## SIEMENS

## Data sheet

## 6ES7141-5BF00-0BL0



SIMATIC ET 200AL, IO-Link, DI 8x 24 V DC, 8x M8, Degree of protection IP67

General information	
Product type designation	IO-Link DI 8x24VDC
HW functional status	FS01
Firmware version	V1.0.x
Vendor identification (VendorID)	42
Device identifier (DeviceID)	229379
Engineering with	
IODD file	Yes
Supply voltage	
Load voltage 1L+	
Rated value (DC)	24 V; Supply from 1Us+ of the IO-Link master
<ul> <li>permissible range, lower limit (DC)</li> </ul>	18 V
<ul> <li>permissible range, upper limit (DC)</li> </ul>	30 V
Reverse polarity protection	Yes; Against destruction; encoder power supply outputs applied with reversed polarity
Input current	
Current consumption (rated value)	15 mA; without load
Encoder supply	
Number of outputs	8; Supply from 1Us+ of the IO-Link master
24 V encoder supply	
Short-circuit protection	Yes; per module, electronic
Output current, max.	0.7 A; Total current of all encoders (depending on IO-Link master supply via 1Us+)
Power loss	
Power loss, typ.	1.5 W
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 55 °C, max.	8
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.	3 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms

— at "0" to "1", max.	4.8 ms	
— at "1" to "0", min.	1.2 ms	
— at "1" to "0", max.	4.8 ms	
Cable length		
<ul> <li>unshielded, max.</li> </ul>	30 m	
Encoder		
Connectable encoders		
• 2-wire sensor	Yes	
- permissible quiescent current (2-wire sensor), max.	1.5 mA	
IO-Link		
IO-Link protocol 1.1	Yes	
Transmission rate	38.4 kBd (COM2)	
Cycle time, min.	2.1 ms	
Size of process data, input per module	1 byte	
Size of process data, output per module	0 byte	
Supported IO-Link profiles	common profile	
Cable length unshielded, max.	20 m	
Connection of IO-Link devices		
Port type A	Yes	
Interrupts/diagnostics/status information		
Alarms		
Diagnostic alarm	Yes; Parameterizable	
Diagnoses		
Short-circuit	Yes; Sensor supply to M; module by module	
Diagnostics indication LED		
<ul> <li>Channel status display</li> </ul>	Yes; green LED	
<ul> <li>for module diagnostics</li> </ul>	Yes; green/red LED	
Potential separation		
Potential separation channels		
<ul> <li>between the channels</li> </ul>	No	
<ul> <li>between the channels and the power supply of the</li> </ul>	No	
electronics		
Isolation		
Isolation tested with	707 V DC (type test)	
Degree and class of protection		
IP degree of protection	IP65/67	
Ambient conditions		
Ambient temperature during operation		
● min.	-30 °C	
• max.	55 °C	
connection method		
Design of electrical connection for the inputs and outputs	M8, 3-pole	
Type of electrical connection for IO-Link	M12, 5-pin, A-coded	
Dimensions		
Width	30 mm	
Height	159 mm	
Depth	40 mm	
Weights		
Weight, approx.	124 g	
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