Instruction Manual

1. Marking

Multifunction Terminal MFT
ATEX certificate: PTB 07 ATEX 1004 U
ATEX marking: 🕲 II 2 G Ex d e IIC
IECEx certificate: IECEx BKI 08.0008U
IECEx marking: Ex d e IIC Gb
Pepperl+Fuchs Group Lilienthalstraße 200, 68307 Mannheim, Germany

Internet: www.pepperl-fuchs.com

2. Device Versions

Device type	Function	Version
MFT	XXXX	XXXX(.L)

The X-marked letters of the type code are placeholders for versions of the device.

Function

Option	Function
BASE	Socket
R	1 resistor
2R	2 resistors
F	1 fuse
2F	2 fuses
D	1 diode
2D	2 diodes
2L	2 jumpers
FT	Bus terminator
RNO	1 relay, normally open
RNC	1 relay, normally closed

Version

Option	Version
2P	2-pole socket
4P	4-pole socket
0 9999	Resistor value [aaa m Ω x 10 ^b] for devices with R, 2R function
	Fuse value in mA for devices with F, 2F function
500 1000	Current value in mA for devices with D, 2D function
1600	Current value in mA for devices with 2L function
000X	0001 – index for devices with FT function
	0006 – index for devices with RNC, RNO function
.L	additional jumper for devices with F, D function

3. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting of the device. The trained and qualified personnel must have read and understood the instruction manual.

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

4. Reference to Further Documentation

Observe directives, standards, and national laws applicable to the intended use and the operating location. Observe Directive 1999/92/EC in relation to hazardous areas. The corresponding datasheets, manuals, declarations of conformity, EUtype examination certificates, certificates, and control drawings if applicable (see datasheet) are an integral part of this document. You can find this information under www.pepperl-fuchs.com. For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com. If you use the device in safety-related applications, observe the requirements for functional safety. You can find these requirements in the functional safety documentation under www.pepperl-fuchs.com.

5. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The device must only be operated in the specified ambient temperature range and at the specified relative humidity without condensation. If you use the device in safety-related applications, observe the information for safety function and safe state.

6. Improper Use

Protection of the personnel and the plant is not ensured if the device is not used according to its intended use.

7. Mounting and Installation

If you install the device in safety-related applications, observe the requirements for functional safety.

Do not mount a damaged or polluted device.

Do not mount the device at locations where an aggressive atmosphere may be present.

The device may only be installed and operated in Zone 1 if mounted in a surrounding enclosure, which corresponds to equipment protection level Gb.

When mounting the surrounding enclosure in hazardous areas, the surrounding enclosure must meet the requirements of a type of protection listed in IEC/EN 60079-0.

If mounting the devices in a surrounding enclosure with type of protection Ex e, observe the clearance and creepage distances according to IEC/EN 60079-7.

Place warning marking "Warning – Non-intrinsically safe circuits protected by internal cover with a degree of protection IP30!" visibly on the surrounding enclosure.

If intrinsically safe and non-intrinsically safe circuits are being operated together, the connections of the non-intrinsically safe circuits must be covered. The cover must comply with degree of protection IP30 according to IEC/EN 60529.

Use the supplied parts to ensure the required degree of protection.

Observe the installation instructions according to IEC/EN 60079-14. Requirements for Cables and Connection Lines

Requirements for Cables and Connection Ellies

Observe the following points when installing cables and connection lines: Observe the permissible core cross section of the conductor. Observe the insulation stripping length.

When using stranded conductors, crimp wire end ferrules on the conductor ends.

The cables and connection lines must not be strained. Provide an adequate strain relief.

8. Operation, Maintenance, Repair

If you operate the device in safety-related applications, observe the requirements for functional safety. In case of operating in low demand mode, plan appropriate intervals for the proof test. Do not use a damaged or polluted device.

Do not repair, modify, or manipulate the device.

If there is a defect, always replace the device with an original device. Observe IEC/EN 60079-17 for maintenance and inspection. If intrinsically safe and non-intrinsically safe circuits are present, the cover with a degree of protection IP30 may only be removed if the nonintrinsically safe circuits are de-energized (volt-free and currentless). Use the supplied parts to ensure the required degree of protection. The surrounding enclosure may be opened for maintenance while energized in Zone 1 provided that the following conditions are met:

- The connections of the non-intrinsically safe circuits must be protected by a cover with a degree of protection IP30.
- All other devices in the surrounding enclosure must permit the opening of the surrounding enclosure while energized in Zone 1.
- An appropriate marking is placed on the surrounding enclosure.

9. Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

Keep the original packaging. Always store and transport the device in the original packaging.

Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.





The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.

