Gas Detection Control Unit ET-8D(A)



Description: Gas detection control unit for measurement of flammable and/or toxic gases as well as oxygen. Smoke detection as option. Graphic display. Menu guided configuration. 3 Alarm levels per channel. 24 freely configurable relays. Analog outputs 4...20 mA (only ET-8DA).

Article-No.	Wall Mounted		DIN-Rail		Control Panel		19"-Rack	
	230 V	24 V	230 V	24 V	230 V	24 V	230 V	24 V
ET-8D	320000	320003	320006	320007	320001	320004	320008	320009
ET-8DA	322000	322003	322006	322007	322001	322004	322008	322009

Features

Number of Transmitters: 1 to 8 (4-20 mA)

Signal Processing: Microcontroller with A/D-Converter

Alarm/Fault/Indication:
- Illuminated graphic display (240 x 64) for indication of measured values, messages and alarms
- 24 (3 x 8) red LEDs for alarm indication
- LEDs for indication of channel fault (8 x yellow), channel operation (8 x green), operation (1 x green), device fault (1 x yellow)

User Interface:
- Menu guided system via graphic display and keys
- Completely configurable at device, no tools needed
- 3 password protected servicing levels

Alarm Evaluation:
- 3 freely adjustable alarm levels per channel
- Monitoring: over-scale, under-scale or min/max
- Latching of each alarm configurable

Relays, potential free:
- 24 change-over contacts 230 V / 5 A (total power consumption: max. 10 A), freely configurable with Alarm 1 to 3 and transmitter fault
- 2 change-over contacts 230 V / 5 A for maintenance mode and device fault

Additional Features:
- Adjustment of zero point and sensitivity of measuring channels
- RS 232/RS 485-Interface for communication with external periphery (PC or PLT-System)
- Key switch function (maintenance mode)
- Horn reset
- Reactivation of alarms
- 4 Digital inputs, potential free
- 8 Analog outputs 4-20 mA/0-10 V, potential free (only ET-8DA)

Operation Temperature: -10 °C to +40 °C, Humidity: non condensing

Storage Temperature: -25 °C to +60 °C, Humidity: non condensing

Options: ProfiBus, ModBus, Ethernet connection, Visualisation ET-View, ...
(with integrated ProfiBus DP-Module: ET-8DP, 230 V (Art. 320010), ET-8DP, 24 V (Art. 320011))

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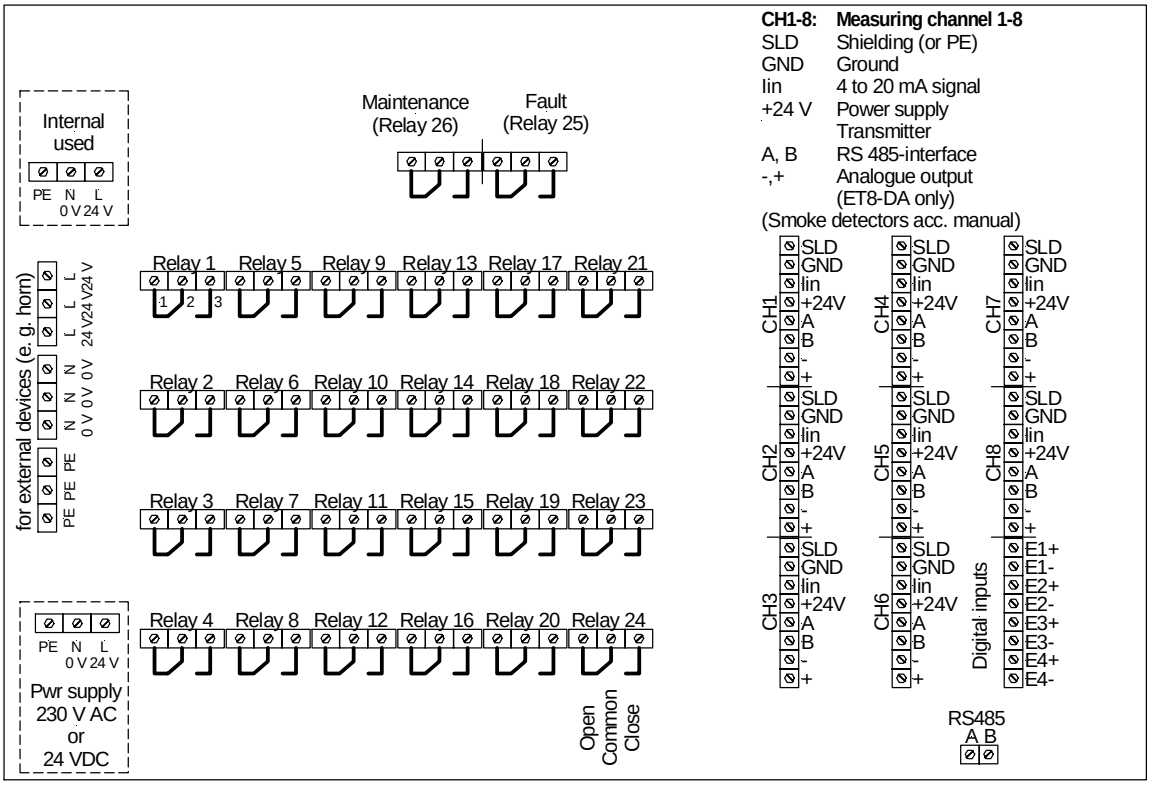
Electrical Features

Power Supply:	▪ 230 V AC (85...264 V AC, 47...440 Hz / 120...340 V DC) or ▪ 24 V DC
Power Consumption:	65 W (230 V AC: max. 0.3 A , 24 V DC: max. 3 A)

Conformity

EC-Directives:	CE Ex II (2)G (230 V AC, Software ET881118) or CE Ex II (3)G 94/9/EC (ATEX), 2004/108/EEC (EMV), 2006/95/EEC (LVD)
EC-Type Test:	BAM 10 ATEX 0301 X (Art. 320000, 322000) (acc. to Standards EN 60079-29-1:2007, EN 50271:2001)
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

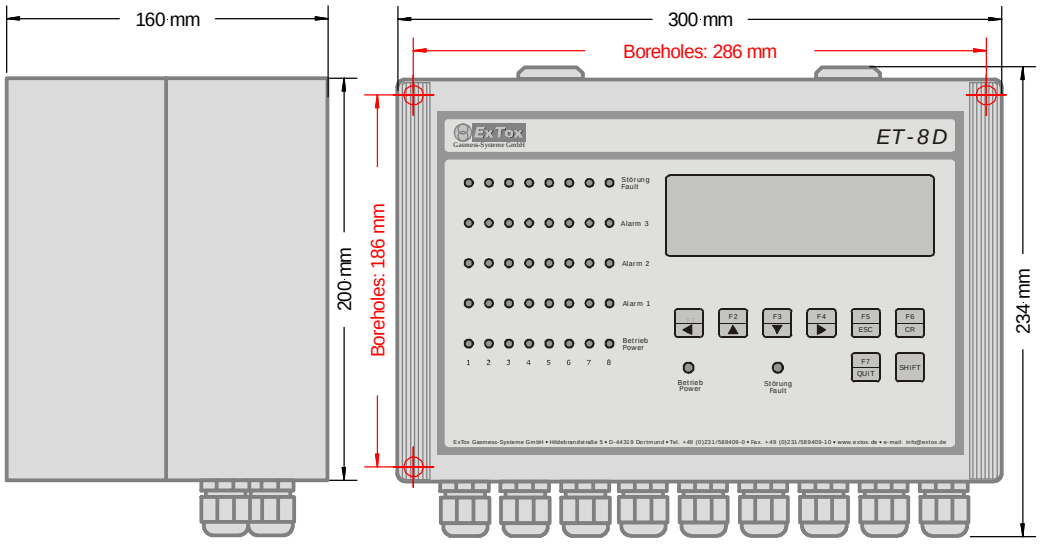


Relay Configuration

Relay 1 to 24:	Freely configurable at device (Alarm 1 to 3, fault, reset able, open-circuit/closed-circuit principle, logic linking AND/OR)
Relay 25:	Device fault
Relay 26:	Maintenance mode
Standard Settings:	Relay 1 to 8: 1. Alarm of channels 1 to 8 Relay 9 to 16: 2. Alarm of channels 1 to 8 Relay 17 to 20: not used Relay 21: 1. Common Alarm of channels 1 to 8 Relay 22: 2. Common Alarm of channels 1 to 8 Relay 23: 3. Common Alarm of channels 1 to 8 Relay 24: Common fault of channels 1 to 8 All relays: closed-circuit, non reset able (deviations possible when used in ExTox IMC, in special versions or in combination with smoke detectors)
Option:	Adjustment acc. to customer requirements: ▪ on factory-sided delivery ▪ at location by ExTox-Service

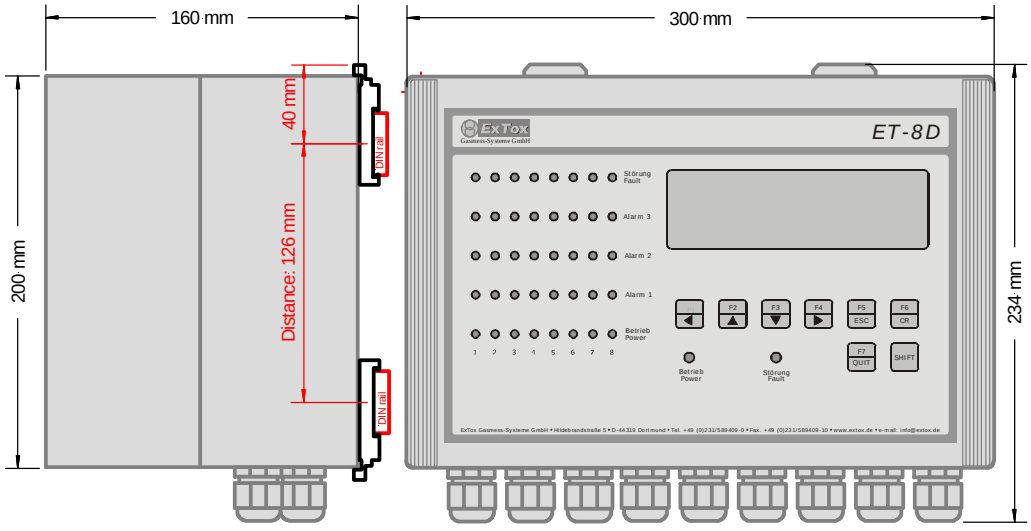
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Type Wall Mounted



Type:	Wall mounted housing for fix installation
Dimension (WxHxD):	300 mm x 234 mm x 160 mm
Material:	Housing ABS
Enclosure Rating:	IP 54
Cable Gland:	▪ 1 x M20 x 1.5 (diameter of cable 7-13 mm) ▪ 15 x M16 x 1.5 (diameter of cable 5-10 mm)
Installation Hints:	▪ Lead-through for mounting screws: d= 4.5 mm ▪ The housing can be opened for installation and maintenance purposes by tucking up the cover. Provide free space above the housing.

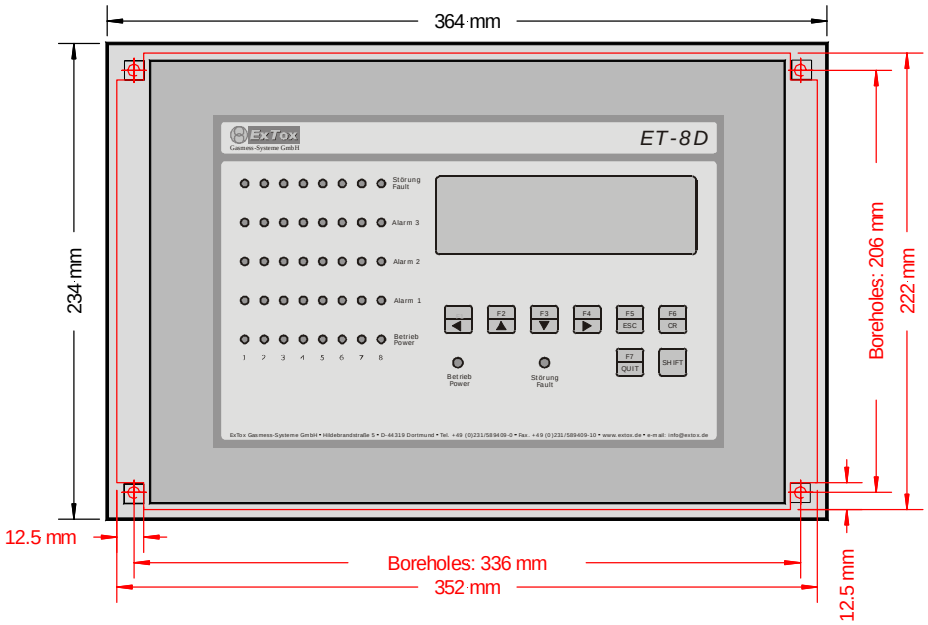
Type DIN-Rail



Type:	Identical to wall mounted type, but additionally with adapters for installation on Standard DIN-Rails 35 mm x 7.5 mm
Installation Hints:	▪ Adapters are mounted on the back plate to snap-in the housing on the DIN-rails. The connection can easily be loosened by a screw-driver. Pull up the nozzle of the adapter. ▪ The housing can be opened for installation and maintenance purposes by tucking up the cover. Provide free space above the housing.

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Type Control Panel



Type:	Installation in control panels or cabinets. Indication/Controller to be installed in front cut-out. I/O-clamp terminal can freely be positioned on mounting places.
Dimension (WxHxD):	364 mm x 234 mm x 80 mm (Indication/Controller) 300 mm x 200 mm x 40 mm (I/O-clamp terminal)
Material:	Front lid: Polystyrene with double front seal
Enclosure Rating:	IP 54 (front lid)
Installation Hints:	▪ Lead-through for mounting screws: d= 3 mm ▪ I/O-clamp terminal for remote installation inside the cabinet: Bore holes: 286 mm x 186 mm, Connection cable: ca. 1.8 m (special length on demand)
Options:	▪ I/O- clamp terminal not remote: installation is done on the backside of the controller PCB. Depth of complete device: ca. 160 mm ▪ Front lid for adaption to customer specific dimensions of control panel cut-out

Type 19''-Rack

Type:	Identical to Control Panel Type, but built-in 19''-frame rack
Dimension (WxHxD):	482.6 mm (84 TE) x 265.35 mm (6 HE) x 185 mm

(Subject to technical changes)