DIN rail power supply. DC input up to 1500Vdc or AC input 115Vac, 230Vac, 400Vac, 690Vac — *AL140L*

- ***AL140L : Single phase input and direct wide range input***
  85Vac….265 Vac and 110Vdc....320Vdc
- ***AL140L-HV : High level input or three-phase network***
  85Vac….528 Vac and 120Vdc....750Vdc
- ***AL140L-THV : Very High Voltage input DC or AC***
  200Vac….800Vac and 200Vdc….1500Vdc
- ***Protection*** *short-circuits, overload, thermal*
- ***1 to 3 isolated outputs, 10 to 180 Watts total***
  Output coupling is possible
- ***DIN rail mounting,*** *cooling by natural convection*
- ***Applications:*** *Photovoltaic, automatism, machine, instrumentation*

Strong industrial medium power supply, fully protected (resin embedded modules), available from 1 to 3 isolated and independent outputs.

Description:

- SMPS power supply allowing high power density without heating due to its high efficiency.

- wide range of input voltage in alternative or continuous

- 1 to 3 isolated outputs allowing serial or parallel coupling, thereby obtaining exotic or symmetric voltage output, to increase the available output current, or create up to 3 levels redundancy.

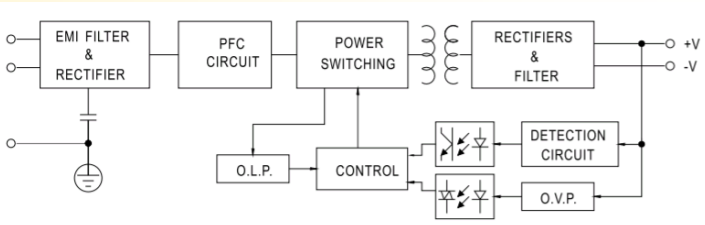
Protection against overload (current limitation)
Protection against short-circuits
Protection against reverse polarity
Protection against undervoltage (locking)
Thermal protection (power limitation)
Natural convection cooling
low consumption with no load

Technical specifications:

Symmetric DIN rail mounting
Protection rating IP20
Internal silicone encapsulation, conformal coating, high resistance to vibration and shock, moisture and dust resistant.
Green LED for main voltage presence
Connection on pluggable screw terminals, 2.5 mm².

Embedded EMC filter in accordance with EN55022 class A
Single output voltage : 3.3, 5, 12, 15, 24, 30, 48, 72, ...
or symmetrical : +/-5, +/-12, +/-15, +/-24, ….
(Specific output on request).

Synoptic



Implementation and installation recommendations:

- Main protection with fuse recommended (delayed 5A)
- Maintain a spacing for a natural ventilation
- Vertical mounting recommended.

Version and order code : Request a quote

AL140L (HV-THV) -N-U-i :

AL140L	85Vac….265 Vac and 110Vdc....320Vdc
AL140L-HV	85Vac….528 Vac and 120Vdc....750Vdc
AL140L-THV	200Vac….800Vac and 200Vdc….1500Vdc

DIN rail enclosure (45 mm width)
- **N** : number of output. 1 to 3
- **U** : output voltage : 5v, 9v,12v,15v, 24v, ……
- **i** : output current : according to voltage output

Option **-HF** frequency of input : 400 Hz

For the 2 or 3 outputs version, each outputs have a nominal power of 10 watts. Up to 100 Watts for single output version

TECHNICAL SPECIFICATIONS

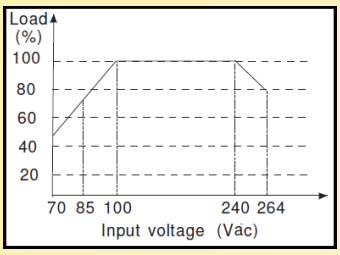
Power supply

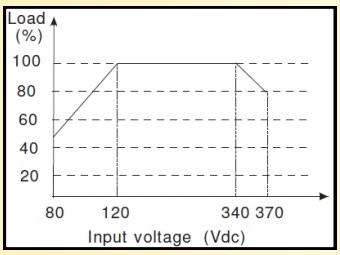
Input voltage	85….265Vac / 100...370Vdc
(model dependant)	85....528Vac / 120...750Vdc
	200Vac...800Vac and 200Vdc...1500Vdc
Input frequency	47….440Hz
Typical efficiency	> 85%
Inrush current	15A typical

Outputs

Accuracy	+/- 2% max.
Load regulation (output current variation)	+/- 2% max
Line regulation (input variation)	+/- 0.5%
Output hold time	Typical 50 ms.
Ripple	< 0.5% Vout (limited to 20MHz)
Thermal stability	+/- 0.03%/°C
Overload protection	110% typ.
Switching frequency	60kHz typ.

Output power characteristics as a function of the input voltage
standard AL140L version

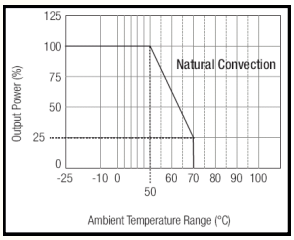




ENVIRONMENT

Operating temperature	-25 °C to 50 °C (natural convection)
Temperature derating	2.5%/°C above 50°C
Thermal protection	100°C internal
Storage	-40 °C to 85 °C
Humidity	85 % (not condensed)
Temperature coefficient	±0.02%/°C typical
Insulation resistance	> 100 MΩ min.
Dielectric strength	4000VAC (input / output)
Weight	250 g
MTBF (+25°C)	> 300 000 hours

Output power characteristic
vs ambient temperature

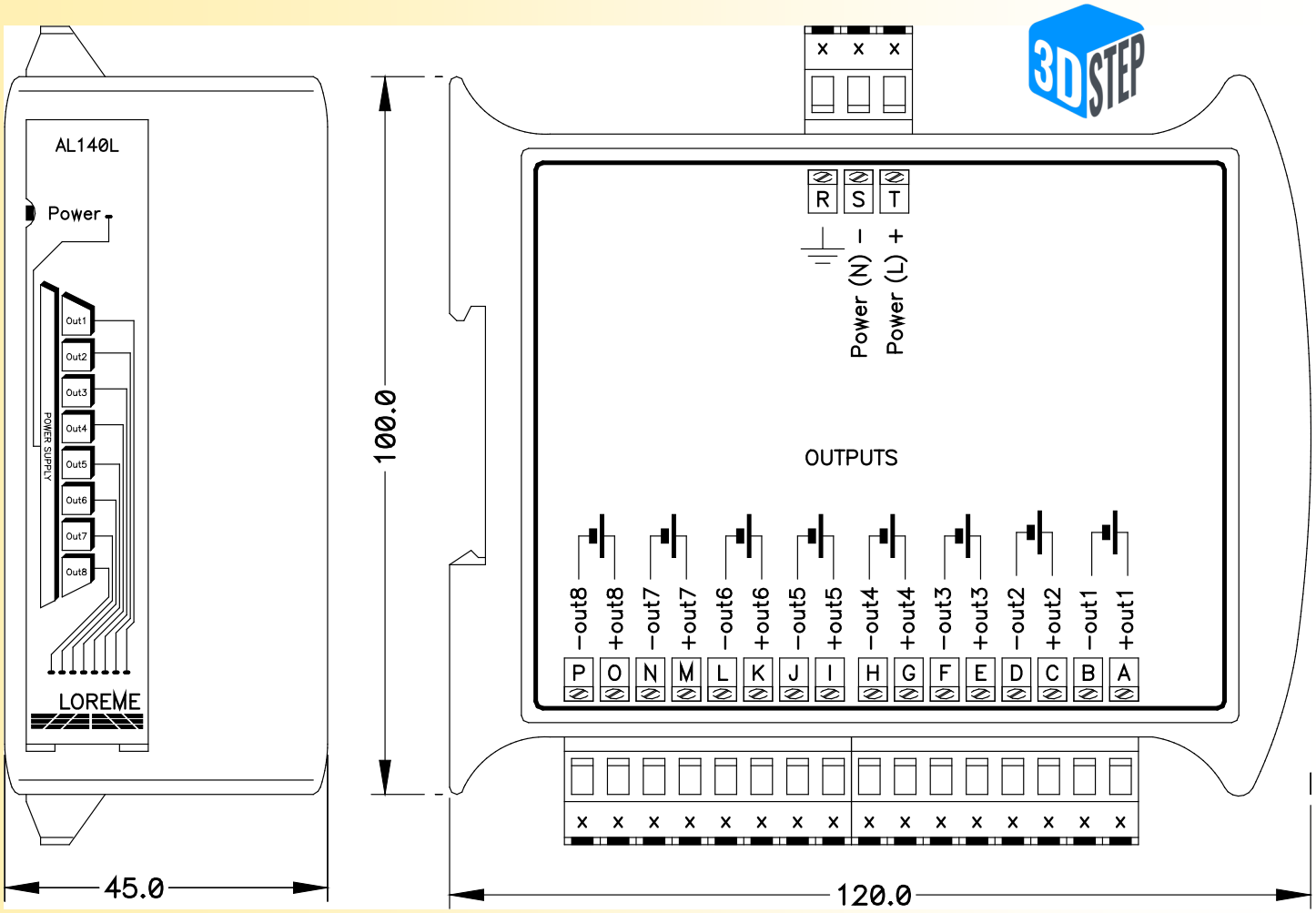


Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

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	

CE

WIRING AND OUTLINE DIMENSIONS:



LOREME 12, rue des Potiers d'Etain - 57071 Metz ☎ 03.87.76.32.51 - www.loreme.fr - Email: Commercial@Loreme.fr - Technique@Loreme.fr