SIEMENS

Data sheet 6DL1131-6BL00-0PH1

SIMATIC ET 200SP HA, digital input module, DI 32X24VDC HA, suitable for terminal block, H1, P0, color code CC00, channel diagnostics

General information	
Product type designation	DI 32x24VDC HA
Firmware version	V1.0
● FW update possible	Yes
Usable terminal block	TB type H1 and P0
Color code for module-specific color identification plate	CC00
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V16
● STEP 7 configurable/integrated from version	V5.6
● PCS 7 configurable/integrated from version	V9.0
● PCS neo can be configured/integrated from version	V3.0
● PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
● DI	Yes
● Counter	No
● Oversampling	No
● MSI	No
Redundancy	
● 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)	11.5 mA
Current consumption, max.	15 mA
Encoder supply	
Number of outputs	32; When terminal block with encoder supply is used (type P0)
Output voltage, min.	19.2 V
Short-circuit protection	Yes; When using TB type P0
Power loss	
Power loss, typ.	1.6 W; Max. 2.8 W (all inputs "1")
Address area	
Address space per module	
● Address space per module, max.	4 byte; + 4 bytes for QI information
Hardware configuration	
Automatic encoding	

● Mechanical coding element	Yes
Digital inputs	
Number of digital inputs	32
Digital inputs, parameterizable	Yes
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 2	No
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Pulse extension	No
Edge evaluation	Yes; rising edge, falling edge, edge change
Input voltage	
● Rated value (DC)	24 V
● for signal "0"	-30 to +5 V
● for signal "1"	+11 to +30V
Input current	
● for signal "1", typ.	2.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	3.2 ms
— at "0" to "1", max.	5.3 ms
— at "1" to "0", min.	2.9 ms
— at "1" to "0", max.	4.5 ms
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	
Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes; channel by channel
● Hardware interrupt	Yes; channel by channel
Diagnoses	
● Diagnostic information readable	Yes
● Monitoring the supply voltage	Yes; Module-wise
— parameterizable	Yes
● Wire-break	Yes; Channel-by-channel, optional protective circuit for preventing wire-break diagnostics in the case of simple encoder contacts: 15 kOhm to 18 kOhm
● Short-circuit	No
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	No
● for module diagnostics	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
● between the channels	No
● between the channels and backplane bus	Yes
● between the channels and the power supply of the electronics	No
Isolation	
Isolation tested with	1 500 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.	150 g

last modified: 8/16/2023