

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTD93035H6013.2-F

May 5, 2024

Ruggedized DC/DC converter, 50-150VDC Input and 60W/13.2VDC output. Alternate output voltages available. IEC 60068 Vibration, Shock, Bump, and Salt Mist tested

Information

Model Number	GTD93035H6013.2-F
Description	GTD93035H6013.2-F, ICT/ITE Power Supply, Enclosed-Metal, DC-DC, , Input Rating: 50-150 Vdc, 3 Positon Terminal Block, Output Rating: 60 Watts, Power rating with convection cooling (W) , 13.2V in 0.1V increments, Approvals: IRAM; UKCA; S-Mark 62368; India BIS; cETLus 62368-1; CB 62368; S-Mark 60950; CE; FCC; IP54; Salt Mist; Vibration Shock Bump; Saudi; South Africa; cETLus; AS/NZS; RCM; CU Kazakhstan; CCC; NOM; South Africa; Malaysia (pending); CB 60950;
Model Picture	
Agency Documents	http://www.globtek.info/certs/GTD93035/
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a00a000000C2XikEAF
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a00a000000C2XikEAF
REACH Declaration	https://www.globtek.com/pdf/iso_certificates/REACH.pdf
Conflict Minerals Declaration	https://www.globtek.com/pdf/conflict-minerals.pdf

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTD93035H6013.2-F

May 5, 2024

MODEL PARAMETERS

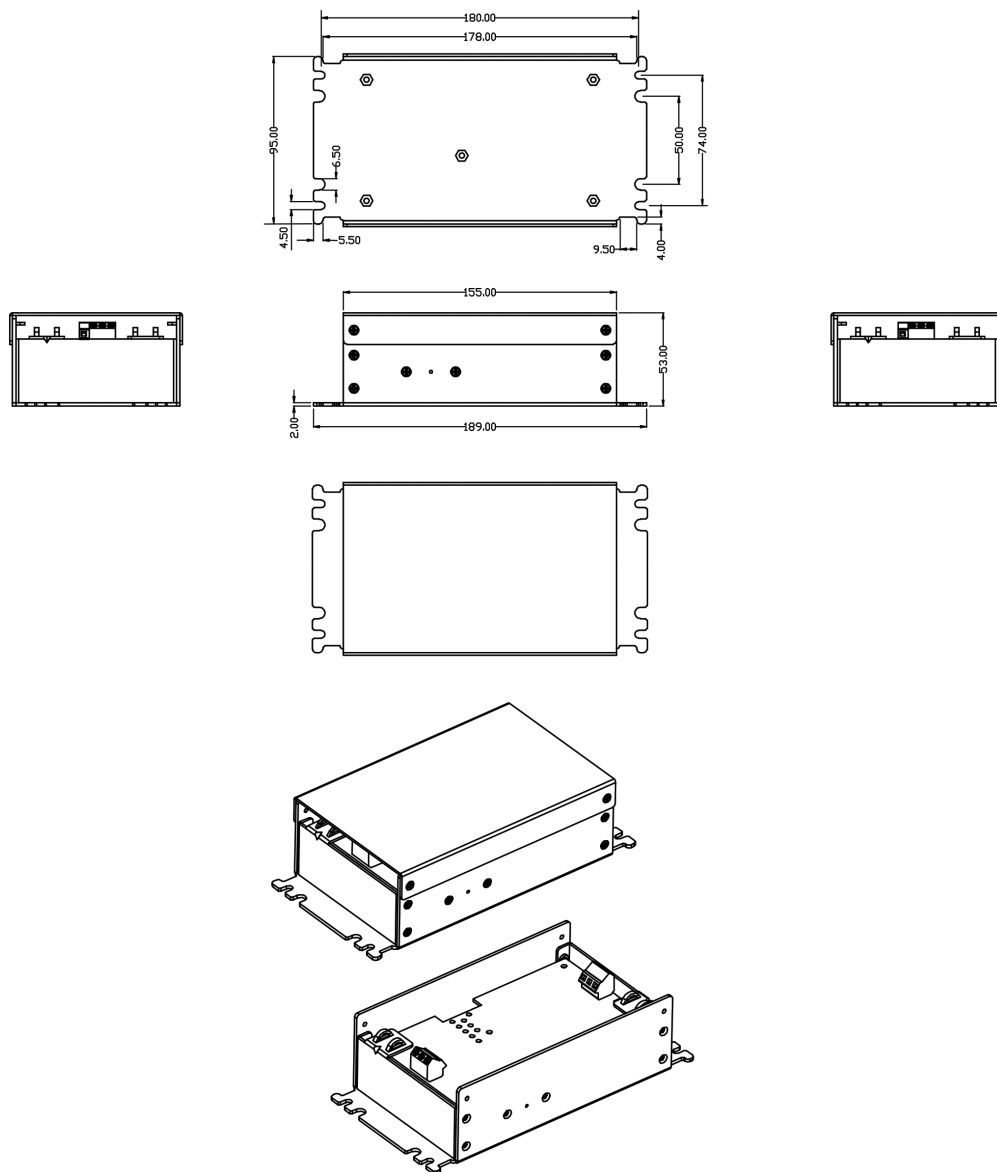
Type	Enclosed-Metal
Technology	DC-DC
Category	ICT/ITE Power Supply
Input Voltage	50-150 Vdc
I/P Amps (A)	2.0 A
Wattage (W)	60.0
Vout Range (V)	13.2
Efficiency Level	N/A
Ingress Protection	
Size (mm)	180*95*53

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTD93035H6013.2-F

May 5, 2024

ENCLOSURE



Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTD93035H6013.2-F

May 5, 2024

RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTD93035H6013.2-F	13.2 V	4.5	59.40	RFQ

Model:GTD93035H6013.2-F

May 5, 2024

SPECIFICATIONS

A) ELECTRICAL SPECIFICATIONS:

1. Input Voltage: 50-150 Vdc
2. Output Regulation: +/- 1% measured at the output connector
3. Line Voltage Regulation: +/- 1% typical measured at full load
4. Output Ripple (Vp-p): 132 mV maximum, measured at 20 MHz bandwidth with 0.1 uf ceramic capacitor in parallel with 10 uf electrolytic capacitor connected at the end of the output connector at nominal line
5. Turn-ON/OFF Overshoot: 5% maximum, 500uS typical recovery time for 25% to 50% step load
6. Turn-ON Delay: 3 Seconds, maximum @ full load, nominal line
7. Hold-Up Time: 5mS typical @ nominal input voltage and full load
8. Inrush Current: 50A maximum cold start @ 50Vdc input
9. Switching Frequency: 150 KHz typical
10. Efficiency: >80% minimum at full load, nominal line
11. Transient Response: 200uS to +/-1.5% max value @ 25% load step

B) PROTECTION

1. Over-Voltage: Protected latch type, input recycling required to recover
2. Short Circuit: Hiccup with auto recovery
3. Over-load: Hiccup with auto recovery
4. Input Protection: Input line and neutral fusing
5. Reverse Polarity Protection: Yes

C) SAFETY

1. Dielectric Withstand Voltage: 1600 Vdc from primary to secondary, primary to chassis, secondary to chassis

D) OTHER:

1. MTBF: 200,000 Hours @ 25°C ambient temperature
2. Operating Temperature: -30°C to 50°C ambient temperature
3. Humidity: 5% to 85% relative humidity
4. Storage Temperature: -40°C to 85°C
5. Cooling: Convection

E) ENCLOSURE

1. Housing: Rugged, vehicle mounted. Vibration, shock, contamination, water resistant. Aluminum
2. Size: 189*95*53mm
3. Markings: Label
4. Vibration: IEC 60068-2-64 Fh (Random)
5. Bump: IEC 60068-2-29 Eb
6. Waterproof: Not required. However, it should be water-resistant. Recommended IEC 60068-2-52
7. Contamination: Resistant to chemicals, rust, etc.

PROPRIETARY INFORMATION

PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

<https://www.globtek.com/ds/DiTYv5jFWwa/7QMN5ocxvtf.html>

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTD93035H6013.2-F

May 5, 2024

DERATING CURVE

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTD93035H6013.2-F

May 5, 2024

INPUT CONFIGURATION

Description	3 Positon Terminal Block
<u>Shanghai Elinker P/N: LG103-5.0</u>	

PROPRIETARY INFORMATION

PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

<https://www.globtek.com/ds/DiTYv5jFWwa/7QMN5ocxvtf.html>

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTD93035H6013.2-F

May 5, 2024

Approvals

Logo	Description
No Logo Applicable	AS/NZS 60950.1:2011
No Logo	CB Certificate IEC 60950-1:2005 2nd Edition + A1:2009 +A2:2013 Report to EN 60950-1:2006 +A11:2009 +A1:2010 + A12:2011 +A2:2013 For 5V-24V only
No Logo Applicable	CB for IEC 62368-1:2014 (3rd Edition)
	CCC to GB4943.1-2011 GB9254-2008 GB17625.1-2012 with Tropical and Altitude above 2000m approval
	CE Mark: tested to comply with EN55022:2006/A1:2007 Class B, EN610003-2, EN610003-3 including EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6N EN61000-4-11; EMI: Complies with EN55011 CLASS B and FCC Part 15B - On label or Molded in case
	cETLus-Cert-60950-1 4007497 Listed
Conforms to UL STD. 62368-1 Certified to CSA STD C22.2 NO.62368-1	Conforms to UL STD. 62368-1 Certified to CSA STD C22.2 NO.62368-1
 адаптер питания	CU Kazakhstan Certificate
	FCC PART 15 CLASS B

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTD93035H6013.2-F

May 5, 2024

 IS 13252 (Part 1) IEC 60950-1 R-41175579 www.bis.gov.in	Bureau Of Indian Standards for GTD93035
IP54	Ingress Protection: ?IP54 to IEC60529:2001 Protected against dust - limited ingress (no harmful deposit) and Protected against sprays from all directions - limited ingress permitted
 DC-E-G71-004.1 PRECAUCION: PARA USO EN EQUIPOS ELECTRONICOS SOLAMENTE	IRAM certificate DC-E-G71-004.1 to IEC 62368-1:2014
No Logo	Malaysia ST Release Letter GTD93035L6013.2-F GTD93035H6013.2-F (pending) IEC60950-1:2005 (ED.2) + A1:2009 No logo (pending)
	NOM (Mexico) to NOM-001-SCFI-1993
	RCM N136; Australia and New Zealand Regulatory Compliance, Mark (http://rcm.standards.org.au/rcmfaq/rcmfaq.htm)
	S-Mark Certificate EN 62368-1:2014 + A11 (http://www.intertek.com/marks/s/)
	S-Mark Certificate EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 +A2:2013 (http://www.intertek.com/marks/s/)
No LOGO	Salt Mist to IEC 60068-2-52 Environmental testing Part 2: Tests- Test Kb: Salt mist, cyclic (sodium chloride solution)
إمدادات الطاقة	Saudi Arabia approval to IEC 60950

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTD93035H6013.2-F

May 5, 2024

No Logo	South Africa EMI and EMC approval to CISPR 22 Class B CISPR 24
No Logo	South Africa approval to SANS IEC 60950
	UKCA Certification
No LOGO	Vibration, Shock, Bump to IEC 60068-2-6:2007 -2-64:2008 -2-27:2008 -2-29 ed 2.0 Environmental testing Part 2 Tests