

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
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>Connector type</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
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

**last modified:** 09/15/2017