

RHINO Installation Instructions for PSRP 150 Series DC/DC Converter



READ THESE INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE. KEEP FOR FUTURE REFERENCE.
 CAUTION: FOR USE IN A CONTROLLED ENVIRONMENT. REFER TO THIS MANUAL FOR ENVIRONMENTAL CONDITIONS.

▼AUTOMATIONDIRECT

ATTENTIONS: A UTILISER DANS UN ENVIRONNEMENT SOUS CONTROLE. VOIR MANUEL POUR LES CONDITIONS ENVIRONNEMENTALES.

PSRP 150 Series DC/DC Converter			
Part. No.	Input	Output Power Max.	Output
PSRP-12-DC24-150	24 VDC	150 Watt	12 VDC / 12'500 mA
PSRP-15-DC24-150			15 VDC / 10'000 mA
PSRP-24-DC24-150			24 VDC / 6'300 mA
PSRP-28-DC24-150			28 VDC / 5'400 mA
PSRP-48-DC24-150			48 VDC / 3'200 mA
PSRP-12-DC48-150	48 VDC	150 Watt	12 VDC / 12'500 mA
PSRP-24-DC48-150			24 VDC / 6'300 mA

Input Voltage Range	9 - 36 VDC (24 VDC nom.) 18 - 75 VDC (48 VDC nom.)	Terminal for Wiring	Screw terminal: Wires 14-24 AWG max. Recommending tightening torque: 0.25 Nm max.
Input Current (at no load)	100 mA typ. (24 VDC nom.) 65 mA typ. (48 VDC nom.)		
Operation Temperature Range	-40°C to 75°C		
Output Power Derating (natural convection)	Above 50°C -> 2.0 %/K (24 VDC nom.) Above 55°C -> 2.2 %/K (48 VDC nom.)	Case Material	Aluminum

Safety Instructions:

- Before installation read these instructions carefully and completely. These installation instructions cannot cover every possible example of installation, operation or maintenance. Further information is obtainable from the product data sheet which can be downloaded from the internet at www.AutomationDirect.com
- The power supplies are constructed in accordance with the safety requirements of IEC/EN 62368-1 and UL 62368-1 and carry the CE mark. They are cUL approved in accordance to UL62368-1.
- Before installation, maintenance or modification work, ensure that the main switch is switched off and prevented from being switched on again. Touching any live components or mishandling of this converter can result in serious injury, death or substantial property damage. The successful and safe operation is dependent of proper storage, handling, installation and operation.
- Compliance with the relevant national regulations (in the USA, Europe and other countries) must be ensured. Before operation is started the following conditions must be ensured:
 - Connection to supply in compliance with national regulations.
 - If using stranded wires, all strands must be fastened in the terminal blocks.
 - Converter and cables must be sufficiently fused.
 - All wires must be rated for the corresponding current and must be connected with the correct polarity.
 - Sufficient cooling must be ensured
 - Keep away from fire and water
 - The equipment for installation in a Pollution Degree 2 environment.
- Never work on the converter if power is supplied! Risk of electric arcs and electrical shock which can cause death, severe personal injury or substantial property damage.
- Warning: Hazardous voltages and components storing a substantial amount of energy are present in this converter during normal operation conditions. However, these are inaccessible. Improper handling may result in an electric short or serious burns!
- Do not open the converter housing. There are no user-repairable components inside.

Installation Instructions:

- If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call AutomationDirect.com Tech Support at 770-844-4200.
- This converter is designed for professional indoor systems. In operation the converter must not be accessible. It may be installed and put into service by qualified personnel only.
- The converters provide functional insulation between input and output circuit and intend to be supplied by a DC power source that provides double/reinforced insulation from AC mains.
- The correct mounting position for optimal cooling performance must be observed. Observe power derating. (See data sheet)
- Recycling: The unit contains elements which are suitable for recycling, and components which need special disposal. You are therefore requested to make sure that the converter will be recycled by the end of its service life.

Do not open the converter

Caution: Not for outdoor use.

Avertissement : Ce bloc d'alimentation contient une grande tension et des composants puissants pendant l'utilisation normale. Une mauvaise manipulation peut causer un choc électrique ou des brûlures graves !

N'ouvrez pas le bloc d'alimentation.

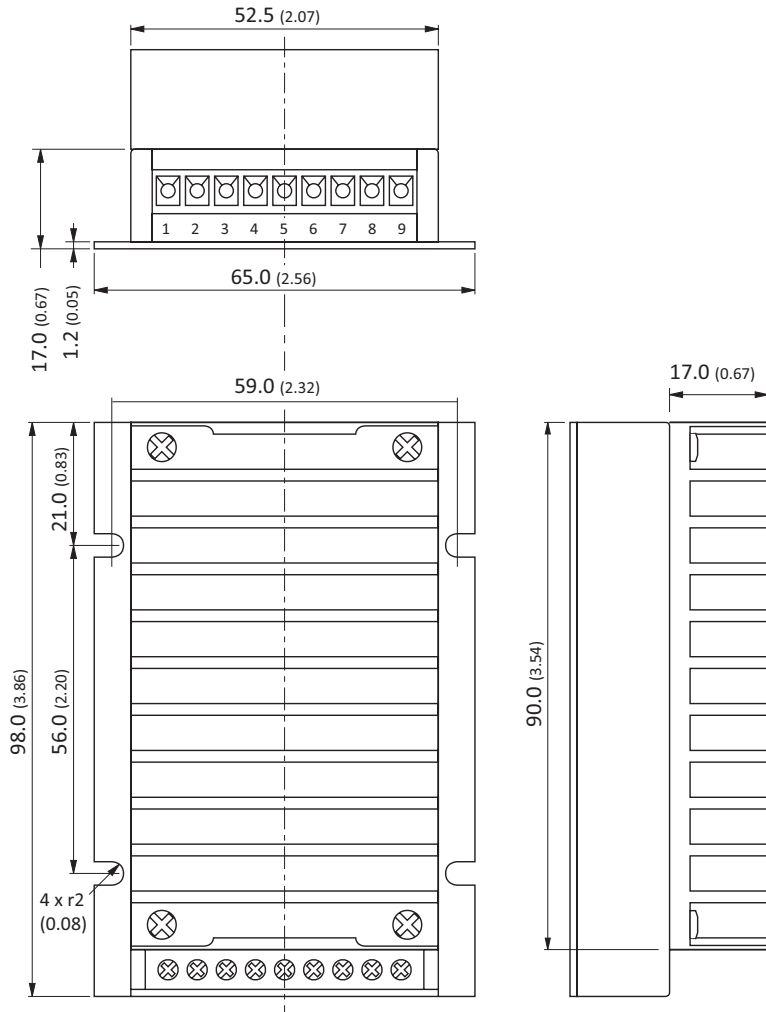
Attention : Pas pour une utilisation en extérieur.

Wiring terminals diagram:



AUTOMATIONDIRECT

3505 Hutchinson Rd, Cumming GA 30040
Sales: 800-633-0405 - Support: 770-844-4200
www.automationdirect.com



Connection		
Pin	Function	recommended wire
1	+Vin	14 - 16 AWG
2	+Vin	
3	-Vin	
4	-Vin	
5	Remote On/Off	14 - 24 AWG
6	+Vout	14 - 16 AWG
7	-Vout	
8	Trim	14 - 24 AWG
9	Trim	

Dimensions in mm (inch)
Mounting slot tolerance ± 0.25 (± 0.001)
case tolerance ± 0.5 (± 0.02)

Converter orientation for proper cooling

To ensure proper cooling, the converter must be mounted in such a way that the air flow can pass unhindered between the cooling fins. Using forced air cooling will increase the cooling performance and reduce required power derating especially when mounted horizontally.

If mounted vertically, the fins must stand upright to ensure heat transportation through thermal dynamics effects. When using forced air cooling, the air flow must pass unhindered between the cooling fins.

