

# EC3CB

S E R I E S

## 15 WATT EN55022 CLASS B DC-DC CONVERTERS



### Features

- 15W Isolated Output
- 2"x 2" Six-Sided Shield Metal Case
- Regulated Outputs
- Efficiency to 82%
- Fixed 200KHz Switching Frequency
- Meets EN55022 Class B, Conducted
- Pi Input Filter
- Continuous Short Circuit Protection
- Alternative Pin Configuration

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	SIZE
				NO LOAD	FULL LOAD		
EC3CB01	9-18 VDC	5 VDC	3000 mA	30 mA	1660 mA	75	2" x 2"
EC3CB02		12 VDC	1250 mA	30 mA	1625 mA	78	
EC3CB03		15 VDC	1000 mA	30 mA	1625 mA	78	
EC3CB04		±12 VDC	±625 mA	35 mA	1620 mA	77	
EC3CB05		±15 VDC	±500 mA	35 mA	1620 mA	77	
EC3CB06		±5 VDC	±1500 mA	35 mA	1620 mA	77	
EC3CB07		3.3 VDC	3000 mA	30 mA	1178 mA	70	
EC3CB11	18-36 VDC	5 VDC	3000 mA	15 mA	812 mA	78	2" x 2"
EC3CB12		12 VDC	1250 mA	20 mA	772 mA	81	
EC3CB13		15 VDC	1000 mA	20 mA	772 mA	81	
EC3CB14		±12 VDC	±625 mA	25 mA	780 mA	80	
EC3CB15		±15 VDC	±500 mA	25 mA	780 mA	80	
EC3CB16		±5 VDC	±1500 mA	25 mA	780 mA	80	
EC3CB17		3.3 VDC	3000 mA	15 mA	557 mA	74	
EC3CB21	36-72 VDC	5 VDC	3000 mA	10 mA	390 mA	80	2" x 2"
EC3CB22		12 VDC	1250 mA	15 mA	381 mA	82	
EC3CB23		15 VDC	1000 mA	15 mA	381 mA	82	
EC3CB24		±12 VDC	±625 mA	20 mA	386 mA	81	
EC3CB25		±15 VDC	±500 mA	20 mA	386 mA	81	
EC3CB26		±5 VDC	±1500 mA	20 mA	386 mA	81	
EC3CB27		3.3 VDC	3000 mA	20 mA	271 mA	76	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC  
2. Alternative pin-out version. To order, suffix a "S" to the standard model number.

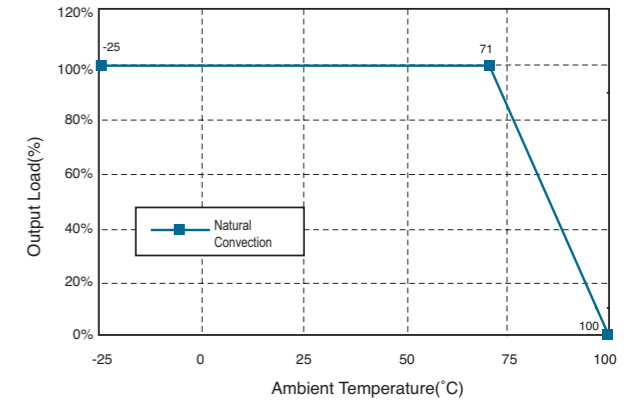
### Specifications

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

**OUTPUT SPECIFICATIONS:**  
 Voltage Accuracy  
 Single Output.....±1.0% max.  
 Dual + Output.....±1.0% max.  
 Dual - Output.....±3.0% 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.  
 Ripple & Noise 20MHz BW.....10mV RMS. max.  
 75mV p-p max.  
 Temperature Coefficient.....±0.02%/°C  
 Short Circuit Protection.....Indefinite & Current Limit  
 Line Regulation<sup>1</sup> Single/Dual Output.....±0.2% max.  
 Load Regulation<sup>2</sup> Single/Dual Output.....±1.0% max.

**GENERAL SPECIFICATIONS:**  
 Efficiency.....See Table  
 Isolation Voltage.....500 VDC min.  
 Isolation Resistance.....10<sup>9</sup>ohms  
 Switching Frequency.....200KHz, typ.  
 Operating Ambient Temperature Range .....-25°C to +71°C  
 De-rating, Above 71°C ..... Linearly to Zero power at 100°C  
 Case Temperature<sup>5</sup>.....100°C max  
 Cooling .....Natural Convection  
 Storage Temperature Range.....-40°C to + 100°C  
 EMI/RFI.....Conductive EMI Meet EN55022 Class B  
 Dimensions.....2.00 x 2.00 x 0.40 inches  
 (50.8 x 50.8 x 10.2mm)  
 Case Material.....Black Coated Copper With  
 Non-Conductive Base  
 Weight.....57g

### EC3CB Series Derating Curve

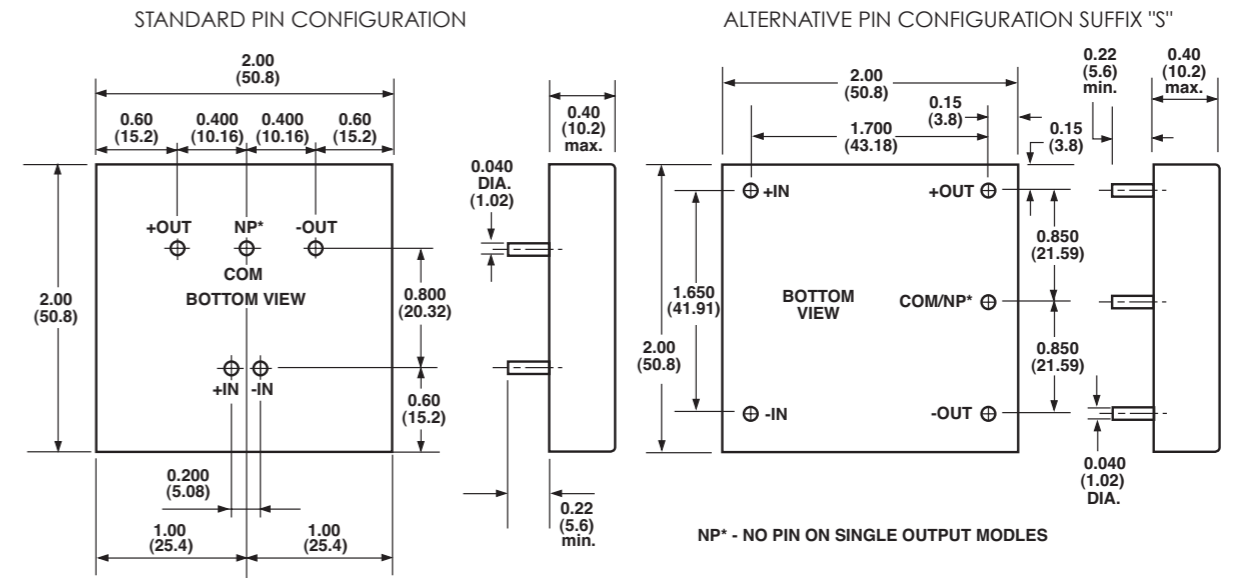


#### NOTE:

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 Desired Fuse Size.
4. Alternative Pin Configuration Suffix "S"
5. Maximum case temperature under any operating condition should not exceed 100°C.

### 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.