

Three Phase Hybrid Inverter **Trio Hybrid Maxi-Series** 60 / 70 / 75 / 80

Simple. Reliable. Efficient.



3- Phase
Unbalanced
Output



AC
Coupling



Up to 10
Units Parallel



2x 80A
Max. Charging
Current



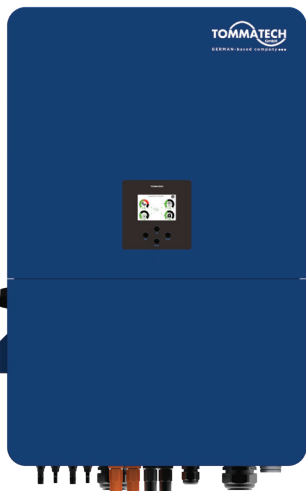
High Voltage
Battery



Double
Battery
Input



Diesel
Generator
Support



INV-TT-TF-M60K / INV-TT-TF-M70K INV-TT-TF-M75K / INV-TT-TF-M80K

The three-phase TommaTech® Maxi Series M60/70/75/80K hybrid inverters are ideal solutions for commercial and industrial applications. With six MPPTs, they offer high efficiency and, thanks to their IP65 protection rating, are also suitable for outdoor use. The inverters can also be remotely monitored and controlled, and by connecting up to 10 units in parallel, their capacity can be expanded to up to 800 kW. Furthermore, the Maxi Series offers a flexible and powerful energy management solution with highly efficient battery integration and support for off-grid operation.

TRIO HYBRID MAXI-SERIES (THREE PHASE)



	INV-TT-TF-M60K	INV-TT-TF-M70K	INV-TT-TF-M75K	INV-TT-TF-M80K
DC INPUT				
Max. PV Array Input Power [Wp]	120000	140000	150000	160000
Max. Useable PV Input Power [W]	96000	112000	120000	128000
Max. PV Input Voltage [V]		1000		
Start Output Voltage [V]		180		
MPPT Voltage Range [V]		180-1000		
Nominal PV Input Voltage [V]		150-850		
Max. Input Current [A]		36+36+36+36+36+36		
Max. Short-Circuit Current [A]		54+54+54+54+54+54		
No. of MPP Trackers / No. of Strings MPP Tracker		6/2+2+2+2+2		
AC INPUT & OUTPUT				
Nominal AC Input/Output Active Power [W]	60000	70000	75000	80000
Max. AC Input/Output Apparent Power [VA]	66000	77000	82500	88000
Nominal AC Input/Output Current [A]	91/87	106.1/101.5	113.7/108.7	121.3/115.9
Max. AC Input/Output Current [A]	100/95.7	116.7/111.6	125/119.6	133.4/127.6
Max Continuous AC Bypass (grid to load) [A]		200		
Peak Power (off-grid) [W]		1.5 time of rated power, 10 S		
Power Factor Adjustment Range		0.8 leading to 0.8 lagging		
Nominal Input/Output Voltage/Range [V]		220/380V, 230/400V 0.85Un-1.1Un		
Nominal Input/Output Grid Frequency/Range [Hz]		50Hz/45Hz-55Hz 60Hz/55Hz-65Hz		
Grid Connection Form		3L+N+PE		
Total Current Harmonic Distortion THDi		<3% (of nominal power)		
DC Injection Current		<0.5% In		
BATTERY DATA				
Battery Type		Lithium-ion		
Battery Voltage Range [V]		160-1000		
Max. Charging Current [A]		80+80		
Max. Discharging Current [A]		80+80		
Charging Strategy for Li-ion Battery		Self-adaption to BMS		
Number of Battery Inputs		2		
EFFICIENCY				
Efficiency [%]	97.60%	98.70%	97.60%	97.60%
Euro Efficiency [%]	97.0%	98.10%	97.0%	97.0%
MPPT Efficiency [%]		>99%		
STANDARD				
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE III(DC), TYPE III(AC)			
INTERFACE				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN (optional)			
SYSTEM DATA				
Operating Temperature Range [°C]	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	3000m			
Noise (dB)	≤ 65 dB			
Ingress Protection (IP) Rating	IP 65			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC III(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	606Wx927Hx314D (Excluding connectors and brackets)			
Weight [kg]	105			
Type of Cooling	Intelligent Air Cooling			
Warranty	5 Years			
Grid Regulation	IEC 61727, IEC 62116, EN 50549, VDE-AR-N 4105			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			