Non isolated DC – DC Converter

R74 Series

Features

- Non-isolated converter
- Input 60 – 84V DC
  (Nom. 36V & 48V also available)
- Input Current 3.5A (max 6A) or 5.5A (max 9A)
- Output 13.7V, 24V or 32V DC
- Overvoltage, reverse input & overload protected
- Very low noise
- No min load required
- Efficiency greater than 90%
- 5 year warranty

Suitable for Railway, Radio Communications, Audio, Lighting, Computer Equipment, Auxiliary Battery Systems, Refrigeration, Motors and Solenoids, Relays, etc.

AS/NZS ISO 9001 BUREAU VERITAS Certification

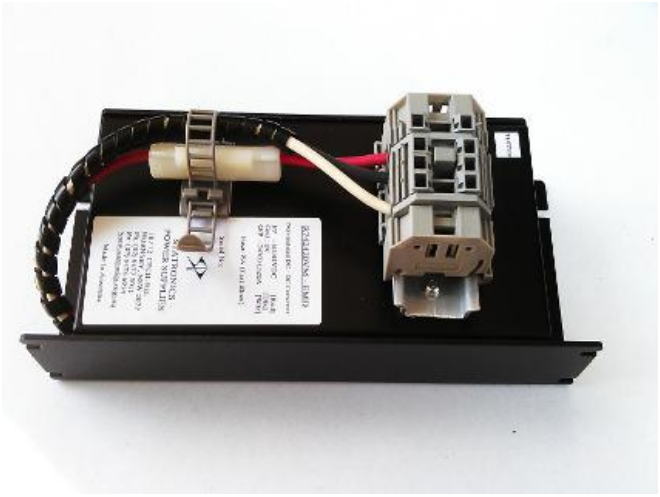
SPECIFICATIONS

MODEL:	R721320VM-CLY (or -EMD)	R742420VM-CLY (or -EMD)	R743210VM-EMD (or -CLY)
DC Input Voltage	60-84 Vdc (Withstand surges to 90 Vdc)		
Steady-state Input Current	3.5A typical, 6A maximum at full load	5.5A typical, 9A Maximum at full load	3.8A typical, 8A Maximum at full load
Output Voltage	13.7V DC ± 2%	24V DC ± 2%	32V DC ± 2%
Output Current	20A maximum, 15A continuous	20A maximum, 15A continuous	10A maximum, 8A continuous
Ripple And Noise	< 50mV p-p at full load, measured at the output connectors		
Minimum Load	0 A		
Line Regulation	± 1% for all load conditions		
Load Regulation	± 1% for all input voltages from 60-84 Vdc		
Temperature Coefficient	0.1% per °C after 1 Hr. Any change in output voltage due to warm-up drift and operation temperature does not exceed regulation limit		
Output Power	274 W	480 W	320W
Efficiency	93 % typical at full load, 72V input		
Short Circuit	short circuit placed on output (indefinite) causes no damage		
Over Current Protection	Current limit at approximately 110% of surge load rating		
No Load	No load operation causes no damage. No minimum load is required.		
Reverse Input Protection	Reversed input polarity blows input fuse or input blocking diode		
Operating Temperature	0°C to 60°C ambient. Maximum case temperature: 80°C		
Relative Humidity	0% to 98%		
Shipping and Storage	-30°C to 85°C, Relative Humidity: 5% to 95%		
Withstand Vibration	2.2G under operation		
Withstand Shock	20G under operation		
Safety Standards	IEC 950, AS 3260, UL 1950, CSA 22.2 No. 950		
EMC Standards	AS 3548, FCC, VDE, AS3548, CISPR22, all class B		
Size (L x W x H)	244 x 85.5mm (9.6x3.35") - **Note**: Height with CLY = 75mm (2.95"), with EMD = 90mm (3.54")		

Weight	600 grams, 1.32 pounds
Mechanical Protection	Black anodized aluminium case.
Grounding Normal	Case is isolated from common negative input and output.
Grounding Option	Case connected to common negative input and output.
Remote ON/OFF Function	Standard Open - ON. Option, short to negative input/output -OFF

Model Options

There are two different options, R7xxxxxVM-CLY and R7xxxxxVM-EMD. The only difference between "-CLY" and "-EMD" is the terminal. The option "-CLY" (pictured above) uses open type spade terminals for quick connect lugs and "-EMD" (picture below) employs Wago cage clamp terminals assembled on a DIN rail.



Adaptor Plate

For installation where the unit size must be similar to the old R72 or R74 Series units(300 x 111 x 44 mm) the converter can be supplied mounted on an adaptor plate.

Voltage Options

The design is very versatile. The voltages can be customised to suit most applications.
(Minimum MOQ's may apply)