

SA R-410A Series Dehumidifiers

EFFECTIVE HUMIDITY CONTROL POOL WATER HEATING AIR CONDITIONING OPTION ENERGY RECOVERY-OUTSIDE AIR

Data for SA Series Dehumidifiers

SYSTEM SUMMARY

Desert Aire's large capacity dehumidifiers have many options to insure that they meet the requirements of each specific jobsite. This flexibility has a significant impact on the specifications of each unit, therefore details must be provided after the system is defined using customer requirements such as power, duct static pressure and unit configuration. The ratings below provide a guide to the systems specifications and should not be relied upon for submittal data. Desert Aire or its sales representative will provide a detail submittal for each jobsite including details on connection sizes, electrical ratings and capacities.

The SA Series is offered with No Code Ventilation, Code ventilation, Code Ventilation with Energy Recovery, Extended Range Purge, and Source Capture options.

The SA Series dehumidifiers use 410A refrigerant. The performance below are based on the nominal air volumes listed and rated at the conditions specified in AHRI Standard 910, Performance rating of indoor pool dehumidifiers.

For units with remote condensers, please consult the submittal for details on line set sizing as they are impacted by horizontal and vertical distance between the dehumidifier and the remote condenser.

SYSTEM SPECIFICATIONS

MODEL	SA 18	SA 20	SA 24	SA 30	SA 35	SA 40	SA 45	SA 50	SA 60
MRC lbs./hr.**	108	113	140	172	198	227	252	281	338
Total Cooling Capacity MBH**	242	250	312	383	439	504	561	625	754
Sensible Cooling Capacity**	137	140	176	216	247	265	296	331	400
THR/Water**	304.0	318.0	392.0	480.0	553.0	633.0	708.0	788.0	948.0
S/A Volume - CFM	8,200	8,200	11,000	13,800	15,100	17,900	19,200	22,000	26,400
Maximum O/A Volume - CFM	4,100	4,100	5,500	6,900	7,550	8,950	9,600	11,000	13,200
Compressor Nominal Tonnage	18	20	24	30	35	40	45	50	60
Supply Blower HP @ 1.0" ESP	10★	10★	10★	15★	15★	25★	15⊕	20⊕	20⊕
E/A Blower HP @ 0.25" ESP (*E/A Based on 25% of Supply Air CFM)	1.5HP	1.5HP	2HP	2HP	1.5HP x 2	1.5HP x 2	1.5HP x 2	2HP x 2	2HP x 2
No Code Vent kW**	26.2	27.8	31.4	40.7	49.8	58.3	55.3	63.8	73.1
Code Vent w/recovery kW**	27.4	29.0	33.0	42.3	52.2	60.7	57.7	67.1	76.4

WATER (optional)										
CIRCUIT-A	Water Heating Capacity - MBH**	152	159	152	240	240	240	314	314	474
	Water Inlet & Outlet Size (in.)	1-3/8"	1-3/8"	1-3/8"	1-5/8"	1-5/8"	1-5/8"	2-1/8"	2-1/8"	2-1/8"
	Water Flow - GPM	20	20	20	30	30	30	40	40	60
	Pressure Drop - ft. W.C.***	25	25	25	25	25	25	25	25	25
CIRCUIT-B	Water Heating Capacity - MBH**	152	159	240	240	314	393	394	474	474
	Water Inlet & Outlet Size (in.)	1-3/8"	1-3/8"	1-5/8"	1-5/8"	2-1/8"	2-1/8"	2-1/8"	2-1/8"	2-1/8"
	Water Flow - GPM	20	20	30	30	40	50	50	60	60
	Pressure Drop - ft. W.C.***	25	25	25	25	25	25	25	25	25

WEIGHTS (lbs)									
SA (No Code Vent & w/o energy recovery)	4,100 to 4,600	4,100 to 4,600	4,800 to 5,300	5,400 to 6,000	6,400 to 6,900	6,900 to 7,400	7,500 to 8,000	8,000 to 8,500	11,000 to 12,300
SA Energy Recovery or Ext. Range Purge	4,800 to 5,400	4,800 to 5,400	5,400 to 6,100	6,100 to 6,800	6,900 to 7,600	7,300 to 8,200	8,000 to 8,800	8,500 to 9,300	11,800 to 13,300

NOTES: *** To convert ft. W.C. to PSI, divide by 2.31.

Sizing Note: ** denotes rating at 82°F/60% RH.

Blower Note: This data is provided as a guide as external static pressure, auxiliary heat and air volume significantly impact blower sizing. Consult software for exact size.

Power Note: Power is calculated at above rating conditions in the reheat mode.

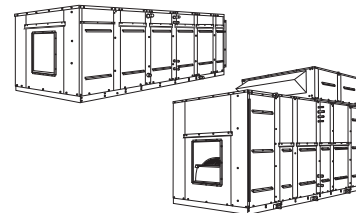
★ Based on Forward Curved Blower. High Efficiency Backward inclined blower and motor assemblies are available. Consult Desert Aire sales representatives for details.

⊕ High Efficiency Backward Inclined Blower and motor assembly.

Specifications are subject to slight changes without notice.



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SYSTEM PERFORMANCE - Moisture Removal Capacity

