

# MODULYS

## Scalable and flexible modular solution

from 1.5 to 24 kVA



#### The solution for

- > e.business
- > Server farms
- > Telecommunications
- > Medical
- > Computer networks

#### Technology

> VFI "online double conversion"

## Range description and features

Upgradable over time

 MODULYS adapts easily to changes and to the growth of your system. Power modules of 1.5, 3, 4.5 and 6 kVA, in tower, rack and system versions are easily combined to ensure the ideal configuration.

#### Total protection

 MODULYS is a modular UPS. The number of Mod-Power and Mod-Battery units can easily be increased to provide redundant operation, from N + 1 to N + X. In this way, total availability of the system is achieved, even if one or more modules are inoperative.

### Continuous protection

 MODULYS has "hot swap" power and back-up modules which can be replaced or inserted while the system is in operation. In this way, true continuity of power supplied to the load is achieved, without any interruption of service.

## Organisation of your future needs

 MODULYS modular design allows the number of modules to be increased and therefore, the power and back-up time of your UPS to grow. In this way you can easily cope with future situations which you are not able to predict today.

#### Working space

 MODULYS is the most compact UPS in its category. Whether in stand- alone version or one of the many system configurations, the installation takes up very little of your working area.

## "No Single Point of Failure" solutions

 Each power module has its own integrated controller and an automatic bypass. In the system version, this design provides an additional guarantee since the load will be powered even if one of the modules is not working.



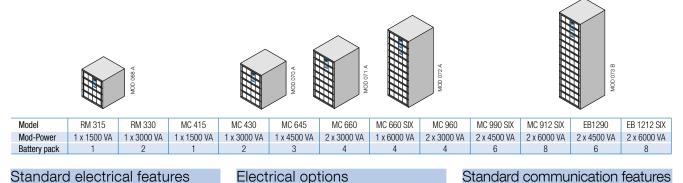


#### Range

Mod-RM expandable from 1.5 to 9 kVA

Mod-MC expandable from 1.5 to 24 kVA

Mod-EB expandable from 9 to 24 kVA



#### Electrical options

- Separate bypass input.

### • Temperature sensor.

- 4 dry contacts relay card.

### Technical data

	MODULYS										
Mod-Power											
Sn [VA]	1500	3000	45	00	6000						
Pn [W]	1050	2100	31	50	4200						
Input/output	1/1			1/1, 3	8/1						
INPUT											
Rated voltage	230 V (	230 V (1ph) 230 V (1ph + N) or 400 V (3ph +									
Voltage tolerance		$\pm$ 20% (up to -30% at 70% nominal load)									
Rated frequency		50/60 Hz									
Frequency tolerance		± 10%									
Power factor/THDI		> 0.99/6 %									
OUTPUT											
Rated voltage		230 V	(1ph + N)								
Voltage tolerance		± 3% (can be s		40 V)							
Rated frequency		50	/60 Hz								
Frequency tolerance		$\pm 2\% (\pm 0.1\%$ autonomous frequency)									
Overload	110% for	r 1 minute, 130% fo	r 10 seconds,	200% for 5	cycles						
Crest factor			3:1								
BYPASS											
Rated voltage		voltag	e selected								
Voltage tolerance		±	15%								
Rated frequency		frequency selected									
Frequency tolerance		1	: 2%								
EFFICIENCY											
Online mode		up to 91%									
Eco Mode		(	97%								
ENVIRONMENT											
Operating ambient temperature	0 °C to + 40 °C (15 °C to 25 °C for best battery life)										
Relative humidity	0 % - 90 % without condensation										
Maximum altitude (above sea level)	1000 m without de-rating (maximum 3000 m)										
Mod-System MODULYS MC											
Mod-MC 4XX - 4 slots W x D x H	550 x 625 x 760 mm										
Mod-MC 6XX - 6 slots W x D x H	550 x 625 x 1026 mm										
Mod-MC 9XX - 9 slots W x D x H	550 x 625 x 1425 mm										
Weight	depending on the configuration										
Degree of protection	IP20										
Acoustic level at 1 m (ISO 3746)	< 52 dBA (Mo	od-MC 4XX)	< 60 dBA	(Mod-MC 6X	X and Mod-MC 9XX)						
Heat dissipation	530 W (Mod-MC 4XX)	700 W (Mod-MC 6XX	)	2090 W (Mod	I-MC 9XX)						
Connections	terminals										
STANDARDS											
Safety	IE	IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2									
EMC		IEC/EN 62040-2, AS 62040.2									
Performance		IEC/EN 62040-3, AS 62040.3									
Product declaration		CE, RC	M (E2376)								

#### Standard communication features

- 2 slots for communication options.
- MODBUS/JBUS RTU (RS232).

#### Communication options

- Dry-contact interface.
- Remote mimic panel.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

#### An adaptable system

#### Mod-RM

		Back-up time (minutes) <sup>(1)</sup>											
VA	10	20	30	40	50	60	70	80	90	100	110	120	130
1500			1	1	1	1	1	1	1	1	1		
3000							)						-
4500		- 1		1									
9000	<b>_</b> ;												

#### Mod-MC

		Back-up time (minutes)(1)								
UPS	kVA	25 50 75 100 125 150 175 200								
Mod-MC 415	1.5	6 kVA								
Mod-MC 430	3	6 kVA								
Mod-MC 645	4.5	13.5 kVA								
Mod-MC 660	6	12 KVA								
Mod-MC 660six	6	18 KVA								
Mod-MC 960	6	12 kVA								
Mod-MC 990	9	18 KVA								
Mod-MC 912six	12	24 kVA								

#### Mod-EB

MOD 077 B

		Back-up time (minutes) <sup>(1)</sup>										
	UPS	kVA	10	20	30	40	50	60	70	80	90	100 110
	Mod-EB 1290	9	0	-	. 1	8 k	VA					
	Mod-EB 1212 six	12	-1	- (	24	kVA		- 1-				
5		L		'	241	~~~				-		

Standard (1) Max BUT @ 75% load Maximum Expandable

