

ACTIVE FIELD DISTRIBUTOR AFD4 FOR PROFIBUS PA FOR FOUNDATION FIELDBUS H1, 4 SHORT-CIRCUIT PROOF SPURS WITH CHATTER SUPPRESSION LOGIC AUTOMATIC BUS TERMINATION FOR LINE- AND RING-TOPOLOGY FOR ENHANCED TEMPERATURE RANGE PROTECTION CLASS IP 66



General information	
Product type designation	Active field distributor
Hardware product version	01
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
Diagnostic functions	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	
Degree of protection acc. to EN 60529	
• IP66	Yes
Standards, approvals, certificates	
Use in hazardous areas	
• EX Zone 1	No
• EX zone 11	No
• EX zone 2	Yes
• EX zone 22	Yes
• Class I Zone 1	No
• 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 mm²
- Conductor cross-section, max. 2.5 mm²
- 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 mm²
- Conductor cross-section, max. 2.5 mm²
- 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
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last modified: 10/28/2016