

SLDW / BLDW Hydronic Air Handler

The **SLDW/BLDW** series hydronic air handlers are designed for permanent installation in the downflow position. The units will provide ample heating for most structural loads. Various models are available that provide 1 1/2 to 5 tons of air movement. All models feature a control voltage transformer, fan relay, pump relay, and circulation pump with built in check valve. The units are available for 120 or 208/230 volts single phase installations. A minimum of a forty gallon water heater is required for proper operation. Optional air conditioning coils are available to match most manufacturer outdoor equipment.

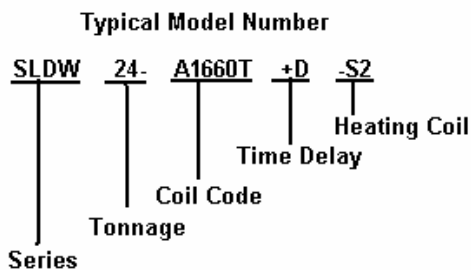


Standard Features

- Hydronic check valve
- Entering water thermostat
- Factory prewired for 120 volts
- Multi speed PSC blower motor
- Powder coated insulated cabinet
- Five year factory limited warranty
- Built in quality Grundfos circulation pump
- Rifled copper tubing / enhanced aluminum fins

Optional Accessories

- Freezestat
- Expansion valve



Physical Dimensions

Model	Cabinet Width	Cabinet Depth	Cabinet Height	S/A Plenum Depth	S/A Plenum Width
SLDW 18-36	19.75"	21.50"	45.00"	15.00"	18.50"
BLDW 42-60	23.00"	22.50"	51.00"	15.50"	21.50"

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Heating Specifications

Model	CFM	GPM	ROWS	EWT 120	EWT 140	EWT 160	EWT 180
SLDW18-*-S2**	600	3.5	2	18,122	24,046	30,001	35,975
SLDW18-*-S3**	600	3.5	3	21,960	29,273	36,633	44,023
SLDW24-*-S2**	800	3.5	2	20,943	27,703	34,505	41,333
SLDW24-*-S3**	800	3.5	3	25,499	33,924	42,414	50,944
SLDW30-*-S2**	1000	3.5	2	22,916	30,341	37,816	45,322
SLDW30-*-S3**	1000	3.5	3	28,064	37,367	46,748	56,181
SLDW36-*-S2**	1200	3.5	2	25,519	33,484	41,507	49,567
SLDW36-*-S3**	1200	3.5	3	31,028	41,038	51,140	61,303
BLDW42-*-B2**	1400	3.5	2	28,744	37,624	46,574	55,569
BLDW42-*-B3**	1400	3.5	3	37,240	49,200	61,257	73,378
BLDW42-*-B4**	1400	3.5	4	42,729	56,634	70,643	84,715
BLDW48-*-B2**	1600	3.5	2	31,800	41,716	51,707	61,745
BLDW48-*-B3**	1600	3.5	3	39,093	51,670	64,355	77,110
BLDW48-*-B4**	1600	3.5	4	46,046	60,981	76,002	91,073
BLDW60-*-B2**	2000	3.5	2	31,042	41,750	52,543	63,391
BLDW60-*-B2**	2000	3.5	3	39,257	52,861	66,590	80,400

* INDICATES OPTIONAL A/C COIL **INDICATES VOLTAGE

Sequence of Operation Heating Mode

When the space thermostat calls for heat, the unit circulating pump moves warm water from the water heater to the hydronic coil in the air handler. If the temperature of the water is above 120 degrees, then the entering water thermostat closes and allows the fan motor to run. If the water temperature is below 100 degrees then the entering water thermostat remains open until the water temperature reaches 120 degrees. When adequate temperature has been achieved the blower will start heating the conditioned space. The air passing over the hydronic coil absorbs heat from the water and this warms the air which is circulated through out the space via the air duct system. The warm water is returned to the water heater approximately 15 - 20 degrees cooler than it left the heater originally. The water is reheated and circulated back to the hydronic coil. This process continues until the thermostat is satisfied and cycles the pump and the blower motor off. The actual heating output of the unit can not exceed the BTU output of the water heating source. Determine the BTU input rating by the recovery efficiency of the water heater.

Electrical Specifications

Model	Nominal CFM	Blower HP / Amps	Pump HP / Amps	Voltage 60HZ 1ph	Rated Amps	MCA	Mop
SLDW18-*-S*1	600	.25/4.0	.04/.74	115	4.8	6.0	15
SLDW18-*-S*2	600	.2/1.7	.04/.43	208/230	2.2	2.8	15
SLDW24-*-S*1	800	.25/4.0	.04/.74	115	4.8	6.0	15
SLDW24-*-S*2	800	.2/1.7	.04/.43	208/230	2.2	2.8	15
SLDW30-*-S*1	1000	.33/4.3	.04/.74	115	5.1	6.4	20
SLDW30-*-S*2	1000	.33/2.7	.04/.43	208/230	3.2	4.0	15
SLDW36-*-S*1	1200	.5/7.5	.04/.74	115	8.3	10.4	20
SLDW36-*-S*2	1200	.5/4.0	.04/.43	208/230	4.5	5.7	15
BLDW42-*-B*1	1400	.5/7.5	.04/.74	115	8.3	10.4	20
BLDW42-*-B*2	1400	.75/4.0	.04/.43	208/230	4.5	5.7	15
BLDW48-*-B*1	1600	.75/8.4	.04/.74	115	9.2	11.5	20
BLDW48-*-B*2	1600	.75/5.0	.04/.43	208/230	5.5	6.9	15
BLDW60-*-B*1	1800	.75/8.4	.04/.74	115	9.2	11.5	20
BLDW60-*-B*2	1800	.75/5.0	.04/.43	208/230	5.5	6.9	15

*INDICATES VARIABLES OF A/C COILS AND HEATING COILS
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Water Heater Selection Chart

SLDW18 40 GAL	BLDW42 70 GAL OR 2 @ 40 GAL
SLDW24 40 GAL	BLDW48 70 GAL OR 2 @ 40 GAL
SLDW30 50 GAL	BLDW60 Any combination of heaters with 98,000 BTU output
SLDW36 50 GAL	

Blower Performance

Model	SPD	WHEEL	1 ESP	2 ESP	3 ESP	5 ESP
SLDW18	LOW	10 X 6	775	720	690	600
SLDW24	HIGH	10 X 6	824	780	750	665
SLDW30	LOW	10 X 8	1252	1190	1092	1026
SLDW36	HIGH	10 X 8	1304	1255	1197	1081
BLDW42	HIGH	10 X 8	1655	1560	1510	1355