UNINTERRUPTIBLE POWER SUPPLY

# **UPS**

## ARCHIMOD UPS MODULAR THREE-PHASE from 20 to 120kVA







# ARCHIMOD MODULAR

**THREE-PHASE** 

Efficiency up to 95% when in ON LINE MODE

Standard modules with self-configurable Plug&Play system

Power factor close to 1 at input

Multi IN/OUT to obtain different three-phase or single-phase configurations ON SITE

ARCHIMOD is the UPS with a modular and expandable architecture with power from 20 to 120kVA, in 19 inch rack cabinet.

The system is made from a set of standard and pre-assembled components that allow simplifying and speeding up the design and completion process for infrastructures.





#### **MODULAR ARCHITECTURE**

## Control logics

Equipped with microprocessor, it manages 3 power modules. If combined with a power expansion module, it can manage up to 6 power modules, thus increasing power from 20 to 40kVA. It comes equipped with a multifunction display and keyboard to monitor UPS operating parameters, and to configure numerous functions.

It can be connected in parallel to other control modules and with power modules. On the front side, there is a backlit status indicator to immediately identify the system's operation status, and an RS232 communication port for maintenance.

#### Power modules

Power modules, with power equal to 6.7 kVA, are extremely compact and easy to move. Equipped with a plug-in and real hot-swap system, installation and maintenance is quick. They work in parallel with all modules to guarantee maximum system performance.

#### Power expansion module

It must be combined with a control module. Power can be increased from 20 to 40 kVA, and redundancy on single-phase can be set.

#### **Battery module**

Each module has batteries that can be connected to others in series, creating independent strings. The compactness and functionality of individual modules (plug-in) means they can be easily moved and expanded without changing the installed solution (flexibility and scalability).

#### **Distribution**

UPS can be configured directly on site into different distribution systems (three-three, three-single, single-single and single-three). Inside there are terminal blocks for in-out connection, movement and protection components, and the predisposition for additional battery cabinets. Power supply can be configured on two separate input networks (primary and emergency by-pass).

#### Input cable

Input cable compartments allow inserting in-out connection cables at both the top and bottom.



#### **ARCHIMOD**

#### Modular three-phase UPS with double conversion VFI





3 108 55



3 104 54

3 108 40

Pack.	ltem	CONFIGUR	RABLE CAB	INETS							
		The cabinets are supplied empty and are pre-set for power and uptime as indicated in the table									
		NOMINAL POWER KVA	NO. BATTERY MODULES	NO. MODULES FOR CONTROL	NO. MODULES FOR POWER EXPANSION	NO. PHASES					
	3 104 51 *	20	12	1	-	3-1/3-3					
	3 104 52	20	30	1	-	3-1/3-3					
	3 104 53	40	24	2	-	3-3/3-3					
	3 104 54	60	18	3	-	3-3					
	3 104 55	80	-	3	1	3-3					
	3 104 56	100	-	3	2	3-3					
	3 104 57	120	-	3	3	3-3					

<sup>\*</sup> cabinet with 18 rack units available

#### ADDITIONAL CABINETS FOR BATTERIES

DESCRIPTION
Empty modular battery cabinet
Battery cabinet for 20kVA UPS with 21 94 Ah long life batteries
Battery cabinet for 40-60kVA UPS with 21 94 Ah long life batteries
Battery cabinet for 80kVA UPS with 21 94 Ah long life batteries
Battery cabinet for 100-120kVA UPS with 21 94 Ah long life batteries
Cover for closing empty battery slots
Cover for closing empty power module slots

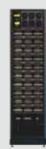
#### **ACCESSORIES**

	DESCRIPTION
3 108 40	6.7kVA power module
3 108 64	Front/rear closing door
3 108 55	Kit of 3x9Ah battery slots
3 108 56	Kit of 3 empty battery slots

#### **CONFIGURATIONS**

Power: 20 kVA Uptime (80% of the load): 1h

- 1 Cabinet 1 Control module
- 3 Power modules
- 30 Battery modules
- 1 Distribution modules



Power: 40 kVA

Autonomy (80% of the load): 20 min

- 1 Cabinet 2 Control modules
- 6 Power modules
- 24 Battery modules 1 Distribution modules



Power: 60 kVA Uptime (80% of the load): 6 min 1 Cabinet

- 3 Control modules
- 9 Power modules
- 18 Battery modules 1 Distribution modules



80

Power: 80 kVA Autonomy (80% of the load): 12 min 2 Cabinets

- 3 Control modules
- 1 Power expansion module
- 12 Power modules
- 36 Battery modules
- 1 Distribution modules





#### 100

- Power: 100 kVA Autonomy (80% of the load): 10 min
- 2 Cabinets
- 3 Control modules
- 2 Power expansion modules 15 Power modules 36 Battery modules 1 Distribution modules



120

Power: 120 kVA

Autonomy (80% of the load): 6 min

- 2 Cabinets
- 3 Control modules
- 3 Power expansion modules 18 Power modules

- 36 Battery modules
  1 Distribution modules





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



#### **ARCHIMOD**

## Modular three-phase UPS with double conversion VFI

							3 104 57		
General features				1					
	Nominal Power (kVA)	20	40	60	80	100	120		
	Active power (kW)	18	36	54	72	90	108		
	Module Power (kVA)	6.7	7 for the Power	Module (20kVA	with 3 Modules	s), power factor	0.9		
	Technology	On-Line Double Conversion VFI-SS-111							
	System	Modular, expandable and redundant UPS system in just one 19" rack cabinet			cabinet				
	Hot Swap capacity	Possibility o	f replacing the	power modules	and/or battery	without turnin	g off the UP		
nput features									
	Input voltage	230V 1F+N, 400V 3F+N		400V 3F+N					
	Input frequency			50-60 Hz ±2% Autosensing					
	Input Voltage Range	230V +15%/-20% 1F		400V +15%/-20% 3F					
	, , ,		400V +15%/-20% 3F						
	THD Input Current		0 6 11 1		3%				
	Compatibility with Power-Supply Units		Configurable in order to achieve synchronism between input and output frequencies, even for wider frequency ranges, ±14%						
	Input Power Factor				),99	<u>, , , , , , , , , , , , , , , , , , , </u>			
utput features	Pro to the second				,				
	Output voltage	230V 1F, 400V 3F		400V 3F					
	Performance at Full Load	2007 11,4007 01		95%					
	Nominal output frequency		50/60 Hz ±0.1						
	Crest Factor			3,5:1					
	Output Voltage Tolerance	±1%							
	Allowed Overload	10 minutes at 125% and 1 minute at 150%							
	Performance in Eco Mode		101111		9%	10070			
	Bypass		Λι		aintenance bypa	acc			
atteries	Буразэ		Au	itorriatic aria rric	annenance byp	a55			
outer 165	Battery Module	The battery modules are designed to easily be fitted inside the cabinet.			binet.				
	Battery Series Type/Voltage	No particular operation is necessary to connect them  VRLA - AGM / 252 Vdc							
	Uptime	Configurable and expandable both internally and with additional battery cabi			ry cahinete				
	Battery Charge	Smart Charge technology. 3-stage advanced cycle			y cabinets				
Configuration and ma			Siliait Cil	arge technolog	y. 5-Stage auva	niceu cycle			
omigui adomana me	Display and Signals	4 lines/20 characteristics, 4 buttons for menu navigation, multi-colour LED status indicator							
	Communication Ports	2 RS232 serial ports, 1 Logical gate, 5 ports with dry contacts, 2 slots for SNMP interfaces (optional)			5,				
	Emergency Power Off (EPO)	Yes							
	Remote Management	Available							
Physical features	5								
•	Dimensions (H x W x D) (mm)	2080 x 570 x 912 (42U)							
	Installed Power Modules	3	6	9	12	15	18		
	Installable Battery Slots	Up to 30	Up to 24	Up to 18	-	-	-		
	Net Weight (kg)	205	240	276	272	318	364		
nvironmental condit	3 . 3.								
	Operating Temperature/Humidity	0 - 40 °C / 20 - 80% non-condensing							
	Degree of protection	IP21							
	Maximum Audible Noise at 1 m from the Unit (dBA)	50÷65							
	Heat Loss (BTU/h)	2730	5460	8190	10920	13650	16380		
	Fiedt 2005 (BTO/II)	2,00	0400	3173	10720	10000	13350		
onformity	Certifications		FNI	62040-1 FN 42	ηΔη-2 FN 620	40-3			
Conformity	Cei tilleations	EN 62040-1, EN 62040-2, EN 62040-3 2-year warranty							
Conformity	Standard Warranty								
	Standard Warranty			z-year v	varranty				
ervices	Standard Warranty  Installation		e performed by	the user, modu	ular architectur				



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