

Power

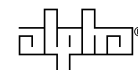
Alpha TRI-Power X33

Three Phase UPS 20 to 80kVA



- Online, VFI-SS-111
- Static and maintenance bypass
- THD below 5%
- Efficiency up to 99%
- LCD panel with back lighting
- Interface card
- Up to 8 systems in parallel

The TRI-POWER X33 is a high performance 20-80kVA UPS system with redundant processor controlling and modern fibre optic data transfer. The integrated intelligent Energie Management provides optimised efficiency operation. The TRI-POWER X33 protects all loads and is up to 99% efficient. This UPS is specially designed for telecom, industry and fire protecting applications.



Alpha TRI-Power X33

Nominal Specifications

Size in kVA at cos phi = 0,8	20	30	40	60	80
Rectifier					
Nominal Input Voltage (V):	400V three phase (380V, 415V on request), 50/60Hz selectable				
Tolerance of Voltage (oat charge) (%):	±15	±15	±15	±15	±15
Tolerance of Voltage (without battery charge) (%):	-25	-25	-25	-25	-25
Frequency Range (Hz):	45 to 65	45 to 65	45 to 65	45 to 65	45 to 65
THD at input, incl. Filter + 12pulse rectifier (Option) (%):	≤5	≤5	≤5	≤5	≤5
Medium Power Factor, Including THD-filter (cos phi):	≥0,96	≥0,96	≥0,96	≥0,96	≥0,96
Softstart Adjustable (in sec.):	0,10,20,30	0,10,20,30	0,10,20,30	0,10,20,30	0,10,20,30
Battery Charging Current Min. (A):	2	2	2	5	5
Battery Charging Current Max. (A):	46	64	91	126	171
Battery					
Recommended Power of Battery Needed, Total (kW):	16.9	25.3	33.6	50.4	67.2
Power of Battery in Watt Per Each Cell (W/cell) (1 line):	85.6	127.9	169.9	254.4	339.2
Recommended Nos. of Pb Cells:	198.0	198.0	198.0	198.0	198.0
End of Discharge Voltage, Min. Adjustable (V):	316.8	316.8	316.8	316.8	316.8
Inverter					
Nominal Power at P. F. 0,8 Inductive:	20	30	40	60	80
Nominal Power at P. F. 1,0 (kW):	16	24	32	48	64
Nominal Output Current at 400VAC and 0,8 P. F. (A):	29	44	58	87	116
Nominal Voltage (V):	400V three phase (380V, 415V on request) + Neutral 50/60Hz				
Crest Factor at 100% Balanced Load:	5	5	5	5	5
Inverter Efficiency at Full Nominal Load (%):	94.4%	94.8%	95.1%	95.3%	95.3%
Overload at 400VAC, 0.8 P. F. 150% Pn x 20 (min):	20	20	20	20	20
Overload at 400VAC, 0.8 P. F. 125% Pn x 90 (sec.):	90	90	90	90	90
3 ph. Short Circuit Current 5 sec. (%):	180	180	180	180	180
1 ph. Short Circuit Current 5 sec. (%):	220	220	220	220	220
Reserve Line (static switch):					
Nominal Input Voltage (V):	400V three phase (380V, 415V on request) + Neutral 50/60Hz				
Nominal Frequency (Hz):	45 to 65	45 to 65	45 to 65	45 to 65	45 to 65
Internal Manual Bypass (service bypass):	Standard integrated				
General System Data					
Radio Interference Suppression and Immunity, Acc. To:	EN 50091-2	EN 50091-2	EN 50091-2	EN 50091-2	EN 50091-2
Operating Mode:	Online, double conversion, acc. to VFI-SS-111 class A				
Efficiency, High Efficiency Plus Mode (%):	99.2	99.2	99.2	99.3	99.3
Efficiency, High Efficiency Quality Mode (%):	97.1	97.1	97.1	97.1	97.3
Efficiency, Acc. to VFI-SS-111 (opt. load) (%):	92.2	92.4	92.1	92.2	92.9
Norms, Acc. To:	EN 50091 - 1 - 2 - 3 ; IEC 62040 - 1 - 2 - 3 ; VDE 0558, VFI-SS-111 class A				
MTBF (mean time between failure):	120.000hrs				
Parallel Mode, n+1 Systems, Up To:	8	8	8	8	8
Cabinet Type:	Industry steel cabinet, RAL 7035				
Cooling:	Self cooling, redundancy fans				
Dimensions + Weights (standard system)					
Height (mm):	1200	1200	1200	1400	1400
Width (mm):	555	555	555	800	800
Depth (mm):	720	720	720	740	740
Weight UPS (kg):	230	282	330	450	555
Footprint (m2):	0.47	0.47	0.47	0.47	0.60
Load Capacity (kg/m2):	535	588	642	791	914
Interfaces					
1. Serial RS 232, Sub-D 9pin, standard protocol, Male	X	X	X	X	X
2. Serial RS 232, Sub-D 9pin, J-BUS, Male	X	X	X	X	X
3. Serial RS 232, Sub-D 9pin, MOD-BUS, Male	X	X	X	X	X
4. Serial RS 232, Sub-D 9pin, PROFIBUS-Connector, Male	X	X	X	X	X
5. IBM AS400, Sub-D 9pin, Female	X	X	X	X	X
6. Potential free Relays, 10 + 5 Indications, programmable	X	X	X	X	X
7. GenSet operation, stop battery charging, input	X	X	X	X	X
8. GenSet operation, synchronising free running	X	X	X	X	X
9. EPO emergency power off, potential free input	X	X	X	X	X
10. EPO emergency power off, potential free output	X	X	X	X	X
11. Fibre optic for remote control (potential free) TX	X	X	X	X	X
12. Fibre optic up to 8-systems parallel (pot. free) RX/TX	X	X	X	X	X
13. SNMP-connector RS232, Sub-D 9pin for SNMP-Module	X	X	X	X	X

Backuptime on request

For contact information visit www.alpha.com

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Model, Dimensions, Backup Time and Weight

Power kVA	Model	Code	THD %	Dimensions W x D x H (mm)	Weight kg	Comment
20	X33 20-0	TRI-306PES20X33 S	≥8	555 x 720 x 1200	230	6-pulse-rectifier
20	X33 20-0	TRI-306PES20X33 F	≤8	825 x 720 x 1200	325	6-pulse-rectifier + filter
20	X33 20-0	TRI-306PEP20X33 S	≥8	555 x 720 x 1200	230	6-pulse-rectifier, parallel kit
20	X33 20-0	TRI-306PEP20X33 F	≤8	825 x 720 x 1200	325	6-pulse-rectifier + filter, parallel kit
30	X33 30-0	TRI-306PES30X33 S	≥8	555 x 720 x 1200	282	6-pulse-rectifier
30	X33 30-0	TRI-306PES30X33 F	≤8	825 x 720 x 1200	387	6-pulse-rectifier + filter
30	X33 30-0	TRI-306PEP30X33 S	≥8	555 x 720 x 1200	282	6-pulse-rectifier, parallel kit
30	X33 30-0	TRI-306PEP30X33 F	≤8	825 x 720 x 1200	387	6-pulse-rectifier + filter, parallel kit
40	X33 40-0	TRI-306PES40X33 S	≥8	555 x 720 x 1200	330	6-pulse-rectifier
40	X33 40-0	TRI-306PES40X33 F	≤8	825 x 720 x 1200	435	6-pulse-rectifier + filter
40	X33 40-0	TRI-306PEP40X33 S	≥8	555 x 720 x 1200	330	6-pulse-rectifier, parallel kit
40	X33 40-0	TRI-306PEP40X33 F	≤8	825 x 720 x 1200	435	6-pulse-rectifier + filter, parallel kit
60	X33 60-0	TRI-306PES60X33 S	≤8	800 x 740 x 1400	450	6-pulse-rectifier
60	X33 60-0	TRI-306PES60X33 F	≤5	1070 x 740 x 1400	595	6-pulse-rectifier + filter
60	X33 60-0	TRI-306PEP60X33 S	≤8	800 x 740 x 1400	450	6-pulse-rectifier, parallel kit
60	X33 60-0	TRI-306PEP60X33 F	≤5	1070 x 740 x 1400	595	6-pulse-rectifier + filter, parallel kit
60	X33 60-0	TRI-312PES60X33 S	≤8	1070 x 740 x 1400	650	12-pulse-rectifier
60	X33 60-0	TRI-312PEP60X33 S	≤8	1070 x 740 x 1400	650	12-pulse-rectifier, parallel kit
80	X33 80-0	TRI-306PES80X33 S	≤8	800 x 740 x 1400	555	6-pulse-rectifier
80	X33 80-0	TRI-306PES80X33 F	≤5	1070 x 740 x 1400	700	6-pulse-rectifier + filter
80	X33 80-0	TRI-306PEP80X33 S	≤8	800 x 740 x 1400	555	6-pulse-rectifier, parallel kit
80	X33 80-0	TRI-306PEP80X33 F	≤5	1070 x 740 x 1400	700	6-pulse-rectifier + filter, parallel kit
80	X33 80-0	TRI-312PES80X33 S	≤8	1070 x 740 x 1400	800	12-pulse-rectifier
80	X33 80-0	TRI-312PEP80X33 S	≤8	1070 x 740 x 1400	800	12-pulse-rectifier, parallel kit

Note:

S = standard system F = system with filter

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