



EVO-LUTION WS LINE

THE “REAL” BLACK BOX OF YOUR TRANSFORMER!



Why can we compare the new WS-EVO Line to the “real” **Black Box**? And what has changed compared to the WS Line? What are the added values?



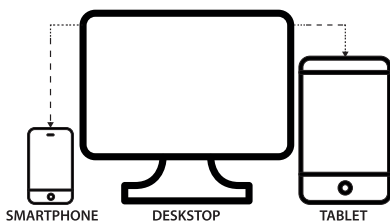
CALENDAR (RTC) and CLOCK self-powered: thanks to this new feature, the control unit records all events from the moment it is installed and switched on



TEMPERATURES RECORDING CAPACITY = 10 years
EVENT REGISTRATION CAPACITY = 10,000



DARK BACKGROUND THEME to ensure environmental sustainability (reduction of electrical consumption of devices) and operator health (reduction of visual fatigue)



RESPONSIVE DESIGN: it adapts its graphic structure to be always intuitive, whatever the device used to read the information



WiFi connected to WiFi-R&D (-62 dBm) - Modbus running

Display of the **INTENSITY OF THE WI-FI SIGNAL RECEIVED**



STATISTICS for each channel (maximum and minimum temperature reached - weighted average temperature - hours of operation of the ventilation system fan1 and fan2 - alarm and tripping events counter)

EXPORT of the temperatures measured in CSV file compatible with spreadsheets, selectable for each single year of the 10 REGISTERED + export - always in CSV - of all the events recorded on the date in which it is performed.



SENDING EMAILS (max 2 recipients) for the following events: system restart - modification of programming parameters - alarm and trip



ENTER PIN to authorize programming

TECSYSTEM: Listen, Create, Propose, Design!



TECHNICAL SPECIFICATIONS

NT935WS-EVO

POWER SUPPLY

Rated values 85-260 Vac-dc 50/60 Hz
Vdc with reversible polarities

INPUTS

4 inputs RTD Pt100 3 wires
Removable rear terminals
Input channels protected against electromagnetic interference
Sensor length cable compensation up to 500 m (1 mm²)

OUTPUTS

2 alarm relays (ALARM-TRIP)
2 alarm relays for fan control (FAN1 and FAN2)
1 alarm relay for sensor fault or working anomaly (FAULT)
Output contacts capacity: 10A-250 Vac-res COSΦ=1
Wi-Fi connection: protocols 802.11 b/g/n, frequency 2.4 GHz with removable external antenna

TESTS AND PERFORMANCES

Assembling in accordance to CE and RED rules
Protection against electromagnetic noises CEI-EN61000-4-4
Dielectric strength: 1500 Vac for 1 minute from relays to sensors, relays to power supply, power supply to sensors
Accuracy: ± 1% full scale value ± 1 digit
Ambient operating temperature: from -20°C to +60°C
Humidity: 90% non-condensing
Self-extinguishing housing NORYL 94_V0
Polycarbonate frontal film IP65
Burden: 7,5VA
Digital linearity of sensor signal
Self-diagnostic circuit
Option: tropicalization
Internal battery for RTC power supply 3V 220mAh

DISPLAYING AND DATA MANAGEMENT

2 displays 13 mm with 3 digits for displaying temperatures, messages and channels
3 leds to display the state of the alarms of the selected channel
2 leds to display the state of FAN1 and FAN2
Temperature monitoring from 0°C to 240°C
2 alarm thresholds for channels 1-2-3
2 alarm thresholds for channel 4
2 ON-OFF thresholds for FAN1 and FAN2
Sensors diagnostic (Fcc-Foc-Fcd)
Data storage diagnostic (Ech)
Access to programming through front keyboard
Automatic exit from relay programming, display and test after 1 minute's inactivity
Incorrect programming warning
Possibility of setting automatic channels scanning, hottest channel, manual scanning
Maximum reached temperatures and alarm storage
Frontal alarm reset push button
Voting function
Intellifan function
Fail Safe function
Wi-Fi WEB SERVER function
Internal clock keeping in STATION (NTP server) and ACCESS POINT mode
Automatic sending of alarm activation e-mails
Periodic sending of channel statistics reports

DIMENSIONS

100 x 100 mm DIN 43700 depth 150 mm
(terminals and antenna - installed at 90° - included)
Panel cut-out 92 x 92 mm

NT538WS-EVO

POWER SUPPLY

Rated values 85-260 Vac-dc 50/60 Hz
Vdc with reversible polarities

INPUTS

8 inputs RTD Pt100 3 wires
Removable rear terminals
Input channels protected against electromagnetic interference
Sensor length cable compensation up to 500 m (1 mm²)

OUTPUTS

2 alarm relays (ALARM-TRIP)
2 alarm relays for fan control (FAN1 and FAN2)
1 alarm relay for sensor fault or working anomaly (FAULT)
Output contacts capacity: 10A-250 Vac-res COSΦ=1
Wi-Fi connection: protocols 802.11 b/g/n, frequency 2.4 GHz with removable external antenna

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DISPLAYING AND DATA MANAGEMENT

2 displays 13 mm with 3 digits for displaying temperatures, messages and channels
3 leds to display the state of the alarms of the selected channel
2 leds to display the state of FAN1 and FAN2
Temperature monitoring from 0°C to 240°C
1 ALARM threshold for each channel
1 TRIP threshold for each channel
2 ON-OFF thresholds for FAN1 and FAN2 in common or all enabled channels
Sensors diagnostic (Fcc-Foc-Fcd)
Data storage diagnostic (Ech)
Access to programming through front keyboard
Automatic exit from relay programming, display and test after 1 minute's inactivity
Incorrect programming warning
Possibility of setting automatic channels scanning, hottest channel, manual scanning
Maximum reached temperatures and alarm storage
Frontal alarm reset push button
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