SIEMENS

Data sheet 6ES7655-5DX60-1BB0

Active field distributor AFDiSD FISCO field barrier for PROFIBUS PA for Foundation Fieldbus H1 Extended fieldbus diagnostics for PROFIBUS PA 6 short circuit-proof and intrinsically safe spur lines with bounce protection logic Integrated field bus repeater Automatic bus termination for line and ring topology for extended temperature range Degree of protection IP66 Extended fieldbus diagnostics

General information	
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	Yes; only in conjunction with FDC 157
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; max. 180 mA total current of all field devices for operation in the permissible operating voltage range from 16 V to 32 V
● 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
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	Yes
Isolation	
Isolation tested with	2 550 V DC
Degree and class of protection	
IP degree of protection	IP66
Standards, approvals, certificates	
Use in hazardous areas	
● ATEX Zone 1	Yes
● ATEX Zone 21	Yes
● ATEX Zone 2	Yes
● ATEX Zone 22	Yes
● FM Class I Zone 1	No
● FM Class I Zone 2, Division 2	No
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 / header	
connection method / main cable / header	
● Number of main lines	2
● Design of terminals	Screw terminal block
● Type of connection (enclosure cable gland)	M20
● Type of cable	Type A
● Cable diameter, min.	6 mm
● Cable diameter, max.	13 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
connection method / spur line / header	
● 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 mm²
● Conductor cross-section, max.	2.5 mm²
● total current output to field devices, max.	260 mA; max. 180 mA total current of all field devices for operation in the permissible operating voltage range from 16 V to 32 V
● 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
● short-circuit proof	Yes
● Short-circuit current (test current); max.	6 mA
● 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

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