

Gas Detection Control Unit ET-2D



Type: Wall mounted



Type: DIN-rail

Device Type

	ET-2D	ET-2DA	ET-2DD	ET-2DE	ET-2DAD	ET-2DAE	ET-2DAE	ET-2DADE
Wall mounted, 230 V AC	308000	308002	308004	308006	308008	308010	308012	308014
Wall mounted, 24 V DC	308001	308003	308005	308007	308009	308011	308013	308015
DIN-rail, 24 V DC	308020	308021	308022	308023	308024	308025	308026	308027
DIN-rail, 230 V AC								

type 24 V DC + power supply (article-no. 940487)

Description

Description: Gas detection control unit for measurement of flammable and/or toxic gases as well as oxygen. Smoke detectors as option. Graphic display. Menu guided configuration. 2 Alarm levels per channel. 5 freely configurable relays.

Extensions

Analogue outputs (A):	4...20 mA (not isolated)
Data logger (D):	- Recording of all measured values and messages - Rate: every 10 s - Storage medium: USB-Stick - Scope of delivery 16 GB (max. storage time appr. 4 years) - Integrated in housing
Ethernet-Module (E)	- Connection to network - Transmission of all measured values and messages - Preparation for remote maintenance

Features

Number of Transmitters:	2 Gas Transmitters (4...20 mA) - Line with up to 2 smoke detectors (Art. 297000)
Indication:	- Illuminated graphic display (Measured values, messages, user menu) - LED-indication for gas transmitters - Pre- and main alarm (2 x 2 x red), - Status of measuring channel: operation (2 x green), fault (2 x yellow), - Status of control unit: operation (1 x green), fault (1 x yellow)
User Interface:	- Menu guided system via display and six push buttons - Completely configurable at device, no tools needed - Password protected - Adjustment of measuring channels at control unit - Maintenance mode to be activated via menu or digital input
Alarm Evaluation:	2 freely adjustable alarm levels per transmitter - rise above level - fall below level - Latching of each alarm configurable
Relays, potential free:	5 Change-over contacts 230 V / 4 A (total current ET-2D: max. 10 A) - Freely configurable with alarms and fault messages - Operation selectable: normally closed and normally open - Horn reset selectable: quit in spite of present message 2 Change-over contacts 230 V / 4 A (total current ET-2D: max. 10 A) - Fault of control unit - Maintenance mode
Inputs:	2 Analogue inputs 4...20 mA for Transmitter 2 Digital inputs, 24 V DC, potential free (for smoke detectors)
Outputs:	- Extension A: 4...20 mA (not isolated) - Interface RS232 or RS485/RS422 (configurable)

Gas Detection Control Unit ET-2D

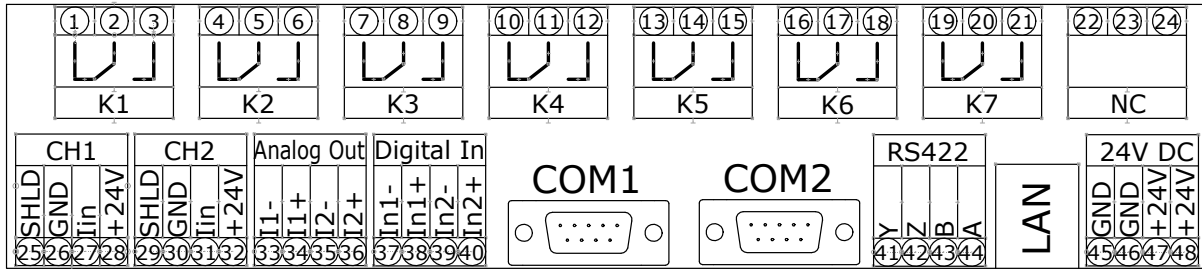
Electrical Features

Power Supply:	230 V AC or 24 V DC
Power Consumption:	maximum 30 W
Operation Temperature:	-20 °C to +55 °C, Humidity: non condensing
Storage Temperature:	-25 °C to +60 °C, Humidity: non condensing

Conformity

EG-Directives:	CE Ⓜ II (3)G 2014/34/EU (ATEX), 2014/30/EU (EMV), 2014/35/EU (LVD)
Measuring Function:	Designed acc. to - DIN EN 60079-29-1 - DIN EN 45544-1 to DIN EN 45544-3 - DIN EN 50104

I/O-Connection Scheme



Clamps 1 to 15:	Relays 1to 5 (K1 to K5): Open/Common/Close
Clamps 16 to 18:	Relay System Fault (K6): Open/Common/Close
Clamps 19 to 21:	Relay Maintenance (K7): Open/Common/Close
Clamps 22 to 24:	n. e.
Clamps 25 to 28:	Transmitter Channel 1 (Shielding/PE, Ground GND, 4...20 mA, power supply)
Clamps 29 to 32:	Transmitter Channel 2 (Shielding/PE, Ground GND, 4...20 mA, power supply)
Clamps 33 to 36:	4...20 mA-Analogue output for Channel 1 and 2 (Extension A)
Clamps 37 to 40:	Connection Smoke detector (or Digital input 1/2, only for special functions)
COM1:	RS232-Interface (D-Sub9-Plug): output measured values/messages
COM2:	RS232-Interface (D-Sub9-Plug): for service purposes only
Clamps 41 to 44:	RS422/485
LAN	Ethernet-Interface (RJ45-Bushing) (Extension E)
Clamps 45 to 48:	Power supply 24 V DC (Version 230 V AC already wired internally)

Relays Configuration

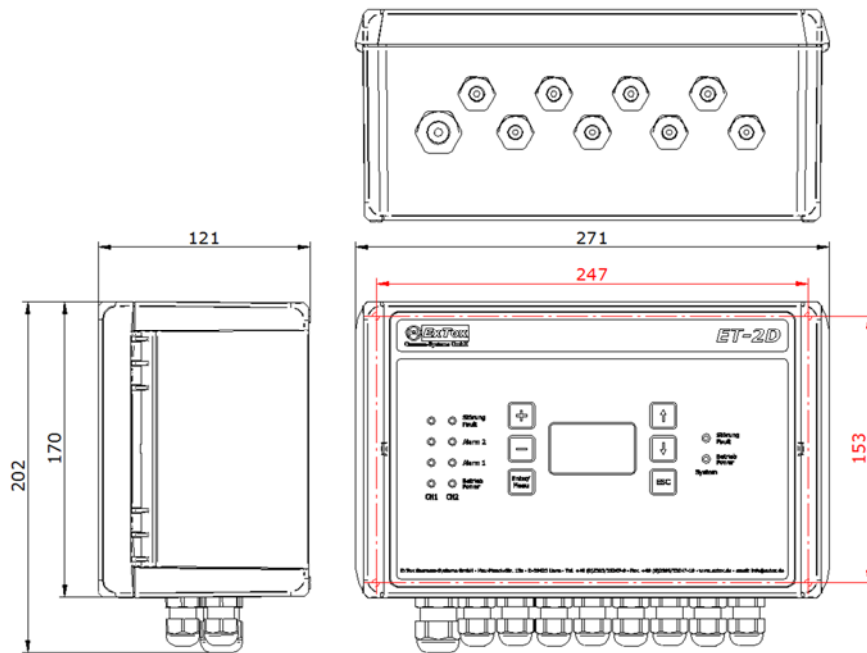
Relays 1 to 5 (K1 to K5):	Freely adjustable at device (Alarm 1, alarm 2, fault, reset-able, operation: normally closed or normally open)
Option:	Adjustment according to customer requirements: - on factory-sided delivery - at location by ExTox-Service

Options/Spares

Art.-No. 825023	ProfiBus-Module incl. standard protocol
Art.-No. 825022	ProfiNet-Module incl. standard protocol
Art.-No. 825017	ModBus-Module incl. standard protocol
Art.-No. 825019	Remote Indication 4-Channel (external)
Art.-No. 940439	Measurement of environmental conditions: - Temperature - Relative Humidity - Absolute pressure (can be integrated into basic unit)

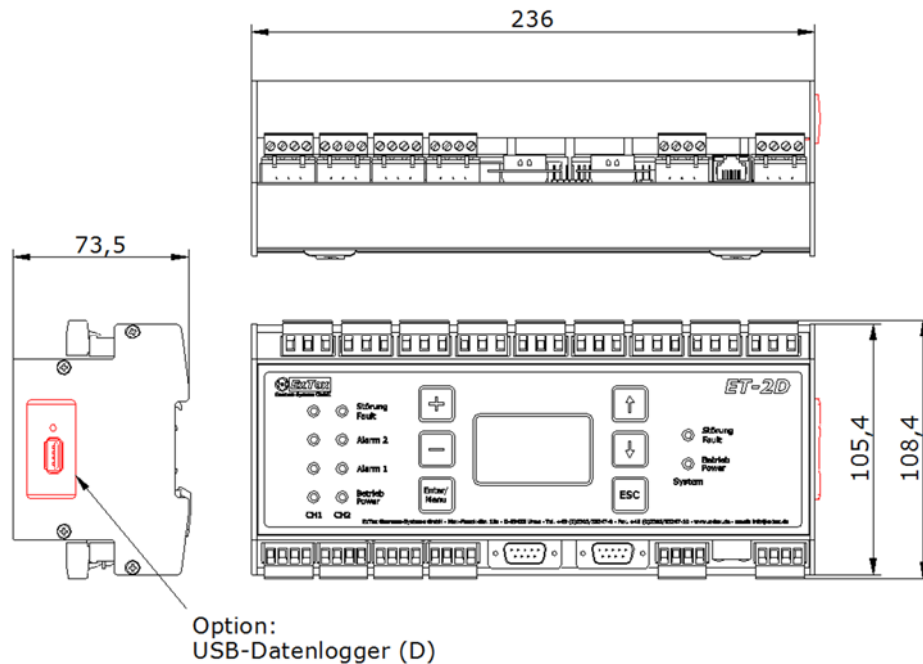
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Type Wall mounted



Type:	Wall mounted for fix installation
Material:	Housing ABS
Enclosure Rating:	IP 54
Cable Gland:	1 piece M20 x 1.5 (Diameter of cable 7-13 mm) 8 piece M16 x 1.5 (Diameter of cable 5-10 mm)
Installation Hints:	- Lead-through for mounting screws: d= 4.5 mm - Housing can be opened for installation and maintenance purposes by turning the lid left side. Provide free space.

Type DIN-Rail



Type:	Installation on standard DIN-Rail 35 mm x 7.5 mm
Material:	Aluminium-DIN-Rail

(Subject to technical changes)