

## Description

- SCR technology with DSP microprocessor controller;
- High output voltage and current stability;
- 12-pulse input transformer, low THDi;
- Galvanic insulation;
- Sinusoidal power grid consumption;
- External communication with MODBUS RTU, IEC870-5-103, DNP3, protocol, selected from control panel;
- Exit voltage pulsation control;
- Charging algorithm acc. DIN 41773 for every battery type, VRLA, lead-acid, Ni-Cd, etc;
- Earth fault control system;



- ○ Natural cooling (convection);
- ○ Battery circuit continuity control;
- ○ Battery current control;
- ○ Three operation modes (buffer, automatic, manual);
- ○ Integrated communication interface RS485, USB, Ethernet;
- ○ Activity and operation status register (SD card);

**PBIT**

## Technical data

DESCRIPTION		PARAMETR
Power supply voltage (AC)	V	3x400 +/- 10 %
Power supply frequency	Hz	50 +/- 4 %
Output nominal voltage	V	220 or 110
Output voltage acceptable deviation (*)	%	+/- 1
Output voltage pulsation (***)	%	+/- 2
Buffer charge temperature compensation range (*)	°C	from -10 to + 50
Temperature compensation of buffer charging voltage (*)	mV/°C/cell	0-10
Overcharge	A	1.5 Inom/5sec (standard); adapted individually
Output current stability (**)	%	+/- 1
Output current pulsation (**)	%	+/- 2
Charging battery level	%	IU acc. DIN 41773
Efficiency	%	> 93
Protection level		IP-20 , IP-21 , IP-30 , IP-31; Higher IP levels require to use fan

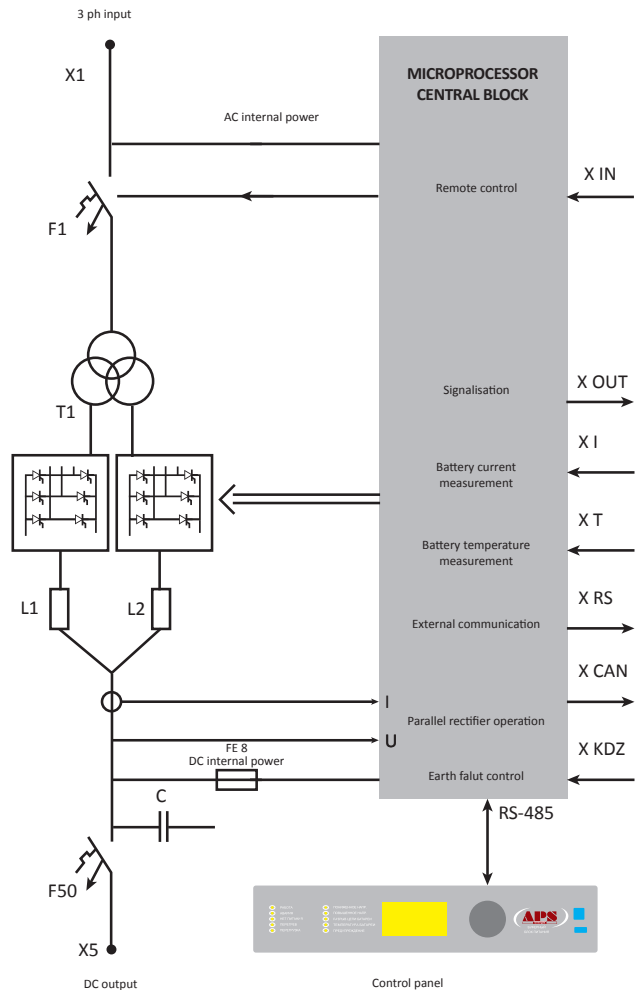
(\*) – buffer charging, voltage regulator; (\*\*) – battery charging, current regulator; (\*\*\*) – at load

## Type of protections in APS Energia thyristor rectifier prostowniku

- From overvoltage on input;
- From overvoltage on thyristors;
- From input voltage lowering;
- From asymmetric voltage;
- From overvoltage on output;
- From dynamic overvoltage on output;
- From pulsation level increasing on output;
- From short circuits modes on receivers;
- From internal short circuits

## Main options:

- Anti-seismic performance;
- Parallel rectifier operation;
- Integration of output circuits distributor with rectifier box;
- Output voltage range extension;
- Blockage of battery charge at lack of battery room ventilation;
- Double side ATS;
- Voltage drop diode system;
- Automatic bus battery system;
- Adopted to standard voltage and frequency requirements;
- Adopted to nominal output DC voltage level requirements.



RECTIFIER TYPE	OUTPUT VOLTAGE, V	OUTPUT CURRENT, A	DIMENSIONS (WXDXH)
PBI 220/100 T	220 V	100 A	600 x 600 x 2000
PBI 220/200 T	220 V	200 A	800 x 800 x 2000
PBI 220/300 T	220 V	300 A	800 x 800 x 2000
PBI 220/400 T	220 V	400 A	800 x 800 x 2000
PBI 220/500 T	220 V	500 A	1600 x 800 x 2000
PBI 220/600 T	220 V	600 A	1600 x 800 x 2000
PBI 220/800 T	220 V	800 A	1600 x 800 x 2000
PBI 220/1000 T	220 V	1000 A	2400 x 800 x 2000
PBI 220/1200 T	220 V	1200 A	2400 x 800 x 2000
PBI 220/1500 T	220 V	1500 A	2800 x 800 x 2000
PBI 110/100 T	110 V	100 A	600 x 600 x 2000
PBI 110/200 T	110 V	200 A	600 x 600 x 2000
PBI 110/300 T	110 V	300 A	800 x 800 x 2000
PBI 110/400 T	110 V	400 A	800 x 800 x 2000
PBI 110/500 T	110 V	500 A	800 x 800 x 2000
PBI 110/600 T	110 V	600 A	1600 x 800 x 2000
PBI 110/800 T	110 V	800 A	1600 x 800 x 2000
PBI 110/1000 T	110 V	1000 A	1600 x 800 x 2000
PBI 110/1200 T	110 V	1200 A	2000 x 800 x 2000
PBI 110/1500 T	110 V	1500 A	2000 x 800 x 2000

NORMS:
EN 61204: 1995/A1:2001
EN 61204-3:2000
EN 61204-6:2001
EN 61204-7:2006/A11:2009
EN 50178: 1997
EN 60950: 2000
EN 61000-6-4:2007/A11:2011
EN 61000-2-4:2002
EN 61000-2-2:2002

The manufacturer reserves the right to change parameters of the devices. Other types and solutions can be delivered on request.



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