

Active field distributor AFD4 for PROFIBUS PA for foundation Fieldbus H1,
4 short circuit-proof spur lines with bounce protection logic Automatic bus
termination for line and ring topology for extended temperature range
Degree of protection IP66



General information	
Product function	
• Repeater function	No
Supply voltage	
permissible range, lower limit (DC)	16 V
permissible range, upper limit (DC)	32 V
Reverse polarity protection	Yes; only in conjunction with FDC 157
Overvoltage protection	No
Input current	
Current consumption (in no-load operation), typ.	24 mA; 54 mA at the end of the cable
Current consumption, max.	264 mA
Power loss	
Power loss, typ.	384 mW
Power loss, max.	3.2 W
Interfaces	
PROFIBUS PA	
• Transmission rate, max.	31.25 kbit/s
• Number of connectable PA field devices	4
• Current output to PA field devices, max.	240 mA
• permissible current per spur line	60 mA
Protocols	
PROFIBUS DP	No
PROFIBUS PA	Yes
AS-Interface	No
FOUNDATION Fieldbus H1	Yes
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	No
Diagnostics function	Yes
Diagnostics indication LED	
• Main line status	Yes
• Main line failure	Yes
• Spur line status/fault	Yes
• automatic bus termination	Yes
Potential separation	
between main line and spur lines	No
Degree and class of protection	
IP degree of protection	IP66

Standards, approvals, certificates

Use in hazardous areas

• ATEX Zone 1	No
• ATEX Zone 21	No
• ATEX Zone 2	Yes
• ATEX Zone 22	Yes
• FM Class I Zone 1	No
• FM Class I Zone 2, Division 2	Yes

Ambient conditions

Ambient temperature during operation

• min.	-40 °C
• max.	70 °C

Ambient temperature during storage/transportation

• min.	-40 °C
• max.	85 °C

Relative humidity

• Operation, max.	95 %
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connection method / header

connection method / main cable / header

• number of connections / for PROFIBUS PA main cable	2
• design of the electrical connection / for PROFIBUS PA main cable	Screw terminal block
• design of the thread / of cable screw connection / for PROFIBUS PA main cable	M16
• design of the PROFIBUS PA main cable	Type A
• diameter / of the PROFIBUS PA main cable / connectable / minimum	4 mm
• diameter / of the PROFIBUS PA main cable / connectable / maximum	9 mm
• connectable conductor cross-section / of the PROFIBUS PA main cable / minimum	0.2 mm ²
• connectable conductor cross-section / of the PROFIBUS PA main cable / maximum	2.5 mm ²
• product function / of the PROFIBUS PA main cable / automatic bus termination	Yes
• output current / for PROFIBUS PA main cable / maximum permissible	1 A

connection method / spur line / header

• number of connections / for PROFIBUS PA spur line	4
• design of the electrical connection / for PROFIBUS PA spur line	Screw terminal block
• design of the thread / of cable screw connection / for PROFIBUS PA spur line	M16
• design of the PROFIBUS PA spur line	Type A
• diameter / of the PROFIBUS PA spur line / connectable / minimum	4 mm
• diameter / of the PROFIBUS PA spur line / connectable / maximum	9 mm
• connectable conductor cross-section / of the PROFIBUS PA spur line / minimum	0.2 mm ²
• connectable conductor cross-section / of the PROFIBUS PA spur line / maximum	2.5 mm ²
• output current / for PROFIBUS PA spur lines / total / maximum	240 mA
• number of PROFIBUS PA field devices / connectable	4
• output current / per PROFIBUS PA spur line / maximum	60 mA
• No-load voltage, max.	30 V
• short-circuit current / of the PROFIBUS PA spur line / as test current / maximum	6 mA
• product feature / of the connections for PROFIBUS PA spur line / intrinsically safe according to FISCO model	No

- product function / of the connections for PROFIBUS PA spur line / debounce logic

Yes

Dimensions

Width	220 mm
Height	120 mm; without screw glands
Depth	83 mm

Weights

Weight, approx.	2 000 g
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