

Field Device Coupler FDC 157 physical interface for PROFIBUS PA or Foundation Fieldbus H1 integrated bus supply up to 1000 mA with redundancy capability integrated diagnostics Degree of protection IP20 for extended temperature range

General information

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

Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Overvoltage protection	Yes

Mains buffering

<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	5 ms
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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. 	45.45 kbit/s
<ul style="list-style-type: none"> Design of electrical connection 	9-pin sub D

PROFIBUS PA

<ul style="list-style-type: none"> Transmission rate, max. 	31.25 kbit/s
<ul style="list-style-type: none"> Number of connectable PA field devices 	31
<ul style="list-style-type: none"> Current output to PA field devices, max. 	1 A

Protocols

PROFIBUS DP	Yes
PROFIBUS PA	Yes

Interrupts/diagnostics/status information

Status indicator	Yes; Group error (red)
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> Bus activity DP (yellow) 	Yes
<ul style="list-style-type: none"> 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
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Degree and class of protection

IP degree of protection	IP20
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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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last modified: 07/10/2020