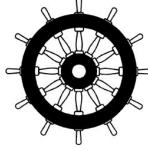


EXPLORER RTC SERIES

Sensors / Transmitters for combustible gases



- Ex Aluminum Case for 3/4" NPT cable gland
- For ATEX 94/9/EC Security Systems
- For ABS – RINA – MED[®] marine applications
- Sensor case in INOX steel
- Accessories complete series
- Very good price-quality relationship
- Very fast response



The RTC sensors series permit the monitoring in continuous, in Exd classified Areas, of combustible gas (%LEL). The die-cast aluminium tin container is done according with the ATEX directions.

The interior display, mounted on the transmitter PCB card, get easy the control recurring procedures, check and calibration, through the easy 3 buttons use.

The sensors are approved for applications in the naval field: RINA, MED e ABS Type approval.

These sensors are available in the standard version (VQ-01 type) and also in the "poison resistant" version (VQ-21 type) to endure to the chemical aggression such as for example solvents.

The RTC sensor range is complete with the thermoconductivity sensor (VQ-06 type) for measurements till 100% vol.

The outlet signal is 4-20mA with 3 conductors.

All the RTC series sensors are compatible with the Explorer control units and with any control unit admitting the signal 4-20mA.

The transmitters are supplied with a specific circuit balancing automatically the zero point drifts.

Through the buttons and the display you can access a list of combustible gas with the referred correction factors, respect to the standard gas calibration (CH₄).

RTC Series is made of the following sensors :

- **RTC 1001:** Sensor with transmitter of combustible gas at 0-100%LEL, VQ-01, standard applications, CH₄ calibration
- **RTC 1002:** Sensor with transmitter for combustible gas at 0-100 %LEL, VQ-21 PR, inside environments rich of silicones, lead, Sulphur-containing compounds, and halogen hydrocarbons.
- **RTC 1003:** Sensor with transmitter at 0-100 %VOL thermal conductivity, VQ-06, for measurement in % volume of Methane, Carbon Dioxide, Helium, etc.
- **RTC 1004:** Sensor plus transmitter for combustible gas at 0-100%LEL, VQ-01, standard applications , calibration different from CH₄ (to be specified during the Purchase Order)
- **RTC 1005:** Sensor plus transmitter for combustible gas at 0-100%LEL, VQ-21 PR, calibration different from the CH₄ (to be specified during the Purchase Order)

Purchase Order Details

RTC 1001	1001700
RTC 1002	1001710
RTC 1003	1001730
RTC 1004	1001705
RTC 1005	1001715

RECOM INDUSTRIALE s.r.l.

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Cap. Soc.€110.000,00 int.Vers.

C.C.I.A.A. 38999 GE
 RE.A. 365226 GE
 P.IVA e C.F. 03618890101

Technical Specifications	
Mechanical Details	
Enclosure	Die-cast aluminum
Dimensions	71 (H) x 40 (P) x 53 (L)
Weight	620 gr.
Enclosure rating	IP-6X
Electric Details	
Display	Internal with 7-segments, 4-digit LCD
Power Supply	12- 24 Vcc
Absorption	5 – 25 W
Connection	4-20mA, 3 conductors
Sensitivity	1%
Linearity	100%
Sensors	
Measurement range	<ul style="list-style-type: none"> 0 – 100 % LEL 0 – 100 % vol.
Sensor	<ul style="list-style-type: none"> Catalytic VQ-01 Catalytic VQ-21 PR Thermal conductivity VQ-06
Response Act	T ₉₀ < 25 sec.
Working operative conditions	
Temperature	-20°C / + 55°C
Humidity	0% - 95% low levels of humidity (not condensing)
Pression	Atmospheric +/- 10%
Certifications	CE – Electromagnetic Compatibility ATEX II G Ex D IIC T6 Gb RINA ELE 272113CS MED 272113CS ABS 13-GE975317-PDA
Set-up parameters	<ul style="list-style-type: none"> Language (Italian, English) Gain, offset, and range for each channel Alarm levels Channel sample time

Gas	Range	Gas	Range
Methane CH ₄	0 ÷ 100% LEL	Helium He	0 ÷ 100% LEL
Propane C ₃ H ₈	0 ÷ 100% LEL	Chlorobenzene C ₆ H ₅ Cl	0 ÷ 100% LEL
n-Butane C ₄ H ₁₀	0 ÷ 100% LEL	Ethanol C ₂ H ₆ O	0 ÷ 100% LEL
Iso- Butane C ₄ H ₁₀	0 ÷ 100% LEL	Ethane C ₂ H ₆	0 ÷ 100% LEL
n-Pentane C ₅ H ₁₂	0 ÷ 100% LEL	Ethyl Acetate C ₄ H ₈ O ₂	0 ÷ 100% LEL
Gasoline Gas	0 ÷ 100% LEL	Ethylene C ₂ H ₄	0 ÷ 100% LEL
n-Eptane C ₇ H ₁₆	0 ÷ 100% LEL	Ethylmercaptane C ₂ H ₆ S	0 ÷ 100% LEL
n-Hexane C ₆ H ₁₄	0 ÷ 100% LEL	Iso-Butyl alcohol C ₄ H ₁₀ O	0 ÷ 100% LEL
n-Optane C ₈ H ₁₈	0 ÷ 100% LEL	Isopropyl alcohol C ₃ H ₈ O	0 ÷ 100% LEL
Toluene C ₇ H ₈	0 ÷ 100% LEL	Isobutylene C ₄ H ₈	0 ÷ 100% LEL
Nitrogen NH ₃	0 ÷ 100% LEL	Methanol CH ₄ O	0 ÷ 100% LEL
Acetone C ₃ H ₆ O	0 ÷ 100% LEL	Methyl Mercaptane CH ₃ SH	0 ÷ 100% LEL
Acetylene C ₂ H ₂	0 ÷ 100% LEL	Methyl Ethyl ketone C ₄ H ₈ O	0 ÷ 100% LEL
Acetic Acid C ₂ H ₄ O ₂	0 ÷ 100% LEL	Xylene C ₈ H ₁₀	0 ÷ 100% LEL
Benzene C ₆ H ₆	0 ÷ 100% LEL	Methyl Amine CH ₅ N	0 ÷ 100% LEL
Ethyl Benzene C ₈ H ₁₀	0 ÷ 100% LEL		0 ÷ 100% LEL