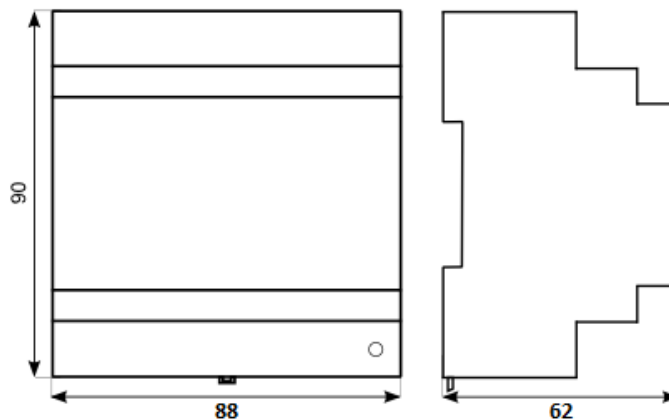


## SS-31-120/DIN\_4kV



### DESCRIPTION

DC/DC converter with high input voltage, designed for direct supply of control and monitoring systems from PV strings or from traction voltage. The converter is characterized by low self-consumption. Safe separation of primary and secondary circuits. Operation is indicated by an LED. Designed for DIN rail mounting.

### TECHNICAL PARAMETERS

#### Input Data

|                        |                |
|------------------------|----------------|
| Input voltage, DC      | 350-1000 V DC  |
| Input current, DC max. | 100 mA         |
| Input fuse             | Yes (internal) |

#### Output Data

|                          |  |
|--------------------------|--|
| Output voltage           | 12 V DC (+/-7 %)                                 |
| Output current           | 2,4 A max.                                       |
| Output power             | 29 W   |
| Power derating           | -2 %/°C from 40 °C to 60 °C ambient temperature. |
| Short-circuit protection | Yes (auto resume)                                |
| Max. residual ripple     | <150 mV  |

#### General Data

|   |   |
|---|---|
| Efficiency, max.                        | approx. 84 %                            |
| Max. power loss (nominal load)          | approx. 5,5 W                           |
| Impulse withstand                       | 0,5 V line to line, 0,5 kV line to case |
| Isolation between primary and secondary | 4 kV hi-pot test, double insulation     |
| Cooling                                 | natural (free air)                      |
| IP code                                 | IP20                                    |

|                       |                 |
|-----------------------|-----------------|
| Weight                | 270 g           |
| Material of enclosure | NORYL           |
| Dimensions            | 90 x 88 x 62 mm |
| Class of protection   | II.             |



Pollution degree 2  
RoHS comply Yes

**Connection data**

Number of terminals  
Cable length max.  
Wire cross-section  
Solid min/max

**Input**

4 (++,--)  
unrestricted

**Output**

4 (--,++)  
<3m

**Indication**

2(C,E)  
<3m

|  |                                      |                                      |
|--|--------------------------------------|--------------------------------------|
| 0,5/2,5 mm <sup>2</sup><br>20/13 AWG     | 0,5/2,5 mm <sup>2</sup><br>20/13 AWG | 0,5/2,5 mm <sup>2</sup><br>20/13 AWG |
| Flexible min/max<br>20/13 AWG            | 0,5/2,5 mm <sup>2</sup><br>20/13 AWG | 0,5/2,5 mm <sup>2</sup><br>20/13 AWG |
| Tightening torque, min/max<br>0,5/0,6 Nm | 0,5/0,6 Nm                           | 0,5/0,6 Nm                           |

**Signal indication**

Device working LED green, outputs C and E connected - open collector 35 V / 10mA max.

**Environmental conditions**

Operating temperature -20°C to 60 °C  
Relative humidity (non-condensing) 5% to 90 %RH  
Installation altitude <2000 m above sea level

The power supply is designed for continuous operation, overvoltage category in installation 3 according to EN 61010-1 and is resistant to short-circuit at the output.

**TECHNICAL STANDARDS**

Safety EN 61204-7 ed.2  
EMC EN 61000-6-1 ed.2  
EN 61000-6-3 ed.2

**Limited warranty 3 years**

**PACKING AND STORAGE**

The product is supplied bulk packaged, user's guide for each piece is included.

Storage temperature -35 to 70 °C, relative humidity < 90 % (not condensing). It is prohibited to expose the product to mechanical shocks and injurious gases.