

## Technical Data



TRN010KTL  
 TRN012KTL  
 TRN015KTL  
 TRN017KTL  
 TRN020KTL  
 TRN025KTL

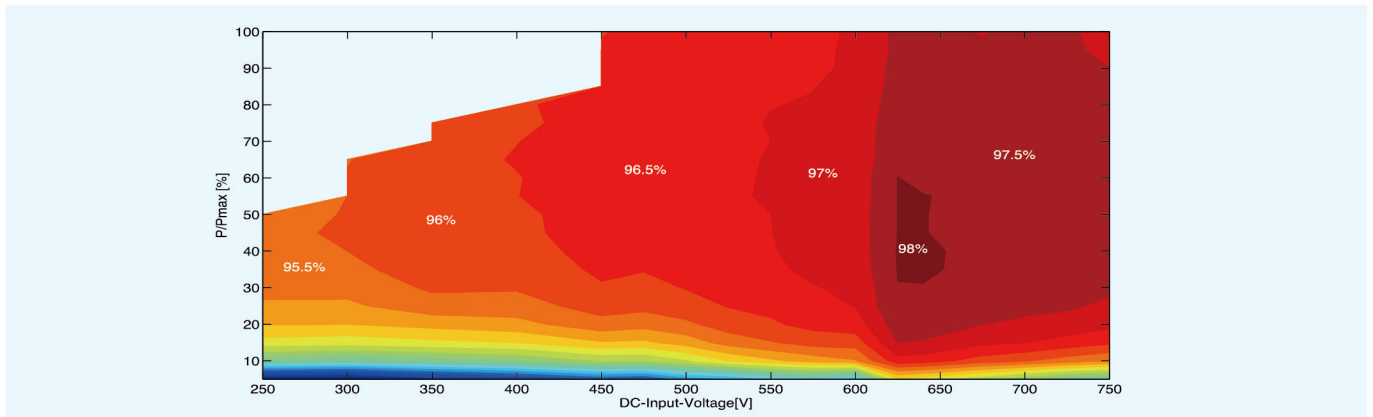
## Features:

- > Max efficiency 98.2%
- > High efficiency across wide operation range
- > Wide range of input DC and MPPT voltage
- > Dual independent MPPT input
- > Integrated DC switch

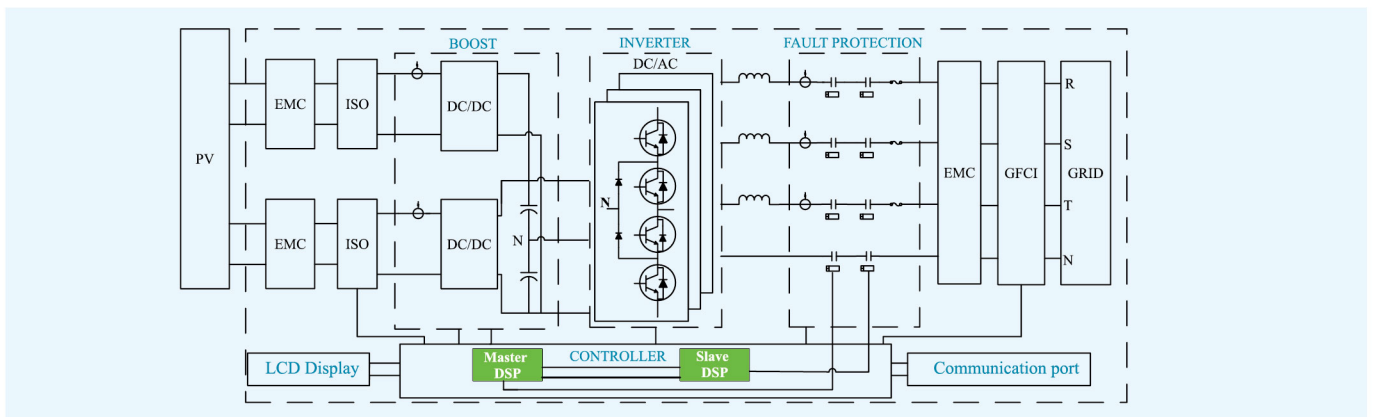
## Certificates and Approvals:

CE, NB/T32004-2013(CQC), VDE AR-N-4105, VDE 0126-1-1+A1, G83/1, G83/2, G59/2, G59/3, EN50438, AS4777(SAA), CEI 0-21, RD1663, IEC61727, ROHS, REACH

## Efficiency Curve (TRN017KTL):



## Circuit Diagram:



# TRN Series

TRN010KTL / TRN012KTL / TRN015KTL / TRN017KTL / TRN020KTL / TRN025KTL

Model	TRN010KTL	TRN012KTL	TRN015KTL	TRN017KTL	TRN020KTL	TRN025KTL
Rated AC power	10000 W	12000 W	15000 W	17000 W	20000 W	25000 W
Maximum AC power	10000 VA	12000 VA	15000 VA	17000 VA	20000 VA	25000 VA
<b>Input</b>						
Maximum input power	11000 W	13000 W	16000 W	18200 W	21500 W	27000 W
Maximum DC input voltage	1000 Vdc	1000 Vdc	1000 Vdc	1000 Vdc	1000 Vdc	1000 Vdc
MPPT operating voltage range	250 - 800 Vdc	250 - 800 Vdc	250 - 800 Vdc	250 - 800 Vdc	250 - 800 Vdc	250 - 800 Vdc
Startup voltage	200 Vdc	200 Vdc	200 Vdc	200 Vdc	200 Vdc	200 Vdc
Initial feeding voltage	300 Vdc	300 Vdc	300 Vdc	300 Vdc	300 Vdc	300 Vdc
MPPT number	2	2	2	2	2	2
Maximum input current	10 Adc / 10 Adc	10 Adc / 20 Adc	20 Adc / 20 Adc	20 Adc / 20 Adc	20 Adc / 20 Adc	20 Adc / 30 Adc
Number of DC inputs	1+1	1+2	2+2	2+2	2+2	2+3
DC switch	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
<b>Output</b>						
AC nominal voltage	3N - PE 380/400 Vac					
AC connection	Three phase					
AC voltage Range	310 Vac - 470 Vac					
Frequency range	50 Hz, 60Hz / -5 Hz ... +5 Hz					
Power factor	> 0.99, 0.8 leading...0.8 lagging controllable					
Maximum output current	15.5 Aac	18.5 Aac	23.0 Aac	26.0 Aac	30.5 Aac	38.0 Aac
DC current injection	< 1‰	< 1‰	< 1‰	< 1‰	< 1‰	< 1‰
THDi	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%
<b>System</b>						
Maximum efficiency	> 98.1%	> 98.1%	> 98.2%	> 98.2%	> 98.3%	> 98.3%
European efficiency	> 97.6%	> 97.6%	> 97.7%	> 97.7%	> 97.8%	> 97.8%
MPPT efficiency	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%
Night power consumption/Night display	< 0.2 W/Optional	< 0.2 W/Optional	< 0.2 W/Optional	< 0.2 W/Optional	< 0.2 W/Optional	< 0.2 W/Optional
Topology	Transformerless					
Heat dissipation	Smart Fan cooling					
Insulation monitoring	Yes					
DC reverse-polarity protection	Yes					
AC over current protection	Yes					
Anti-islanding protection	Yes					
Residual current detection	Yes					
Thermal protection	Yes					
<b>General Parameters</b>						
Dimensions(W×H×D)	520 x 180 x 700 mm					
Weight	35 kg	35 kg	35 kg	35 kg	35 kg	35 kg
Display	3.5 inch LCD					
Function key	4					
Data interface	RS232 / RS485 / RS422 / Ethernet / WiFi / GPRS / USB					
Ambient temperature range	-25°C - +60 °C					
Operating altitude	< 2000m					
Protection degree	IP65					
Noise emission	< 45dB					
Warranty	Standard 5 years 10/15/20/25 years extension optional					
<b>Certifications</b>						
Safety/EMC	IEC62109-1, IEC62109-2, EN61000-6-2, EN61000-6-3, AS/NZS3100					
Grid code	VDE AR-N-4105, VDE 0126-1-1+A1, CE, G83/2, UTE C15-712, MEA, PEA, AS4777					