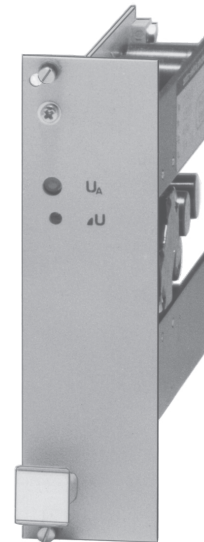


DC/DC Converter

Made in Europe

**Single Output
Isolated
Series GWR, GWP**

Input voltage 12 – 220 V
Voltage regulated
Power boost
High efficiency
High industrial standard
Intended for 19" rack



Input:

Input voltage (DC) 12 – 220 V see table
-20 % +30 % at $U_{In} = 12 V$,
 $\pm 30\%$ at $U_{In} \geq 24 V$

Output:

Output voltage (DC) see table
Output current (DC) see table
Output power see table
Efficiency > 70 – 90 %

Regulation:

Line regulation $\leq 0,2\% U_{Out}$
(max. source voltage variation)
Load regulation $\leq 0,2\% U_{Out}$
(0 – 100% output load change)
Dynamic response $\leq 2 ms$
Ripple and noise $< 1\%$ at $U_{Out} \leq 24 V$
 $\leq 300 mV_{pk-pk}$ at $U_{Out} > 24 V$
Temperature coefficient $\leq 0,02\% / K$

Protection:

Overload protection current limit at $1,1 - 1,3 I_{Nom}$
short circuit protection
Overvoltage protection at $U_{Out} = 5 V$,
suppressor diode
Thermal protection shut down with automatic
recovery

Environmental conditons:

Operating temperature $0 - +50^{\circ} C$
Power-boost one regulation card GWR.. is
able to drive 10 power cards
GWP..
the maximum output power of the
regulation card is available
at the output
Cooling free air convection
Switching frequency 40 – 100 kHz

Safety:

Safety standard EN60950
Isolation
input - output: U_{In} and $U_A \leq 60 V$: 500 V_{eff}
 $U_{In} 60 - 130 V, U_{Out} \leq 130 V$: 2 kV_{rms}
 $U_{In} 130 - 250 V, U_{Out} \leq 250 V$: 3 kV_{rms}
input - ground and
output - ground U_{In} or $U_{Out} \leq 60 V$: 500 V_{rms}
 U_{In} or $U_{Out} 60 - 130 V$: 1 kV_{rms}
 U_{In} or $U_{Out} 130 - 250 V$: 1,5 kV_{rms}

EMC:

EMI with ext. filter

Operating and Control:

Remote sense standard
up to 0,25 V per wire
standard
Ext. On/Off standard
Indicator "ON" LED GWR.. (only)
Adjustment GWR...: voltage $\pm 5\%$,
potentiometer front-panel

Connectors:

Input and Output 31-pole connector,
to DIN 41617
Options:
32-pole connector design D
to DIN 41612
16-pole screw-terminal

Physical Specification:

Dimension 30 x 100 x 160 mm
(w x h x d)
see drawing

Regulator Card

Input Voltage (V)	Output Voltage (V) / Current (A)	Power (W)	Model Number
12	5/4	20	GWR12/5
12	12/1,7	20	GWR12/12
12	15/1,4	20	GWR12/15
12	24/0,8	20	GWR12/24
12	48/0,4	20	GWR12/48
12	60/0,3	20	GWR12/60
12	110/0,15	15	GWR12/110
24	5/7	35	GWR24/5
24	12/3	35	GWR24/12
24	15/2,5	35	GWR24/15
24	24/1,6	35	GWR24/24
24	48/0,6	30	GWR24/48
24	60/0,5	30	GWR24/60
24	110/0,3	35	GWR24/110
48,60,110,220	5/7	35	GWR../5
48,60,110,220	12/3,5	40	GWR../12
48,60,110,220	15/2,8	40	GWR../15
48,60,110,220	24/2	50	GWR../24
48,60,110,220	48/0,8	35	GWR../48
48,60,110,220	60/0,6	35	GWR../60
48,60,110,220	110/0,35	40	GWR../110

Power Card

Input Voltage (V)	Output Voltage (V) / Current (A)	Power (W)	Model Number
12	5/4	20	GWP12/5
12	12/1,7	20	GWP12/12
12	15/1,4	20	GWP12/15
12	24/0,8	20	GWP12/24
12	48/0,4	20	GWP12/48
12	60/0,3	20	GWP12/60
12	110/0,15	15	GWP12/110
24	5/7	35	GWP24/5
24	12/3	35	GWP24/12
24	15/2,5	35	GWP24/15
24	24/1,6	35	GWP24/24
24	48/0,6	30	GWP24/48
24	60/0,5	30	GWP24/60
24	110/0,3	35	GWP24/110
48,60,110,220	5/7	35	GWP../5
48,60,110,220	12/3,5	40	GWP../12
48,60,110,220	15/2,8	40	GWP../15
48,60,110,220	24/2	50	GWP../24
48,60,110,220	48/0,8	35	GWP../48
48,60,110,220	60/0,6	35	GWP../60
48,60,110,220	110/0,35	40	GWP../110

Pin Assignment

GWR../GWP..	31-pole Connector	32-pole Connector	16-pole Screw-terminal	H15-Connector
+ Input	27,28,29,30	ac28,ac30	2,3	z28,d30
- Input	23,24,25,26	ac24,ac26	4,5	z24,d26
+ Output	6,7,8,9	ac8,ac10	12,13	z8,d10
- Output	10,11,12,13,14	ac12,ac14	10,11	z12,d14
+ Sense	4,5	ac6	14	d6
- Sense	2,3	ac4	15	z4
Ext. on/off	18,19	ac18	7	d18
ext. connection*	22	ac22	8	d22
ext. connection*	20,21	ac20	6	z20

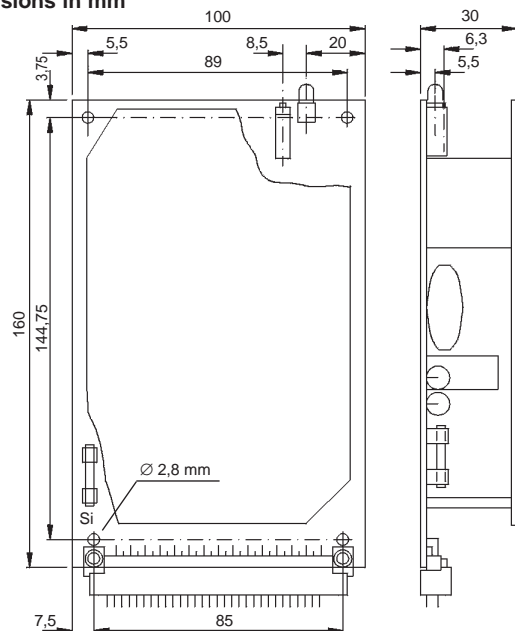
*Power boost: connect Input, Output and "ext. connection"

Options:

- Card with H15-connector
- Card with 32-pole connector
- Card with 16-pole screw-terminal
- Female plug H 15
- Female plug 31-pole
- Female plug 32-pole
- Sub front-panel
- 7 T \approx 35,6 mm (T = 5,08 mm)
- Colour Al anodized
- Colour RAL 7032
- other colours consult factory

Model Number:
replace points (...) with the input voltage

Dimensions in mm



Application example power-boost:

Input 24 V, Output 12 V/9 A

