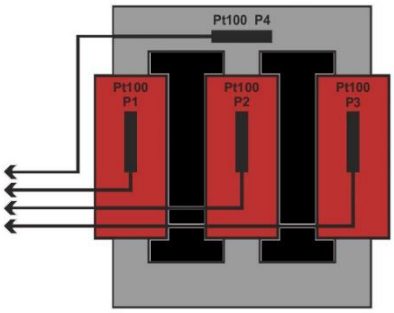
TEMPERATURE MONITORING UNIT FOR TRANSFORMERS

DQ61



DQ61 device is a temperature controller specifically designed for electrical equipment such as transformers, motors, generators.

DQ61 protects the machine when overload can lead to a rise in the temperature of the windings. Moreover, it controls the fans to maintain the temperature of the machine and preserve the normal working conditions.

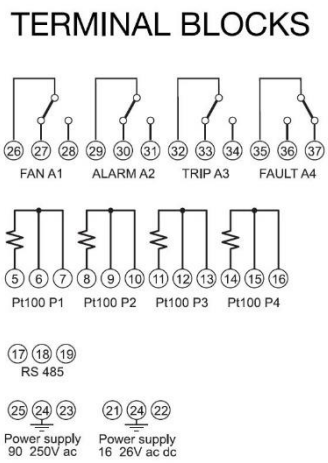
The DQ61 detects alarm conditions and intervenes disconnecting the transformers before they come to a dangerous situation.

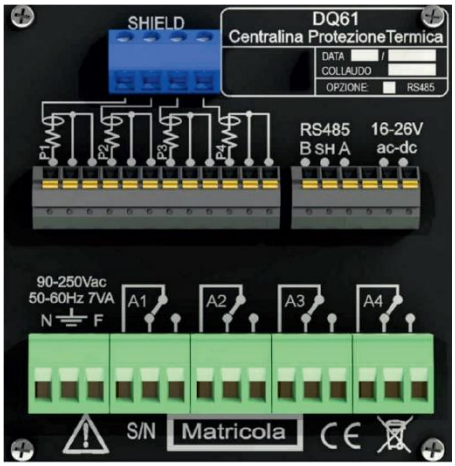
A self-diagnostic system continuously monitors the status of the temperature sensors and of the internal system, reporting potential anomalies. It can handle up to four temperature sensors Pt100 and three alarm stages.

The model DQ61 is a front panel mountable with overall dimensions of 96x96mm (3.77”x3.77” 4.5” depth)

An Oled high contrast graphic display allows the simultaneous visualization of the four temperatures monitored and of the alarms.

The scrolling menu helps and guides the parameters programming with clear messages, in the language selected by the operator





Technical data and images may be subject to a change without notice

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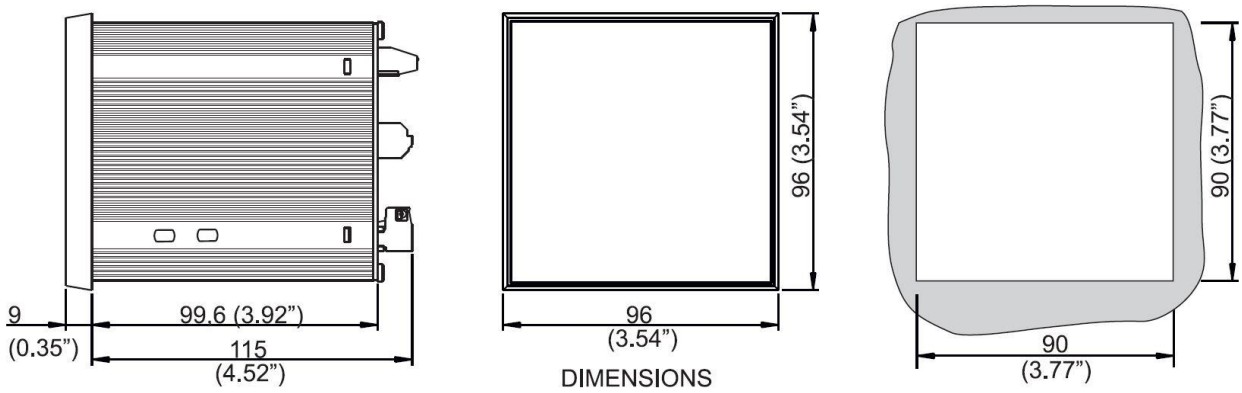

DIMENSIONS

TECHNICAL SPECIFICATION

– **Power supply**	Universal 90…240Vdc/Vac 50/60Hz and 16…26Vdc/ac, <4VA
– **Input voltage range**	± 10%
– **Available inputs**	N°4 RTD Pt100 3 wires
– **Cable length compensation**	Up to 500m (0,5mm2)
– **External connections**	Terminals wiring up to AWG 17 for Pt100 un up to AWG 14 for power and relays
– **Temperature range**	-20 … +200°C
– **Accuracy**	Better than 0,4°C ±1 digit
– **Output alarm relays**	N°2 SPDT 5A 250V for alarm and TRIP
– **Output fan relay**	N°1 SPDT 5A 250V
– **Output fault relay**	N°1 SPDT 5A 250V
– **Display**	Graphic OLED 2,4" 128x64 pixel
– **Keyboard**	Touch Capacitive
– **Alarms and signals**	4 dedicated led with test message on display
– **Menu Language**	English, Espanol, French, Italian, more on request
– **Unit of measure**	°C or °F
– **Dimensions**	Front 96x96mm, depth 115mm
– **Mounting**	Front panel
– **Panel cut-out**	90x90mm
– **Building according to CE directives**	2006/95/CEE (Low voltage) and 2004/108/CEE (EMC)
– **Protection against electric noise**	EN61326-1
– **Dielectric strength**	2500Vca for 1 minute
– **Isolation**	Better than 100MOhm at 500Vcc ground-other terminals
– **Frontal protection**	IP40, IP65 optional
– **Ambient operating temperature**	-20 … +60°C
– **Ambient operating humidity**	Max 90% not condensing
– **MTBF**	Better than 100.000 h
– **Data storage**	More than 10 years
– **Recorded data**	Max temp on each channel; Each alarm number of activations
– **Remote control (optional)**	Optoisolated RS485, MODBUS RTU protocol
– **weight**	330 g. (unit only) 350 g. (with manual and packing)

Self diagnosis with error signal on the FAULT relay.
Integrated counters (partial and total) for hours of work done
Ability to schedule the regular switch-on of the fans from the service menu
FCD function: ability to set an alarm if the temperature change is too fast (°C/s) from the service menu
Ability to disable alarms for probes P1 P2 and P3 from the service menu
Ability to disable alarm activation for probe P4 from user menu

PT100 TEMPERATURE PROBE
PT1001M-25

DESCRIPTION

Pt100 thermometer sensor with extensible cable and 3 shielded conductors with 2.5m standard length (other size on request).

TECHNICAL DETAILS

Operating temperature -40÷220°C
Protection level: IP68

PROBE/SENSOR ELEMENT

Type: RTD Pt100 ohm at 0°C
Coefficients: α=0,385 Ω/°C
Calibration: IEC 751, BS 1904
Accuracy: Class B

CABLE

Flexible tinned copper wires 3 x 24 AWG
Primary insulation: silicon rubber
Aluminium foil shield
Secondary insulation: grey silicone rubber

TESTS

Temperature isolation at room temperature (>5000 M Ω 2500 Vdc)
Dielectric strength: 5KVac for 60”

KEY FEATURES

- Operating temperature -40÷220°C
- Protection level: IP68
- Class B accuracy
- Reliable cables for industrial application
- 5KVac isolation for 60’