

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Selected official specification and wiring pages

SIEMENS SIMATIC

6ES7288-5DT04-0AA0

S7-200 SMART SB DT04 DIGITAL INPUT/OUTPUT SIGNAL BOARD

The following original Siemens pages contain the model-specific specifications, interface details, and wiring information with original pagination retained.

REFERENCE PACKAGE

SIMATIC S7-200 SMART System Manual V2.8, 08/2023

OFFICIAL DOCUMENT

[A5E03822230-AL](#)

SIMATIC

S7 S7-200 SMART

System Manual

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Table A-136 Connector pin locations for EM AR04 RTD 4 x 16 bit (6ES7288-3AR04-0AA0)

Pin	X10 (gold)	X11 (gold)	X12 (gold)	X13 (gold)
1	L+ / 24 V DC	No connection	No connection	No connection
2	M / 24 V DC	No connection	No connection	No connection
3	Functional Earth	No connection	No connection	No connection
4	AI 0 M+/RTD	AI 1 M+/RTD	AI 2 M+/RTD	AI 3 M+/RTD
5	AI 0 M-/RTD	AI 1 M-/RTD	AI 2 M-/RTD	AI 3 M-/RTD
6	AI 0 I+/RTD	AI 1 I+/RTD	AI 2 I+/RTD	AI 3 I+/RTD
7	AI 0 I-/RTD	AI 1 I-/RTD	AI 2 I-/RTD	AI 3 I-/RTD

A.6 Digital signal boards

A.6.1 SB DT04 digital input/output specifications

Table A-137 General specifications

Technical data	SB Digital 2 x Inputs / 2 x Digital Outputs (DT04)
Article number	6ES7288-5DT04-0AA0
Dimensions W x H x D (mm)	35 x 52.2 x 16
Weight	18.1 grams
Power dissipation	1.0 W
Current consumption (5 V DC)	50 mA
Current consumption (24 V DC)	4 mA / Input used

Table A-138 Digital inputs

Technical data	SB Digital 2 x Inputs / 2 x Digital Outputs (DT04)
Number of inputs	2
Type	Sink (IEC Type 1 sink)
Rated voltage	24 V DC at 4 mA, nominal
Continuous permissible voltage	30 V DC max.
Surge voltage	35 V DC for 0.5 sec.
Logic 1 signal (min.)	15 V DC at 2.5 mA
Logic 0 signal (max.)	5 V DC at 1 mA
Isolation (field side to logic)	500 V AC for 1 minute
Isolation groups	1

A.6 Digital signal boards

Technical data	SB Digital 2 x Inputs / 2 x Digital Outputs (DT04)
Filter times	Individually selectable on each channel: μs: 0.2, 0.4, 0.8, 1.6, 3.2, 6.4, 12.8 ms: 0.2, 0.4, 0.8, 1.6, 3.2, 6.4, 12.8
Number of inputs on simultaneously	2
Cable length (max.), in meters	Shielded: 500 m normal inputs Unshielded: 300 m normal inputs

Table A-139 Digital outputs

Technical data	SB Digital 2 x Inputs / 2 x Digital Outputs (DT04)
Number of outputs	2
Output type	Solid state - MOSFET (sourcing)
Voltage range	20.4 to 28.8 V DC
Logic 1 signal at max. current	20 V DC min.
Logic 0 signal at max. current	0.1 V DC max.
Rated current per point (max.)	0.5 A
Rated current per common (max.)	1 A
Lamp load	5 W
On state contact resistance	0.6 Ω max.
Leakage current per point	10 μA max.
Surge current	5 A for 100 ms max.
Overload protection	No
Isolation (field side to logic)	500 V AC for 1 minute
Isolation groups	1
Inductive clamp voltage	L+ minus 48 V, 1 W dissipation
Switching delay	2 μs max. off to on 10 μs max. on to off
Output behavior in STOP	Last value or substitute value (default value 0)
Number of outputs on simultaneously	2
Cable length (max.), in meters	Shielded: 500 m normal inputs Unshielded: 150 m normal inputs

Table A-140 Wiring diagram for the SB DT04 2 Digital Input/2 Digital Output (6ES7288-5DT04-0AA0)

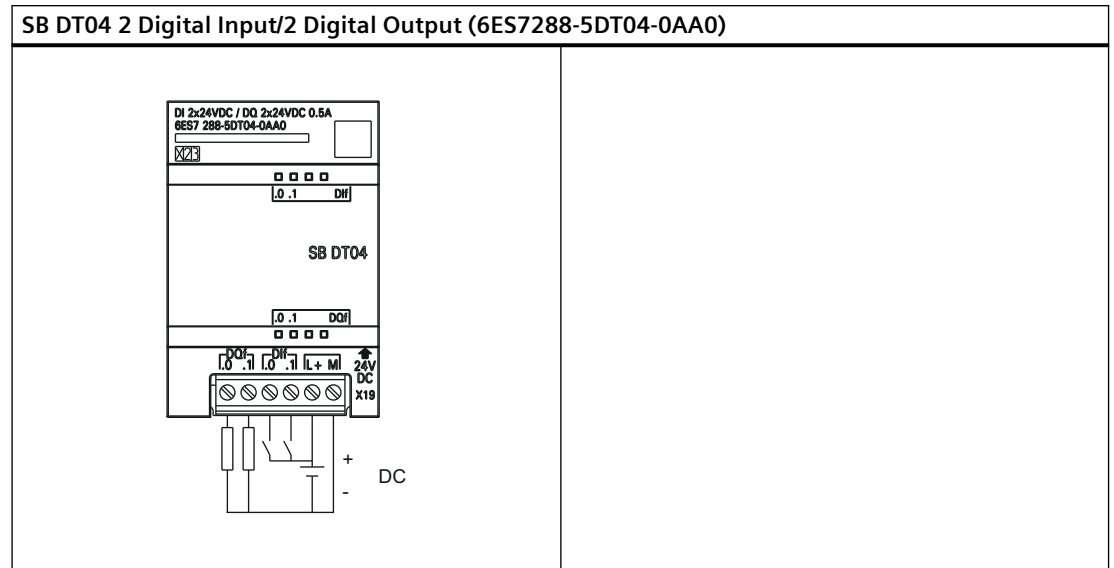


Table A-141 Connector pin locations for SB DT04 2 Digital Input/2 Digital Output (6ES7288-5DT04-0AA0)

Pin	X19
1	DQ f.0
2	DQ f.1
3	DI f.0
4	DI f.1
5	L+ / 24 V DC
6	M / 24 V DC

A.7 Analog signal boards

A.7.1 SB AE01 analog input specifications

Table A-142 General specifications

Technical data	SB Analog 1 x Input (SB AE01)
Article number	6ES7288-5AE01-0AA0
Dimensions W x H x D (mm)	35 x 52.2 x 16
Weight	20 grams
Power dissipation	0.4 W
Current consumption (5 V DC)	50 mA (5 V and 3.3 combined)
Current consumption (24 V DC)	None