

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"> <li>Mains/voltage failure stored energy time</li> </ul>	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"> <li>Transmission rate, max.</li> </ul>	45.45 kbit/s
<ul style="list-style-type: none"> <li>Design of electrical connection</li> </ul>	9-pin sub D
PROFIBUS PA	
<ul style="list-style-type: none"> <li>Transmission rate, max.</li> </ul>	31.25 kbit/s
<ul style="list-style-type: none"> <li>Number of connectable PA field devices</li> </ul>	31
<ul style="list-style-type: none"> <li>Current output to PA field devices, max.</li> </ul>	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"> <li>Bus activity DP (yellow)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Bus activity PA (yellow)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Bus fault BF (red)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Group error SF (red)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Monitoring 24 V voltage supply ON (green)</li> </ul>	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"> <li>min.</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>max.</li> </ul>	60 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>min.</li> </ul>	-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 %
<b>Dimensions</b>	
Width	80 mm
Height	125 mm
Depth	130 mm
<b>Weights</b>	
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**



EG-Konf.

[Miscellaneous](#)



[China RoHS](#)



RCM



**For use in hazardous locations**



IECEX



ATEX

[Type Examination Certificate](#)

[FM](#)



CCC

[CCC-Ex](#)

**Maritime application**      **Environment**



DNV

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



EPD

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