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# INV-TC

# Sinewave Inverter

## Description

The INV-TC series are a highly reliable series of DC/AC Inverters. Backed by a 2 year warranty these rugged modules have a wide operating temperature range down to -25°C. A variety of different inputs and output power levels are available. Each unit in the range has a supervisory circuit to ensure that batteries are not subjected to a damaging deep discharge. The input is automatically disconnected should the input voltage fall too low. Protection is also provided for output short circuit, overload and over temperature. The INV-TC's are also built with an adjustable standby feature. This is useful to ensure that connected loads do not needlessly drain the batteries when in sleep mode. The high peak capability along with a wide output power factor range makes this family of inverters ideal for numerous applications including motor type devices.



- Adjustable Standby Function
- True Sinewave Oupput
- Battery Monitoring
- High Efficiencies

## Selection Table

Part Number	Max Continuous Power	Input Voltage	Output Voltage	Output Current
INV-TC 13-12	1000VA	12VDC	230VAC	5.7A
INV-TC 20-12	1800VA	12VDC	230VAC	8.7A
INV-TC 15-24	1200VA	24VDC	230VAC	6.5A
INV-TC 22-24	2000VA	24VDC	230VAC	9.6A
INV-TC 30-24	2700VA	24VDC	230VAC	13A
INV-TC 20-36	1800VA	36VDC	230VAC	9A
INV-TC 22-48	2000VA	48VDC	230VAC	9.6A
INV-TC 35-48	3200VA	48VDC	230VAC	15.6A
INV-TC 25-110	2200VA	110VDC	230VAC	12A

## Options Table

Code	Description
/19" Rack.....	Unit built into a 19" rack



# INV-TC

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## Technical Data

### Model Specification

	INV-TC 13-12	INV-TC 20-12	INV-TC 15-24	INV-TC 22-24	INV-TC 30-24	INV-TC 20-36	INV-TC 22-48	INV-TC 35-48	INV-TC 25-110
Rated Voltage UDC <sub>IN</sub>	12Vdc		24Vdc			36Vdc	48Vdc		110Vdc
Input Voltage Range	10.5 - 15V		21 - 32V			31 - 47V	42 - 64V		96 - 148V
Dynamic Low Voltage Cut Off	10.5 - 9V		21 - 18V			31 - 27V	42 - 36V		96 - 84V
Rated Current IDC <sub>IN</sub>	125A	195A	72A	110A	150A	61A	54A	80A	27A
Current IDC <sub>IN</sub> max.	340A	520A	140A	205A	340A	180A	96A	210A	74A
Rated Power P <sub>10</sub> (10min at TA = 20°C)	1400VA	2300VA	1700VA	2900VA	3200VA	2500VA	2700VA	3900VA	2900VA
Rated Power P <sub>30</sub> (30min at TA = 20°C)	1300VA	2000VA	1500VA	2200VA	3000VA	2200VA	2200VA	3500VA	2500VA
Continuous Power PD	1000VA	1800VA	1200VA	2000VA	2700VA	1800VA	2000VA	3200VA	2200VA
Rated Output Current IAC <sub>OUT</sub>	5.7A	8.7A	6.5A	9.6A	13A	9A	9.6A	15.6A	12A
Short Circuit IAC <sub>K</sub> (max. 0.5s)	16A	24A	16A	24A	35A	24A	16A	24A	16A
Adjustable Standby Level (logarithmic)	5 - 60W	5 - 60W	5 - 60W	5 - 60W	5 - 60W	4 - 40W	5 - 60W	5 - 60W	4 - 40W
Consumption 230VAC OK	10W	16W	12W	12W	22W	12W	12W	12W	13W
DC- Breaker/Fuse	NO	NO	100A	125A	NO	63A	80A	100A	80A
Alarm Contact (Insulated Relay)	NO	NO	NO	NO	YES	YES	NO	YES	YES
Weight	15.5kgs	20kgs	16kgs	20kgs	27kgs	19.5kgs	20kgs	30kgs	25kgs
Length of Unit	375mm	456mm	385mm	456mm	456mm	456mm	456mm	456mm	456mm
Width of Unit	260mm	320mm	260mm	320mm	320mm	320mm	320mm	320mm	320mm
Height of Unit	181mm	211mm	182mm	211mm	211mm	211mm	211mm	211mm	211mm

### General Specification

Rated Output Voltage UAC <sub>OUT</sub>	230 VAC ±2% (short circuit proof)
Output Frequency	50Hz ±0.5% (true sinewave)
Allowable CosPhi	0.3 - 1
Efficiency Factor max.	93%
Consumption Standby/OFF	ca. 1.5W (test impulse every 800ms)/10mA
Ambient Temperature Range	-25°C to +60°C (max. 95% rH, non condensing)
Remote Control ON/OFF	Yes (with external switch)
Status Indication	LED
Toroidal Transformer	EN61558 (IEC61558)
Temperature & Load Controlled Fan	ON 55°C/OFF 45°C, PD >80%
Reset after Short Circuit	Every 60s
Reset after Overload	Every 60s
Reset after Overtemperature	Automatically after reaching semiconductor temperature +45°C
Reset after Battery Failure	Automatically after reaching UDC <sub>IN</sub>
Included in Delivery	Connector for non-heating apparatus
IP Rating	IP20
Warranty	2 Years