

Large Room Systems - Electrical Data

Large Room Semi-Hermetic Discus Medium Temp (Air Cooled) Condensing Units																	
Model	Comp Model	Electrical Data												Physical Dimensions w/Housing			
		Amps @208-230/60/3						Amps @460/60/3						Length	Width	Height	Ship Wt. LBS.
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA	MOPD				
RLA	LRA	FLA	CU	CU	CU	FLA	CU	CU	CU	CU	CU	CU					
M500	2DC3R53KE	22.3	120	3.5	25.8	31.4	50	10.4	60.0	4.0	14.4	17.0	25.0	43	51	31	825
M501	2DD3R63KE	22.3	120	3.5	25.8	31.4	50	10.5	60.0	4.0	14.5	17.1	25.0	43	51	49	1,050
M750	2DA3R89KE	32.0	169	6.5	38.5	46.5	75	14.1	85.0	3.5	17.6	21.1	35.0	43	51	49	1,125
M10X	3DB3R12ME	43.6	215	6.5	50.1	61.0	100	20.0	106.0	3.5	23.5	28.5	45.0	43	58	59	1,300
M12X	3DF3R15ME	48.2	275	6.5	54.7	66.8	100	23.6	138.0	3.5	27.1	33.0	50.0	43	58	59	1,300
M15X	3DS3R17MO	59.6	275	6.5	66.1	81.0	125	29.0	138.0	3.5	32.5	39.8	60.0	43	58	59	1,325

Large Room Systems - BTUH

Large Room Semi-Hermetic Discus Medium Temp (Air Cooled) Condensing Units														Physical Data			
Model	Nom HP	Capacity (BTUH) @ 90°F AMBIENT												Sweat Connection ODS. IN.		Rec'r @90% LBS	Ship Wt. LBS
		Suction Temperature												SUC	LIQ		
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F				
M500	5	—	—	—	17,800	22,300	26,800	30,500	39,100	44,000	49,300	55,000	61,000	1-3/8" OD	1/2" OD	17.5	825
M501	5.5	—	—	—	22,000	25,300	28,600	37,000	47,200	53,000	59,500	66,000	73,000	1-3/8" OD	1/2" OD	17.5	1,050
M750	7.5	—	—	—	33,000	37,750	42,500	54,000	67,000	75,000	83,000	92,000	102,000	1-3/8" OD	1/2" OD	35	1,125
M10X	10	—	—	—	46,800	53,400	60,000	75,500	94,000	104,000	115,000	127,000	140,000	1-3/8" OD	5/8" OD	75	1,300
M12X	12	—	—	—	58,500	66,500	74,500	93,500	116,000	129,000	143,000	159,000	175,000	1-3/8" OD	5/8" OD	75	1,300
M15X	15	—	—	—	64,500	73,500	82,500	104,000	129,000	143,000	159,000	176,000	194,000	1-5/8" OD	5/8" OD	75	1,325

Model	Nom HP	Capacity (BTUH) @ 100°F AMBIENT												Sweat Connection ODS. IN.		Rec'r @90% LBS	Ship Wt. LBS
		Suction Temperature												SUC	LIQ		
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F				
M500	5	—	—	—	15,700	18,200	20,700	27,000	30,200	34,600	43,600	48,700	54,000	1-3/8" OD	1/2" OD	17.5	825
M501	5.5	—	—	—	19,700	22,550	25,400	32,800	41,900	47,100	52,500	58,500	65,000	1-3/8" OD	1/2" OD	17.5	1,050
M750	7.5	—	—	—	29,200	33,600	38,000	48,100	54,000	60,000	74,500	82,500	91,000	1-3/8" OD	1/2" OD	35	1,125
M10X	10	—	—	—	42,000	48,250	54,500	68,500	85,000	94,000	104,000	115,000	127,000	1-3/8" OD	5/8" OD	75	1,300
M12X	12	—	—	—	52,500	59,750	67,000	84,500	105,000	116,000	129,000	142,000	157,000	1-3/8" OD	5/8" OD	75	1,300
M15X	15	—	—	—	58,000	66,250	74,500	93,500	116,000	129,000	142,000	157,000	174,000	1-5/8" OD	5/8" OD	75	1,325

Model	Nom HP	Capacity (BTUH) @ 110°F AMBIENT												Sweat Connection ODS. IN.		Rec'r @90% LBS	Ship Wt. LBS
		Suction Temperature												SUC	LIQ		
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F				
M500	5	—	—	—	13,600	15,800	18,000	23,500	30,200	34,000	38,100	42,600	47,400	1-3/8" OD	1/2" OD	17.5	825
M501	5.5	—	—	—	17,400	19,850	22,300	28,700	36,600	41,100	46,000	51,500	57,000	1-3/8" OD	1/2" OD	17.5	1,050
M750	7.5	—	—	—	25,300	29,350	33,400	42,500	59,000	65,500	72,500	80,500	88,500	1-3/8" OD	1/2" OD	35	1,125
M10X	10	—	—	—	37,100	42,750	48,400	61,000	75,500	83,500	92,500	102,000	112,000	1-3/8" OD	5/8" OD	75	1,300
M12X	12	—	—	—	46,900	53,450	60,000	75,500	93,000	103,000	114,000	126,000	139,000	1-3/8" OD	5/8" OD	75	1,300
M15X	15	—	—	—	52,000	59,250	66,500	83,500	103,000	114,000	126,000	139,000	154,000	1-5/8" OD	5/8" OD	75	1,325

Large Room Systems - Electrical Data

Large Room Semi-Hermetic Discus Low Temp (Air Cooled) Condensing Units																	
Model	Comp Model	Electrical Data												Physical Dimensions w/Housing			
		Amps @208-230/60/3						Amps @460/60/3						Length	Width	Height	Ship Wt. LBS.
		Compressor		Cond FLA	Total CU	MCA	MOPD	Compressor		Cond FLA	Total CU	MCA	MOPD				
RLA	LRA	FLA	CU	CU	CU	FLA	CU	CU	CU	CU	CU	CU	CU				
L600	2DB3F25KE	28.2	161	2.8	31.3	38.1	65	10.4	60.0	1.6	15.1	14.6	25	43	51	31	875
L601	3DA3F28KE	30.3	150	1.4	5.6	39.3	70	13.7	77.0	3.2	17.1	20.3	30	43	51	49	900
L750	3DB3F33KE	31.5	161	5.6	37.4	45.0	70	16.1	83.0	3.2	19.5	23.3	35	43	51	49	1,125
L900	3DF3F40KE	39.0	215	5.6	44.9	54.4	100	16.9	106.0	3.2	20.3	24.3	40	43	59	52	1,250
L10X	3DS3F46KE	42.0	215	5.6	47.9	58.1	100	18.6	106.0	3.2	22.0	26.5	45	43	59	52	1,275
L15X	4DL3F63KE	52.6	278	5.6	58.5	71.4	125	24.5	136.0	3.2	27.9	33.8	50	43	59	58	1,300



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RDI

Large Room Systems - BTUH

Large Room Semi-Hermetic Discus Low Temp (Air Cooled) Condensing Units														Physical Data			
Model	Nom HP	Capacity (BTUH) @ 90°F AMBIENT												Sweat Connection ODS. IN.		Rec'r @90% LBS	Ship Wt. LBS
		Suction Temperature												SUC	LIQ		
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F				
L600	6	24,600	28,500	32,700	37,300	42,300	47,800	—	—	—	—	—	—	1-3/8" OD	1/2" OD	17.5	875
L601	6	27,800	32,000	36,600	41,600	47,100	53,000	—	—	—	—	—	—	1-3/8" OD	1/2" OD	39.0	900
L750	7.5	33,100	37,900	43,200	49,100	55,500	62,500	—	—	—	—	—	—	1-3/8" OD	1/2" OD	39.0	1,125
L900	9	40,200	46,300	53,000	60,000	68,000	77,000	—	—	—	—	—	—	1-3/8" OD	5/8" OD	75.0	1,250
L10X	10	46,000	52,500	59,500	67,500	75,500	85,000	—	—	—	—	—	—	1-3/8" OD	5/8" OD	75.0	1,275
L15X	15	52,600	71,500	81,000	91,500	103,000	116,000	—	—	—	—	—	—	1-5/8" OD	5/8" OD	75.0	1,300

Model	Nom HP	Capacity (BTUH) @ 100°F AMBIENT												Sweat Connection ODS. IN.		Rec'r @90% LBS	Ship Wt. LBS
		Suction Temperature												SUC	LIQ		
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F				
L600	6	21,950	25,500	29,300	33,500	38,050	43,000	—	—	—	—	—	—	1-3/8" OD	1/2" OD	17.5	875
L601	6	24,900	28,850	33,100	37,750	42,700	48,100	—	—	—	—	—	—	1-3/8" OD	1/2" OD	39.0	900
L750	7.5	29,900	34,450	39,350	44,650	50,500	56,750	—	—	—	—	—	—	1-3/8" OD	1/2" OD	39.0	1,125
L900	9	36,450	42,050	48,150	54,750	62,000	70,000	—	—	—	—	—	—	1-3/8" OD	5/8" OD	75.0	1,250
L10X	10	41,700	47,650	54,250	61,500	69,250	77,250	—	—	—	—	—	—	1-3/8" OD	5/8" OD	75.0	1,275
L15X	15	55,750	63,750	72,500	82,250	93,000	104,500	—	—	—	—	—	—	1-5/8" OD	5/8" OD	75.0	1,300

Model	Nom HP	Capacity (BTUH) @ 110°F AMBIENT												Sweat Connection ODS. IN.		Rec'r @90% LBS	Ship Wt. LBS
		Suction Temperature												SUC	LIQ		
		-25	-20	-15	-10	-5	0F	10F	20F	25F	30F	35F	40F				
L600	6	19,300	22,500	25,900	29,650	33,700	38,100	—	—	—	—	—	—	1-3/8" OD	1/2" OD	17.5	875
L601	6	21,700	25,400	29,400	33,650	38,200	43,150	—	—	—	—	—	—	1-3/8" OD	1/2" OD	39.0	900
L750	7.5	26,650	30,900	35,450	40,250	45,500	51,200	—	—	—	—	—	—	1-3/8" OD	1/2" OD	39.0	1,125
L900	9	32,550	37,700	43,350	49,350	56,000	63,000	—	—	—	—	—	—	1-3/8" OD	5/8" OD	75.0	1,250
L10X	10	36,900	42,550	48,600	55,250	62,250	69,750	—	—	—	—	—	—	1-3/8" OD	5/8" OD	75.0	1,275
L15X	15	49,600	57,000	65,000	74,000	83,500	94,000	—	—	—	—	—	—	1-5/8" OD	5/8" OD	75.0	1,300



SOLUTIONS

RDI provides many of the operational solutions from Manitowoc Foodservice, a global company dedicated to bringing value to foodservice operators by equipping

Large Room Refrigeration Systems

RDI Large Room Refrigeration Systems are manufactured to meet the highest standards and provide the performance and reliability that the industry has come to expect.

Each Large Room System is designed with components installed and wired. The system is leak tested by utilizing mass spectrometry then sealed with a dry Nitrogen charge.

Job site installation involves securing the evaporator assembly on the interior of the refrigerated structure and placing the condensing unit in a suitable location. Refrigeration lines must be run between the evaporator assembly and the condensing unit.

The system must be leak checked after field installation, evacuated and charged with refrigerant.

The electrician must bring power to both the condensing unit and the evaporator assembly.

On low temperature systems the time clock is shipped loose (unless otherwise specified) and is to be field installed in a convenient location outside of the refrigerated room.

Refrigerants

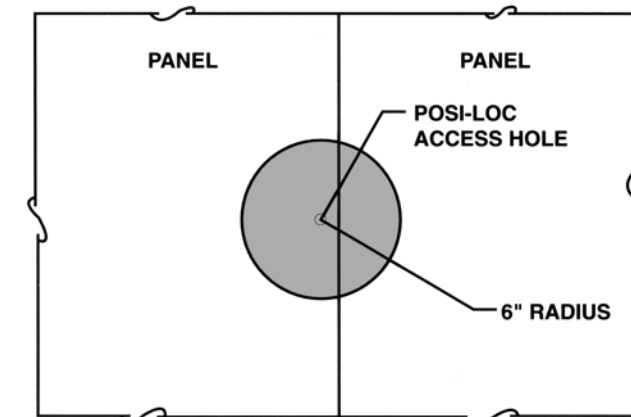
Both medium temperature and low temperature systems are available in sizes from 5HP through 15HP using Copeland Discus compressors that operate with R-404A.

Making Cuts in Modular Panels

At times it is necessary to cut holes in the insulated panels. Remote refrigeration systems, electrical connections and drainage tubes all require cuts in the panels.

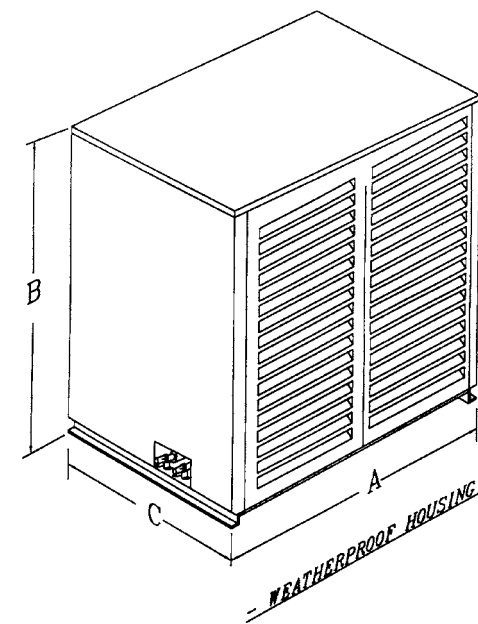
To prevent possible damage to the foamed-in-place Posi-Loc assemblies, cuts must not be made within a six-inch radius of the access hole to the Posi-Loc. This area is indicated in gray on the drawing.

Because the modular panels have urethane insulation, holes may be cut in any other area without fear of weakening the panel. After the hole has been cut and the connections made, the opening should be completely sealed to prevent moisture from entering.

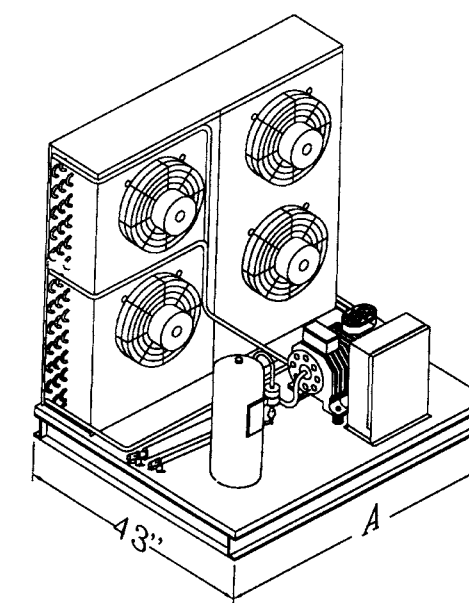


Large Room Systems

Model	Dimensions			Line Connections	
	A	B	C	Suction	Liquid
M15X	59"	58"	43"	1-5/8" OD	5/8" OD
L15X	59"	58"	43"	1-3/8" OD	5/8" OD
M12X	59"	58"	43"	1-3/8" OD	5/8" OD
M10X	59"	58"	43"	1-3/8" OD	5/8" OD
L10X	59"	52"	43"	1-3/8" OD	5/8" OD
L900	59"	52"	43"	1-3/8" OD	5/8" OD
M750	51"	49"	43"	1-3/8" OD	1/2" OD
L750	51"	49"	43"	1-3/8" OD	1/2" OD
L601	51"	49"	43"	1-3/8" OD	1/2" OD
L600	51"	31"	43"	1-3/8" OD	1/2" OD
M501	51"	49"	43"	1-3/8" OD	1/2" OD
M500	51"	31"	43"	1-3/8" OD	1/2" OD



Large Room Refrigeration Systems are available in air-cooled models with either outdoor system (Model G) or indoor system (Model I). All semi-hermetic (Discus) systems are also available as indoor water-cooled condensers (Model W). Every system is mounted on a welded structural steel frame of channel and angle that has been



primed and painted for weather resistance. Outdoor systems are enclosed in a unitized weather housing with one-piece die-formed louver.

Model Selection

Refrigeration Systems in this catalog are shown in sections according to the following features and applications:

Room Temperature

Standard cooler systems are listed for 35°F and are designed for normal air-defrost. They are not provided with a defrost time clock unless specified as an option.

Cooler systems designed to operate at 28°F are provided with an electric defrost evaporator and a defrost time clock.

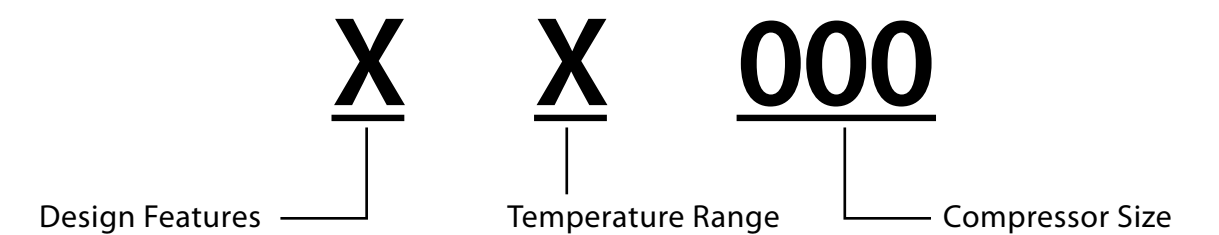
Freezers are listed for three (3) room temperatures: 0°F, -10°F and -20°F.

Compressor Style

Semi-Hermetic (Discus) compressors are available for medium and low temperature applications from 5HP to 15HP using R-404A.

Model Number

The model number describes the system design, including compressor horsepower and evaporator models as defined below.



G – Outside system air-cooled
I – Inside system air-cooled
W – Water-cooled

M – Medium Temperature
L – Low Temperature

500 – 5HP Discus
600 – 6HP Discus
750 – 7.5HP Discus
900 – 9HP Discus
10X – 10HP Discus
12X – 12HP Discus
15X – 15HP Discus