

ACTIVE FIELD DISTRIBUTOR AFDIS FISCO FIELD BARRIER FOR PROFIBUS PA FOR FOUNDATION FIELDBUS H1 6 SHORT-CIRCUIT PROOF AND INTRINSICALLY SAFE SPURS WITH CHATTER SUPPRESSION LOGIC INTEGRATED FIELDBUS REPEATER AUTOMATIC BUS TERMINATION FOR LINE- AND RING-TOPOLOGY FOR ENHANCED TEMPERATURE RANGE PROTECTION CLASS IP 66



Figure similar

General information	
Product type designation	Active field distributor
Hardware product version	01
Product function	
• Repeater function	Yes
Supply voltage	
Design of the power supply	via fieldbus
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, max.	400 mA; at 20 V input voltage
Current consumption in the case of short-circuit at all spur lines	100 mA; at 24 V input voltage
Power loss	

Power loss, typ.	1.4 W; minimum - typ. specification not possible because load-dependent
Power loss, max.	5.9 W

Interfaces

PROFIBUS PA	
• Transmission rate, max.	31.25 kbit/s
• Number of connectable PA field devices	6
• Current output to PA field devices, max.	260 mA
• permissible current per spur line	40 mA; first 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	Yes
----------------------------------	-----

Isolation

Isolation tested with	2 550 V DC
-----------------------	------------

Degree and class of protection

Degree of protection acc. to EN 60529	
• IP66	Yes

Standards, approvals, certificates

Use in hazardous areas	
• EX Zone 1	Yes
• EX zone 11	No; EX zone 21
• EX zone 2	Yes
• EX zone 22	Yes
• Class I Zone 1	Yes
• Class I Zone 2, Division 2	Yes
• Type of protection acc. to KEMA	10 ATEX 0055
• Test number KEMA	10 ATEX 0055

Ambient conditions	
Ambient temperature during operation	
• min.	-40 °C
• max.	70 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °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	6
• 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.	260 mA
• Number of connectable field devices	6
• Current limitation per field device, max.	40 mA; 60 mA on S1
• No-load voltage, max.	15.3 V; on spur lines
• short-circuit proof	Yes
• Short-circuit current (test current); max.	5 mA; on spur lines
• intrinsically safe according to FISCO model	Yes
• Debounce logic	Yes
Dimensions	
Width	380 mm

Height	85 mm
Depth	170 mm
Weights	
Weight, approx.	4 500 g
last modified:	03/11/2017