Engineering Schedule for Berner's SFR Unit

Energy Recovery Unit Schedule

Unit ID	Manufacture	Model #	Supply Air Flow			Exhaust Air Flow			Base Eff.	Summer Conditions				Winter Conditions			
										Outside Air		Return Air		Outside Air		Return Air	
			CFM	E.S.P in wc	Fan HP	CFM	E.S.P in wc	Fan HP		db	wb	db	wb	db	%RH	db	%RH
ERU-1	Berner																
ERU-2	Berner																
ERU-3	Berner																
ERU-4	Berner																
ERU-5	Berner																

Cooling Btuh's Saved	Heating Btuh's Saved	Volts-Phase-Hertz	FLA	MCA	Remarks

The above schedule is available in Excel and can be pasted into autocad with the following steps: Contact Berner for a copy. 1-800-479-0988
1) Copy the cells that you would like to paste into AutoCAD
2) Open AutoCAD
3) Under the Edit drop down menu select paste special
4) Select paste and then select as: Autocad Entities and hit Ok
5) Position where you want to put it on your drawing
6) If you need to make changes or edit the schedule you can use you edit command in AutoCAD

Schedule **SFR**

SFR
Amp Load

Berner's Electrical Calculations - SFR

Calculation Chart

Electrical Parts	Input Amp Draw 208 Volt	240 Volt	480 Volt
Fan HP Motor			
Heat Wheel Motor			
Enthalpy Wheel Rotation Detection			
Damper Motor - total			
Radiant Defrost Heater - total			
Temperature Sensors - total			
Lights and Receptical			
Variable Frequency Drive for Fan			
Misc. Panel Requirments	3.6	3.2	1.6

Electrical Load Results	208 Volt	240 Volt	480 Volt
Full Load Amps - FLA			
Minimum Circuit Ampacity - MCA			

Direction: Insert the amps for each component (*In the area marked Calculation Chart*) that you plan on using from the chart on the right labeled *Electrical Component Amps*. You can find the Fan and Heat Wheel Motor HP on the data sheets under each model *Selection Tab* and *cfm selection*. First input the amps for the largest fan motor (supply or exhaust). Second input the smallest motor amps (if the fan motors are the same then input the amps in both). Third input the designated Heat Wheel Motor amps. Fourth input only the Accessories Amp Draws that you wish to use.

To calculate FLA: Add each column per Desired Voltage

To calculate MCA: (Largest Fan Motor x 1.25) Plus FLA

Caution: FLA & MCA may vary +/- 5 amps depending on Manufactures of Parts

Electrical Component Amp Draw

Fan Motors	208 Volt	240 Volt	480 Volt
1/2 HP Motor	2.40	2.20	1.10
3/4 HP Motor	3.50	3.20	1.60
1 HP Motor	3.10	3.00	1.50
1 1/2 HP Motor	4.50	4.40	2.20
2 HP Motor	6.00	5.90	3.00
3 HP Motor	8.60	8.40	4.20
5 HP Motor	14.00	12.70	6.40
7 1/2 HP Motor	21.00	19.00	9.50
10 HP Motor	27.30	24.70	12.30
15 HP Motor	41.00	38.00	19.00
20 HP Motor	54.00	50.00	24.90
25 HP Motor	66.00	60.00	30.00
30 HP Motor	78.00	71.00	35.00

Heat Wheel Motor	208 Volt	240 Volt	480 Volt
1/4 HP Motor 3820 - 5855 units	1.00	1.00	0.50
1/3 HP Motor 6875 - 7812 units	1.20	1.20	0.60
1/2 HP Motor 8815 - 9620 units	1.80	1.80	0.90

Accessories Amp Draw	208 Volt	240 Volt	480 Volt
Enthalpy Wheel Rotation Detection	0.20	0.20	0.10
Damper Motor - each	0.75	0.75	0.50
Radiant Defrost Heater Pkg. - each	4.57	3.95	1.97
Temperature Sensor - each	0.50	0.50	0.25
Lights and Receptical	12.00	12.00	6.00
Variable Frequency Drive for Fan	0.50	0.50	0.25