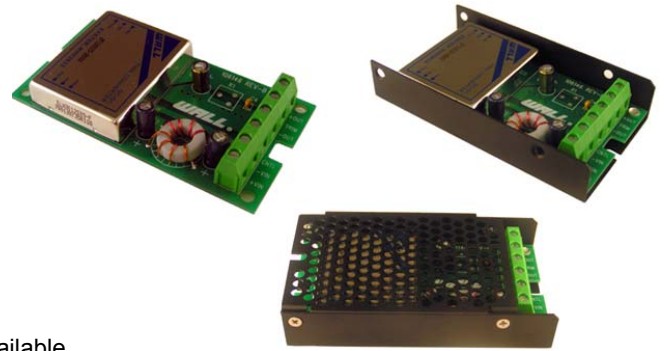


FEATURES

- 15 Watts Output Power
- Output Current up to 3A
- High Efficiency up to 82%
- Fixed Switching Frequency
- Six-Sided Continuous Shielding
- 4:1 Ultra Wide Input Voltage Range
- ISO9001 Certified Manufacturing Facilities
- **Call Factory for More Output Power Options**
- Compliant to RoHS EU Directive 2002/95/EC
- UL60950-1, EN60950-1, and IEC60950-1 Licensed
- CE Mark Meets 2006/95/EC, 93/68/EEC, and 89/336 EEC
- Chassis Mount Options: Open Frame, U Channel, and Enclosed Types Available

APPLICATIONS

- Measurement
- Wireless Network
- Telecom/Datacom
- Industry Control System
- Semiconductor Equipment



SPECIFICATIONS: CMYFW15 Series

All specifications apply @ 25°C ambient unless otherwise noted

INPUT SPECIFICATIONS

Input Voltage Range	24V nominal input	9-36VDC
	48V nominal input	18-75VDC
Input Surge Voltage (100ms max)	24V input	50VDC
	48V input	100VDC
Input Reflected Ripple Current (nominal Vin and full load)		20mA _{p-p}
Start Up Time (nominal Vin and constant resistive load)		20ms typ.
Remote ON/OFF (Note 7)		
(Positive Logic)	DC-DC ON	Open or 3.5V < Vr < 12V
	DC-DC OFF	Short or 0V < Vr < 1.2V
Input Current of Remote Control Pin (nominal Vin)		-0.5mA ~ +0.5mA
Remote Off Input Current (nominal Vin)		20mA

OUTPUT SPECIFICATIONS

Output Voltage		see table
Voltage Accuracy (nominal Vin and full load)		±1%
Voltage Adjustability		±10%
Output Current		see table
Output Power		15 watts max.
Line Regulation (LL to HL at FL)		±0.2%
Load Regulation (min load to full load)		±0.5%
Minimum Load (Note 6)		see table
Ripple/Noise (20 MHz BW)		75mV _{p-p}
Temperature Coefficient		±0.02% / °C max.
Transient Response Recovery Time (25% load step)		250us

PROTECTION SPECIFICATIONS

Over Voltage Protection (zener diode clamp)	5V output	6.2V
	12V output	15V
	15V output	18V
Over Load Protection (% of full load at nominal input)		150% max.
Short Circuit Protection		Hiccup, automatic recovery

GENERAL SPECIFICATIONS

Efficiency		see table
Switching Frequency		270KHz typ.
Isolation Voltage (Input to Output)		1600VDC min.
Isolation Resistance		10 ⁹ ohms min.
Isolation Capacitance		300pF max.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature		-40°C ~ +85°C (with derating)
Storage Temperature		-55°C ~ +105°C
Maximum Case Temperature		100°C
Relative Humidity		5% to 95% RH
Thermal Impedance (Note 8)		
Natural Convection		10°C / Watt
Natural Convection with Heat-Sink		8.24°C / Watt
Thermal Shock		MIL-STD-810F
Vibration		10~55Hz, 10G, 30 minutes along X, Y, and Z
MTBF (Note 1)		2.041 X 10 ⁶ hrs

PHYSICAL SPECIFICATIONS

Potting material of the DC/DC Converter		Epoxy (UL94-V0)
Shielding of the DC/DC Converter		six-sided
Weight		Approximately 7oz
Dimensions		4.00(L) x 2.25(W) x 0.81(H) inches

SAFETY & EMC

Safety Standard Pending		IEC60950-1, UL60950-1, EN60950-1
EM	EN55022	Class A
ESD	EN61000-4-2	Air ± 8KV Contact ± 6KV Criteria B
Radiated Immunity	EN61000-4-3	10V/m Perf. Criteria A
Fast Transient	EN61000-4-4	±2KV Perf. Criteria B
Surge	EN61000-4-5	±1KV Perf. Criteria B
Conducted Immunity	EN61000-4-6	10 Vrms Perf. Criteria A

Due to advances in technology, specifications subject to change without notice

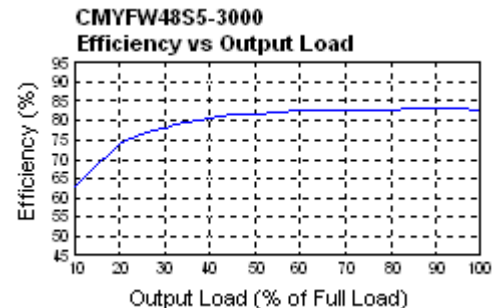
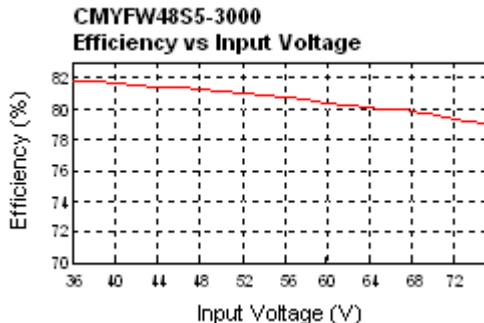
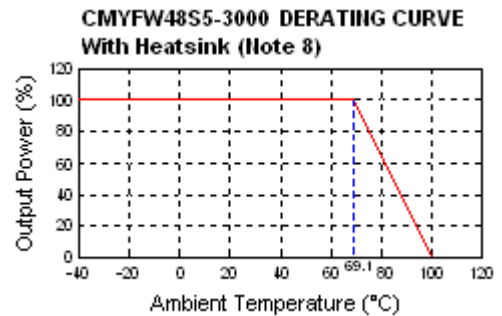
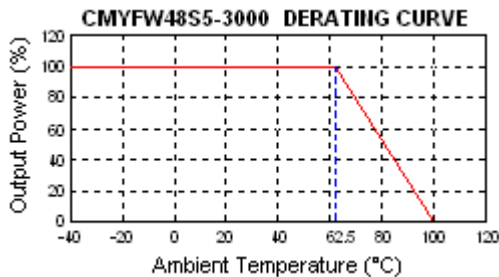
OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Range	Output Voltage	Output Current		Output ⁽²⁾ Ripple & Noise	Input Current		Efficiency ⁽⁴⁾	Capacitor ⁽⁵⁾ Load max
			Min. load	Full load		No load ⁽³⁾	Full load ⁽²⁾		
CMYFW24S5-3000	24 VDC (9-36 VDC)	5 VDC	210mA	3000mA	75mVp-p	20mA	822mA	80%	6800uF
CMYFW24S12-1250		12 VDC	100mA	1250mA	75mVp-p	10mA	801mA	82%	890uF
CMYFW24S15-1000		15 VDC	80mA	1000mA	75mVp-p	20mA	801mA	82%	570uF
CMYFW48S5-3000	48VDC (18-75 VDC)	5 VDC	210mA	3000mA	75mVp-p	15mA	411mA	80%	6800uF
CMYFW48S12-1250		12 VDC	100mA	1250mA	75mVp-p	15mA	401mA	82%	890uF
CMYFW48S15-1000		15 VDC	80mA	1000mA	75mVp-p	10mA	401mA	82%	570uF

NOTES

1. BELLCORE TR-NWT-000332. Case I: 50% Stress, Temperature at 40°C. (Ground fixed and controlled environment).
2. Maximum value at nominal input voltage and full load.
3. Typical value at nominal input voltage and no load.
4. Typical value at nominal input voltage and full load.
5. Test by minimum Vin and constant resistive load.
6. The output requires a minimum loading to maintain specified regulation. Operation under no-load condition will not damage these devices, however they may not meet all listed specifications.
7. The ON/OFF control pin voltage is reference to -Vin.
8. Heat-sink is optional, please contact factory for ordering details.
9. Chassis Mount Options: No suffix for open frame, "U" suffix for U Channel, and "E" suffix for Enclosed type.

DERATING CURVES & EFFICIENCY GRAPHS



MECHANICAL DRAWING

Unit: inches [mm]

