

Technical Data



- TRN010KTL
- TRN012KTL
- TRN015KTL
- TRN017KTL
- TRN020KTL
- TRN023KTL
- TRN025KTL

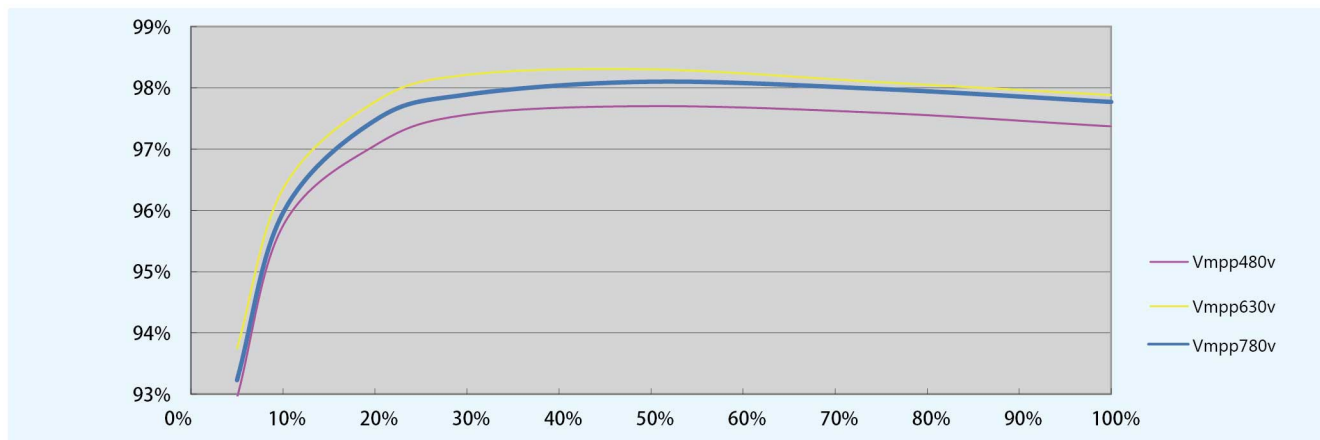
Features:

- > 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

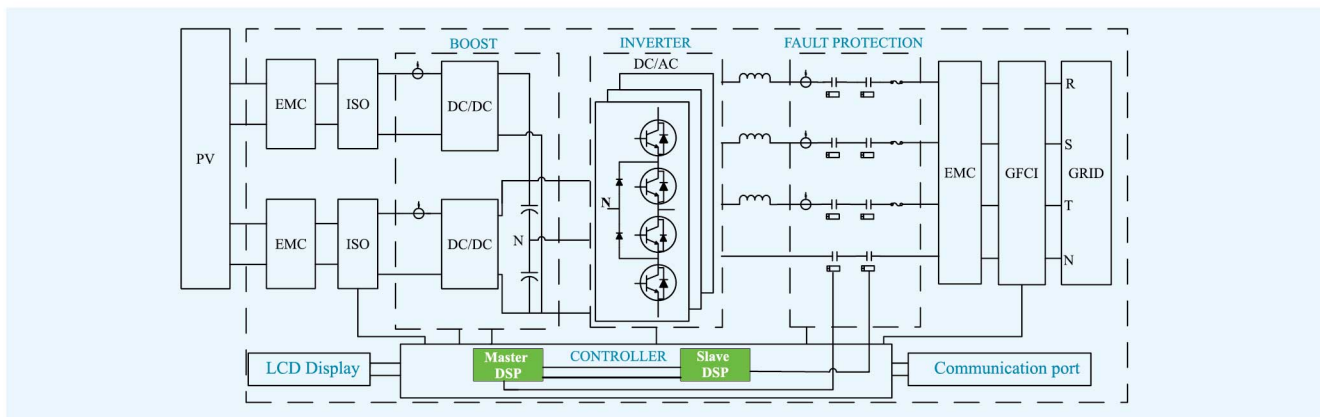
Certificates and Approvals:

VDE AR-N-4105, VDE 0126-1-1+A1, CE, G83/2, UTE C15-712, MEA, PEA, AS4777

Efficiency Curve (TRN017KTL):



Circuit Diagram:





TRN Series

TRN010KTL / TRN012KTL / TRN015KTL / TRN017KTL / TRN020KTL / TRN023KTL / TRN025KTL

Model	TRN010KTL	TRN012KTL	TRN015KTL	TRN017KTL	TRN020KTL	TRN023KTL	TRN025KTL
Rated AC power	10000 W	12000 W	15000 W	17000 W	20000 W	23000 W	25000 W
Maximum AC power	10000 VA	12000 VA	15000 VA	17000 VA	20000 VA	23000 VA	25000 VA
Input							
Maximum input power	11000 W	13000 W	16000 W	18200 W	21500 W	24800 W	27000 W
Maximum DC input voltage	1000 Vdc	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	250 - 800 Vdc
Startup voltage	200 Vdc	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	300 Vdc
MPPT number	2	2	2	2	2	2	2
Maximum input current	10Aac / 10Aac	10Aac / 20Aac	20Aac / 20Aac	20Aac / 20Aac	20Aac / 20Aac	20Aac / 20Aac	20Aac / 30Aac
Number of DC inputs	1+1	1+2	2+2	2+2	2+2	2+2	2+3
DC switch	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output							
AC nominal voltage	3N - PE 380/400 Vac						
AC connection	Three phase						
AC voltage Range	280 Vac ~ 480 Vac						
Frequency range	50 Hz, 60Hz / -5 Hz ... +5 Hz						
Power factor	>0.99 , -0.8 - 0.8 controllable						
Maximum output current	15.5 Aac	18.5 Aac	23.0 Aac	26.0 Aac	30.5 Aac	35.0 Aac	38.0 Aac
DC current injection	< 1‰	< 1‰	< 1‰	< 1‰	< 1‰	< 1‰	< 1‰
THDi	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%
System							
Maximum efficiency	> 98.1%	> 98.1%	> 98.2%	> 98.2%	> 98.3%	> 98.3%	> 98.3%
European efficiency	> 97.6%	> 97.6%	> 97.7%	> 97.7%	> 97.8%	> 97.8%	> 97.8%
MPPT efficiency	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%
Night power consumption/Night display	< 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						
General Parameters							
Dimensions(W×H×D)	520 x 180 x 700 mm						
Weight	35 kg	35 kg	35 kg	35 kg	35 kg	36 kg	36 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						
Certifications							
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						