



SIMATIC S7-200, DIGITAL I/O EM 223,
FOR S7-22X CPU ONLY, 16DI 24V DC,
SINK/SOURCE, 16DO 24V DC,
0.75A/POINT,SOURCE

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
from backplane bus 5 V DC, max.	160 mA
Power losses	
Power loss, typ.	6 W
Digital inputs	
Number/binary inputs	16
Input voltage	
Type of input voltage	DC
Rated value, DC	24 V
for signal "0"	0 to 5 V
for signal "1"	15 to 30 VDC
Input current	
for signal "1", typ.	4 mA

Input delay (for rated value of input voltage)	
for standard inputs	
at "0" to "1", max.	4.5 ms
Digital outputs	
Number/binary outputs	16
Functionality/short-circuit strength	No ; to be provided externally
Limitation of inductive shutdown voltage to	L+ (-48 V)
Output voltage	
for signal "0", max.	0.1 V
for signal "1", min.	20 V
Output current	
for signal "1" rated value	750 mA
Aggregate current of outputs (per group)	
all mounting positions	
maximum current per conductor/group	3 A ; 3 / 3 / 6
Relay outputs	
Switching capacity of contacts	
with inductive load, max.	0.75 A ; each output
on lamp load, max.	5 W
Switching frequency/contacts/at ohmic load/maximum	0.75 A ; each output
Cable length	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	150 m
Encoder	
Connectable encoders	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	1 mA
Galvanic isolation	
Galvanic isolation digital inputs	
Galvanic isolation digital inputs	Yes ; Optocoupler
between the channels, in groups of	4
Galvanic isolation digital outputs	
Galvanic isolation digital outputs	Yes ; Optocoupler
between the channels, in groups of	4 ; 4 / 4 / 8
Isolation	
Isolation checked with	500 V AC
Connection method	
Plug-in I/O terminals	Yes

Dimensions	
Width	137.5 mm
Height	80 mm
Depth	62 mm
Weight	
Weight, approx.	360 g
Status	Feb 25, 2013