

TFO Med 600
TFO Med 1000



MEDICAL
ISOLATING TRANSFORMERS

TFO Med series

INTRODUCTION

The currently EU medical product directive determines that medical devices and systems have to be designed in a way that patients, operating personnel or other persons may not suffer while being in contact with those.

This generates strict requirements for the safety of the power supply of electrical medical devices and systems. Especially medical electrical systems for life support and monitoring life functions require very high reliability and quality of their power supplies.

Increased safety requirements are valid in hospitals, surgeries, dental surgeries and in other areas, where patients or operators can come into contact with electrical devices.

The use of medical isolating transformers for the power supply of electrical devices and systems, used in medical protected zones, offers a well-priced possibility to follow the EU medical product directive and to ensure the electrical safety for the power supply in a medical environment.



TFO Med series

TFO Med SERIES features

DICEL ELECTRONICS is proud to introduce a special isolating toroidal transformer for medical application built in an attractive and elegant white finish aluminum enclosure. The power entry module contains a power switch, green LED (when "on"), line filter for medical use and dual current limiting fuses. Double insulated windings ensure a galvanic physical separation between input and output as well as holding the leakage current below the stipulated maximum value.

This series work with a fix input and output at 230Vac. A built-in inrush current limiter on semi-conductor technique avoids an unwanted blow of the input fuses of the device or of an automatic circuit breaker of the building's sub-distribution through the inrush current. All models are equipped with as potential equalization bolt for the connection to a special medical potential equalization existing in the room of application. The protective earth conductor of the input socket is additionally conductively connected with the corresponding contacts of the output sockets. With this measure, devices are equipped with base potential equalization. Hereby, it is also possible to operate the devices in such medical rooms, in which no additional special potential equalization aside from the intact protective earth conductor of the wall socket is installed.

Transformers of the TFO Med series are designed for continuous operation. Self resetting temperature switches avoid damage through temperature rise in the device in a reliable way.



TFO Med series

MODELS AVAILABLE

DICEL ELECTRONICS introduces two medical isolating transformers models:

- TFO Med 600 with 600VA power
- TFO Med 1000 with 1000VA power

On request:

- Additional powers can be available: 150/300/2000VA
- Different output connections configurations

APPLICATIONS

Very high requirements for extremely low leakage current, as well as the reduction of the leakage current of several units combined for the hospital environment.

Typical applications:

- Computers
- Printers
- Analytical Instruments
- Surveying cameras
- Video monitors



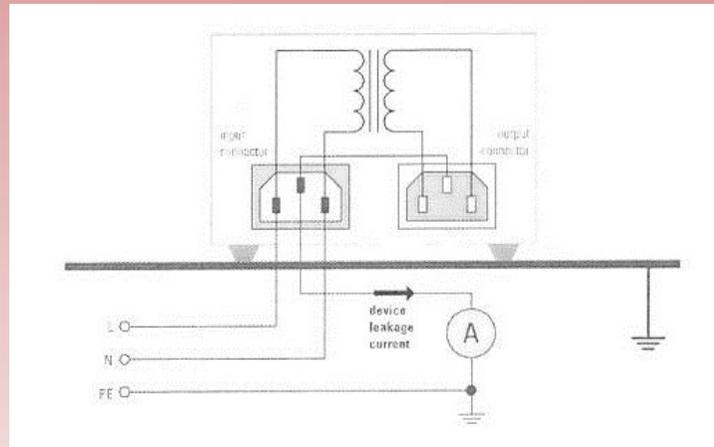
TFO Med series

Features	TFO Med 600	TFO Med 1000
Max power output	600VA	1000VA
Max power input	630VA	1040VA
Output sockets	6 X IEC 320	9 X IEC 320
Protection degrees	IP20	IP20
Weight / Kg.	9	14
Dimensions lxwxh / mm	270x188x92	305x218x110
Input and Output voltage	Primary 230Vac Secondary 230Vac 50/60Hz	
Device leakage current (primary)*	< 100µA	< 100µA
Output leakage current (secondary)*	< 100µA	< 100µA
Inrush current limiter	Thermal semiconductor	
Short circuit protection	Micro fuse primary	
Excess temperature protection	Self resetting temperature switch	
Cabinet	Sheet stell, powder-coated cabinet – RAL 7035	
Mains cable	included	included
CONFORMITY	EN 60601-1, EN 60601-1-1, EN 60601-1-2, EN 61558-1, EN 61558-2-4	

* See pictures next page



DEVICE LEAKAGE CURRENT



OUTPUT LEAKAGE CURRENT

