

# SIEMENS

## Product data sheet

## 6ES7151-1CA00-3BL0



ET 200S COMPACT, 16DI/16DO STD DC24V,  
3MS;  
DC24V,  
0.5A EXPANDABLE WITH UP TO 12 ET 200S  
MODULES (NO F-MODULES) ELECTRONICBLOCK

General information	
Vendor identification (VendorID)	8200H
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from supply voltage 1L+, max.	100 mA
Address area	
Addressing volume	
Outputs	100 byte
Inputs	100 byte
Digital inputs	
Number/binary inputs	16
Input voltage	
Type of input voltage	DC

Rated value, DC	24 V
for signal "0"	-30 to +5 V
for signal "1"	13 to 30 V
<b>Input current</b>	
for signal "1", typ.	3 mA
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
at "0" to "1", min.	3 ms
at "0" to "1", max.	3 ms
<b>Cable length</b>	
Cable length unshielded, max.	1000 m
<b>Digital outputs</b>	
Number/binary outputs	16
Functionality/short-circuit strength	Yes
Limitation of inductive shutdown voltage to	L+ (-55 to -60 V)
Lamp load, max.	5 W
Controlling a digital input	Yes
<b>Output current</b>	
for signal "1" permissible range for 0 to 60 °C, min.	7 mA
for signal "0" residual current, max.	0.5 mA
<b>Output delay with resistive load</b>	
"0" to "1", max.	0.5 ms
"1" to "0", max.	1.3 ms
<b>Switching frequency</b>	
with resistive load, max.	100 Hz
with inductive load, max.	2 Hz
on lamp load, max.	10 Hz
<b>Aggregate current of outputs (per group)</b>	
<b>all mounting positions</b>	
up to 60 °C, max.	2 A
<b>Cable length</b>	
Cable length unshielded, max.	1000 m
<b>Encoder</b>	

Connectable encoders	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	1.5 mA
Interfaces	
Interface physics, RS 485	Yes
Interface physics, FOC	No
Supports protocol for PROFINET IO	
Transmission rate, max.	12 Mbit/s
PROFIBUS DP	
Cable length, max.	1200 m
PROFIBUS DP, output current, max.	80 mA
Transmission procedure	RS 485
Direct data exchange (slave-to-slave communication)	Yes
Protocols	
Supports protocol for PROFINET IO	No
PROFIBUS DP protocol	Yes
Protocols (Ethernet)	
TCP/IP protocol	No
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Alarms	
Alarms	No
Diagnostic messages	
Diagnostic functions	Yes
Diagnostics indication LED	
Run mode RUN (green)	Yes
Group error SF (red)	Yes
Status indicator digital output (green)	Yes
Status indicator digital input (green)	Yes
Monitoring 24 V voltage supply ON (green)	Yes

Connection to network LINK (green)	No
Transmit/receive RX/TX (yellow)	No
<b>Galvanic isolation</b>	
between backplane bus and electronics	No
between supply voltage and electronics	No
<b>Galvanic isolation digital inputs</b>	
Galvanic isolation digital inputs	No
<b>Galvanic isolation digital outputs</b>	
Galvanic isolation digital outputs	Yes
<b>Isolation</b>	
Isolation checked with	500 V DC
<b>Degree and class of protection</b>	
IP20	Yes
<b>Connection method</b>	
Inputs/outputs	Screw-type and spring-loaded terminals, permanent wiring; 3 and 4-wire connection
<b>Dimensions</b>	
Width	120 mm
Height	81 mm
Depth	58 mm
<b>Weight</b>	
Weight, approx.	230 g ; EB only
Status	Jul 17, 2012