

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 | |
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| Product type designation | Field Device Connection FDC157 |
| Product description | Field Device Coupler for PROFIBUS PA and Foundation Fieldbus |
| 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 |
| Input current | |
| Current consumption, max. | 2.3 A; at 24 V DC |
| Power loss | |
| Power loss, typ. | 13.4 W |
| 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 of PROFIBUS interface | 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 | |

- 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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