



Figure similar

CONNECT. MOD. TPOO W. LED PUSH-IN TERM.

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

|  |   |
|--|---|
| Technical Product Detail Page  | <a href="https://i.siemens.com/1P6ES7924-0BF20-0BC0">https://i.siemens.com/1P6ES7924-0BF20-0BC0</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  | push-in   |
| 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> </ul> | 0.2 ... 2.5 mm <sup>2</sup> ; End sleeve according to DIN 46228/1 or DIN 46228/4 with plastic collar   |                       |
| <ul style="list-style-type: none"> <li>• stranded</li> </ul>  | 0.2 ... 2.5 mm <sup>2</sup>  |                       |
| <ul style="list-style-type: none"> <li>• finely stranded / without core end processing</li> </ul>     | 0.2 ... 2.5 mm <sup>2</sup>  |                       |
| <ul style="list-style-type: none"> <li>• finely stranded / with core end processing</li> </ul>        | 0.2 ... 2.5 mm <sup>2</sup>  |                       |
| 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   |                       |
| <b>standards, specifications, approvals</b>   |  |                       |
| 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   |                       |
| <b>standards, specifications, approvals / Environmental Product Declaration</b>                       |  |                       |
| Environmental Product Declaration   | Yes  |                       |
| global warming potential [CO2 eq]   |  |                       |
| <ul style="list-style-type: none"> <li>• total</li> </ul>   | 286.2 kg   |                       |
| <ul style="list-style-type: none"> <li>• during manufacturing</li> </ul>                              | 1.6 kg   |                       |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>                                  | 284.4 kg   |                       |
| <ul style="list-style-type: none"> <li>• after end of life</li> </ul>                                 | 0.15 kg  |                       |
| <b>ambient conditions</b>   |  |                       |
| ambient temperature   |  |                       |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>                                  | 0 ... 60 °C  |                       |
| <ul style="list-style-type: none"> <li>• during storage</li> </ul>                                    | -40 ... +70 °C   |                       |
| <b>mechanical data</b>  |  |                       |
| 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  | 0.25 kg  |                       |
| insulation material   | other  |                       |
| color   |  |                       |
| <ul style="list-style-type: none"> <li>• of the enclosure</li> </ul>                                  | grey   |                       |
| <ul style="list-style-type: none"> <li>• of the light source</li> </ul>                               | other  |                       |
| product component / required / end cover plate  | No   |                       |
| <b>further information / internet links</b>   |  |                       |
| internet link   |  |                       |
| <ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>                         | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>  |                       |
| <ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>     | <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>  |                       |
| <ul style="list-style-type: none"> <li>• to web page: system cabling</li> </ul>                       | <a href="https://siemens.com/simatic-top-connect">https://siemens.com/simatic-top-connect</a>  |                       |
| <ul style="list-style-type: none"> <li>• to website: CAx-Download-Manager</li> </ul>                  | <a href="https://siemens.com/cax">https://siemens.com/cax</a>  |                       |
| <ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>               | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>  |                       |
| <b>additional information</b>   |  |                       |
| 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 push-in 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 push-in terminals, is precisely adapted to the respective task. 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. |                       |
| <b>Classifications</b>  |  |                       |
|   | <b>Version</b>   | <b>Classification</b> |

|        |     |             |
|--------|-----|-------------|
| 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

|                          |     |             |
|--------------------------|-----|-------------|
| General Product Approval | EMV | Environment |
|--------------------------|-----|-------------|

[Manufacturer Declaration](#)

[China RoHS](#)



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11/14/2025