

Performance

Unit Tag: ERV2

Summary

Unit Details

Unit Tag:	ERV2	Orientation:	Horizontal
Model:	B20IN - (525 - 1300 CFM)	ESP SA / RA (inH ₂ O):	0.75 / 0.75
Qty:	1	Filters OA / RA:	2" 85% MERV-13 / 2" 30% MERV-8
Location:	Indoor	Controls Preference:	Constant Volume
Altitude (ft):	0	Dampers & Actuator:	No Casing - Field Mounted and Wired
Bypass:	No		

Electrical Requirements

Total Number of Connections Required: 3

Unit	Preheat Electric Heater	Heating Electric Heater
Voltage: 208V/1ph/60Hz	Std. Coil: 1	Std. Coil: 1
Range: 207 - 253V	Controls: SCR	Controls: SCR
FLA: 8.09	Voltage: 208V/1ph/60Hz	Voltage: 208V/1ph/60Hz
MCA: 9.06	Range: 187.5 - 218.4	Range: 187.5 - 218.4
RFS: 15A	FLA: 33.67	FLA: 33.67
	MCA: 42.0875	MCA: 42.0875
	RFS: 45A	RFS: 45A
	Max KW: 7	Max KW: 7

Preheat Electric Heater

Actual	
Outdoor Air (CFM):	500
Voltage:	208V/1ph/60Hz
kW:	6.1
Ent. Air DB/WB (F):	-20 / -21
Lvg Air DB/WB (F):	15 / 9.4
Installation:	In Casing – Field Mounted and Wired
*Separate electrical connection required for heater	

Heat Exchanger

Design Conditions	Outdoor Air	Return Air
SCFM:	500	500
Summer DB (F) / WB (F) / RH (%):	91 / 73 / 42.7	75 / 62.5 / 49.9
Winter DB (F) / WB (F) / RH (%):	15 / 9.4 / 1.9	70 / 58.4 / 50

Performance Leaving Air	Supply Air	Exhaust Air
SCFM:	500	500
Summer DB (F) / WB (F) / RH (%):	79.2 / 66.2 / 50.6	86.8 / 69.8 / 43
Winter DB (F) / WB (F) / RH (%):	55.6 / 47 / 51.9	29.4 / 28.6 / 91.7

Performance	Summer	Winter
Supply Air PD (inH2O):	0.22	0.22
Exhaust Air PD (inH2O):	0.43	0.43
Sensible Effectiveness %:	73.9	73.9
Latent Effectiveness %:	61.7	61.8
Total Effectiveness %:	67.4	69.3
EATR %:	0.5	0.5
OACF:	1.00	1.00
Net Supply Airflow (SCFM):	500	500
Energy Recover Ratio %:	67.49	69.25
BTU/H Saved	12763	33393



Summer performance: Certified in accordance with the AHRI ERV Certification Program, which is based on AHRI Standard 1060. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

Winter performance: Application rating is outside the scope of the AHRI ERV Certification Program but is rated in accordance with AHRI Standard 1060.

Heating Electric Heater

Electric Heater	
Outdoor Air (CFM):	500
Voltage:	208V/1ph/60Hz
kW:	2.6
Entering Temp (F):	55.6
Leaving Temp (F):	72
Installation:	In Casing – Field Mounted and Wired
*Separate electrical connection required for heater	

