



SIPLUS PS PSU2600 24V5A TX RAIL

SIPLUS PS PSU2600 24V/5A TX rail input: 110 V DC, output: 24 V DC/5 A, -40...+70 °C, OT4 with ST1/2 (+85 °C for 10 minutes),

| input                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| type of the power supply network                                                           | DC voltage                                                        |
| supply voltage at DC                                                                       | 110 V                                                             |
| input voltage at DC                                                                        | 77 ... 154 V                                                      |
| wide range input                                                                           | Yes                                                               |
| buffering time for rated value of the output current in the event of power failure minimum | 20 ms                                                             |
| operating condition of the mains buffering                                                 | at $V_{in} = 110 \text{ V}$                                       |
| input current                                                                              |                                                                   |
| • at rated input voltage 110 V                                                             | 1.2 A                                                             |
| current limitation of inrush current at 25 °C maximum                                      | 25 A                                                              |
| fuse protection type                                                                       | internal                                                          |
| fuse protection type in the feeder                                                         | None required. Fuse protection starting from 6 A Char. C possible |
| output                                                                                     |                                                                   |
| voltage curve at output                                                                    | Controlled, isolated DC voltage                                   |
| output voltage at DC rated value                                                           | 24 V                                                              |
| output voltage                                                                             |                                                                   |
| • at output 1 at DC rated value                                                            | 24 V                                                              |
| output voltage adjustable                                                                  | Yes; via potentiometer                                            |
| adjustable output voltage                                                                  | 24 ... 28.8 V; max. 120 W                                         |
| relative overall tolerance of the voltage                                                  | 3 %                                                               |
| relative control precision of the output voltage                                           |                                                                   |
| • on slow fluctuation of input voltage                                                     | 0.1 %                                                             |
| • on slow fluctuation of ohm loading                                                       | 0.2 %                                                             |
| residual ripple                                                                            |                                                                   |
| • maximum                                                                                  | 50 mV                                                             |
| voltage peak                                                                               |                                                                   |
| • maximum                                                                                  | 200 mV                                                            |
| display version for normal operation                                                       | Green LED for 24 V OK                                             |
| type of signal at output                                                                   | Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"   |
| behavior of the output voltage when switching on                                           | No overshoot of $V_{out}$ (soft start)                            |
| response delay maximum                                                                     | 1.5 s                                                             |
| voltage increase time of the output voltage                                                |                                                                   |
| • maximum                                                                                  | 500 ms                                                            |
| output current                                                                             |                                                                   |
| • rated value                                                                              | 5 A                                                               |
| • rated range                                                                              | 0 ... 5 A; 5 A up to +60°C; 4 A up to +70°C                       |
| supplied active power typical                                                              | 120 W                                                             |
| constant overload current                                                                  |                                                                   |
| • on short-circuiting during the start-up typical                                          | 6 A                                                               |

|                                                                                                                 |                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| bridging of equipment                                                                                           | No                                                                                                                                                               |
| <b>efficiency</b>                                                                                               |                                                                                                                                                                  |
| efficiency in percent                                                                                           | 87 %                                                                                                                                                             |
| power loss [W]                                                                                                  |                                                                                                                                                                  |
| • at rated output voltage for rated value of the output current typical                                         | 17.5 W                                                                                                                                                           |
| • during no-load operation maximum                                                                              | 1 W                                                                                                                                                              |
| <b>closed-loop control</b>                                                                                      |                                                                                                                                                                  |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical | 0.1 %                                                                                                                                                            |
| relative control precision of the output voltage load step of resistive load 50/100/50 % typical                | 1 %                                                                                                                                                              |
| setting time                                                                                                    |                                                                                                                                                                  |
| • load step 50 to 100% typical                                                                                  | 0.2 ms                                                                                                                                                           |
| • load step 100 to 50% typical                                                                                  | 0.2 ms                                                                                                                                                           |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical              | 2 %                                                                                                                                                              |
| setting time                                                                                                    |                                                                                                                                                                  |
| • load step 10 to 90% typical                                                                                   | 0.2 ms                                                                                                                                                           |
| • load step 90 to 10% typical                                                                                   | 0.2 ms                                                                                                                                                           |
| • maximum                                                                                                       | 10 ms                                                                                                                                                            |
| <b>protection and monitoring</b>                                                                                |                                                                                                                                                                  |
| design of the overvoltage protection                                                                            | < 32 V                                                                                                                                                           |
| property of the output short-circuit proof                                                                      | Yes                                                                                                                                                              |
| design of short-circuit protection                                                                              | Shutdown and periodic restart attempts                                                                                                                           |
| • typical                                                                                                       | 6 A                                                                                                                                                              |
| enduring short circuit current RMS value                                                                        |                                                                                                                                                                  |
| • typical                                                                                                       | 6 A                                                                                                                                                              |
| <b>safety</b>                                                                                                   |                                                                                                                                                                  |
| galvanic isolation between input and output                                                                     | Yes                                                                                                                                                              |
| galvanic isolation                                                                                              | Safety extra low output voltage Vout according to EN 60950-1                                                                                                     |
| operating resource protection class                                                                             | Class I                                                                                                                                                          |
| leakage current                                                                                                 |                                                                                                                                                                  |
| • maximum                                                                                                       | 3.5 mA                                                                                                                                                           |
| • typical                                                                                                       | 1.1 mA                                                                                                                                                           |
| protection class IP                                                                                             | IP20                                                                                                                                                             |
| <b>EMC</b>                                                                                                      |                                                                                                                                                                  |
| standard                                                                                                        |                                                                                                                                                                  |
| • for emitted interference                                                                                      | EN 50121-3-2                                                                                                                                                     |
| • for interference immunity                                                                                     | EN 50121-3-2                                                                                                                                                     |
| <b>standards, specifications, approvals</b>                                                                     |                                                                                                                                                                  |
| certificate of suitability                                                                                      |                                                                                                                                                                  |
| • CE marking                                                                                                    | Yes                                                                                                                                                              |
| <b>standards, specifications, approvals other</b>                                                               |                                                                                                                                                                  |
| certificate of suitability                                                                                      |                                                                                                                                                                  |
| • railway application in accordance with EN 50121-3-2                                                           | Yes; EMC for rail vehicles                                                                                                                                       |
| • railway application in accordance with EN 50124-1                                                             | Yes; Rail vehicles - Overvoltage category OV2; Pollution degree PD2                                                                                              |
| • railway application in accordance with EN 50125-1                                                             | Yes; Rail vehicles - see ambient conditions                                                                                                                      |
| • railway application in accordance with EN 50155                                                               | Yes; Rail vehicles - Temperature class OT4/ST1/ST2 max. 4 A, horizontal installation, interruption class S3, switching class C1                                  |
| • railway application in accordance with EN 61373                                                               | Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B                                                                                                 |
| • fire protection in accordance with EN 45545-2                                                                 | Yes; Rail vehicles - proof on request                                                                                                                            |
| <b>ambient conditions</b>                                                                                       |                                                                                                                                                                  |
| ambient temperature                                                                                             |                                                                                                                                                                  |
| • in horizontal mounting position during operation                                                              | -40 ... +70 °C; +85 °C for 10 min (OT4/ST1/ST2 acc. to EN 50155 at max. 4 A)                                                                                     |
| • during transport                                                                                              | -40 ... +85 °C                                                                                                                                                   |
| • during storage                                                                                                | -40 ... +85 °C                                                                                                                                                   |
| installation altitude at height above sea level maximum                                                         | 5 000 m                                                                                                                                                          |
| ambient condition relating to ambient temperature - air pressure - installation altitude                        | In case of operation at altitudes of 2000 - 5000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m |
| type of coating for electronic devices in railway applications according to EN 50155                            | Yes; Protective coating of Class PC2 acc. to EN 50155:2017                                                                                                       |

| connection method                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------|
| type of electrical connection                                                         | screw terminal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |                |
| <ul style="list-style-type: none"><li>• at input</li></ul>                            | Input, output and ground: 1 screw terminal each for 0.2 ... 2.5 mm² single-core/finely stranded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
| <ul style="list-style-type: none"><li>• at output</li></ul>                           | +, -: 2 screw terminals each for 0.2 ... 2.5 mm²                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                |
| <ul style="list-style-type: none"><li>• for auxiliary contacts</li></ul>              | 13, 14 (alarm signal): 1 screw terminal each for 0.05 ... 2.5 mm²                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                |
| mechanical data                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
| width × height × depth of the enclosure                                               | 42 × 125 × 125 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                |
| installation width × mounting height                                                  | 42 mm × 225 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |                |
| required spacing                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
| <ul style="list-style-type: none"><li>• top</li></ul>                                 | 50 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |                |
| <ul style="list-style-type: none"><li>• bottom</li></ul>                              | 50 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |                |
| <ul style="list-style-type: none"><li>• left</li></ul>                                | 0 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |                |
| <ul style="list-style-type: none"><li>• right</li></ul>                               | 0 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |         |                |
| fastening method                                                                      | Snaps onto DIN rail EN 60715 35x7.5/15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |                |
| <ul style="list-style-type: none"><li>• standard rail mounting</li></ul>              | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |                |
| <ul style="list-style-type: none"><li>• S7 rail mounting</li></ul>                    | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                |
| <ul style="list-style-type: none"><li>• wall mounting</li></ul>                       | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                |
| housing can be lined up                                                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |                |
| net weight                                                                            | 0.6 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |                |
| further information internet links                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
| 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 website: Industry Online Support</li></ul> | <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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                |
| security information                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
| security information                                                                  | Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a> . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a> . (V4.7) |         |                |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
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| Classifications                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |
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|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 14      | 27-04-07-01    |
|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 12      | 27-04-07-01    |
|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9.1     | 27-04-07-01    |
|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9       | 27-04-07-01    |
|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8       | 27-04-90-02    |
|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 7.1     | 27-04-90-02    |
|                                                                                       | eClass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 6       | 27-04-90-02    |
|                                                                                       | ETIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 9       | EC002540       |
|                                                                                       | ETIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8       | EC002540       |
|                                                                                       | ETIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 7       | EC002540       |
|                                                                                       | IDEA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4       | 4130           |
|                                                                                       | UNSPSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 15      | 39-12-10-04    |
| Approvals Certificates                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |                |

[Manufacturer Declaration](#)[Confirmation](#)

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last modified:

6/26/2024