



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	
Hardware product version	01
Product function	
Repeater function	No
Operator control and monitoring	
Illuminant	LED
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 DP	No
FOUNDATION Fieldbus H1	Yes
AS-Interface	No
PROFIBUS PA	
PROFIBUS PA	Yes
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
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	
Alarms	No
Diagnostic messages	
Diagnostic functions	Yes
Diagnostics indication LED	
Status main line	Yes
Main line failure	Yes
Status/fault spur line	Yes
automatic bus termination	Yes
Galvanic isolation	
between main line and spur lines	No
Degree and class of protection	
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	
Operating temperature	
min.	-40 °C
max.	70 °C
Storage/transport temperature	
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.	2000 g
Status	Jul 21, 2014