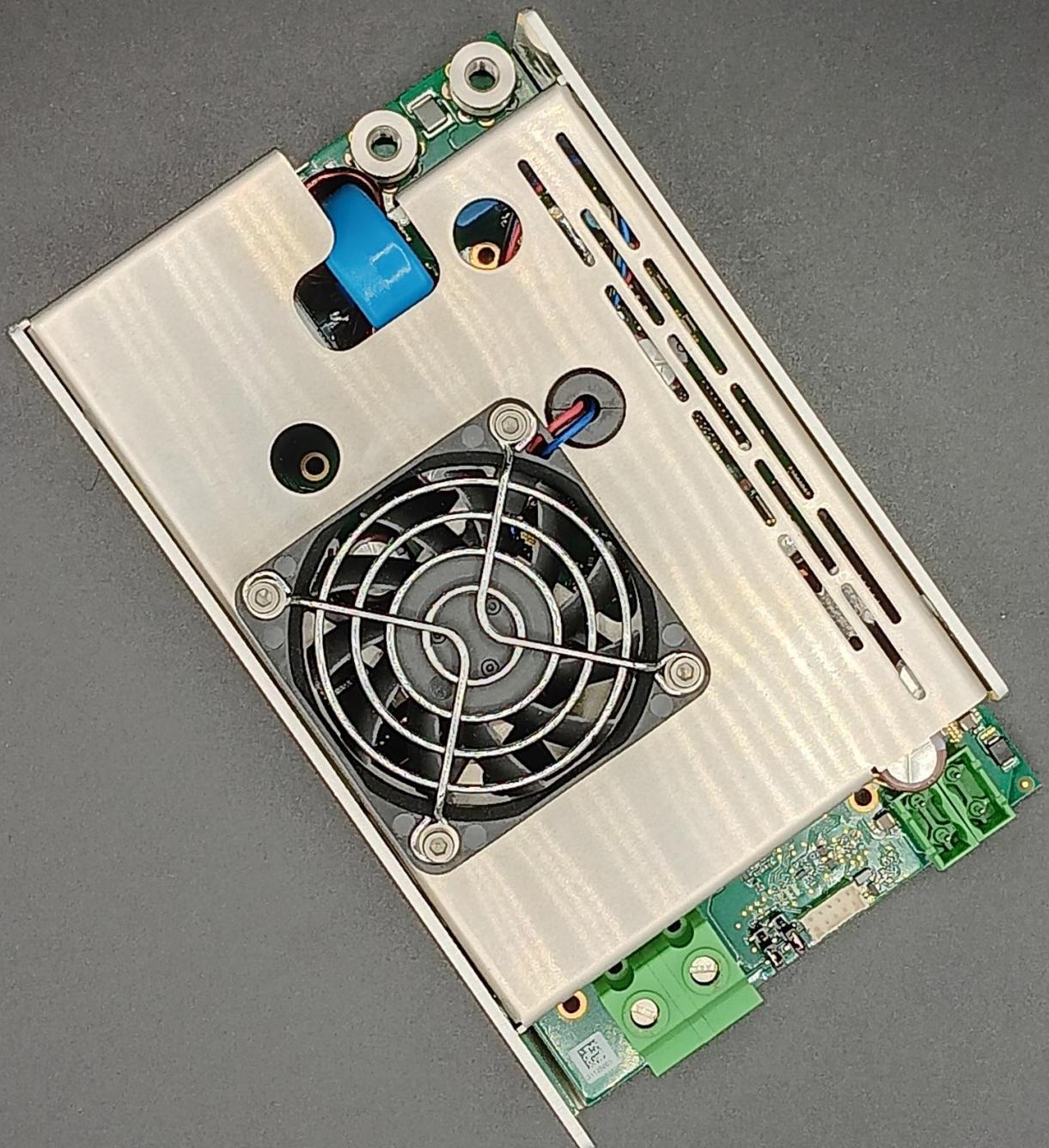




**Querom**  
Power Electronics



**DDL3050-48**  
**48V DC/DC converter**  
(short version data sheet)

# DDL3050-48

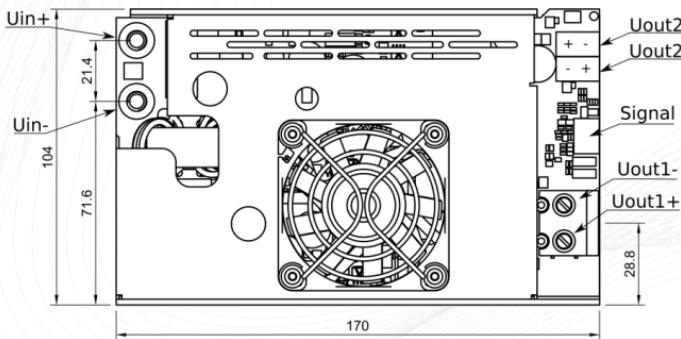
(short version)

## 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	+24V Output		Environment	
Input Voltage	40-60 VDC	Output Voltage	24 V	Ambient Temp. 0 ... 80 °C
Input Overvoltage	66 VDC	Output Current	up to 14 A	Baseplate Temp. 0 ... 58 °C
Input Current Limit	75 A	Output Power	nom. 300 W	Humidity 5 ... 95 %
Inrush Current	10A	Output Efficiency	>94 %	
Port B	Monitoring		Certifications	
Output Voltage Setpoint	25 ... 60 VDC	Sense Resolution	12 Bit	Safety EN 62368
Output Current Setpoint	0 ... 60 A	Sense Bandwidth	50 Hz	EMC Conducted EN 61000-6-3
Output Power	3000 W	Communication		EMC Radiated EN 55032 Class B
Output Efficiency	> 96 %	Modbus	Compatible	ESD EN 61000-4-2
Dropout Voltage	< 2 V	Bandwidth	max. 1 Mbit/s	