# UMB AC Industrial Modular AC Systems 2.5-50 kva

Borri Modular AC Uninterruptable Power System has been designed for industrial applications from oil & gas, power generation, utilities, water treatment, desalination to transportation, telecom, chemical industries and industrial process control.

UMB AC has been developed to withstand harsh environment and operating conditions of Industrial applications with state-of-the-art technology providing, reliable and customized system solutions with very low MTTR.

With decades of experience in industrial power solutions, Borri offers complete AC modular UPS systems with highly reliable, robust quality and flexible, longest design life.



# Industrial Power

# **Applications**

Power Generation.

Power Utility.

Oil & Gas.

Transportation.

Water Desalination.

Marine.

Chemical Industries.

Other Heavy Industries.

### Main Features

- LCD display and data interface for monitoring.
- Single, N+1 and N+N configurations.
- Hot Swappable Power Modules for very low MTTR.
- Scalability for future power growth.
- Compact 19" design and customized engineering.
- High power density.
- Low Current Harmonics (THDi).
- Wide DC voltage range for Ni-Cad Batteries.
- CE and UL marked Modules.



### UMB AC

# Industrial Modular AC Systems



UMB AC tecl	nnical data								
General									
Rating (kVA)		2.5	5	10	15	20	30	40	50
Nominal power (kW)		2	4	8	12	16	24	32	40
Input									
Input voltage		220/230/240 Vac 1-phase ±10%, 380/400/415 Vac 3-phase ±10%, 50/60 Hz ±10%							
Power factor / Input THDi		0,99 @ 50% - 100% Load / THDi <5% @ 100% Load							
Bypass input voltage		220/230/240 Vac 1-phase ±20% or 380/400/415 Vac 3-phase ±20%							
Battery									
DC Output voltage	200÷220 Vac	48 Vdc (43.2 ÷ 60 Vdc range); 110 Vdc (90 ÷ 160 Vdc range); 220 Vdc (180 ÷ 300 Vdc range)							
	380÷415 Vac	110 Vdc (90 ÷ 160 Vdc range); 220 Vdc (180 ÷ 300 Vdc range)							
Operating battery voltage		Floating: 2.27 (VRLA), 2.2 ÷ 2.3 (VLA), 1.4 ÷ 1.5 (Ni-Cd) V/cell adjustable							
		Boost: 2.4 ÷ 2.45 (VLA), 1.5 ÷ 1.65 (Ni-Cd) V/cell adjustable Equalizing: up to 2.35 (VRLA), up to 2.7 (VLA), up to 1.7 (Ni-Cd) V/cell adjustable							
Output			Lqualiz	ing. up 10 2.33	(VKLA), UP 10 2.7	(VLA), up 10 1.7	(141-Cd) V/ Cell dC	alosiable	
Nominal voltage		200/208/220/380/400/415 Vac 3-phase ±1% (Inverter o/p)							
Frequency		50/60 Hz (selectable), ± 0.001 Hz free running, ±2 Hz synchronized with mains							
Voltage regulation		±1% static; ±5% dynamic (80% load change), <40 ms recovery time							
Overload capacity		125% for 10 min; 150% for 1 min; 200% for 100 ms							
Harmonic Distortion THDv		<2% linear load; <5% non-linear load							
System	ISIOTHOLI ITIDY				270 IIIICai Ioaa, 4	.576 Hon-linear R	<u> </u>		
	oling				Forced coo	ed modules			
Colour		RAL 7035 (others on request)							
Protection degree (IEC 60529)		IP 20 standard (optional up to IP54)							
Efficiency		>90%							
Environmental	,								
Operating temperature		-10 °C ÷ +40 °C (optional up to 55°C with derating) / Storage: -20 °C ÷ + 70 °C							
Altitude		<2000 m (derating according to EN 62040-3)							
Audible noise at 1 meter (dBA)		≤ 65							
User Interface		Front panel: LCD display, keyboard							
Standards		Test and performance: IEC EN 60146-1-1							
Options		LED mimic. Customizable status and alarms LED set							

# Main Options

- In-built galvanic isolation.
- Other AC input voltages.
- Additional Input and Output protection breakers
- DC voltage regulators.
- DC-DC Converters.
- Low Voltage disconnect.
- RS-232 / RS-485 / Ethernet Port / SNMP / WEB Interface.
- Remote control software.
- Built-in DC distribution.
- Built-in Battery Bank.
- Higher protection degrees.

- Special cabinet colours.
- Additional alarms and analogue meters.
- DC Earth fault monitoring.
- Top cable entry.
- Other options on request.

