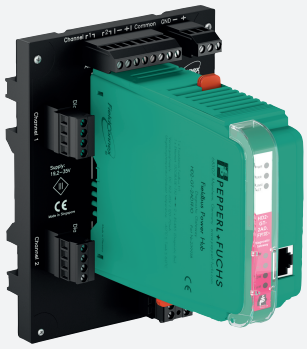


Diagnostic Gateway Kit

FieldConnex® Fieldbus

KT-MB-GT2AD.FF

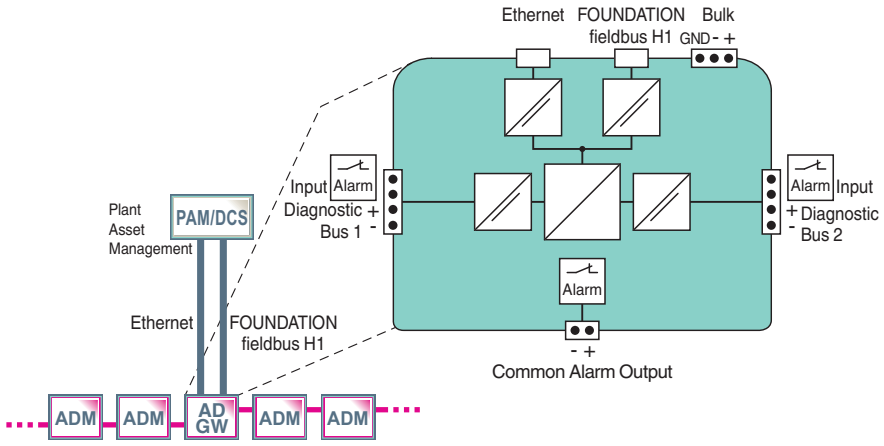
- System integration kit for Advanced Diagnostics
- PCS integration via Diagnostic Manager or device DTM
- Simple automatic setup of Advanced Diagnostics
- Common alarm handling
- For FOUNDATION Fieldbus and PROFIBUS PA
- Installation in Zone 2

Diagnostic gateway kit with Ethernet, FF-H1 interface for advanced diagnostics

Function

The FieldConnex® Diagnostic Gateway is the interface between stationary Advanced Diagnostic Modules (ADM) and the control system. It offers access to all ADM data in two ways: via Ethernet and the Diagnostic Manager software or via FOUNDATION Fieldbus H1 and DTM/EDD or both. The gateway configures itself and automatically detects the ADMs. The Diagnostic Manager automatically finds gateways on the same subnet. The setup of the diagnostic bus and all connected modules is automatic. This significantly simplifies engineering of FieldConnex® Advanced Diagnostics.

Wiring Diagram



Zone 2/Div. 2

Technical Data

General specifications		
Design / Mounting		Motherboard based
Installation in hazardous area		Zone 2 / Div. 2
Supply		
Rated voltage	U_r	19.2 ... 35 V DC SELV/PELV
Rated current	I_r	160 ... 90 mA
Power dissipation		max. 3.1 W
Fieldbus connection		
Number of segments		4
Fieldbus type		FOUNDATION Fieldbus
Physical layer profile		profile type 114

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Technical Data

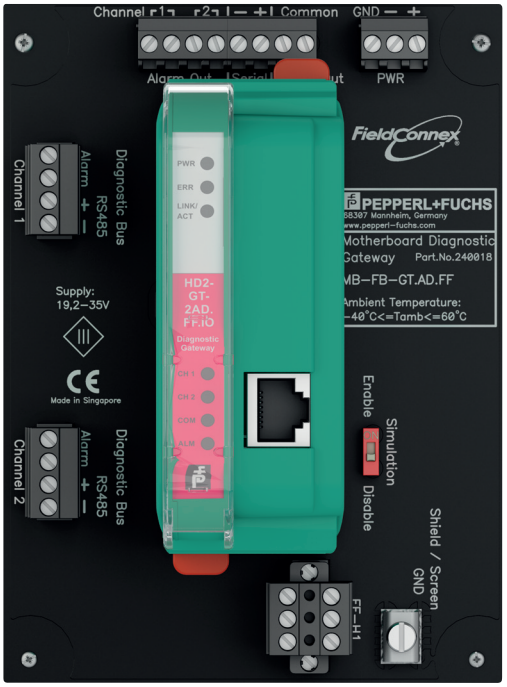
ITK version		6
Implementation		resource block 1x RS function block 4x MDI, 1x MDO, 1x MAI, 1x DI transducer block 16x ADM TB, 1x IO TB
Firmware update		Ethernet
Polarity		polarity-sensitive
Rated voltage	U_N	9 ... 35 V
Rated current	I_N	0 mA
Ethernet Interface		
Port		100 BASE-TX
Protocol		TCP/IP and UDP/IP
Services		ICMP , DHCP , AutoIP , HTTP
Connection type		RJ-45 socket, 8-pin
Transfer rate		100 MBit/s
Diagnostic Bus		
Number of Diagnostic Bus Channels		2
Number of Diagnostic Modules/Channel		31 Using Ethernet Interface , 8 Using Fieldbus Interface
Termination		integrated
Cable length/Channel		30 m
Indicators/operating means		
LED ERR		red: Hardware fault
LED PWR		green: Power on
LINK/ACT		yellow
CH1, CH2		yellow: diagnostic bus activity
Outputs		
Output I		alarm output diagnostic bus channel 1 , volt-free contact , NC contact
Voltage		50 V DC
Current		max. 1 A
Output II		alarm output diagnostic bus channel 2 , volt-free contact , NC contact
Voltage		50 V DC
Current		max. 1 A
Output III		common alarm , volt-free contact , NC contact
Voltage		50 V DC
Current		max. 1 A
Galvanic isolation		
All circuits/FE		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Output I, II/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 250 V_{eff}
Ethernet/Supply		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Ethernet/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Fieldbus/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Diagnostic Bus/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Standard conformity		
Galvanic isolation		IEC 62103
Electromagnetic compatibility		NE 21
Degree of protection		IEC 60529
Fieldbus standard		IEC 61158-2
Climatic conditions		DIN IEC 721
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Ethernet		IEEE 802.3
Ambient conditions		

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Technical Data

Ambient temperature		-40 ... 60 °C (-40 ... 140 °F) hazardous area -40 ... 70 °C (-40 ... 158 °F) safe area horizontal DIN rail mounting
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		< 95 % non-condensing
Shock resistance		15 g 11 ms
Vibration resistance		1 g , 10 ... 150 Hz
Pollution degree		max. 2, according to IEC 60664
Corrosion resistance		acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications		
Housing material		Polycarbonate
Degree of protection		IP20
Mass		470 g
Dimensions		
Height		see dimensions
Width		see dimensions
Depth		see dimensions
Mounting		DIN rail mounting
Data for application in connection with hazardous areas		
Certificate		TÜV 14 ATEX 115980 X
Marking		Ⓔx II 3 G Ex ec IIC T4 Gc
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2018+AC:2020 , EN 60079-11:2012 , EN 60079-7:2015+A1:2018
International approvals		
IECEx approval		IECEx TUN 14.0003X
Approved for		Ex ec IIC T4 Gc
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.

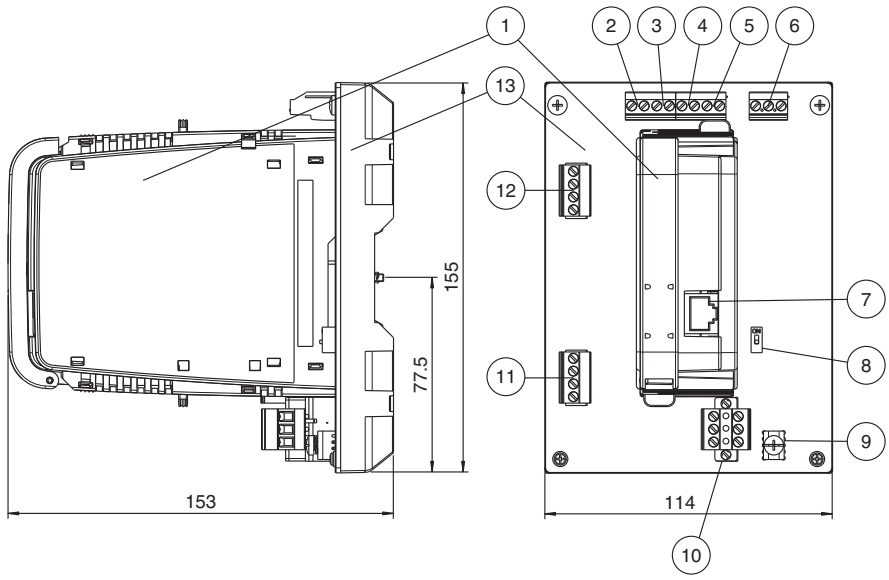
Assembly



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Additional Information

Dimensions and Assembly

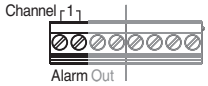


All dimensions in

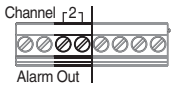
Description

1 Diagnostic gateway module HD2-GT-2AD.FF.IO

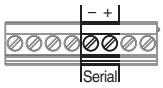
2 Output I:
Alarm output diagnostic bus channel 1, volt-free contact, NC contact



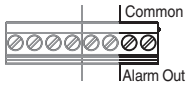
3 Output II:
Alarm output diagnostic bus channel 2, volt-free contact, NC contact



4 Serial, not used



5 Output III:
Common alarm, volt-free contact, NC contact



6 Bulk power supply connection

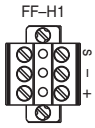


7 Ethernet, 8-pin RJ45 socket

8 Enable/disable simulation switch

9 Grounding terminal

10 FF-H1



11 Diagnostic bus channel 2



12 Diagnostic bus channel 1



13 Motherboard MB-FB-GT.AD.FF

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