

## Performance

Unit Tag: ERV31

## Summary

## Unit Details

Unit Tag:	ERV31	Orientation:	Horizontal
Model:	A16IN - (325 - 775 CFM)	ESP SA / RA (inH <sub>2</sub> 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: 2

Unit	Preheat Electric Heater
Voltage: 208V/1ph/60Hz	Std. Coil: 1
Range: 207 - 253V	Controls: SCR
FLA: 5.29	Voltage: 208V/1ph/60Hz
MCA: 5.91	Range: 187.5 - 218.4
RFS: 15A	FLA: 19.24
	MCA: 24.05
	RFS: 25A
	Max KW: 4

## Preheat Electric Heater

Actual	
Outdoor Air (CFM):	325
Voltage:	208V/1ph/60Hz
kW:	4
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:	325	325
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:	325	325
Summer DB (F) / WB (F) / RH (%):	79 / 66.2 / 51.1	87 / 69.8 / 42.6
Winter DB (F) / WB (F) / RH (%):	56.1 / 47 / 49.8	28.9 / 28.6 / 97.1

Performance	Summer	Winter
Supply Air PD (inH2O):	0.24	0.24
Exhaust Air PD (inH2O):	0.51	0.51
Sensible Effectiveness %:	74.8	74.8
Latent Effectiveness %:	60.3	60.3
Total Effectiveness %:	67.1	69.3
EATR %:	0.5	0.5
OACF:	1.00	1.00
Net Supply Airflow (SCFM):	325	325
Energy Recover Ratio %:	67.14	69.23
BTU/H Saved	8254	21699



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](http://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.

