

FIELD DEVICE COUPLER FDC 157 PHYSICAL LAYER
 INTERFACE TO PROFIBUS PA OR FOUNDATION FIELDBUS H1
 INTEGRATED POWER CONDITIONER UP TO 1000MA
 REDUNDANCY SUPPORT INTEGRATED DIAGNOSTICS
 PROTECTION CLASS IP 20 FOR EXPANDED TEMPERATURE
 RANGE

General information

Product description	Field Device Coupler for PROFIBUS PA and Foundation Fieldbus
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Supply voltage

Rated value (DC)	Yes
<ul style="list-style-type: none"> • 24 V DC 	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Overvoltage protection	Yes

Input current

Current consumption, max.	2.3 A; at 24 V DC
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Power loss

Power loss, typ.	13.4 W
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Interfaces

PROFIBUS DP	
<ul style="list-style-type: none"> • Transmission rate, max. • Connector type 	45.45 kbit/s 9-pin sub D
PROFIBUS PA	
<ul style="list-style-type: none"> • Transmission rate, max. • Number of connectable PA field devices • Current output to PA field devices, max. • Voltage failure bridging 	31.25 kbit/s 31 1 A 5 ms

Protocols

PROFIBUS DP	Yes
PROFIBUS PA	Yes

Interrupts/diagnostics/status information

Status indicator	Yes; Group error (red)
Alarms	
<ul style="list-style-type: none"> • Alarms 	Yes
Diagnostic messages	

• Diagnostic functions	Yes
Diagnostics indication LED	
• Bus activity DP (yellow)	Yes
• Bus activity PA (yellow)	Yes
• Bus fault BF (red)	Yes
• Group error SF (red)	Yes
• Monitoring 24 V voltage supply ON (green)	Yes
Potential separation	
between backplane bus and all other circuit components	Yes
between PROFIBUS DP and all other circuit components	Yes
between PROFIBUS PA and all other circuit components	Yes
between supply and all other circuits	Yes
Isolation	
Isolation tested with	600 V DC
Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP20	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C
• max.	60 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Relative humidity	
• Operation, max.	95 %
Dimensions	
Width	80 mm
Height	125 mm
Depth	130 mm
Weights	
Weight, approx.	550 g
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