## SIEMENS

## Data sheet

## 6EP4136-3AC00-2AY0



## SITOP UPS1600/DC/DC24V/20A/IE/PN/EX

SITOP UPS1600 EX 20 A Ethernet PROFINET uninterruptible power supply with Ethernet / PROFINET interface / OPC UA Server / Web server input: 24 V DC output: 24 V DC/20 A

Input	
supply voltage at DC rated value	24 V
input voltage	DC 21 29 V
adjustable response value voltage for buffer connection preset	21.5 V
adjustable response value voltage for buffer connection	21 25 V; Adjustable: 21 V, 21.5 V, 22 V, 22.5 V, 23 V, 24 V, 25 V DC or via software
input current at rated input voltage 24 V rated value	25 A; for max. charging current (4 A)
Mains buffering	
type of energy storage	with batteries
design of the mains power cut bridging-connection	Adjustable range using rotary coding switch: 0.5 min, 1 min, 2 min, 5 min, 10 min, 20 min, max. buffering time or via software
charging current	0.1 A, 4 A
adjustable charging current maximum note	Automatically depending on battery module
Output	
output voltage	
<ul> <li>in normal operation at DC rated value</li> </ul>	24 V
<ul> <li>in buffering mode at DC rated value</li> </ul>	24 V
formula for output voltage	Vin - approx. 0.2 V
startup delay time typical	60 ms
voltage increase time of the output voltage typical	60 ms
output voltage in buffering mode at DC	18.5 27 V
output current	
<ul> <li>rated value</li> </ul>	20 A
<ul> <li>in normal operation</li> </ul>	0 60 A
<ul> <li>in buffering mode</li> </ul>	0 60 A
peak current	60 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Limitation to 3 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 5 sec/min
supplied active power typical	480 W
Efficiency	
efficiency in percent	
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	97.5 %
in case of operation on rechargeable battery typical	97.5 %
power loss [W]	
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	11 W
<ul> <li>in case of operation on rechargeable battery typical</li> </ul>	11 W
Protection and monitoring	
product function	

priority reveral         Yes           Spaning         Security function against input voltage pointing           digital y consist         Normal operation           digital y consist         Interface           digital y consist         Normal operation           - for normal operation         Interface           - or normal operation         Normal operation           - in buffering mode         Interface           - in buffering mode         Secure 2014 (Secure 201	<ul> <li>reverse polarity protection against energy storage unit</li> </ul>	Yes
reversal         Provide           Idealing         Second and the second	polarity reversal	
Spending         Spending           display version              • Ior normal operation               Marrial operation (CS) fielding desreption on the "Battory to a provide operation is operated the operation is prease than out in meshod set at the DC UPS module; Lack of buffer, Stating and the operation is called a stating to a stating operation is operated to a stating operation is operated to a stating operation is operated to a stating operation of the operating operatin operation of the operating operation of the operating		Yes
deplay version     Normal operation: LED green (OK), finating changever contral "Bat/OK" to the eling "OK" (OK" means: Volkage of the supplying power availability. LED read (Laker), Rearing changever contral "Bat/OK" to the eling "OK" (OK" means: Volkage of the supplying power availability. LED read (Laker), Rearing changever contral "Bat/OK" to the eling "OK" (OK" means: Volkage of the supplying power availability. LED read (Laker), Rearing changever contral "Bat/OK" to the supplying power availability. LED read (Laker), Rearing changever contral "Bat/OK" (OK" COK" COK and the State of State (LED read) (Laker) (Laker) (Laker) (Laker) (Laker), Rearing changever contral "Bat/OK" (OK" COK and the State of State (LED read) (Laker), Rearing changever contral "Bat/OK" (DK and the State of State (LED read)), Read (Laker), Rearing changever contral "Bat/OK" (DK and the State of State (LED read)), Read (Laker), Read (Laker		
In buffering mode     Bufferied mode. ED yellow (Beit, finating changever contact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Marm", Energy storage > 85%. EDD green (Beit > 85%), todaing 40 vontact "Beit > 85% vontact Safety gatantic isolation between input and output optication class IP IP20 Approval  protection class IP IP20 Approval  Portection class IP IP20 Approval IP20 IP20 Approval IP20 IP20 IP20 IP20 IP20 IP20 IP20 IP20		setting "OK" ("OK" means: Voltage of the supplying power supply unit is greater than cut-in threshold set at the DC UPS module); Lack of buffer standby: LED red (alarm), floating changeover contact "Alarm/Bat" to setting "Alarm"; Battery replacement required: LED red (alarm) flashing with approx. 0.25 Hz, floating changeover contact "Alarm/Bat" switching with approx. 0.25 Hz; Energy storage > 85%: LED green (Bat > 85%), floating NO contact "Bat > 85" closed;
product component PC interface         Yes           design of the interface         Etherms/PROFINET           galvarini isolation between input and output         No           operating resource protection class         Class III           protection class IP         IP20           Approvals         Class III           cettricate of subability         Yes           • CE marking         Yes           • CCSAs, proval         No           • CSAs, proval         No           • CSAs approval         availability           • LicEX         Yes           cettricate of subability         Yes           • Contract Gauss Burgeroval         availabile soon           Morine classification association         No           • David GL         No           • Contentified interference         EN E5022 Class B           • for merited interference         EN E5022 Class B           • for merited interference         - 400 - 465 °C           • during toporetid         -40 455 °C	• in buffering mode	Buffered mode: LED yellow (Bat), floating changeover contact "OK/Bat" to setting "Bat"; Prewarning battery voltage < 20.4 VDC: LED red (alarm), floating changeover contact "Alarm/Bat" to setting "Alarm"; Energy storage > 85%: LED
design of the interface         Ethemet/PROFINET           Satady         Image: Satady of the interface           gaivanic isolation between input and output         No           operating resource protection class         Class III           protection class IP         IP20           Approvals         Image: Satady of the interface           cettificate of suitability         Ves           - C.C.E. marking         Yes           - U.L.approval         No           - c.C.S.A. Class 1, Division 2         No           - c.C.S.A. Class 1, Division 2         No           - c.C.S.C.C.S.C.S.C.S. (Lass 1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.S.1, Division 2         No           - c.S.S.C.S.C.S.S.S.1, Division 2         No           - e.C.S.C.S.C.S.S.S.S.S.D.S.C.S.S.S.T.S.S.C.S.S.S.D.S.S.C.S.S.S.S.S.S.S.S.S.S	Interface	
design of the interface         Ethemet/PROFINET           Satady         Image: Satady of the interface           gaivanic isolation between input and output         No           operating resource protection class         Class III           protection class IP         IP20           Approvals         Image: Satady of the interface           cettificate of suitability         Ves           - C.C.E. marking         Yes           - U.L.approval         No           - c.C.S.A. Class 1, Division 2         No           - c.C.S.A. Class 1, Division 2         No           - c.C.S.C.C.S.C.S.C.S. (Lass 1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.1, Division 2         No           - c.C.S.C.S.C.S.C.S.S.S.1, Division 2         No           - c.S.S.C.S.C.S.S.S.1, Division 2         No           - e.C.S.C.S.C.S.S.S.S.S.D.S.C.S.S.S.T.S.S.C.S.S.S.D.S.S.C.S.S.S.S.S.S.S.S.S.S	product component PC interface	Yes
gatvanic isolation between input and output     No       operating resource protection class     Class III       protection class IP     IP20       Approvals     Image: Class III       certificate of suitability     • Cless III       • Cless Approval     No       • CSAus; Class 1, Division 2     No       • ATEX     Yes       certificate of suitability     Yes       • LECEx     Yes       certificate of suitability     Yes       • IECEx     Yes       certificate of suitability     IECEx       • shipbuilding approval     available soon       Marine classification association     •       • American Bureau of Shipping Europe Ltd. (ABS)     No       • DNV GL     No       EMC     Standard       • for interference immunity     EN 55022 Class B       • for interference immunity     EN 51000-6-2       envi	design of the interface	Ethernet/PROFINET
Operating resource protection class       Class III         protection class IP       IP20         Approval       IP20         certificate of suitability       Yes         • CE marking       Yes         • UL approval       No         • CSA approval       No         • CSA approval       No         • CSA class 1, Division 2       No         • ATEX       Yes         certificate of suitability       Yes         • ECEX       Yes         certificate of suitability       Yes         • ECEX       Yes         certificate of suitability       Yes         • ElCEX       Yes         certificate of suitability       Yes         • ElCEX       Yes         certificate of suitability       No         • Sinpbuilding approval       No         standard       EN 55022 Class B         • for emitted interference immunity       EN 51002-6.2         antiont efference immunity       EN 51000-6.2         antiont efference immunity       -25+70 'C; with natural convection         • during storage       -40+85 'C         • during storage       -40+85 'C         • during storage       -40+45 'C <td>Safety</td> <td></td>	Safety	
operating resource protection class         Class III           protection class IP         IP20           certificate of suitability         IP20           • CE marking         Yes           • CLE approval         No           • CSA approval         No           • CSA approval         No           • CSA approval         No           • CCSAus, Class 1, Division 2         Yes           certificate of suitability         Yes           • EICE EX         Yes           certificate of suitability         No           • EICE EX         Yes           certificate of suitability         No           • Electex         Yes           certificate of suitability         No           • Subpulding approval         available soon           Marine classification association         No           • American Bureau of Shipping Europe Ltd. (ABS)         No           • DNV Cl.         No           Standard         • For omitted interference           • for omitted interference         EN 55022 Class B           • for omitted interference         EN 51000-6-2           strutrommental conditions         anabient temperature           • during storage         -40	galvanic isolation between input and output	No
protection class IP         IP20           Approvals		Class III
certificate of suitability     Yes       • CE marking     Yes       • UL approval     No       • CSAus, Class 1, Division 2     No       • ATEX     Yes       certificate of suitability     Yes       • ICE     Yes       certificate of suitability     Yes       • ICEX     Yes       certificate of suitability     Yes       • ICE     Yes       certificate of suitability     No       • shipbuilding approval     available soon       Marine classification association     American Bureau of Shipping Europe Ltd. (ABS)       • No     No       • Standard     Ior emitted interference       • for interference immunity     EN 65022 Class B       effect     Standard       • for interference immunity     EN 65002-Class B       environmental conditions     ambient temperature       • during transport     -40 +85 °C       • during transport     -40 +85 °C       • during transport     -25 +70 °C; with natural convection       • during transport     -25 erg verse terminals for 0.2 6 mm?24 13 AWG       • or inclarge betatery module     24 V DC: 2 screw terminals for 0.2 6 mm?24 13 AWG       • or chargeable battery module     24 V DC: 2 screw terminals for 0.2 6 mm?24 13 AWG       • ori		IP20
certificate of suitability     Yes       • CE marking     Yes       • UL approval     No       • CSAus, Class 1, Division 2     No       • ATEX     Yes       certificate of suitability     Yes       • ICE     Yes       certificate of suitability     Yes       • ICEX     Yes       certificate of suitability     Yes       • ICE     Yes       certificate of suitability     No       • shipbuilding approval     available soon       Marine classification association     American Bureau of Shipping Europe Ltd. (ABS)       • No     No       • Standard     Ior emitted interference       • for interference immunity     EN 65022 Class B       effect     Standard       • for interference immunity     EN 65002-Class B       environmental conditions     ambient temperature       • during transport     -40 +85 °C       • during transport     -40 +85 °C       • during transport     -25 +70 °C; with natural convection       • during transport     -25 erg verse terminals for 0.2 6 mm?24 13 AWG       • or inclarge betatery module     24 V DC: 2 screw terminals for 0.2 6 mm?24 13 AWG       • or chargeable battery module     24 V DC: 2 screw terminals for 0.2 6 mm?24 13 AWG       • ori		
• CE marking       Yes         • UL approval       No         • CSA paproval       No         • CSAus, Class 1, Division 2       No         • ATEX       Yes         certificate of suitability       IECEX         • IECEX       Yes         certificate of suitability       No         • IECEX       Yes         certificate of suitability       No         • shipbuilding approval       available soon         Marine classification association       available soon         • American Bureau of Shipping Europe Ltd. (ABS)       No         • No remitted interference       EN 55022 Class B         • for mitted interference       EN 55022 Class B         • for interference immunity       EN 61000-6-2         onvironmental conditions       ambient temperature         • during operation       -25 +70 °C; with natural convection         • during transport       -40 +85 °C         • during transport       -24 V DC: 2 screw terminals for 0.2 6 mm?24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm?24 13 AWG		
• UL approal     No       • CSA approval     No       • CSA approval     No       • CSA approval     No       • ATEX     Yes       certificate of suitability     -       • ECEX     Yes       certificate of suitability     No       • Sinpbuilding approval     No       • Sinpbuilding approval     No       • American Bureau of Shipping Europe Ltd. (ABS)     No       • DNV GL     No       EMC		Yes
• CSA approval       No         • cCSAus, Class 1, Division 2       No         • ATEX       Yes         certificate of suitability          • ECEX       Yes         certificate of suitability       No         • hipbuilding approval       available soon         shipbuilding approval       available soon         Marine classification association       No         • American Bureau of Shipping Europe Ltd. (ABS)       No         • DNV GL       No         EMC       Standard         • for emilted interference       EN 55022 Class B         • for interference immunity       EN 61000-6-2         environmental conditions       ambient temperature         • during gostrage       -40		No
• cCSAus, Class 1, Division 2       No         • ATEX       Yes         certificate of suitability       •         • ECEX       Yes         certificate of suitability       •         • hipbuilding approval       No         • shipbuilding approval       available soon         Marine classification association       •         • American Bureau of Shipping Europe Ltd. (ABS)       No         • DNV GL       No         EMC       Standard         • for mitted interference immunity       EN 65022 Class B         • for interference immunity       EN 61000-6-2         onvironmental conditions       -25 +70 °C; with natural convection         • during transport       -40 +65 °C         • during transport       -40 +65 °C         • during storage       -40 +65 °C         • during storage       -40 +65 °C         • during storage       -40 +65 °C         • at input       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • at input       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG		No
• ATEX     Yes       certificate of suitability     iECEx       • shipbuilding approval     No       • shipbuilding approval     No       shipbuilding approval     available soon       Marine classification association     -       • American Bureau of Shipping Europe Ltd. (ABS)     No       • NV CL     No <b>EMC</b> Standard       • for emitted interference     EN 55022 Class B       • for interference immunity     EN 65002-6-2       environmental conditions     -       ambient temperature     -       • during storage     -40+65 °C       • during storage     -20		No
• IECEx       Yes         certificate of suitability       No         • shipbuilding approval       available soon         Marine classification association       available soon         • American Bureau of Shipping Europe Ltd. (ABS)       No         • DNV GL       No         standard       No         • for emitted interference       EN 55022 Class B         • for interference immunity       EN 61000-6-2         onvironmental conditions       ambient temperature         • during operation       -25 +70 °C; with natural convection         • during storage       -40 +85 °C         environmental category according to IEC 60721       Climate class 3K3, 5 95% no condensation         Mechanics       screw-type terminals for 0.2 6 mm²/24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2		Yes
• IECEx       Yes         certificate of suitability       No         • shipbuilding approval       available soon         Marine classification association       available soon         • American Bureau of Shipping Europe Ltd. (ABS)       No         • DNV GL       No         standard       No         • for emitted interference       EN 55022 Class B         • for interference immunity       EN 61000-6-2         onvironmental conditions       ambient temperature         • during operation       -25 +70 °C; with natural convection         • during storage       -40 +85 °C         environmental category according to IEC 60721       Climate class 3K3, 5 95% no condensation         Mechanics       screw-type terminals for 0.2 6 mm²/24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • at output       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2	certificate of suitability	
• shipbuilding approval       available soon         Marrice classification association       available soon         Marrice classification association       No         • American Bureau of Shipping Europe Ltd. (ABS)       No         • DNV GL       No <b>EMC</b> Exact         standard       e for emitted interference         • for interference immunity       EN 61000-6-2         environmental conditions       ambient temperature         • during operation       -25 +70 °C; with natural convection         • during storage       -40 +85 °C         • during transport       -40 +85 °C         • during transport       -25 95% no condensation         Mechanics       screw-type terminals         type of electrical connection       screw-type terminals         • at input       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 0 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 0 mm²/24 13 AWG         • during the enclosure       50 mm         height of the enclosure       50 mm         height of the enclosure       50 mm         • top       50 mm         heig	-	Yes
shipbuilding approval       available soon         Marine classification association       .            • American Bureau of Shipping Europe Ltd. (ABS)       No            • DNV GL       No            • Standard        • for emitted interference            • for interference immunity       EN 65022 Class B            • for interference immunity       EN 61000-6-2            environmental conditions        -25 +70 °C; with natural convection             • during operation        -25 +70 °C; with natural convection             • during storage        -40 +85 °C             • during storage        -40 +85 °C             • environmental category according to IEC 60721        Climate class 3K3, 5 95% no condensation          Mechanics	certificate of suitability	
Marine classification association <ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>No</li> <li>DNV GL</li> <li>No</li> </ul> EMC           standard <ul> <li>for emitted interference</li> <li>for interference immunity</li> <li>EN 65022 Class B</li> <li>for interference immunity</li> <li>EN 61000-6-2</li> </ul> environmental conditions               ambient temperature                 • during operation <ul> <li>-25 +70 °C; with natural convection</li> <li>• during operation</li> <li>-25 +70 °C; with natural convection</li> <li>• during storage</li> <li>-40 +85 °C</li> <li>• during storage</li> <li>-40 +85 °C</li> <li>• during storage</li> <li>-40 +85 °C</li></ul>	shipbuilding approval	No
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS) No</li> <li>DNV GL No</li> <li>DNV GL No</li> <li>EMC</li> <li>standard For emitted interference</li> <li>for emitted interference immunity</li> <li>EN 55022 Class B</li> <li>for interference immunity</li> <li>EN 61000-6-2</li> <li>environmental conditions</li> <li>ambient temperature         <ul> <li>during operation</li> <li>-25 +70 °C; with natural convection</li> <li>during transport</li> <li>-40 +85 °C</li> <li>during storage</li> <li>-40 +85 °C</li> <li>during storage</li> <li>-40 +85 °C</li> <li>environmental category according to IEC 60721</li> <li>Climate class 3K3, 5 95% no condensation</li> </ul> </li> <li>Mechanics</li> <li>type of electrical connection</li> <li>screw-type terminals</li> <li>et input</li> <li>24 V DC: 2 screw terminals for 0.2 6 mm<sup>2</sup>/24 13 AWG</li> <li>at output</li> <li>24 V DC: 2 screw terminals for 0.2 6 mm<sup>3</sup>/24 13 AWG</li> <li>et or control circuit and status message</li> <li>41 screw terminals for 0.2 6 mm<sup>3</sup>/24 13 AWG</li> <li>et or control circuit and status message</li> <li>41 screw terminals for 0.2 6 mm<sup>3</sup>/24 13 AWG</li> <li>et nonucle circuit and status message</li> <li>41 screw terminals for 0.2 6 mm<sup>3</sup>/24 13 AWG</li> <li>et or control circuit and status message</li> <li>14 screw terminals for 0.2 6 mm<sup>3</sup>/24 14 AWG</li> <li>et or control circuit and status message</li> <li>14 screw terminals for 0.2 6 mm<sup>3</sup>/24 16 AWG</li> </ul> <li>botom         <ul> <li>botom</li> <li>botom</li> <li>botom</li> <li>botom</li> <li>botot</li></ul></li>	shipbuilding approval	available soon
• DNV GL     No       EMC       standard       • for emitted interference       = for interference immunity       EN 61000-6-2       environmental conditions       ambient temperature       • during operation       -25 +70 °C; with natural convection       • during storage       -40 +85 °C       • during storage       -41 +85 °C       • during storage       -10 +85 °C       • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG       • for control circuit and status message       14	Marine classification association	
EMC         standard         • for emitted interference         EN 55022 Class B         • for interference immunity         EN 61000-6-2         environmental conditions         ambient temperature         • during operation         • during transport         • during storage         • during storage         • during storage         • during transport         • during storage         • during transport         • during storage         • during transport         • transport         • transport         • during transport         • during transport         • during transport	<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
standard       e for emitted interference       EN 55022 Class B         e for interference immunity       EN 61000-6-2         environmental conditions       ambient temperature         e during operation       -25 +70 °C; with natural convection         e during transport       -40 +85 °C         e during storage       -40 +85 °C         environmental category according to IEC 60721       Climate class 3K3, 5 95% no condensation         Mechanics       type of electrical connection         e at input       24 V DC: 2 screw terminals         e for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         e for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 13 AWG         width of the enclosure       50 mm         height of the enclosure       139 mm         depth of the enclosure       125 mm         required spacing       50 mm         e top       50 mm         e bottom       50 mm	• DNV GL	No
• for emitted interferenceEN 55022 Class B• for interference immunityEN 61000-6-2environmental conditionsambient temperature• during operation• during transport-40 +85 °C• during storage-40 +85 °Cenvironmental category according to IEC 60721Climate class 3K3, 5 95% no condensationMachanicstype of electrical connection• at input-at output24 V DC: 2 screw terminalsfor rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 13 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure• top• top• bottom• bottom• left0 mm	EMC	
• for interference immunityEN 61000-6-2environmental conditionsambient temperature• during operation-25 +70 °C; with natural convection• during transport-40 +85 °C• during storage-40 +85 °Cenvironmental category according to IEC 60721Climate class 3K3, 5 95% no condensationMechanicstype of electrical connection• at input- at output• at output- other rechargeable battery module- for rechargeable battery module- for control circuit and status message44 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message44 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 v DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 v DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 v DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 v DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message15 mmmethodsureheight of the enclosure125 mm• top• top• bottom• bottom• left0 mm	standard	
environmental conditions         ambient temperature         • during operation         • during transport         • during storage         • at output         • at output         • at output         • for rechargeable battery module         • for control circuit and status message         14 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message         14 screw terminals for 0.2 16 mm²/24 16 AWG         width of the enclosure <tr< td=""><td>• for emitted interference</td><td>EN 55022 Class B</td></tr<>	• for emitted interference	EN 55022 Class B
ambient temperature       -25 +70 °C; with natural convection         • during operation       -25 +70 °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       screw-type terminals         type of electrical connection       screw-type terminals for 0.2 6 mm²/24 13 AWG         • at input       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • for rechargeable battery module       24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG         • for control circuit and status message       14 screw terminals for 0.2 6 mm²/24 16 AWG         width of the enclosure       50 mm         height of the enclosure       139 mm         depth of the enclosure       125 mm         required spacing       50 mm         • top       50 mm         • bottom       50 mm         • left       0 mm	<ul> <li>for interference immunity</li> </ul>	EN 61000-6-2
• during operation-25 +70 °C; with natural convection• during transport-40 +85 °C• during storage-40 +85 °C• environmental category according to IEC 60721Climate class 3K3, 5 95% no condensationMechanicstype of electrical connectionscrew-type terminals• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mm• top50 mm• left0 mm	environmental conditions	
• during transport-40 +85 °C• during storage-40 +85 °Cenvironmental category according to IEC 60721Climate class 3K3, 5 95% no condensationMechanicstype of electrical connectionscrew-type terminals• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 13 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	ambient temperature	
e during storage-40 +85 °Cenvironmental category according to IEC 60721Climate class 3K3, 5 95% no condensationMechanicstype of electrical connectionscrew-type terminals• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure50 mm• top50 mm• bottom50 mm• left0 mm	during operation	-25 +70 °C; with natural convection
environmental category according to IEC 60721Climate class 3K3, 5 95% no condensationMechanicstype of electrical connectionscrew-type terminals• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	during transport	-40 +85 °C
Mechanicstype of electrical connectionscrew-type terminals• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 13 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	during storage	-40 +85 °C
type of electrical connectionscrew-type terminals• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
• at input24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	Mechanics	
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• at output24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for rechargeable battery module24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG• for control circuit and status message14 screw terminals for 0.2 6 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm		
• for control circuit and status message14 screw terminals for 0.2 1.5 mm²/24 16 AWGwidth of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	● at output	24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG
width of the enclosure50 mmheight of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	<ul> <li>for rechargeable battery module</li> </ul>	24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG
height of the enclosure139 mmdepth of the enclosure125 mmrequired spacing50 mm• top50 mm• bottom50 mm• left0 mm	<ul> <li>for control circuit and status message</li> </ul>	14 screw terminals for 0.2 1.5 mm <sup>2</sup> /24 16 AWG
depth of the enclosure     125 mm       required spacing     50 mm       • top     50 mm       • bottom     50 mm       • left     0 mm	width of the enclosure	50 mm
required spacing       • top       50 mm       • bottom       • left       0 mm	height of the enclosure	139 mm
• top         50 mm           • bottom         50 mm           • left         0 mm	depth of the enclosure	125 mm
bottom 50 mm     left 0 mm	required spacing	
• left 0 mm	• top	50 mm
	bottom	50 mm
• right 0 mm	● left	0 mm
	● right	0 mm

net weight	0.45 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Battery module
MTBF at 40 °C	345 056 h
reference code according to IEC 81346-2	RB
other information	Specifications at rated input voltage and ambient temperature +25 $^\circ\text{C}$ (unless otherwise specified)