



CFB600 SERIES

600 TO 700 WATTS 2:1 INPUT DC-DC CONVERTERS SINGLE OUTPUT

FEATURE

- * 600 - 700W Isolated Output
- * Efficiency to 92%
- * Fixed Switching Frequency
- * Input under-voltage Protection
- * Over Temperature Protection
- * Over Voltage/Current Protection
- * Remote ON/OFF
- * Industry Full-Brick Package
- * Fully Isolated 1500VDC

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		EFF. (%)	CASE
			MIN.	MAX.	NO LOAD	FULL LOAD		
CFB600-24S12	18-36VDC	12VDC	0mA	50 A	150mA	28.09A	89	FB
CFB600-24S28	18-36VDC	28VDC	0mA	21.5 A	150mA	27.87A	90	FB
CFB600-24S32	18-36VDC	32VDC	0mA	18.75 A	150mA	27.47A	91	FB
CFB600-48S12	36-75VDC	12VDC	0mA	50 A	90mA	13.89A	90	FB
CFB700-48S28	36-75VDC	28VDC	0mA	25 A	105mA	16.03A	91	FB
CFB600-48S32	36-75VDC	32VDC	0mA	18.75 A	90mA	13.59A	92	FB

NOTE : 1. Nominal Input Voltage 24,48 VDC

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	18-36V
	48V.....	36-75V
Under voltage lockout	24Vin power up	17V
	24Vin power down	16V
	48Vin power up	35V
	48Vin power down.....	33V
Input over voltage protection.....	24Vin Turn off....40V, Turn on....	38V
	48Vin Turn off...80V, Turn on....	77V

Opto isolated Remote ON/OFF

Input Filter PI Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy :	±1.5% max.
Transient Response:25% Step Load Change	<500u sec.
External Trim Adj. Range	60-110%
Load share Accuracy(5).....	±10% at 50% to 100%Full Load
Auxiliary output voltage/current.....	10±3Vdc/20mA max.
Ripple & Noise, 20MHz BW	
12V	60mV RMS max., 120mV pk-pk max.
28V	100mV RMS max., 280mV pk-pk max.
32V	120mV RMS max., 320mV pk-pk max.
Temperature Coefficient.....	±0.03%/°C
Short Circuit Protection.....	Continuous
Line Regulation(1)	±0.2% max.
Load Regulation(2)	±0.5% max.
Over Voltage Protection trip Range ,% Vo nom.	115-140%
Current Limit	110% ~150% Nominal Output

GENERAL SPECIFICATIONS:

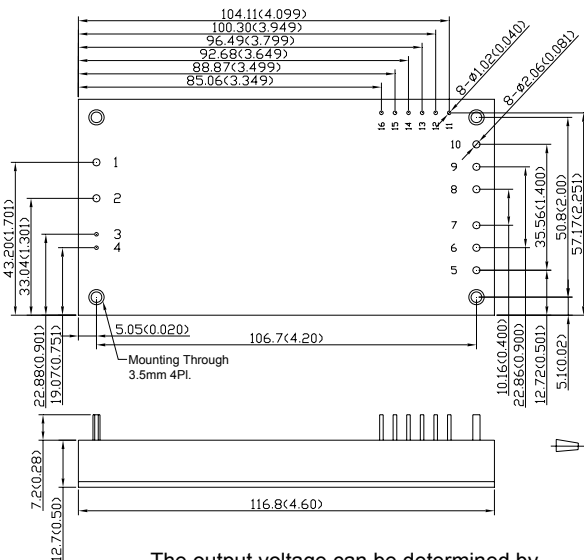
Efficiency.....	See Table
Isolation Voltage	Input/Output..... 1500VDC min.
	Input/Case.....1500VDC min.
	Output/Case..... 1500VDC min.
Isolation Resistance	10 ⁷ ohm min.
Switching Frequency	24Vin..... 250KHz, Typ.
	48Vin..... 300KHz, Typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Thermal Shutdown, Case Temp.	110°C Typ.
Dimensions	4.60×2.40×0.50 inches(116.8×61.0×12.7 mm)
Case Material	Aluminum Baseplate with Plastic Case

NOTE :

1. Measured From High Line to Low Line
2. Measured From Full Load to Zero Load
3. Output Ripple and Noise measured with 10uF tantalum and 1uF Ceramic capacitor across output
4. The output adjustment circuit and trim equations show as figure1 and figure2.

CASE FB

All Dimensions In mm(Inches)
Tolerances mm: X±0.5 XX±0.25 Pin
Inches: .XX±0.02 .XXX±0.010 ±0.01



PIN	CONNECTIONS
PIN NUMBER	FUNCTION
1	-Vin
2	+Vin
3	-ON/OFF
4	+ON/OFF
5~7	+Vo
8~10	-Vo
11	-S
12	+S
13	TRIM
14	PC/NC
15	IDC
16	AUX

The output voltage can be determined by below equations:

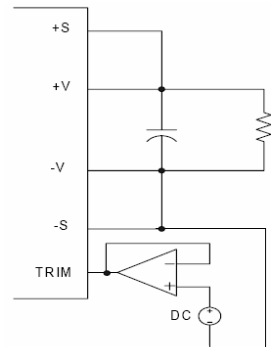
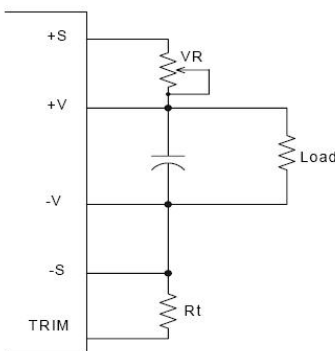
$$V_f = \frac{1.24 \times \left(\frac{R_t \times 33}{R_t + 33} \right)}{7.68 + \frac{R_t \times 33}{R_t + 33}}$$

$$V_{out} = (V_o + V_R) \times V_f$$

Unit: KΩ

Vo: Nominal Output Voltage

Fig.1 The schematic of output voltage adjusted by using external resistor and/or variable resistor.



Output Voltage = TRIM Terminal Voltage * Nominal Output Voltage

Fig.2 The schematic of output voltage adjusted by using external DC voltage.

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