

Gas Detection Control Unit ET-1D(A)



Description: : Gas detection control unit for measurement of flammable and/or toxic gases as well as oxygen. Display. Menu guided configuration. 2 alarm levels. 2 alarm, horn and fault relays. Analogue output 4...20 mA (only ET-1DA).

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-1D	303010	303011	303014	303015
ET-1DA	305010	305011	305014	305015

Features

- Number of Transmitters: : 1 (4-20 mA)
- Signal Processing: : Microcontroller with A/D-Converter
- Alarm/Fault/Indication: :
 - Illuminated 4-lined display for indication of measured values, messages and alarms, bar graph indication of concentration
 - Green operation LED
 - 2 reds alarm LEDs (alarm level 1 and 2)
 - yellow LED for indication of device and transmitter fault
- User Interface: :
 - Menu guided system via display and keys
 - Completely configurable at device, no tools needed
 - Password protection
- Alarm Evaluation: :
 - 2 freely adjustable alarm levels
 - Monitoring: over-scale or under-scale
 - Latching of each alarm configurable
- Relays, potential free: : 4 change-over contacts 230 V / 5 A (total power consumption: max. 10 A) for Alarm 1 and 2, fault, horn
- Additional Features: :
 - Adjustment of zero point and sensitivity of measuring channel
 - Alarm locking in maintenance mode
 - Horn alarm separately reset able
 - 2 Digital inputs, potential free
 - Analogue Outputs 4...20 mA (only ET-1DA)
- Operation Temperature: : -10 °C to +40 °C
- Storage Temperature: : -25 °C to +60 °C, Humidity: non-condensing

Gas Detection Control Unit ET-1D(A)

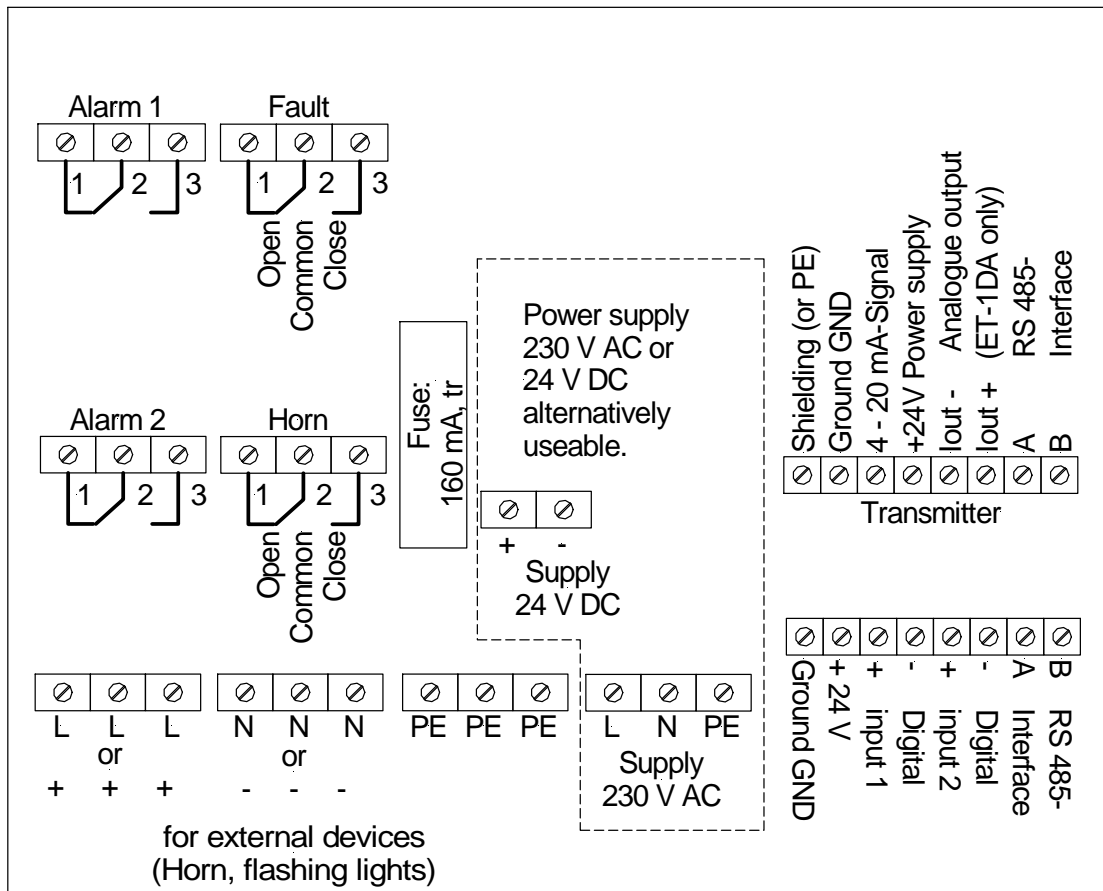
Electrical Features

Power Supply: : 230 V AC or 24 V DC (selectively useable)
 Power Consumption: : 20 W (230 V AC: max. 0.08 A , 24 V DC: max. 0.8 A)

Conformity

EC-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

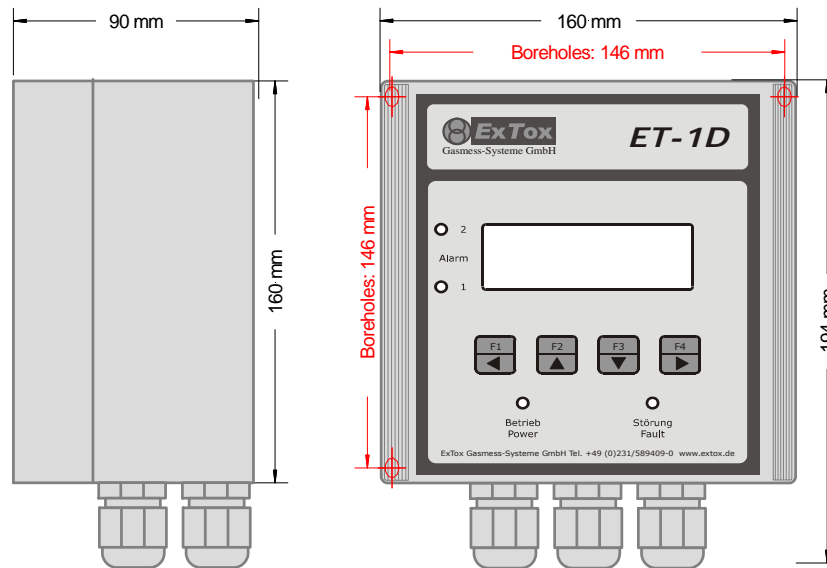


Relays Configuration

Relay 1 and 2: : Alarm 1 and 2 (freely configurable at device: Alarm levels, latching alarm, open-circuit/closed-circuit principle)
 Relay 3: : Device and transmitter fault (freely configurable at device: open-circuit/closed-circuit principle)
 Relay 4: : Horn (freely configurable at device: allocation to Alarm 1 or 2, open-circuit/closed-circuit principle)
 Standard Settings: :
 • Alarm 1, 2 and fault: closed-circuit principle
 • Horn: open-circuit principle, allocated to Alarm 2
 • Alarm 2: latching
 Options: : Adjustment acc. to customer requirements:
 • on factory-sided delivery
 • at location by ExTox-Service

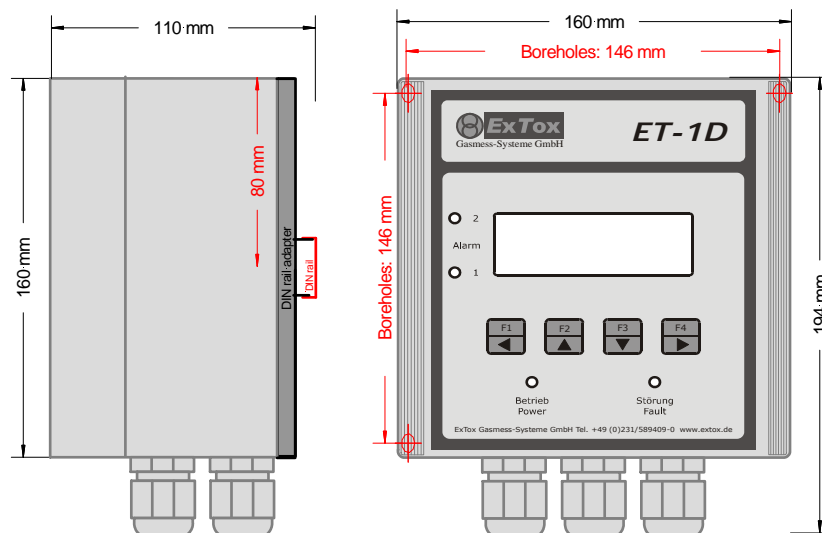
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Type Wall Mounted



- Type: : Wall mounted housing for fix installation
- Dimension (WxHxD): : 160 mm x 194 mm x 90 mm
- Material: : Housing ABS
- Enclosure Rating: : IP 54
- Cable Gland: :
 - 1 x M20 x 1.5 (diameter of cable 7-13 mm)
 - 5 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.

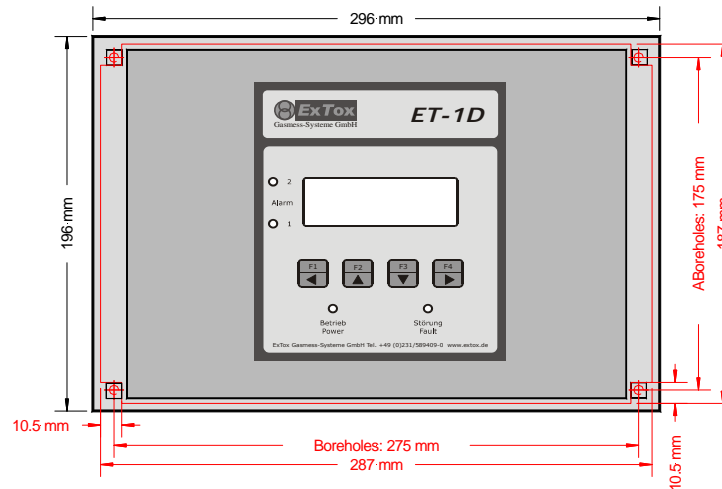
Type DIN-Rail



- 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 housing can be opened for installation and maintenance purposes by tucking up the cover. Provide free space above the housing.

Gas Detection Control Unit ET-1D(A)

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): : 296 mm x 196 mm x 80 mm (Indication/Controller)
160 mm x 160 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: 146 mm x 146 mm,
Connection cable: ca. 1.8 m (special length on demand)
- Options: :
 - 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)