SIEMENS

Data sheet 6ES7924-2AA20-0AA0



32K CONNECT. MOD. TP1 W/O LED SCREW

Connection module TP1 32 channels a. 4x2 terminals f. Potential supply Type: Screw terminal without LED, VPE=1 unit 50 pole IDC connector f. cable

Technical Product Detail Page	https://i.siemens.com/1P6ES7924-2AA20-0AA0
target system	SIMATIC S7-1500
suitability for use	Digital I/O modules
product brand name	SIMATIC Top connect
product type designation	Fully modular connection
product designation	Connection module
electrical data	
operating voltage	
● at DC / rated value	24 V
● rated value	50 V
● at DC / maximum	50 V
ampacity / per pin / maximum	1 A
continuous current / at DC / per signal cable / maximum	1 A
total current / maximum	2 A
product function / infeed function	Yes
product component	
● PE connection	No
● shield connection	No
● disconnector	No
product feature / cross-connectable	No
connection method	
number of terminals	48; 32 x I/O; 8 x L+, 8 x M
number of channels	32
type of connecting terminal	Screw-type terminal
position / of the terminal	Top
number of terminal levels	1
design of terminal / terminal levels internally linked	No
type of electrical connection / for connecting cable	Plug-in connection
number of poles / at the 1st interface	50; IDC connector with installed strain relief for the connecting cable
number of the plug contacts / of the electrical connection	1
wire length / maximum	30 m; between front connector module and Connection module
type of connectable conductor cross-sections / solid	No
connectable conductor cross-section	
● for flexible conductor / with core end processing	0.5 ... 2.5 mm²; End sleeve according to DIN 46228/1
● stranded	0.5 ... 2.5 mm²
● finely stranded / with core end processing	0.5 ... 2.5 mm²
number of cables / per connection	2; Connection for internal system: Combination of 1 or 2 Wires until the sum total of cross sections be achieved in a ferrule.
width of screwdriver blade	3.5 mm

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tightening torque	0.4 ... 0.5 N·m
standards, specifications, approvals	
certificate of suitability	
● cULus approval	Yes
● IECEx	Yes
● ATEX	Yes
● ULhazloc approval	Yes
● UKEX	Yes
● CCC / for hazardous zone according to GB standard	Yes
design tested acc. to type of protection / EEx e	Yes
overvoltage category	2
degree of pollution	2
combustibility class according to UL 94	V1
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
● total	90.3 kg
● during manufacturing	2.5 kg
● during operation	87.5 kg
● after end of life	0.23 kg
ambient conditions	
ambient temperature	
● during operation	0 ... 60 °C
● during storage	-40 ... +70
mechanical data	
width × height × depth	100 mm × 76 mm × 60 mm
mounting type	DIN rail 35 mm, DIN rail 15 mm
mounting position	any
height / with lowest-profile installation	60 mm
net weight	0.31 kg
insulation material	other
color	
● of the enclosure	grey
● of the light source	without
product component / required / end cover plate	No
further information / internet links	
internet link	
● to website: Industry Mall	https://mall.industry.siemens.com
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: system cabling	https://siemens.com/simatic-top-connect
● to website: CAx-Download-Manager	https://siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
marketing text	The TP1 connection module for a 1-wire connection with 32 channels and a potential connection with screw terminals without LED for signalling forms the interface between the connection cables of the peripherals coming from the field and the SIMATIC S7. This is mounted on the DIN rail and is exactly adapted to the respective task thanks to its functionality with screw terminals. This connection module is part of the fully modular SIMATIC TOP connect connection for the fastest and safest system cabling. In addition to low wiring costs, error sources in cabling can be significantly reduced. Sensors and actuators from the peripherals are combined with the connection modules of SIMATIC TOP connect and connected to the SIMATIC S7-300/1500 via cable and front plug-in module.

Classifications

	Version	Classification
eClass	16	27-25-01-12
eClass	14	27-25-01-12
eClass	12	27-14-11-28

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eClass	9.1	27-14-11-28
eClass	9	27-14-11-28
eClass	8	27-14-11-28
eClass	7.1	27-14-11-28
eClass	6	27-14-11-28
ETIM	10	EC000900
ETIM	9	EC000900
ETIM	8	EC000900
ETIM	7	EC000900
UNSPSC	15	39-12-14-10

Approvals / Certificates

General Product Approval

Manufacturer Declaration

Declaration of Conformity

China RoHS

UL

For use in hazardous locations

Manufacturer Declaration

IECEx

For use in hazardous locations

Miscellaneous

ATEX

CCC-Ex

UL

Environment

EPD

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