



- **Wide range for DC input**

12Vdc rated input value (9Vdc....18Vdc)

24Vdc rated input value (18Vdc....36Vdc)

48Vdc rated input value (36Vdc....75Vdc)

85Vdc....320Vdc for applications:

110Vdc, 115Vdc, 127Vdc

- **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:

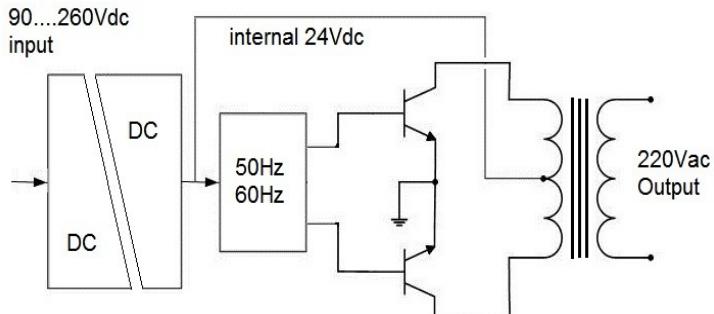
- DIN rail mounting,
- Protection rating IP20,
- Conformal coating for electronic protection,
- Non sensitive to dust and humidity,
- Resistant to shock and vibration,
- Green LED for main voltage presence,
- Embedded EMC filter according to EN55022 class A
- Connection with pluggable terminal block
(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:

[Request a quote](#)

WR140-DC-AC :

- Rating DC input : 12V, 24V, 48V, 110V, 115V, 125V, 250V
9Vdc....18Vdc 12Vdc rating input
18Vdc....36Vdc 24Vdc rating input
36Vdc....75Vdc 48Vdc rating input
85Vdc....320Vdc for 115 / 125 / 230Vdc rating input

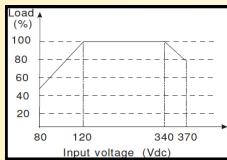
- Rating AC output: 110V, 115V, 220V, 230V ; 8VA
(50 or 60 Hz) to define. 50Hz by default

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

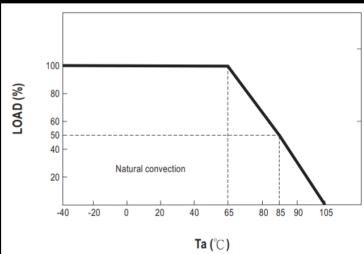
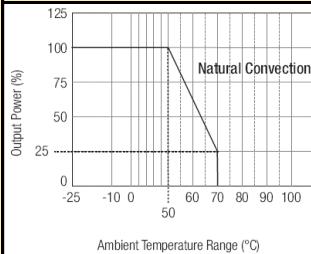
Power supply

9Vdc....18Vdc input, 12Vdc rated input
 18Vdc....36Vdc input, 24Vdc rated input
 36Vdc....75Vdc input, 48Vdc rated input
 85Vdc....320Vdc input, for 110Vdc/125Vdc/250Vdc rated 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**

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

**Emission standard for industrial environments
EN 61000-6-4**

EN 55011

group 1
class A

**WIRING AND OUTLINE DIMENSIONS:**