

- 4:1 Input Range
- Compact 2 x 2" Footprint
- 1600V Isolation
- Over Voltage & Over Current Protection
- Adjustable Output Voltage
- Remote On/Off & Remote Sense
- High Efficiency up to 92%
- -40 to +105 °C Operational Temperature Range



### Specification (typical values shown)

Input Ranges.....	9~36 Volts, 18~75 Volts
Outputs.....	Single & Dual outputs available
Output Adjustment.....	+/-10%
Line Regulation.....	+/-0.5%
Load Regulation.....	+/-0.5% for single O/P. Duals are +/-1% max
Efficiency.....	See table for each model
Overload Protection.....	130% of full load typical
Short Circuit Protection.....	Continuous, auto-recovery (hiccup)
Isolation Voltage.....	Input to Output: 1600 VDC Input & Output to case: 1600 VDC
Operating Temperature.....	-40 to +55°C @ full load, derates to zero at 105°C.
Storage Temperature.....	-40 to +125 °C
Case Material.....	Nickel coated Copper.
Switching Frequency.....	270 kHz typical
Ripple & Noise.....	50 mV pk-pk (3.3 & 5v Output) 150mV pk-pk (Dual Outputs) 75mV pk-pk (All other models)
Radiated Emissions.....	EN55022 Class A
Conducted Emissions.....	EN55022 Class A (see notes)
Safety.....	IEC/EN60950-1 (designed to meet)
MTBF.....	>151 khrs (MIL-HDBK-217F)

### Models and Ratings

Model (9-36V input)	Model (18-75V input)	Output (VDC)	Output Current	Efficiency
<b>Single Output Units</b>				
ECO40-24S3R3	ECO40-48S3R3	3.3 V	10000 mA	89%
ECO40-24S05	ECO40-48S05	5.0 V	8000 mA	91~92%
ECO40-24S12	ECO40-48S12	12.0 V	3350 mA	90%
ECO40-24S15	ECO40-48S15	15.0 V	2650 mA	90~91%
<b>Dual Output Units</b>				
ECO40-24D12	ECO40-48D12	+/-12.0 V	+/-1650 mA	89~90%
ECO40-24D15	ECO40-48D15	+/-15.0 V	+/-1350 mA	89~90%

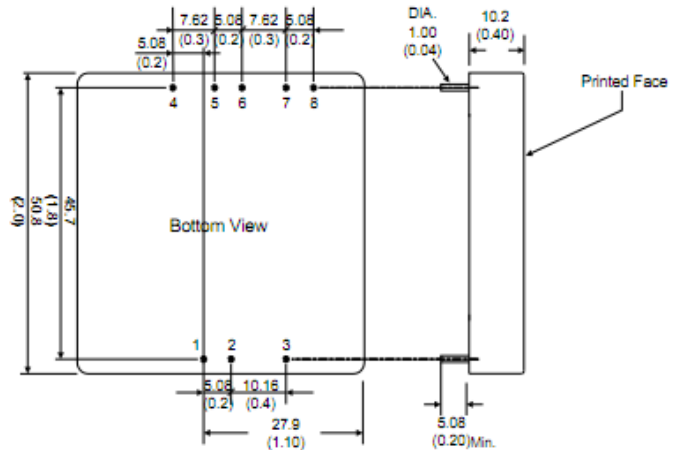
**For mechanical drawing and pinout, see next page**

Specifications may change without notice, E&OE. ALL PSU Terms & Conditions apply.

**ALL PSU Ltd, Unit D6 Laser Quay, Culpeper Close, Medway City Estate,  
Rochester, Kent, ME24HU, Tel : 01634 725527, Fax : 01634 739111  
Email: sales@allpsu.co.uk Web: www.allpsu.co.uk**

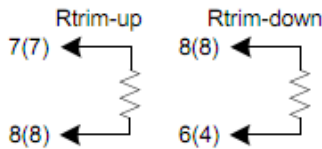
## Mechanical Details and Pin-Out

Pin	Function Single O/P	Function Dual O/P
1	+V in	+V in
2	-V in	-V in
3	CTRL	CTRL
4	-Sense	+V out
5	+Sense	Com
6	+Vout	Com
7	-Vout	-Vout
8	Trim	Trim



Output voltage can be trimmed by +/- 10% using the method shown below.

( ) For Dual Outputs



Remote on/off (CTRL) (6)

On: 3~12Vdc or open circuit

Off: 0~1.2Vdc or short pins 2 & 3

Off idle current: 5 mA (typical)

### Notes:

The remote on/off pin is referenced to -V in (Pin 2).

An external filter capacitor is required if the module has to meet EN61000-4-4 and EN61000-4-5  
Suggested filter capacitor: Nippon chemi-con KY series 220 uF/100 V

The ECO40 series can meet EN55011 Class A with an external filter in parallel with the input pins

Specifications may change without notice, E&OE. ALL PSU Terms & Conditions apply.

**ALL PSU Ltd, Unit D6 Laser Quay, Culpeper Close, Medway City Estate,  
Rochester, Kent, ME2 4HU, Tel : 01634 725527, Fax : 01634 739111  
Email: sales@allpsu.co.uk Web: www.allpsu.co.uk**