

# Power

## Alpha TRI-Power X33T

Three Phase UPS 10 to 30kVA



- Models: 10 to 30kVA
- LCD display with LED's
- 2x RS232 communication port
- EPO: Emergency Power Off connector
- Remote alarms contacts and frequency converter
- PFC Circuit, active control and static bypass
- Slot for SNMP expansion or additional RS232

Alpha TRI-Power X33T uses online double conversion (VFI) technology where the load is always powered by the inverter ensuring a filtered and stabilized sinusoidal voltage. Furthermore the input filters significantly increase the immunity of the load to mains noise and lightning. TRI-Power is able to operate as an Eco Mode/ Line interactive UPS, and selection can be made manually or automatically. In automatic mode TRI-Power uses the most efficient and cost effective way to protect the load, in accordance with the real-time conditions of the mains. When the mains is stable, TRI-Power operates in Eco mode resulting in high energy savings and efficiency jumping to 98%. When the mains voltage and frequency fluctuate outside present parameters, the TRI-Power switches instantaneously to online operation to provide total protection. Not only from mains failure, brownouts, sags, spikes but also from more subtle problems such as electrical noise and frequency instability.

# Alpha TRI-Power X33T

## Technical Data

Model:	X33T 10	X33T 15	X33T 20	X33T 30
Nominal Voltage Three Phase:	400V +N	400V +N	400V +N	400V +N
Voltage Range:	±20%	±20%	±20%	±20%
Frequency:	45 to 65Hz	45 to 65Hz	45 to 65Hz	45 to 65Hz
Max. Input Current:	18A	26A	35A	46A
Power Factor:			0 to 95% (0 to 99% with Active Filter)	
Current Distortion:			<27% (<4% with Active Filter)	
<b>Bypass line</b>				
Nominal Voltage Three Phase:	400V+N	400V+N	400V+N	400V+N
Voltage Range:			±15% (selectable ±5% to ±25%)	
Frequency:	50 to 60Hz	50 to 60Hz	50 to 60Hz	50 to 60Hz
Frequency Stability:			±2%Hz (selectable ±1% to ±6%)	
<b>Output</b>				
Nominal Power Three Phase:	10kVA	15kVA	20kVA	30kVA
Active Power kW cos 0.8:	8kW	12kW	16kW	24kW
Nominal Voltage Three Phase:			400V + N, selectable from 346 to 422V in 1V steps	
Voltage Stability:			±1% static ±5% dynamic after 5msec	
Wave Form:	sinusoidal	sinusoidal	sinusoidal	sinusoidal
Transfer Time:	0ms (online double conversion)	0ms (online double conversion)	0ms (online double conversion)	0ms (online double conversion)
Voltage Wave Form and Distortion:			2% with linear load , 5% with non linear load	
Frequency:	50 or 60Hz selectable	50 or 60Hz selectable	50 or 60Hz selectable	50 or 60Hz selectable
Frequency Stability:		±0,05% in battery operation, ±1% in synchronism with mains (±5% selectable)		
Crest factor:	3:1	3:1	3:1	3:1
Overload:			110% for 5h, 125% for 10, 150% for 1	
Inverter Short-circuit Current:	300% for 0.5sec	300% for 0.5sec	300% for 0.5sec	300% for 0.5sec
<b>Batteries</b>				
Type:			Maintenance-free sealed lead-acid	
Numbers/Voltage/Capacity:	32 x 12V(2 x 192V)	48 x 12V (2 x 288V)	48 x 12V (2 x 288V)	48 x 12V (2 x 288V)
Recharging Current:			2 to 4A (depends from capacity)	
Battery Recharging Time:			4 to 12 Std. (depends from capacity)	
<b>System</b>				
AC-AC Efficiency:			92% online; 98% line interactive	
Operating Temperature:			0 ÷ 40°C, optimal for batteries 15 to 25°C	
Humidity:	0 to 90 % non-condensing	0 to 90 % non-condensing	0 to 90 % non-condensing	0 to 90% non-condensing
Noise:		<50 to 56dBA at 1m depending (on load and temperature)		
Leakage Current:	<100mA	<100mA	<100mA	<100mA
Standards:			Safety EN 62040-1 Electromagnetic Compatibility EN 50091-2 Level A Performances EN 62040-3	
Protection:			Excessive battery discharge, over current, short circuit, over voltage, under voltage, over temperature	
Communication Ports:			2 St. RS232, slot for SNMP-Adapter; Modbus, Profibus etc.	
Remote Signaling:	Volt free contacts	Volt free contacts	Volt free contacts	Volt free contacts
Software:			Watch & Save for Shutdown and Monitoring	
Colour:	RAL 7024 dark grey	RAL 7024 dark grey	RAL 7024 dark grey	RAL 7024 dark grey
Remote Control:			Emergency Power Off (EPO), Remote Panel	
Protection Degree:	IP20	IP20	IP20	IP20

## Model, Dimensions, Backup Time and Weight

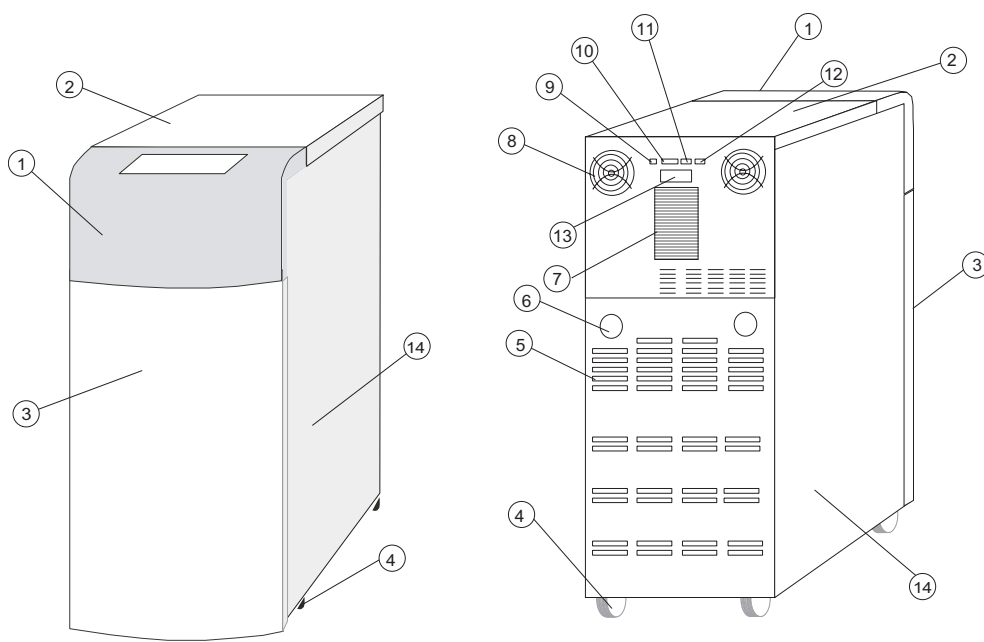
Power kVA	Model	Code	Backup min	Dimensions W x D x H (mm)	Weight kg	Batteries Pc./Ah
10	X33T 10-0	TRI-X33T10-0	0	450 x 750 x 1200	110	---
10	X33T 10-10	TRI-X33T10-10	10	450 x 750 x 1200	200	32 x 7Ah
10	X33T 10-15	TRI-X33T10-15	15	450 x 750 x 1200	238	32 x 12Ah
10	X33T 10-20	TRI-X33T10-20	20	450 x 750 x 1200	258	32 x 14Ah
10	X33T 10-40	TRI-X33T10-40	40	450 x 750 x 1200	378	64 x 12Ah
10	X33T 10-50	TRI-X33T10-50	50	450 x 750 x 1200	406	64 x 14Ah
15	X33T 15-0	TRI-X33T15-0	0	450 x 750 x 1200	115	---
15	X33T 15-10	TRI-X33T15-10	10	450 x 750 x 1200	250	48 x 7Ah
15	X33T 15-15	TRI-X33T15-15	15	450 x 750 x 1200	305	48 x 12Ah
15	X33T 15-20	TRI-X33T15-20	20	450 x 750 x 1200	335	48 x 14Ah
20	X33T 20-0	TRI-X33T20-0	0	450 x 750 x 1200	130	---
20	X33T 20-6	TRI-X33T20-6	6	450 x 750 x 1200	290	48 x 9Ah
20	X33T 20-10	TRI-X33T20-10	10	450 x 750 x 1200	320	48 x 12Ah
20	X33T 20-15	TRI-X33T20-15	15	450 x 750 x 1200	350	48 x 14Ah
30	X33T 30-0	TRI-X33T30-0	0	450 x 750 x 1200	144	---
30	X33T 30-8	TRI-X33T30-8	8	450 x 750 x 1200	370	48x14Ah

## Battery Cabinets for Longer Autonomy

Model	Description	Empty Weight	Dimensions (mm)
2104000000K	Battery cabinet for 18Ah with grounds	66kg	611 x 400 x 1200
4104000000K	Battery cabinet for 26Ah with grounds	114kg	611 x 800 x 1400
3000104000K	Battery cabinet for 33Ah with grounds	123kg	911 x 600 x 1400
4104000000K	Battery cabinet for 36Ah with grounds	114kg	611 x 800 x 1400
4000104000K	Battery cabinet for 54Ah with grounds	147kg	911 x 800 x 1400
4000105000K	Battery cabinet for 66Ah with grounds	165kg	911 x 800 x 1400

## Backup Time Overview

KVA Ah	10 Backup Time (min)	15 Backup Time (min)	20 Backup Time (min)	30 Backup Time (min)
18	28	27	20	11
26	34	34	24	18
33	55	54	35	22
36	75	74	44	27
54	118	117	88	44
66	145	143	105	53
72	152	151	116	74



- 1. Control panel
- 2. Top panel
- 3. Front panel
- 4. Wheels for the movement
- 5. Rear ventilation holes
- 6. Rear income cables
- 7. Heat sinks
- 8. Fan grid
- 9. EPO connector
- 10. REMOTE connector
- 11. RS232-2 communications port
- 12. RS232-1 communications port
- 13. Communications card option
- 14. Side panel

**PDS Design Solutions LTD**  
 Unit 1 Shenval House, South Road  
 Harlow, Essex CM20 2BD  
 Tel: 01279 431746 Fax: 01279 435073  
 Email: [sales@whatpowersupply.com](mailto:sales@whatpowersupply.com)  
 Web Site: [www.whatpowersupply.com](http://www.whatpowersupply.com)