



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	V1.0
<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"> STEP 7 configurable/integrated from version 	V5.6
<ul style="list-style-type: none"> PCS 7 configurable/integrated from version 	V9.0
<ul style="list-style-type: none"> PCS neo can be configured/integrated from version 	V3.0
<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	
• for signal "0"	-125 ... +5 V
• for signal "1"	+11 ... +125 V
Input current	
• 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	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	Yes; Parameterizable, channels 0 to 7, rising/falling edge
Diagnoses	
• Diagnostic information readable	Yes
• Monitoring the supply voltage	Yes
• Wire-break	Yes; channel by channel
• Group error	Yes
Diagnostics indication LED	
• MAINT LED	Yes; Yellow LED
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; green LED
• for channel diagnostics	Yes; red LED
• for module diagnostics	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
• between the channels	No
• between the channels and backplane bus	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	
• horizontal installation, min.	-40 °C
• horizontal installation, max.	70 °C
• vertical installation, min.	-40 °C
• vertical installation, max.	60 °C
Dimensions	
Width	22.5 mm
Height	115 mm
Depth	138 mm
Weights	
Weight, approx.	165 g

last modified: 1/17/2021 