

## Power Transformer – PT4179

### Special Features:

- Two primary voltages compliant: 230 V / 115 V
- Nominal output power:  $S = 80 \text{ VA}$
- Operating frequency: 50/60 Hz
- Compliance:
  - EN 61558-1:2019
  - PN-EN 60601-1:2011/A1:2014-02 (p. 15.5.2 and 15.5.3)
  - CE
  - RoHS and REACH
- Strengthen insulation and compliant with medical standards
- Integrated thermal protection
- Low profile
- Operating ambient temperature:  $-25^{\circ}\text{C}$  to  $40^{\circ}\text{C}$
- CE compliant

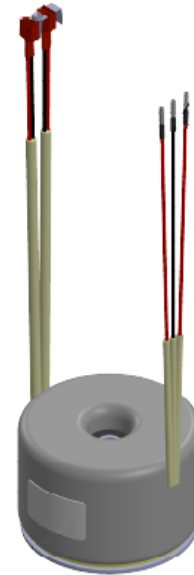


Figure 1. General view

### Typical Applications:

- Medical devices
- Linear power supplies (where SMPS cannot be used)

For samples or custom solutions please contact directly:  
[inquiry@sma-magnetics.com](mailto:inquiry@sma-magnetics.com)

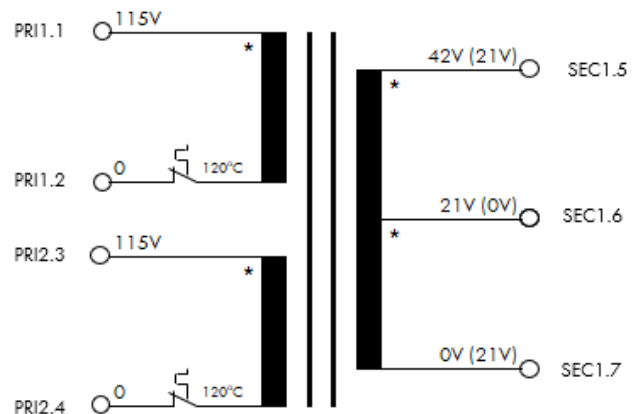


Figure 2. Electrical circuit



Parameter description	Parameter	Comment
Circuits	Connections are provided in <b>Błąd! Nie można odnaleźć źródła odwołania..</b>	
Rated supply voltage	$V_{PRI1} = V_{PRI2} = 115 V_{RMS}$	
Rated frequency	$f = 50..60 \text{ Hz}$	
No load output voltage	$V_{OCSEC1.0-SEC1.1} = 21.57 V_{RMS} \pm 5\%$ $V_{OCSEC1.1-SEC1.2} = 21.57 V_{RMS} \pm 5\%$ $V_{OCSEC1.0-SEC1.2} = 43.13 V_{RMS} \pm 5\%$	Routine test
Rated output current	$I_{SEC1} = 1.9 A_{RMS}$	
Total rated output power	$S = 80 \text{ VA}$	
Primary winding resistance	$R_{PRI1.0-PRI1.1} \leq 17 \Omega$ $R_{PRI2.0-PRI2.1} \leq 17.6 \Omega$	Routine test given values are valid for 20°C (resistance temperature coefficient: 0.00393 1/K)
Secondary winding resistance	$R_{SEC1.0-SEC1.1} \leq 0.2 \Omega$ $R_{SEC1.1-SEC1.2} \leq 0.21 \text{ m}\Omega$ $R_{SEC1.0-SEC1.2} \leq 0.41 \text{ m}\Omega$	Routine test given values are valid for 20°C (resistance temperature coefficient: 0.00393 1/K)
Magnetizing current at primary	$I_{mPRI1+PRI2} \leq 25 \text{ mA}_{RMS}$	Routine test @ 230V, 50Hz series connection PRI1 & PRI2
Ambient temperature range	$t_a = -25^\circ\text{C to } +40^\circ\text{C}$	
Insulation class	B (130°C)	
Overheat Protector	Thermal cutoff 120°C, Normally Closed (NC)	PRI1, PRI2
Typical mass	1.3 kg	

A-A

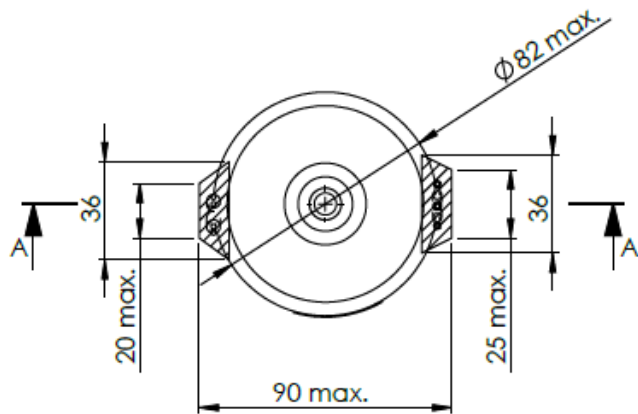
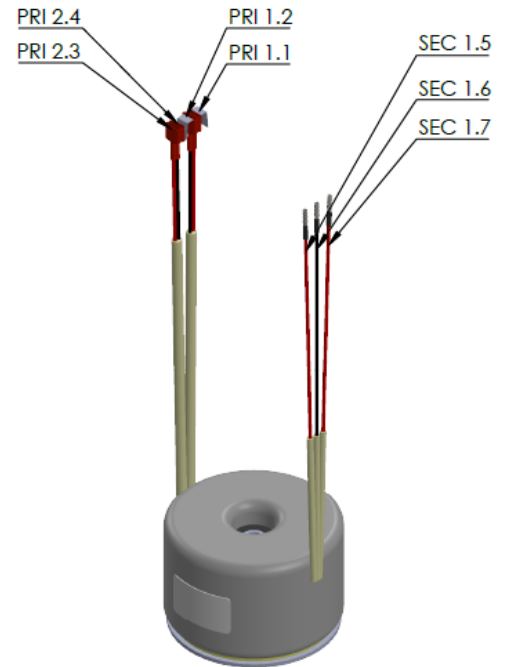
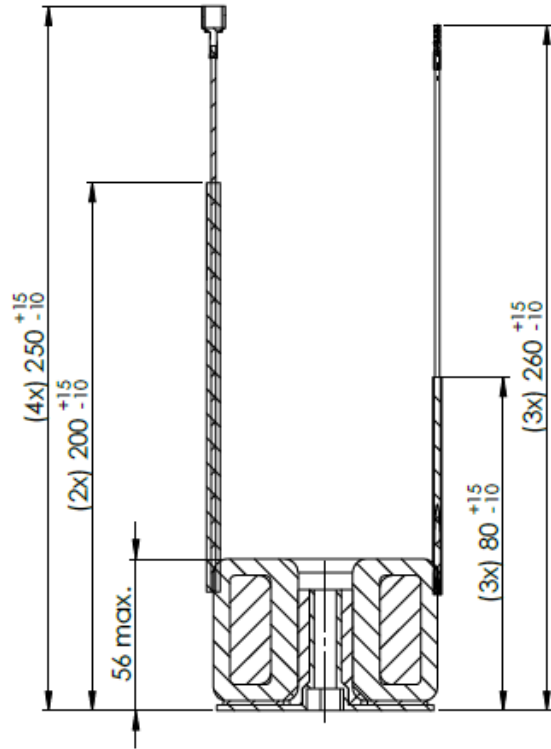


Figure 3. Transformer dimensions in mm