

Safety Instructions

FlexView FMA90

[Ex ia Ga] IIC
[Ex ia Da] IIIC



FlexView FMA90

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About this document

The document number of these Safety Instructions (XA) must match the information on the nameplate.

Associated documentation

All documentation is available on the Internet:

www.endress.com/Deviceviewer

(enter the serial number from the nameplate).

To commission the device, please observe the Operating Instructions pertaining to the device:

www.endress.com/<product code>, e.g. FlexView FMA90

Supplementary documentation

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:

www.endress.com/Downloads

Certificates and declarations**EAC certificate**

The device meet the fundamental health and safety requirements for the design and construction of devices and protective systems intended for use in potentially explosive atmospheres.

- Certification body: ТОО/Ж ИИС "Т-Стандарт"
- Certificate number: EAЭC KZ.7500525.01.01.02282

Affixing the certificate number certifies conformity with the following standards:

- GOST 31610.0-2019 (IEC 60079-0:2017)
- GOST 31610.11-2014 (IEC 60079-11:2011)

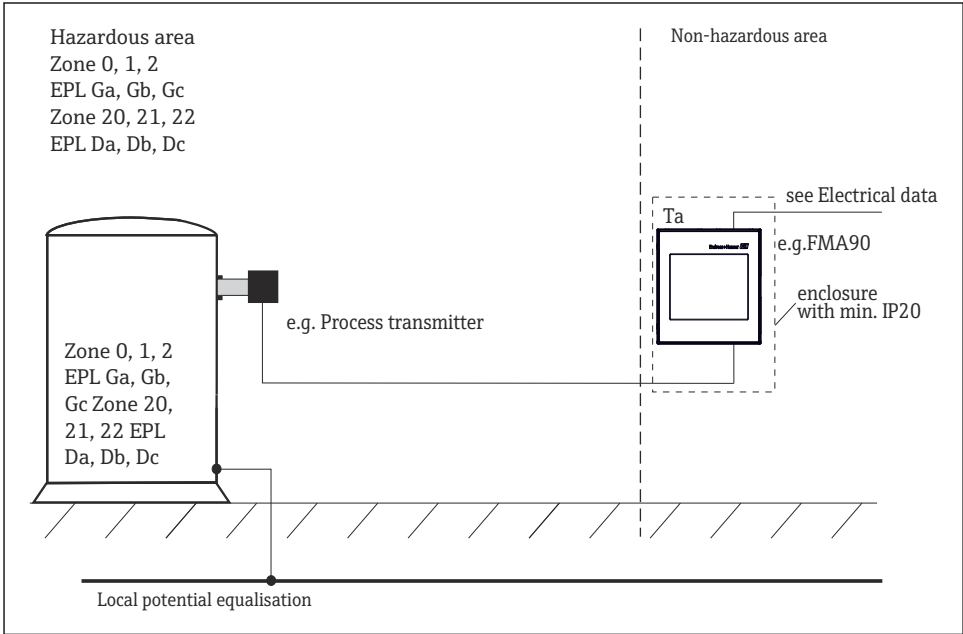
Manufacturer address

Endress+Hauser Wetzer GmbH + Co. KG

Obere Wank 1

87484 Nesselwang, Germany

Safety instructions



A0058500

Safety instructions: Intrinsic safety

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations (e.g. EN/IEC 60079-14).
- The unit is an associated electrical apparatus and can only be installed outside the hazardous area.
- The unit must be installed in such way that a minimum ingress protection of IP 20 is achieved.
- When installing the unit care must be taken that there must be a spacing of at least 50 mm (zone radius) to the intrinsically safe terminals

Safety instructions:
Specific conditions of use

- The DIN/Panel versions shall be installed in a suitable enclosure based on the environmental conditions of the end application and acceptable to the Authority having Jurisdiction.
- The polymeric field housing shall be fitted with suitable cable entry devices compatible with the environmental conditions and Ingress protection level required.

Type of protection
Ex ia Ga IIC
Ex ia Da IIIC

Housing	Ambient temperature Ta
DIN rail mounting, Polycarbonat (A)	-40 to +60 °C
DIN rail mounting, Polycarbonat (B) Field mounting, Polycarbonat (C)	-35 to +60 °C

Type	Electrical data		
FMA90	Supply: terminals L+/, N/-	U = 10.5 to 32 V _{DC} U = 85 to 253 V _{AC} ^{50/60} Hz Um = 250 V	
	Analog In: terminals 11-12, 21-22	2 to 22 mA	
	LPS (Loop Power Supply): terminals 13, 23	14 to 27 V _{DC}	
	Analog Out: terminals 71/72, 73/74	0 to 23 mA (22.5 mA DC + 0.5 mA HART)	
	Digital input, passive: terminals 52-55	max. 30 V _{DC}	
	Open Collector	max. 30 V _{DC} , max. 120 mA	
	Output circuits, limit value relay: terminals	111 trough 114, 211 trough 214, x13 trough x14	4 A, 250 V _{AC} , 1000 VA 4 A, 30 V _{DC}
	Output circuit:		U = 30 V _{DC} I = 0/4-20 mA Um = 250 V

Type	Electrical data			
	Input circuit: terminals 11, 12, 13, 13 optional: 21, 22, 23, 23		$U_o \leq 27.3 V_{DC}$ $I_o \leq 84.1 \text{ mA}$ $P_o = 574 \text{ mW}$ $C_i = \text{negligibly small}$ $L_i = \text{negligibly small}$	
	Maximum connection values Single values:	Ex ia IIC Ex ia IIB Ex ia IIA	$L_o = 1.7 \text{ mH}$ $L_o = 25 \text{ mH}$ $L_o = 47 \text{ mH}$	$C_o = 65 \text{ nF}$ $C_o = 551 \text{ nF}$ $C_o = 1790 \text{ nF}$
	Combined values:	Ex ia IIC Ex ia IIB Ex ia IIA	$L_o = 0.5 \text{ mH}$ $L_o = 2 \text{ mH}$ $L_o = 20 \text{ mH}$	$C_o = 0.065 \mu\text{F}$ $C_o = 0.390 \mu\text{F}$ $C_o = 1.3 \mu\text{F}$



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www.addresses.endress.com
