

DDL3050-48

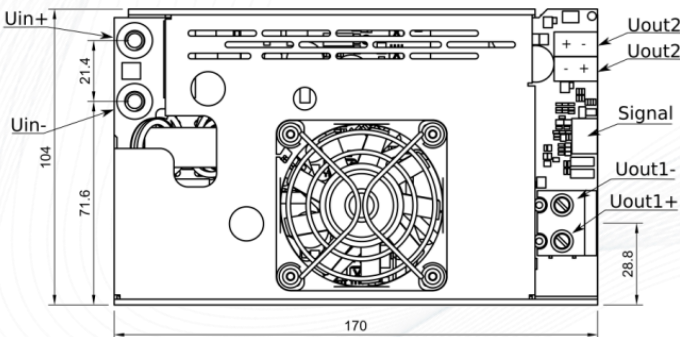
48V DC/DC Converter



Description

The DDL3050-48 is a non-isolated high-power DC/DC Converter handling energy transfer from Port A to Port B. The converter operates in buck mode and provides a reduced voltage level at Port B.

An additional +24V constant voltage output features a power supply for a lot of applications. With the Modbus interface, a variety of parameters can be set individually. Several safety functions e.g., overvoltage, overcurrent and overtemperature protection are integrated.



- Programmable input/output
- High efficiency
- Remote control (Modbus / Analog)
- Overload protection
- Low standby power consumption
- Auxiliary 24V output

Specification

The following parameters are valid for operation at 25°C and under nominal conditions, unless specifically stated otherwise. Nominal condition includes in particular $U_C > U_B$, $U_A > U_B$ and $U_A > 40V$.

Port A

Input Voltage	40-60 A
Input Overvoltage	66 VDC
Input Current Limit	75 A
Inrush Current	10A

Port B

Output Voltage Setpoint	25 ... 60 VDC
Output Current Setpoint	0 ... 60 A
Output Power	3000 W
Output Efficiency	> 96 %
Dropout Voltage	< 2 V

+24V Output

Output Voltage	24 V
Output Current	up to 14 A
Output Power	nom. 300 W
Output Efficiency	>94 %

Monitoring

Sense Resolution	12 Bit
Sense Bandwidth	50 Hz

Communication

Modbus	Compatible
Bandwidth	max. 1 Mbit/s

Environment

Ambient Temp.	0 ... 80 °C
Baseplate Temp.	0 ... 58 °C
Humidity	5 ... 95 %

Certifications

Safety	EN 62368
EMC Conducted	EN 61000-6-3
EMC Radiated	EN 55032 Class B
ESD	EN 61000-4-2