Russell

Condensed Catalog

Heat Transfer Products

Brea, California, Executive Offices and Manufacturing Facility

RUSSELL has been serving the refrigeration industry for over 40 years. Innovations such as the Low Profile Unit Cooler and Custom Fin Spacing have marked RUSSELL as a leader while establishing new standards in commercial refrigeration.

Products ranging from the smallest reach-in unit cooler to industrial size multi-compressor systems follow the same rigid manufacturing standards. Quality control checks take place throughout the production process. Skilled, innovative engineering and proven manufacturing experience, working together in the most modern facilities have produced today's comprehensive line of RUSSELL Quality Products.

RUSSELL is firmly committed to a high level of responsiveness and customer service, the attributes which make a company *easy to do business with.* Each inquiry and order is given individual attention. Inquiries are expedited for immediate or same day reply. Orders are monitored from the moment they are entered into the computer until shipment is complete, assuring reliable lead time commitments.

Yuma, Arizona, Manufacturing Facility

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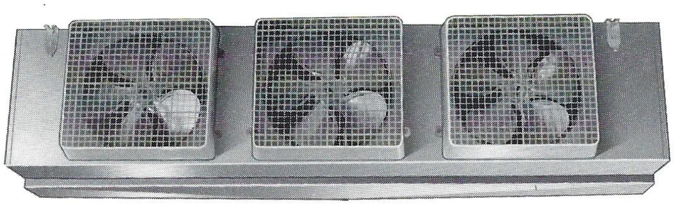
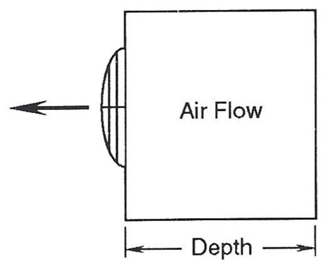


Unit shown with optional high throw fan guards.

All-Temp²B - The original low profile unit cooler. This is the unit that established an industry standard as the all-purpose design for commercial walk-in coolers and freezers. Refer to Technical Bulletin 100 for complete catalog details.



- 35 Model sizes
- Capacities from 3,600 to 39,000 BTUH @ 10° TD
- 4, 6 or 8 fins per inch available
- Air, Electric or Hot Gas Defrost
- All motors are 1/20 H.P. permanently lubricated ball bearing with thermal overload protection.

Air Defrost Specifications

	Model No.	Capacity BTUH 10° TD	CFM	Fan Motor Total Amps 115/1	Fan Motor Total Amps 230/1	Fan Motor Total Amps 460/1	Width[1] (Inches)	Connections[2] (In.) Suction ODS	Connections[2] (In.) Ext. Eq. ODS	Ship Wt. (Lbs)
8 FPI	AA18-41B	4100	800	2.0	1.0	0.5	27 7/16	½	—	43
	AA18-53B	5300	770	2.0	1.0	0.5	27 7/16	½	—	46
	AA18-66B	6600	740	2.0	1.0	0.5	27 7/16	½	—	50
	AA28-76B	7600	1460	4.0	2.0	1.0	41 7/16	½	—	64
	AA28-97B	9700	1420	4.0	2.0	1.0	41 7/16	⅞	¼	69
	AA28-106B	10600	1540	4.0	2.0	1.0	45 7/16	⅞	¼	71
	AA28-122B	12200	1380	4.0	2.0	1.0	41 7/16	⅞	¼	74
	AA28-134B	13400	1480	4.0	2.0	1.0	45 7/16	⅞	¼	77
	AA38-160B	16000	2310	6.0	3.0	1.5	63 7/16	1⅛	¼	110
	AA38-195B	19500	2220	6.0	3.0	1.5	63 7/16	1⅛	¼	120
	AA48-212B	21200	3080	8.0	4.0	2.0	81⅜	1⅛	¼	145
	AA48-264B	26400	2960	8.0	4.0	2.0	81⅜	1⅛	¼	160
	AA58-275B	27500	3850	10.0	5.0	2.5	99⅜	1⅛	¼	230
	AA68-318B	31800	4620	12.0	6.0	3.0	117⅜	1⅛	¼	255
	AA68-390B	39000	4440	12.0	6.0	3.0	117⅜	1⅛	¼	275
6 FPI	AA16-39B	3900	830	2.0	1.0	0.5	27 7/16	½	—	41
	AA16-48B	4800	800	2.0	1.0	0.5	27 7/16	½	—	44
	AA16-58B	5800	780	2.0	1.0	0.5	27 7/16	½	¼	47
	AA26-70B	7000	1540	4.0	2.0	1.0	41 7/16	⅞	¼	61
	AA26-87B	8700	1500	4.0	2.0	1.0	41 7/16	⅞	¼	67
	AA26-115B	11500	1560	4.0	2.0	1.0	45 7/16	⅞	¼	74
	AA36-145B	14500	2400	6.0	3.0	1.5	63 7/16	⅞	¼	105
	AA36-170B	17000	2340	6.0	3.0	1.5	63 7/16	1⅛	¼	115
	AA46-192B	19200	3200	8.0	4.0	2.0	81⅜	1⅛	¼	140
	AA46-230B	23000	3120	8.0	4.0	2.0	81⅜	1⅛	¼	155
	AA56-245B	24500	4000	10.0	5.0	2.5	99⅜	1⅛	¼	225
	AA66-295B	29500	4800	12.0	6.0	3.0	117⅜	1⅛	¼	250
	AA66-345B	34500	4680	12.0	6.0	3.0	117⅜	1⅛	¼	270
4 FPI	AA14-42B	4200	830	2.0	1.0	0.5	27 7/16	½	—	42
	AA24-84B	8400	1660	4.0	2.0	1.0	45 7/16	⅞	¼	67
	AA24-105B	10500	1620	4.0	2.0	1.0	45 7/16	⅞	¼	72
	AA34-130B	13000	2490	6.0	3.0	1.5	63 7/16	⅞	¼	100
	AA44-170B	17000	3320	8.0	4.0	2.0	81⅜	⅞	¼	135
	AA54-215B	21500	4150	10.0	5.0	2.5	99⅜	1⅛	¼	220
	AA64-255B	25500	4980	12.0	6.0	3.0	117⅜	1⅛	¼	245

1. Width is left to right dimension facing Air Discharge.
All Units: 15" Height
14" Depth

2. All Units: 1/2" Flare Nut Liquid Line
3/4" MPT Drain

Electric Defrost Specifications

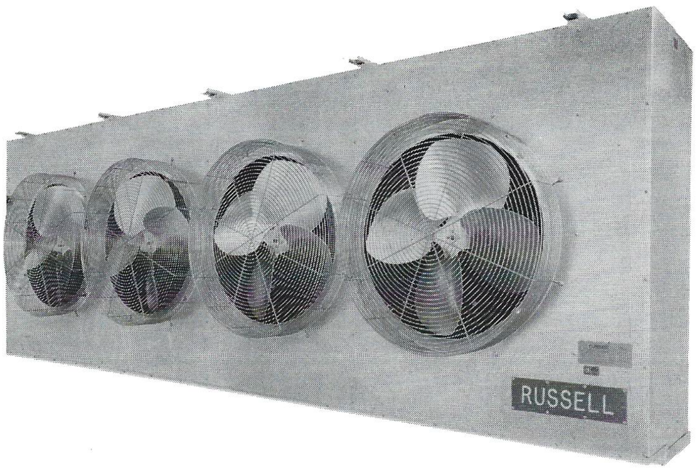
	Model No.	BTUH Capacity @ 10° TD		CFM	Total Amps[1]			Htr. Watts	Width[2] (Inches)	Connections[3]		Ship Wt. (Lbs)
					Fan Motors	Heaters				Suction ODS	Ext. Equal ODS	
		-20°S.T.	+20°S.T.		230/1	230/1	230/3					
6 FPI	AE16-36B	3600	3900	830	1.0	4.4	2.6	1000	27 7/16	1/2	—	41
	AE16-41B	4100	4800	800	1.0	4.4	2.6	1000	27 7/16	1/2	—	44
	AE16-46B	4600	5800	780	1.0	4.4	2.6	1000	27 7/16	1/2	1/4	47
	AE26-60B	6000	7000	1540	2.0	7.0	6.0	1600	41 7/16	7/8	1/4	61
	AE26-75B	7500	8700	1500	2.0	7.0	6.0	1600	41 7/16	7/8	1/4	67
	AE26-92B	9200	11500	1560	2.0	8.7	7.5	2000	45 7/16	7/8	1/4	74
	AE36-120B	12000	14500	2400	3.0	13.0	11.3	3000	63 7/16	7/8	1/4	105
	AE36-140B	14000	17000	2340	3.0	13.0	11.3	3000	63 7/16	1 1/8	1/4	115
	AE46-164B	16400	19200	3200	4.0	17.4	15.1	4000	81 3/8	1 1/8	1/4	140
	AE46-185B	18500	23000	3120	4.0	17.4	15.1	4000	81 3/8	1 1/8	1/4	155
	AE56-210B	21000	24500	4000	5.0	—	18.8	5000	99 3/8	1 1/8	1/4	225
	AE66-245B	24500	29500	4800	6.0	—	22.6	6000	117 3/8	1 1/8	1/4	250
	AE66-280B	28000	34500	4680	6.0	—	22.6	6000	117 3/8	1 1/8	1/4	270
4 FPI	AE14-37B	3700	4200	830	1.0	4.4	2.6	1000	27 7/16	1/2	—	42
	AE24-72B	7200	8400	1660	2.0	8.7	7.5	2000	45 7/16	7/8	1/4	67
	AE24-85B	8500	10500	1620	2.0	8.7	7.5	2000	45 7/16	7/8	1/4	72
	AE34-105B	10500	13000	2490	3.0	13.0	11.3	3000	63 7/16	7/8	1/4	100
	AE44-140B	14000	17000	3320	4.0	17.4	15.1	4000	81 3/8	7/8	1/4	135
	AE54-180B	18000	21500	4150	5.0	—	18.8	5000	99 3/8	1 1/8	1/4	220
	AE64-215B	21500	25500	4980	6.0	—	22.6	6000	117 3/8	1 1/8	1/4	245

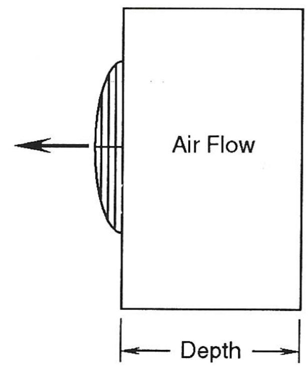
1. 460v Motor & Heater Amp Specifications — Multiply 230/1 amps x 0.5
2. Width is left-to-right dimension facing Air Discharge
All Units — 15" Height
14" Depth
3. All Units — 1/2" Flare Nut Liquid Line
3/4" MPT Drain

Hot Gas Defrost Specifications

	Model No. Rev. Cycle[1]	BTUH Capacity 10° TD		CFM	Fan Motors Total Amps			Width[2] (Inches)	Connection[3]		Ship Wt. (Lbs)
		-20° S.T.	+20° S.T.		115/1	230/1	460/1		Suction ODS	Ext. Eq. ODS	
6 FPI	AG16-36B	3600	3900	830	2.0	1.0	0.5	27 7/16	1/2	—	41
	AG16-41B	4100	4800	800	2.0	1.0	0.5	27 7/16	1/2	—	44
	AG16-46B	4600	5800	780	2.0	1.0	0.5	27 7/16	1/2	1/4	47
	AG26-60B	6000	7000	1540	4.0	2.0	1.0	41 7/16	7/8	1/4	61
	AG26-75B	7500	8700	1500	4.0	2.0	1.0	41 7/16	7/8	1/4	67
	AG26-92B	9200	11500	1560	4.0	2.0	1.0	45 7/16	7/8	1/4	74
	AG36-120B	12000	14500	2400	6.0	3.0	1.5	63 7/16	7/8	1/4	105
	AG36-140B	14000	17000	2340	6.0	3.0	1.5	63 7/16	1 1/8	1/4	115
	AG46-164B	16400	19200	3200	8.0	4.0	2.0	81 3/8	1 1/8	1/4	140
	AG46-185B	18500	23000	3120	8.0	4.0	2.0	81 3/8	1 1/8	1/4	155
	AG56-210B	21000	24500	4000	10.0	5.0	2.5	99 3/8	1 1/8	1/4	225
	AG66-245B	24500	29500	4800	12.0	6.0	3.0	117 3/8	1 1/8	1/4	250
	AG66-280B	28000	34500	4680	12.0	6.0	3.0	117 3/8	1 1/8	1/4	270
4 FPI	AG14-37B	3700	4200	830	2.0	1.0	0.5	27 7/16	1/2	—	42
	AG24-72B	7200	8400	1660	4.0	2.0	1.0	45 7/16	7/8	1/4	67
	AG24-85B	8500	10500	1620	4.0	2.0	1.0	45 7/16	7/8	1/4	72
	AG34-105B	10500	13000	2490	6.0	3.0	1.5	63 7/16	7/8	1/4	100
	AG44-140B	14000	17000	3320	8.0	4.0	2.0	81 3/8	7/8	1/4	135
	AG54-180B	18000	21500	4150	10.0	5.0	2.5	99 3/8	1 1/8	1/4	220
	AG64-215B	21500	25500	4980	12.0	6.0	3.0	117 3/8	1 1/8	1/4	245

1. Re-Evap Type Model No.: Prefix AH (e.g. AH16-36)
2. Width is left-to-right dimension facing Air Discharge
All Units — 15" Height
14" Depth
3. All Units — 1/2" Flare Nut Liq. Inlet
3/4" MPT Drain
5/8" ODS Hot Gas Inlet (Model AH only)





Ultra-Temp — The heavy duty unit cooler. Designed specifically for commercial and industrial coolers and freezers of all sizes. Ideal for either storage or process applications. Refer to Technical Bulletin 101 for complete catalog details.

- 50 Model sizes
- Capacities from 11,800 to 182,100 BTUH @ 10° TD
- 4, 6 or 8 fins per inch available
- Air, Electric or Hot Gas Defrost
- High efficiency PSC motors with life lubricated ball bearings and thermal overload protection
- All units (except 1-fan models) are shipped "Right Side Up" for ease of mounting.

ULTRA-TEMP NOMENCLATURE

U E L 2 - 408

Ultra-Temp

Defrost Type
A - Air
E - Electric
G - Hot Gas - Rev. Cycle
H - Hot Gas - Re-Evap.

BTUH in Hundreds

Number of Fans

Temperature Range
H - High
M - Medium
L - Low (6 FPI)
U - Low (4 FPI)

High Temperature Specifications

	Model No.	*Capacity BTUH 10° TD*	*CFM*	*Total Motor Amps 60 HZ*		
				115/1	*230/1*	*460/1*
8 FPI	UAH1-182	18200	2800	7.1	3.2	1.3
	UAH1-232	23200	2720	7.1	3.2	1.3
	UAH2-300	30000	6880	14.2	6.4	2.6
	UAH2-365	36500	6600	14.2	6.4	2.6
	UAH2-433	43300	6400	14.2	6.4	2.6
	UAH2-490	49000	6250	14.2	6.4	2.6
	UAH3-530	53000	9800	21.3	9.6	3.9
	UAH3-648	64800	9600	21.3	9.6	3.9
	UAH3-736	73600	9400	21.3	9.6	3.9
	UAH4-866	86600	12800	28.4	12.8	5.2
	UAH4-980	98000	12500	28.4	12.8	5.2
	UAH4-1100	110000	12200	28.4	12.8	5.2
	UAH4-1452	145200	20700	—	16.8	8.4
	UAH4-1821	182100	19900	—	16.8	8.4

Medium Temperature Specifications

	Model No.	Capacity BTUH +20ST @ 10°TD	CFM	Total Motor Amps[1] 60 HZ			Defrost Heater Total Amps[2]		Defrost Heater Watts
				115/1	230/1	460/1	230/3	460/3	
6 FPI	U•M1-164	16400	2920	7.1	3.2	1.3	14.6	9.5	5512
	U•M1-209	20900	2840	7.1	3.2	1.3	14.6	9.5	5512
	U•M2-270	27000	7000	14.2	6.4	2.6	26.0	17.0	9832
	U•M2-329	32900	6840	14.2	6.4	2.6	26.0	17.0	9832
	U•M2-390	39000	6640	14.2	6.4	2.6	26.0	17.0	9832
	U•M2-441	44100	6480	14.2	6.4	2.6	26.0	17.0	9832
	U•M3-583	58300	9960	21.3	9.6	3.9	37.4	24.5	14152
	U•M3-662	66200	9720	21.3	9.6	3.9	37.4	24.5	14152
	U•M4-780	78000	13280	28.4	12.8	5.2	47.8	24.3	18440
	U•M4-882	88200	12960	28.4	12.8	5.2	47.8	24.3	18440
	U•M4-1320	132000	21200	—	16.8	8.4	63.8	31.9	27660
	U•M4-1656	165600	20400	—	16.8	8.4	63.8	31.9	27660

1. All models are standard single phase motors. For three phase requirements, see Technical Bulletin No. 101
2. All electric defrost models are standard three phase heaters. For single phase requirements, see Technical Bulletin No. 101

Low Temperature Specifications

	Model No.	Capacity BTUH @ 10° TD		CFM	Total Motors[1] Amps 60 HZ		Defrost Heater Total Amps[2]		Defrost Heater Watts
		-10° S.T.	-30° S.T.		230/1	460/1	230/3	460/3	
4 FPI	U•U1-118	12900	11800	3750	4.2	2.1	14.6	9.5	5512
	U•U2-236	25700	23600	7500	8.4	4.2	26.0	17.0	9832
	U•U2-355	38700	35500	8200	8.4	4.2	26.0	17.0	9832
	U•U3-474	51600	47400	12450	12.6	3.6[3]	37.4	24.5	14152
	U•U4-711	74500	71100	16400	16.8	5.6[3]	47.8	24.3	18440
	U•U4-851	92800	85100	21600	16.8	5.6[3]	63.8	31.9	27660
	U•U4-1080	117700	108000	21600	16.8	5.6[3]	63.8	31.9	27660
6 FPI	U•L1-125	12500	10900	3750	4.2	2.1	14.6	9.5	5512
	U•L1-152	15200	13200	3650	4.2	2.1	14.6	9.5	5512
	U•L1-193	19300	16800	3550	4.2	2.1	14.6	9.5	5512
	U•L2-240	24000	20900	7600	8.4	4.2	26.0	17.0	9832
	U•L2-304	30400	26400	7300	8.4	4.2	26.0	17.0	9832
	U•L2-361	36100	31400	8300	8.4	4.2	26.0	17.0	9832
	U•L2-408	40800	35500	8100	8.4	4.2	26.0	17.0	9832
	U•L3-445	44500	38700	12800	12.6	3.6[3]	37.4	24.5	14152
	U•L3-540	54000	47000	12450	12.6	3.6[3]	37.4	24.5	14152
	U•L3-613	61300	53300	12150	12.6	3.6[3]	37.4	24.5	14152
	U•L3-660	66000	57400	11800	12.6	3.6[3]	37.4	24.5	14152
	U•L4-722	72200	62700	16600	16.8	5.6[3]	47.8	24.3	18440
	U•L4-817	81700	71100	16200	16.8	5.6[3]	47.8	24.3	18440
	U•L4-950	95000	82500	21500	16.8	5.6[3]	63.8	31.9	18440
	U•L4-1100	110000	95700	21200	16.8	5.6[3]	63.8	31.9	27660
	U•L4-1260	126000	109600	20800	16.8	5.6[3]	63.8	31.9	27660
	U•L4-1380	138000	120000	20400	16.8	5.6[3]	63.8	31.9	27660

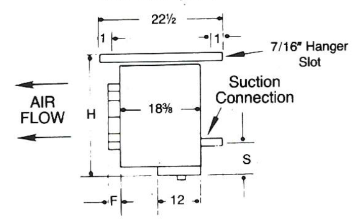
1. All models are standard single phase. For three phase requirements, see Technical Bulletin No. 101
2. All electric defrost models are standard three phase heaters. For single phase requirements, see Technical Bulletin No. 101
3. Amps shown are for delta three phase wiring on 3 and 4 fan 460 volt models.

Dimensional Data

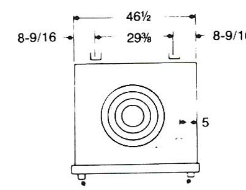
Model No.	Refrigerant Connections (In)			Dimensions (Inches)			Ship Wt. (Lbs.)
	Liquid	Suction	Hot Gas	H	S	F	
U●U1-118	1/2 F.N.	1⅛ ODS	7/8 ODS	25½	5¼	3½	190
U●U2-236	7/8 ODS	1⅜	7/8	25½	3¾	3½	370
U●U2-355	7/8	1⅝	7/8	31½	2¼	3½	440
U●U3-474	7/8	1⅝	7/8	31½	2¼	3½	570
U●U4-711	7/8	2⅛	1⅛	31½	2⅞	3½	665
U●U4-851	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	875
U●U4-1080	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	900
U●L1-125	1/2 F.N.	1⅛ ODS	7/8 ODS	25½	5¼	3½	180
U●L1-152	1/2 F.N.	1⅛	7/8	25½	5¼	3½	200
U●L1-193	5/8 ODS	1⅛	7/8	25½	3¾	3½	220
U●L2-240	7/8 ODS	1⅜	7/8	25½	3¾	3½	370
U●L2-304	7/8	1⅜	7/8	25½	3¾	3½	400
U●L2-361	7/8	1⅝	7/8	31½	2¼	3½	425
U●L2-408	7/8	1⅝	7/8	31½	2¼	3½	446
U●L3-445	7/8	2⅛	7/8	31½	2¼	3½	525
U●L3-540	7/8	2⅛	7/8	31½	2¼	3½	585
U●L3-613	7/8	2⅛	7/8	31½	2¼	3½	620
U●L3-660	7/8	2⅛	7/8	31½	2¼	3½	645
U●L4-722	7/8	2⅛	1⅛	31½	2⅞	3½	675
U●L4-817	1⅜	2⅛	1⅛	31½	2⅞	3½	726
U●L4-950	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	850
U●L4-1100	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	885
U●L4-1260	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	895
U●L4-1380	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	910
U●M1-164	1/2 F.N.	1⅛ ODS	7/8 ODS	25½	5¼	3½	200
U●M1-209	5/8 ODS	1⅛	7/8	25½	3¾	3½	220
U●M2-270	5/8	1⅜	7/8	25½	3¾	3½	360
U●M2-329	5/8	1⅜	7/8	25½	3¾	3½	400
U●M2-390	7/8	1⅜	7/8	31½	2¼	3½	425
U●M2-441	7/8	1⅜	7/8	31½	2¼	3½	446
U●M3-583	7/8	1⅝	7/8	31½	2¼	3½	585
U●M3-662	7/8	1⅝	7/8	31½	2¼	3½	620
U●M4-780	7/8	1⅝	1⅛	31½	2⅞	3½	675
U●M4-882	1⅛	2⅛	1⅛	31½	2⅞	3½	726
U●M4-1320	7/8(2)	1⅝(2)	1⅛	49½	2⅞	5	885
U●M4-1656	7/8(2)	2⅛(2)	1⅛	49½	2⅞	5	910
UAH1-182	1/2 F.N.	1⅛ ODS	—	25½	5¼	3½	210
UAH1-232	5/8 ODS	1⅛	—	25½	3¾	3½	230
UAH2-300	7/8	1⅜	—	25½	3¾	3½	370
UAH2-365	7/8	1⅜	—	25½	3¾	3½	410
UAH2-433	7/8	1⅜	—	31½	2¼	3½	435
UAH2-490	7/8	1⅝	—	31½	2¼	3½	458
UAH3-530	7/8	1⅝	—	31½	2¼	3½	550
UAH3-648	7/8	1⅝	—	31½	2¼	3½	600
UAH3-736	7/8	1⅝	—	31½	2¼	3½	635
UAH4-866	1⅛	2⅛	—	31½	2⅞	3½	690
UAH4-980	1⅜	2⅛	—	31½	2⅞	3½	746
UAH4-1100	1⅛	2⅛	—	31½	2⅞	3½	785
UAH4-1452	1⅜(2)	1⅝(2)	—	49½	2⅞	5	905
UAH4-1821	1⅜(2)	2⅛(2)	—	49½	2⅞	5	930

All Units have shipping legs except 1-Fan Models

END VIEW (TYP)

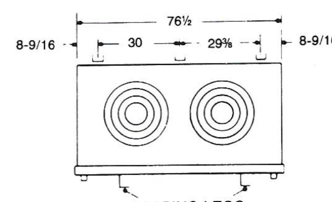


1 FAN UNIT



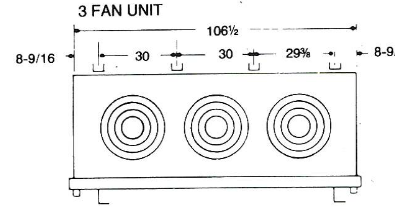
3/4 MPT DRAINS

2 FAN UNIT

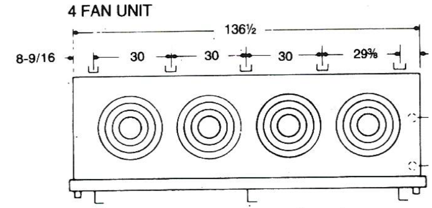


SHIPPING LEGS

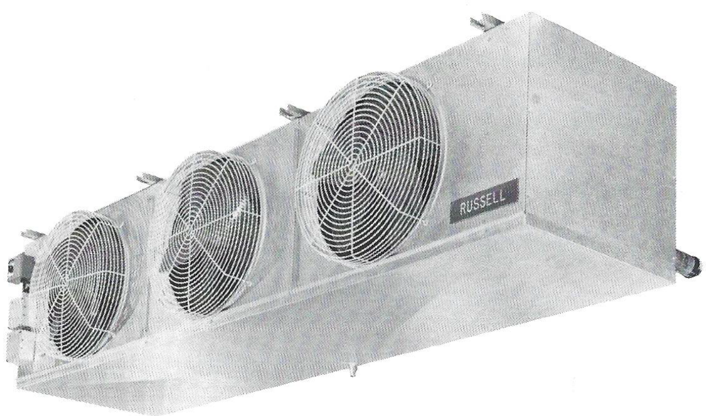
3 FAN UNIT

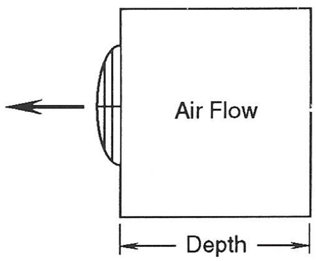


4 FAN UNIT



†24" dimension applies only to models with 2 connections





The Super Temp is suitable for a variety of special applications. The standard version, a medium profile unit designed for R-22, R-502 and R-12, is available in Air Defrost. Explosion proof motors are available as an option.

The Ammonia version is supplied with an aluminum tube core. All return bends and headers are heliarc welded, providing strength and durability. Advantages of aluminum tube cores over steel include higher thermal conductivity, rust resistant and they are less than half the weight of an equivalent steel coil resulting in tremendous savings for heavy duty ceiling supports and installation. The Ammonia version is available in Air, Electric or Hot Gas Defrost. The coil can be circuited for either Direct Expansion, Flooded or Recirc systems. Steel mating flange kits with garlock gaskets are supplied for simple piping connections.

Standard Super Temp

	Model No.	Capacity BTUH 10 TD	CFM	Motor Amps 230/1	Dimensions (In)		Connections (In)			Ship Wt. (Lbs)
					Width	Height	Liq. ODS	Suct. ODS	Hot Gas ODS	
4 FPI	SU 14-105	10,500	1960	2.8	38¼	22	½ FN	1⅛	⅞	150
	SU 14-125	12,500	1950	2.8	38¼	22	½ FN	1⅛	⅞	170
	SU 14-150	15,000	2700	2.8	38¼	26	½ FN	1⅜	⅞	190
	SU 24-210	21,000	3920	5.6	67¼	22	⅞ ODS	1⅜	1⅛	260
	SU 24-250	25,000	3900	5.6	67¼	22	⅞ ODS	1⅝	1⅛	295
	SU 24-300	30,000	5400	5.6	67¼	26	⅞ ODS	1⅝	1⅛	320
6 FPI	SU 16-150	15,000	1930	2.8	38¼	22	½ FN	1⅛	⅞	170
	SU 16-186	18,600	1920	2.8	38¼	22	½ FN	1⅛	⅞	190
	SU 16-224	22,400	2660	2.8	38¼	26	½ FN	1⅜	⅞	210
	SU 26-300	30,000	3860	5.6	67¼	22	⅞ ODS	1⅜	1⅛	280
	SU 26-373	37,300	3840	5.6	67¼	22	⅞ ODS	1⅝	1⅛	310
	SU 26-448	44,800	5320	5.6	67¼	26	⅞ ODS	1⅝	1⅛	340

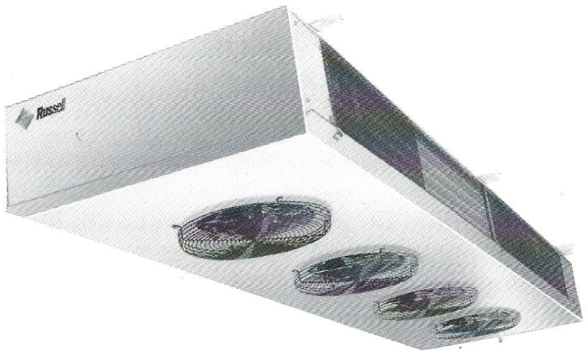
Ammonia Super Temp

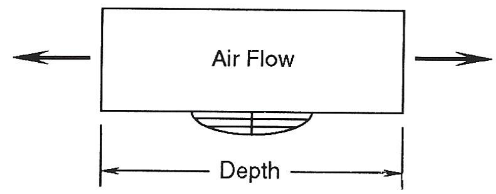
	Model No.*	Capacity BTUH 10 TD	CFM	Total Amps		Htr. Ph.	Htr. Watts	Dimensiions (In)		Connections (In)			Ship Wt. (Lbs)
				Motor 230/1	Heater 230V			Width	Height	Liq. (FPT)	Suct. (FPT)	Hot Gas (FPT)	
4 FPI	ASU 14-128	12,800	3040	4.2	15.9	1	3660	38¼	22	½	1¼	½	150
	ASU 14-154	15,400	3040	4.2	15.9	1	3660	38¼	22	½	1¼	½	170
	ASU 14-175	17,500	3750	4.2	23.7	1	5460	38¼	26	½	1¼	½	190
	ASU 24-257	25,700	6080	8.4	32.3	1	7440	67¼	22	½	1¼	½	260
	ASU 24-308	30,800	6080	8.4	32.3	1	7440	67¼	22	½	1¼	½	295
	ASU 24-349	34,900	7500	8.4	29.5	3	11040	67¼	26	½	1¼	½	320
	ASU 34-455	45,500	10100	12.6	26.5	3	10560	96¼	22	½	1¼	½	400
	ASU 34-524	52,400	12450	12.6	40.0	3	15960	96¼	26	½	1½	¾	450
	ASU 44-615	61,500	13300	16.8	35.2	3	14040	125¼	22	½	1½	¾	530
	ASU 44-695	69,500	16400	16.8	33.1/23.6	3	21240	125¼	26	½	1½	¾	560
	ASU 44-845	84,500	16400	16.8	33.1/23.6	3	21240	125¼	26	½	2	¾	715

** Insert suffix "E" for Electric Defrost or "HG" for Hot Gas Reverse Cycle Defrost to the model number.*

Russell

Flow-Temp





Flow-Temp — The low velocity unit cooler. Designed with high surface area and low air velocity to refrigerate highly perishable products in storage and work rooms. Ideal for meat, produce and floral refrigeration. Refer to Technical Bulletin 110 for complete catalog details.

- Seven models through 26500 BTUH @ 10° TD
- Air, electric or hot gas defrost
- Easy fan access through hinged and latched drain pan
- Optional white baked enamel finish

FLOW-TEMP NOMENCLATURE

FL 3 6 - 100 E

- FL — Flow Temp
- 3 — No. of Fans
- 6 — Fins Per Inch
- 100 — BTUH in Hundreds
- E — Defrost Type
  - Blank - Air
  - E - Electric
  - HG - Hot Gas

*Specifications**

Model No.	Capacity BTUH 10° TD	CFM	230V Electrical[1] Total Motor Amps	Total Heater Amps	Heater Watts	Dimensions (In.)[2] Width	Height	Suction Conn. O.D.S.	Approx. Ship. Wgt. (Lbs.)
FL26-67	6700	1050	.6	17.2[3]	3940	58½	10¼	⅞	155
FL36-100	10000	1220	.9	22.4	5960	82½	10¾	⅞	205
FL36-135	13500	1670	1.65	22.4	5960	82½	13¾	1⅛	265
FL36-160	16000	1820	1.65	22.4	5960	82½	13¾	1⅛	285
FL46-180	18000	2230	2.2	30.4	8060	106½	13¾	1⅛	325
FL46-220	22000	2420	2.2	30.4	8060	106½	13¾	1⅛	340
FL46-265	26500	2420	2.2	30.4	8060	106½	16¾	1⅜	370

1. 115V — Air Defrost only — Multiply Motor Amps by 2.0
2. Width is left-to-right dimension facing Air Discharge
Depth = 27½" - All Models
3. Heaters wired for 1 phase: All other models wired for 3 phase
4. All liquid connections ½" F.N.

**Air Defrost / 35° and above Room Temp*
Electric & Hot Gas / 28° and above Room Temp

Ceiling-Temp — Two-way discharge lowest profile. The air distribution problem solver. Extra low profile permits center ceiling mount; two-way discharge gives full air coverage (without fogging reach-thru glass doors). Refer to Technical Bulletin 119 for complete details.

- 40 Model sizes
- NSF type flush-to-ceiling mount
- Air or electric defrost
- Hinged drain pan for all service

Air Defrost Specifications

	Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps. 115/1	Total Motor Amps. 230/1	Dimensions[1] (In.) Width	Dimensions[1] (In.) Height	Connections[2] (In.) Suct. ODS	Connections[2] (In.) Ext. Equal ODS	Ship Wt. (Lbs)
8 FPI	CTA38-75	7500	1455	3.3	1.7	58½	8	⅝	—	95
	CTA38-88	8800	1305	3.3	1.7	58½	8	⅝	—	100
	CTA38-98	9800	1200	3.3	1.7	58½	8	⅝	—	105
	CTA48-112	11200	2120	4.4	2.2	82½	8¾	⅞	¼	125
	CTA48-130	13000	1920	4.4	2.2	82½	8¾	⅞	¼	130
	CTA48-150	15000	1760	4.4	2.2	82½	8¾	⅞	¼	135
	CTA58-162	16200	2320	5.5	2.8	106½	8¾	⅞	¼	150
	CTA48-210	21000	1820	4.4	2.2	106½	10¼	⅞	¼	155
	CTA58-230	23000	2650	5.5	2.8	106½	10¼	⅞	¼	165
	CTA68-250	25000	2970	6.6	3.3	106½	10¼	1⅛	¼	185
6 FPI	CTA36-64	6400	1560	3.3	1.7	58½	8	⅝	—	90
	CTA36-82	8200	1425	3.3	1.7	58½	8	⅝	—	95
	CTA36-93	9300	1305	3.3	1.7	58½	8	⅝	—	100
	CTA46-100	10000	2160	4.4	2.2	82½	8¾	⅞	¼	120
	CTA46-123	12300	2040	4.4	2.2	82½	8¾	⅞	¼	125
	CTA46-140	14000	1920	4.4	2.2	82½	8¾	⅞	¼	130
	CTA56-157	15700	2360	5.5	2.8	106½	8¾	⅞	¼	145
	CTA46-190	19000	1940	4.4	2.2	106½	10¼	⅞	¼	150
	CTA56-208	20800	2850	5.5	2.8	106½	10¼	⅞	¼	160
	CTA66-232	23200	3150	6.6	3.3	106½	10¼	1⅛	¼	180

1. Width is left-to-right dimension facing Air Discharge
Depth - 26¼" All Units

2. All units — 1/2" Flare Nut Liquid Inlet

Electric Defrost Specifications

	Model No.	Capacity 10° TD -10° F S.T.	Capacity 10° TD -20° F S.T.	CFM	Electrical 230/1[1] Fan Motor Amps	Electrical 230/1[1] Heaters Amps	Electrical 230/1[1] Heaters Watts	Dimensions[2] (In.) Width	Dimensions[2] (In.) Height	Connections[3] (In.) Suct. ODS	Connections[3] (In.) Ext. Equal ODS	Ship Wt. (Lbs)
6 FPI	CTE36-53	5500	5300	1440	1.7	9.0	2070	58½	8	⅝	—	95
	CTE36-62	6500	6300	1290	1.7	9.0	2070	58½	8	⅝	—	100
	CTE36-69	7200	6900	1245	1.7	9.0	2070	58½	8	⅝	¼	105
	CTE46-77	8100	7700	2075	2.2	13.0	2990	82½	8¾	⅞	¼	125
	CTE46-90	9400	9000	1860	2.2	13.0	2990	82½	8¾	⅞	¼	130
	CTE46-100	10500	10000	1740	2.2	13.0	2990	82½	8¾	⅞	¼	135
	CTE56-125	13100	12500	2160	2.8	17.0	3910	106½	8¾	⅞	¼	150
	CTE46-140	14700	14000	1820	2.2	17.0	3910	106½	10¼	⅞	¼	155
	CTE56-160	16800	16000	2550	2.8	17.0	3910	106½	10¼	⅞	¼	165
	CTE66-218	22900	21800	3000	3.3	17.0	3910	106½	10¼	1⅛	¼	185
4 FPI	CTE34-48	5000	4800	1500	1.7	9.0	2070	58½	8	⅝	—	90
	CTE34-58	6100	5800	1395	1.7	9.0	2070	58½	8	⅝	—	95
	CTE34-65	6800	6500	1350	1.7	9.0	2070	58½	8	⅝	¼	100
	CTE44-72	7500	7200	2120	2.2	13.0	2990	82½	8¾	⅞	¼	120
	CTE44-84	8800	8400	1980	2.2	13.0	2990	82½	8¾	⅞	¼	125
	CTE44-95	9900	9500	1900	2.2	13.0	2990	82½	8¾	⅞	¼	130
	CTE54-115	12000	11500	2280	2.8	17.0	3910	106½	8¾	⅞	¼	145
	CTE44-128	13400	12800	1940	2.2	17.0	3910	106½	10¼	⅞	¼	150
	CTE54-145	15200	14500	2650	2.8	17.0	3910	106½	10¼	⅞	¼	160
	CTE64-173	18100	17300	3080	3.3	17.0	3910	106½	10¼	1⅛	¼	180

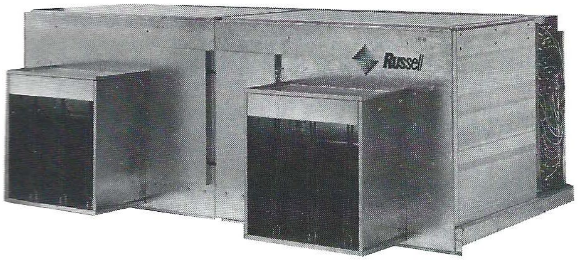
1. 115/1 Motors — Multiply 230/1 Amps x 2.0
460/1 Heaters — Multiply 230/1 Amps x 0.5

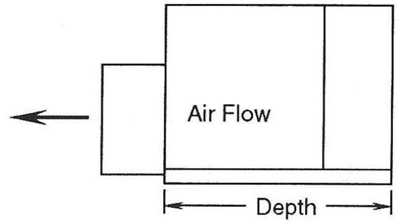
2. Width is left-to right dimension facing Air Discharge
Depth — 26¼" All Units
3. All Units — 1/2" Flare Nut Liquid Inlet

Russell

Product Cooler

One Carlot Unit





Half Carlot Unit

DESIGNED EXPRESSLY TO STORE & RIPEN BANANAS & TOMATOES

- Industrial grade all-galvanized construction
- Oversized Class II blower wheels
- 200,000 hour pillow-block bearings
- DX and Glycol cooling coils to 12 rows deep
- Standard capacities up to 173,900 BTUH
- Optional electric heat section
- Easy access for service and cleaning
- ETL Listed

Refer to Technical Bulletin 600 for complete catalog details.

SPECIFICATIONS

One-Fan Units — 7800 CFM w/(1) 2HP Motor

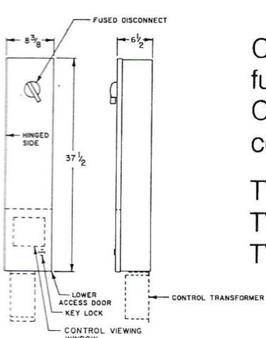
	Model No. PCR	Cooling Capacity — BTUH 70° Room 60° S.T.	55° Room 45° S.T.	55° Room 40° S.T.	35° Room 25° S.T.	Width* (In.)	Connections — R-22 (In.) Inlet ODM	Outlet ODM	Net Weight (Lbs.)
4 FPI	144	34600	30300	49700	27500	54	⅞	⅞	527
	154	41600	36200	59400	32700		⅞	⅞	553
	164	48000	41600	68100	37400		⅞	1⅛	570
6 FPI	146	40400	35900	59300	33200	54	⅞	⅞	567
	156	48200	42500	70000	39100		⅞	1⅛	593
	166	55200	48400	79500	44100		⅞	1⅛	610

Two-Fan Units — 15600 CFM w/(2) 2HP Motors

	Model No. PCR	70° Room 60° S.T.	55° Room 45° S.T.	55° Room 40° S.T.	35° Room 25° S.T.	Width* (In.)	Inlet ODM	Outlet ODM	Net Weight (Lbs.)
4 FPI	244	75700	66300	108700	60100	105	1⅛	1⅜	1060
	254	91000	79200	129900	71500		1⅛	1⅜	1114
	264	105000	91000	148900	81800		1⅛	1⅜	1150
6 FPI	246	88300	78500	129700	72600	105	1⅛	1⅜	1140
	256	105400	92900	153100	85500		1⅛	1⅜	1194
	266	120700	105800	173900	96400		1⅜	1⅝	1230

**Width is left-to-right dimension facing Air Discharge*
Depth — 50" All units. Add 14" for optional Heater Section(s)
Height — 38¾" All Units

Type II Complete Panel



Control Panels

Control panels to meet most ripening room applications. Power components include main fused disconnect, fan motor & (optional) heater contactors and control transformer (460V). Control components include thermostats, mode selector switch and indicator lights. All field connections made to numbered terminal strips. Three versions are available.

TYPE I Power Panel Only - for control module by others
TYPE II Complete Panel - One piece, stand-alone unit
TYPE III Power Panel + Remote Control Module (Not ETL)

Hi-Temp

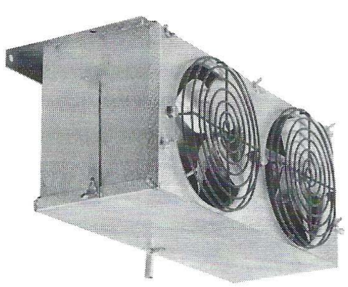
Hi-Temp — The classic-style unit cooler. Large coil surface in the gentle blow-thru configuration assures increased shelf life for more sensitive products. There are 16 air defrost units available from 600 BTUH for reach-ins to 18,000 BTUH for walk-ins, with Russ-Proof coil coating standard in the smaller sizes. Refer to Technical Bulletin 118 for complete catalog details.

Hi-Temp

Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps 115v	Dimensions (In)[1]			Connections (In)[2]		Ship Wt. (Lbs)
				Width	Depth	Height	Inlet ODS	Suction ODS	
HI 17-6	600	108	.4	12	8¾	7	⅜	⅜	11
HI 17-9	900	160	.4	12	8¾	9	⅜	⅜	12
HI 17-12	1200	216	.4	12	8¾	9	⅜	⅜	13
HI 17-15	1500	270	.6	12	8¾	9	⅜	⅜	15
HI 17-18	1800	325	.6	18	11	12	½	½	21
HI 17-25	2500	450	.6	18	11	12	½	½	24
HI 17-35	3500	490	1.7	20	20	15½	½	⅝	35
HI 17-45	4500	575	1.7	20	20	15½	½	⅝	41
HI 18-55	5500	795	1.7	20	20	15½	½	⅝	42
HI 17-65	6500	900	3.5	24	20	19½	½	⅝	60
HI 17-75	7500	1040	3.5	24	20	19½	½	⅝	80
HI 18-85	8500	1185	3.5	24	20	19½	½	⅝	82
HI 17-105	10500	1465	3.5	30	20	22	½ FN	⅞	89
HI 18-120	12000	1700	5.6	30	20	22	½ FN	⅞	95
HI 27-150	15000	2080	7.0	48	20	22	⅝	⅞	120
HI 27-180	18000	2430	7.0	48	20	22	⅝	1⅛	147

1. Width is left-to-right dimensions facing Air Discharge
2. HI17-6 thru 25 are 1/2" ODS Drain. All others are 3/4" MPT.

T-Temp

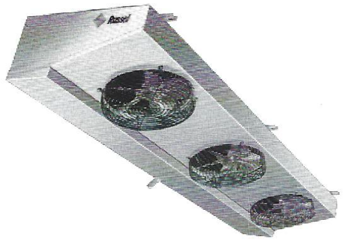


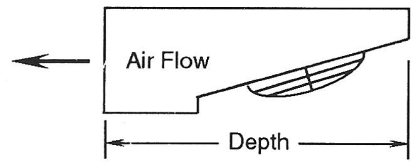
T-Temp — The extra compact unit cooler. These small capacity units are for use in the most compact back bar and undercounter fixtures where space is at a premium. Designed for wall or ceiling mount with Russ-Proof coil as standard on all models. Refer to Technical Bulletin 116 for complete catalog details.

T-Temp

Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps 115v	Dimensions (In)[1]			Connections (In)			Ship Wt. (Lbs)
				Width	Depth	Height	Inlet FN	Suction ODS	Drain ODS	
TT18-8	800	200	.5	13¾	7½	7¼	½	⅜	½	10
TT28-13	1300	380	1.0	19¼	7½	7¼	½	⅜	½	15
TT28-17	1700	360	1.0	19¼	8½	7¼	½	⅜	½	16

1. Width is left-to-right dimension facing Air Discharge.





Slim-Temp — The most popular reach-in unit cooler. High capacity with an effective air distribution pattern. Compact height for maximum storage space. Refer to Technical Bulletin 112 for complete catalog details.

- 17 Model sizes
- Capacities from 1000 to 8700 BTUH @ 10°TD
- Air or electric defrost
- Special high efficiency blow-thru fans for controlled velocity output

Model SL — Standard Height Unit

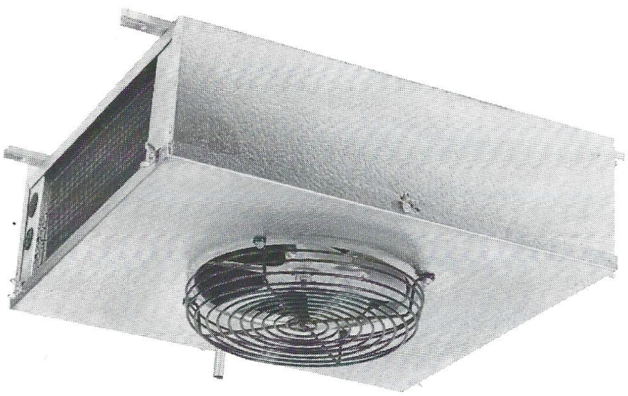
	Model No.	Capacity BTUH 10° TD	CFM	230V Electrical[1] Total Motor Amps	Total Heater Amps	Heater Watts	Dimensions (In)[2] Width	Depth	Height	Suction[3] Conn. O.D.S. (In.)	Ship Wt. (Lbs)
7 FPI	SL17-10	1000	130	.25	NOT APPLICABLE		16⅝	16⅜	4¾	½	15
	SL17-13	1300	160	.25			20⅝	16⅜	4¾	½	18
	SL27-17	1700	235	.5			24⅛	17⅜	4¾	½	22
	SL27-23	2300	295	.5			31⅝	17⅜	4¾	½	29
	SL37-30	3000	365	.75			40⅛	17⅜	4¾	½	37
	SL47-37	3700	550	1.0			48⅝	17⅜	4¾	⅝	45
	SL57-50	5000	650	1.25			63⅛	17⅜	4¾	⅝	61
5 FPI	SL15-9E	900	138	.25	1.83	420	16⅝	16⅜	4¾	½	16
	SL15-11E	1100	170	.25	2.17	500	20⅝	16⅜	4¾	½	19
	SL25-15E	1500	250	.5	3.04	700	24⅛	17⅜	4¾	½	23
	SL25-20E	2000	315	.5	3.90	900	31⅝	17⅜	4¾	⅝	31
	SL35-26E	2600	390	.75	5.65	1300	40⅛	17⅜	4¾	⅝	39
	SL45-33E	3300	585	1.0	6.95	1600	48⅝	17⅜	4¾	⅝	48
	SL55-44E	4400	690	1.25	9.1	2100	63⅛	17⅜	4¾	⅝	65
	SL35-58E	5800	1350	1.65	9.6	2200	63	24	7	⅞	95
	SL35-70E	7000	1420	1.65	13.0	2980	80	24	7	⅞	105
	SL45-87E	8700	1800	2.2	15.3	3520	94	24	7	1⅛	116

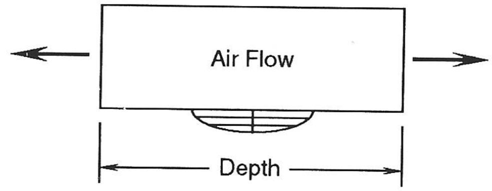
1. 115V Motors & Heaters: Multiply 230V ratings x 2.0
2. Width is left-to-right dimension facing Air Discharge
3. Liquid Inlet — 1/2" Flare Nut — All Models
Drain Connection — 1/2" O.D. — All Models up thru SL55-44E
7/8" O.D. — SL35-58E and Larger

Model ASL — High Capacity Unit

Model No.	Capacity BTUH 10° TD	CFM	230V Electrical Total Motor Amps	Total Heater Amps	Heater Watts	Width[1] (In)	Suction[2] Conn. ODS (In)	Ship Wt. (Lbs)
ASL25-46	4600	950	1.1	5.7	1300	46	⅞	83
ASL25-58	5800	1000	1.1	8.6	1970	56	⅞	105
ASL35-70	7000	1425	1.7	8.0	1850	69	⅞	125
ASL45-94	9400	1900	2.2	10.9	2500	92	1⅛	151
ASL55-117	11700	2375	2.8	13.9	3200	115	1⅛	185

1. Width is left-to-right dimensions facing Air Discharge
Depth: 20" All Units
Height: 9" All Units
2. Liquid Inlet: 1/2" Flare Nut — All Units
Drain Conn: 7/8" OD — All Units





Twin-Temp — The two-way discharge unit cooler. Small enough for reach-in, large enough for walk-in. Air pattern avoids discharge against glass doors. For 35° and above. Refer to Technical Bulletin 111 for complete catalog details.

- 16 Model sizes
- Capacities from 900 to 30,000 BTUH @ 10° TD
- Air defrost only
- NSF type flush-to-ceiling mount

Twin-Temp — Standard Height

Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps 115V	Dimensions (In)[1]			Connections (In)			Ship Wt. (Lbs)
				Width	Depth	Height	Inlet[2]	Suction[3]	Drain	
TW17-9	900	150	.4	16	19½	7⅝	½ FN	½ MF	½ OD	17
TW17-12	1200	190	.4	16	19½	7⅝	½ FN	½ MF	½ OD	19
TW17-18	1800	260	.6	16	19½	9⅛	½ FN	½ MF	½ OD	23
TW17-25	2500	350	.6	18	21½	9⅝	½ FN	½ MF	½ FPT	26
TW17-35	3500	440	.6	18	21½	11¼	½ FN	½ MF	½ FPT	28
TW17-45	4500	530	1.7	21	31½	10	½ OD	⅝ OD	½ FPT	44
TW17-55	5500	650	1.7	21	31½	12	½ OD	⅝ OD	½ FPT	50
TW18-65	6500	820	1.7	21	31½	12	½ OD	⅝ OD	½ FPT	55
TW17-75	7500	960	3.5	36	36½	11	½ OD	⅝ OD	½ FPT	109
TW18-85	8500	1100	3.5	36	36½	11	½ OD	⅝ OD	½ FPT	115
TW17-105	10500	1350	3.5	36	36½	13	⅝ OD	⅞ OD	½ FPT	121
TW18-120	12000	1540	3.5	36	36½	13	⅝ OD	⅞ OD	½ FPT	128
TW17-150	15000	1920	5.6	37	38½	16¼	⅝ OD	⅞ OD	¾ MPT	138
TW17-180	18000	2280	5.6	37	38½	17	⅝ OD	⅞ OD	¾ MPT	153
TW27-240	24000	3100	7.0	48	36½	17	⅞ OD	1⅛ OD	¾ MPT	235
TW27-300	30000	4100	11.2	48	42½	17	⅞ OD	1⅜ OD	¾ MPT	275

1. Width is left-to-right dimension facing Air Discharge
2. FN — Flare Nut
3. MF — Male Flare

Mini Twin-Temp — Extra Thin

Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps 115V	Dimensions (In)[1]			Connections (In)			Ship Wt. (Lbs)
				Width	Depth	Height	Inlet[2] FN	Suction OD	Drain OD	
MTW18-8	800	200	.5	14¼	13	3¼	½	⅜	½	14
MTW28-13	1300	400	1.0	19¼	13	3¼	½	⅜	½	15
MTW28-18	1800	380	1.0	19¼	13	3¼	½	⅜	½	18
MTW38-27	2700	570	1.5	28¼	13	3¼	½	⅜	½	23

1. Width is left-to-right dimensions facing Air Discharge
2. FN — Flare Nut

Russell — Wedge-Temp

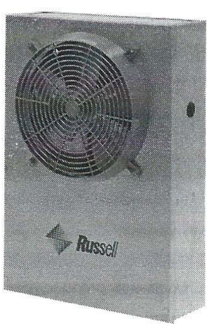
Wedge-Temp — The 'Old Timer'. This air defrost unit cooler design has survived because it does so many things so well. The unique shape and size, combined with high surface low air velocity performance make it the unit of choice from back bars to salad boxes. Russ-Proof coil coating thru 2500 BTUH is standard; sizes thru 4500 BTUH @ 10° TD. Refer to Technical Bulletin 115 for complete catalog details.

Wedge-Temp

Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps 115V	Dimensions[1] (In)			Connections (In)			Ship Wt. (Lbs)
				Width	Depth	Height	Inlet[2] FN	Suction[3] ODS	Drain FPT	
WE17-12	1200	220	.4	15¼	$15\frac{13}{16}$	$8\frac{5}{16}$	½	½	½	16
WE17-15	1500	260	.6	15¼	$15\frac{13}{16}$	$8\frac{5}{16}$	½	½	½	19
WE17-18	1800	290	.6	17¾	$15\frac{13}{16}$	$8\frac{5}{16}$	½	½	½	22
WE17-25	2500	450	.6	19⅞	$16\frac{13}{16}$	$8\frac{5}{16}$	½	½	½	29
WE17-35	3500	520	1.1	22⅞	17⅞	9½	½	½	½	36
WE17-45	4500	810	1.7	26¾	20½	9⅝	½	⅝	½	57

1. Width is left-to-right dimension facing Air Discharge
2. FN - Flare Nut

Wall-Temp

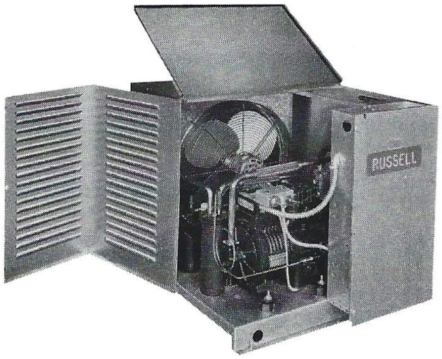


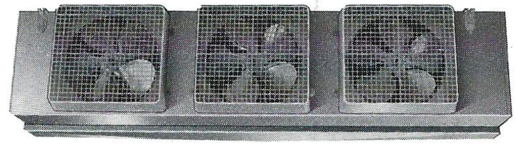
Wall-Temp — The mullion unit cooler. Designed for mounting in the (vertical) mullion area or rear wall, taking minimum usable storage space. These air defrost units are standard with Russ-Proof coated coils thru 2500 BTUH; capacities up thru 4500 BTUH. Refer to Technical Bulletin 114 for complete catalog details.

Wall-Temp

Model No.	Capacity BTUH 10° TD	CFM	Total Motor Amps 115V	Dimensions (In)[1]			Connections (In)			Ship Wt. (Lbs)
				Width	Depth	Height[4]	Inlet[2] FN[2]	Suction[3] MF[2]	Drain FPT	
WA17-6	600	115	.4	12	4⅜	20⅞	½	⅜	½	11
WA17-9	900	140	.6	12	4⅜	20⅞	½	⅜	½	14
WA17-12	1200	175	.6	18	4¾	22⅞	½	½	½	20
WA17-18	1800	260	.6	18	4¾	22⅞	½	½	½	24
WA17-25	2500	360	1.7	18	8½	29	½	⅝	½	28
WA17-35	3500	500	1.7	18	8½	29	½	⅝	½	29
WA17-45	4500	625	3.5	18	10½	32⅛	½	⅝	½	40

1. Width is left-to-right dimension facing Air Discharge
2. FN — Flare Nut
MF — Male Flare
4. Height dimension includes drain pan





COMPLETE REFRIGERATION SYSTEMS

The complete factory pre-engineered refrigeration system has long been recognized as the surest way to quality and reliability. RUSSELL is a leading manufacturer of such systems with a product line extending from the little ½ HP for small walk-ins to the industrial size 80 HP for warehouse and process applications. Compressors, condensers, evaporators and their associated components are precisely matched for optimum performance. Pre-wired electrical components and pre-piped refrigeration specialties save expensive field labor. One source means one responsibility.

INDOOR CONDENSING UNIT

Systems up through 22 HP are available with indoor condensing units for those who prefer sheltered maintenance and the avoidance of ultra-low ambient problems. Loaded with standard features plus many options.

OUTDOOR CONDENSING UNIT

All systems are available with outdoor fully weatherized condensing units for use in ambient temperatures down to -20°F. Save on expensive indoor floor area, reduce field piping, eliminate forced ventilation for condenser cooling, exploit low ambients for free cooling capability.

Standard Ambient to +30°F.

Condenser fan cycling controls permit trouble-free cooling down to +30° ambient temperature for warmer climates, plus the part-year operation in colder climates typical of air conditioning and similar applications.

Low Ambient to -20°F.

Profit from ultra-high efficiency refrigeration as the RUSS-SAVER system harnesses the cooling power of Wintertime air to drastically reduce compressor power consumption and daily running time.

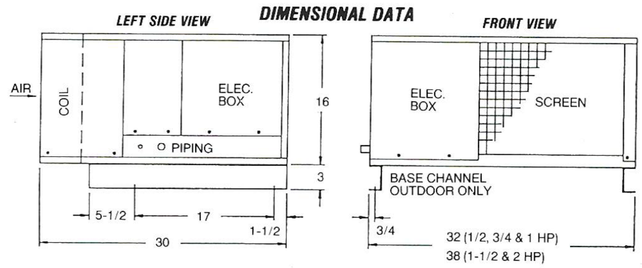
Low Ambient = Low System Pressures and thus . . .

- Avoids complex head pressure controls
- Avoids heavy refrigerant charges
- Extends compressor life thru:
    - Reduced daily running time
    - Reduced internal stress and wear

The excellent controlled head pressure system is available for those preferring this style of operation and for those applications in which close control of suction pressure is necessary.

- Operates with conventinal expansion valves
- Minimizes low ambient effects on suction pressure
- Generates "free" heat for heat reclaim

The following pages detail the various styles and sizes of compressorized products which can be furnished separately or matched with an appropriate cooling unit for a complete factory pre-engineered refrigeration system.



The Russell Mini-Con condensing unit is designed specifically to meet the needs of the Food Service Industry. The pre-assembled unit comes pre-piped and wired for easy and cost effective installation. Refer to Technical Bulletin 502 for complete catalog details.

STANDARD FEATURES

Indoor Models

- Semi-hermetic or hermetic compressors
- Low profile cabinet
- Hi-Lo pressure & compressor-start controls
- UL Listed

Outdoor Models

- Includes all features of Indoor Models
- Outdoor raised-base housing
- Crankcase heater
- Liquid line filter-drier & sight glass
- Suction line filter

HIGH / MEDIUM TEMPERATURE

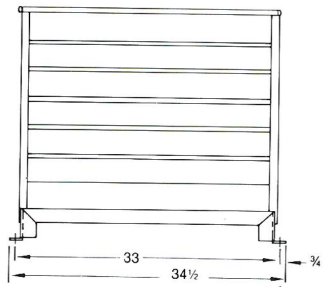
Model No.	Nom. HP	Refr.	Capacity - MBH 35°F S.T.	Capacity - MBH 25°F S.T.	Total Unit Amps 208/230V - 60HZ 1 PH	Total Unit Amps 208/230V - 60HZ 3 PH	Connections Liq. ODM	Connections Suct. ODM	RCVR Cap. Lbs. @ 90%	Ship Weight Lbs. Indoor	Ship Weight Lbs. Outdoor
SEMI-HERMETIC MES / MCS											
050M22	½	22	—	4,000	5.2	3.7	⅜	⅝	7	175	190
075H22	¾	22	8,150	6,300	7.6	5.0	⅜	⅝	7	185	200
100H22	1	22	11,150	9,000	8.9	5.8	⅜	⅝	7	195	210
150H22	1½	22	14,800	11,600	12.1	8.0	⅜	⅞	11	220	240
200H22	2	22	20,100	16,000	13.1	9.3	⅜	⅞	11	260	280
HERMETIC MEH / MCH											
050H22	½	22	7,100	5,550	6.5	N/A	⅜	⅝	7	120	135
075H22	¾	22	8,400	6,550	8.6	N/A	⅜	⅝	7	125	140
100H22	1	22	12,300	9,600	8.5	6.2	⅜	⅝	7	130	145
150H22	1½	22	16,400	12,600	13.3	N/A	⅜	⅞	11	160	180
200H22	2	22	21,300	16,500	15.6	11.2	⅜	⅞	11	180	200

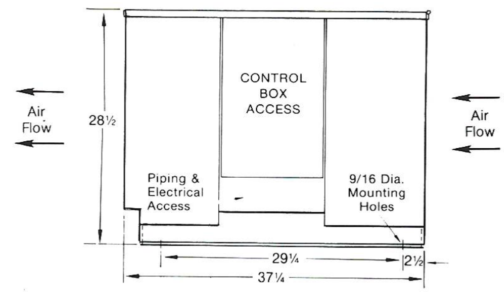
LOW TEMPERATURE

Model No.	Nom. HP	Refr.	Capacity - BTUH -10°F S.T.	Capacity - BTUH -30°F S.T.	Total Unit Amps 208/230V - 60HZ 1 PH	Total Unit Amps 208/230V - 60HZ 3 PH	Connections Liq. ODM	Connections Suct. ODM	RCVR Cap. Lbs. @ 90%	Ship Weight Lbs. Indoor	Ship Weight Lbs. Outdoor
SEMI-HERMETIC MES / MCS											
050L52	½	502	3,050	1,700	4.8	3.3	⅜	⅝	6	175	190
075L52	¾	502	4,650	2,600	6.8	3.9	⅜	⅝	6	185	200
100L52	1	502	6,190	3,550	8.1	4.6	⅜	⅝	6	195	210
150L52	1½	502	8,900	5,050	12.1	7.6	⅜	⅞	10	220	240
200L52	2	502	12,500	7,500	14.6	8.8	⅜	⅞	10	260	280

Low Temperature semi-hermetic R-22 models are also available. Refer to techincal bulletin for details.

Model No.	Nom. HP	Refr.	Capacity - BTUH -10°F S.T.	Capacity - BTUH -30°F S.T.	Total Unit Amps 208/230V - 60HZ 1 PH	Total Unit Amps 208/230V - 60HZ 3 PH	Connections Liq. ODM	Connections Suct. ODM	RCVR Cap. Lbs. @ 90%	Ship Weight Lbs. Indoor	Ship Weight Lbs. Outdoor
HERMETIC MEH / MCH											
050L12	½	12	2,860	1,670	5.5	N/A	⅜	⅝	7	120	135
075L12	¾	12	4,220	2,110	7.6	N/A	⅜	⅝	7	125	140
100L12	1	12	5,050	2,680	9.4	5.0	⅜	⅝	7	130	145
150L12	1½	12	7,100	3,700	11.9	7.6	⅜	⅞	10	160	180
200L52	2	502	11,070	6,480	13.6	9.2	⅜	⅞	10	180	200





The small size RussCon is designed for heavy duty performance with a full range of standard features and options. This style of unit provides full flexibility to meet most applications in this horsepower range. Its large condenser includes a separate sub-cooling circuit to enhance performance. Special options like 460 volt, 3 phase are also available. Refer to Technical Bulletin 501 for complete catalog details.

STANDARD FEATURES

Indoor Models - "RE"

- Semi-hermetic or hermetic compressors
- Compressor start controls or contactor
- Control circuit fuses
- Large condenser with sub-cooling circuit
- Hi-Lo pressure control
- Receiver with shut off valve
- Discharge vibrasorber (except Hermetic)

Outdoor Models - "RC"

- Durable, rust-proof aluminum housing
- Crankcase heater
- Liquid line filter-drier & sight glass
- Suction line filter and vibrasorber (except Hermetic)
- Pre-assembled piping extended beyond housing

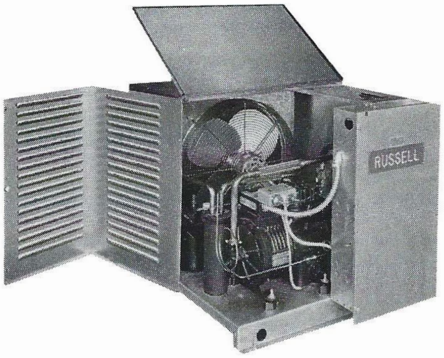
HIGH / MEDIUM TEMPERATURE

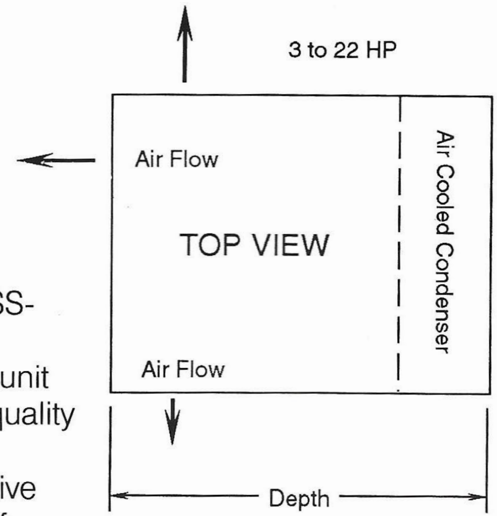
Model No. RE / RC	Nom. HP	Refr.	Capacity - BTUH 35°F S.T.	Capacity - BTUH 25°F S.T.	Total Unit Amps 208/230V - 60HZ 1 PH	Total Unit Amps 208/230V - 60HZ 3 PH	Connections Liq. ODM	Connections Suct. ODM	RCVR Cap. Lbs. @ 90%	Ship Weight Lbs. Indoor RE	Ship Weight Lbs. Outdoor RC
SEMI-HERMETIC COMPRESSOR											
¾H22	¾	R-22	8,550	6,650	9.9	7.3	⅜	⅝	10	295	375
1H22	1	R-22	11,750	9,500	11.2	8.1	⅜	⅝	10	300	380
1½H22	1½	R-22	15,600	12,200	13.4	9.3	⅜	⅞	10	315	395
2H22	2	R-22	21,150	16,800	14.4	10.6	⅜	⅞	16	380	475
3H22	3	R-22	33,300	27,000	20.8	15.5	½	⅞	16	440	535
HERMETIC COMPRESSOR											
1½C22	1½	R-22	20,300	15,600	16.7	—	⅜	⅝	16	280	360
2C22	2	R-22	24,700	19,200	19.1	—	⅜	⅝	16	285	365
3C22	3	R-22	36,700	31,500	27.7	19.1	½	⅞	16	300	380

LOW TEMPERATURE

Model No. RE / RC	Nom. HP	Refr.	Capacity - BTUH -10°F S.T.	Capacity - BTUH -30°F S.T.	Total Unit Amps 208/230V - 60HZ 1 PH	Total Unit Amps 208/230V - 60HZ 3 PH	Connections Liq. ODM	Connections Suct. ODM	RCVR Cap. Lbs. @ 90%	Ship Weight Lbs. Indoor RE	Ship Weight Lbs. Outdoor RC
SEMI-HERMETIC COMPRESSOR											
¾L52	¾	R-502	4,850	2,720	9.8	6.5	⅜	⅝	10	295	375
1L52	1	R-502	6,300	3,590	9.2	7.2	⅜	⅝	10	300	380
1½L52	1½	R-502	9,410	5,380	9.4	9.2	⅜	⅞	10	315	395
2L52	2	R-502	12,800	7,690	13.8	10.4	⅜	⅞	16	380	475
3L52	3	R-502	19,500	10,300	18.9	14.5	½	1⅛	16	440	535

Low Temperature semi-hermetic R-22 models are also available. Refer to technical bulletin for details.





The medium size RUSS-CON is the heart of Russell's condensing unit line, combining high quality and many standard features with competitive price. A wide variety of optional features are also available to make these units versatile enough for almost any application. Refer to Technical Bulletin 530 for complete catalog details.

STANDARD FEATURES

- DISCUS™ compressor - Semi Hermetic
- Control panel with hinged access*
- Crankcase heater*
- Oil failure control - oil pump models
- Dual pressure control
- Single-point power connection
- Condenser sub-cooling circuit
- PSC fan motors, internal protection
- Suction line filter*
- Liquid line filter-drier*
- Moisture indicating sight glass*
- Discharge line vibration eliminator
- Suction line vibration eliminator*
- Receiver with inlet and outlet valves
- All-weather housing - hinged access*
- UL Listed

OPTIONAL FEATURES

- Fused disconnect - field installed
- Suction line accumulator
- Oil separator
- Receiver relief valve (in lieu of fusible plug)
- R-22 Low temperature with demand cooling
- Heated & insulated receiver (Not UL Listed)
- Russ-Saver floating head pressure system
- Flooded condenser type low ambient control
- Air, electric or hot gas defrost provisions

*Standard feature ONLY on outdoor units, optional on indoor units.

Specifications

95° Ambient

High Temperature Models 10° to 55°F. Suction Temperature

Model DE DC DS	Nom. H.P.	Ref.	Capacity - MBH		Total Unit Amps 3 Ph. - 60 Hz		Connections (In)		RCVR Cap. (Lbs.) 90%	Ship. Wgt. (Lbs.)	
			40° F S.T.	25° F S.T.	208-230V	460V	Liq. ODS	Suct. ODS		Model DE	Model DC/DS
5H22	5	22	70.1	51.7	27.5	13.1	⅝	1⅛	32.0	580	850
7H22	7½	22	96.5	71.9	39.4	18.8	⅝	1⅜	60.2	740	1100
8H22	7½	22	120.1	89.8	48.4	24.7	⅝	1⅜	60.2	760	1130
10H22	10	22	140.2	105.6	53.0	24.7	⅞	1⅜	60.2	900	1330
15H22	15	22	186.3	140.7	69.0	33.7	⅞	1⅝	60.2	920	1350

Medium Temperature Models 0° to 45° F* Suction Temperature

Model DE DC DS	Nom. H.P.	Ref.	Capacity - MBH		Total Unit Amps 3 Ph. - 60 Hz		Connections (In)		RCVR Cap. (Lbs.) 90%	Ship. Wgt. (Lbs.)	
			25° F S.T.	15° F S.T.	208-230V	460V	Liq. ODS	Suct. ODS		Model DE	Model DC/DS
5M52	5	502	53.0	43.7	27.5	13.1	⅝	1⅛	33.1	580	850
7M52	7½	502	76.2	62.5	39.4	18.8	⅝	1⅜	62.4	740	1100
8M52	7½	502	89.4	74.0	48.4	24.7	⅝	1⅜	62.4	760	1130
10M52	10	502	106.3	87.9	53.0	24.7	⅞	1⅜	62.4	900	1330
15M52	15	502	140.3	116.8	69.0	33.7	⅞	1⅝	62.4	920	1350

*25° F Maximum for Model 7M52

Low Temperature Models -40° to 0° F Suction Temperature

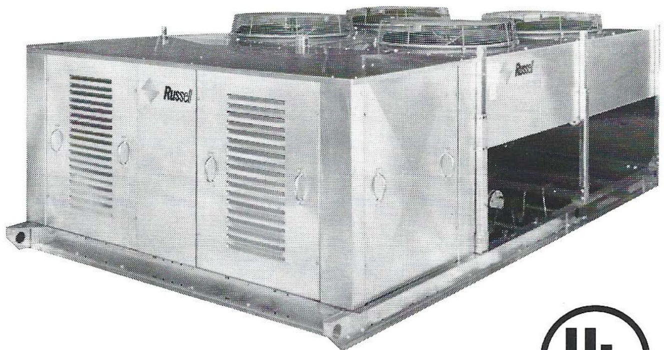
Model DE DC DS	Nom. H.P.	Ref.	Capacity - MBH		Total Unit Amps 3 Ph. - 60 Hz		Connections (In)		RCVR Cap. (Lbs.) 90%	Ship. Wgt. (Lbs.)	
			-10° F S.T.	-30° F S.T.	208-230V	460V	Liq. ODS	Suct. ODS		Model DE	Model DC/DS
3L52	3	502	23.9	13.9	21.0	10.7	½	1⅛	33.1	460	710
5L52	5	502	33.5	20.3	33.0	12.8	½	1⅜	33.1	525	805
6L52	6	502	39.5	23.1	35.5	16.3	½	1⅜	33.1	540	840
8L52	7½	502	50.1	29.9	38.9	20.8	½	1⅜	62.4	760	1130
9L52	9	502	58.1	35.3	46.4	21.6	⅝	1⅝	62.4	850	1275
10L52	10	502	64.2	38.5	49.4	23.3	⅝	1⅝	62.4	850	1275
15L52	15	502	85.8	51.4	69.4	34.7	⅝	1⅝	62.4	880	1310
22L52	22	502	103.9	65.8	80.8	40.4	⅞	2⅛	62.4	980	1420
3L22	3	22	21.5	11.7	21.0	10.7	½	1⅛	32.0	460	710
5L22	5	22	30.4	16.2	33.0	12.8	½	1⅜	32.0	525	805
6L22	6	22	35.7	19.8	35.5	16.3	½	1⅜	32.0	540	840
8L22	7.5	22	41.8	24.2	38.9	20.8	½	1⅜	60.2	760	1130
9L22	9	22	49.0	27.6	46.4	21.6	⅝	1⅝	60.2	850	1275
10L22	10	22	51.9	29.9	49.4	23.3	⅝	1⅝	60.2	850	1275
15L22	15	22	79.8	44.9	69.4	34.7	⅝	1⅝	60.2	880	1310
22L22	22	22	93.9	54.8	80.8	40.4	⅞	2⅛	60.2	980	1420

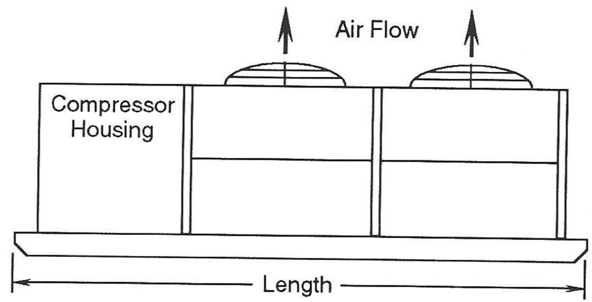
Over-all Dimensions

Width - 3 HP to 6 HP 38"
7 HP & Up 68"

Depth - Model DE 42¾
Model DC & DS 48"

Height - 3 HP to 10 HP 37¼"
Model 15L52 37¼"
Other 15 HP & Up 44¾"





The large RUSS-CON line of condensing units forms the link between commercial and industrial refrigeration capability. Used with its companion lines of cooling units or with a specialized process evaporator by others, these rugged units are ideal for applications ranging from cold storage warehousing and heavy food processing to ordinary air conditioning.

STANDARD FEATURES

- DISCUS™ compressor - Semi Hermetic
- Control panel with key-lock access door
- Main power terminal block
- Crankcase heater
- Oil failure control
- Dual pressure control
- Compressor contactor(s)
- Condenser fan contactor
- 230 volt control circuit w/fusing
- Condenser fan cycling control - lag fan(s)
- Cylinder head cooling fan - as required
- Suction line filter
- Liquid line filter-drier
- Moisture indicating sight glass
- Suction & discharge vibrasorbers
- Receiver with pressure relief valve
- Inlet and outlet receiver valves
- Condenser sub-cooling circuit
- All-weather housing with access panels
- UL Listed

OPTIONAL FEATURES

- Main disconnect - field installed
- Circuit breakers - compressor or fans
- Pressure fan cycling - lead fan(s)
- Suction line accumulator
- Oil separator
- Low ambient flooded control
- R-22 Low Temperature with demand cooling
- Russ-Saver floating head pressure system
- Low ambient liquid line control module
- Air, electric or hot gas defrost provisions
- Factory selected components - furnished loose
  - Thermostatic expansion
  - Liquid line solenoid valve
  - Room thermostat
  - Heat exchanger

SPECIFICATIONS

95°F Ambient

High Temperature Models 10°F to 55°F Suction Temperature

Model VCD VLD VSD	Nom. H.P.	Ref.	Capacity - MBH		Total Unit Amps 3 Ph - 60 Hz		Dimensions* (Inches)		Connections (In)		RCVR. Cap. (Lbs.) 80%	Approx. Wgt. (Lbs.)
			40°F S.T.	25°F S.T.	208-230V	460V	Lgth.	Wdth.	Liq. ODM	Suct. ODM		
20H22	20	22	208.0	156.6	83.8	41.9	150¾	45¼	⅞	2⅛	93	1925
25H22	25	22	266.0	196.7	99.5	49.8	150¾	45¼	⅞	2⅛	126	2000
30H22	30	22	312.6	236.5	131.8	65.9	150¾	45¼	1⅛	2⅛	159	2140
35H22	35	22	397.0	297.0	145.2	72.6	198¾	45¼	1⅛	2⅛	192	2385
40H22	40	22	464.4	352.8	161.2	82.1	198¾	45¼	1⅛	2⅛	224	2525
50H22	50	22	561.1	422.8	206.6	103.8	150¾	93¼	1⅛	2⅝	258	3500
60H22	60	22	623.3	472.4	250.6	125.3	150¾	93¼	1⅜	2⅝	358	3710
70H22	70	22	783.9	588.7	289.4	144.7	198¾	93¼	1⅝	3⅛	358	4340
80H22	80	22	912.9	695.7	321.4	160.7	198¾	93¼	1⅝	3⅛	435	4750

Medium Temperature Models -5° to +25°F† Suction Temperature

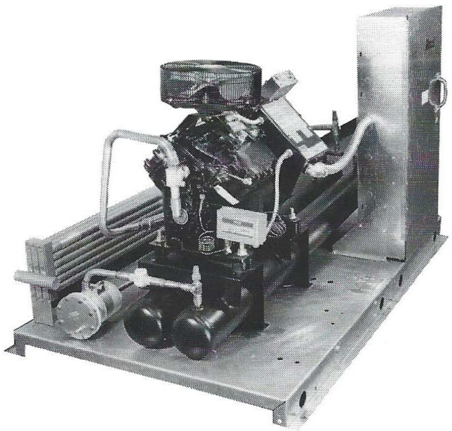
Model VCD VLD VSD	Nom. H.P.	Ref.	Capacity - MBH		Total Unit Amps 3 Ph - 60 Hz		Dimensions* (Inches)		Connections (In)		RCVR. Cap. (Lbs.) 80%	Approx. Wgt. (Lbs.)
			25°F S.T.	15°F S.T.	208-230V	460V	Lgth.	Wdth.	Liq. ODM	Suct. ODM		
20M52	20	502	160.3	132.0	83.8	41.9	150¾	45¼	⅞	2⅛	97	1925
25M52	25	502	204.5	168.3	99.5	49.8	150¾	45¼	⅞	2⅛	131	2000
30M52	30	502	232.7	195.2	131.8	65.9	150¾	45¼	1⅛	2⅛	166	2140
35M52	35	502	301.9	251.9	145.2	72.6	198¾	45¼	1⅛	2⅛	200	2385
40M52	40	502	346.4	291.0	161.2	82.1	198¾	45¼	1⅛	2⅛	234	2525
50M52	50	502	422.0	353.6	206.6	103.8	150¾	93¼	1⅛	2⅝	269	3500
60M52	60	502	465.5	391.5	250.6	125.3	150¾	93¼	1⅜	2⅝	374	3710
70M52	70	502	599.7	501.6	289.4	144.7	198¾	93¼	1⅝	3⅛	374	4340
80M52	80	502	686.5	577.8	321.4	160.7	198¾	93¼	1⅝	3⅛	453	4750

† +40°F S.T. For Models 50M52 & 60M52

Low Temperature Models -40°F to -5°F Suction Temperature

Model VCD VLD VSD	Nom. H.P.	Ref.	Capacity - MBH		Total Unit Amps 3 Ph - 60 Hz		Dimensions* (Inches)		Connections (In)		RCVR. Cap. (Lbs.) 80%	Approx. Wgt. (Lbs.)
			-10°F S.T.	-30°F S.T.	208-230V	460V	Lgth.	Wdth.	Liq. ODM	Suct. ODM		
27L52	27	502	130.0	80.6	103.1	51.6	150¾	45¼	⅞	2⅛	131	2000
30L52	30	502	155.2	96.2	124.8	61.9	150¾	45¼	⅞	2⅛	131	2065
44L52	44	502	213.3	137.3	163.0	81.5	233	45¼	1⅛	3⅛	200	2800
54L52	54	502	256.8	160.0	198.8	99.5	233	45¼	1⅛	3⅛	234	3280
60L52	60	502	292.5	187.0	242.2	120.1	233	45¼	1⅛	3⅛	269	3580
27L22	27	22	120.3	68.7	103.1	51.6	150¾	45¼	⅞	2⅛	129	2000
30L22	30	22	140.4	81.7	124.8	61.9	150¾	45¼	⅞	2⅛	129	2065
44L22	44	22	200.2	114.3	163.0	81.5	233	45¼	1⅛	3⅛	197	2800
54L22	54	22	250.8	140.7	198.8	99.5	233	45¼	1⅛	3⅛	231	3280
60L22	60	22	292.8	168.7	242.2	120.1	233	45¼	1⅛	3⅛	265	3580

* Overall Height - 50" — All Units



WATER COOLED CONDENSING UNITS

1/2 through 30 HP

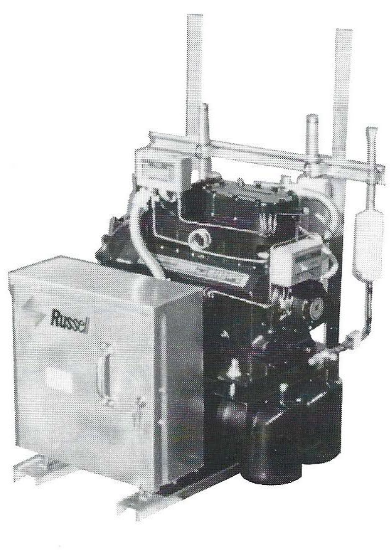
A complete line of water cooled condensing units from ½ thru 30 HP is available for year-round highest capacity/efficiency plus longest compressor life. Features the Discus™ compressor from 3 HP, with cleanable water cooled condenser on 5 HP and larger plus large receiver on all models. Contact factory for application details.

Standard Features

- Large electrical control panel
- Dual pressure control
- Oil failure control - oil pump models
- Compressor contactor
- Cylinder head cooling fan - as required
- Discharge vibration absorber

Optional Features

- Water regulating valve
- Liquid & suction line components
- Suction accumulator
- Oil separator
- Cleanable condenser for ½ through 3 HP
- Air, electric or hot gas defrost components



REMOTE COMPRESSOR UNIT

3/4 through 80 HP

The model RN compressor unit is designed for those applications best served by an indoor compressor and an outdoor condenser. Pre-engineered systems, using RUSSELL air or evaporative cooled condensers plus a wide range of unit coolers, are available up thru 60 HP for low temperature and 80 HP for medium and high temperature. Contact factory for application details.

Standard Features

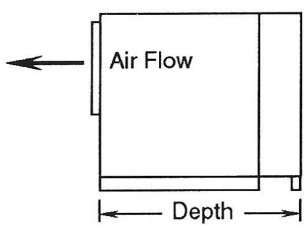
- Semi-hermetic DISCUS™ compressors (3 HP & above)
- Compressor contactor
- Cylinder head cooling fan - as required
- Large electrical control panel
- Dual and oil pressure controls
- Discharge vibration absorber

Optional Features

- Fused disconnect
- Liquid & suction line components
- Air or electric defrost components

CENTRIFUGAL FAN AIR COOLED CONDENSER

2 through 100 nominal tons



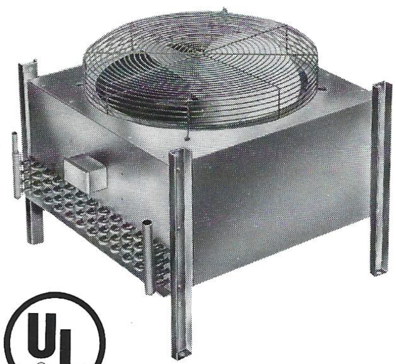
The HC series of belt-drive centrifugal fan units, for condenser and heat reclaim applications, are for use whenever ductwork or other static pressure losses are involved. Hot discharge refrigerant is cooled at the same time the cooling-air is heated, filtered and delivered to a conditioned space. Choose condenser or reclaim duty by appropriate coil sizing. The data below outlines the range of performance vs. physical size; refer to Technical Bulletin 620 or contact factory for application engineering.

CHOICE OF FEATURES AND MODULAR SECTIONS

- Fan section with forward curved or airfoil wheel
- Wide selection of coil surface
  - 1 thru 12 rows deep
  - 4 thru 14 fins per inch
  - Special coil materials and coatings
- Flat, angular & heavy duty filter sections
  - Throwaway filters
  - Pleated filters
  - Cleanable filters
- Combination filter/mix box
- Wide variety of drive motor types

Model Size	CFM Range	Nominal THR MBH @ 30° TD		Face (Sq. Ft.)	Dimensions[1] (In)	
		2 Row 6 FPI	8 Row 12 FPI		Width	Height
03	900 - 2600	26	77	5.25	51¾	23⅝
06	1700 - 4700	43	135	8.17	65¾	26⅝
08	2200 - 6700	59	157	11.25	69¾	32⅝
10	2900 - 8500	73	234	13.75	69¾	38⅝
12	3400 - 10200	84	269	15.81	78¾	38⅝
14	4000 - 12000	95	304	17.88	87¾	38⅝
17	5100 - 14700	116	373	21.94	90¾	45⅝
21	6100 - 18000	138	442	26.00	105¾	45⅝
25	7000 - 21000	159	510	30.00	105¾	52⅝
31	9000 - 26000	199	638	37.50	129¾	52⅝
36	11000 - 28000	218	702	41.25	129¾	60⅝
41	12000 - 34500	251	808	47.50	129¾	67⅝
50	15000 - 40500	298	927	56.25	129¾	78⅛
65	19575 - 52200	404	1256	76.25	129¾	99⅛

1. Width is left-to-right dimension facing Blower Discharge (Includes headers & connection stubs) Length & Weight depend upon accessory sections



MODEL RAC

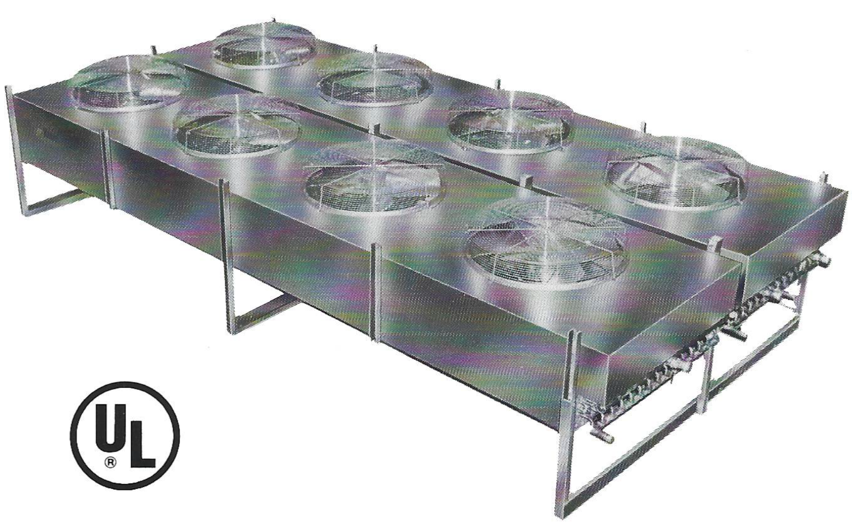
The RAC series of direct drive air cooled condensers ranges from ¾ to 3 nominal tons with either a single refrigerant circuit or multi-circuited for two or more compressors. Ideal for convenience store applications.

Horizontal or vertical air discharge
Life lubricated thermally protected motors
Galvanized casing
Fan cycling controls available

Model No.	Selection Data — R-22[1]			Total[2] Motor Amps 230/1	Dimensional Data (In)[3]			Refrg. Conn. In & Out O.D.S.	Ship Wt. (Lbs.)
	Capacity MBH 1° TD	Refrg. Charge (Lbs.)	No. Circuits Avail.		Length	Width	Height		
RAC-¾	0.4	0.7	12	2.9	21	20¼	21	⅝	60
RAC-1	0.6	1.1	12	2.9	21	20¼	21	⅝	65
RAC-1½	0.8	1.1	12	2.9	25	26¼	22	⅝	90
RAC-2	1.1	1.7	12	2.9	25	26¼	22	⅝	110
RAC-3	1.5	2.2	12	2.9	25	26¼	22	⅞	145

See Footnotes — Page 27

MODEL VAC



The Multicon direct drive air cooled condenser is designed for highest efficiency, built for long life. Only the highest grades of commercially available aluminum, copper and galvanized steel are used. Close inspection throughout manufacture, followed by heavy well-designed crating assures trouble-free installation and operation. Refer to Technical Bulletin 400 for complete catalog details.

Standard Features

- Horizontal or vertical air discharge
- Full baffling between each fan
- Ball bearing thermally protected motors
  1/2 HP single phase - sizes 5 to 19
  1½ HP three phase - sizes 22 to 144
  Voltage/phase motor options available
- Copper tube aluminum fin refrigerant coil
- Galvanized casing
- Oversized weatherproof control panel

Optional Features

- Multi-circuiting on all sizes
- Sub-cooling circuits
- Fan cycling controls
- Flooded condenser control
- Special fin materials and coatings

Air Cooled Condenser

Model No.	Application Data - R-22[1]			Total Motor Amps 208-230V[2]		Length[3] (Inches)	Connections - ODS[4]		Ship Wt. (Lbs)
	Capacity MBH 1° TD	Refrig. Charge (Lbs.)	No. of Circuits Avail.	1 Ph	3 Ph		Inlet (Inches)	Outlet (Inches)	

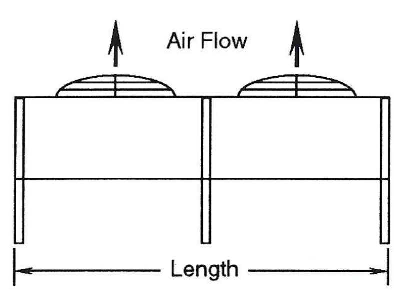
Single Fan-Width Units

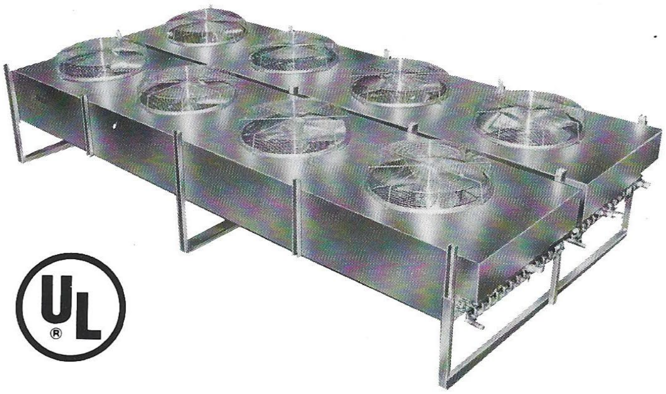
VAC-5	2.7	3.3	30	4.2	4.0	32¼	1⅛	1⅛	220
VAC-6	3.0	3.3	30	4.2	4.0	32¼	1⅜	1⅜	245
VAC-7	3.7	5.0	22	4.2	4.0	32¼	1⅜	1⅜	270
VAC-8	4.4	6.6	30	4.2	4.0	32¼	1⅜	1⅜	295
VAC-9	4.8	6.6	30	4.2	4.0	32¼	1⅝	1⅛	305
VAC-11	5.7	6.3	30	8.4	8.0	62¼	1⅝	1⅛	340
VAC-13	7.5	9.4	22	8.4	8.0	62¼	1⅝	1⅛	355
VAC-15	7.9	9.4	22	8.4	8.0	62¼	1⅝	1⅛	370
VAC-17	9.3	12.5	30	8.4	8.0	62¼	1⅝	1⅛	400
VAC-19	9.8	15.7	25	8.4	8.0	62¼	2⅛	1⅜	420
VAC-22	11.8	14.7	22	—	12.8	98¼	1⅝	1⅛	465
VAC-25	12.6	14.7	22	—	12.8	98¼	1⅝	1⅛	495
VAC-29	13.7	14.7	22	—	12.8	98¼	1⅝	1⅛	520
VAC-31	15.2	19.7	30	—	12.8	98¼	1⅝	1⅛	550
VAC-35	17.9	24.6	25	—	12.8	98¼	2⅛	1⅛	600
VAC-42	20.5	21.9	22	—	19.2	146¼	2⅛	1⅛	800
VAC-48	22.9	29.1	30	—	19.2	146¼	2⅛	1⅛	900
VAC-55	25.4	36.4	25	—	19.2	146¼	2⅛	1⅜	1000
VAC-58	27.3	29.0	22	—	25.6	194¼	2⅛	1⅜	1050
VAC-62	30.5	38.6	30	—	25.6	194¼	2⅛	1⅜	1100
VAC-67	33.8	48.3	25	—	25.6	194¼	2⅝	1⅜	1150
VAC-72	35.7	48.3	25	—	25.6	194¼	2⅝	1⅜	1200

Double Fan-Width Units

VAC-59	27.3	29.5	(2) 22	—	25.6	98¼	(2) 1⅝	(2) 1⅛	1080
VAC-63	30.5	39.3	(2) 30	—	25.6	98¼	(2) 1⅝	(2) 1⅛	1140
VAC-68	33.8	49.1	(2) 25	—	25.6	98¼	(2) 1⅝	(2) 1⅛	1190
VAC-73	35.7	49.1	(2) 25	—	25.6	98¼	(2) 2⅛	(2) 1⅛	1240
VAC-83	41.0	43.7	(2) 22	—	38.4	146¼	(2) 2⅛	(2) 1⅛	1640
VAC-95	46.7	58.3	(2) 30	—	38.4	146¼	(2) 2⅛	(2) 1⅛	1840
VAC-102	50.7	72.8	(2) 25	—	38.4	146¼	(2) 2⅛	(2) 1⅜	2050
VAC-116	54.6	57.9	(2) 22	—	51.2	194¼	(2) 2⅛	(2) 1⅜	2150
VAC-127	60.9	77.2	(2) 30	—	51.2	194¼	(2) 2⅛	(2) 1⅜	2250
VAC-134	67.6	96.5	(2) 25	—	51.2	194½	(2) 2⅝	(2) 1⅜	2350
VAC-144	71.4	96.5	(2) 25	—	51.2	194¼	(2) 2⅝	(2) 1⅜	2460

1. R-12 Correction. Multiply R-22 Capacity x 0.95
Multiply R-22 Refrg. Charge x 1.11
R-502 Correction. Multiply R-22 Capacity x 0.98
Multiply R-22 Refrg. Charge x 1.03
2. 115 Volts. (RAC only). Multiply 208-230V. Amps x 2.0
460 Volts. (VAC only). Multiply 208-230V. Amps x 0.5
3. Width is left-to-right dimension facing Refrigerant Headers (Vertical Discharge)
Model VAC only. Height - 42¾" - All Models
Width - 48¼" - Single Fan-Width Models
96½" - Double Fan-Width Models
4. Typical connection sizes based on nominal R-22 loads
Contact factory for specific applications





PROPELLER FAN FLUID COOLERS

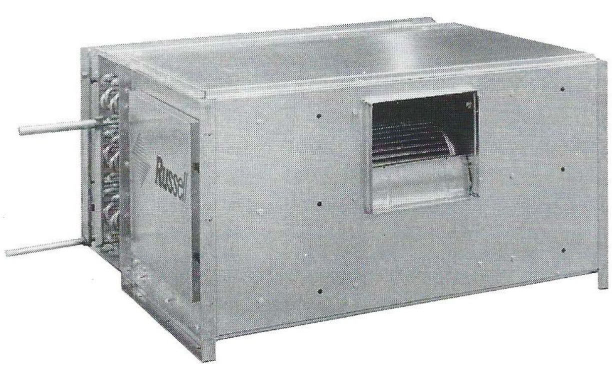
The Multicon air cooled fluid cooler is used to cool a variety of liquids, gases and vapors in a wide range of applications, from ordinary air conditioning to industrial compressed air aftercooling and exotic fluid temperature control. Based on the proven Multicon air cooled condenser design, this industrial grade line of coolers is designed to give years of trouble-free service. Refer to Technical Bulletin 410 for application details, or contact the factory for computer-assisted recommendations.

Standard Features

- Horizontal or vertical air discharge
- Full baffling between each fan
- Ball bearing thermally protected motors
  - 1/2 HP single phase - sizes 5 to 19
  - 1½ HP three phase - sizes 22 to 144
  - Voltage/phase motor options available
- Copper tube, aluminum fin refrigerant coil
- Galvanized casing
- Oversized weatherproof control panel

Optional Features

- Fan cycling controls
- Special fin materials and coatings
- Hinged fan venturi panel for cleaning & service
- Surge tank
- Fill valve assembly



CENTRIFUGAL FAN FLUID COOLER

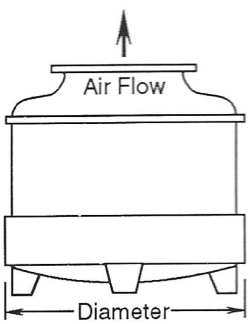
The HC series of belt-drive centrifugal fan units, with the coil surface computer-designed for a specific fluid, are for use whenever ductwork or other static pressure losses are involved. A wide variety of liquids, gasses or vapors can be cooled inside the copper tubes at the same time the cooling-air is heated, filtered and delivered to a conditioned space. Contact factory for application details and coil selections.

Choice of Features and Modular Sections

- Industrial quality construction throughout
- Fan section with forward curved or airfoil wheel
- Wide selection of coil surface
  - 1 thru 12 rows deep
  - 4 thru 14 fins per inch
  - Special coil materials and coatings
- Flat, angular & heavy duty filter sections
  - Throwaway filtrs
  - Pleated filters
  - Cleanable filters
- Combination filter/mix box
- Wide variety of drive motor types

MODEL ECR
EVAPORATIVE CONDENSER
3 through 125 nominal tons

The life of an evaporative condenser is over when the casing deteriorates and collapses. The Russell Model ECR is built with a very thick, strong fiberglass casing that is *Impervious* to rust and corrosion. The first refrigerant leaks in a conventional evaporative condenser usually appear in the return bends. The Russell Model ECR *Has No Return Bends!* Built with layers of unique spiral-wound tubing, return bends are eliminated, braze-joints are minimized, yet full multi-circuiting capability is retained. Eighteen sizes from 3 to 125 nominal tons. Refer to Technical Bulletin 910 for for complete catalog details.



Standard Features

- Direct drive axial-type propeller fan
- Totally enclosed, weather proofed motor
- High efficiency 360° induced-draft air flow
- Circulating pump kit
- High flow PVC water distribution network
- Easy access to tube bundle
- Easily removable tube bundle
- Also available as a fluid cooler.
  Contact Russell for selection.

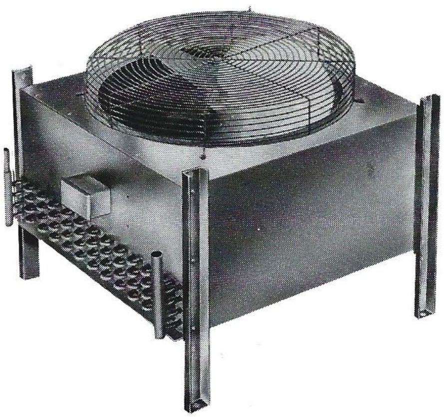
Model No.	Application Data - R-22[1]			Elect. Data 230V[2]		Dimensions (Inches)		Refrigerant Conn. ODM (Inches)		Operating Weight (Lbs)	
	Capacity MBH	Refrig. Chg. (Lbs)	Circuits Avail.	Amps	Ph	Hgt.	Dia.	Inlet	Outlet	Dry	Wet
ECR-3	46.5	3.6	10	5.8	1	56	32¾	⅞	⅝	157	373
ECR-5	77.5	5.5	16	5.8	1	56	32¾	1⅛	⅞	196	412
ECR-8	123.0	7.3	22	5.8	1	56	32¾	1⅛	⅞	235	451
ECR-10	154.0	10.2	30	5.8	1	56	32¾	1⅜	⅞	291	507
ECR-15	231.0	19.1	18	6.8	1	57	43¼	1⅜	⅞	330	755
ECR-20	309.0	25.4	24	6.8	1	57	43¼	1⅝	1⅛	390	815
ECR-25	385.5	31.9	30	6.8	1	57	43¼	1⅝	1⅛	451	876
ECR-29	448.0	36.2	34	6.8	1	57	43¼	1⅝	1⅛	492	917
ECR-39	601.5	50.2	22	5.8	3	68	63¾	2⅛	1⅝	643	1500
ECR-47	726.0	59.3	26	5.8	3	68	63¾	2⅛	1⅝	716	1573
ECR-54	832.0	68.4	30	5.8	3	68	63¾	2⅛	1⅝	788	1645
ECR-59	911.5	75.5	28	3.6	3	70	67¾	2⅛	1⅝	939	2026
ECR-63	972.5	80.9	30	3.6	3	70	67¾	2⅛	1⅝	981	2068
ECR-72	1110.0	91.7	34	3.6	3	70	67¾	2⅝	2⅛	1064	2151
ECR-79	1218.0	99.5	20	5.9	3	80	87	2⅝	2⅛	1294	3371
ECR-94	1450.0	119.4	24	5.9	3	80	87	3⅛	2⅝	1438	3515
ECR-110	1701.0	138.8	28	5.9	3	80	87	3⅛	2⅝	1578	3655
ECR-125	1927.0	159.2	32	5.9	3	80	87	3⅛	2⅝	1726	3803

1. Capacity @ 78° WB., 105 Cond.
Refrigerant Charge: R-12 — Multiply R-22 x 1.11
R-502 — Multiply R-22 x 1.03

2. 115V — 1 Ph: Multiply 230/1 Amps x 2.0
460V — 3 Ph: Multiply 230/3 Amps x 0.5

Russell

Heat Reclaim Unit Heaters



The Model HR unit has been developed from our reliable air cooled condenser product line to assure complete system integrity after installation. Add free heat in small areas or large; can be piped to reclaim all of the heat from a smaller system or a small portion of the heat from a large system. Can be piped into the same system with another reclaim coil. Refer to Technical Bulletin 402 for complete catalog details.

Features

- Heating capacity from 21,000 to 238,000 BTUH
- Custom circuiting for correct pressure drop
- Multi-circuiting available
- Horizontal or vertical discharge

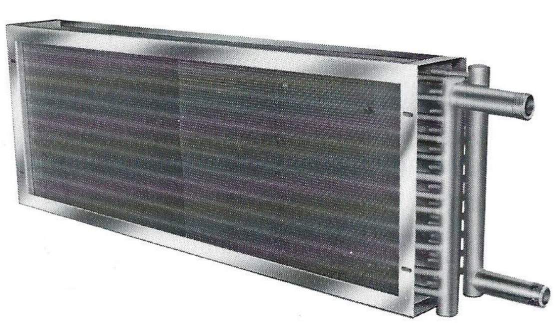
Heat Reclaim Unit Heaters

Model No.	Application Data - R-22[1]		Motor Amps 208-230V 1 Ph[2]	Dimensions[3]			Connections - ODM (Inches)		Approx. Ship. Wgt. (Lbs.)
	THR 50° TD	Refrg. Chg. Lbs.		Width	Depth	Height	Inlet	Outlet	
HRAC-¾	21,000	0.7	2.8	20½	18¼	20	⅝	⅝	58
HRAC-1	27,000	1.1	2.8	20½	18¼	20	⅝	⅝	65
HRAC-1½	39,000	1.1	2.8	20½	24¼	20	⅝	⅝	89
HRAC-2	50,000	1.7	28	26½	24¼	20	⅝	⅝	110
HRAC-3	73,000	2.2	28	26½	24¼	20	⅞	⅞	145
HRC-5	135,000	3.3	4.2	32¼	48¼	40	1⅛	1⅛	220
HRC-7	185,500	5.0	4.2	32¼	48¼	40	1⅜	1⅜	270
HRC-9	238,000	6.6	4.2	41¼	48¼	40	1⅝	1⅛	305

1. R-12 Correction. Multiply R-22 Capacity x 0.95
Multiply R-22 Refrg. Chg. x 1.11
R-502 Correction. Multiply R-22 Capacity x 0.98
Multiply R-22 Refrig. Chg. x 1.03
Refrigerant Charge based on 100% Condensing (i.e. Htg. Capacity=THR)
For partial condensing, multiply Refrg. Chg. x $\frac{\text{Htg. Capacity}}{\text{Total Heat Rejection (THR)}}$

2. 115 Volts (HRAC only) Multiply 208-230V Amps x 2.0
460 Volt (HRC only) Multiply 208-230V Amps x 0.5
3. Horizontal Discharge Orientation.
Width is left-to-right dimension facing Air Discharge
Depth includes unit casing plus Fan Guard

Heating and Cooling Coils



RUSSELL'S heating and cooling surface coils are computer-selected and custom built for a specific heat transfer application. *Cooling Coils* - for chilled water/glycol or direct expansion refrigerant. *Heating Coils* - for hot water/glycol, steam or heat reclaim/condenser. Contact factory for performance and dimensional data.

- Coils up to 20 feet long
- Coil depth from 1 to 12 rows
- Fins spacing from 4 to 14 FPI
- Tube sizes — ⅜, ½ or ⅝ inch OD
- Special fin materials and coatings

CENTRAL STATION AIR HANDLERS

4 through 123 nominal tons

The RUSSELL central station air handler is an industrial grade product with heavy gauge mill-galvanized steel framing and sheet metal throughout. Designed specifically for the HVAC industry with a full range of options and accessories, these units are also ideal for custom or design-and-build projects in refrigeration or air conditioning. The table below outlines the size, face area and air volume ranges available. Refer to Technical Bulletin 610 for complete catalog details.

Standard Features

- Horizontal or vertical configuration
- Six air discharge arrangements
- Heavy duty centrifugal blower assemblies
- 200,000 hour pillow-block bearings
- Custom designed heating and cooling coils
- Wide selection of accessories and options
- CSA and MEA Listed
- ARI Certification pending.

Optional Features

- Filter sections
- Mix Box sections
- Face and Bypass sections
- Internal vibration isolators
- Variable Inlet vanes on blower
- Air foil wheel

Model Size	CFM - Range Cooling Thru Heating	Nominal Capacity[1] MBH		Large Face Area Sq. Ft.	Dimensions[2]	
		Clg.	Htg.		Width (Inches)	Height (Inches)
03	900 - 2600	49.8	71.0	3.1	45	23⅝
06	1700 - 4700	88.3	125.0	5.5	59	26⅝
08	2200 - 6700	128.5	181.0	8.0	63	32⅝
10	2900 - 8500	160.6	227.0	10.0	63	38⅝
12	3400 - 10200	191.1	269.0	11.9	72	38⅝
14	4000 - 12000	221.6	312.0	13.8	81	38⅝
17	5100 - 14700	277.8	391.0	17.3	84	45⅝
21	6100 - 18000	337.3	476.0	21.0	99	45⅝
25	7000 - 21000	393.5	555.0	24.5	99	52⅝
31	9000 - 26000	505.9	714.0	31.5	123	52⅝
36	11000 - 28000	578.1	816.0	36.0	123	60⅝
41	12000 - 34500	650.4	918.0	40.5	123	67⅝
50	15000 - 40500	795.0	1122.0	49.5	123	78⅛
65	19525 - 52200	1047.9	1479.0	65.3	123	99⅛

1. *Cooling:*
   4 row 8 Fpi DX coil @ 500 FPM Air Velocity
   80°F DB/67°F W.B. Entering Air
   40° Suction Temperature

   Heating:
   1 row 8 Fpi Steam Coil @ 500 FPM Air Velocity
   60°F DB Entering Air; 5 PSIG Steam

2. *Width is left-to-right dimension facing Blower Discharge. Depth (In direction of Air Flow) and weight depends on accessories used.*

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