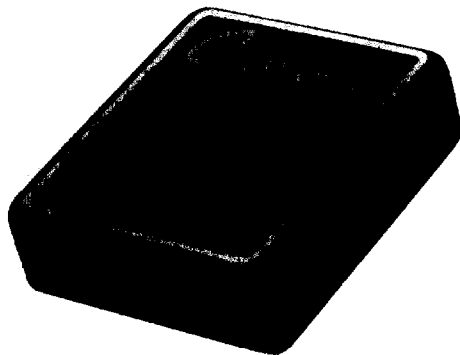


25 TO 30 WATT CEM 2400 SERIES



- 4:1 Input Range
- 30W Isolated Output
- Efficiency to 83%
- Remote On/Off Control
- 100 KHz Switching Frequency
- Six-Sided Shield
- Conductive EMI Meet VDE0871 Class A

SPECIFICATIONS

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

Input Specifications

Input Voltage Range, 24V 9-36V
48V 18-72V

Input Filter Pi Network Reverse
Voltage Protection¹ Internal Shunt Diode
Use External Fuse

Output Specifications

Voltage Accuracy, Single Output ±1% max.
Dual, + Output ±1% max.
- Output ±3% max.
Triple, 5V ±1% max.
12V/15V ±5% max.

Voltage Balance, Dual Output at Full Load .. ±1.0% max.

Transient Response,

Single, 25% Step Load Change < 500µ sec.
Dual, FL-1/2L, 1% Error Band < 500µ sec.

External Trim Adj. Range ±10%

Ripple and Noise, 20MHz BW 10mV RMS max.
75mV P-P max.

Temperature Coefficient ±0.02%/°C max.
Short Circuit Protection Continuous
Overvoltage Protection, 5V 6.8V
12V 15V
15V 18V

Line Regulation², Single/Dual Output ±0.5% max.
Triple Output ±1% max.
Load Regulation³, Single/Dual Output ±1% max.
Triple Output ±5% max.

General Specifications

Efficiency See Table
Isolation Voltage 1500 VDC min.
Isolation Resistance 10⁹ ohms min.
Switching Frequency 100kHz
Case Grounding Capacity Coupled to Input
Operating Temperature Range,
Ambient, None Derating -25°C to +60°C
Derating 0.67 W/°C
Case Temperature 100°C max.
Cooling Free air Convection
Storage Temperature Range -55°C to +105°C
EMI/RFI Six-Sided Continuous Shield

Dimensions 2.56 x 3.0 x 0.83 inches
(65 x 76 x 21.1 mm)

Case Material Black-Coated Copper with
Non-Conductive Base

Weight 180g

Notes:

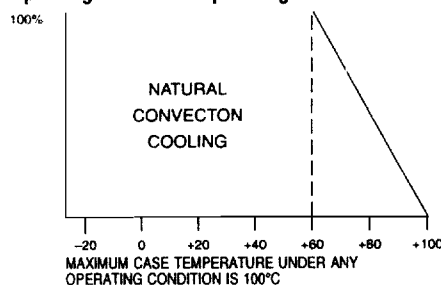
1. Determine the correct fuse size by calculating the maximum DC current drain at low line input, maximum load and then adding 20% to 25% to get the desired fuse size.
2. Measured from High Line to Low Line.
3. Measured from Full Load to 1/4 Full Load.

Remote On/Off Control

Logic Compatibility CMOS or Open Collector TTL
Ec-ON, > +5.5 VDC or Open Circuit
Ec-OFF, < 1.8 VDC
Shutdown Idle Current 10 mA
Input Resistance (E_{in} 0VDC to 9 VDC) 100kohm
Control Common Referenced to Input Minus

MODEL NUMBER	INPUT RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF	CASE
				NO LOAD	FULL LOAD		
CEM2401	24Vdc	5Vdc	5000mA	25mA	1360mA	76	E
CEM2402	24Vdc	12Vdc	2500mA	30mA	1560mA	80	E
CEM2403	24Vdc	15Vdc	2000mA	30mA	1560mA	80	E
CEM2404	24Vdc	±12Vdc	±1250mA	30mA	1560mA	80	E
CEM2405	24Vdc	±15Vdc	±1000mA	30mA	1560mA	80	E
CEM2406	24Vdc	+5/±12Vdc	3000±450mA	50mA	1400mA	77	E
CEM2407	24Vdc	+5/±15Vdc	3000±350mA	50mA	1380mA	77	E
CEM2411	48Vdc	5Vdc	5000mA	20mA	680mA	77	E
CEM2412	48Vdc	12Vdc	2500mA	20mA	780mA	80	E
CEM2413	48Vdc	15Vdc	2000mA	20mA	780mA	80	E
CEM2414	48Vdc	±12Vdc	±1250mA	20mA	750mA	83	E
CEM2415	48Vdc	±15Vdc	±1000mA	20mA	750mA	83	E
CEM2416	48Vdc	+5/±12Vdc	3000±450mA	40mA	690mA	78	E
CEM2417	48Vdc	+5/±15Vdc	3000±350mA	40mA	680mA	78	E

Operating Limit and Output Range



Triple Output Loading Table¹

Output	Voltage	Amperes		
		Min. ²	Nom.	Max.
1	5	0.50	3.00	3.50
2 & 3	+12 or -12	0.10	0.45	0.70
2 & 3	+12 or -15	0.10	0.35	0.70

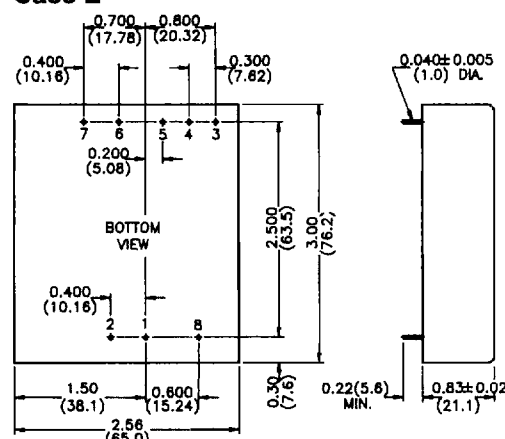
Pin Connections

Pin	Single ²	Dual	Triple
1	+INPUT	+INPUT	+INPUT
2	-INPUT	-INPUT	-INPUT
3	+SENSE	+OUTPUT	+12V, 15V
4	OUTPUT TRIM	COMMON	COMMON
5	-SENSE	-OUTPUT	-12V, 15V
6	+OUTPUT	NO PIN	+5V
7	-OUTPUT	NO PIN	+5V COM
8	REMOTE ON/OFF CONTROL		

Notes:

1. Maximum total power from all outputs is limited to 30 Watts but no output should be allowed to exceed its maximum current.
2. Minimum current on each output required to maintain specified regulation.
3. If remote sensing is utilised, output sense pins must be jumpered to respective output power pins, for normal operation connect Pin No. 3 to Pin No. 6 and Pin No. 5 to Pin no. 7.

Case E



Mechanical tolerances unless otherwise noted:

X.XX dimensions: ±0.04 inches

X.XXX dimensions: ±0.010 inches

