

## Isolating Transformer – PT3250

### Special Features:

- Multi-system voltage compliant: 110 V / 220 V / 240 V
- Nominal output power: S = 18 kVA
- Operating frequency: 45-65 Hz
- Compliance:
  - IEC61558-1
  - ABYC
  - RoHS and REACH
- Build to operate in high humidity (up to 95%) and salt environment
- C5 / Cx corrosion protection
- Reduced inrush current – no need of a soft start
- Operating ambient temperature: -25°C to 40°C

### Typical Applications:

- Intended for use on a marine vessels for connection with onshore multi-system power outlets.

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

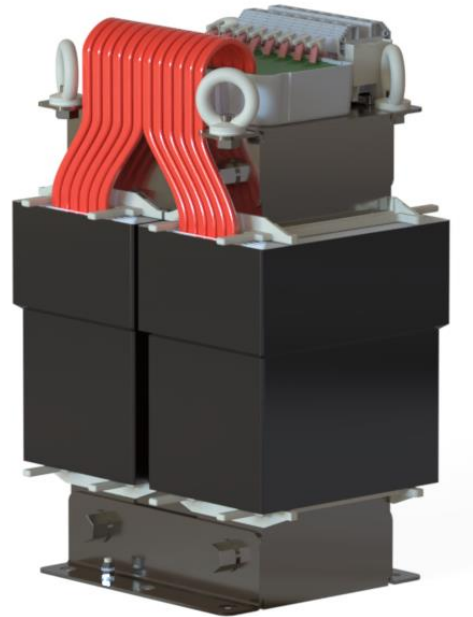


Figure 1. General view

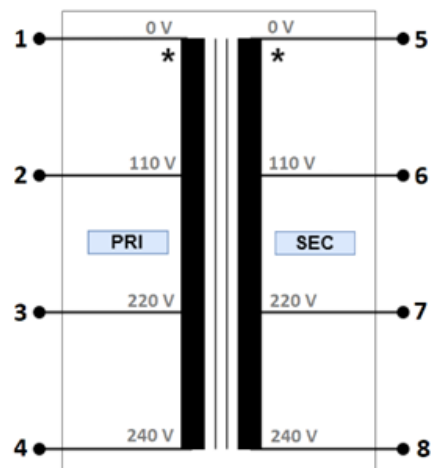


Figure 2. Electrical circuit



Parameter description	Parameter	Comment
Circuit	As in <b>Błąd! Nie można odnaleźć źródła odwołania..</b>	
Rated power	18 000 VA	
Rated primary voltage $V_{PRI}$	$V_{1-4} = 240\text{ V}$ $V_{1-3} = 220\text{ V}$ $V_{1-2} = 110\text{ V}$	
Rated secondary voltage $V_{SEC}$	$V_{5-8} = 240\text{ V (+/- 3%)}$ $V_{5-7} = 220\text{ V (+/- 3%)}$ $V_{5-6} = 110\text{ V (+/- 5%)}$	Routine test Voltage at 0 A load, $V_{1-4} = 240\text{ V}$
Rated current $I_n$	78 A	At $V_{1-4} = 240\text{ V}$
Operating frequency $f$	45 – 65 Hz	
Primary DC resistance	< 30 m $\Omega^*$	Routine test between pin 1 and pin 4
Secondary DC resistance	< 30 m $\Omega^*$	Routine test between pin 5 and 8
No load power loss	< 85 W	@ 240 V, 50 Hz on primary (pin 1 and pin 4)
Efficiency	> 95 %	@ 20 °C, Nominal Current
Magnetizing current at primary	< 3 $A_{RMS}$	Routine test @ 230 V, 50 Hz on PRI_1 – PRI_4 winding
Dielectric strength	Between primary and secondary winding 4000 V, 50 Hz, 60 s.	Routine test
Weight	105 kg	
Operating humidity	Max. 95 %	
Protection degree	IP00	
Insulating materials	Class F	

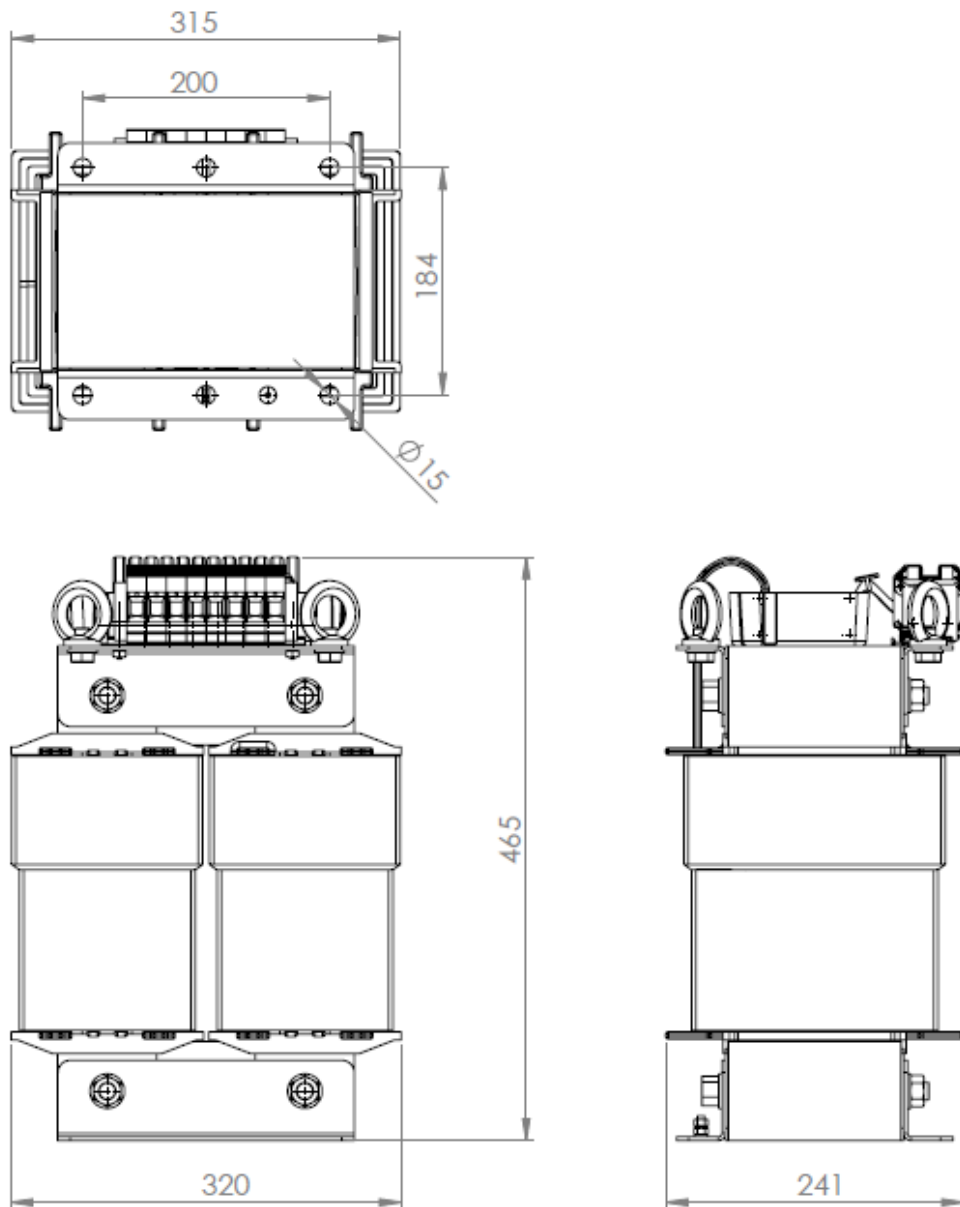


Figure 3. Transformer dimensions in mm

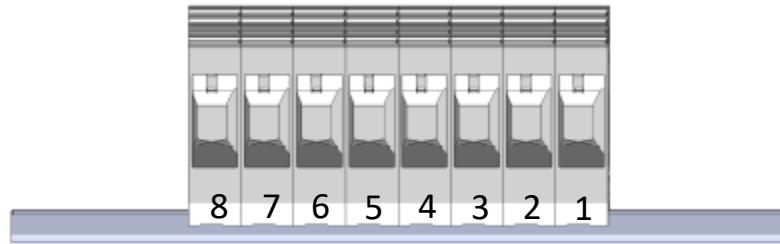


Figure 4. Connectors on DIN rail terminal blocks. Numbers are related with the electrical circuit diagram presented on Fig. 1.

Ref. circuit terminal	Terminal description	Cable cross section	Terminal length	Cable colour	Terminal end
1	Primary winding 0 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block
2	Primary winding 110 V	2.5 - 35 mm <sup>22</sup>	n/a	n/a	DIN rail terminal block
3	Primary winding 220 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block
4	Primary winding 240 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block
5	Secondary winding 0 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block
6	Secondary winding 110 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block
7	Secondary winding 220 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block
8	Secondary winding 240 V	2.5 - 35 mm <sup>2</sup>	n/a	n/a	DIN rail terminal block