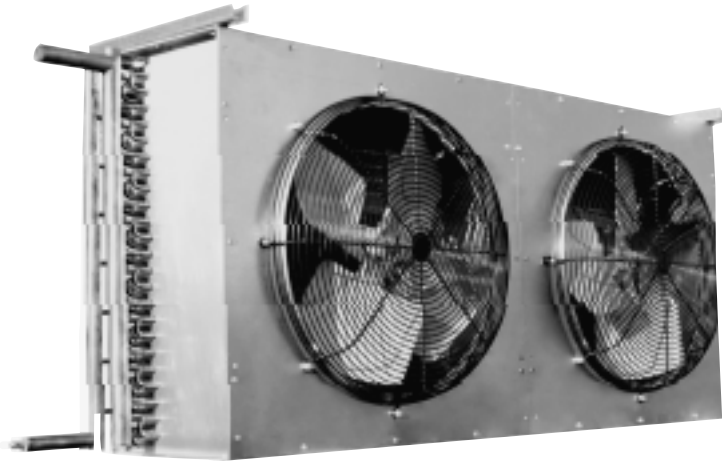


HEAT RECLAIM

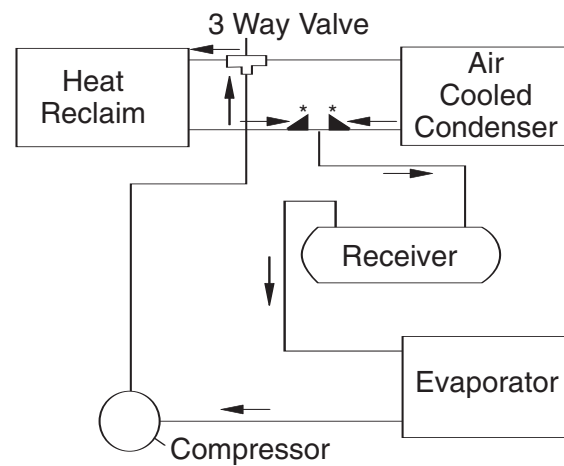
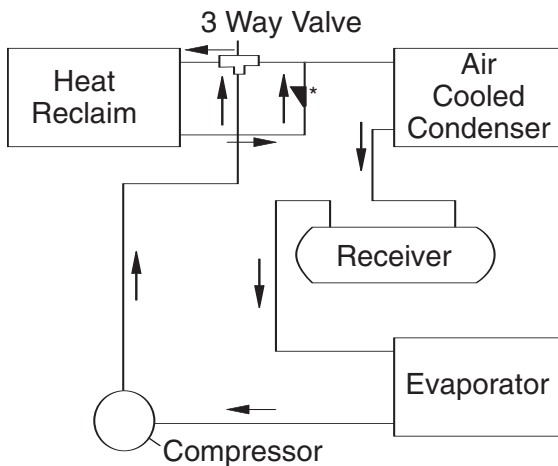
Space Heaters for: Storage rooms, Receiving areas, Loading Docks, Miscellaneous Supplemental Heating.

*Publication 402.4
March, 2005*



In an air conditioning or refrigeration system the heat taken from the conditioned space or product is usually wasted to the atmosphere by a water or air cooled condenser. The Russell Reclaim Heater may be used to recapture this wasted heat, (100% recovery on parallel piping arrangement to about 70% for series connection.)

PIPING DIAGRAM



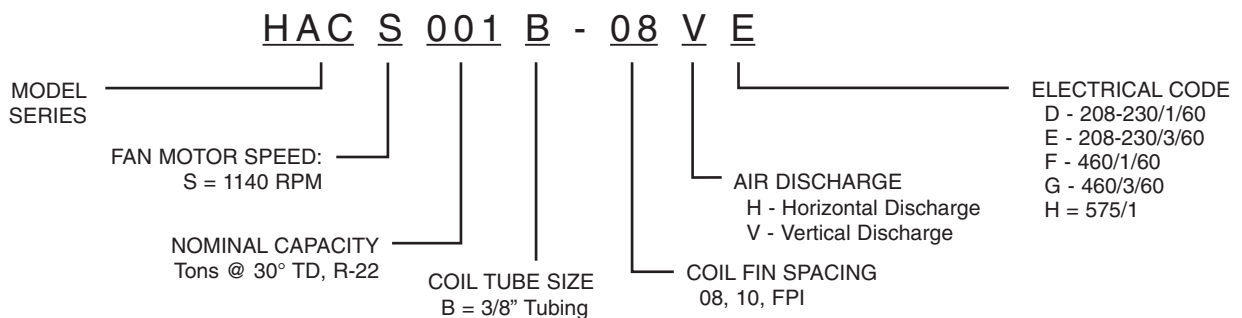
NOTE: Arrows show refrigerant path in reclaim mode.

* Check Valve

SERIES ARRANGEMENT

PARALLEL ARRANGEMENT

NOMENCLATURE



SPECIFICATIONS — RUSSELL HEAT RECLAIM UNIT HEATERS

Model Number	R-404A Capacity †	R-22 Capacity †	TOTAL CFM	Fans		Motors		Total Motor Amps		
				Num.	Dia.	H.P.	RPM	230/1 Volts	230/3 Volts	460 Volts
HACS001B-08	32,000	29,000	3100	1	18"	1/2	1140	2.5	2.0	1.0
HACS002B-08	57,000	53,000	2750	1	18"	1/2	1140	2.5	2.0	1.0
HACS003B-08	83,000	83,000	3850	1	22"	1/2	1140	2.5	2.0	1.0
HACS005B-10	127,000	115,000	3700	1	22"	1/2	1140	2.5	2.0	1.0
HACS008B-10	178,000	176,000	7700	2	22"	1/2	1140	5.0	4.0	2.0
HACS010B-10	254,000	230,000	7400	2	22"	1/2	1140	5.0	4.0	2.0
HACS012B-10	310,000	270,000	7000	2	22"	1/2	1140	5.0	4.0	2.0

NOTES: Capacities shown in Gray have Opposite End Connections. Special conditions on certain models may make it necessary to use OEC's.
 Capacities shown are for 50°F TD (condensing temperature minus entering air temperature).
 † - Heating Capacity

Correction factors below are for capacities at other TD's.

TD	30	35	40	45	50	55	60
Factor	0.6	0.7	0.8	0.9	1.0	1.1	1.2

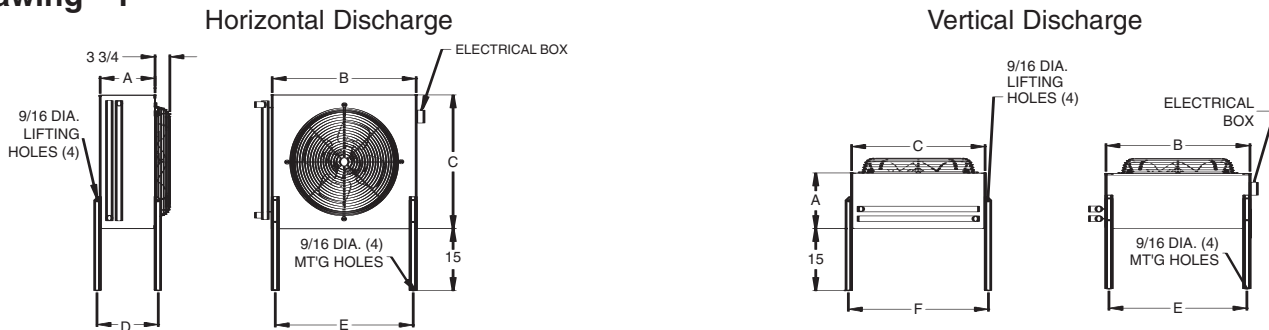
EXAMPLE: 65° Entering Air, Compressor Total Heat Rejection at 110° Condensing Temperature 44,000 BTU/HR

$$110 - 65 = 45 \text{ use correction factor } 0.9, \frac{44,000}{0.9} = 48,889 \text{ use HACS002}$$

DIMENSIONS

Model HACS	Drawing	A	B	C	D	E	F	Weight (lbs.)	
								Net	Shipping
001	1	12 9/16	28	25 5/8	26 1/2	15	40	78	97
002	1	12 9/16	28	25 5/8	26 1/2	16 1/2	40	86	105
003	1	14 1/2	33	30 5/8	31 1/2	16 1/2	45	107	128
005	1	14 1/2	33	30 5/8	31 1/2	17 1/2	45	116	137
008	2	14 1/2	—	—	—	—	—	164	190
010	2	14 1/2	—	—	—	—	—	179	205
012	2	15 3/4	—	—	—	—	—	195	221

Drawing - 1



Drawing - 2

