MYRA encapsulated electronic transformers are Switched Mode Power Supplies based on Flyback topology.

They constitute an interesting alternative to the traditional supply in the most common applications of power lower than 5W.

ENERGY SAVING due to high efficiency and low standby power

The applications for the Electronic serie are:
- Alternative to the linear transformers in all AC/DC applications of power up to than 5W
- Alternative to DC/DC converters for application in D.C.current (Telecom supplies, electric substations etc.)
- Industrial, domestic and consumer electronics applications
- Standby devices and others DC or AC auxiliary supplies

With the same footprint as a EI30 transformer, they will replace:
- 50 Hz Transformer
- Fuse
- Bridge Rectifier
- Filtering Capacitor

Regulated types will also replace linear regulator and heatsink

MAIN FEATURES
- Wide input voltage range
- Increased power. 3 x compared to standard EI30 transformer
- Better energetic efficiency: 70% typical compared to 40% for the conventional supply
- Very low Standby Power consumption: meets requirements of Energy Star or EC Code of Conduct
- Same footprint as EI30 transformer: Upgrade your application without redesign of PCB

SAFETY STANDARDS
Meets all requirements of:
- EN 60950
- EN 60335
- EN 61558-2-17
- Uses UL listed components
- Uses UL 94-V0 plastic and resin

EMC STANDARDS
Conducted and radiated emissions conform to
- EN 55014-1
- EN 55022 class B
Immunity conform to
- EN 55014-2
- EN 61000-4-x
ONE OUTPUT  2.5 & 5W - Regulated

ELECTRICAL SPECIFICATIONS

Input voltage range
85 to 265 Volts AC
85 to 370 Volts DC
Input Frequency  47 to 440 Hz
Output voltage accuracy (full load ) ± 2%
Line output voltage variation ± 0.3%
Load output voltage variation ± 0.5%
No load input power < 200mW
Energy consumption and efficiency :
Meets requirements of Energy Star and EC Code of Conduct

SAFETY

Prepared for Class II – reinforced insulation
Input / Output Isolation test voltage: 4000 Vac
Operating ambient temperature:
- 25°C / + Ta (See table)
Storage temperature: - 40°C / + 85°C
Input protection by integrated fusible resistor
Output short circuit protection: automatic restarts when fault condition is removed
Thermal shutdown with automatic recovery if internal temperature exceeds allowable value

<table>
<thead>
<tr>
<th>Reference</th>
<th>Output voltage (DC Volts)</th>
<th>Output current (DC mA)</th>
<th>Output Power (W)</th>
<th>Efficiency (%)</th>
<th>Ta (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>47121</td>
<td>3.3</td>
<td>750</td>
<td>2.5</td>
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<td>4.2</td>
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<td>+50</td>
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<td>550</td>
<td>5</td>
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<td>+50</td>
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<td>420</td>
<td>5</td>
<td>75</td>
<td>+50</td>
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<td>5</td>
<td>76</td>
<td>+50</td>
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<td>47156</td>
<td>24</td>
<td>220</td>
<td>5</td>
<td>79</td>
<td>+50</td>
</tr>
</tbody>
</table>

DIMENSIONS and PINOUT

4 pins
pins 1 & 5 : AC or DC Input
pin 7: DC output +V
pin 9: DC output  0V

(view from pins side):
### ELECTRICAL SPECIFICATIONS

**Input voltage range**
- 85 to 265 Volts AC
- 85 to 370 Volts DC

Input Frequency 47 to 440 Hz

**Output voltage accuracy (full load)** ± 5%

**Line output voltage variation** ± 3%

**Load output voltage variation** 0/ +30%

**No load input power** < 300mW

### SAFETY

Prepared for Class II – reinforced insulation

Input / Output Isolation test voltage: 4000 Vac

**Operating ambient temperature:**
- 25°C / + Ta (See table)

**Storage temperature:**
- -40°C / + 85°C

Input protection by integrated fusible resistor

Output short circuit protection: automatic restarts when fault condition is removed

Thermal shutdown with automatic recovery if internal temperature exceeds allowable value

### DIMENSIONS and PINOUT

**4 pins**

- Pins 1 & 5: AC or DC Input
- Pin 7: DC output +V
- Pin 9: DC output 0V

(view from pins side):

<table>
<thead>
<tr>
<th>Reference</th>
<th>(DC Volts)</th>
<th>Output current (DC mA)</th>
<th>Output Power (W)</th>
<th>Efficiency (%)</th>
<th>Ta (°C)</th>
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<tbody>
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<td>+70</td>
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<td>+70</td>
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<tr>
<td>47134</td>
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<td>270</td>
<td>3.2</td>
<td>75</td>
<td>+70</td>
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<td>+70</td>
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<td>47163</td>
<td>9</td>
<td>560</td>
<td>5 *</td>
<td>73</td>
<td>+50</td>
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<td>420</td>
<td>5 *</td>
<td>75</td>
<td>+50</td>
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<td>47166</td>
<td>24</td>
<td>210</td>
<td>5 *</td>
<td>80</td>
<td>+50</td>
</tr>
</tbody>
</table>

* Nota: Power up to 5.4W is possible with input voltage ≥ 97 Vac
TWO COMMON OUTPUTS  3 to 5W - Regulated

ELECTRICAL SPECIFICATIONS

- **Input voltage range**
  - 85 to 265Volts AC
  - 85 to 370V DC
- **Input Frequency**: 47 to 440 Hz
- **Output voltage accuracy**: see table for 10 to 100% rated load of each output (includes line and load variations)
- **No load input power**: < 200mW
- **Energy consumption and efficiency**: Meets requirements of Energy Star or EC Code of Conduct
- The 2 outputs share a common 0v reference. This enables closer coupling and a better cross-regulation of the outputs

<table>
<thead>
<tr>
<th>Reference</th>
<th>Output 1 (DC Volts)</th>
<th>Output 1 (DC mA)</th>
<th>Output Power (W)</th>
<th>Output 1 Output 2 accuracy</th>
<th>Efficiency (%)</th>
<th>Ta (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>47243</td>
<td>+10.5 +7</td>
<td>380 max</td>
<td>4 *</td>
<td>± 3% ± 15%</td>
<td>72</td>
<td>+60</td>
</tr>
<tr>
<td>47244</td>
<td>+15 +7</td>
<td>300 max</td>
<td>4 *</td>
<td>± 3% ± 15%</td>
<td>73</td>
<td>+60</td>
</tr>
<tr>
<td>47245</td>
<td>+12 +5.5</td>
<td>130 max</td>
<td>3.2</td>
<td>± 5% ± 10%</td>
<td>65</td>
<td>+70</td>
</tr>
<tr>
<td>47246</td>
<td>+5 +12</td>
<td>400 (600max)</td>
<td>4</td>
<td>± 3% ± 15%</td>
<td>65</td>
<td>+60</td>
</tr>
<tr>
<td>47247</td>
<td>+15 -15</td>
<td>130 max</td>
<td>4</td>
<td>± 8% ± 8%</td>
<td>73</td>
<td>+60</td>
</tr>
</tbody>
</table>

* Nota: Power up to 5W is possible with input voltage ≥ 97 Vac and Ta ≤ 50°C

SAFETY

- Prepared for Class II – reinforced insulation
- Input / Output Isolation test voltage: 4000 Vac
- Operating ambient temperature:
  - 25°C / + Ta (See table)
- Storage temperature:
  - - 40°C / + 85°C
- Input protection by integrated fusible resistor
- Output short circuit protection: automatic restarts when fault condition is removed
- Thermal shutdown with automatic recovery if internal temperature exceeds allowable value

DIMENSIONS and PINOUT

5 pins

- pins 1 & 5: AC or DC Input
- pin 6: Common output 0V
- pin 7: DC output 1
- pin 10: DC output 2

(view from pins side):
TWO ISOLATED OUTPUTS  3 to 5W - Regulated

ELECTRICAL SPECIFICATIONS

Input voltage range
- 85 to 265Volts AC
- 85 to 370V DC

Input Frequency 47 to 440 Hz

Output voltage accuracy: see table for 10 to 100% rated load of each output (includes line and load variations)

No load input power < 200mW
Energy consumption and efficiency:
- Meets requirements of Energy Star or EC Code of Conduct

2 isolated outputs - Output 1 only is regulated and should provide the higher power

<table>
<thead>
<tr>
<th>Reference</th>
<th>Output 1 (DC Volts)</th>
<th>Output 1 (DC mA)</th>
<th>Output 2 (max W)</th>
<th>Output 2 accuracy</th>
<th>Efficiency (%)</th>
<th>Ta (°C)</th>
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</thead>
<tbody>
<tr>
<td>47252</td>
<td>5</td>
<td>5</td>
<td>350 (600max)</td>
<td>± 3%</td>
<td>66</td>
<td>+60</td>
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<tr>
<td></td>
<td>12</td>
<td>12</td>
<td>165 (300max)</td>
<td>± 5%</td>
<td>72</td>
<td>+60</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>15</td>
<td>135 (200max)</td>
<td>± 5%</td>
<td>73</td>
<td>+60</td>
</tr>
<tr>
<td>47254</td>
<td>5</td>
<td>12</td>
<td>400 (600max)</td>
<td>± 3%</td>
<td>68</td>
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<td>12</td>
<td>170 max</td>
<td>165 max</td>
<td>± 5%</td>
<td>72</td>
<td>+60</td>
</tr>
<tr>
<td>47255</td>
<td>15</td>
<td>135 max</td>
<td>4</td>
<td>± 5%</td>
<td>73</td>
<td>+60</td>
</tr>
<tr>
<td>47257</td>
<td>18</td>
<td>150 (200max)</td>
<td>4</td>
<td>± 5%</td>
<td>72</td>
<td>+60</td>
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<tr>
<td>47258</td>
<td>8</td>
<td>150 max</td>
<td>4</td>
<td>± 5%</td>
<td>72</td>
<td>+60</td>
</tr>
</tbody>
</table>

SAFETY

Prepared for Class II – reinforced insulation
Input / Output Isolation test voltage: 4000 Vac
Output1 / Output 2 isolation: 4000Vac

Operating ambient temperature:
- 25°C / + Ta (See table)
Storage temperature:
- 40°C / + 85°C

Input protection by integrated fusible resistor

Output short circuit protection: automatic restarts when fault condition is removed

Thermal shutdown with automatic recovery if internal temperature exceeds allowable value

DIMENSIONS and PINOUT

6 pins

- pins 1 & 5: AC or DC Input
- pin 6: DC output1 0V
- pin 7: DC output1 +V
- pin 9: DC output2 0V
- pin 10: DC output2 +V

(view from pins side):