

# AC/DC Converter

## TGCM550-G



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## Features

## Regulated Converter

- 300W baseplate-cooled, fan-less operation
- 550W peak power or forced air rating
- Industrial, household and medical 2MOPP ready
- Standby power consumption <0.5W
- Aux Output: 5VSB / 1A
- Signals: remote sensing and ON/OFF control

# TGCM550-G

## Description

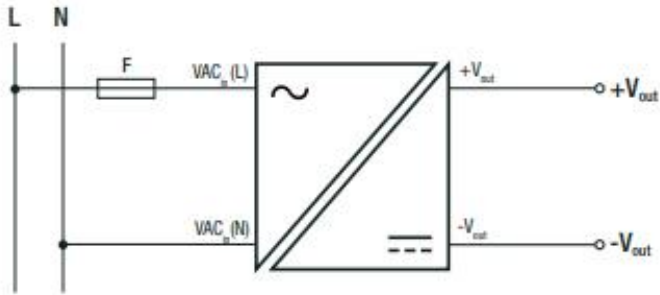
The TGCM550 Series is designed to support up to 300 Watt continuous output power without fan cooling. The compact 5" x 3" baseplate design enables direct heat dissipation through metal housings in the application. Up to 550 watts are available to drive dynamic loads for several seconds of peak power or with forced air for even longer time frames. A fan output is on board as standard as well as a 5V/1A VSB output for applications with housekeeping circuits and on/off control. A wide input range of 80 to 264VAC, up to 5000m operating altitude and international safety agency certifications make the series worldwide suitable for BF-rated applied parts, household and industrial ITE applications.

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

BASIC CHARACTERISTICS					
Parameter	Condition		Min.	Typ.	Max.
No load Power Consumption					2W
Standby Power	main output OFF, VSB Output unloaded				0.5W
Input Frequency Range	AC input		47Hz		63Hz
ErP Lot 6 Standby Mode Conformity (VSB Output Load Capability)	Input Power= 1W (main output= standby mode)				450mW
Minimum Load			0%		
Power Factor	115VAC 230VAC		0.98 0.95	0.99 0.97	
Start-up Time	main output	115VAC/230VAC		400ms	
	VSB Output	115VAC/230VAC		140ms	
Rise Time	main output	115VAC/230VAC		15ms	
	VSB Output	115VAC/230VAC		5ms	
Hold-up Time	main output	115VAC/230VAC, 550W		15ms	
	VSB Output	115VAC/230VAC		130ms	
Output Ripple and Noise <sup>(5)</sup>	20MHz BW @ 25°C	main output	1% of Vout nom. max.		
		VSB Output			120mVp-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



Specifications (measured @  $T_a = 25^\circ\text{C}$ , nom.  $V_{in}$ , full load and after warm-up unless otherwise stated)

ENVIRONMENTAL		
Parameter	Condition	Value
Operating Temperature Range	refer to below graphs (valid for /OF and /ENC)	$-40^\circ\text{C}$ to $+70^\circ\text{C}$
Temperature Coefficient		$\pm 0.02\%/K$
Operating Altitude <sup>(1)</sup>		5000m
Operating Humidity	non-condensing	20% - 90% RH max.
Pollution Degree		PD2
Shock		250m/s <sup>2</sup> , 6ms; 3 times, each along x, y, z axes
Vibration		90-200Hz, 10m/s <sup>2</sup> ; 3.5min./1cycle, 5 periods, each along x, y, z axes
MTBF	according to MIL-217F Method 2	
	Components Stress Method	$+25^\circ\text{C}$ (forced air cooling) $200 \times 10^3$ hours $+45^\circ\text{C}$ (forced air cooling) $50 \times 10^3$ hours

## Dimension Drawing (mm)

