# ZYGGOT TEMPERATURE

Contactless Online Thermography System





# Predictive maintenance with thermography

ZyggotTemperatureisanOnlineThermography system and predictive maintenance tool that was developed for low and medium voltage panels or other critical applications with critical electrical connections. The sensors measure the temperature continuously, without physical contact, by infrared detection. Each sensor measures two temperature levels:

from the target and from the air surrounding the sensor, allowing detection of flaws in unmeasured points, by indirect heating. The relays provide local protection and also through the supervisory system. Alarm and trip levels are freely programmable for each point. An eventual failure in one of the sensors does not interrupt the operation of the other sensors.

# > Features



Predictive diagnostics



No need to open the switchgear



Replaces tradicional thermography



Single cable



Continuous reading



Contactless measurement

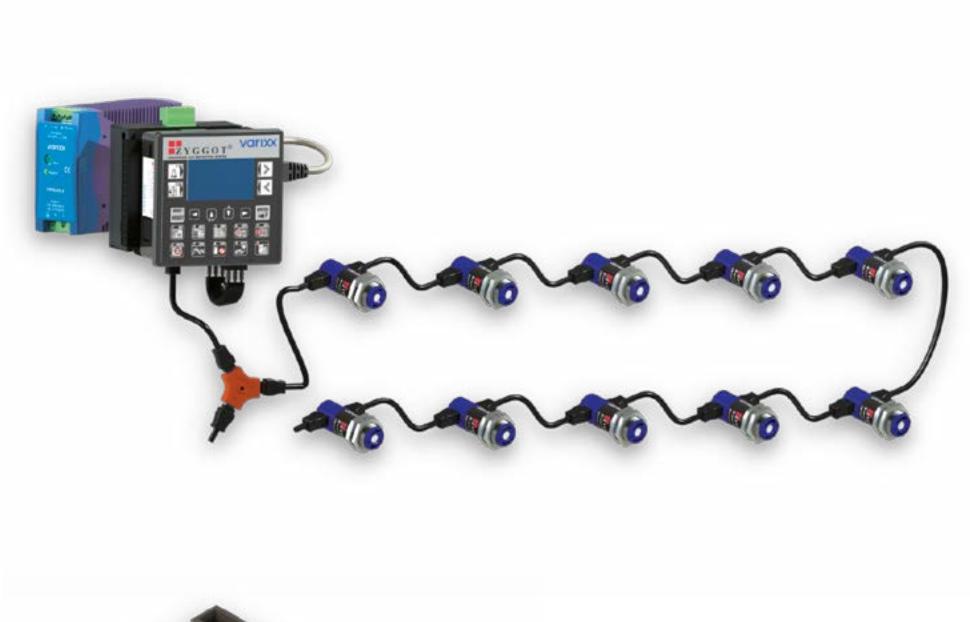


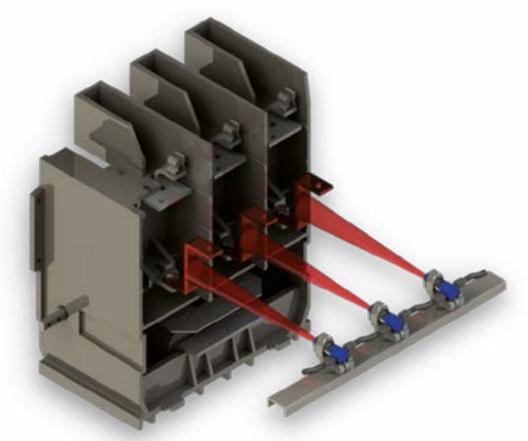
Easy Installation



Network communication

**ZYGGOT TEMPERATURE** > Contactless Online Thermography System









Support for fixing and sighting for Temperature Sensor









Low-Voltage Temperature Sensor backside

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# Low and medium voltage solutions

The Zyggot Temperature Sensor is a predictive maintenance tool, monitoring the temperature of low and medium voltage electrical panels or other critical electrical connections. The sensors measure the temperature and allow a continuous reading. Each sensor measures two temperature levels: the point and the surrounding air. They are connected in a certain way that allows a fast, error-free and tool-free installation.



### Temperature Sensor

#### Sensor specifications:

MEASUREMENT ANGLE	TARGET TEMPERATURE	LENGTH
7°	0 to 300°C	53mm (2,08 in)
PRECISION	ENVIROMENT TEMPERATURE	COMMUNICATION
+/= 2,5% F.S.	0 to 75°C	Modbus RTU
EMISSIVITY	POWER SUPPLY	MATERIAL
Adjustable (0,95 default)	24 VDC	Stainless Steel Polycarbonate
RESOLUTION	DIAMETER	
1°C	19mm (0,74 in)	

# > Low voltage solutions

The Zyggot LV Temperature Sensor was developed for applications in low voltage electrical panels that require a large number of sensors in a small space, many critical points and connections to make the thermography, and a low cost. It can be attached by screw or stainless steel tape directly to the busbar, ensuring space savings without compromising the insulation. The temperatures can be monitored at the relay or in a supervisory system.



## Low-Voltage Temperature Sensor

#### Sensor specifications:

RESOLUTION

1°C

MEASUREMENT ANGLE

O°	0 to 120°C	54mm (2,12 in)
RECISION	ENVIROMENT TEMPERATURE	COMMUNICATION
′= 2,5% F.S.	0 to 75°C	Modbus RTU
MISSIVITY	POWER SUPPLY	MATERIAL
djustable (0,95 default)	24 VDC	Polycarbonate

TARGET TEMPERATURE

DIAMETER

31mm (1,22 in)

LENGTH

Each relay supports up to 125 sensors, and the reading values from each sensor can be plotted on a graph at the relay or using a supervisory system. The cables available are from 0.3 to 8 meters, pre-assembled and quick to install, error-free and tool-free. Each relay supports up to 125 sensors.

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### Temperature Touch Relay

POWER SUPPLY

24 VDC

#### INPUTS

4 analog (light version)

4 analog (full version / 0 - 5 VDC)

4 digital (light version)

12 digital (full version / 24 VDC)

#### OUTPUTS

2 outputs for Alarm and Trip (N.O.)
2 programable outputs (N.O. / light version)
10 programable outputs (N.O. / full version)
1 output for connecting the sensors

#### SCREEN

Color, Touch screen WVGA



#### HUMIDITY

5 to 95%

#### NUMBER OF SENSORS

Up to 125 sensors

#### RESOLUTION

1°C

#### COMMUNICATION

Modbus RTU

Ethernet TCP-IP (included)

### Temperature Relay

POWER SUPPLY

24 VDC

#### INPUTS

4 analog 8 digitals (24 VDC)

#### OUTPUTS

2 outputs for Alarm and Trip (N.O.)4 programable outputs (N.O.)1 output for connection of the sensors

#### HUMIDITY

5 to 95%

#### NUMBER OF SENSORS

Up to 125 sensors

#### RESOLUTION

1°C

#### COMMUNICATION

Modbus RTU
Profbus DP (optional)



Learn more technical details about Zyggot Temperature, Varixx's Online Thermography System that predictively monitors and protects low and medium voltage or other critical electrical connections.

And also get to know Zyggot Arc, Varixx's Arc Flash Protection System that works through intelligent sensors, capable of detecting UV radiation in the initial phase of the arc. It can be applied in low, medium high voltage electrical panels and external applications.









