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M+F | Systems

MFX_4 TERMINAL V3.1

MFX_4 Terminal V3.1 [Ex] housing.

The MFX_4 Terminal is the Human-Machine-Interface Module of the MFX_4 System. Its large graphic display with multi-language capability and the alphanumeric keypad (foil or mechanical) offer highest flexibility for fuel loading.

The MFX_4 Terminal has a graphic display that can display any required process data in large or small characters, either Latin or Cyrillic, Chinese, etc. The MFX_4 Terminal features soft keys as part of the alphanumeric keypad. Therefore, the display format is configurable for any applications.

Due to its integrated card readers and TCP/IP connectivity, the MFX_4 Terminal can also be used as an access controller, i.e. for entry and exit gates.





MFX_4 TERMINAL V3.1

CHARACTERISTICS

Approvals	ATEX several more national approvals	
Housing	W 232 mm x H 255 mm x D 100 mm, IP65	
Marking of equipment	II 2 G EEx d[ia/ib] IIB T4 II 2 G EEx ia IIB T4 II (2) G [EEx ia] IIB	(Housing) (Keypad) (Trennstufe)
Weight	9.000 g (with cable glands)	
Ambient working temperature	-20 °C ... +40 °C -25 °C ... +60 °C (option low-temperature)	
Storage temperature	-25 °C to +75 °C	
Supply voltage	24 VDC ±10 % P _{typ} = 7 W P _{max} = 15 W or 110 VAC... 240 VAC P _{typ} = 8 W P _{max} = 15 W	
Display	Large graphic display, ¼VGA LED backlight Automatic contrast tracking	
Keypad	Foil keypad Mechanical keypad (weatherproof)	
Integrated card reader	Transponder (Proximity) 13,56 MHz	
Interfaces	CAN-Bus (with electrical isolation) 1x RS232 or 1x RS485 (with electrical isolation) 1x Ethernet TCP/IP (option)	
Protocols	CANopen MODBUS RTU MODBUS TCP	
I/Os	2x relay outputs (option), e.g. for entrance control with integrated card reader	
Multi-language capability	Eastern Europe = Polish, Russian, Hungarian, Slovenian, Slovakian, Czech, Romanian, German, English (UK) Western Europe = German, English (UK), English (US), French, Spanish, Portuguese, Dutch German = German, English (UK), English (US) Chinese = Chinese	



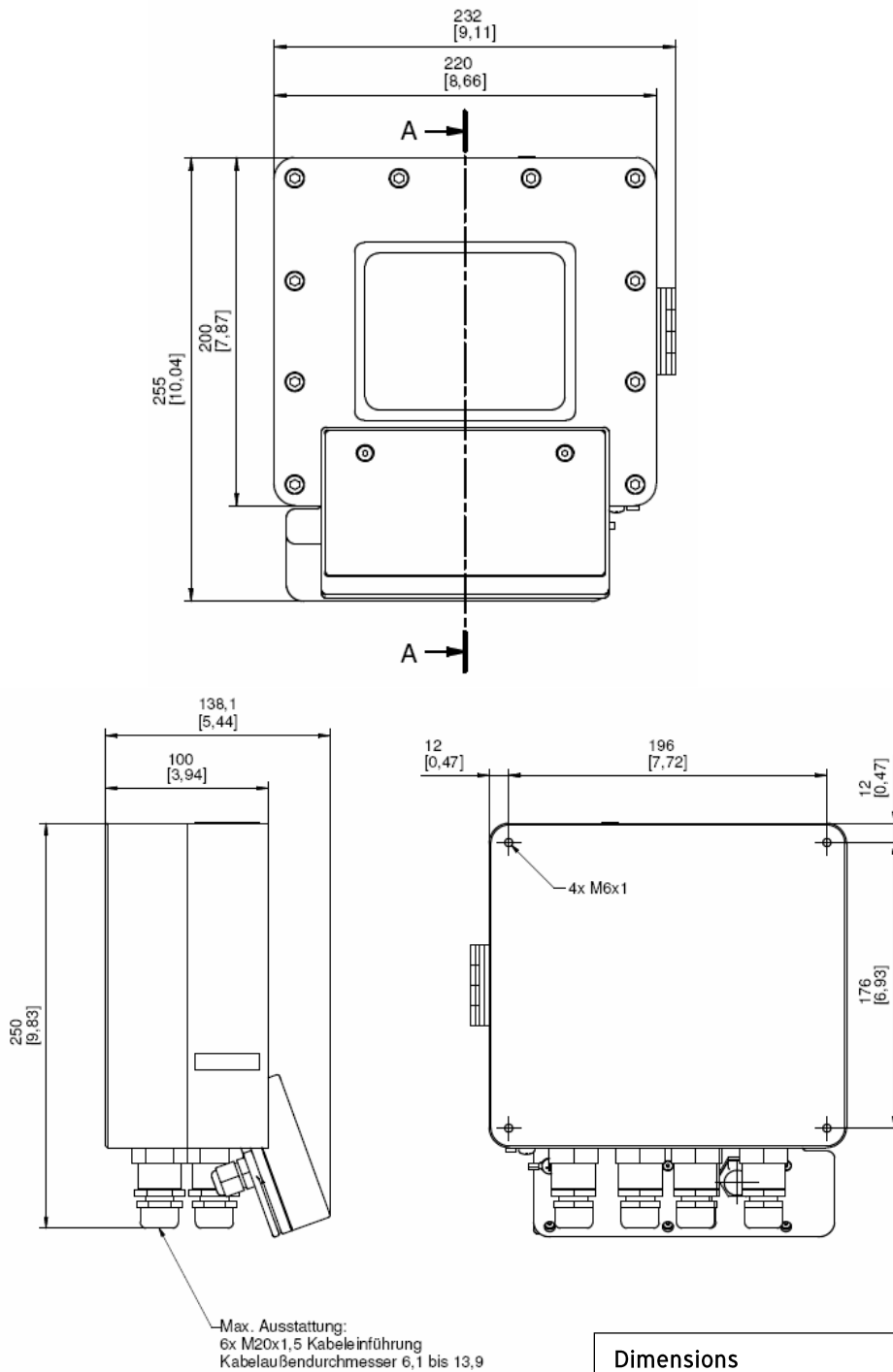
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PRODUCT KEY MFX_4 TERMINAL V 3.1

	4000001+ [basic device] + [temperature range] + [keypad] + [card reader] + [Ethernet] + [relay] + [interface option] + [heating] + [cable] + [configuration] + [language] e.g. 4000001 - P230 + TR1 + KF + CR1 + E1 +R0+ RS232 + H000 + IK01 + B125 + West
Basic device (without keypad)	P230 = Supply voltage 230 VAC P024 = Supply voltage 24 VDC
Temperature range	TR1 = -20 °C ... +40 °C (standard) TR2 = -25 °C ... +60 °C (extended)
Keypad	K0 = No keypad KF = Foil keypad KM = Mechanical keypad
Card reader	CRO = No card reader CR1 = RFID
Ethernet	E0 = No Ethernet E1 = with Ethernet
Relay	R0 = No relay AC2 = with 2 AC solid state relay DC2 = with 2 DC solid state relay
Interface option	RS232 = RS232 RS485 = RS485
Heating (for low temperature)	H000 = No heating H230 = Heating 230 V H024 = Heating 24 V
Cable	IK0 = No cable IK01 = 5m (Power + CANopen) IK02 = 10m (Power + CANopen) IK03 = 15m (Power + CANopen)
Configuration	B125 = Baud rate CANopen bus B250 = Baud rate CANopen bus
Languages (see also 571)	Ost = Polish, Russian, Hungarian, Slovenian, Slovakian, Czech, Romanian, German, English (UK) West = German, English (UK), English (US), French, Spanish, Portuguese, Dutch D = German, English (UK), English (US) CN = Chinese

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DIMENSIONS

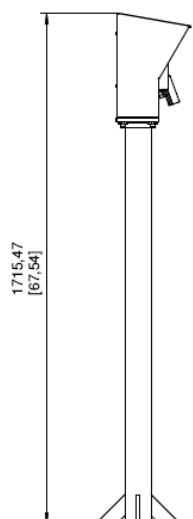
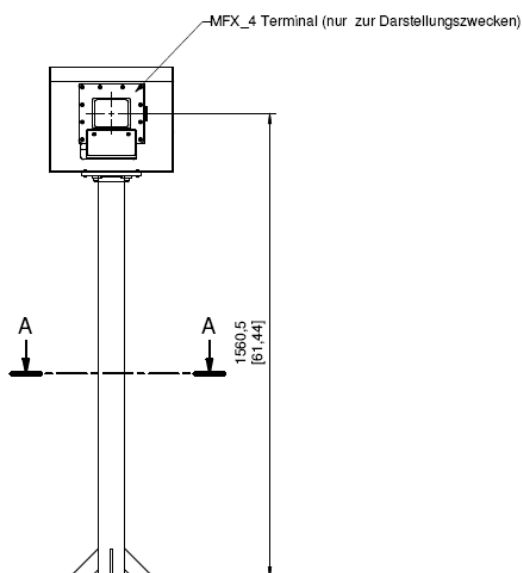
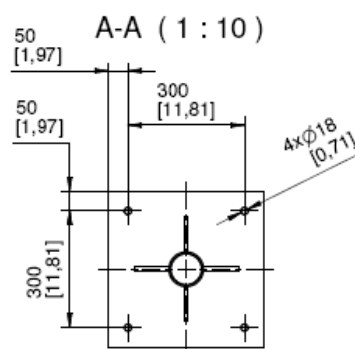
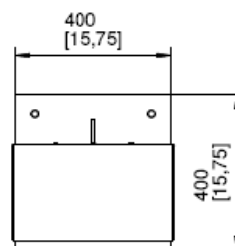
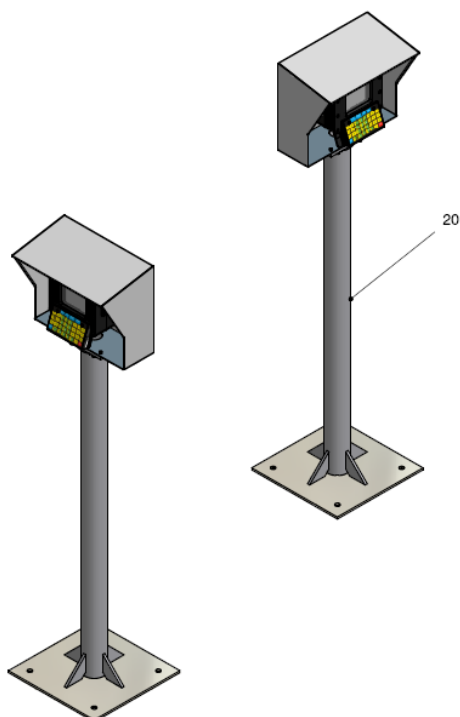


Dimensions	
254	: Dimension in millimetres
[10]	: Dimensions in inches

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DIMENSIONS

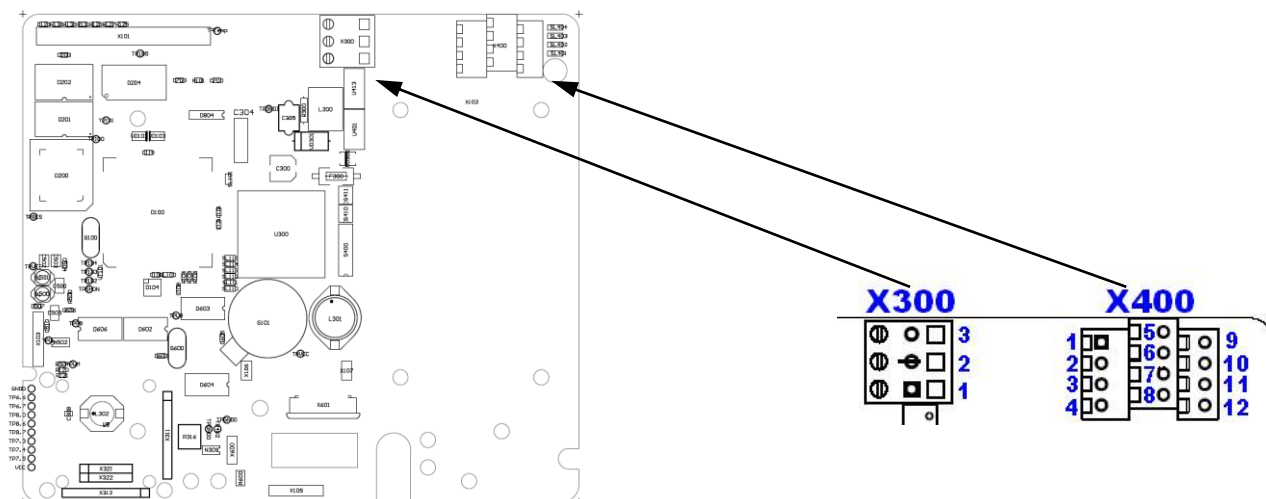
Option: Protective Housing (turnable, on solid stand)
(for MFX_4 Terminal [Ex]-Version)



Dimensions
254 : Dimension in millimetres
[10] : *Dimensions in inches*

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PIN CONFIGURATION



Terminal X300 (internal power supply for CPU board)

Feature	Pin	Signal	
	1	0V	
	2	+24V	
	3	Earth	

Terminal X400 (interface)

Feature	Pin	Signal	
CANopen	1	GNDC	
	2	CANH	
	3	CANL	
	4	GNDS	GND

Interface	Pin	Signal	
	5	R+ (RS485)	
	6	R- (RS485)	RxD (RS232)
	7	T+ (RS485)	TxD (RS232)
	8	T- (RS485)	

Dig I/O	Pin	Signal	
	9	OUT 1 +	
	10	OUT 1 -	
	11	OUT 2 +	
	12	OUT 2 +	

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CABLE GLANDS

