

## DEVICE DESCRIPTION

BFI CW are compact wall-mounted housing inverters, BFI CS are compact floor-standing housing inverters. Despite their small dimensions both inverter types possess full functionality and are compliant with high output voltage requirements. All inverters are equipped with an Automatic Supervisory System SAN 8. The systems can be supplied from different DC voltages. The maximum inverter power is 10 kVA. BFI CW and BFI CS inverters have forced air cooling systems. Fan speed is adjusted smoothly depending on the device internal temperature.

### Specification:

SAN 8 external communication system;

Perfectly sinusoidal output voltage;

High voltage and output frequency stability, both in steady state and dynamic states;

Galvanic isolation of DC and AC circuits;

High energy efficiency >92%

Events logging on the SD card;

High immunity to overloads and harsh environment conditions;

The ability to work with a load characterized by any  $\cos \phi$  (supply of inductive or capacitive loads);



Electromagnetic compatibility (EMC). Filters of EMI (electromagnetic interference) at the input and output circuits – limitation of emission of conducted disturbances and at the same time high resistance to electromagnetic interference;

Advanced user communication: keyboard, control console with the LCD screen. Advanced user communication: keyboard, control console with the LCD screen;

A wide range of data transmission protocols: Modbus RTU, IEC 60870-5-103, IEC 61850, SNMP; APS6000; other;

Integrated communication interfaces: RS485, USB and Ethernet;

Overcurrent, overvoltage, short-circuit protections;

High short circuit current from  $sc = 3 \times I_{nom}$  to  $sc = 9 \times I_{nom}$ , (high selectivity of tripping the protective devices);

## Environmental

DESCRIPTION	PARAMETER
Operating temperature ( EN 50178 class 3K3)	0 to +40 °C
Storage temperature	-15 to +55 °C
Humidity (EN 50178 class 3k3)	max. 95% (without condensation)
Access	Service and maintenance access from the front
Cable entry	From the bottom
Allitude (maximum level without power derating)	1000 m (amsl)

# Typeseries

## COMPACT SINGLE-PHASE INVERTERS, BFI CW / CS TYPE, 1 kVA ÷ 10 kVA (CW-wall-mounted version, CS-standing version)

Catalog No: BFI10-110

Inverter Power Rating	Nominal DC input voltage	Type	Type**	Type of housing*
1 kVA	60 VDC	230 VAC	BFI 1 S 60/230 CW	CW6
	110 VDC	230 VAC	BFI 1 S 110/230 CW	
	220 VDC	230 VAC	BFI 1 S 220/230 CW	
2,5 kVA	60 VDC	230 VAC	BFI 2,5 S 60/230 CW	CW6
	110 VDC	230 VAC	BFI 2,5 S 110/230 CW	
	220 VDC	230 VAC	BFI 2,5 S 220/230 CW	
5 kVA	110 VDC	230 VAC	BFI 5 S 110/230 CW	CW6
	220 VDC	230 VAC	BFI 5 S 220/230 CW	
10 kVA	110 VDC	230 VAC	BFI 10 S 110/230 CW	C1
	220 VDC	230 VAC	BFI 10 S 220/230 CW	

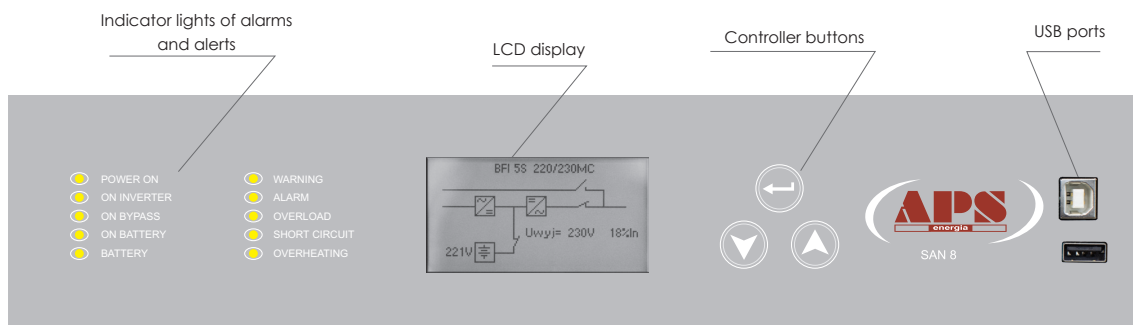
\* CW6: 500 x 700 x 250; C1: 800x1000x300; CS6: 500x1400x250 (WxHxD)

\*\*All inverters CW type are available in CS type

## Technical Parameters

DESCRIPTION	PARAMETER
Voltage stability(static)	+/- 1%
Voltage stability(dynamic)	+/- 5% up to 10 ms
Voltage waveform	Sinusoidal
THDU voltage distortion(linear load)	<2%
THDU voltage distortion(nonlinear load)	<5%
Output voltage frequency	50/60 Hz
Frequency stability	+/- 0,1%
Short-circuit current	3:1
Crest factor	3:1
cos φ	Cos φ ≤ 1 (0 ind to 0 cap)
Efficiency	>92%
Electro-magnetic compability	EN 62040-2
Interface language	PL   EN   RUS   DE   CZ

## Console with navigation cursors



The manufacturer reserves the right to change the equipment parameters. Other types of solutions can be provided on request.



APS Energia SA  
ul. Strużańska 14  
05-126 Staniszów Pierwszy

tel: +48 (22) 762 00 00  
fax: +48 (22) 762 00 01  
aps@apsenergia.pl  
www.apsenergia.pl

