

- **Wide range for DC input**

9Vdc....18Vdc
18Vdc....36Vdc
36Vdc....75Vdc

- **230Vac Output, 115Vac quasi-sin, 8VA power**

50 Hz or 60Hz

- **Protection** short circuit, overload, thermal

- **High input / output isolation** 4000 Vac

- **Rail DIN mounting, natural convection cooling**



The WR140 is a double-insulated quasi-sine DC-AC converter for powering various devices from DC voltage. It incorporates input regulation ensuring a regulated and protected alternating output voltage.

Specifications:

- Switching mode inverter allow high power density without heating due to the high efficiency of electronic.

- Wide DC input range

Overload protected (current limiting)
Short-circuit protected (internal fuse)
Reverse polarity protected
Under voltage protected (locking)
Thermal protected (limitation of output power)
Natural convection cooling
Low consumption with no load

Features:

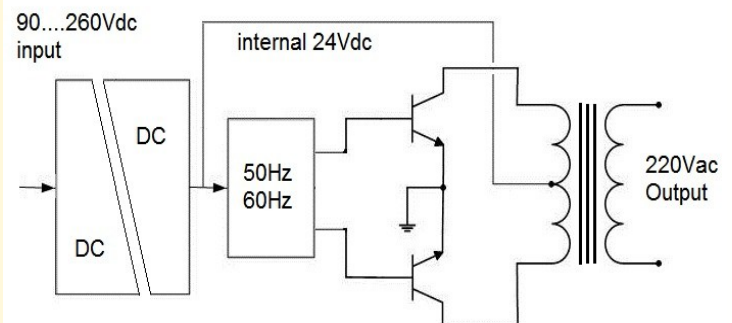
- DIN rail mounting,
- Protection rating IP20,
- Conformal coating for electronic protection,
- Non sensitive to dust and humidity,
- Resistant to chock and vibration,
- Green LED for main voltage presence,
- Embedded EMC filter according to EN55022 class A
- Connection with pluggable terminal block (wire section up to 2.5 mm²).

(Specific output voltage or specific frequency available on request)

Implementation recommendations:

- Primary protection with fuse recommended (5A delayed)
- Maintain a spacing between devices for natural convection
- Vertical mounting recommended

Internal synoptic



Version and order code:

WR140-DC-AC :

- Rating DC input :
9Vdc....18Vdc
18Vdc....36Vdc
36Vdc....75Vdc

- Rating AC output: 110V, 115V, 220V, 230V ; 8VA
(50 or 60 Hz) to define. 50Hz by default

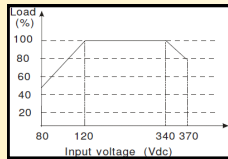
Option :-HT High temperature version TA 70°C without derating

Power supply

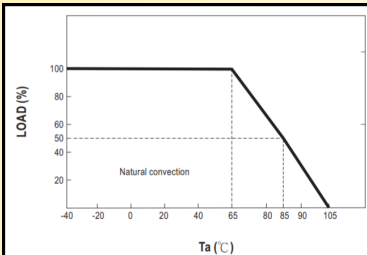
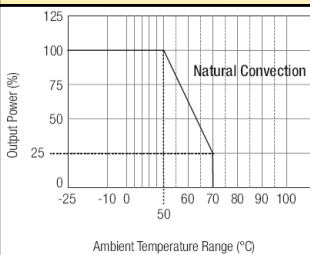
9Vdc....18Vdc input
18Vdc....36Vdc input
36Vdc....75Vdc input

Other voltage input or extended range on request
Typical efficiency > 85%
Inrush current 10A typical < 20ms

Output power function of input voltage
WR140DC-AC version, 125Vdc input

**Output**

Alternative voltage 115Vac or 230Vac quasi-sin
Frequency 50Hz +/- 2Hz : 60Hz +/- 2Hz
Output accuracy +/- 5%
Load regulation (output current variation) : +/-2%
Line regulation (input variation) : +/-0.5%
Overload protection: 120% typical
Output power function of ambient temperature

standard version**HT version****ENVIRONNEMENT**

Operating temperature -25°C to 50°C (**standard version**)
Derating with temperature 2.5% / °C above 50°C
Thermal protection 85°C internal

Operating temperature -25°C to 70°C (**HT version**)
Thermal protection 105°C internal

Storage temperature -25°C to 85°C
Humidity 85 % (not condensed)
Drift regulation +/-0.04%/°C typical

Insulation resistance > 500 Mohms @ 500Vdc
Dielectric strength 4000VAC (input / output)
Weight 400g.

MTBF (25°C) > 500 000 hours

Lifetime: > 200 000 Hrs @ 30°C 8VA load
> 100 000 Hrs @ 50°C 8VA load
> 100 000 Hrs @ 60°C 4VA load
> 50 000 Hrs @ 70°C 4VA load

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for
industrial environments
EN 61000-6-2

Emission standard for
industrial environments
EN 61000-6-4

EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

EN 55011
group 1
class A

**WIRING AND OUTLINE DIMENSIONS:**