

# SIEMENS

## Product data sheet

**6ES7131-4BD01-0AB0**


SIMATIC DP,  
 5 ELECTRON. MODULES FOR ET 200S,  
 4 DI HIGH FEATURE 24V DC,  
 15 MM WIDTH WITH PARAM. F. INPUT DELAY  
 DIAGNOSIS F. ENCODER SHORT- CIRCUIT W. LED  
 SF (GROUP FAULT) 5 PIECES PER PACKAGING  
 UNIT

Supply voltage	
Power supply / Input / Input voltage	
24 V DC	Yes ; From power module
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Power supply / Input / Input current	
from backplane bus 3.3 V DC, max.	10 mA
from supply voltage L+, max.	Dependent on encoder
Encoder supply	
Output voltage	min. L+ (-0.5 V), under load
Output current, rated value	500 mA
Output current, permissible range	0 to 500 mA
Sensor supply / Output current	
Short-circuit protection	Yes ; electronic

<b>Power losses</b>	
Power loss, typ.	0.7 W
<b>Address area</b>	
<b>Address space per module</b>	
with packing	4 bit
without packing	1 byte
<b>Digital inputs</b>	
Number of digital inputs	4
Input characteristic curve acc. to IEC 1131, Type 1	Yes
<b>Input voltage</b>	
Rated value, DC	24 V
for signal "0"	-30 to +5 V
for signal "1"	11 to 30 V
<b>Input current</b>	
for signal "1", typ.	8 mA
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
parameterizable	Yes ; 0.1 / 0.5 / 3 / 15 ms
at "0" to "1", min.	0.05 / 0.4 / 2.7 / 14.85
at "0" to "1", max.	0,15 / 0,6 / 3,3 / 15,15
at "1" to "0", min.	0.05 / 0.4 / 2.7 / 14.85
at "1" to "0", max.	0.15 / 0.6 / 3.3 / 15.15
<b>Cable length</b>	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
2-wire BEROS	Yes
permissible quiescent current (2-wire BEROS), max.	1.5 mA
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnoses</b>	
Diagnostic functions	Yes

Short circuit	Yes ; Short-circuit of outputs to ground; module by module
<b>Diagnostics indication LED</b>	
Group error SF (red)	Yes
Status indicator digital input (green)	Yes ; Per channel
<b>Parameter</b>	
Remark	3 bytes
Diagnosis: short circuit	Disable/enable
<b>Galvanic isolation</b>	
<b>Galvanic isolation digital inputs</b>	
between the channels	No
between the channels and the backplane bus	Yes
<b>Permissible potential difference</b>	
between different circuits	75 VDC / 60 VAC
<b>Isolation</b>	
Isolation checked with	500 VDC
<b>Dimensions and weight</b>	
<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm
<b>Weight</b>	
Weight, approx.	35 g
Status	May 16, 2011