

UNINTERRUPTIBLE POWER SUPPLY

UPS

TRIMOD UPS
MODULAR
THREE-PHASE
from 10 to 60kVA



THE GLOBAL SPECIALIST
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES



TRIMOD MODULAR THREE-PHASE

Modular and upgradable
with power from
10 to 60kVA in compact
structures with a reduced
footprint.

The completely modular structure enables programming each individual power module in order to obtain the desired input/output configuration.

It is possible to manage three-phase or single-phase output and input voltage in order to choose, 3-3 phases, 3-1 phases, 1-3 phases and 1-1 phase.

Furthermore, it is possible to obtain single-phase and three-phase output lines simultaneously or two or more single-phase lines, even of different power levels (upon request).



Control display

The TRIMOD system is completely managed by a microprocessor and using the keyboard on the LCD display it is possible to:

- set and view operational data in real time
- configure and control parameters for each power module
- access event logs
- complete functional tests



Compact and reduced footprint versions

The compact dimensions, the vertical build of the structure and 2 small wheels located in the rear help with positioning and transporting the UPS, even in rooms that are not easy to access.

TRIMOD

EXCLUSIVE FEATURES

Power scalability

Power expansion, for both product families, can always be obtained within the same cabinet in an extremely simple and immediate manner, without the need to re-configure the system and UPS.



TRIMOD
10 to 60 kVA



Scalability uptime

Based on UPS power and the request for uptime, expansion may take place both in the same cabinet, adding battery slots or in additional battery cabinets.

Compact non modular battery cabinets that further extend uptime reaching a level of hours, are also available.

TRIMOD

Modular three-phase UPS with double conversion VFI



3 103 99



3 108 40



3 108 43

Pack.	Item	POWER CABINETS				
		NOMINAL POWER KVA	ACTIVE POWER KW	UPTIME (MIN.) 80% OF THE LOAD	NO. CABINET	WEIGHT (kg)
	3 103 98	10	9	0'	1	120
	3 104 04	15	13.5	0'	1	120
	3 104 10	20	18	0'	1	120
	3 104 16	30	27	0'	1	146
	3 104 21	40	36	0'	1	146
	3 104 28	60	54	0'	1	165

	POWER CABINETS (EMPTY)			
	NO. POWER MODULES	NO. BATTERY MODULES	POWER MODULE TYPES	NO. PHASES
3 104 36	3	12	3x3,4 kVA	1-1/3-3/3-1/1-3
3 104 37	3	12	3x5,6,7 kVA	1-1/3-3/3-1/1-3
3 104 38	6	-	6x3,4 kVA	3-3
3 104 39	6	-	6x5kVA	1-1/3-3/3-1/1-3
3 104 40	6	-	6x6,7kVA	3-3
3 104 41	9	-	9x6,7kVA	3-3

Pack.	Item	UPS			
		NOMINAL POWER KVA	UPTIME (MIN.) 80% OF THE LOAD	NO. CABINET	WEIGHT (kg)
	3 103 99	10	11'	1	167
	3 104 00	10	17'	1	223
	3 104 01	10	35'	1	279
	3 104 00 + 3 107 57	10	54'	2	471
	3 104 00 + 3 107 58	10	68'	2	527
	3 104 05	15	13'	1	220
	3 104 06	15	21'	1	279
	3 104 06 + 3 107 60	15	33'	2	413
	3 104 06 + 3 107 63	15	57'	2	550
	3 104 04 + 3 108 08	15	109'*	2	865
	3 104 11	20	9'	1	220
	3 104 12	20	14'	1	279
	3 104 12 + 3 107 58	20	35'	2	572
	3 104 12 + 3 108 08	20	81'*	2	865
	3 104 12 + 2 x 3 107 58	20	59'	3	574
	3 104 16 + 3 107 57	30	6'	2	378
	3 104 16 + 3 107 58	30	12'	2	434
	3 104 16 + 3 108 09	30	50'*	2	890
	3 104 16 + 2 x 3 108 09	30	109'*	3	1645
	3 104 21 + 3 107 63	40	8'	2	564
	3 104 21 + 2 x 3 107 58	40	16'	3	801
	3 104 21 + 3 108 10	40	33'*	2	925
	3 104 21 + 3 x 3 107 59	40	38'	4	439
	3 104 21 + 4 x 3 107 64	40	60'	5	1663
	3 104 21 + 3 x 3 108 10	40	120'*	4	2430
	3 104 28 + 2 x 3 107 58	60	9'	3	830
	3 104 28 + 2 x 3 107 64	60	15'	3	942
	3 104 28 + 3 108 11	60	17'*	2	952
	3 104 28 + 3 x 3 107 64 + 3 107 60	60	32'	5	1579
	3 104 28 + 2 x 3 108 11	60	50'*	3	1715
	3 104 28 + 3 x 3 108 11	60	80'*	4	2474
	3 104 28 + 4 x 3 108 11	60	110'*	5	3234

* Configurations with battery cabinets (20 x 94 Ah).
Battery cabinet dimensions and weight: A x L x P 1635 x 600 x 800 (mm), 785 kg

	ACCESSORIES	
	DESCRIPTION	
3 108 36	Power module 3.4 kVA	
3 108 38	Power module 5 kVA	
3 108 40	Power module 6.7 kVA	
3 108 51	Additional 5kVA battery charge module for expansions	

	ACCESSORIES FOR BATTERIES	
	DESCRIPTION	
3 108 54	Kit of 4 empty battery slots	
3 108 43	Single slot with 5x7,2Ah batteries (installable in multiples of 4)	
3 108 45	Single slot with 5x9Ah batteries (installable in multiples of 4)	

	ADDITIONAL BATTERY CABINETS	
	DESCRIPTION	
3 108 05	Modular battery cabinet (empty) with 16 trays	
3 108 06	Modular battery cabinet (empty) with 20 trays	
3 107 55	Modular battery cabinet with 4 battery trays (7.2 Ah)	
3 107 56	Modular battery cabinet with 8 battery trays (7.2 Ah)	
3 107 57	Modular battery cabinet with 12 battery trays (7.2 Ah)	
3 107 58	Modular battery cabinet with 16 battery trays (7.2 Ah)	
3 107 59	Modular battery cabinet with 20 battery trays (7.2 Ah)	
3 107 60	Modular battery cabinet with 4 battery trays (9 Ah)	
3 107 61	Modular battery cabinet with 8 battery trays (9 Ah)	
3 107 62	Modular battery cabinet with 12 battery trays (9 Ah)	
3 107 63	Modular battery cabinet with 16 battery trays (9 Ah)	
3 107 64	Modular battery cabinet with 20 battery trays (9 Ah)	
3 108 07	10kVA battery cabinet for UPS with 20, 94 Ah long life batteries	
3 108 08	20kVA battery cabinet for UPS with 20, 94 Ah long life batteries	
3 108 09	30kVA battery cabinet for UPS with 20, 94 Ah long life batteries	
3 108 10	40kVA battery cabinet for UPS with 20, 94 Ah long life batteries	
3 108 11	60kVA battery cabinet for UPS with 20, 94 Ah long life batteries	

NOTE: autonomy values, expressed in minutes, are measured during optimal operating conditions.

TRIMOD

Modular three-phase UPS with double conversion VFI

Item	3 103 98	3 104 04	3 104 10	3 104 16	3 104 21	3 104 28
General Features						
Nominal Power (kVA)	10	15	20	30	40	60
Active power (kW)	9	13,5	18	27	36	54
Module Power (kVA)	3,4	5	6,7	5	6,7	6,7
Technology	On-Line Double Conversion VFI-SS-111					
System	Modular, expandable and redundant UPS in a single cabinet			Modular, expandable and redundant UPS system		
Input features						
Input voltage	230V 1F+N, 400V 3F+N		400V 3F + Neutral			
Input frequency	50-60 Hz $\pm 2\%$ Autosensing					
Input Voltage Range	400V +15%/-20% - 230V +15%/-20%				400V +15%/-20%	
THD Input Current	< 3%					
Compatibility with Power-Supply Units	Configurable in order to achieve synchronism between input and output frequencies, even for wider frequency ranges, $\pm 14\%$					
Input Power Factor	> 0,99					
Output features						
Output voltage	230V, 400V 3F +N		400V 3F + Neutral			
Performance at Full Load	95%					
Nominal output frequency	50/60 Hz can be selected by the user ± 1 Hz					
Crest Factor	1:3,5					
Output Voltage Tolerance	$\pm 1\%$					
Allowed Overload	100 seconds at 125%, 30 seconds at 150%					
Performance in Eco Mode	98%					
Bypass	Automatic and maintenance bypass					
Batteries						
Battery Module	The battery modules are designed to easily be fitted inside the cabinet. No particular operation is necessary to connect them					
Battery Series Type/Voltage	VRLA - AGM / 240 Vdc (internal redundant series)					
Uptime	Configurable and expandable both internally and with additional battery cabinets					
Battery Charge	Smart Charge technology. 3-stage advanced cycle					
Configuration and management						
Display and Signals	4 rows/20 characters, 4 menu browsing buttons, multi-colour LED status indicator, alarms and audio signals					
Communication Ports	2 RS232 serial ports, 1 Logical gate, 4 ports with dry contacts, 1 slots for interfaces					
Emergency Power Off (EPO)	Yes					
Remote Management	Available					
Physical features						
Dimensions (H x W x D) (mm)	1345 x 414 x 628					
Installed Power Modules	3		6	6	9	
Installable Battery Slots	Up to 12		-	-	-	
Net Weight (kg)	120		130	130	150	
Environmental conditions						
Operating Temperature/Humidity	0 - 40 °C / 20 - 80%					
Degree of protection	IP21					
Maximum Audible Noise at 1 m from the Unit (dBA)	46					
Heat Loss (BTU/h)	1436	2155	2873	4310	5746	8619
Conformity						
Certifications	EN 62040-2, EN 62040-3, EN 62040-1					
Standard Warranty	2-year warranty					
Services						
Installation	Can be performed by the user, modular architecture with "plug and play" power and battery modules					
Maintenance	Can be performed by the user, optional services available from the manufacturer					
Easy to Manage	Advanced diagnostics functions via the display					



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