



MED ECO-line 4 kVA

- Transformers with reduced operational losses, composite core and vertical mounting are intended for the supply of equipment in medical locations.
- Thanks to the higher efficiency of operation, transformers help to significantly save electrical energy and thereby reduce the impact on the economy and ecology of operation.
- Produced with a voltage transfer of 230 / 230 V or 400 / 230 V, frequency 50 / 60 Hz, protection IP00, terminals IP20, insulation class F (155 °C) and maximum ambient temperature of 55 °C.
- Transformers have reinforced insulation and protective shielding between the primary and secondary winding.
- Equipped with two temperature sensors PT100, thanks to these sensors, the transformers work better with HAKEL ISOLGUARD insulation monitoring devices and provide the best possible basis for measuring the insulation status and transformer heating.
- Transformers can be supplied in a steel case with IP23.

Type		MED ECO-line 4 kVA
Primary supply voltage AC		230 V
Secondary voltage AC		230 V
Power	P	4 000 W
Transformer construction		Less operating losses
Frequency	f	50 ÷ 60 Hz
In-built temperature sensor		2 x PT100
In a steel cover		Yes
Protection class according to IEC 61140		I
Insulation class		F
Operating temperature	θ	-25 ÷ 55 °C
Degree of protection		IP23
Short-circuit resistance of the secondary		Non resistant
Trigger current		Max. 8 times the rated current
Clamp fastening range (solid conductor)		2.5 ÷ 16 mm ²
Clamp fastening range (stranded conductor)		2.5 ÷ 16 mm ²
Recommended cross-section of connected conductors	S	4 mm ²
Short-circuit voltage	U _k	2.1 %
No-load losses	ΔP ₀	16 W
Total losses	ΔP	110 W
Efficiency	η	97.3 %
Noise level		< 35 dBA
Recommended back-up fuse		32 A/gG
Designed according to standards		
Particular requirements and tests for isolating transformers for the supply of medical locations		IEC 61558-2-15:2011
Safety of power transformers, power supplies, reactors and similar		IEC 61558-1:2005

Application standards

Low-voltage electrical installations – Medical locations
Electric installations in rooms for medical use

HD 60364-7-710:2012
ČSN 33 2140, TNI 33 2140

Ordering, packaging and additional data

Mass m 58.5 kg

Customs tariff no. 85043200

EAN code 8590681174296

Art. number **72 233/23**



The link in the QR code leads to the online presentation of the **MED ECO-line 4 kVA**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit www.hakil.com



Internal diagram

