

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
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Degree and class of protection

IP degree of protection	IP66
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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 %

Connection method

Main line	
• Number of main lines	2
• Design of terminals	Screw terminal block
• Type of connection (enclosure cable gland)	M16
• Type of cable	Type A
• Cable diameter, min.	4 mm
• Cable diameter, max.	9 mm
• Conductor cross-section, min.	0.2 mm ²
• Conductor cross-section, max.	2.5 mm ²
• automatic bus termination	Yes
• permissible main line current	1 A
Spur line	
• Number of spur lines	4
• Design of terminals	Screw terminal block
• Type of connection (enclosure cable gland)	M16
• Type of cable	Type A
• Cable diameter, min.	4 mm
• Cable diameter, max.	9 mm
• Conductor cross-section, min.	0.2 mm ²
• Conductor cross-section, max.	2.5 mm ²
• total current output to field devices, max.	240 mA
• Number of connectable field devices	4
• Current limitation per field device, max.	60 mA
• No-load voltage, max.	30 V
• Short-circuit current (test current); max.	6 mA
• intrinsically safe according to FISCO model	No
• Debounce logic	Yes
Dimensions	
Width	220 mm
Height	120 mm; without screw glands
Depth	83 mm
Weights	
Weight, approx.	2 000 g
last modified:	03/17/2020