



Figure similar

CONNECT. MOD. TPOO W. LED SCREW TERM.

Connection module TPOO w. optocoupler 24 V DC, Output 8 NO contacts 24V DC/4 A Overload and short circuit-proof, with LED Push-in terminal VPE = 1 unit 16 pole IDC connection for cable

Technical Product Detail Page	<a href="https://i.siemens.com/1P6ES7924-0BF20-0BA0">https://i.siemens.com/1P6ES7924-0BF20-0BA0</a>
target system	SIMATIC S7-300 / 1500
suitability for use	Digital output module
product type designation	Fully modular connection
product designation	Connection module
<b>electrical data</b>	
operating voltage	
• at DC / rated value	24 V; for coil
• rated value	24 V
• at DC / maximum	28.8 V
ampacity / per pin / maximum	1 A
continuous current / at DC / per signal cable / maximum	4 A
total current / maximum	32 A; any, except overhead; voltage feed each group of four max. 16A
switching capacity current / of the contacts / with resistive load / maximum	4 A; for 24V DC
type of switching contact	Optocoupler
operating frequency / maximum	500 1/s
display version	
• as status display of the inputs/outputs	LED yellow for "active high"
• for power supply / power LED	Yes; green for 24 V DC O.K.
product function / infeed function	Yes
product component	
• PE connection	No
• shield connection	No
• disconnecter	No
product feature / cross-connectable	No
<b>connection method</b>	
number of terminals	22; 8 x O; 2 x L+, 2 x M; 10 x special terminals
number of channels	8
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	16; 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	
<ul style="list-style-type: none"> <li>• for flexible conductor / with core end processing</li> <li>• stranded</li> <li>• finely stranded / with core end processing</li> </ul>	0.5 ... 2.5 mm <sup>2</sup> ; End sleeve according to DIN 46228/1
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
tightening torque	0.4 ... 0.5 N·m

#### standards, specifications, approvals

certificate of suitability	
<ul style="list-style-type: none"> <li>• cULus approval</li> </ul>	Yes
design tested acc. to type of protection / EEx e	No
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 [CO <sub>2</sub> eq]	
<ul style="list-style-type: none"> <li>• total</li> <li>• during manufacturing</li> <li>• during operation</li> <li>• after end of life</li> </ul>	287 kg 2.3 kg 284.4 kg 0.22 kg

#### ambient conditions

ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	0 ... 60 °C -40 ... +70 °C

#### mechanical data

width × height × depth	130 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	0.29 kg
insulation material	other
color	
<ul style="list-style-type: none"> <li>• of the enclosure</li> <li>• of the light source</li> </ul>	grey other
product component / required / end cover plate	No

#### further information / internet links

internet link	
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to web page: system cabling</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://siemens.com/simatic-top-connect">https://siemens.com/simatic-top-connect</a> <a href="https://siemens.com/cax">https://siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

#### additional information

other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
marketing text	The TPOo connection module with optocoupler and potential feed terminals (24VDC) for the connection of 8 digital outputs (24VDC) for potential adaption/isolation, contact designed as normally open contact, with screw terminals and LED for signalling forms the interface between the connection cables of the peripherals supplied from the field and the SIMATIC S7. This is mounted on the DIN rail and, thanks to its functionality with screw terminals, is precisely adapted to the respective task. This connectionmodule 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	14	27-25-01-12

eClass	12	27-14-11-28
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	39-12-23-31

**Approvals / Certificates**

<b>General Product Approval</b>	<b>EMV</b>	<b>Environment</b>
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[Manufacturer Declaration](#)

[China RoHS](#)



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