



Size: 3.46in x 1.97in x 1.81in (91.1mm x 45.4mm x 27.5mm)

FEATURES

- Level VI Compliant
- Input Voltage Range of 90~264VAC
- Drop In Tested
- RoHS Compliant
- Over Current and Short Circuit Protection
- Burn In Tested
- UL, CUL, FCC, CE, GS, KC, PSE, CCC, SAA, C-Tick, and CB Safety Approvals
- C8 AC Inlet

DESCRIPTION

The DTCGSW30 series of AC DC desktop power supplies offers 15~30 watts of continuous output power. This series consists of single output models with an input voltage range of 90~264VAC and output voltages ranging from 5~12V. This series features a C8 AC inlet, Energy Level VI compliance, and models have been both drop in and burn in tested. All models are protected against over current and short circuit conditions, and all have U UL, CUL, FCC, CE, GS, KC, PSE, CCC, SAA, C-Tick, and CB safety approvals. Please call factory for ordering details.

| MODEL SELECTION TABLE | | | | | | | | | | |
|-----------------------|------------------------|----------------|----------------|--------|-------------------------------|---------------|-------------------|--|--|--|
| Model Number | Input Voltage Range | Output Voltage | Output Current | | Ripple & Noise ⁽¹⁾ | Output Power | Efficiency Level | | | |
| | | | Min. | Max. | Trippio a Troise | Calpat I owoi | Ziliolorioy Edvel | | | |
| DTCGSW30-090-2000 | 90~264VAC | 9V | 0mA | 2000mA | 90mV | 15~30 Watts | Level VI | | | |
| DTCGSW30-090-3000 | | 9V | 0mA | 3000mA | 90mV | | Level VI | | | |
| DTCGSW30-120-1500 | | 12V | 0mA | 1500mA | 120mV | | Level VI | | | |
| DTCGSW30-120-2000 | | 12V | 0mA | 2000mA | 120mV | | Level VI | | | |
| DTCGSW30-120-2500 | | 12V | 0mA | 2500mA | 120mV | | Level VI | | | |
| DTCGSW30-180-1000 | | 18V | 0mA | 1000mA | 150mV | | Level VI | | | |
| DTCGSW30-240-1000 | | 24V | 0mA | 1000mA | 150mV | | Level VI | | | |



| All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances. SPECIFICATION INPUT SPECIFICATIONS Input Voltage Range Input Voltage Range Input Frequency Input Frequency Input Ac Current Inrush Current Inr | VAC Hz A W % % A | | | |
|--|---|--|--|--|
| Input Voltage Range | VAC Hz A A W % % % MNP-p S mS mS mS mS uS | | | |
| Input Voltage Range | Hz A A W % % % MVp-p S mS mS mS uS | | | |
| Input Frequency | Hz A A W % % % MVp-p S mS mS mS uS | | | |
| Input Frequency | A A W % % % A mVp-p S mS mS mS uS | | | |
| Input AC Current 1.2 | A A W % % % A mVp-p S mS mS mS uS | | | |
| Inrush Current | A W % % % A mVp-p S mS mS mS uS | | | |
| Standby Power No Load ≤0.1 | W % % A mVp-p S mS mS mS uS | | | |
| OUTPUT SPECIFICATIONS Output Voltage Line Regulation Load Regulation Output Power Output Power Output Current Minimum Load Ripple & Noise (20MHz bandwidth) Turn-On Delay Time @ 100VAC to 240VAC Input & Full Load Ripple & Noise (20MHz bandwidth) Turn-On Delay Time @ Full Load &115VAC/60Hz; Input will turn off at worst case Rise Time @ Rated Load @ Full Load @ Full Load @ Full Load @ Full Load @ Full Load @ Full Load @ Full Load Dvershoot/Undershoot When the power is on or off Transient Response Dynamic Response Overshoot PROTECTION The input power will decrease when the output rail shorts, the power supply Autematic Response Autematic Response The input power will decrease when the output rail shorts, the power supply Autematic Response | % % % % MS mS mS % uS | | | |
| Output Voltage See Table Line Regulation -1 +1 Load Regulation -5 +5 Output Power See Table Output Current See Table Minimum Load 0 0 Ripple & Noise (20MHz bandwidth) 240 Turn-On Delay Time @100VAC to 240VAC Input & Full Load 3 Hold-Up Time @Full Load &115VAC/60Hz; Input will turn off at worst case 10 Rise Time @Rated Load 20 Fall Time @Full Load 20 Overshoot/Undershoot When the power is on or off 10 Transient Response All output voltages for load step from 25% to 50% to 25%, 50% to 75% to 50% to 75% to 50% R/S: 0.25A/uS, 200 Dynamic Response Overshoot 5 PROTECTION The input power will decrease when the output rail shorts, the power supply | A mVp-p S mS mS wS wS uS | | | |
| Line Regulation Load Regulation Output Power Output Power Output Current Minimum Load Ripple & Noise (20MHz bandwidth) Turn-On Delay Time Hold-Up Time Regulation © Full Load &115VAC/60Hz; Input will turn off at worst case Rise Time Rise Time Rated Load © Full Load Ripple & Rated Load | A mVp-p S mS mS wS wS uS | | | |
| Load Regulation Output Power Output Current Minimum Load Ripple & Noise (20MHz bandwidth) Turn-On Delay Time Hold-Up Time @ Full Load & 115VAC/60Hz; Input will turn off at worst case Rise Time @ Rated Load @ Full Load Dovershoot/Undershoot Transient Response Dynamic Response Overshoot PROTECTION The input power will decrease when the output rail shorts, the power supply Automatic Response Automatic Response Automatic Response Automatic Response Automatic Respon | A mVp-p S mS mS wS wS uS | | | |
| Output Power Output Current Minimum Load Ripple & Noise (20MHz bandwidth) Turn-On Delay Time @100VAC to 240VAC Input & Full Load Be full Load &115VAC/60Hz; Input will turn off at worst case Rise Time @Rated Load @Rated Load @Full Load ### Automatic Response PROTECTION See Table | A mVp-p S mS mS mS wS uS | | | |
| Output Current See Table Minimum Load 0 Ripple & Noise (20MHz bandwidth) 240 Turn-On Delay Time @100VAC to 240VAC Input & Full Load 3 Hold-Up Time @Full Load &115VAC/60Hz; Input will turn off at worst case 10 Rise Time @Rated Load 20 Fall Time @Full Load 20 Overshoot/Undershoot When the power is on or off 10 Transient Response All output voltages for load step from 25% to 50% to 25%, 50% to 75% to 50% to 75% to 50% R/S: 0.25A/uS, 200 Dynamic Response Overshoot 5 PROTECTION The input power will decrease when the output rail shorts, the power supply | mVp-p S mS mS mS uS | | | |
| Minimum Load Ripple & Noise (20MHz bandwidth) Turn-On Delay Time @ 100VAC to 240VAC Input & Full Load Hold-Up Time @Full Load &115VAC/60Hz; Input will turn off at worst case Rise Time @Rated Load @Full Load @Full Load @Full Load @Full Load @Full Load @Full Load @Full Load @Full Load Dvershoot/Undershoot When the power is on or off Transient Response Dynamic Response Overshoot PROTECTION The input power will decrease when the output rail shorts, the power supply Automatic Response | mVp-p S mS mS mS uS | | | |
| Ripple & Noise (20MHz bandwidth) Turn-On Delay Time @ 100VAC to 240VAC Input & Full Load ### Hold-Up Time @ Full Load &115VAC/60Hz; Input will turn off at worst case @ Full Load &230VAC/50Hz; Input will turn off at worse case #### Ripple & Noise (20MHz bandwidth) #### Grund | mVp-p S mS mS mS uS | | | |
| Turn-On Delay Time @ 100VAC to 240VAC Input & Full Load @ Full Load &115VAC/60Hz; Input will turn off at worst case @ Full Load &230VAC/50Hz; Input will turn off at worse case Rise Time @ Rated Load @ Full Load @ Full Load @ Full Load Overshoot/Undershoot Transient Response Dynamic Response Overshoot PROTECTION The input power will decrease when the output rail shorts, the power supply Automatic Response Automatic Response The input power will decrease when the output rail shorts, the power supply Automatic Response | s ms ms ms ws | | | |
| Hold-Up Time @Full Load &115VAC/60Hz; Input will turn off at worst case @Full Load &230VAC/50Hz; Input will turn off at worse case 20 Rise Time @Rated Load 20 Fall Time @Full Load When the power is on or off Transient Response Dynamic Response Overshoot PROTECTION The input power will decrease when the output rail shorts, the power supply Automatic Response The input power will decrease when the output rail shorts, the power supply Automatic Response | mS mS mS % uS | | | |
| Rise Time | mS mS % uS | | | |
| Rise Time | mS mS % uS | | | |
| Rise Time | mS % uS | | | |
| Fall Time | mS % uS | | | |
| Overshoot/Undershoot When the power is on or off Transient Response All output voltages for load step from 25% to 50% to 25%, 50% to 75% to 50% R/S: 0.25A/uS, Dynamic Response Overshoot PROTECTION Short Circuit Protection The input power will decrease when the output rail shorts, the power supply | % uS | | | |
| Transient Response All output voltages for load step from 25% to 50% to 25%, 50% to 75% to 50% R/S: 0.25A/uS, Dynamic Response Overshoot PROTECTION Short Circuit Protection The input power will decrease when the output rail shorts, the power supply | uS | | | |
| Dynamic Response Overshoot PROTECTION Short Circuit Protection The input power will decrease when the output rail shorts, the power supply Automatic Response | | | | |
| PROTECTION Chart Circuit Protection The input power will decrease when the output rail shorts, the power supply Automatic Reco | % | | | |
| Short Circuit Protection The input power will decrease when the output rail shorts, the power supply | | | | |
| will not damage and will self-recover when the fault condition is removed | Automatic Recovery | | | |
| Over Current Protection The output will hiccup when the over current are applied to the output rail and shall self-recovery when the fault condition is removed. Automatic Reco | Automatic Recovery | | | |
| 5V Models <7 | | | | |
| 7.5V Models <5.5 | | | | |
| Over Current Point Limited 100-240VAC 9V (2.5A) Models <5 | Α | | | |
| 9V (3A) Models <6.5 | | | | |
| 12V Models <4 | | | | |
| ENVIRONMENTAL SPECIFICATIONS | | | | |
| Operating Temperature 10 40 | °C | | | |
| Humidity 5 95 | %RH | | | |
| Storage Temperature -20 80 | °C | | | |
| Temperature Coefficient 0.05 | %/°C | | | |
| Cooling Convection | | | | |
| MTBF @25°C ambient temperature max. working load, according to MIL-HDBK-217 50,000 | Hours | | | |
| GENERAL SPECIFICATIONS | | | | |
| Drop In Height: 1m; the product should be felled off on the hardwood with the thickness of 20mm, and the hardwood should be put on a cement base on or the ground without flexibility. Apply two times on all surfaces. Apply two times on all corners. | | | | |
| Burn-In The power supply will be burned-in for 4 hours under normal input and 80% rated load at 40°C±5°C | | | | |
| Primary to Secondary: 3000\/AC/10mA May | 60 Seconds | | | |
| Dielectric Strength (Hi-pot) Primary to Secondary: 3300VAC/ 5mA N 3300VAC/ 5mA N | | | | |
| Leakage Current @264VAC/50Hz 0.25 | | | | |
| Insulation Resistance Primary to Secondary add 500VDC Test Voltage 50 | MΩ | | | |
| PHYSICAL SPECIFICATIONS | | | | |
| Weight Approx. 5.29oz | 150g) | | | |
| 2.46in v.4.07in v | | | | |
| Dimensions (L x W x H) (91.9mm x 45.4mm | 07 Fim) | | | |



| SPECIFICATIONS | | | | | | | |
|---|---|--|------------------------|-----------------|--------------------------|--|--|
| All specification | s are based on 25°C, Nominal Input Volt We reserve the right to change specifi | tage, and Maximum Output C | Current unless otherwi | se noted. | | | |
| SPECIFICATION | Min | Тур Ма | x Unit | | | | |
| SAFETY & EMC CHARACTERISTIC | TEST CONDIT | | | .) | | | |
| Regulatory Standards ⁽³⁾ | Type | Standard | | | | | |
| | ČE | EN60950-1 | | | | | |
| | FCC | UL60950 | | | | | |
| | SAA | AS/NZ 60950.1 | | | | | |
| EMI Standards | 5V-9V Models | EN55022 EN61000-3-2 FCC Part15 | Class | | | | |
| ESD | EN61000-4-2 | Discharge Characteristic | Test Level | Test Criteria | | | |
| E2D | EN61000-4-2 | | Air Discharge | ±8KV | В | | |
| | | Contact Discharge | ±4KV | В | | | |
| Radiated Electromagnetic Field | | | Test Level | Te | st Criteria | | |
| Susceptibility | EN 61000-4-3 | 3V/m (r.m.s) | Hz A | | | | |
| Ousceptibility | | 80-1000MHz | | | | | |
| Flactric Fact Transients (burst) | | Coupling | Test Level | Test Criteria | | | |
| Electric Fast Transients (burst) Immunity Requirement | EN 61000-4-4 | AC-Input | 0.5KV | Α | | | |
| miniantly resquirement | | AC-Input | 1KV | В | | | |
| Surge Capability Requirement | | Surge Voltage | Test Criteria | | | | |
| | EN 61000-4-5 | Common Mode ±2 | | | | | |
| | | Differential Mode ±1KV | | | | | |
| | | Test Level | Test Level Test Crite | | | | |
| Induced Radio Frequency Fields | EN 61000-4-6 | 3V | | | | | |
| Conducted Disturbances Immunity | 214 01000 4 0 | 0.15-80 MHz, 80%AM | | Α | | | |
| | | (1KHz) | | | | | |
| | Acceptance Ci | Performance | | | | | |
| | Α | Agreed operational behavior within the specified | | | | | |
| | <i>A</i> | limits | | | | | |
| | | Time limited functional diminishment or | | | | | |
| Assessment Criteria | В | malfunction during the tests is permitted. The | | | | | |
| | | function is self-reactivated by the unit following | | | | | |
| | | | | | completion of the tests. | | |
| | С | Malfunction is permitted. The function can be reactivated either by reconnection to the mains of | | | | | |
| | C | by operator intervention. | | | | | |
| | | | by oper | ator interventi | J11. | | |

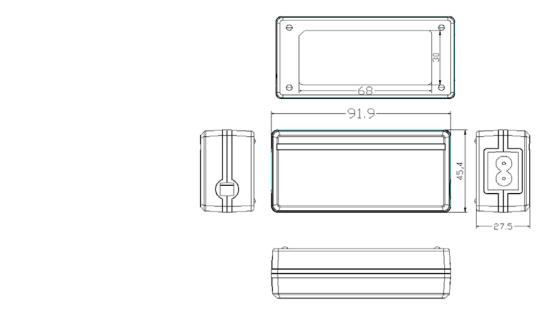
NOTES

- Ripple and Noise is measured by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. (Test under the condition of rated input and rated output)
- Efficiency measured Nominal input. Efficiency indicated is minimum. Regulatory standards for 5V-9V Models

Single Output



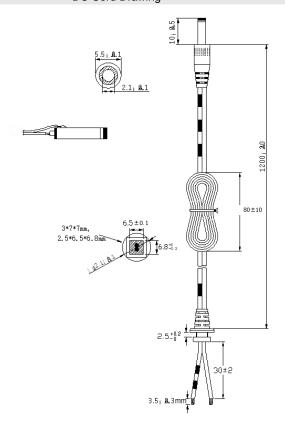
MECHANICAL DRAWINGS



PC + ABS Temperature: 95°C

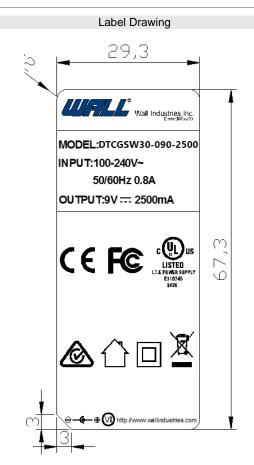
PC Material compliance with the ball pressure test requirments

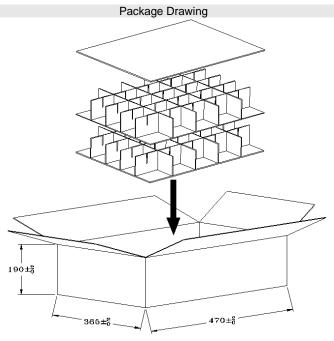
DC Cord Drawing



Single Output







Packing Details: 90pcs/carton, 12.5kg/carton, external carton size: 51cm x 39cm x 22cm



Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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