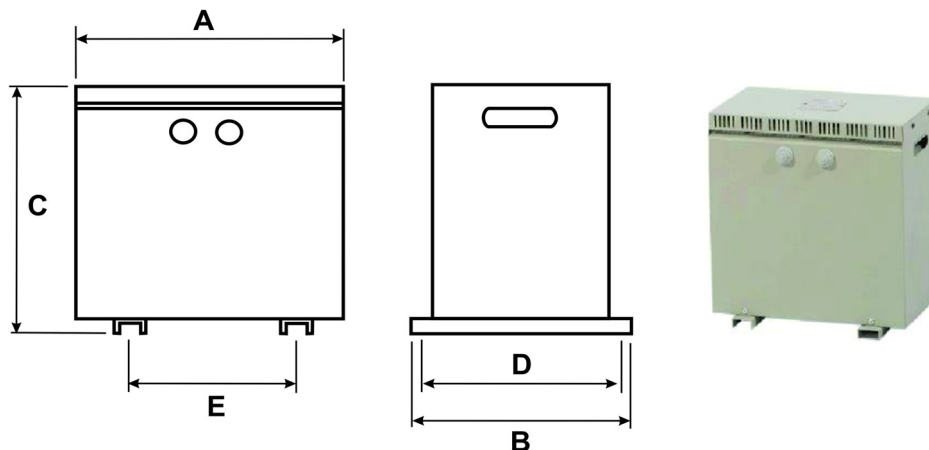


Medical Isolation Transformer

Transformer data

Reference	THX/THW4	THX/THW6.3	THX/THW8	THX/THW10
Rated power (kVA)	4000	6300	8000	10000
Rated frequency (Hz)	50..60 Hz	50..60 Hz	50..60 Hz	50..60 Hz
Rated input voltage (Vac)	230	230	230	230
Rated input current (In)	17,4	27,4	34,8	43,5
Rated output voltage (Vac)	115-0-115	115-0-115	115-0-115	115-0-115
Rated output current (In)	17,4	27,4	34,8	43,5
Inrush current IE	≤8In	≤8In	≤8In	≤8In
Leakage current	<0.5mA	<0.5mA	<0.5mA	<0.5mA
No-load input current Io	<3%	<3%	<3%	<3%
No-load output voltage Uo	<235	<233	<233	<233
Short-circuit voltage Uk	≤3%	≤3%	≤3%	≤3%
R primary Ω (20°C)	0,182	0,086	0,070	0,055
R secondary Ω (20°C)	0,238	0,099	0,092	0,062
Ambient temperature	40°C	40°C	40°C	40°C
temperature rise	70°C	70°C	70°C	70°C
Maximum temperature	110°C	110°C	110°C	110°C
Fe losses (W) 110°C	31	46	46	47
Winding losses (W) 110°C	167	194	262	310
Efficiency	95%	96%	96%	97%
Noise level	<35dB	<35dB	<35dB	<35dB

Transformer Enclosure



WEIGHTS AND DIMENSIONS

Rating	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)
4 kVA	440	430	535	390	180	42
6.3 kVA	440	430	535	390	180	53
8 kVA	440	430	535	390	180	70
10 kVA	440	430	535	390	180	82

Medical Isolation Transformer

Starkstrom transformers are manufactured in accordance with IEC 61558-2-15, with the following additional requirements:

- The leakage current of the output winding to earth and the leakage current of the enclosure, when measured in no-load condition and the transformer supplied at rated voltage and rated frequency, do not exceed 0.5 mA.
- Single-phase transformers are used to form the medical IT systems for portable and fixed equipment and the rated output is not less than 0.5 kVA and does not exceed 10 kVA.
- The medical isolation transformers are installed into the IPS panels at the manufacturer’s facility. The IPS system is then tested, shipped, installed and commissioned as a complete system without any subsequent transformer removal and re-installation.

10kVA Transformer: Heat Loss Comparison



Heat Losses per Transformer

Starkstrom has invested in a range of transformers that are more efficient over their entire working range, and especially in the 0-50% loading area where the majority of the transformers operating life are spent.

Starkstrom transformers can generate energy savings of up to 63% compared to other suppliers of medical isolated transformers (see 10KVA comparison graph). This has the benefits of reducing direct energy costs and reducing the cost of removing the excess heat.

SIZE	NO LOAD HEAT LOSSES	FULL LOAD HEAT LOSSES	EFFICIENCY
4 kVA	37W	146W	96%
6.3 kVA	53W	254W	96%
8 kVA	50W	270W	97%
10 kVA	56W	345W	97%

Starkstrom medical isolation transformers have been engineered to give a maximum of 8 times “in rush”. We would suggest considering the following MCB’s to allow adequate circuit protection. However, this must be confirmed with your project electrical designer.

- 4kVA Transformer 40 Amp ‘C’ Curve
- 6.3kVA Transformer 50 Amp ‘C’ Curve
- 8kVA Transformer 63 Amp ‘C’ Curve
- 10kVA Transformer 63 Amp ‘D’ Curve



www.starkstrom.com

256 Field End Road, Eastcote, Ruislip, Middlesex, HA4 9UW, UK
 Tel +44 (0) 20 8868 3732 Fax +44 (0) 20 8868 3736

