LEUTRON®

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SURGE PROTECTION IN HAZARDOUS AREAS

MORE EQUIPMENT AVAILABILITY FOR PROCESS AUTOMATION

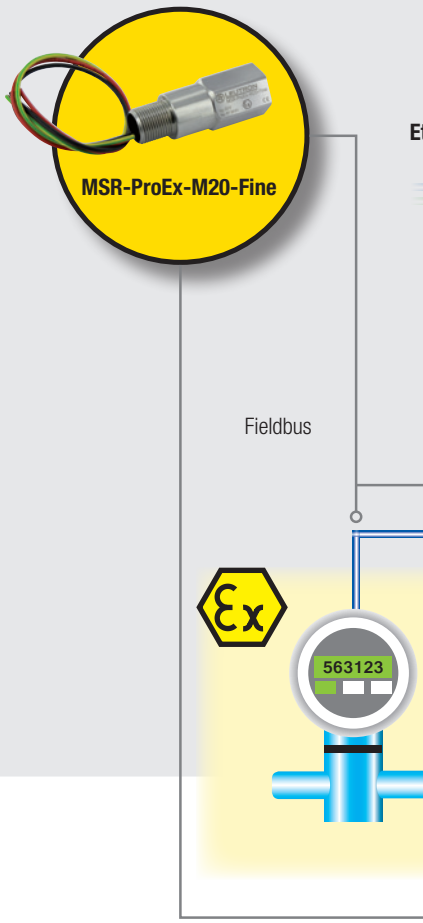
More and more, a growing number of automation and control equipment is getting installed to control complex processes in process automation.
These control tasks are sophisticated, because they often control installations that process hazardous or even explosive mixtures of substances. Hence, the availability of the automation equipment has top priority for a secure function of the installation.

Today, the measuring and control tasks are carried out by microcontrollers in a fully electronically way. These sensitive electronics offer only minimum protection against potential differences (according to the CE guideline).
However, the potential differences of a day-to-day practice easily exceed the insulation strength of the automation equipment.
Potential differences and surges are not only caused by indirect lightning strikes, but are caused by many switching operations as well. Every current that flows through a conductor generates a voltage.

Therefore, surges are often caused by short-circuits of switching operations of inductive loads. The surges do not necessarily destroy the electronics of the automation equipment immediately. Often the electronics get predamaged which then leads to an unexpected breakdown later on.
Thus, the availability of automation applications decreases.

Surges can cause:

- System breakdown
- Data loss
- Sporadically occurring malfunctions
- Follow-up costs of production downtimes
- Repair cost



ADVANTAGES OF LEUTRON'S SURGE ARRESTERS

M20 arrester for field mounting

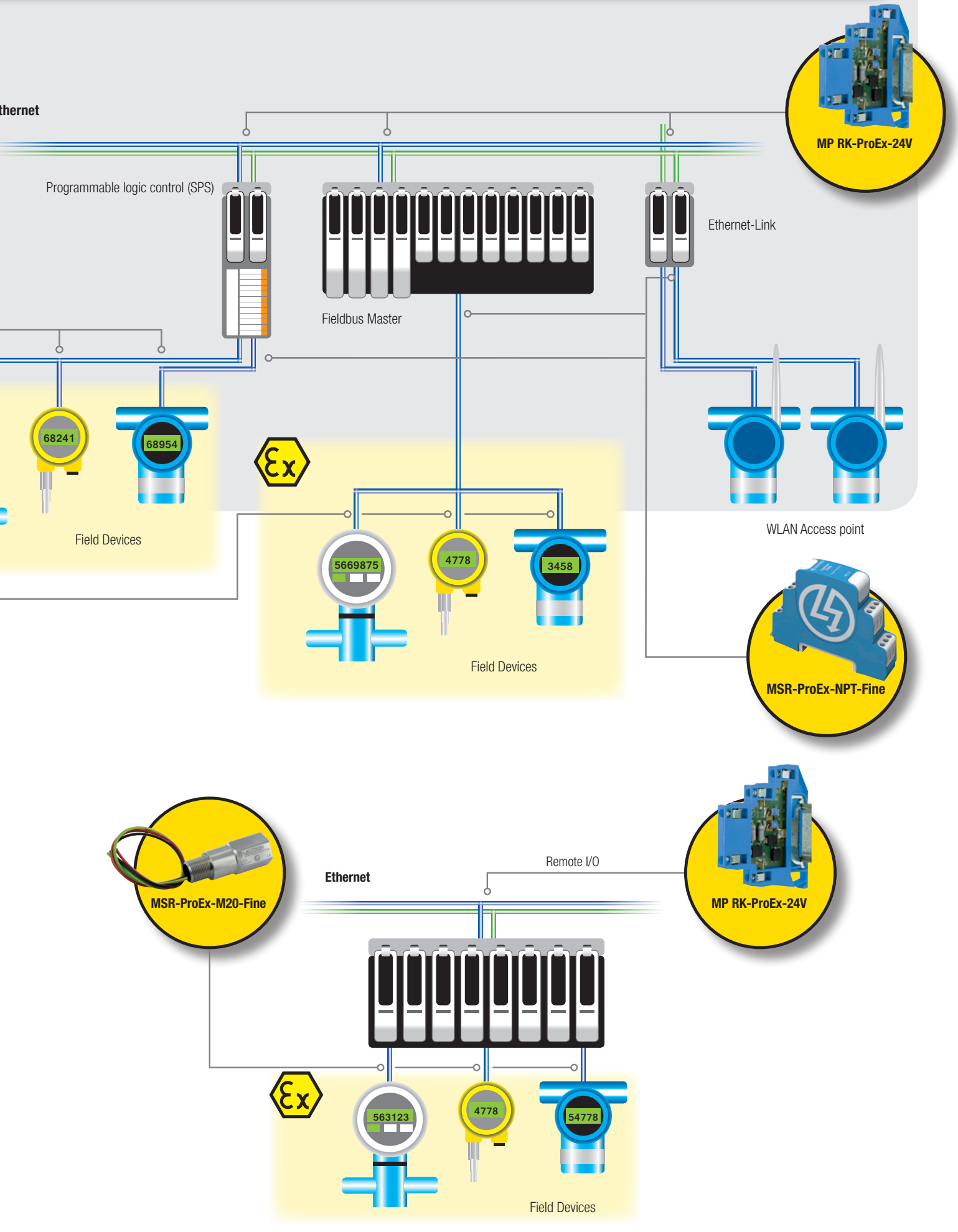
- One unit for all purposes
- Easy installation
- Minimum space requirement thanks to a compact design
- No additional housing needed
- No additional cabling thanks to integrated earthing
- No interference with the EX-i circuits
- Thanks to their robust design especially suitable for outdoor installation
- Maintenance-free

DIN-rail version for cabinet mounting

- One unit for all purposes
- Can replace terminal strips
- Easy installation
- Earthing contact to DIN rail
- Compact design with 2 modular widths (36 mm)
- No incorrect measurement while changing the modules
- No interference with the EX-i circuits
- Maintenance-free

TECHNICAL SPECIFICATIONS

		MSR-ProEX-M20-Fine	MSR-ProEX-NPT-Fine	MP RK-ProEX-24V
Mounting		field mounting (M20 x 1,5)	cabinet mounting (DIN rail)	cabinet mounting (DIN rail)
For signals/interfaces		24 V DC / 4-20 mA / HART/ Fieldbus IEC 61158		
Max. continous operating voltage AC	U_C	32 V	32 V	24 V
C2 nominal discharge current (8/20) total	I_{max}	10 kA	10 kA	10 kA
Degree of protection (IEC EN 60529)		IP 67	IP 20	IP 00
Grounding		via housing/connecting cable	DIN rail	DIN rail
ATEX identification		G Ex ia IICT6 Gb	G Ex Ia [ia Ga] IIC T6 Gb	–
Item No.		97 20 01	97 20 03	97 20 10


thernet
Programmable logic control (SPS)
Fieldbus Master
Ethernet-Link
MP RK-ProEx-24V
68241
68954
Field Devices
WLAN Access point
5669875
4778
3458
Field Devices
MSR-ProEx-NPT-Fine
MSR-ProEx-M20-Fine
Ethernet
Remote I/O
MP RK-ProEx-24V
563123
4778
54778
Field Devices

LEUTRON®

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LIGHTNING AND SURGE PROTECTION

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