Features

Regulated Converters

- High Output Voltage DIP24 converter
- Improved Version of Rxx-100_150A Series with higher efficiency and reduced ripple.
- Input Voltage 5, 12, 15 or 24VDC
- Adjustable Output Voltage up to 210VDC
- Cascadeable for Output Voltages up to 420VDC
- 3kVDC Input/Output Isolation
- Remote Voltage Programming by External Voltage or Resistance
- Continuous Short Circuit Protection
- Ambient Temperature up to +85°C

Selection Guide

Part Number DIP 24	Input Range (VDC)	Output Voltage Range (VDC)	Max Output Current (mA)	Efficiency at Full Load (%)
R05-100B	5 (4.5 – 6)	+40...+120	25	77
R12-100B	12 (10 – 14)	+55...+135	50	82
R15-100B	15 (14 – 17)	+55...+135	50	82
R24-100B	24 (21 – 27)	+55...+135	50	84
R12-150B	12 (10 – 14)	+95...+210	50	82
R15-150B	15 (14 – 17)	+95...+210	50	82
R24-150B	24 (21 – 27)	+95...+210	50	84

Specifications (typical at 25°C, nominal input voltage, full load unless otherwise specified)

Input Voltage Range		5, 12, 15 or 24VDC
Rated Power	5V	25mA max. or 3 Watts max.
	All others	50mA max. or 5 Watts max.
Output Voltage Adjustment Range		55..135 or 95..210VDC
Output Voltage Accuracy		±5% max
Line Voltage Regulation		0.5% max
Load Voltage Regulation	20% to 100% full load	0.5% max
Output Ripple and Noise	20MHz limited	60mVp-p typ.
Operating Frequency		200kHz typ.
Efficiency at Full Load		80 ~ 86% typ.
Isolation Voltage (tested for 1 second)		3000VDC min.
Isolation Capacitance		20pF typ.
Isolation Resistance		1 GΩ min.
Short Circuit Protection		Continuous, Automatic Restart
Short Circuit Input Current		30mA typ.
Temperature Coefficient		±0.02%/°C
Operating Temperature Range	With derating	-40°C to +85°C
(free air convection)	Full Power	-40°C to +70°C
Storage Temperature Range		-50°C to +125°C
Case Material		Non-Conductive Black Plastic
Potting Material		Epoxy (UL94V-0)
MTBF (25°C)	Mil-Std 217F	1.4 x 10^3 hours
Output Voltage Adjust	External Voltage	0 - 4VDC
	External Resistor	0 - 5kΩ
Internal Voltage Reference		Regulated 5V with 1kΩ series resistor
EN General Safety	Report: SPCLVD 1207005	EN60950-1:2006 + A12:2011

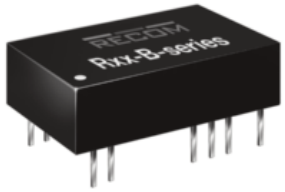
INNOLINE

DC/DC-Converter

with 3 year Warranty

RECOM

5 Watt Single Output



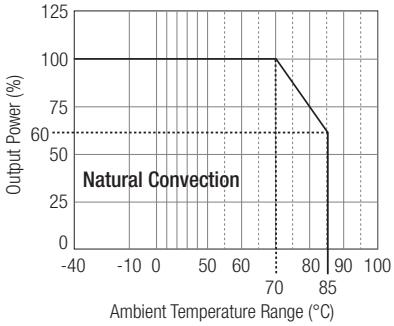
RoHS 2011/65/EU 6/6

EN-60950-1 Certified

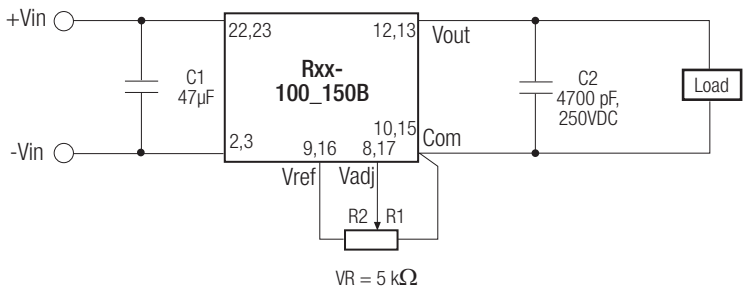
Rxx-B

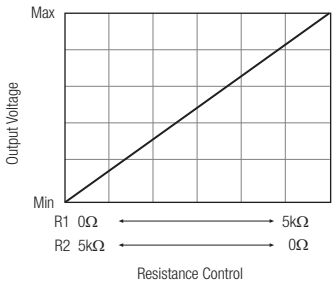
Derating Graph

(Ambient Temperature)

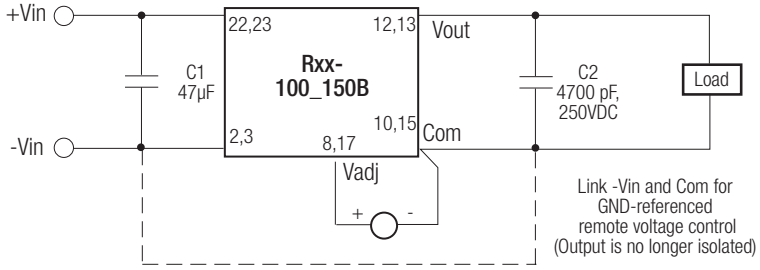


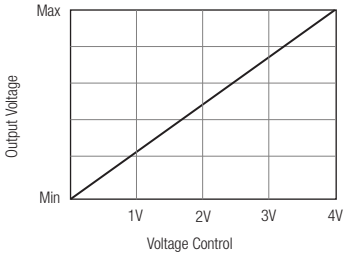
Typical Applications

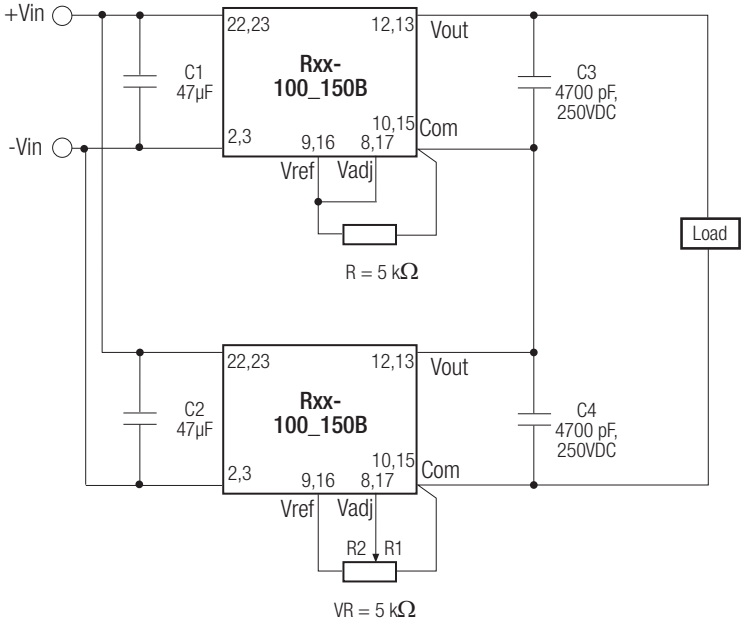




For remote voltage control







Cascade Combinations

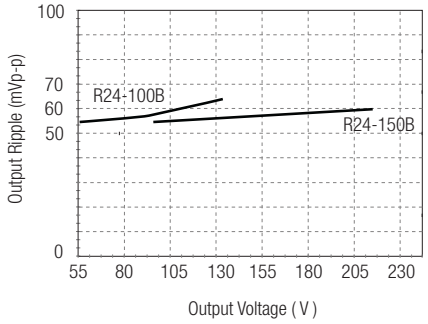
U1	U2	Vout Range
R05-100B	R05-100B	160-240
Rxx-100B	Rxx-100B	190~270
Rxx-150B	Rxx-100B	230~345
Rxx-150B	Rxx-150B	305~420

xx = 12, 15 or 24

Note: When cascaded, only one Rxx-A may be adjustable, the other must be fixed voltage.

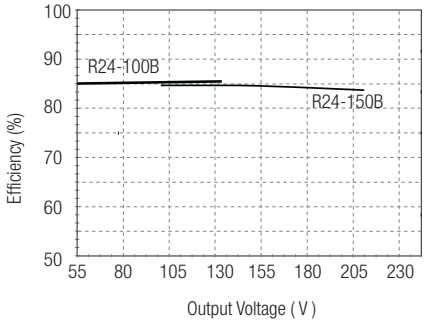
Typical Characteristics

R24-100B _ R24-150B



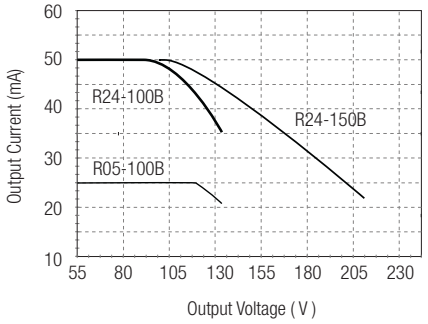
Output Ripple Vs Output Voltage (Vin=Nom.)

R24-100B _ R24-150B



Efficiency Vs Output Voltage (Vin=Nom.)

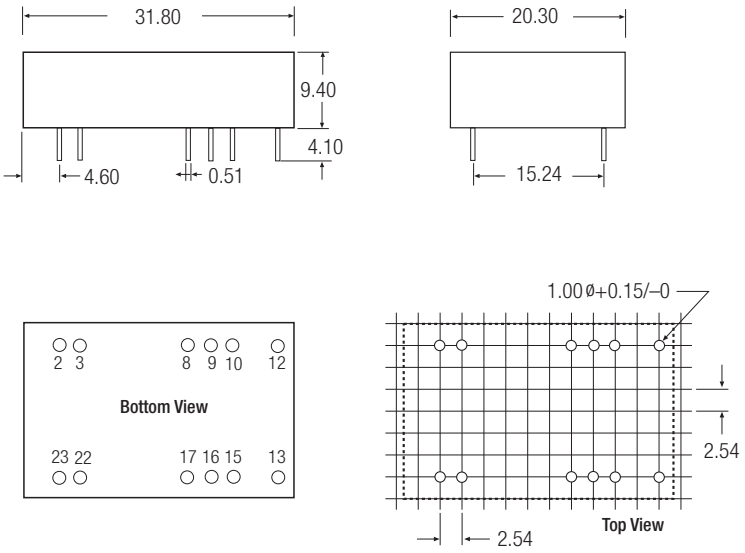
Power Limit



Output Current Vs Output Voltage (Vin=Nom.)

Rxx-B

Package Style and Pinning



Pin Connections

Pin #	Out
2,3	-Vin
8,17	Vadj
9,16	V ref
10,15	-Vout
12,13	+Vout
22,23	+Vin

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

The product information and specifications are subject to change without prior notice. All products are designed for non-safety critical commercial and industrial applications.
The Buyer agrees to implement safeguards that anticipate the consequences of any failures that might cause harm, loss of life and/or damage property.