

# Inverter, Direct to alternative converter 8VA WR140-DC-AC



- **Wide range for DC input**

9Vdc....18Vdc  
18Vdc....36Vdc  
36Vdc....75Vdc  
85Vdc....320Vdc

- **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:

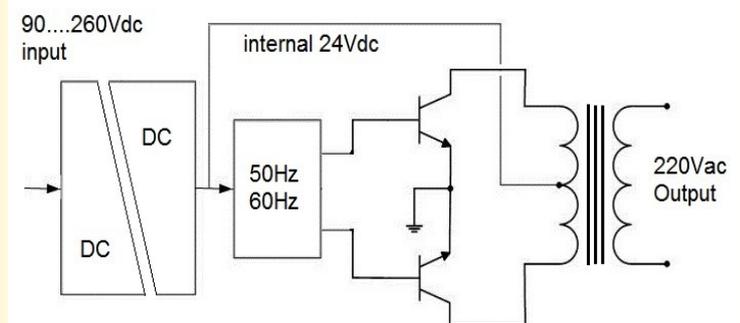
- DIN rail mounting,
- Protection rating IP20,
- Conformal coating for electronic protection,
- Non sensitive to dust and humidity,
- Resistant to chock and vibration,
- Green LED for main voltage presence,
- Embedded EMC filter according to EN55022 class A
- Connection with pluggable terminal block  
( wire section up to 2.5 mm<sup>2</sup> ).

(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 :  
9Vdc....18Vdc  
18Vdc....36Vdc  
36Vdc....75Vdc  
85Vdc....320Vdc

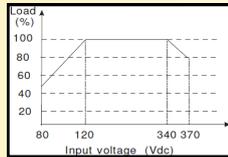
- Rating AC output: 110V, 115V, 220V, 230V ; 8VA  
(50 or 60 Hz) to define. 50Hz by default

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

**Power supply**

9Vdc....18Vdc input  
 18Vdc....36Vdc input  
 36Vdc....75Vdc input  
 85Vdc....320Vdc 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

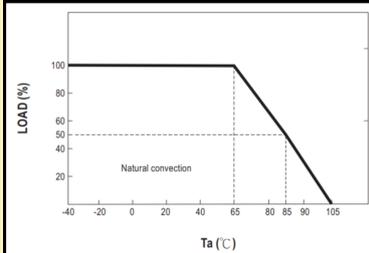
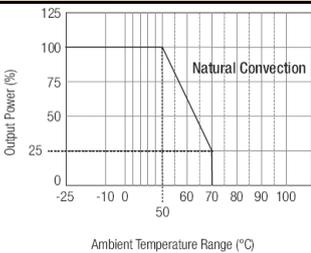


**Output**

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 55011 group 1 class A
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	



**WIRING AND OUTLINE DIMENSIONS:**

