# TG+ Series 3/3, 3/1

## **Low Frequency Online UPS**

10kVA~100kVA

3 Phase input/ 1 Phase output

10kVA~1000kVA

3 Phase input / 3 Phase output





#### **Product**

The TG series are Low Frequency UPS, which is commonly use in Industrial Power Supply. This Industrial UPS series is a Transformer Based UPS, which adopts Online Double Conversion technology to provide more comprehensive and complete protection for the equipment. Remote monitoring and network management through human-machine dialogue. The system has high system efficiency and complete protection functions.

It adopts the world's most advanced DSP digital control technology. It breaks through the technical bottleneck of the UPS industry, replaces the traditional analog circuit with an advanced digital circuit system, and realizes the parallel redundancy function of multiple UPS. It is an extraordinary innovation of EPI. In the digital circuit mode, the high-speed microcontroller and programmable logic device have more perfect circuit control, parameter setting and operation management, and the self-test and self-detection functions are more powerful.

### **Application**

Data Center, the network computer room, intelligent precision equipment, the financial, telecommunications, insurance, transport, taxation, military, security, enegy, education, government, manufacturing and other industries etc.

#### **Features**

- · High reliable static switch
- · Self diagnose and self protection
- · Rechargeable battery intelligent management
- Strong English display interface
- · Double transformation is on-line design
- Flexible weaver technology
- System with high efficiency

- Output transformer
- With optional 12 pulse rectifier
- Human-machine dialogue with the remote monitoring and network management
- Allowing 100% to balance working
- Intelligent battery management function to
- Protect the function is all ready
- Sound and light alarm
- A variety of voltage output
- Color optional
- Load protection ability
- Strong adaptability to the environment
- High battery optimize performance
- Network Management
- Energy saving and environmental protection design



160-800kVA

Model	TG+3110	TG+3115	TG+3120	TG+3130	TG+3140	TG+3150	TG+3160	TG+3180	TG+3110	
Capacity	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA	50 kVA	60 kVA	80 kVA	100 kV	
Input										
Phase			3 Pha	ase+Neutral+Gr	ound, 380V/400	0V/415V(L-L v	oltage)			
Input voltage range					304-456 VAC					
Input frequency range					50/60 Hz ± 5%					
Input PF					> 0.97					
Output										
Rated voltage					220/230 VAC					
Voltage regulation	± 1%									
Rated frequency					50/60 Hz					
Frequency precision					± 5%					
Output PF					0.9					
Output THDu				≤ 2% (linear	load); ≤ 3% (nor	n-linear load)				
Crest factor					3:1					
Inverter overload			5	min @ 110 - 1	50% load; 300 n	ns @ > 150% l	oad			
Battery									HVI	
Voltage				360V	/372V/384V/39	96Vdc				
Battery type				Sealed mainte	enance-free lead-	- acid batteries				
Charging time				8 - 10	hours recharged	l to 90%				
Backup time				Dependin	g on the externa	I batteries				
System										
Efficiency			92%				9	3%		
Protection function	Output short-circuit protection; current-limiting protection									
Transfer time				Normal m	ode to battery m	node, 0 ms				
Display	LCD+LED+Key <mark>board</mark>									
IP Class					IP 20					
Communication interface	RS232, SNMP card (optional)									
Temperature				Operation; 0	- 40 °C, Storage	e ; -25 - 55 ℃				
Relative humidity	0 – 95%, no-condensing									
Altitude		<1500, W	ithin 1500 to 4	1000m, pwer ca	apacity decrease	s by 1% per 10	00m increasing	g in altitude		
Noise (1 m away)	<55 dB <68 dB									
Physical										
Weight (kg)	155	240	297	336	352	355	415	468	550	
Dimension		720x450x1130	)		855x450x1230			1000x660x146	60	

Model	TG+33010	TG+33015	TG+33020	TG+33030	TG+33040	TG+33060	TG+33080	TG+33100	TG+33120		
Capacity	10kVA	15kVA	20kVA	30kVA	40kVA	60kVA	80kVA	100kVA	120kVA		
Input											
Phase					3-phase+N	+G					
Rated Voltage					380/400/41	.5Vac					
Input Voltage Range					285-475V	ac					
Rated Frequency					50/60H	Z					
Input Frequency Range					50H±10%, 60H	lz±10%					
THDi					<10%						
Soft Start		1-100%, 5 seconds									
Bypass											
Phase					3-phase+N	+G					
Voltage Range				3	80/400/415Va	ac ±15%					
Frequency Range					50/60H±1						
Output											
Rated Voltage					380/400/41	.5Vac					
Voltage Regulation				±1% for bal		for unbalance load					
Rated Frequency					50/60H						
Frequency Precision				50/6	0Hz±0.05%(B	attery mode)					
Outout PF				-, -	0.9	· · · · · ,					
THDu				< 2% (lin		(non-linear load)					
Crest Factor				\270 (iiii	03:01	(non inical loca)			7		
Dynamic Voltage Transient					5% (from 0 to 1	00% load)			/		
-									7		
Transient Recovery Time				1050/1	<10ms (±		_				
Inverter Overload				125% load	for 10 mins; 1	50% load for 1min					
Battery	I				2001/-1-		_				
Voltage				CII	360Vdc			_			
Battery Type						lead-Acid Battery		_			
Charging Voltage		-				st charging: 435Vdc	_				
Charging Current		-		1-50A, setta	ible according t	he battery capacity	_				
System	I				040/		_				
Efficiency					91%						
Protection Function			OL			urrent-limiting protect	ion				
Transfer Time				Norma	I mode to batte						
Display					LCD+LED+Key	board					
IP Class					IP20						
Communication Interface						NMP Card (optional)					
Temperature						rage: -25-55 °C					
Relative Humidity					0-95%, no-cond						
Altitude		<1500.	Within 1500 t	o 4000m, pow		reases by 1% per 100	m increasing in	altitude			
Noise (1-meter away)					<55dB						
Physical											
Weight (kg)	84	106	113	117	195	270	344	520	605		
Dimension (W*D*H)mm		300*610*810		400*75	0*1010	450*830*:	1160	700*80	0*1500		

Model	TG+33160	TG+33200	TG+33250	TG+33300	TG+33400	TG+33500	TG+33600	TG+33800	TG+331000	
Capacity	160kVA	200kVA	250kVA	300kVA	400kVA	500kVA	600kVA	800kVA	1000kVA	
Input										
Phase	3-phase+N+G									
Rated Voltage	380/400/415Vac									
Input Voltage Range	285-475Vac									
Rated Frequency	50/60Hz									
Input Frequency Range	45-65Hz									
THDi	< 10%									
Soft Start	1-100%, 5 seconds 1-100%, 5-600 seconds									
Bypass										
Phase					3-р	hase+N+G				
Voltage Range				380Va	ac ±15% ( ±10	0%, ±15%, ±20%, settab	le)			
Frequency Range				50/60	H±2% (±0.5%	5/±1%/±2%/±3%, settal	ole)			
Output										
Rated Voltage						400/415Vac				
Voltage Regulation				±1% fo		d; ±3% for XRbalance lo	ad			
Rated Frequency					5	60/60Hz				
Frequency Precision					50/60Hz±0.0	05% ( Battery mode)				
Output PF						0.9				
THDu					< 1%	(linear load)				
Crest Factor						3:1				
Dynamic Voltage Transient					< 5% (fror	m 0 to 100% load)			TM A	
Transient Recovery Time					<1	0ms (±5%)				
Inverter Overload				105%-110%	, 60mins; 110	0%-125%, 10 mins; > 1	50%,10s			
Battery										
Voltage		384Vdc				480	Vdc	_/		
Battery Type				Seal	ed maintenar	nce-free lead-acid batter	у			
Charging Voltage			F	loat charging	: 13.5Vdc/blo	ck; boost charging: 13.8	3Vdc/block			
Charging Current	5/10/15/20/25/30/35/40A, settable									
System										
Efficiency						92%				
Protection FXRction						ction; current-limiting pr	otection			
Transfer Time	_			N		to battery mode, 0ms				
Display		LCD+LED+Keyboard								
IP Class						IP20				
CommXRication Interface						d (optional), dry contact	(optional)			
Temperature				0		0°C; storage: -25-55°C				
Relative Humidity						no-condensing				
Altitude		< 150		00 to 4000m	, power capa	city decreases by 1% pe			ie	
Noise (1-meter away)	< 65dB < 68dB									
Physical									ı	
Weight (kg)	702	800	850	1350	1550	1900	2500	3200	4000	
Dimension (W*D*H)mm	7	00*800*150	0	700*80	0*1700	1400*1000*1900	2400*12	00*1950	2800*1400*2000	



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