



- True double-conversion
- DSP technology guarantees high reliability
- Dual mains input accepted
- 50Hz/60Hz frequency converter mode
- ECO mode operation for energy saving
- Emergency power off function (EPO)
- Optional parallel operation up to 4 units
- Smart battery charger design to optimize battery perf.
- Maintenance bypass available
- Reverse phase frequency operation and supports non neutral input
- True galvanic insulation (transformer)
- Optional 7" touch screen

Model	TTF10K	TTF15K	TTF20K	TTF30K	TTF40K	TTF60K	TTF80K	TTF100K	TTF120K	TTF160K	TTF200K
CAPACITY	10 KVA /	15 KVA /	20 KVA /	30 KVA /	40 KVA /	60 KVA /	80 KVA /	100 KVA /	120 KVA /	160 KVA /	200 KVA /
	8 KW	12 KW	16 KW	24 KW	32 KW	48 KW	64 KW	80 KW	96 KW	128 KW	160 KW
INPUT											
Nominal Voltage	3 x 380VAC/400VAC (3Ph + N)										
Acceptable Voltage Range	285VAC ~ 485VAC										
Frequency	50/60 Hz ± 10 %										
INVERTER											
Nominal Voltage	3 x 380VAC/400VAC (3Ph + N)										
Precision	Stationary: ±1% ; Transitory: ±5% (load variations 100-0-100%)										
Frequency	50/60 Hz synchronised ±1 % With mains absent ±0.1 Hz										
Max. Synchronisation Speed	±1 Hz/s										
Waveform	Pure Sinewave										
Total Harmonic Distortion (THDv)	< 2% (Linear Load) ; < 5% (Non-linear Load)										
Phase Displacement	120° ±1% (balanced load) ; 120° ±2% (imbalances 50% of the load)										
Dynamic Recovery Time	3 cycles at 90 % of the static value										
Admissible Overload	110% for 10min; 150% for 60sec ; >160% for 200ms										
Admissible Crest Factor	03:01										
Admissible Power Factor	0.6-1 (inductive or capacitive)										
Imbalance Output Voltage @ 100% Unbalanced Load†	<1%										
Current Limit	High overload, short-circuit: RMS Voltage Limit ; High Crest-Factor current: Peak Voltage Limit										
STATIC BYPASS											
Type	Solid state										
Voltage	3 x 380VAC/400VAC (3Ph + N)										
Frequency	50/60 Hz										
Activation Criterion	Microprocessor control										
Transfer Time	Zero										
Admissible Overload	150% for 1 hour; 180% for 30sec; >200% for 200ms										
Transfer to Bypass	Immediate, for overloads above 160%										
Re-transfer	Automatic after alarm clear										

MAINTENANCE BYPASS													
Type		Without interruption											
Voltage		3 x 400V (3Ph + N)											
Frequency		50/60 Hz											
Overall Efficiency (Line mode)	Line Mode	89%	90%	91%	92%								
	Battery Mode	90%	91%	92%	93%								
BATTERY & CHARGER													
Battery Type and Numbers		12VDC x 32 pcs (29~32 pcs adjustable)											
Nominal Battery Voltage		384 VDC (Based on 32pcs batteries)											
Charging Method		CC/CV											
Charging Current		Default 10A, Max. = Capacity(KW) / Battery Voltage (real-time)			Default: 10A. Max. 40A; 5A@ full load								
Charging Voltage		432 VDC (Based on 32pcs batteries)											
PHYSICAL													
Dimension, D x W x H (mm)		656 x 405 x 817		656 x 405 x 941		821 x 432 x 1159		975 x 554 x 1286		975 x 554 x 1326		1051 x 705 x 1646	
Net Weight (kgs)		118	120	145	193	278	365	471	573	650	760	790	

