

AC/DC Converter

TGCM130E-K



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Features

Regulated Converter

- Universal input 90-264VAC
- Efficiency 91%
- Short circuit and over voltage protected
- Active PFC function, PF>0.95
- Power indicator LED
- UL, CE marked (CB report)
- Conformal coated product
- RECOM connector set available

TGC150

Description

The TGC150 series are cost-efficient 150 Watt AC/DC power supplies in a standard 2"x4" footprint with a universal input range of 90-264VAC for worldwide usage. They are built to deliver up to 125 Watt with natural air convection for use in tight, space-critical housings with low available airflow. UL and CE marks with CB-reports include the new 62368 safety standard as well as the usual 60950 safety standard. The TGC150 series offers tightly regulated 12V, 24V and 48VDC outputs with 3kVAC isolation and Class B EMC certifications and come with a three year warranty.

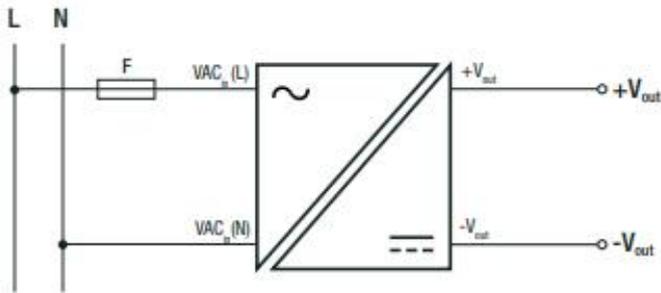
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

BASIC CHARACTERISTICS					
Parameter	Condition		Min.	Typ.	Max.
Output Power	with forced cooling	90-264VAC			150W
	natural convection	230VAC			125W
		115VAC			120W
	90-115VAC		refer to "Derating Graph"		
Internal Input Filter					Pi type
Input Voltage Range			90VAC	230VAC	264VAC
Input Current					2A
Inrush Current	cold start at 25°C	115VAC			40A
		230VAC			60A
continued on next page					

BASIC CHARACTERISTICS					
Parameter	Condition		Min.	Typ.	Max.
Input Frequency Range			47Hz		63Hz
Minimum Load			0%		
Power Factor	115VAC		0.98		
	230VAC		0.95		
Rise Time	115VAC/230VAC				50ms
Hold-up Time	115VAC	100% load	6ms		
	230VAC	50% load		20ms	
Internal Operating Frequency				132kHz	
Output Ripple and Noise	+70°C	12Vout			150mVp-p
		24Vout			240mVp-p
	-30°C	48Vout			360mVp-p
		12Vout			300mVp-p
		24Vout			480mVp-p
		48Vout			720mVp-p

Notes: Note4: No proper operation with DC input voltage Note5: The products were submitted for safety files at AC-Input operation Note6: Refer to "Line Deratin

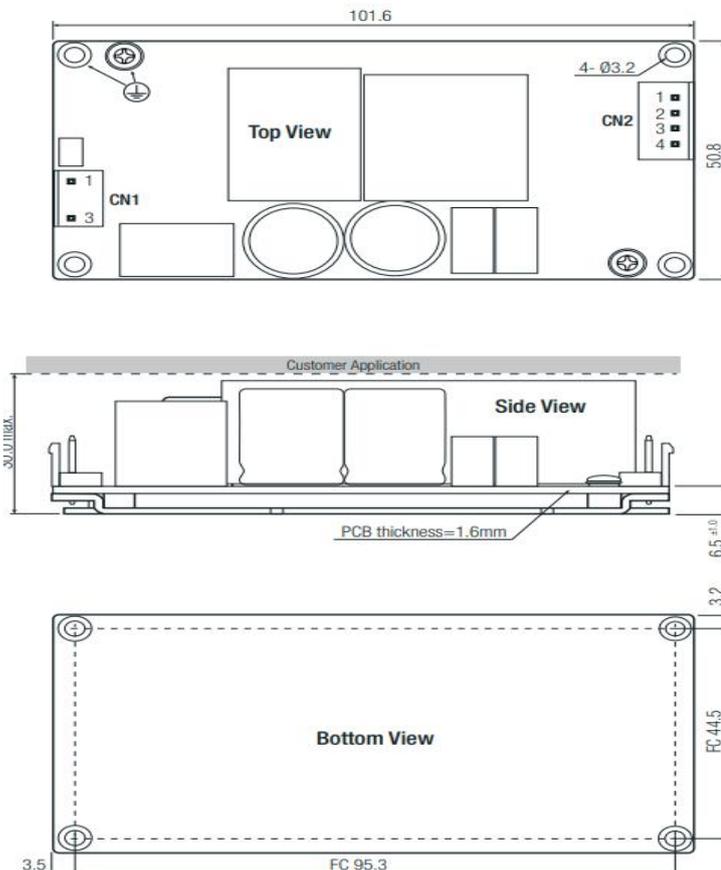
Protection Circuitm



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ENVIRONMENTAL		
Parameter	Condition	Value
Operating Temperature Range	refer to derating graph	-30°C to +70°C
Temperature Coefficient		0.02%/K
Operating Altitude ⁽⁷⁾		5000m
Operating Humidity	non-condensing	20% - 90% RH max.
Pollution Degree		PD2
Conformal Coating		conformal coated product
Shock		20G, 11ms, 3 times for X,Y,Z axis
Vibration		10-500Hz, 3G, 10min. for each, 6cycles for each X,Y,Z
MTBF	according to MIL-HDBK-217F, G.B.	natural convection (125W)
	+25°C	forced cooling (150W)
		100 x 10 ³ hours
		200 x 10 ³ hours

Dimension Drawing (mm)



Connections

AC Input (CN1)

Pin #	Terminal
1 AC/L	3 Pins (Pin2 removed) with
3 AC/N	3.96mm pitch

DC Output Connector (CN2)

Pin #	Terminal
1,2 V-	4 Pins with
3,4 V+	3.96mm pitch

FC= fixing centers
Crimp Terminal AWG Range: 18-22AWG
Tolerance: xx.xx= ±1.0mm
 xx.xx= ±0.5mm

Compatible Connectors

Housing

Landwin 3960S Series
JST VHR
Molex 51144 Series

Crimp Terminal

Landwin 3963T011R
JST SVH-21T-P1.1
Molex 50539