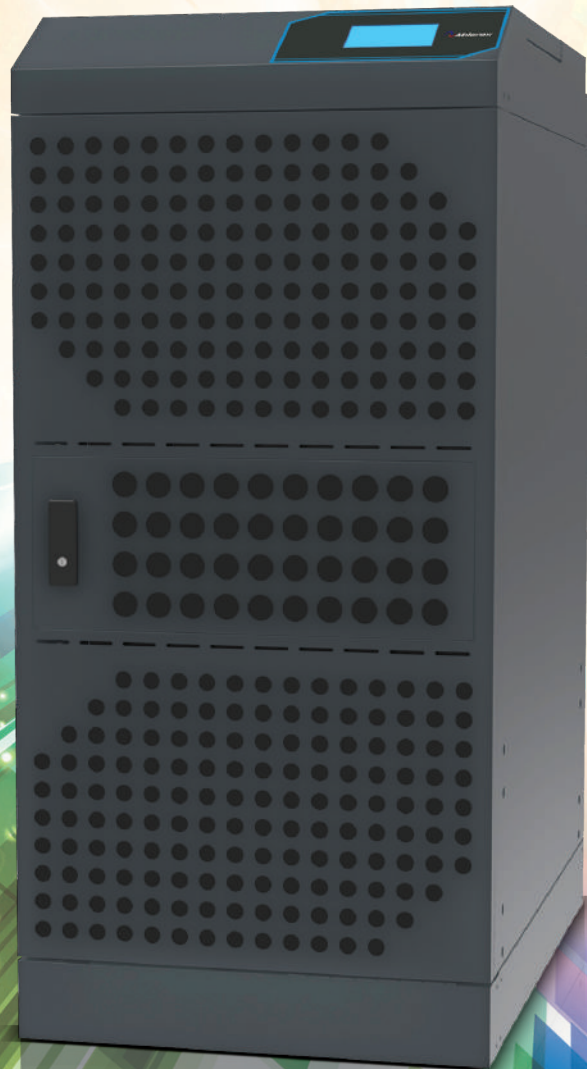


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# Ablerex BRIC MPC

## Three-phase Multi-Purpose Converter

### FEATURES

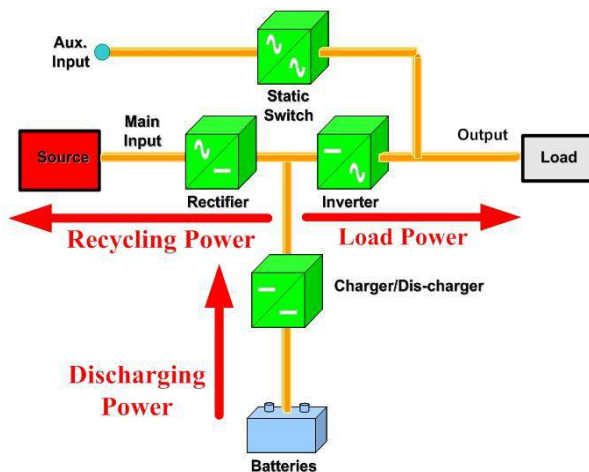
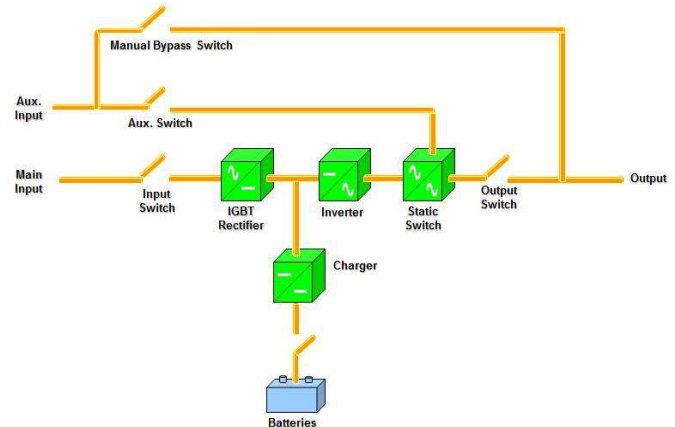
- Maximized Output Active Power, PF1.0
- Up to 96% Efficiency in Double Conversion Mode
- Near Unity Input Power Factor
- Low Input Harmonic Distortion
- Intelligent Battery Management

# BRIC MULTI-PURPOSE CONVERTER

Scalable, adaptable and modular data centre solution that are fast and easy to configure and deploy. The Bric MPC is a complete 3-phase power protection system, designed for multi-purpose application while ensuring your critical availability targets are met.

## True On-Line Double Conversion UPS

- Up to 96% efficiency in double conversion mode, continuously delivers regulated pure sine wave output, isolating critical system from disruptive power problems.
- Fully rated output power, supplying loads from 0.9 leading to 0.9 lagging without derating.
- Parallel Application enable UPS to install in parallel to increase power capacity or system redundancy
- Generator Compatibility, ensuring clean, uninterrupted power to protected equipment when generator is used.



## Energy Storage System (ESS)

The Bric MPC is an Intelligent distributed Energy Storage System that store electrical energy and providing a stable and continuous power supply to a load that is not connected to the utility

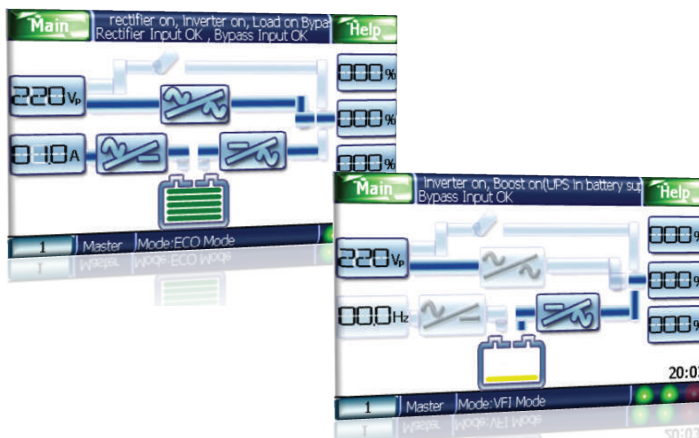
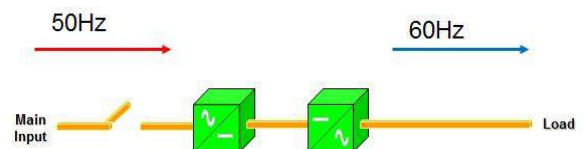
Some applications which the ESS can be used:

- Power Factor Regulation for dynamic power control
- Voltage Regulation for dynamic reactive power control
- VAR Support by injecting or absorbing reactive power
- Seamless integration to high reliability

## Frequency Converter (CVCF)

The Bric MPC Frequency converters are available from 30kVA to 120kVA, with 50Hz or 60Hz input and output.

Featuring Advanced IGBT Inverter Technology and Advanced Digital Control Technology, producing less than 3% input total harmonic distortion (THDi).



## LCD Touch Screen Control Panel

The Bric MPC is equipped with a user friendly control panel offering access to all parameters and management of the bric system.

- Commands
- Measurements
- Status
- Alarms
- Event logs
- Languages
- Simple Setting

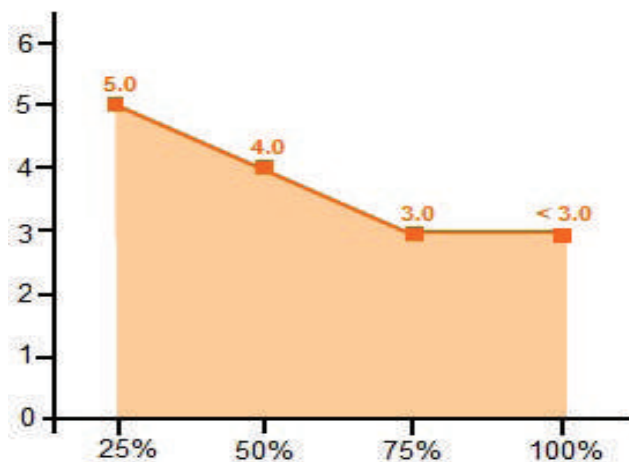
# HIGH EFFICIENCY AND LOW CURRENT HARMONIC POLLUTION

Power Performance by providing a clean rectifier connection to the utility power. It meets today's industry standards for energy saving, low current harmonic pollution to the utility power and achieves up to 0.99 at Input Power Factor as well as <3% Current THD.

## Efficiency

The Bric MPC delivers high efficiency at partial and full load (up to 96% in double conversion online mode), dramatically reducing operating cost of the system, extending components service life and increasing overall power performance.

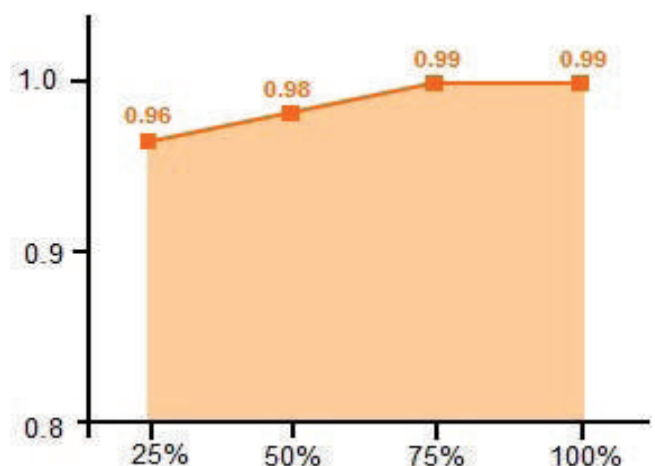
## Input Current Total Harmonic Distortion (THDi)



## Low input current total harmonic distortion (THDi)

The Bric MPC manage the input current total harmonic distortion (THDi) at a low level (3% at 100% load), eliminating harmonic distortion at the input of the system, providing greater operation reliability and extending the service life of MPC.

## Input Power Factor Versus Load

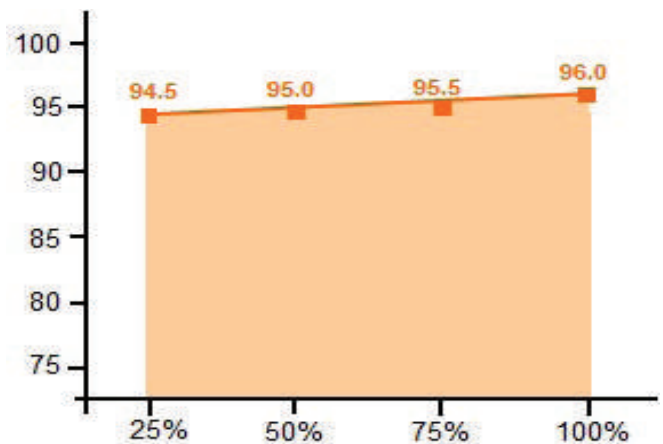


## Near-to-unity input power factor

The Bric MPC input power factor is 0.99 even with partial loads, thus reducing the input installation cost by using smaller size input cables and fuses.

The Bric MPC can supply load from 0.9 leading to 0.9 lagging without derating.

## AC – AC efficiency



## Technical Specifications

MODEL		BRIC MPC-30	BRIC MPC-60
INPUT	Voltage	320V ~ 480V	
	Frequency	45Hz ~ 65Hz	
	Phase	Three Phase Four Wire + G	
	Power Factor / THDi	$\geq 0.99$ at linear load / $< 3\%$	
OUTPUT	Voltage	380/400/415V 3 phase + N $\pm 1\%$	
	Capacity	30kVA/30KW	60kVA/60KW
	Power Factor	1.0	
	Frequency (Synchronized Range)	$\pm 3\text{Hz}$ or $1\text{Hz}$ (selectable)	
	Frequency (Battery Mode)	50Hz/60Hz $\pm 0.1\%$ unless synchronized to line	
	Crest Factor	3:1	
	Harmonic Distortion	$< 3\%$ (at full linear load)	
	Output Waveform	Pure sine wave	
	Transfer Time (AC to DC)	0 ms	
	Overall Efficiency	$> 93\%$	
	DC Start	Yes	
BATTERY	Number of Batteries	32~40	
	Rated Battery Voltage	384~480Vdc	
	Internal Battery	Yes optional, for 5 to 10mins depending on load. Consult your dealer	No Internal Battery Options
DISPLAY	LCD Touch Panel	Input Voltage / Input Frequency / Output Voltage / Output Frequency / Load Percentage / Battery Voltage / Temperature	
ALARM	Audible and Visual	Line Failure, Battery Mode, Battery Low, Overload, System Fault Conditions	
PROTECTION	Overload Capacity	110% for 60min. ; 125% for 10min. ; 150% for 1min.	
PHYSICAL	Dimensions (WxHxD)	560mm x 1200mm x 900mm	
	Weight	~174kg, without battery	~250kg
ENVIRONMENTAL	Operation Temperature	0 ~ 40°C	
	Noise Level	$< 60\text{dBA}$ from 1 meter	
	Altitude	1000m without de-rating	
	Humidity	0 to 95% (without condensation)	
COMMUNICATION INTERFACE	Standard	RS-232	
	Option Slots	Relay Card, SNMP Card, RS-485 (Modbus RTU)	
STANDARDS AND CERTIFICATIONS	Safety	IEC/EN62040-1	
	EMC	IEC/EN62040-2	
	Markings	CE	

DESIGNED AND  
ENGINEERED BY:

