TRIO HYBRID K-SERIES THREE PHASE INVERTER

TOMMATECH GmbH
GERMAN-based company

Three Phase Hybrid Inverter

Trio Hybrid K-Series

5.0/ 6.0/ 8.0/ 10.0/ 12.0/ 15.0

Simple. Reliable. Efficient.

- 3- Phase Unbalanced Output
- High Efficiency
- Remote Monitoring
- IP65 Rated
- Hybrid Solution

5.0kW 6.0kW 8.0kW

Trio-Hybrid-K-5.0/ Trio-Hybrid-K-6.0/ Trio-Hybrid-K-8.0/ Trio-Hybrid-K-10.0/ Trio-Hybrid-K-12.0/ Trio-Hybrid-K-15.0

TommaTech®'s Trio-Hybrid K-Series three phase inverters are the preferred solution for both residential and commercial projects as they support unbalanced phase output, are equipped with dual protection for the BMS and can be controlled remotely through multiple communication options. The inverters, which are available in six power options between 5.0kW and 15.0kW can be equipped with up to 46kWh storage, each. Furthermore, they can be installed in parallel allowing for solutions of up to 150kWh and 460kWh storage.

www.tommatech.de
mail@tommatech.de

TRIO HYBRID K-SERIES (THREE PHASE)

TOMMATECH GmbH
GERMAN-based company

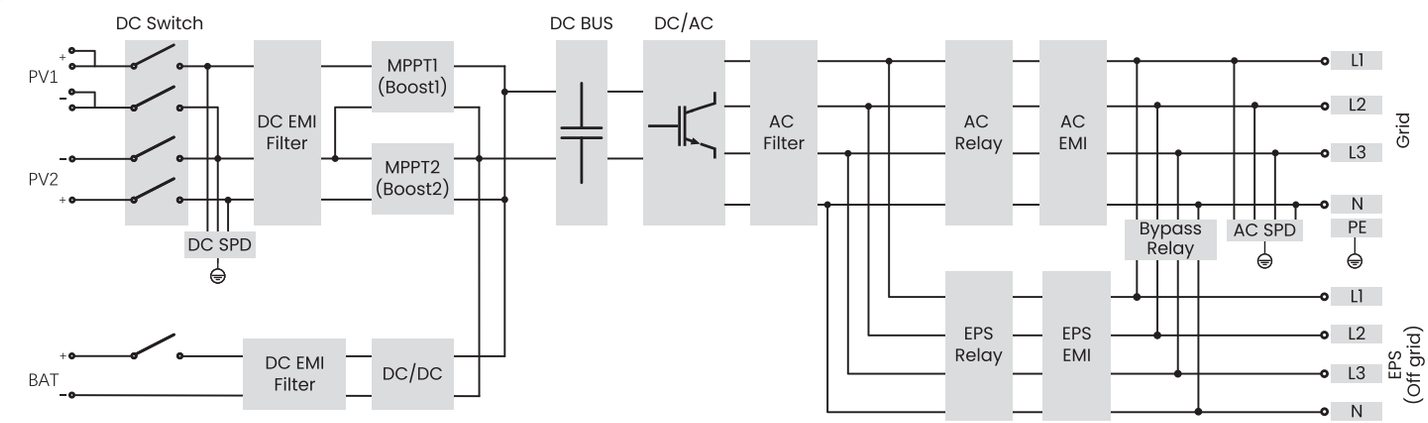
CE

	Trio-Hy-K-5.0	Trio-Hy-K-6.0	Trio-Hy-K-8.0	Trio-Hy-K-10.0	Trio-Hy-K-12.0	Trio-Hy-K-15.0
DC INPUT						
Max. PV Array Input Power [Wp]	8000	10000	12000	15000	18000	18000
Max. PV Input Voltage [V]	1000		1000			
Start Output Voltage [V]	200		200			
Nominal Input Voltage [V]	640		640			
MPPT Voltage Range [V]	180~950		180~950			
Number of MPPT / Strings per MPPT	2(1/1)		2(2/1)			
Max. Input Current (MPPT A / MPPT B) [A]	16/16		26/16			
Max. Short Circuit Current (MPPT A / MPPT B) [A]	20/20		30/20			
AC INPUT & OUTPUT						
Nominal AC Output Power [W]	5000	6000	8000	10000	12000	15000
Max. AC Output Apparent Power [VA]	5500	6600	8800	11000	13200	15000
Max. AC Output Current [A]	8.1	9.7	12.9	16.1	19.3	24.1
Max. AC Input Apparent Power [VA]	10000	12000	16000	20000	20000	20000
Max. AC Input Current [A]	16.1	19.3	25.8	32.0	32.0	32.0
Nominal AC Voltage [V]	415/240; 400/230; 380/220					
Nominal Grid Frequency/Grid Fequency Range [Hz]	50/60					
Displacement Power Factor	0.8 Leading~0.8 Lagging					
THDi (Rated Power) [%]	<3					
BATTERY DATA						
Battery Type	Li-ion Battery					
Battery Voltage Range [V]	180~800					
Max. Continuous Charge/Discharge Current [A]	30					
EPS OUTPUT (OFF-GRID OR BACK-UP) (WITH BATTERY)						
Nominal Output Power [W]	5000	6000	8000	10000	12000	15000
Peak Apparent Power [VA]	7500,60s	9000,60s	12000,60s	15000,60s	15000,60s	16500,60s
Max. Continous Current [A]	7.2	8.7	11.6	14.5	17.5	21.8
Nominal Voltage [V]; Frequency [Hz]	400/230; 50/60					
Switch Time [ms]	<10					
Parallel Operation	Yes					
SYSTEM DATA						
Max. Efficiency [%]	98.0					
Euro. Efficiency [%]	97.7					
Battery Charge/Discharge Effciency [%]	98.5/97.5					
Ingress Protection	IP65					
Operating Temperature Range [°C]	-35~60 (Derating at>45, Charge Derating at>35)					
Max. Operation Altitude [m]	3000					
Humidity [%]	0~100					
Typical Noise Emission [dB]	<35				<45	
Storage Temperature [°C]	-40~+70					
Dimensions [WxHxD] [mm]	503x503x199					
Net Weight [kg]	30					
Cooling Concept	Natural Cooling				Smart Cooling	
Communication Interfaces	CT/ Trio Smart Meter/Dongle Wifi / Dongle LAN /Dongle 4G/ USB/ RS485 / DRM					
POWER CONSUMPTION						
Standby Consumption [W]	<5W For Cold Standby					
STANDARD						
Safety	EN/IEC62109-1/-2					
EMC	EN61000-6-1/2/3/ 4; EN61000-3-2/3/11/12					
Certification	CE, VDE4105, EN50549, IEC61727, TOR					

	Trio-Hy-K-5.0	Trio-Hy-K-6.0	Trio-Hy-K-8.0	Trio-Hy-K-10.0	Trio-Hy-K-12.0	Trio-Hy-K-15.0
PROTECTION						
Anti-Islanding Protection	Yes					
DC Reverse Polarity Protection	Yes					
Insulation Monitoring	Yes					
Residual Current Monitoring	Yes					
AC Overcurrent Protection	Yes					
AC Short-circuit Protection	Yes					
AC Overvoltage Protection	Yes					
AFCI	OPT					
Surge Protection	Type II, DC and AC					

*When PV1 is connected to 2 strings, the maximum input current is 26A; when PV1 is connected to 1 string, the maximum input current is 20A.
*Compatible with a minimum of 3 units of TommaTech 5.8kWh/3.0kWh batteries, but if the total voltage of the 3 batteries is less than 127V and there is no PV input, the system will not able to startup
*PV to BAT Max. efficiency 98.5%, BAT to AC Max. efficiency 97.5%.

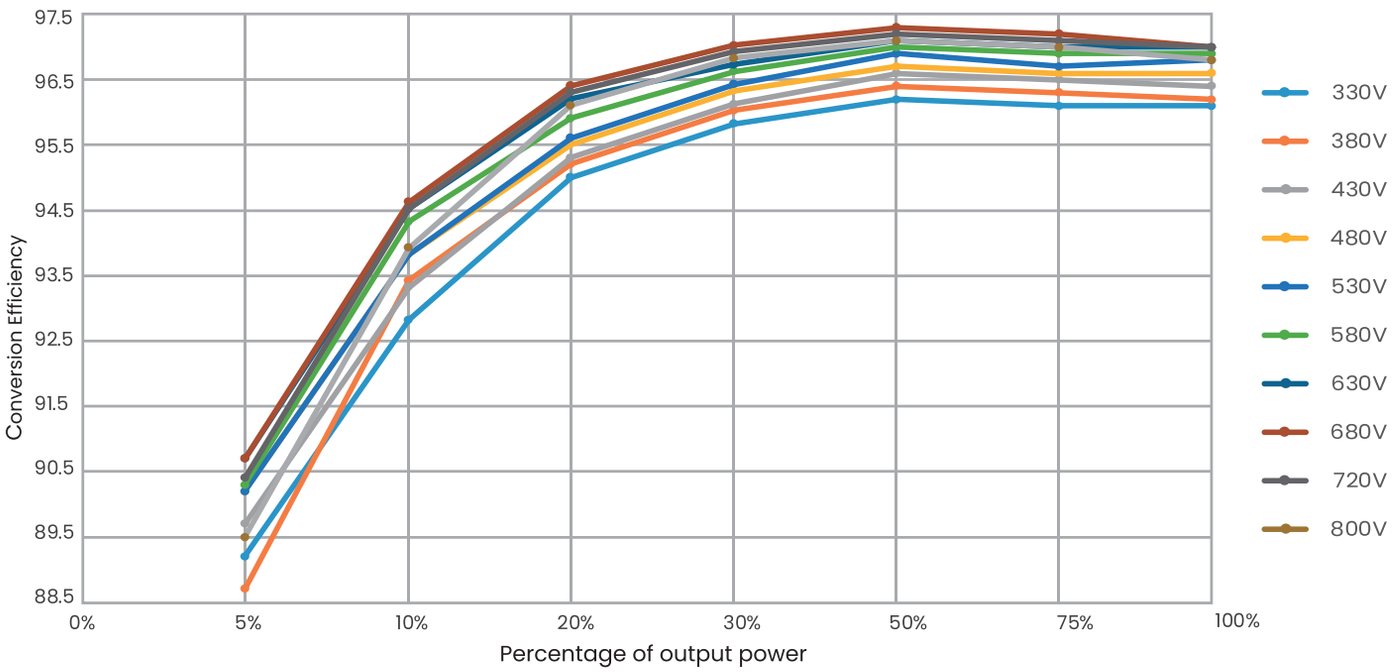
CIRCUIT DIAGRAM



* TommaTech GmbH reserves the right to change the specifications of the products without prior notice.

www.tommatech.de
mail@tommatech.de

EFFICIENCY CURVE



DERATING CURVE