## SIEMENS

## Data sheet

## 6ES7924-0CC21-0AA0



TERM. BL. TPA SCREW TERM .S7-300

Connection module TPA 3-tier for analog Modules of the SIMATIC S7-300 Type: Screw terminal without LED, VPE=1 unit 16 pole IDC connector f. cable

| target system                                                         | SIMATIC S7-300                                                                                                                 |  |  |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--|--|
| target system                                                         |                                                                                                                                |  |  |
| suitability for use                                                   | Analog I/O modules                                                                                                             |  |  |
| product type designation                                              | Fully modular connection Connection module                                                                                     |  |  |
| 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                                                                                                                            |  |  |
| product component / PE connection                                     | No                                                                                                                             |  |  |
| product component / shield connection                                 | No                                                                                                                             |  |  |
| product component / disconnector                                      | No                                                                                                                             |  |  |
| product function / infeed function                                    | Yes                                                                                                                            |  |  |
| product feature / cross-connectable                                   | No                                                                                                                             |  |  |
| connection method                                                     |                                                                                                                                |  |  |
| number of terminals                                                   | 30; Intended for analog                                                                                                        |  |  |
| number of terminal levels                                             | 1                                                                                                                              |  |  |
| type of connecting terminal                                           | Screw-type terminal                                                                                                            |  |  |
| position / of the terminal                                            | Тор                                                                                                                            |  |  |
| type of electrical connection / for connecting cable                  | Plug-in connection                                                                                                             |  |  |
| 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. |  |  |
| design of terminal / terminal levels internally linked                | No                                                                                                                             |  |  |
| type of connectable conductor cross-sections / solid                  | No                                                                                                                             |  |  |
| connectable conductor cross-section                                   |                                                                                                                                |  |  |
| <ul> <li>for flexible conductor / with core end processing</li> </ul> | 0.5 2.5 mm <sup>2</sup> ; End sleeve according to DIN 46228/1                                                                  |  |  |
| stranded                                                              | 0.5 2.5 mm²                                                                                                                    |  |  |
| <ul> <li>finely stranded / with core end processing</li> </ul>        | 0.5 2.5 mm²                                                                                                                    |  |  |
| 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                                                                     |  |  |
| width of screwdriver blade                                            | 3.5 mm                                                                                                                         |  |  |
| tightening torque                                                     | 0.4 0.5 N·m                                                                                                                    |  |  |
| standards, specifications, approvals                                  |                                                                                                                                |  |  |
| certificate of suitability                                            |                                                                                                                                |  |  |
| • cULus approval                                                      | Yes                                                                                                                            |  |  |
| design tested acc. to type of protection / EEx e                      | No                                                                                                                             |  |  |
| overvoltage category                                                  | 2                                                                                                                              |  |  |

|                                                                                          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                       |  |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------|--|
| degree of pollution                                                                      | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                       |  |
| combustibility class according to UL 94                                                  | V1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                       |  |
| standards, specifications, approvals / Environmental Product De                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| Environmental Product Declaration                                                        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                       |  |
| Global Warming Potential [CO2 eq]                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| • total                                                                                  | 12.3 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| <ul> <li>during manufacturing</li> </ul>                                                 | 1.5 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                       |  |
| <ul> <li>during operation</li> </ul>                                                     | 10.7 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| after end of life                                                                        | 0.14 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| ambient conditions                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| ambient temperature                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| <ul> <li>during operation</li> </ul>                                                     | 0 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| during storage                                                                           | -40 +70 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                       |  |
| mechanical data                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| width × height × depth                                                                   | 57 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                                                                               | 0.18 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| insulation material                                                                      | other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                       |  |
| color                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| • of the enclosure                                                                       | grey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                       |  |
| <ul> <li>of the light source</li> </ul>                                                  | without                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| product component / required / end cover plate                                           | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                       |  |
| further information / internet links                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| internet link                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                       |  |
| to website: Industry Mall                                                                | https://mall.industry.siemens.com                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                       |  |
| <ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>                        | https://www.siemens.com/tstcloud                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                       |  |
| <ul> <li>to web page: system cabling</li> </ul>                                          | https://siemens.com/simatic-top-connect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| <ul> <li>to web page: system cabing</li> <li>to website: CAx-Download-Manager</li> </ul> | https://siemens.com/cax                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                       |  |
| to website: Industry Online Support                                                      | https://support.industry.siemens.com                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                       |  |
| additional information                                                                   | mups.//support.industry.siemen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>s.com</u>             |                       |  |
| other information                                                                        | Encoifications at rated input va                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Itago and ambient tompor | coturo 125 °C (upload |  |
|                                                                                          | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                       |  |
| marketing text                                                                           | The TPA connection module for analog modules with screw terminals for 16-pin connecting cables without LED for signalling forms the interface between the connecting cables of the peripherals coming from the field and the SIMATIC S7-300. This is mounted on the DIN rail and, thanks to its functionality with screw terminals, is exactly 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 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           |  |
|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6                        |                       |  |
|                                                                                          | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          | 27-14-11-28           |  |
|                                                                                          | ETIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 9                        | EC000900              |  |
|                                                                                          | ETIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 8                        | EC000900              |  |
|                                                                                          | ETIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 7                        | EC000900              |  |
|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 15                       | 39-12-14-10           |  |
|                                                                                          | UNSPSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                       |  |
| Approvals / Cortificatos                                                                 | UNSPSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10                       |                       |  |
| Approvals / Certificates General Product Approval                                        | UNSPSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EMV                      | Environment           |  |



Manufacturer Declaration









last modified:

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