

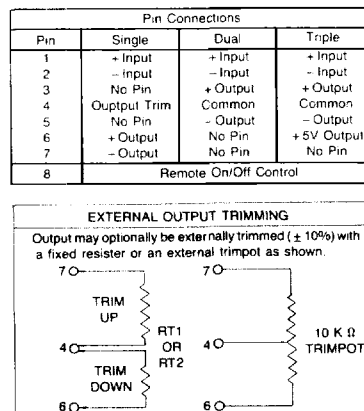
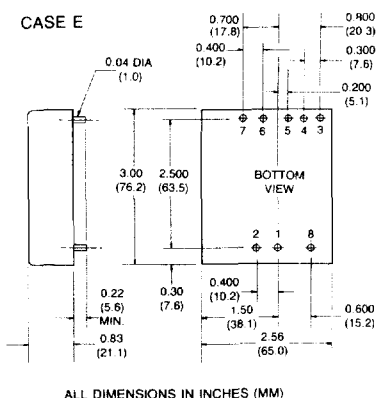
15 WATT DC/DC CONVERTERS CEM600 SERIES



- 2:1 Input Range
- 15W Isolated Output
- Efficiency to 84%
- Remote On/Off Control
- 100 kHz Switching Frequency
- Six-Sided Shield

MODEL NUMBER	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT ¹		% EFF	CASE
				NO LOAD	FULL LOAD		
CEM601	9-18 VDC	5 VDC	3000 mA	30 mA	1700 mA	75	E
CEM602	9-18 VDC	12 VDC	1250 mA	30 mA	1600 mA	78	E
CEM603	9-18 VDC	15 VDC	1000 mA	30 mA	1600 mA	78	E
CEM604	9-18 VDC	±12 VDC	±625 mA	35 mA	1520 mA	82	E
CEM605	9-18 VDC	±15 VDC	±500 mA	35 mA	1520 mA	82	E
CEM606	9-18 VDC	5/±12 VDC	1500/±310 mA	40 mA	1600 mA	78	E
CEM607	9-18 VDC	5/±15 VDC	1500/±250 mA	40 mA	1600 mA	78	E
CEM608	9-18 VDC	+5/±12/-5 VDC	1500/±310/500 mA	40 mA	1470 mA	78	E
CEM611	18-36 VDC	5 VDC	3000 mA	20 mA	810 mA	77	E
CEM612	18-36 VDC	12 VDC	1250 mA	20 mA	780 mA	80	E
CEM613	18-36 VDC	15 VDC	1000 mA	20 mA	780 mA	80	E
CEM614	18-36 VDC	±12 VDC	±625 mA	30 mA	750 mA	84	E
CEM615	18-36 VDC	±15 VDC	±500 mA	30 mA	750 mA	84	E
CEM616	18-36 VDC	5/±12 VDC	1500/±310 mA	30 mA	780 mA	80	E
CEM617	18-36 VDC	5/±15 VDC	1500/±250 mA	30 mA	780 mA	80	E
CEM618	18-36 VDC	+5/±12/-5 VDC	1500/±310/500 mA	30 mA	715 mA	80	E
CEM621	36-72 VDC	5 VDC	3000 mA	20 mA	410 mA	77	E
CEM622	36-72 VDC	12 VDC	1250 mA	20 mA	390 mA	80	E
CEM623	36-72 VDC	15 VDC	1000 mA	20 mA	390 mA	80	E
CEM624	36-72 VDC	±12 VDC	±625 mA	25 mA	375 mA	84	E
CEM625	36-72 VDC	±15 VDC	±500 mA	25 mA	375 mA	84	E
CEM626	36-72 VDC	5/±12 VDC	1500/±310 mA	20 mA	380 mA	82	E
CEM627	36-72 VDC	5/±15 VDC	1500/±250 mA	20 mA	380 mA	82	E
CEM628	36-72 VDC	+5/±12/-5 VDC	1500/±310/500 mA	20 mA	350 mA	82	E

Note: 1. Nominal Input Voltage 12, 24 or 48 VDC



SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage Range	12V	9-18V
	24V	18-36V
	48V	36-72V
Input Filter		Pi Type
Reverse Voltage Protection		Internal Shunt Diode
		Use External Fuse

OUTPUT SPECIFICATIONS

Voltage Accuracy Single Output	± 1% max.
Dual + Output	± 1% max.
- Output	± 3% max.
Triple, 5V	± 2% max.
12V/15V	± 3% 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
	18V
Line Regulation ¹ , Single/Dual/Output	± 0.2% max.
Triple Output	± 1% max.
Load Regulation ² , Single/Dual/Output	± 1% max.
Triple Output	± 5% max.

GENERAL SPECIFICATIONS

Efficiency	SEE TABLE
Isolation Voltage	500 VDC min.
Isolation Resistance	10 ⁹ ohms min.
Switching Frequency	100kHz
Case Grounding	Capacity Coupled to Input
Operating Temperature Range	-25°C to + 71°C
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 76.2 x 21.1mm)
Case Material	Black Coated Copper with Non-Conductive Base

NOTE:

1. Measured from High Line to low Line.
2. Measured from Full Load to 1/4 Full Load.
3. 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.

REMOTE ON/OFF CONTROL

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

OUTPUT	VOLTAGE	AMPERES		
		MIN ²	NON.	MAX.
1	+5	250	15	2.0
2 & 3	+12 OR -12	100	310	500
2 & 3	+15 OR -15	100	250	500
2 & 3	+12 & -5	100/100	310/500	500/500

NOTES

1. Maximum total power from all outputs is limited to 15 watts but no output should be allowed to exceed its maximum current.
2. Minimum current on each output is required to maintain specified regulation.