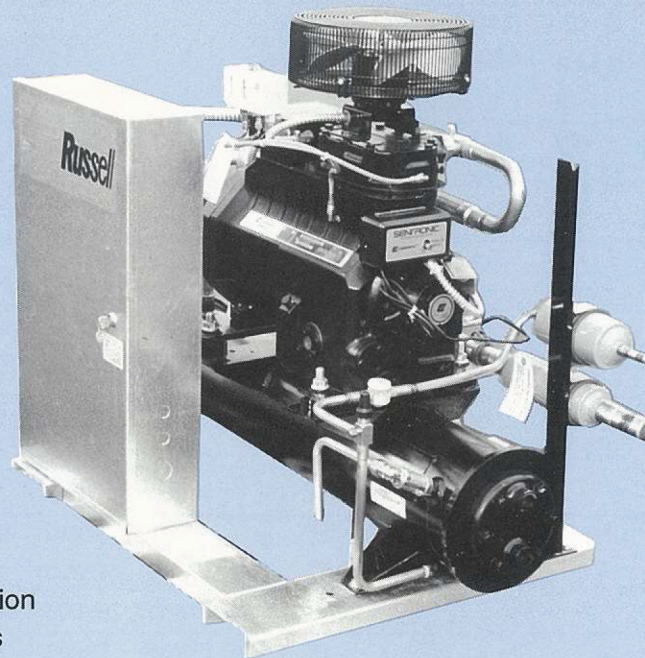


# INDOOR WATER COOLED CONDENSING UNITS 3 THROUGH 22 H.P.

Technical Bulletin 534.0  
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Unit shown  
with optional  
control panel,  
liquid and suction  
line assemblies



The RW series of indoor water cooled condensing units feature R-404A (HP-62) and R-22 environmentally friendly refrigerants. Designed to be compact, yet serviceable, it offers a full selection of standard and optional features. Its narrow profile allows it to easily fit through doorways and its small footprint maximizes use of premium floor space. An optional stacking rack can further enhance floor space utilization on multiple unit installations. A cleanable shell and tube condenser with extra pumpdown capacity is standard.

### **Standard Features:**

- Discus or Reed Semi-hermetic Compressor
- Suction and discharge service valves (as required)
- Compressor springs and discharge vibration absorbers
- Dual pressure control
- Oil failure control (as required)
- Compressor head cooling fan (as required)
- Cleanable shell and tube water cooled condenser
- Pressure relief valve or fusible plug
- Contactor box
- Compressor contactor and control circuit fusing
- UL and Canada UL listed

### **Optional Features:**

- Large electrical control panel (as shown above)
- Crankcase heater
- Liquid line assembly (sight glass and filter)
- Suction line assembly (filter and vibration absorber)
- Suction Accumulator
- Oil Separator
- Air or Electric Defrost provisions (requires optional control panel)
- Pumpdown toggle switch
- Water regulating valve (shipped loose)
- Two tier stacking rack



**BTUH CAPACITY @ 105 °F CONDENSING TEMPERATURE**

NOM.	REF.	MODEL NUMBER	BTUH CAPACITY AT SUCTION TEMPERATURE (°F)									
			40°	30°	25°	20°	10°	0°	-10°	-20°	-30°	-40°
3.0	22	RWS3H22	36700	29400	26200	23200	17900	13600	-	-	-	-
4.0	22	RWS4H22	56500	44400	39200	34300	25500	17800	-	-	-	-
5.0	22	RWS5H22	64400	51400	45600	40200	30800	22900	-	-	-	-
5.0	22	RWD5H22	73400	58900	52500	46600	36000	-	-	-	-	-
7.5	22	RWD7H22	101300	81300	72400	64400	50800	-	-	-	-	-
7.5	22	RWD8H22	123800	100700	90500	81100	64400	-	-	-	-	-
10.0	22	RWD10H22	143900	117800	106300	95600	76900	-	-	-	-	-
15.0	22	RWD15H22	191200	155500	139500	124700	98000	-	-	-	-	-
20.0	22	RWD20H22	210500	171100	153400	137000	107900	-	-	-	-	-
5.0	404A	RWD5M44	77200	62600	56000	49800	39100	30200	23200	-	-	-
7.5	404A	RWD7M44	107600	87600	78800	70700	56600	44800	34900	-	-	-
7.5	404A	RWD8M44	126100	102700	92400	82800	66100	52200	40700	-	-	-
10.0	404A	RWD10M44	148700	121600	109600	98700	79400	63000	49100	-	-	-
15.0	404A	RWD15M44	204700	167200	150600	135400	108700	86300	67700	-	-	-
20.0	404A	RWD20M44	218200	179000	161000	144200	114100	88700	67100	-	-	-
3.0	22	RWS3L22	-	-	-	-	-	23000	17200	12000	7960	5300
3.0	22	RWD3L22	-	-	-	-	-	30200	22100	16000	11200	7200
4.0	22	RWD4L22	-	-	-	-	-	35400	26700	19300	13300	8700
5.0	22	RWD5L22	-	-	-	-	-	41200	31000	22500	15600	10200
6.0	22	RWD6L22	-	-	-	-	-	49300	37200	27300	19400	13000
7.5	22	RWD8L22	-	-	-	-	-	59100	45200	33800	24500	16700
9.0	22	RWD9L22	-	-	-	-	-	71800	55000	40700	28800	19500
10.0	22	RWD10L22	-	-	-	-	-	77700	59400	44100	31500	21200
15.0	22	RWD15L22	-	-	-	-	-	106900	82200	61400	43800	29200
22.0	22	RWD22L22	-	-	-	-	-	125900	95500	72300	53400	35900
3.0	404A	RWD3L44	-	-	-	-	-	32800	25300	19000	13900	9600
4.0	404A	RWD4L44	-	-	-	-	-	39200	30400	23100	17000	11900
5.0	404A	RWD5L44	-	-	-	-	-	44300	34700	26600	19900	14100
6.0	404A	RWD6L44	-	-	-	-	-	53100	41600	32000	24000	17400
7.5	404A	RWD8L44	-	-	-	-	-	62700	49100	37900	28600	20600
9.0	404A	RWD9L44	-	-	-	-	-	76900	60200	46300	34700	25200
10.0	404A	RWD10L44	-	-	-	-	-	85200	67500	52400	39500	28700
15.0	404A	RWD15L44	-	-	-	-	-	114900	91100	71800	55200	39800
22.0	404A	RWD22L44	-	-	-	-	-	138000	110200	86400	65400	46300

**NOTES:**

1. Increase (decrease) capacity 3% for each 5°F lower (higher) condensing temperature.
2. AZ-50 (R-507) capacity ratings are similar to R-404A ratings (pending final approval by Copeland). Change the last two digits of model number from 44 to 57.
3. R-502 capacity ratings are similar to R-404A ratings. Change the last two digits of the model number from 44 to 52.

## ELECTRICAL AND WATER (GPM) DATA

MODEL NUMBER	COMPRESSOR MODEL	AMPS @ 230/3/60			AMPS @ 460/3/60			GPM REQ'D FOR 75° EWT**				GPM REQ'D FOR 85° EWT**			
		COMPRESSOR		MIN. CIRC.	COMPRESSOR		MIN. CIRC.	MAX.	P.D.	MIN.	P.D.	MAX.	P.D.	MIN.	P.D.
		RLA	LRA	AMPACITY*	RLA	LRA	AMPACITY*	GPM	(PSI)	GPM	(PSI)	GPM	(PSI)	GPM	(PSI)
RWS3H22	ERF-0310	12.4	82.0	17	5.8	41.0	15	4.4	1.7	1.6	0.2	7.6	4.8	2.6	0.7
RWS4H22	NRB-0400	21.8	141.0	29	11.3	62.5	15	7.8	5.1	2.5	0.6	15.9	14.0	4.0	1.4
RWS5H22	NRA-0500	19.2	141.0	26	9.6	62.5	15	8.9	0.8	3.2	0.1	16.1	2.3	4.8	0.2
RWD5H22	2DD-0500	22.3	120.0	29	10.5	60.0	15	9.9	0.9	4.4	0.2	18.3	3.0	7.4	0.6
RWD7H22	2DA-0750	32.0	169.0	42	14.1	85.0	19	11.5	1.5	5.6	0.4	20.0	4.1	8.9	0.9
RWD8H22	3DA-0750	41.0	215.0	53	20.0	106.0	27	15.1	2.4	7.4	0.7	28.6	8.4	12.2	1.6
RWD10H22	3DB-1000	43.6	215.0	56	20.0	106.0	27	17.5	2.3	9.2	0.7	32.6	7.4	14.3	1.5
RWD15H22	3DS-1500	59.6	275.0	76	29.0	138.0	38	22.4	1.7	11.0	0.5	39.7	5.0	17.8	1.1
RWD20H22	4DA-2000	70.0	308.0	89	35.0	154.0	45	25.6	2.2	12.5	0.6	47.0	6.9	20.0	1.3
RWD5M44	2DD-050E	22.3	120.0	29	10.5	60.0	15	9.9	0.9	4.4	0.2	18.3	3.0	7.4	0.6
RWD7M44	2DA-075E	32.0	169.0	42	14.1	85.0	19	11.5	1.5	5.6	0.4	20.0	4.1	8.9	0.9
RWD8M44	3DA-075E	41.0	215.0	53	20.0	106.0	27	15.1	2.4	7.4	0.7	28.6	8.4	12.2	1.6
RWD10M44	3DB-100E	43.6	215.0	56	20.0	106.0	27	17.5	2.3	9.2	0.7	32.6	7.4	14.3	1.5
RWD15M44	3DS-150E	59.6	275.0	76	29.0	138.0	38	22.4	1.7	11.0	0.5	39.7	5.0	17.8	1.1
RWD20M44	4DA-200E	66.0	308.0	84	33.0	154.0	43	25.6	2.2	12.5	0.6	47.0	6.9	20.0	1.3
RWS3L22	LAH-0310	10.7	82.0	16	5.2	41.0	15	3.6	0.8	0.9	0.1	6.5	2.4	1.3	0.1
RWD3L22	2DF-0300	16.8	102.0	23	8.1	52.0	15	5.3	1.6	1.2	0.1	10.3	5.8	1.8	0.2
RWD4L22	2DL-0400	26.3	161.0	35	10.2	60.0	15	4.7	2.0	1.2	0.1	8.2	5.6	1.8	0.3
RWD5L22	2DA-0600	28.8	161.0	38	10.2	60.0	15	5.7	2.8	1.5	0.2	10.7	9.5	2.3	0.3
RWD6L22	3DA-0600	26.5	150.0	36	12.0	77.0	17	7.6	4.9	1.8	0.3	15.4	13.9	3.0	0.9
RWD8L22	3DB-0750	31.5	161.0	42	16.1	83.0	22	9.2	0.8	2.7	0.1	16.3	2.5	3.9	0.2
RWD9L22	3DF-0900	39.0	215.0	51	16.9	106.0	23	12.1	1.2	3.2	0.1	23.3	4.8	5.0	0.3
RWD10L22	3DS-1000	42.0	215.0	55	18.6	106.0	25	13.8	1.8	3.5	0.1	27.7	6.8	5.8	0.4
RWD15L22	4DL-1500	52.6	278.0	68	26.3	139.0	35	15.3	2.5	4.3	0.2	29.4	8.8	6.8	0.6
RWD22L22	4DT-2200	66.0	374.0	85	33.0	187.0	43	15.8	0.9	4.9	0.1	26.5	2.4	7.5	0.2
RWD3L44	2DF-030E	16.8	102.0	23	8.1	52.0	15	5.3	1.6	1.2	0.1	10.3	5.8	1.8	0.2
RWD4L44	2DL-040E	26.3	161.0	35	10.2	60.0	15	4.7	2.0	1.2	0.1	8.2	5.6	1.8	0.3
RWD5L44	2DA-060E	28.8	161.0	38	10.2	60.0	15	5.7	2.8	1.5	0.2	10.7	9.5	2.3	0.3
RWD6L44	3DA-060E	26.5	150.0	36	12.0	77.0	17	7.6	4.9	1.8	0.3	15.4	13.9	3.0	0.9
RWD8L44	3DB-075E	31.5	161.0	42	16.1	83.0	22	9.2	0.8	2.7	0.1	16.3	2.5	3.9	0.2
RWD9L44	3DF-090E	39.0	215.0	51	16.9	106.0	23	12.1	1.2	3.2	0.1	23.3	4.8	5.0	0.3
RWD10L44	3DS-100E	42.0	215.0	55	18.6	106.0	25	13.8	1.8	3.5	0.1	27.7	6.8	5.8	0.4
RWD15L44	4DL-150E	52.6	278.0	68	26.3	139.0	35	15.3	2.5	4.3	0.2	29.4	8.8	6.8	0.6
RWD22L44	4DT-220E	66.0	374.0	85	33.0	187.0	43	15.8	0.9	4.9	0.1	26.5	2.4	7.5	0.2

### NOTES:

\* Minimum Circuit Ampacity shown is for the condensing unit and control circuit only. No provisions for electric defrost or evaporator fan loads are included, if necessary. Consult the factory or the unit nameplate for more specific information.

\*\* Max. GPM shown is for the highest suction rating and Min. GPM is for the lowest suction rating. Interpolate GPM requirements for intermediate suction temperatures.

### PHYSICAL DATA

MODEL NUMBER	PUMPDOWN CAP @ 90% (lbs.)	APPROX. OVERALL DIMENSIONS (inches)***			MOUNTING DIMENSIONS (inches)		CONNECTIONS (ODS)				APPROX. SHIP WT. (lbs.)
		L	W	H	A	B	LIQUID LINE **		SUCTION	WATER	
							w/o KIT	w/ KIT	KIT	(FPT)	
RWS3H22	30	39	29	23*	27	5-7/8	5/8	1/2	1-1/8	3/8	400
RWS4H22	30	39	29	23*	27	5-7/8	5/8	1/2	1-1/8	3/8	420
RWS5H22	68	46	29	29*	30	8-1/8	5/8	1/2	1-1/8	1	445
RWD5H22	68	46	29	31*	30	8-1/8	5/8	1/2	1-1/8	1	465
RWD7H22	80	52	29	31*	34	9	7/8	5/8	1-3/8	1-1/4	540
RWD8H22	80	52	29	31*	34	9	7/8	5/8	1-3/8	1-1/4	590
RWD10H22	129	51	29	34	34	9	7/8	7/8	1-5/8	1-1/4	780
RWD15H22	120	51	29	34	34	9	1-1/8	7/8	1-5/8	2	800
RWD20H22	120	51	29	35	34	9	1-1/8	7/8	2-1/8	2	835
RWD5M44	60	46	29	31*	30	8-1/8	5/8	1/2	1-1/8	1	465
RWD7M44	71	52	29	31*	34	9	7/8	5/8	1-3/8	1-1/4	540
RWD8M44	71	52	29	31*	34	9	7/8	5/8	1-3/8	1-1/4	590
RWD10M44	116	51	29	34	34	9	7/8	7/8	1-5/8	1-1/4	780
RWD15M44	108	51	29	34	34	9	1-1/8	7/8	1-5/8	2	800
RWD20M44	108	51	29	35	34	9	1-1/8	7/8	2-1/8	2	835
RWS3L22	20	27	29	33	15	5-7/8	1/2	1/2	1-1/8	3/8	375
RWD3L22	20	27	29	36	15	5-7/8	1/2	1/2	1-1/8	3/8	390
RWD4L22	30	39	29	36	27	5-7/8	5/8	1/2	1-3/8	3/8	465
RWD5L22	30	39	29	36	27	5-7/8	5/8	1/2	1-3/8	3/8	485
RWD6L22	30	39	29	36	27	5-7/8	5/8	1/2	1-3/8	3/8	510
RWD8L22	68	46	29	38	30	8-1/8	5/8	5/8	1-3/8	1	590
RWD9L22	68	46	29	38	30	8-1/8	5/8	5/8	1-5/8	1	620
RWD10L22	68	46	29	38	30	8-1/8	5/8	5/8	1-5/8	1	795
RWD15L22	80	52	29	36	34	9	7/8	7/8	1-5/8	1-1/4	845
RWD22L22	129	51	29	38	34	9	7/8	7/8	2-1/8	1-1/4	1030
RWD3L44	18	27	29	36	15	5-7/8	1/2	1/2	1-1/8	3/8	390
RWD4L44	26	39	29	36	27	5-7/8	5/8	1/2	1-3/8	3/8	465
RWD5L44	26	39	29	36	27	5-7/8	5/8	1/2	1-3/8	3/8	485
RWD6L44	26	39	29	36	27	5-7/8	5/8	1/2	1-3/8	3/8	510
RWD8L44	60	46	29	38	30	8-1/8	5/8	5/8	1-3/8	1	590
RWD9L44	60	46	29	38	30	8-1/8	5/8	5/8	1-5/8	1	620
RWD10L44	60	46	29	38	30	8-1/8	5/8	5/8	1-5/8	1	795
RWD15L44	71	52	29	36	34	9	7/8	7/8	1-5/8	1-1/4	845
RWD22L44	116	51	29	38	34	9	7/8	7/8	2-1/8	1-1/4	1030

NOTE: \* Height is 32 inches with optional control panel.

\*\* Liquid connections with or without factory installed liquid line assembly.

\*\*\* Overall dimensions may change if optional oil separator and/or suction accumulator is installed.

