

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 |
| 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. Design of electrical connection | 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. | 31.25 kbit/s 31 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) Bus activity PA (yellow) Bus fault BF (red) Group error SF (red) Monitoring 24 V voltage supply ON (green) | Yes Yes Yes Yes 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 | |
| IP degree of protection | IP20 |
| Ambient conditions | |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> min. max. | -25 °C 60 °C |

| | |
|---|---------|
| Ambient temperature during storage/transportation | |
| • min. | -40 °C |
| • max. | 70 °C |
| Altitude during operation relating to sea level | |
| • Installation altitude above sea level, max. | 3 000 m |
| Relative humidity | |
| • Operation, max. | 95 % |
| Dimensions | |
| Width | 80 mm |
| Height | 125 mm |
| Depth | 130 mm |
| Weights | |
| Weight, approx. | 550 g |

| Classifications | | | |
|-----------------|--------|---------|----------------|
| | | Version | Classification |
| | eClass | 14 | 27-24-26-08 |
| | eClass | 12 | 27-24-26-08 |
| | eClass | 9.1 | 27-24-26-08 |
| | eClass | 9 | 27-24-26-08 |
| | eClass | 8 | 27-24-26-08 |
| | eClass | 7.1 | 27-24-26-08 |
| | eClass | 6 | 27-24-26-08 |
| | ETIM | 10 | EC001604 |
| | ETIM | 9 | EC001604 |
| | ETIM | 8 | EC001604 |
| | ETIM | 7 | EC001604 |
| | IDEA | 4 | 3564 |
| | UNSPSC | 15 | 32-15-17-05 |

Approvals / Certificates

General Product Approval



[Miscellaneous](#)



[China RoHS](#)

General Product Approval **For use in hazardous locations**

[Miscellaneous](#)

[Manufacturer Declaration](#)



[Type Examination Certificate](#)

[FM](#)

For use in hazardous locations **Maritime application** **Environment**



[CCC-Ex](#)



[CCS \(China Classification Society\)](#)



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