

# Control Unit Type 7-IG/ 7-EU



## PRODUCT INFORMATION

**Serving the Gas Industry  
Worldwide**

## Control Unit 7-IG/ 7-EU

Construction, control options, indicators, fault indicators

### Construction

The odorization control unit (standard design) is supplied either in a wall-mounting enclosure (type 7-IG 4) or installed in a 19" subrack (type 7-EU 4). It comprises the following modules:

- **MC 41-31R/S272-4 control card**  
For pulse scaling and processing of faults or alarms. With various indicators and an internal pulse generator for continuous odorization.
- **MC 82-SSI power supply card**  
24 V supply unit for the control system; power unit for controlling the odorization pump.
- **EEx i MC 13-241 ExO-T input card**  
As 2-channel explosion-proof isolation of volume pulses from the area subject to explosion hazards (volume corrector, turbine meter, etc.).
- **EEx i MC 13-36 ExO-R input card**  
For explosion-proof isolation of signals from the manual button.
- **EEx i MC 13-36 ExO-R/C16 input card (Opt.)**  
For explosion-proof isolation of signals from the flow monitor, float switch (reserve tank) and the level indicator of the odorant tank.

### Control options

Basically, there are three ways to control the odorization pump:

- Through volume-proportional pulses outputted by a volume pulse transmitter. In this way, a constant level of odorant concentration can be achieved in the natural gas.
- By means of an internal 10 Hz pulse generator enabling the odorization pump to be controlled independently of the volume pulse transmitter.
- By operating the manual button, the odorization pump can be controlled independently of the volume pulse transmitter and the internal clock-pulse generator.

The pulse sequence of the signals from the volume pulse transmitter or the internal pulse generator can be converted through the control card to a pulse sequence which is appropriate for controlling the odorization pump (max. 2 Hz). Scaling ratios from 1:1 to 1:9999 can be set via four soft-touch coding switches. If a number of input pulses has been detected which equal the preset scaling factor, the com-

ponent outputs a control signal which causes the odorization pump to perform a stroke. At the same time, the output pulse indicator lights up.

Manual control is independent of the pulse scaler.

Each time the manual button is pressed, a control signal is outputted to the odorization pump.

### Indicators

All incoming and outgoing signals are indicated by LEDs:

- volume pulses from the area subject to explosion hazards (2 input channels)
- signals from the internal pulse generator
- pulses from the manual button
- output pulses to the odorization pump.

### Fault indicators

- Level warning for the reserve tank (option)
- Level warning for the interchangeable odorant tank (option)
- Delivery fault of the odorization pump (option)
- Centralized alarm (lights up when any malfunction occurs).

Every fault indication causes a relay to switch in the control unit. The switching contacts are connected to the terminals. In this way, fault indications can be transmitted to other devices.

