## SIEMENS

## Data sheet

## 6EP1961-3BA21



SITOP PSE202U/REDUNDANCY M./DC24V/40A

SITOP PSE202U redundancy module input/output: 24 V DC/40 A suitable for decoupling two SITOP power supplies with maximal per 20 A output current \*Ex approval no longer available\*

voltage curve at output       Controlled, isolated DC voltage         output voltage at DC rated value       24 V         formula for output voltage       Vin - approx. 0.5 V         output voltage       24 V         output voltage       24 V         e at output 1 at DC rated value       24 V         product function output voltage adjustable       No         display version for normal operation       Green LED for "both Input voltages > switching threshold"; red LED: for "at least one input voltage < switching threshold"         type of signal at output       Isolated relay contact (changeover contacts, rating 8 A/240 V AC, 24 V DC): Signals 0K if both input voltages > switching threshold, setting range of threshold 20 25 V         output current       40 A         • rated range       40 A         • rated range       96.6 %         power loss [W]       34 W         • during no-load operation maximum       1.5 W         Safety       galvanic isolation       yes, SELV acc. to EN 60950-1 (relay contact)         operating resource protection class       Class III         protection class IP       IP20	Input	
• at DC       24 24 V         input voltage       -         • at DC       24 28 8 V         Output       Controlled, isolated DC voltage         output voltage at DC rated value       24 V         formula for output voltage at DC rated value       24 V         output voltage at DC rated value       24 V         output voltage at DC rated value       24 V         output voltage at output 1 at DC rated value       24 V         output voltage at output 1 at DC rated value       24 V         output voltage at output 1 at DC rated value       24 V         isolated relay contact (changeover contacts, rating 8 A/240 V AC, 24 V DC): Signals OK II both input voltages > switching threshold*; red LED: for "bth         type of signal at output       Isolated relay contact (changeover contacts, rating 8 A/240 V AC, 24 V DC): Signals OK II both input voltages > switching threshold, setting range of threshold on	type of the power supply network	DC voltage
input voltage • at DC • at DC Output voltage curve at output output voltage at DC rated value output voltage at DC rated value • at output voltage • at output voltage • at output voltage • at output voltage adjustable (input voltage adjustable • at output voltage adjustable • at output voltage adjustable · at add voltage · at add value · at add value · at add value · at rated value · at rated value · at rated value · during no-boad operation maximum · at rated value of the output · at rated value of of rated value of the output · at rated value of of suitability · Carent (typical · during no-boad operation maximum Safety · galvanci isolation · provalis · CE marking · UL approval · CE marking · CE marking · UL approval · CE marking · CE marking	supply voltage	
• at DC       24 28.8 V         Voltage       Controlled, isolated DC voltage         voltage at DC rated value       24 V         formula for output voltage       Vin - approx. 0.5 V         output voltage       24 V         product function output voltage adjustable       No         display version for normal operation       Green LED for "both Input voltage > switching threshold"; red LED: for "at least one input voltage > switching threshold"; red LED: for "at least one input voltage > switching threshold"; red LED: for "at least one input voltage > switching threshold"; red LED: for "at least one input voltage > switching threshold, setting range of threshold at 0.6 K both input voltage > switching threshold, setting range of threshold at 0.6 K both input voltage > switching threshold, setting range of threshold at 0.4 K max. aggregate current 40 A; +60 +70 °C: derating 3%/K         Efficiency       96.6 %         power loss [W]       96.6 %         • at rated value for rated value of the output current 1.5 W       34 W         • at rated output voltage for rated value of the output current 1.5 W       Safety         • at rated output voltage for rated value of the output output 0.5 KEV acc. to EN 60950-1 (relay contact)       Operating resource protection class         • at rate output voltage for suitability       Yes       Sales III         • CER marking       Yes, culus-Listed (UL 508, CSA C222 No. 107.1), File E197259         • CEK marking       Yes, vulus-Listed (	• at DC	24 24 V
Dutput         Controlled, isolated DC voltage           voltage curve at output         Controlled, isolated DC voltage           output voltage at DC rated value         24 V           formula for output voltage         Vin - approx. 0.5 V           output voltage         24 V           • at output 1 at DC rated value         24 V           product function output voltage adjustable         No           display version for normal operation         Green LED for "both Input voltages > switching threshold"; red LED: for "at least one input voltages > switching threshold, setting range of threshold 20 25 V           output current         isolated relay contact (changeover contacts, rating 8 A/240 V AC, 24 V DC): Signals OK if both input voltages > switching threshold, setting range of threshold advalue           • rated value         40 A           • at rate dupt voltage for rated value of the output         34 W           • during no-load operation maximum         1.5 W           Stafy         galvanic isolation         yes, SELV acc. to EN 60950-1 (relay contact)           • protection class IP         IP20           • Approval         Yes         Yes, CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259           • CSA approval	input voltage	
voltage curve at output         Controlled, isolated DC voltage           output voltage at DC rated value         24 V           formula for output voltage         Vin - approx. 0.5 V           output voltage         Vin - approx. 0.5 V           output voltage         24 V           product function output voltage adjustable         No           display version for normal operation         Green LED for "both Input voltages > switching threshold", red LED: for "at least one input voltage < switching threshold"	• at DC	24 28.8 V
output voltage at DC rated value         24 V           formula for output voltage         Vin - approx. 0.5 V           output voltage         24 V           output voltage at DC rated value         24 V           product function output voltage adjustable         No           display version for normal operation         Green LED for "both Input voltages > switching threshold"; red LED: for "at least one input voltage < switching threshold"; red LED: for "at least one input voltage < switching threshold"; red LED: for "at least one input voltages > switching threshold"; red LED: for "at least one input voltages < switching threshold"; red LED: for "at least one input voltages < switching threshold, setting range of threshold 20 25 V	Output	
Immula for output voltage       Vin - approx. 0.5 V         output voltage       24 V         output voltage adjustable       No         display version for normal operation       Green LED for "both Input voltage > switching threshold"; red LED: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold"; red LAD: for "at least one input voltage < switching threshold, setting range of threshold 20 25 V	voltage curve at output	Controlled, isolated DC voltage
output voltage       24 V         output function output voltage adjustable       No         display version for normal operation       Green LED for "both Input voltages > switching threshold", red LED: for "at least one input voltage < switching threshold"	output voltage at DC rated value	24 V
• at output 1 at DC rated value         24 V           product function output voltage adjustable         No           display version for normal operation         Green LED for "both Input voltage > switching threshold", red LED; for "at least one input voltage < switching threshold"	formula for output voltage	Vin - approx. 0.5 V
Description         Description           product function output voltage adjustable         No           display version for normal operation         Green LED for "both Input voltages > switching threshold"; red LED: for "at least one input voltage < switching threshold"	output voltage	
display version for normal operation       Green LED for "both Input voltages > switching threshold"; red LED: for "at least one input voltage > switching threshold"         type of signal at output       Isolated relay contact (changeover contacts, rating 8 A/240 V AC, 24 V DC): Signals OK if both input voltages > switching threshold, setting range of threshold 20 25 V         output current       40 A         • rated value       40 A; max. aggregate current 40 A; +60 +70 °C: derating 3%/K         Efficiency       efficiency         power loss [W]       43 W         • at rated output voltage for rated value of the output current typical       34 W         • during no-load operation maximum       1.5 W         Sofety       Glass III         galvanic isolation       yes, SELV acc. to EN 60950-1 (relay contact)         operating resource protection class       Class III         protection class IP       IP20         Approvals       Yes         • UL approval       Yes         • CE marking       Yes         • CE marking       Yes         • CE marking       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CSA approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CESA is 0.100 2.       No         • ATEX       No <td><ul> <li>at output 1 at DC rated value</li> </ul></td> <td>24 V</td>	<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
Iteast one input voltage < switching threshold"           type of signal at output         Isolated relay contact (changeover contacts, rating 8 A/240 V AC, 24 V DC): Signals 0X (if both input voltages > switching threshold, setting range of threshold 20 25 V           output current • rated value • rated range         40 A           • rated range         40 A           • rated range         40 A           • rated range         96.6 %           power loss [W] • at rated output voltage for rated value of the output current typical         34 W           • during no-load operation maximum         1.5 W           Safety         1.5 W           galvanic isolation         yes, SELV acc. to EN 60950-1 (relay contact)           optic concluses IP         IP20           Approvals	product function output voltage adjustable	No
Number of the second section of the second section sect	display version for normal operation	
• rated value40 A• rated range40 A; max. aggregate current 40 A; +60 +70 °C: derating 3%/KEfficiency96.6 %power loss [W]96.6 %• at rated output voltage for rated value of the output current typical34 W• during no-load operation maximum1.5 WSafety98.5 ELV acc. to EN 60950-1 (relay contact)operating resource protection classClass IIIprotection class IPIP20ApprovalVescertificate of suitabilityYes• CE markingYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSA approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSAss, Class 1, Division 2No• ATEXNocertificate of suitabilityYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSCAus, Class 1, Division 2No• ATEXNocertificate of suitabilityYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CECAus, Class 1, Division 2No• ATEXNo• ECEKNo	type of signal at output	Signals OK if both input voltages > switching threshold, setting range of
• rated range40 A; max. aggregate current 40 A; +60 +70 °C: derating 3%/KEfficiency96.6 %power loss [W]-• at rated output voltage for rated value of the output current typical34 W• during no-load operation maximum34.WSafety-galvanic isolationyes, SELV acc. to EN 60950-1 (relay contact)operating resource protection classClass IIIprotection class IPIP20Approvals-certificate of suitabilityYes; CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CCS Aus, Class 1, Division 2No• ATEXNocertificate of suitability-• CETIFICATENo	output current	
efficiency         efficiency in percent       96.6 %         power loss [W]       34 W         • at rated output voltage for rated value of the output current typical       34 W         • during no-load operation maximum       1.5 W         Safety       galvanic isolation         galvanic isolation       yes, SELV acc. to EN 60950-1 (relay contact)         operating resource protection class       Class III         protection class IP       IP20         Approvals       CEt marking         • CE marking       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CSA approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • cCSAus, Class 1, Division 2       No         • ATEX       No         certificate of suitability       IECEx	<ul> <li>rated value</li> </ul>	40 A
efficiency in percent       96.6 %         power loss [W]       34 W         • at rated output voltage for rated value of the output current typical       34 W         • during no-load operation maximum       1.5 W         Safety       galvanic isolation         operating resource protection class       Class III         protection class IP       IP20         Approvals       ves; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CE marking       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CSA approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • cCSAus, Class 1, Division 2       No         • ATEX       No         certificate of suitability       Interval         • IECEx       No	rated range	40 A; max. aggregate current 40 A; +60 +70 °C: derating 3%/K
power loss [W]• at rated output voltage for rated value of the output current typical34 W• during no-load operation maximum1.5 WSafetygalvanic isolationyes, SELV acc. to EN 60950-1 (relay contact)operating resource protection classClass IIIprotection class IPIP20Approvalscertificate of suitability • CE markingYes• UL approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSA approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• cCSAus, Class 1, Division 2 • ATEXNocertificate of suitability • IECExNo	Efficiency	
• at rate output voltage for rated value of the output current typical34 W• during no-load operation maximum1.5 WSafetyyes, SELV acc. to EN 60950-1 (relay contact)operating resource protection classClass IIIprotection class IPIP20ApprovalsYescertificate of suitabilityYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CE markingYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CCSA approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CCSAus, Class 1, Division 2No• ATEXNocertificate of suitabilityIntervention (IL 508, CSA C22.2 No. 107.1), File E197259• LECExNo	efficiency in percent	96.6 %
current typical1.5 WSafetyyes, SELV acc. to EN 60950-1 (relay contact)galvanic isolationyes, SELV acc. to EN 60950-1 (relay contact)operating resource protection classClass IIIprotection class IPIP20Approvalscertificate of suitabilitycertificate of suitabilityYes. CE markingYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259. CSA approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259. cCSAus, Class 1, Division 2No. ATEXNocertificate of suitabilityIECEx	power loss [W]	
Safety       galvanic isolation     yes, SELV acc. to EN 60950-1 (relay contact)       operating resource protection class     Class III       protection class IP     IP20       Approvals     certificate of suitability       • CE marking     Yes       • UL approval     Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259       • CSA approval     Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259       • cCSAus, Class 1, Division 2     No       • ATEX     No       certificate of suitability     IECEx		34 W
galvanic isolationyes, SELV acc. to EN 60950-1 (relay contact)operating resource protection classClass IIIprotection class IPIP20Approvalscertificate of suitabilityYes• CE markingYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSA approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSAus, Class 1, Division 2No• ATEXNocertificate of suitabilityNo	<ul> <li>during no-load operation maximum</li> </ul>	1.5 W
operating resource protection class       Class III         protection class IP       IP20         Approvals       certificate of suitability         • CE marking       Yes         • UL approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CSA approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • cCSAus, Class 1, Division 2       No         • ATEX       No         certificate of suitability       IECEx	Safety	
protection class IP       IP20         Approvals       certificate of suitability         • CE marking       Yes         • UL approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CSA approval       Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259         • CSAus, Class 1, Division 2       No         • ATEX       No         certificate of suitability       No	galvanic isolation	yes, SELV acc. to EN 60950-1 (relay contact)
Approvals certificate of suitability • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX • lECEx • IECEx • No • No • No	operating resource protection class	Class III
certificate of suitability     Yes       • CE marking     Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259       • UL approval     Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259       • CSA approval     Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259       • cCSAus, Class 1, Division 2     No       • ATEX     No       certificate of suitability     IECEx       • IECEx     No	protection class IP	IP20
• CE markingYes• UL approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• CSA approvalYes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259• cCSAus, Class 1, Division 2No• ATEXNocertificate of suitabilityNo• IECExNo	Approvals	
• UL approval         Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259           • CSA approval         Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259           • cCSAus, Class 1, Division 2         No           • ATEX         No           certificate of suitability         No           • IECEx         No	certificate of suitability	
• CSA approval     Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259       • cCSAus, Class 1, Division 2     No       • ATEX     No       certificate of suitability     No       • IECEx     No	• CE marking	Yes
• cCSAus, Class 1, Division 2     No       • ATEX     No       certificate of suitability     No       • IECEx     No	UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• ATEX     No       certificate of suitability     No       • IECEx     No	CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
certificate of suitability     No	• cCSAus, Class 1, Division 2	No
• IECEx No	• ATEX	No
	certificate of suitability	
NEC Class 2     No	• IECEx	No
	NEC Class 2	No

ULhazloc approval	No
FM registration	No
type of certification CB-certificate	No
certificate of suitability	
• EAC approval	Yes
• C-Tick	No
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	Yes
French marine classification society (BV)	No
DNV GL	Yes
Lloyds Register of Shipping (LRS)	No
Nippon Kaiji Kyokai (NK)	No
EMC	INU
standard <ul> <li>for emitted interference</li> </ul>	EN 55022 Class B
for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
during operation	-25 +60 °C; with natural convection
during transport	-40 +85 °C
• during storage	-40 +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
● at input	Input, output and ground: 1 screw terminal each for 0.33 10 mm <sup>2</sup> single-core/finely stranded
<ul> <li>for auxiliary contacts</li> </ul>	Relay contact: 3 screw terminals for 0.5 2.5 mm <sup>2</sup> single-core/finely stranded
width of the enclosure	70 mm
height of the enclosure	125 mm
depth of the enclosure	120 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	0.5 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
MTBF at 40 °C	6 471 654 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

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