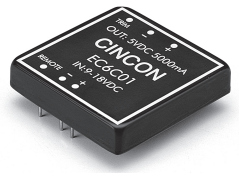
EC6C SERIES

25-30 WATT DC-DC CONVERTERS



Features

- 25-30W Isolated Output
- 2" x 2" Six-Sided Shield Metal Case
- Regulated Outputs
- Efficiency to 85%
- Remote On/Off Control
- External Output Trimming function

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	% EFF.	SIZE
EC6C01	9-18 VDC	5 VDC	5000 mA	30 mA	2675 mA	78	2" x 2"
EC6C02		12 VDC	2500 mA	30 mA	3050 mA	82	
EC6C03		15 VDC	2000 mA	30 mA	3050 mA	82	
EC6C04		±5 VDC	±2500 mA	35 mA	2675 mA	78	
EC6C05		±12 VDC	±1250 mA	35 mA	3050 mA	82	
EC6C06		±15 VDC	±1000 mA	35 mA	3050 mA	82	
EC6C07		5/±12 VDC	3500/±310 mA	35 mA	2640 mA	79	
EC6C08		5/±15 VDC	3500/±250 mA	35 mA	2640 mA	79	
EC6C09		3.3 VDC	5000 mA	30 mA	1860 mA	74	
EC6C11	18-36 VDC	5 VDC	5000 mA	30 mA	1336 mA	79	2" x 2"
EC6C12		12 VDC	2500 mA	30 mA	1525 mA	82	
EC6C13		15 VDC	2000 mA	30 mA	1525 mA	82	
EC6C14		±5 VDC	±2500 mA	30 mA	1336 mA	79	
EC6C15		±12 VDC	±1250 mA	30 mA	1470 mA	85	
EC6C16		±15 VDC	±1000 mA	30 mA	1470 mA	85	
EC6C17		5/±12 VDC	3500/±310 mA	30 mA	1320 mA	80	
EC6C18		5/±15 VDC	3500/±250 mA	30 mA	1320 mA	80	
EC6C19		3.3 VDC	5000 mA	30 mA	920 mA	75	
EC6C21	36-72 VDC	5 VDC	5000 mA	20 mA	660 mA	79	2" x 2"
EC6C22		12 VDC	2500 mA	20 mA	765 mA	82	
EC6C23		15 VDC	2000 mA	20 mA	765 mA	82	
EC6C24		±5 VDC	±2500 mA	25 mA	660 mA	79	
EC6C25		±12 VDC	±1250 mA	25 mA	735 mA	85	
EC6C26		±15 VDC	±1000 mA	25 mA	735 mA	85	
EC6C27		5/±12 VDC	3500/±310 mA	25 mA	655 mA	80	
EC6C28		5/±15 VDC	3500/±250 mA	25 mA	655 mA	80	
EC6C29		3.3 VDC	5000 mA	20 mA	460 mA	75	

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

Specifications

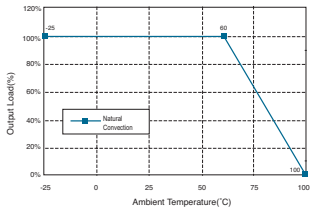
INPUT SPECIFICATIONS:
Input Voltage Range ..... 12V 9-18V
24V 18-36V
48V 36-72V
Input Filter ..... Pi Type

OUTPUT SPECIFICATIONS:
Voltage Accuracy
Single Output ..... ±2.0% max.
Dual +Output ..... ±2.0% max.
-Output ..... ±3.0% max.
Triple, 5V ..... ±2.0% max.
12V/15V ..... ±5.0% max.
Voltage Balance (Dual) ..... ±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 & Noise, 20MHz BW ..... 10mV RMS, max.
75mV p-p max.
Temperature Coefficient ..... ± 0.02%/°C
Short Circuit Protection ..... Continuous
Line Regulation[1], Single/Dual ..... ±0.5% max.
Triple ..... ±1.0% max.
Load Regulation[2], Single/Dual ..... ±1.0% max.
Triple ..... ±5.0% max.

GENERAL SPECIFICATIONS:
Efficiency ..... See Table
Isolation Voltage ..... 500 VDC min.
Isolation Resistance 10⁹ohms
Switching Frequency ..... 300KHz, typ.
Case Grounding ..... Connected to Output Common
Operating Ambient Temperature Range ..... -25°C to +71°C
De-rating, Above 60°C ..... Linearly to Zero power at 100°C
Case Temperature[3] ..... 100°C max
Cooling ..... Natural Convection
Storage Temperature Range ..... -55°C to + 105°C
EMI/RFI ..... Six-Sided Continuous Shield
Dimensions ..... 2.00 x 2.00 x 0.40 inches
(50.8 x 50.8 x 10.2 mm)
Case Material ..... Black Coated Copper with Non-Conductive Base
Weight 65g

NOTE:
1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Load
3. Maximum case temperature under any operating condition should not exceed 100°C.

EC6C Series Derating Curve

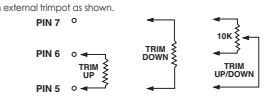


Remote On/Off Control

Logic Compatibility	CMOS or Open Collector TTL
Ec-On	>+5.5 VDC or Open Circuit
Ec-Off	<1.8 VDC
Shutdown Idle Current	10mA
Control Common	Referenced to Input Minus

External Output Trimming

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.



PIN CONNECTION

Pin	Single	Dual	Tripe
1	Remote On/Off Control		
2	No Pin	No Pin	No Pin
3	-Vin	-Vin	-Vin
4	+Vin	+Vin	+Vin
5	Trim	Trim	-Aux. Out
6	-Vout	-Vout	Common
7	+Vout	Common	+5V out
8	No Pin	+Vout	+Aux. Out

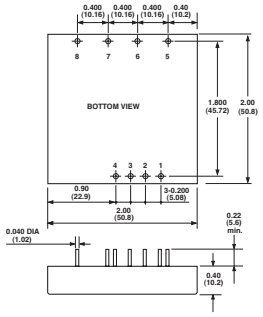
TRIPLE OUTPUT LOADING TABLE (1)

Output (Pin No.)	Voltage	Amperes Min.(2)	Amperes Nom.
7	+5	0.50	3.5
8 & 5	+12 & -12	0.10	0.31
8 & 5	+15 & -15	0.10	0.25

NOTE:
1. Maximum total power from all outputs is limited to 25 watts but no output should exceed its maximum current.
2. Minimum current on each output is required to maintain specified regulation.

CASE C

All Dimensions In Inches(mm)
Tolerance Inches: .xx= ±.04, .xxx= ±.010
Millimeters: .x= ±1.0, .xx= ±0.25



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