

Submitter: Dutchmen Manufacturing Inc.

File: LM 115049

Date: 08.11.10

Converter

Manufacturer..... WFO Cheng USA, Inc.
Model Number..... WFS8100
Input Rating..... 105/130VAC 60Hz 1620watts
Output Rating..... 60AMP @ 13.8VDC
If separate Battery Charging Circuit Specify
Marked Battery Charging Amps..... Not Separate

Load Calculation:

Fill in following for 12V lights, fans, water pumps, refrigerators etc., connected to above converter, for the vehicle employing this converter with largest connected load.
Specify vehicle model number. V3200 VOLTRAGE

Fixture Type	Amps Each	X No. Fixtures = Total Load
Pancake Light Single	1.5	0
Pancake Light Double	3	3
Puck Light 3"	0.85	21
Puck Light 4"	1.66	15
Globe Light Double	3	0
Globe Light Double GJ	3.8	0
Globe Light Quad	6	0
Tulip Light	1.5	0
Deco Light	5.7	0
Interior Lighting (Expend)	0.28	0
Cosmetic Light	4.47	0
Patio Light	1.58	11.06
Scare Light	2.1	4.2
Work Light	1.7	3.4
Step Light	0.27	0.54
Roof Vent	1.5	1.5
Fantastic Vent	3	6
L.P. detector	1	1
Range Hood	3.5	0
Furnace 35,000 BTU	9.8	0
Furnace 40,000 BTU	11	11
Radio	1.5	5
Refer	1.2	1.2
Water Heater	0.1	0.1
Water Pump	7	7
Fuel Pump	11	11
Fuel Pump Switch	0.01	0.01
Slideout Motor	15	60
	65	
	Total Amps	168.76

First 20 amps x100%	=	20
Second 20 amps x 50%	=	10
Balance amps x 25%	=	32.19
Battery Charging amps x 100%	=	5
Minimum Acceptable Converter Output	=	57.19

References	Light Bulbs
Furnace 20,000 BTU 4.6 AMPS	912= 0.9 amps
Furnace 25,000 BTU 7.6 AMPS	C921= 1.49 amps
Furnace 31,000 BTU 7.6 AMPS	1003= 0.94 amps
Furnace 35,000 BTU 9.8 AMPS	1076= 1.80 amps
Furnace 40,000 BTU 11.0 AMPS	1141= 1.58 amps
	1156= 2.10 amps
	2099= 1.08 amps
	G4 Halagon= 1.86amps
	12" Florescent F8W33=0.66 amp
	15" Florescent F157CW=1.25 amps

Circuit Description (ZONES)	Total Amps/Circuit	
A Kitchen	10.49	Includes Refer & Water Heater
B Living Room	8.87	Includes LP
C Bath	8.18	
D Bedroom	11.34	
E Water Pump	10.16	
F Furnace (Appliance)	11.00	
G Accessories (Radio)	5.00	
H Exterior Lighting 1	8.94	
I Exterior Lighting 2	7.10	
J S/O Lighting	6.80	
K Garage	11.87	
L Fuel Pump Timer	11.01	
M S/O Bed	30.00	
N S/O Sofa	30.00	
O Misc	0.00	
Total Consumption:	168.76	

* Note, when load per circuit exceeds 12 amps (12.0 to 12.8);
Increase wire size from 14 ga. to 12 ga.
Increase fuse from 15 amp. to 20 amp.

Option Circuits may be used as needed and are not actually optional.
Total Amps from Fixture Table to match Total Consumption on Circuit Table.

Converter Calc V3200.XLS

10/26/2010