

# ETK ES

## Insulation panel for IT system

### GENERAL INFORMATION

The **IT system insulation board** provides a protected insulated power supply system, for surgical units and other critical care areas, designated as locations for wet procedures.

### COMPONENTS

Automatic switch  
Isolation transformer for medical use  
Transformer protection  
Insulation monitor  
Line insulation fault detector  
General ground busbar  
Circuit breakers

### TECHNICAL DATA

#### ELECTRICAL CHARACTERISTICS

Input voltage	400V~ 3N   230V~
Output voltage	230V~   230V~
Phases	Three phase   Single phase
Frequency	50-60Hz
Power	3 to 10kVA

#### AUTOMATIC SWITCH

Blackout	< 90ms
Modbus connection	optional
Manual bypass element	optional

#### ISOLATION TRANSFORMER

Voltage	230/400V~
Frequency	50-60Hz
Safety class	Class I
Leak current	< 0,5 mA
Power	3,15 a 10 kVA
Insulating class	F (155°C)
No load current	< 3%
Insulation resistance	7 MΩ

#### INSULATION MONITOR

Power supply	AC 84...264V~
Frequency	47-63 Hz
Safety class	Class I
Fault locator	AC/DC
Classification	MED

Monitored alarms

Ground wire connection failure  
Insulation leak  
Temperature in the isolation transformer  
Isolation transformer overcurrent  
Communication failure

#### FORCED VENTILATION

Max flow	150   170 m3/h
Power consumption	19   22W

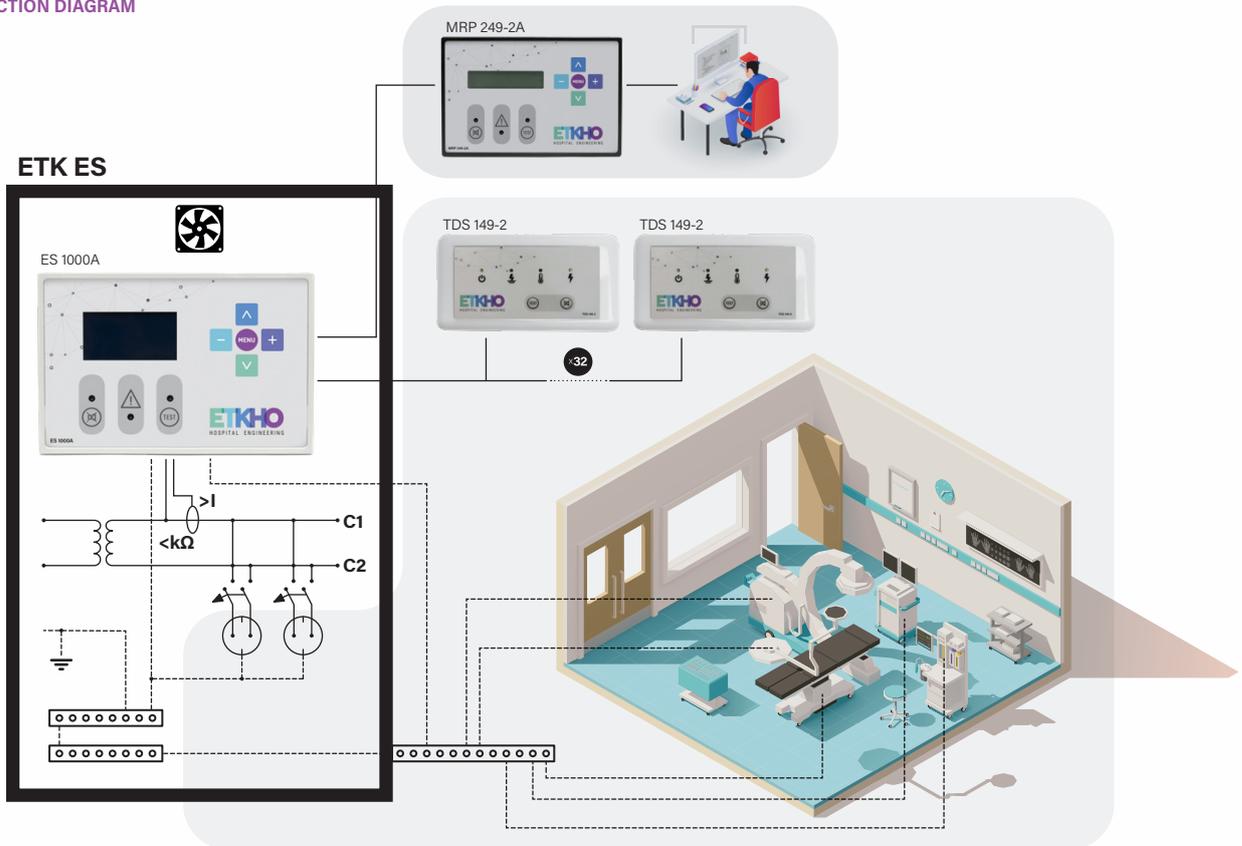
#### TEMPERATURE SENSOR

Precision	± 1%
Range	0° - 150°C



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**CONNECTION DIAGRAM**



**ACCESSORIES**

Temperature sensor **PT 340**

**COMPATIBLE EQUIPMENT**

AC Insulation Monitor	<b>ES 1000A</b>
Alarm repeater	<b>TDS 149-2</b>
Multi repeater	<b>MRP 249-2A</b>
Line insulation fault locator	<b>ES 449</b>
SCADA Management	<b>TDS 500-2</b>

**COMMUNICATION**

Remote communication with independent web server integrated into general building management systems.

**REGULATIONS**

EN 61439-1  
EN 61439-2  
IEC 60364-7-710  
BS7671  
HTM 06-01

