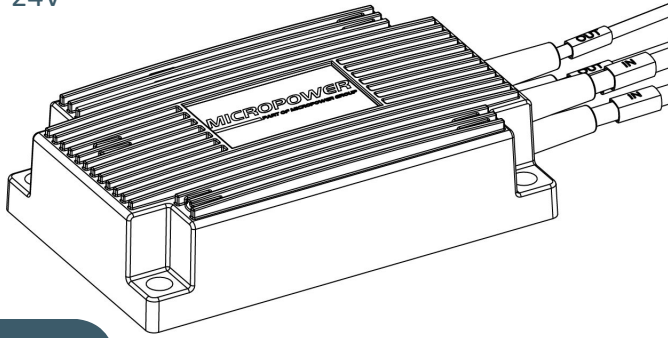


# DC/DC CONVERTER 700

2D1H101  
12–24V



## SAFETY FIRST



Read and understand this instruction before using, installing or servicing the product.

Only qualified personnel should install, use or service this product.



**CAUTION, hot surface during operation.**

Keep heat-sensitive objects away to avoid damage.



**CAUTION, undesirable consequences.**

The output of the converter has no protection against reverse battery polarity. Always verify the battery polarity before connecting the cables to the converter. Output cables are always to be connected first.

Disconnect the battery before maintenance, servicing or dismantling.

Do not operate the unit if there is any evidence of damage.

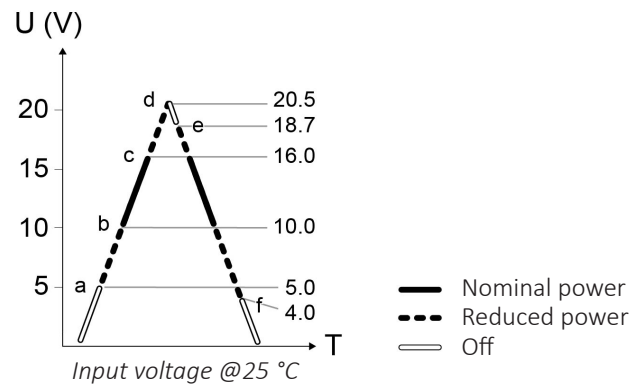
## INTENDED USE

The DC/DC converter transforms the 12 V battery system to 24 V loads, where stable voltage is required. Suitable for automotive, utility vehicles, or forklift applications.

## FEATURES

- Isolated version
- Waterproof and shock resistant
- Aluminium casing
- Compact and easy to operate
- Advanced switching technology
- On/Off function
- High efficiency
- Input protected against
  - reversed polarity
  - overvoltage
- Output protected against short circuit

## OPERATION

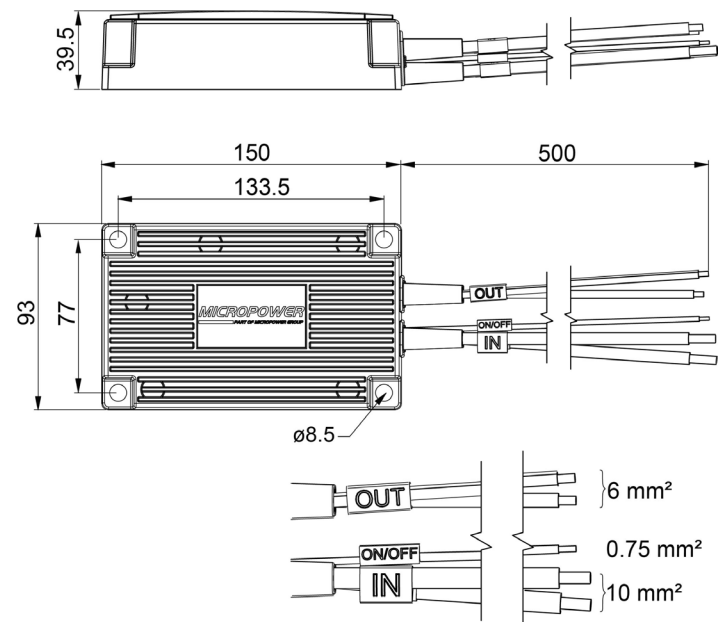


a	Start-up voltage $5 \pm 0.5$ V
b–c	Nominal operation 10–16 V
d	Overvoltage shut down $20.5 \pm 0.5$ V
e	Recovery voltage $18.7 \pm 0.5$ V
f	Shut-down voltage $4 \pm 0.5$ V

## MECHANICAL INSTALLATION

- Install the DC/DC converter on a metallic surface with good heat dissipation ability.
- Can be installed both vertically and horizontally.
- Avoid high ambient temperature.
- Position the DC/DC converter so the air supply is not obstructed.
- Ensure ventilation around the DC/DC converter.
- The DC/DC converter should always be securely fastened.
- Protect both input and output cables with suitable fuses.
- The mounting holes are suitable for M8 screws.

## DIMENSIONS



## ELECTRICAL INSTALLATION

1. Check that the power supply at the site of the installation complies with the rated voltage specified on the DC/DC converter's data label.
2. Check the polarity of the input and output cables before connecting the battery and loads. The DC/DC converter is normally delivered with the following polarity for the cables:
  - Positive (+) = Red
  - Negative (-) = Blue or Black

- Positive (+) = Red
- Negative (-) = Blue or Black

3. Always connect the output cables first.

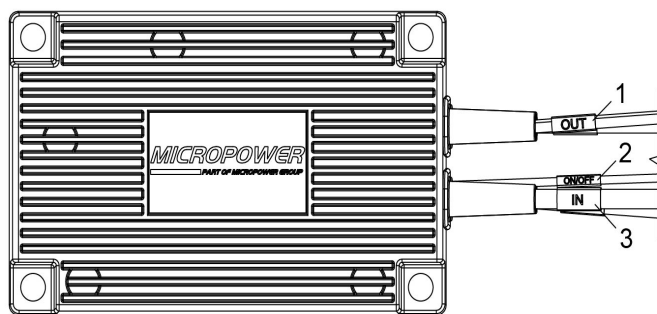
**CAUTION.** Even a momentary reverse polarity connection may severely damage the unit.

4. Connect the input cables.

5. To activate the DC/DC converter, connect the green ON/OFF remote cable to supplying voltage.

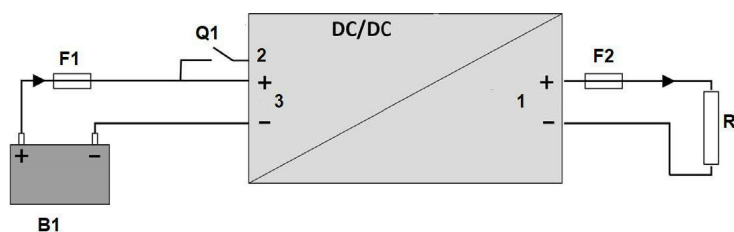
**NOTE.** DC/DC converters without the green ON/OFF cable are always ON when input voltage is above 5 VDC.

## CONNECTIONS OVERVIEW



1	Output cables
2	ON/OFF remote cable (green)
3	Input cables

## CONNECTION EXAMPLE



1	Output cables
2	ON/OFF remote cable
3	Input cables
B1	Battery or power supply
F1	Input fuse
F2	Output fuse
Q1	Remote ON/OFF switch
R	Load

## TECHNICAL DATA

Model	2D1H101
Input voltage	10–16 VDC
Output voltage	24–29 VDC <sup>(1)</sup>
Input current max.	75 A
Output current	29–23 A <sup>(1)</sup> max. 700 W
Idle current when ON/OFF is OFF	< 1 mA
Recommended input fuse	80 A
Recommended output fuse	35 A
Operating temperature	–40 to 40 °C (–40 to 104 °F)
Ingress protection	IP67
Weight	1 kg
Efficiency	> 95 % at rated power

1) Decided when ordering. See data label on unit for correct settings.

## APPROVALS

Manufactured by: Micropower Group AB

The manufacturer declares that this product complies with applicable requirements. Complete declaration is available at: <https://docs.micropower-group.com/Other docs>

## PRODUCT AND SUPPORT INFORMATION

For more information, visit Micropower Support Center:



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