

SIMATIC DP,
ELECTRONIC MODULE FOR ET 200S,
1 POS-SSI D,
CONTROLLED POSITIONING WITH DIGITAL OUTPUTS
FOR SSI-ENCODER,
30MM WIDE

Supply voltage	
24 V DC	Yes
Load voltage L+	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	50 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, typ.	2 W
Hardware configuration	
Module exchange	
Module exchange during operation of the IM-DP	Yes
Module exchange under process voltage	Yes
Digital inputs	
Number of digital inputs	3
Input characteristic curve in accordance with IEC 61131, type 2	Yes
Input voltage	
Rated value, DC	24 V
for signal "0"	-30 to +5 V
Input current	
for signal "0", max. (permissible quiescent current)	2 mA
for signal "1", typ.	9 mA
Input delay (for rated value of input voltage)	
for standard inputs	
at "0" to "1", min.	500 μ s

Cable length	
Cable length unshielded, max.	50 m
Digital outputs	
Number of digital outputs	3
Short-circuit protection	Yes
Response threshold, typ.	0.7 to 1.8 A
Limitation of inductive shutdown voltage to	L+ (-55 to -60 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
Lamp load, max.	5 W
Output voltage	
Rated value (DC)	24 V
for signal "0", max.	3 V
for signal "1", min.	L+ (-1 V)
Output current	
for signal "1" permissible range for 0 to 60 °C, min.	7 mA
for signal "1" permissible range for 0 to 60 °C, max.	600 mA
for signal "0" residual current, max.	3 mA
Output delay with resistive load	
"0" to "1", max.	1.3 ms ; typically 150 µs
"1" to "0", max.	200 µs ; typically 150 µs
Switching frequency	
with resistive load, max.	100 Hz
with inductive load, max.	2 Hz
on lamp load, max.	10 Hz
Cable length	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Analog value generation	
Updating time of the feedback messages	2 ms
Encoder	
Connectable encoders	
Absolute encoder (SSI)	Yes
2-wire sensor	Yes ; Type 2
Encoder signals, absolute encoder (SSI)	
Input signal	to RS 422; 13, 21, 25 Bit
Binary code	1
Gray code	1

Cable length, shielded, max.	320 m ; 320 m at 125 kHz, 160 m at 250 kHz, 60 m at 500 kHz, 20 m at 1 MHz, 8 m at 2 MHz, twisted in pairs and shielded
Response times	
Latch	400 µs ; plus age of encoder value
Response time at switchover/switchoff point	Output delay + message frame runtime + 30 µs
Interrupts/diagnostics/status information	
Diagnostics indication LED	
Actual value falling DN (green)	Yes
Actual value rising UP (green)	Yes
Positioning mode POS (green)	Yes
Group error SF (red)	Yes
Status indicator digital input (green)	Yes
Parameter	
Remark	16 byte
Galvanic isolation	
between the channels and backplane bus	Yes
Dimensions	
Width	30 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	65 g
Status	Jul 21, 2014