



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
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 110 V
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 Vin = 110 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
• 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
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
adjustable output voltage	24 ... 28.8 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 120 W
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 Vout (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
product feature	
• bridging of equipment	No
Efficiency	
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
Closed-loop control	
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
Protection and monitoring	
design of the overvoltage protection	< 32 V
• typical	6 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Shutdown and periodic restart attempts
enduring short circuit current RMS value	
• typical	6 A
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage V _{out} 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
Approvals	
certificate of suitability	
• CE marking	Yes
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
EMC	
standard	
• for emitted interference	EN 50121-3-2
• for interference immunity	EN 50121-3-2
environmental conditions	
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 storage and transport	-40 ... +85 °C
installation altitude at height above sea level maximum	5 000 m
ambient condition relating to ambient temperature - air pressure	In case of operation at altitudes of 2000 - 5000 m above sea level: Output

- installation altitude	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
Mechanics	
type of electrical connection <ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	screw-type terminals Input, output and ground: 1 screw terminal each for 0.2 ... 2.5 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 2.5 mm ² 13, 14 (alarm signal): 1 screw terminal each for 0.05 ... 2.5 mm ²
width of the enclosure	42 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing <ul style="list-style-type: none"> • top • bottom • left • right 	50 mm 50 mm 0 mm 0 mm
net weight	0.6 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

