



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	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	400 mA
Power loss	
Power loss, typ.	7 W
Interfaces	
PROFIBUS DP	
• Transmission rate, max.	45.45 kbit/s
• Design of electrical connection	9-pin sub D
PROFIBUS PA	
• Transmission rate, max.	31.25 kbit/s
• Number of connectable PA field devices	31
• Current output to PA field devices, max.	110 mA
Protocols	
PROFIBUS DP	Yes
PROFIBUS PA	Yes
Interrupts/diagnostics/status information	
Status indicator	No
Diagnostics function	Yes
Diagnostics indication LED	
• Bus activity DP (yellow)	Yes
• Bus activity PA (yellow)	Yes
• Monitoring 24 V voltage supply ON (green)	Yes
Ex(i) characteristics	
maximum values for connecting terminals for gas group IIC	
• U _o (no-load voltage), max.	15 V
• I _o (short-circuit current), max.	247 mA
• P _o (power output), max.	1.95 W
• U _m (voltage at non-intrinsically safe connecting terminals), max.	250 V; AC
Potential separation	

between PROFIBUS DP and all other circuit components		Yes			
between PROFIBUS PA and all other circuit components		Yes			
Isolation					
Isolation tested with		500 V AC			
Degree and class of protection					
IP degree of protection		IP20			
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			
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	9	EC001604		
	ETIM	8	EC001604		
	ETIM	7	EC001604		
	IDEA	4	3564		
	UNSPSC	15	32-15-17-05		
Approvals / Certificates					
General Product Approval			For use in hazardous locations		
 EG-Konf.	Miscellaneous		 RCM		 ATEX
For use in hazardous locations		Marine / Shipping		Environment	
FM	 CCC	 UL	 LRS	CCS (China Classification Society)	 EPD

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