



SIMATIC ET 200SP HA, digital input module, DI 8x24 ... 125VDC HA suitable for terminal block K0, color code CC42, channel diagnostics

General information	
Product type designation	DI 8x24 ... 125 V DC HA
Firmware version	
<ul style="list-style-type: none"> FW update possible 	Yes
Usable terminal block	TB type K0
Color code for module-specific color identification plate	CC42
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V16
<ul style="list-style-type: none"> PCS 7 configurable/integrated from version 	V9.0
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> DI 	Yes
<ul style="list-style-type: none"> Counter 	No
<ul style="list-style-type: none"> Oversampling 	No
<ul style="list-style-type: none"> MSI 	No
Redundancy	
<ul style="list-style-type: none"> Redundancy capability 	No
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption (rated value)	16 mA
Current consumption, max.	20 mA
Power loss	
Power loss, typ.	3.75 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	1 byte; + 1 byte for QI information
Digital inputs	
Number of digital inputs	8
Source/sink input	Yes; P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes

Input characteristic curve in accordance with IEC 61131, type 3	Yes
Time stamping	Yes; Resolution 10 ms
Time stamp (with precision of 1 ms)	Yes; Resolution 1ms
Input voltage	
<ul style="list-style-type: none"> • for signal "0" • for signal "1" 	-125 ... +5 V +11 ... +125 V
Input current	
<ul style="list-style-type: none"> • for signal "1", typ. 	3.1 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length)
Cable length	
<ul style="list-style-type: none"> • shielded, max. • unshielded, max. 	1 000 m 600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> • 2-wire sensor 	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm • Hardware interrupt 	Yes Yes; Parameterizable, channels 0 to 7, rising/falling edge
Diagnoses	
<ul style="list-style-type: none"> • Diagnostic information readable • Monitoring the supply voltage • Wire-break • Group error 	Yes Yes Yes; channel by channel Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • MAINT LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics 	Yes; Yellow LED Yes; green PWR LED Yes; green LED Yes; red LED Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
<ul style="list-style-type: none"> • between the channels • between the channels and backplane bus 	No Yes
Permissible potential difference	
between different circuits	250 V AC/300 V DC
Isolation	
Isolation tested with	3 500 V DC/1 min, type test
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. 	-40 °C 70 °C -40 °C 60 °C
Dimensions	
Width	22.5 mm
Height	115 mm
Depth	138 mm
Weights	
Weight, approx.	165 g
last modified:	1/17/2021 

