



Figure similar

SIMATIC DP, distributed I/O Field device interface DP/PA coupler Ex version Ex(IA) 110 mA Field coupler between PROFIBUS DP and field bus segments to IEC 61158-2, for example PROFIBUS PA, for extended temperature range Degree of protection IP20

General information	
Product description	FDC157 Ex [ia]
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
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms
Input current	
Current consumption, max.	400 mA
Power loss	
Power loss, typ.	7 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>	110 mA
Protocols	
PROFIBUS DP	Yes
PROFIBUS PA	Yes
Interrupts/diagnostics/status information	
Status indicator	No
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>Monitoring 24 V voltage supply ON (green)</li> </ul>	Yes
Ex(i) characteristics	
maximum values for connecting terminals for gas group IIC	
<ul style="list-style-type: none"> <li>U<sub>o</sub> (no-load voltage), max.</li> </ul>	15 V
<ul style="list-style-type: none"> <li>I<sub>o</sub> (short-circuit current), max.</li> </ul>	247 mA
<ul style="list-style-type: none"> <li>P<sub>o</sub> (power output), max.</li> </ul>	1.95 W
<ul style="list-style-type: none"> <li>U<sub>m</sub> (voltage at non-intrinsically safe connecting terminals), max.</li> </ul>	250 V; AC
Potential separation	

between PROFIBUS DP and all other circuit components	Yes
between PROFIBUS PA and all other circuit components	Yes
<b>Isolation</b>	
Isolation tested with	500 V AC
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Ambient conditions</b>	
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 %
<b>Dimensions</b>	
Width	80 mm
Height	125 mm
Depth	130 mm
<b>Weights</b>	
Weight, approx.	550 g
<b>last modified:</b>	12/7/2021 