

FE260

Function extension unit Ex-barrier, data communication and power supply

Applications

- Ex-barrier for data interface and digital outputs
- Interface for the use of a data communication module
- Intrinsically safe power supply for a volume converter



The FE260 is a compact device in which the signals from the data interface and the digital outputs from a volume converter type EK200 series installed in a hazardous area can be connected to the corresponding input terminals. The signals at the output terminals are available for use with any kind of peripheral device. In addition to this, it is possible to provide an intrinsically safe power supply for the connected volume converter. All of the electrical data is perfectly compatible with any of the end devices that can be connected.

Data communication

In order to integrate the volume converter into a remote data transfer system, the FE260 can be fitted with a data communication module. For this purpose, modems for a variety of telecommunication networks are available to meet the necessary requirements. To connect the device to an IP based network an Ethernet module can be equipped alternatively. Should it be necessary to connect modems or devices from other manufacturers, standard interfaces in accordance with RS232 or RS422 are also available.

Power supply

The power supply of the FE260 can be either $115/230\,\mathrm{V}$ AC or a DC voltage between 10 and 30 V DC. The latter also enables the use of batteries or solar power supply. When this is the case, the voltage in combination with the volume converter can easily be monitored. If the voltage falls below a certain level (either $11\,\mathrm{V}$ or $20\,\mathrm{V}$, which can be preset), the volume converter sends out an alarm signal.

Versions

The FE260 is designed to be mounted on a wall. The connection cables to the volume converter are available in a variety of lengths making the installation of the device as easy as possible.

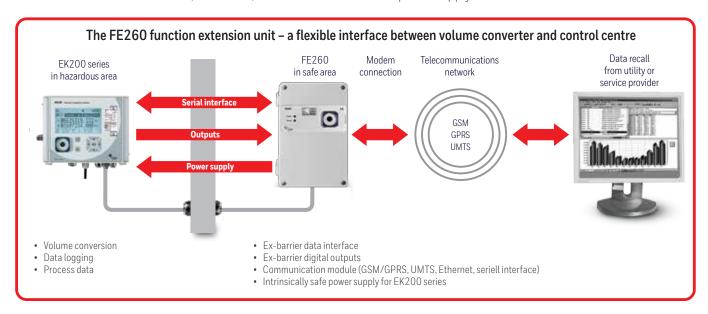


MAIN FEATURES

- Associated apparatus for Ex-Zone 2
- Manufacturer declaration to use in Ex-Zone 2
- Ex-barrier for data communication interface
- Ex-barrier for digital outputs
- Power supply for a volume converter
- Integration in remote data transfer systems
- Modular design
- Monitoring of power supply in combination with solar or battery power supply

Options

- Modem modules
 - 2G (GPRS/GSM)
 - 3G (UMTS)
- Alternative interfaces
 - RS232/RS422
 - Ethernet (in preparation)



Technical data	
Order number	83480540
Housing	Cast aluminium housing for wall mounting
Dimensions	290 mm x 175 mm x 102 mm (height, width, depth) including cable connections and hinges
Weight	App. 3 kg
Protection class	IP 65 in accordance with EN 60529 (suitable for outdoor installation)
ATEX approval	Associated apparatus for Ex-Zone 1, II (2) G [EEx ia] IIB Manufacturer Declaration to use in Ex-Zone 2, II 3 (3) G Ex nA IIB T4 Gc
Ambient conditions	AC Version 0 °C to +40 °C DC Version -10 °C to +60 °C (in combination with communication module see manual) humidity max. 93%, non-condensing
Power supply	230 V AC +10% / -15%, 5060 Hz, max. 3 Watt or 115 V AC +10% / -15%, 5060 Hz, max. 3 Watt alternative 10 – 30 V DC, max. 3 W
Voltage monitoring	11V or $20V$ adjustable for $12V$ DC or $24V$ DC power supply (only available with the $10-30V$ DC version)
Power output for converters	8,5 V DC / max. 40 mA output - for external intrinsically safe power supply of a connected volume converter (EK200 series) - not suitable for the power supply of a built-in communication module in the EK280 - recommended wire section 0.5 – 1 mm² (depending on distance to volume converter)
Display	2 status LED for indication of actual operating mode
Digital inputs	4 digital inputs for connection of digital outputs from converters
Digital outputs	4 digital outputs (with adjustable inverting) which forward the signals, connected to the particular digital input of the FE260
Modems and interface boards (option)	Internal serial TTL-interface for clip on of a desired communication module - Modem module 2G (GPRS/GSM) - Modem module 3G (UMTS) - Ethernet interface for connection to a PC network (intranet, internet) for TCP/IP-transmission
Cables (option)	Connecting cable for data interface, digital outputs and power supply up to 1000 m corresponding to detailed specification possible