



*** Spare part *** SIMATIC DP, 5 electronic modules for ET 200S, 2 DI Standard 24 V DC, 15 mm width, 5 units per packing unit

Supply voltage	
Rated value (DC)	24 V; From power module
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	min. L+ (-0.5 V), under load
Output current	
• Rated value	500 mA
• permissible range, lower limit	0 mA
• permissible range, upper limit	500 mA
Power loss	
Power loss, typ.	0.4 W
Address area	
Address space per module	
• Address space per module, max.	1 byte
• with packing	2 bit
Digital inputs	
Number of digital inputs	2
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	+15 to +30 V
Input current	
• for signal "1", typ.	7 mA; at 24 V
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	2 ms; typically 3 ms
— at "0" to "1", max.	4.5 ms
— at "1" to "0", min.	2 ms; typically 3 ms
— at "1" to "0", max.	4.5 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	

• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	No
Diagnostics indication LED	
• Group error SF (red)	No
• Status indicator digital input (green)	Yes; per channel
Parameter	
Remark	1 byte
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	35 g


last modified: 3/12/2024 



*** Spare part *** SIMATIC DP, 5 electronic modules for ET 200S, 2 DI High Feature 24 V DC, 15 mm width, with param. input delay Diagnostics encoder short circuit with SF LED (group fault) 5 units per packing unit

Supply voltage	
Rated value (DC)	24 V; From power module
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	min. L+ (-0.5 V), under load
Short-circuit protection	Yes; Electronic
Output current	
<ul style="list-style-type: none"> Rated value 	500 mA
<ul style="list-style-type: none"> permissible range, lower limit 	0 mA
<ul style="list-style-type: none"> permissible range, upper limit 	500 mA
Power loss	
Power loss, typ.	0.4 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	1 byte
<ul style="list-style-type: none"> with packing 	2 bit
Digital inputs	
Number of digital inputs	2
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
<ul style="list-style-type: none"> Type of input voltage 	DC
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> for signal "0" 	-30 to +5 V
<ul style="list-style-type: none"> for signal "1" 	+11 to +30V
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	8 mA
Input delay (for rated value of input voltage)	
for standard inputs	
<ul style="list-style-type: none"> parameterizable 	Yes; 0.1 / 0.5 / 3 / 15 ms
<ul style="list-style-type: none"> at "0" to "1", min. 	0.05 / 0.4 / 2.7 / 14.85
<ul style="list-style-type: none"> at "0" to "1", max. 	0.15 / 0.6 / 3.3 / 15,15
<ul style="list-style-type: none"> at "1" to "0", min. 	0.05 / 0.4 / 2.7 / 14.85
<ul style="list-style-type: none"> at "1" to "0", max. 	0.15 / 0.6 / 3.3 / 15,15
Cable length	
<ul style="list-style-type: none"> shielded, max. 	1 000 m
<ul style="list-style-type: none"> unshielded, max. 	600 m
Encoder	

Connectable encoders	
<ul style="list-style-type: none"> • 2-wire sensor 	Yes
<ul style="list-style-type: none"> — permissible quiescent current (2-wire sensor), max. 	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
<ul style="list-style-type: none"> • Hardware interrupt 	Yes; Parameterizable
Diagnoses	
<ul style="list-style-type: none"> • Short-circuit 	Yes; Short-circuit of outputs to ground; module by module
Diagnostics indication LED	
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
<ul style="list-style-type: none"> • Status indicator digital input (green) 	Yes; per channel
Parameter	
Remark	3 byte
Diagnostics short-circuit	Disable / enable
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> • between the channels 	No
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes
Isolation	
Isolation tested with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	35 g

last modified: 3/12/2024 



*** Spare part *** SIMATIC DP, 5 electronic modules for ET 200S, 4DI standard 24 V DC, 15 mm width, 5 units per packing unit

Supply voltage	
Rated value (DC)	24 V; From power module
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	min. L+ (-0.5 V), under load
Output current	
<ul style="list-style-type: none"> Rated value 	500 mA
<ul style="list-style-type: none"> permissible range, lower limit 	0 mA
<ul style="list-style-type: none"> permissible range, upper limit 	500 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	1 byte
<ul style="list-style-type: none"> with packing 	4 bit
Digital inputs	
Number of digital inputs	4
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
<ul style="list-style-type: none"> Type of input voltage 	DC
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> for signal "0" 	-30 to +5 V
<ul style="list-style-type: none"> for signal "1" 	+15 to +30 V
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	7 mA; at 24 V
Input delay (for rated value of input voltage)	
for standard inputs	
<ul style="list-style-type: none"> parameterizable 	No
<ul style="list-style-type: none"> at "0" to "1", min. 	2 ms; typically 3 ms
<ul style="list-style-type: none"> at "0" to "1", max. 	4.5 ms
<ul style="list-style-type: none"> at "1" to "0", min. 	2 ms; typically 3 ms
<ul style="list-style-type: none"> at "1" to "0", max. 	4.5 ms
Cable length	
<ul style="list-style-type: none"> shielded, max. 	1 000 m
<ul style="list-style-type: none"> unshielded, max. 	600 m
Encoder	
Connectable encoders	

- 2-wire sensor Yes
- permissible quiescent current (2-wire sensor), max. 1.5 mA

Interrupts/diagnostics/status information

Diagnostics function No

Diagnostics indication LED

- Group error SF (red) No
- Status indicator digital input (green) Yes; per channel

Parameter

Remark 1 byte

Potential separation

Potential separation digital inputs

- between the channels No
- between the channels and backplane bus Yes

Isolation

Isolation tested with 500 V DC

Dimensions

Width 15 mm

Height 81 mm

Depth 52 mm

Weights

Weight, approx. 35 g


last modified: 5/22/2024 



*** Spare part *** SIMATIC DP, 5 electronic modules for ET 200S, 4 DI High Feature 24 V DC, 15 mm width, with param. input delay Diagnostics encoder short circuit with SF LED (group fault) 5 units per packing unit

Supply voltage	
Rated value (DC)	24 V; From power module
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	min. L+ (-0.5 V), under load
Short-circuit protection	Yes; Electronic
Output current	
<ul style="list-style-type: none"> Rated value 	500 mA
<ul style="list-style-type: none"> permissible range, lower limit 	0 mA
<ul style="list-style-type: none"> permissible range, upper limit 	500 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	1 byte
<ul style="list-style-type: none"> with packing 	4 bit
Digital inputs	
Number of digital inputs	4
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
<ul style="list-style-type: none"> Type of input voltage 	DC
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> for signal "0" 	-30 to +5 V
<ul style="list-style-type: none"> for signal "1" 	+11 to +30V
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	8 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— 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
Cable length	
<ul style="list-style-type: none"> shielded, max. 	1 000 m
<ul style="list-style-type: none"> unshielded, max. 	600 m
Encoder	

Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
• Short-circuit	Yes; Short-circuit of outputs to ground; module by module
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes; per channel
Parameter	
Remark	3 byte
Diagnostics short-circuit	Disable / enable
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	35 g

last modified: 3/12/2024 



*** Spare part *** SIMATIC DP, 5 electronic modules ET 200S: 4 DI 24 V...48 V UI, 15 mm width, with SF LED (group fault) 5 units per packing unit

Supply voltage	
Reverse polarity protection	Yes; AC or DC automatic
Input current	
from supply voltage L+, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
Type of output voltage	min. L+ (-0.5 V), under load
Short-circuit protection	Yes; per module
Output current	
<ul style="list-style-type: none"> Rated value 	500 mA
<ul style="list-style-type: none"> permissible range, lower limit 	0 mA
<ul style="list-style-type: none"> permissible range, upper limit 	500 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	1 byte
<ul style="list-style-type: none"> with packing 	4 bit
Digital inputs	
Number of digital inputs	4
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
<ul style="list-style-type: none"> Type of input voltage 	AC/DC
<ul style="list-style-type: none"> Rated value (UC) 	24 V; 24 ... 48 V UC (47 ... 63 Hz)
<ul style="list-style-type: none"> for signal "0" 	-6 to +6 V DC/ 0 to 5 V AC
<ul style="list-style-type: none"> for signal "1" 	-15 V DC to -57.6 V DC; 15 V DC to 57.6 V DC; 15 V AC to 48 V AC
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	10 mA; 4 to 10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
<ul style="list-style-type: none"> at "0" to "1", max. 	15 ms
<ul style="list-style-type: none"> at "1" to "0", max. 	15 ms
Encoder connection	
<ul style="list-style-type: none"> Fixed current limitation for wire-break monitoring, min. 	18 kΩ; Rated voltage 24 V (15 V to 35 V); rated voltage 48 V (30 V to 60 V): 39 kohms
Cable length	
<ul style="list-style-type: none"> shielded, max. 	1 000 m
<ul style="list-style-type: none"> unshielded, max. 	600 m
Encoder	
Connectable encoders	

<ul style="list-style-type: none"> • 2-wire sensor — permissible quiescent current (2-wire sensor), max. 	Yes 2 mA; (0.5 to 2 mA), a minimum load current is necessary for wire break diagnostics.
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Interrupts/diagnostics/status information

Diagnostics function	Yes; Parameterizable
Diagnoses	
<ul style="list-style-type: none"> • Wire-break 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • Group error SF (red) • Status indicator digital input (green) 	Yes Yes; per channel

Potential separation

Potential separation digital inputs	
<ul style="list-style-type: none"> • between the channels • between the channels and backplane bus 	No Yes

Isolation

Isolation tested with	2 500 V DC
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Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.	35 g
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last modified: 5/22/2024 

*** Spare part *** SIMATIC DP, 5 electronic modules for ET 200S, 2 DI 120 V AC
15 mm width, 5 units per packing unit

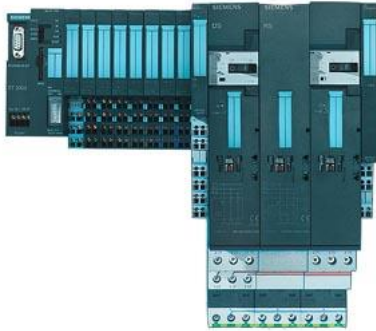


Figure similar

Supply voltage	
Rated value (AC)	120 V
Input current	
from supply voltage L1, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	6 mA
Power loss	
Power loss, typ.	0.5 W
Address area	
Address space per module	
• Address space per module, max.	1 byte
• with packing	2 bit
Digital inputs	
Number of digital inputs	2
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
• Type of input voltage	AC
• Rated value (AC)	120 V; 47 ... 63 Hz
• for signal "0"	0V AC to 20V AC
• for signal "1"	79 to 132 V AC
Input current	
• for signal "1", typ.	3 mA; 3 to 9 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	15 ms
— at "1" to "0", min.	25 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	No
— permissible quiescent current (2-wire sensor), max.	1 mA
Interrupts/diagnostics/status information	
Diagnostics function	No
Diagnoses	
• Short-circuit	No
Diagnostics indication LED	
• Status indicator digital input (green)	Yes; per channel
Parameter	

Remark	3 byte
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	2 500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	31 g

last modified: 3/12/2024 

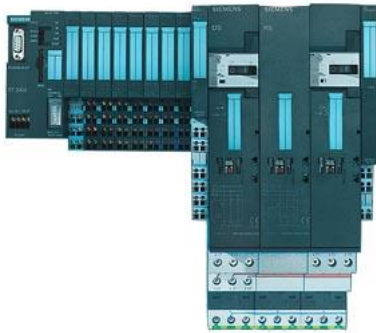


Figure similar

*** Spare part *** SIMATIC DP, 5 electronic modules for ET 200S, 2 DI 230 V AC
15 mm width, 5 units per packing unit

Supply voltage	
Rated value (AC)	230 V
Input current	
from supply voltage L1, max.	Dependent on encoder
from backplane bus 3.3 V DC, max.	6 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
• Address space per module, max.	1 byte
• with packing	2 bit
Digital inputs	
Number of digital inputs	2
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
• Type of input voltage	AC
• Rated value (AC)	230 V; 47 ... 63 Hz
• for signal "0"	0V AC to 40V AC
• for signal "1"	164V AC to 264V AC
Input current	
• for signal "1", typ.	5 mA; 5 to 15mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	15 ms
— at "1" to "0", min.	45 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	No
— permissible quiescent current (2-wire sensor), max.	2 mA
Interrupts/diagnostics/status information	
Diagnostics function	No
Diagnoses	
• Short-circuit	No
Diagnostics indication LED	
• Status indicator digital input (green)	Yes; per channel
Parameter	

Remark	3 byte
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	4 000 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	31 g

last modified: 3/12/2024 