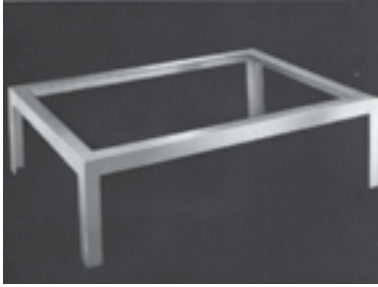
Capacity (BTUH) @ 110°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-30	-25	-20	-15	-10	-5F	0F	10F	15F	20F	25F	30F	SUC	LIQ		
74L	3/4	1,760	2,110	2,510	2,940	3,390	3,850	---	---	---	---	---	---	5/8"OD	3/8"OD	5.4	157
104L	1	2,450	2,890	3,350	3,830	4,330	4,870	---	---	---	---	---	---	5/8"OD	3/8"OD	5.4	176
154L	1-1/2	3,070	3,890	4,695	5,520	6,385	7,305	8,310	---	---	---	---	---	7/8"OD	3/8"OD	17.2	189
204L	2	3,426	4,630	5,528	6,527	7,860	9,204	10,135	---	---	---	---	---	7/8"OD	3/8"OD	17.2	303
304L	3	5,492	6,878	9,112	10,934	12,972	15,260	17,850	---	---	---	---	---	1-1/8"OD	3/8"OD	17.2	373
344L	3	8,562	10,768	13,807	16,454	19,357	22,565	26,160	---	---	---	---	---	1-3/8"OD	1/2"OD	35	568
444L	4	13,800	16,400	19,200	22,200	25,500	29,100	33,000	---	---	---	---	---	1-3/8"OD	1/2"OD	35	589
644L	6	11,988	15,398	19,335	22,981	27,217	31,769	36,295	---	---	---	---	---	1-3/8"OD	5/8"OD	46	606

Capacity (BTUH) @ 120°F AMBIENT														Sweat Connection		REC'R @90% LBS	Ship Wt. LBS
Model	Nom HP	SUCTION TEMPERATURE												ODS, IN.			
		-30	-25	-20	-15	-10	-5F	0F	10F	15F	20F	25F	30F	SUC	LIQ		
74L	3/4	---	---	---	---	---	---	---	---	---	---	---	---	5/8"OD	3/8"OD	5.4	157
104L	1	---	---	---	---	---	---	---	---	---	---	---	---	5/8"OD	3/8"OD	5.4	176
154L	1-1/2	---	---	---	---	---	---	---	---	---	---	---	---	7/8"OD	3/8"OD	17.2	189
204L	2	3,120	3,894	4,810	---	---	---	---	---	---	---	---	---	7/8"OD	3/8"OD	17.2	303
304L	3	3,868	5,160	6,505	8,540	---	---	---	---	---	---	---	---	1-1/8"OD	3/8"OD	17.2	373
344L	3	9,380	11,700	14,100	16,600	19,200	22,000	25,100	---	---	---	---	---	1-3/8"OD	1/2"OD	35	568
444L	4	11,700	14,000	16,500	19,200	22,200	25,400	28,900	---	---	---	---	---	1-3/8"OD	1/2"OD	35	589
644L	6	---	---	---	---	---	---	---	---	---	---	---	---	1-3/8"OD	5/8"OD	46	606

Wiring Diagram



Accessories and Options



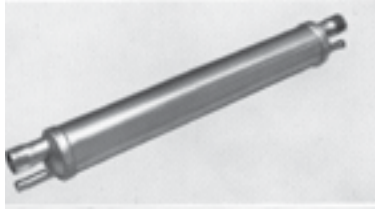
Condensing Unit Rack

This accessory is used to mount condensing unit assembly. Units can be installed separately, stacked or side-by-side. The racks are constructed of heavy-gauge angle iron, welded together and painted to resist rust.



Condensate Evaporator

These units evaporate condensation formed by normal operation of the low-side assembly. It is normally used when a drain is not readily available. Two sizes are available, 50 oz. and 7-1/2 quart capacity, each with a heating element of 120-volts and built-in thermostat.



Heat Exchanger

A heat exchanger is a device to:

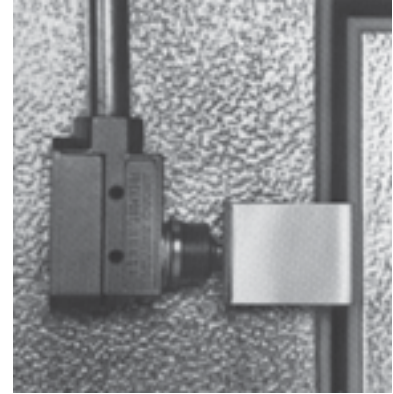
- Sub-cool the liquid refrigerant
- Reduce flash gas in the liquid line
- Reduce liquid refrigerant in the suction line

This accessory is factory installed on "PCL" systems. It is shipped loose for field installation of "PR" or "PC" systems.



Drain Line Heater

This accessory is required on freezers to prevent drain line freeze-up. The heater is available in various lengths or can be provided in a variety of kit forms for field installation.



Fan Switch

This option shuts off fans and the compressor when door is opened and will automatically start system when door closes. (Refrigeration system requires pumpdown cycle.)



Disconnect Switch



Accumulator



Oil Separator

Nomenclature

PC-149MZOP-2P

Kolpak Models
 PCL (Pre-Charged w/ Lines)
 PC (Pre-Charged no lines)
 PR (Pre-Assembled Remote)

P - Premium
 E - Economy
 C - Canadian
 1 - 115/60/1
 2 - 208/230-60-1
 3 - 208/230-6-3
 4 - 460/60-1

OP - Outdoor/Indoor

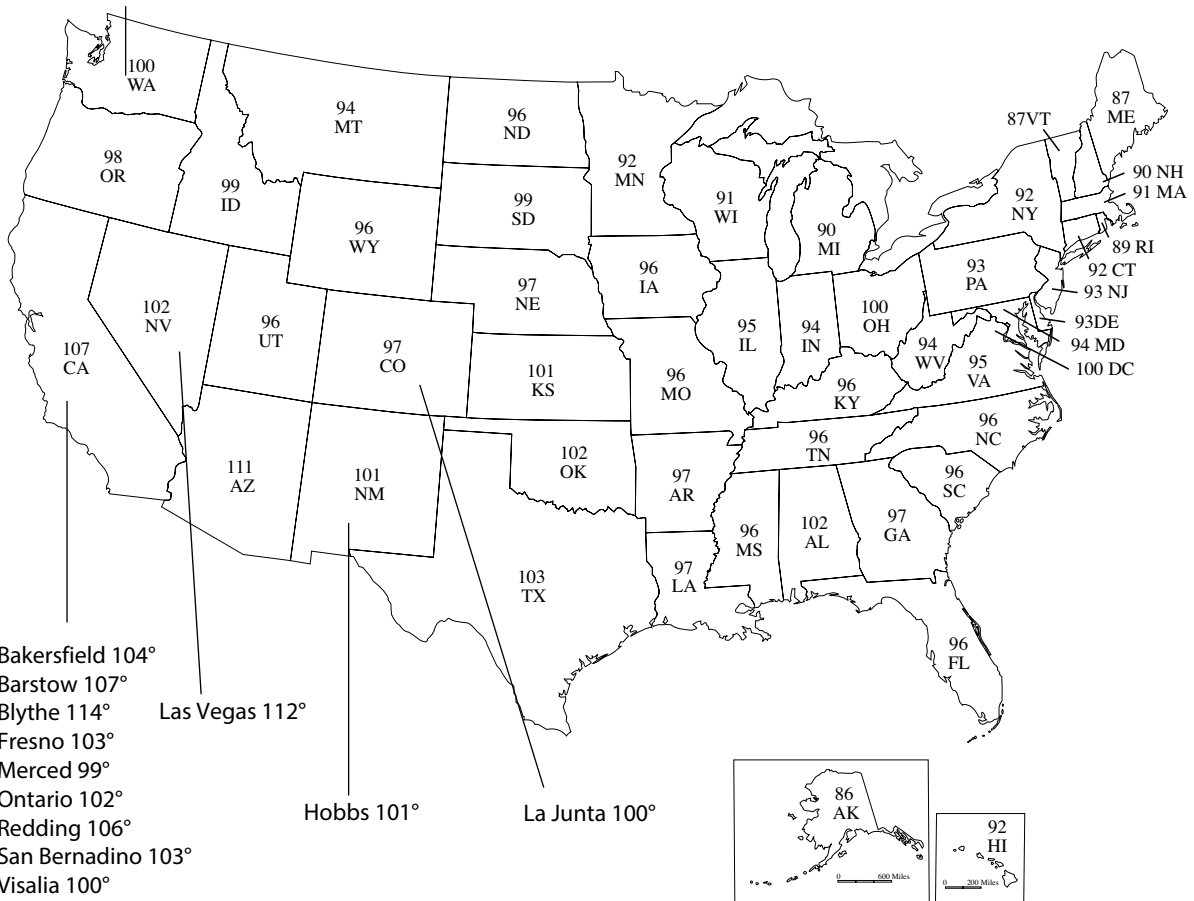
Scroll	Hermetic	Semi-Hermetic
199 - 2 Hp	049 - 1/2 Hp	074 - 3/4 Hp
249 - 2-1/2 Hp	069 - 3/4 Hp	104 - 1 Hp
299 - 3 Hp	099 - 1 Hp	154 - 1-1/2 Hp
349 - 3-1/2 Hp	149 - 1-1/2 Hp	204 - 2 Hp
449 - 4-1/2 Hp	199 - 2 Hp	304 - 3 Hp
549 - 5-1/2 Hp	249 - 2-1/2 Hp	344 - 3-1/2 Hp
599 - 6 Hp	299 - 3 Hp	444 - 4-1/2 Hp
	349 - 3-1/2 Hp	644 - 6 Hp
	399 - 4 Hp	
	499 - 5 Hp	

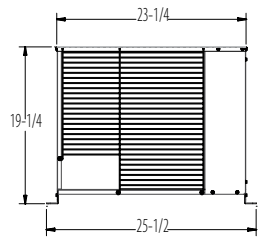
Z - Scroll
 if no letter either hermetic or semi

M - Medium Temperature
 L - Low Temperature

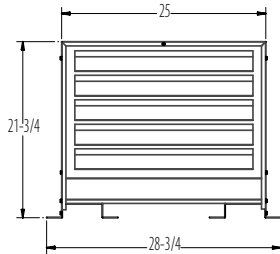
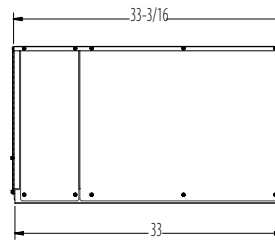
Temperature chart from ASHRAE Handbook

Kennewick 105°
 Wenatchee 105°
 Yakima 105°

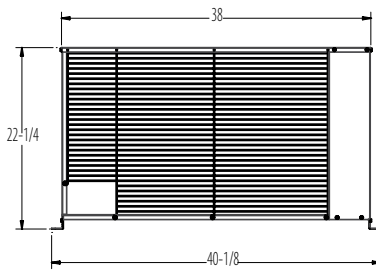
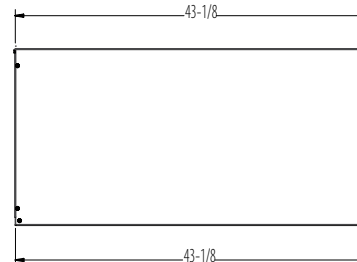




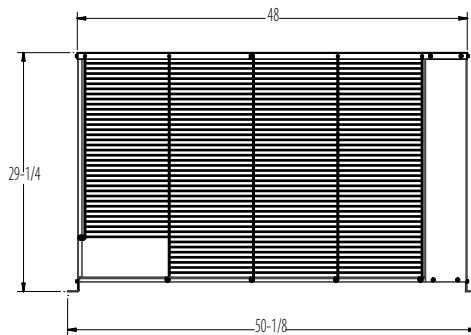
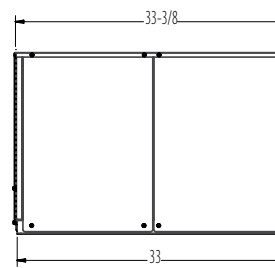
B



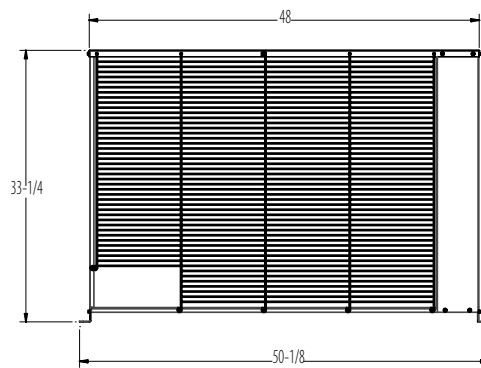
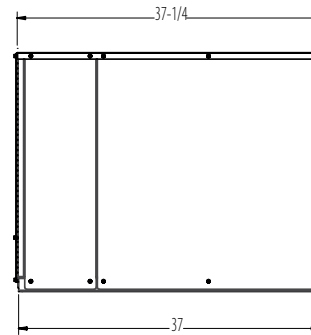
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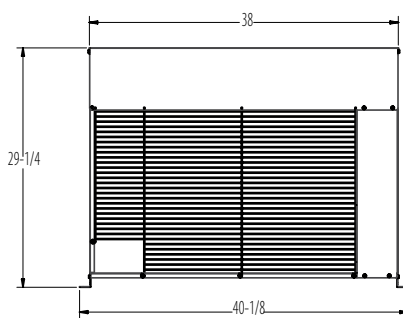
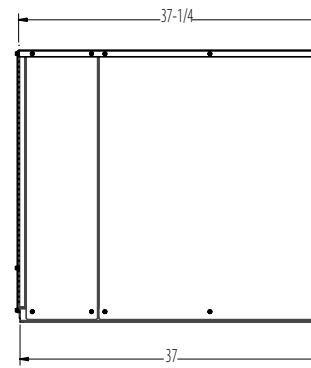
D



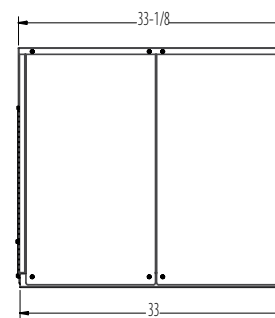
E



K



L



About Kolpak

Kolpak offers a wide range of energy-saving and environmentally-friendly products and features. We've designed our units for maximum cold holding performance with minimum environmental impact, all while saving you money on energy costs, operating costs and overall cost of ownership.

For more information, visit www.kolpak.com.

We build and service foodservice kitchens by understanding the foodservice business from the ground up. We feed our customers' business with operational insights, global foodservice trends, culinary expertise, outstanding aftermarket service and innovative ideas to keep their business healthy. Our unmatched portfolio of leading brands delivers state-of-the-art equipment and full kitchen systems built on operational understanding. This knowledge is why Manitowoc Foodservice is the only foodservice equipment company that can say we are **Fluent in Foodservice**.

Our best in class brands include: Cleveland, Convotherm®, Dean®, Delfield®, Frymaster®, Garland®, Kolpak®, Koolaire®, Lincoln, Manitowoc® Beverage Systems, Manitowoc® Ice, Merco®, Merrychef®, Multiplex®, RDI Systems, Servend®, U.S. Range & Welbilt®