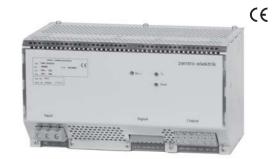
DC / DC Converter

Series GWH

Input voltage 16.8 - 162.5 VDC **Output 500 Watts**

Powerful, compact DC/DC converter for wall and DIN rail mounting and 19" system mounting.



The GWH DC/DC - converter is designed for use in automation systems, power supply and power station engineering, traffic systems and mechanical and plant engineering.

Cooling is provided by internal fans, all electrical connections are made using simple screw terminals , active current sharing takes place during parallel operation. As an option the product can be ruggedised to comply with EN50155 and 50121 for railway applications.

Input:

Input DC 16.8 VDC to 162.5VDC, see table

Making current limitation I max < I nom

Maximum permissible superimposed AC voltage

of voltage source Ue ~≤5%

Maximum activation

Tv < 2 Sec.

delay (including run-up) Overcurrent protection

safety fuse in input circuit

Overvoltage protection Varistor in input circuit

Polarity reversal protection Polarity reversal protection device in input circuit

Output:

Direct output voltage see table **Output currents** see table

Output decoupling diode is built into the device. The anode side of the decoupling diode is also led to the output terminal.

Control data:

Load control < 0.1% Mains control < 0.1%

Superimposed AC voltage (measuring bandwidth

30 Mhz) < 1%

Undershoot / overshoot at load

changes of 10 - 90% < 5%

Protection and monitoring equipment:

Overload protection U-I characteristic curve current limitation

Activation point: 1.1 x I nom

Sensor line operation Wrong sensor line connections do not damage the converter.

In the event of a sensor line break the output voltage is limited to a maximum of 120% of the

nominal output voltage. 1 V adjustable.

Overtemperature protection Shut-off if temperature becomes too high, automatic reactivation

when temperature drops

Varistor in output as additional overtemperature protection. Signalling relay in output with volt-free changeover contact. Output voltage monitored for undervoltage and overvoltage.

Operating parameters:

Operating temperature

range -25°C - 70°C (derating from +50°C with 2%/K)
Cooling From built-in fan, temperature controlled

Safety:

Primary -> secondary
Primary -> housing
Secondary -> housing
2kV 50 Hz
2kV 50 Hz

Electrical safety VDE 0805 EN60950

Protection class 1

FMC:

EN61000-6-1 to EN61000-6-4

Control, operating and indicating elements:

Indicators There is an LED at the connection side for indicating the presence of the input voltage.

A second LED indicates output voltage within range.

A third LED indicates temperature too high

Output voltage

adjustment The output voltage can be adjusted using a potentiometer at the connection side

The adjusting range is +5% -10%.

Parallel switching capability 3 units can be operated in parallel to increase output.

An internal current sharing circuit is mainly responsible for this.

Sensor line operation 1 V, adjustable

Electrical connections:

10mm² screw terminals for input and 4mm² for output (double)

1.5mm² screw terminals for signalling

Mechanical configuration:

Dimensions: WxHxD, 225 x 125 x 125

The standard version of the converter is housed in an aluminium case.

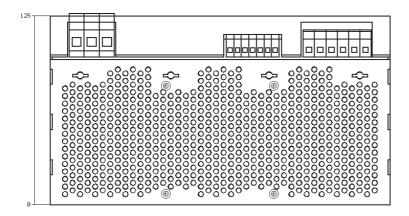
The screw terminals enable fast and simple connection.

The 125mm height means the converter can be also installed in a 19" rack.

The surface of the converter is finished in white chrome.

A ruggedised version of the converter is also available for railway applications.

Option: vibration-proof



| Input | Output | Model |
|------------|-------------------|----------------|
| Voltage | Voltage / Current | number |
| (V) | (V)/(A) | |
| 16.8 - 39 | 24/20.8 | GWH24/24/20,8 |
| 16.8 - 39 | 48/10.4 | GWH24/48/10,4 |
| 16.8 - 39 | 60/8.3 | GWH24/60/8,3 |
| 33.6 - 78 | 24/20.8 | GWH48/24/20,8 |
| 33.6 - 78 | 48/10.4 | GWH48/48/10,4 |
| 33.6 - 78 | 60/8.3 | GWH48/60/8,3 |
| 77 - 162,5 | 24/20.8 | GWH110/24/20,8 |
| 77 - 162,5 | 48/10.4 | GWH110/48/10,4 |
| 77 - 162,5 | 60/8.3 | GWH110/60/8,3 |

