



DC/DC DIN RAIL



Special Features

- Isolated Input/Output 1500 VDC
- Efficiency 91 %
- Fixed Switching Frequency
- Input Undervoltage Protection
- OTP
- OVP and Overload Protection
- Remote On/Off
- Industry Standard Half-Brick Package

Key Applications

- Industry Automation
- Telecom Communication
- Measuring Equipments
- Military

75 W, 150 W, 300 W

Input: 9 - 75 VDC
 Nominal Input Voltage: 36 VDC
 Output Voltage: See Table
 All Specifications typical at Nominal Line, Full Load and 25°C, unless otherwise noted

Electrical Specifications

Input

Operating Input Voltage Range: See Table
 Input Surge Voltage (100 ms max.): 100 VDC max.
 Under Voltage Lockout: Power up 9 VDC
 Power Down: 7.5 VDC
 Positive Logic Remote On/Off: (See Note 4 and 5)
 Input Filter: LC Type

Output

Voltage Accuracy: ± 1.5 % max.
 Transient Response: 25 % Step Load Change: < 500 μ s
 External Trim Adj. Range (Note 6): ± 10 %
 Ripple & Noise, 20 MHz BW
 Humidity: 95 % RH max. Non Condensing
 12 V & 15 V: 60 mV RMS, 120 mV pk-pk max.
 24 V & 28 V: 100 mV RMS, 280 mV pk-pk max.
 48 V: 200 mV RMS, 480 mV pk-pk max.
 Temperature Coefficient: ± 0.03 %/°C
 Short Circuit Protection: Continuous
 Line Regulation (Note 1): ± 0.2 % max.
 Load Regulation (Note 2): ± 0.2 % max.
 Over Voltage Protection Trip Range, % Vo nom.: 115 - 140 %
 Current Limit: 105 - 200 % Nominal Output

General Specifications

Efficiency: See Table
 Isolation Voltage: Input/Output 1500 VDC min.
 Input/Case, Output/Case: 1500 VDC min.
 Isolation Resistance: 10^7 Ω min.
 Isolation Capacitance: 12 V / 15 V, 3500 pF typical
 24 V / 28 V / 48 V: 2500 pF typical
 Switching Frequency: 200 KHz typical
 Operating Case Temperature: -40°C - 100°C
 Storage Temperature: -55°C - 105°C
 Thermal Shutdown, Case Temperature: 100°C typical
 MTBF: 300.000/h
 Dimensions and Weight 75 W: 112 mm x 110 mm x 23 mm / 150 g
 150 W: 112 mm x 110 mm x 46 mm / 300 g
 300 W: 112 mm x 110 mm x 92 mm / 600 g
 Case Material: Aluminum Baseplate with Plastic Case
 UL94 V0 UL compliant

NOTE

1. Measured from high Line to low Line.
Measured from full Load to zero Load.
2. Output Ripple and Noise measured with 10 μ F Tantalum (for 48 Vout with 10 μ F Aluminum) and 1 μ F Ceramic Capacitor across Output.
3. Logic Compatibility: open Collector ref. to -Input
4. Start up Time : 110 ms typical
5. Module On : > 3.5 VDC - 75 VDC or open Circuit
Module Off: < 1.2 VDC
6. The Input External Capacitor Recommend to Parallel with 330 μ F.
7. ESR < 0.7 Ω to Reduce the Input Ripple Voltage.
8. Max. Case Temperature 100°C.

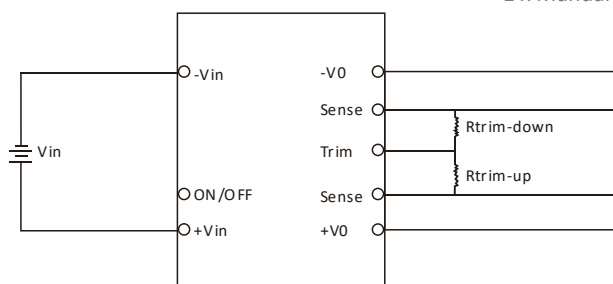


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Ordering Information

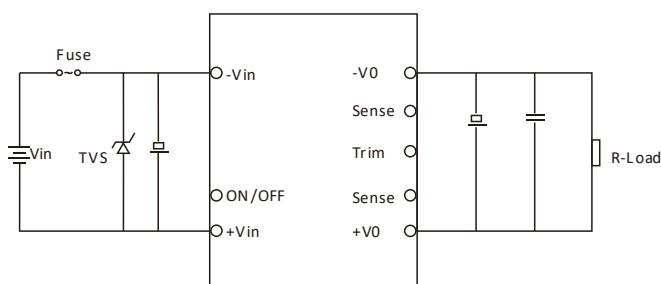
Article No.	Article Name	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Efficiency	Capacitive Load max	Dimension L*W*H (mm)
901003017-42473	TPS30-DRD12S	9 - 75	12	0 - 2.5	85 %	1000UF	112*100*23
901003018-42474	TPS30-DRD24S	9 - 75	24	0 - 1.2	85 %	500UF	112*100*23
901003024-42475	TPS30-DRD48S	9 - 75	48	0 - 0.6	85 %	500UF	112*100*23
901003022-42476	TPS75-DRD12S	9 - 75	12	0 - 6.2	90 %	2000UF	112*100*23
901003023-42477	TPS75-DRD24S	9 - 75	24	0 - 3.1	90 %	1000UF	112*100*23
901003029-42478	TPS150-DRD12S	9 - 75	12	0 - 12.5	91 %	5000UF	112*100*46
901003030-42479	TPS150-DRD24S	9 - 75	24	0 - 6.2	90 %	2000UF	112*100*46
901003025-42480	TPS150-DRD48S	9 - 75	48	0 - 3.1	85 %	1000UF/500UF	112*100*46
901003031-42481	TPS150-DRD12D	9 - 75	12/12	0 - 6.2/0 - 6.2	90 %	2000UF	112*100*46
901003032-42482	TPS150-DRD24D	9 - 75	24/24	0 - 3.1/0 - 3.1	90 %	1000UF	112*100*46
901003026-42483	TPS300-DRD12D	9 - 75	12/12	0 - 12.5/0 - 12.5	90 %	2000UF	112*100*92
901003027-42482	TPS300-DRD24D	9 - 75	24/24	0 - 6.2/0 - 6.2	90 %	1000UF	112*100*92

Output Voltage Adj.



Accessories and Packing

- 1 x Power Supply
- 1 x Manual



Pin Assignment and Dimension (mm)

