Basic parameters

- Output power 1200 W
- Input voltage 115/200 V 400 Hz 3 phases
- Output voltage 27 V, output current up to 45 A
- 5 output terminals for load connection
- External overheating alarm signal output
- Ambient operating temperature range -50° C … +50° C
- Convection cooling without built-in fans
- 19’’ standard case, height 3U

Description

The block is made for installation into 19’’ rack. Dimensions are 446 x 375 x 132,5 mm. The block possesses built-in cooling system, which provides operation in a wide range of ambient temperatures within -50°...+50° C without forced external cooling.

The block has full complex of protection, providing long-term fail-safe operation: overload and short circuit protection, output overvoltage protection, overheating protection. Additionally, there is an overheating alarm, which turns on at temperature of 10 degrees less than the temperature of thermal protection, which turns off the block in case of overheating.

The block is provided with necessary filters to meet required EMC norms. Internal parts of the block are sealed with leak-proof compound, which ensures high block resistance to effects of external climatic and mechanical factors.

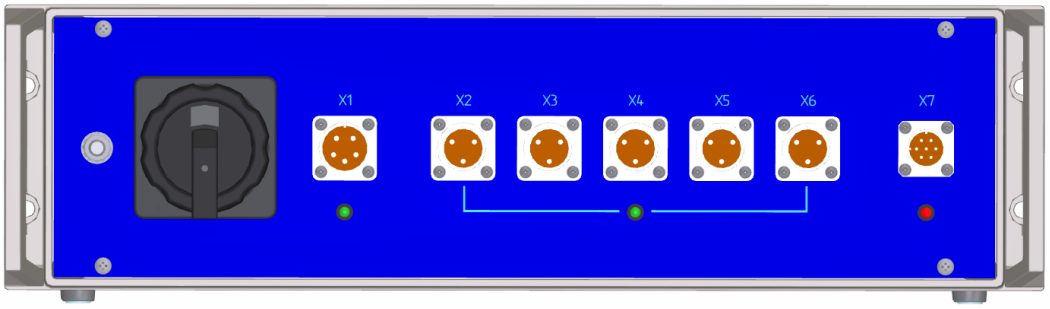
Block contains a socket of type "2РТТ20Б5Ш7В" for input mains connection. For output load connection, there are sockets of type "2РТТ20Б3Г5В". The overheating alarm output connector is "СНЦ23-7/18В". All connectors are placed at the front panel of the block.

Technical specifications*

Input parameters	
Nominal phase-to-neutral / phase-to-phase input voltage, frequency	115/200 V, 400 Hz, 3 phases
Acceptable range of input voltage, frequencies	100..130 V, 350…450 Hz
Power factor correction	>0,93
Input current at nominal input voltage	< 4A
Impulse current surge at start-up, peak value / time	< 10 A / 500 μs
Output parameters	
Output voltage / output current	27 V / 0..45A
Instability of output voltage with change of output current from 10 to 100% / no load	± 0,5 % / ± 2 %
Instability of output voltage with change of input voltage	± 0,2 %
Output voltage ripple (peak-to-peak, 20 MHz)	<1 % Uout
Current overload protection and output short circuit protection	110 … 120 % Iout nom
Maximum output capacity	not limited
Output overvoltage protection	1,2 ... 1,25 Uout
General characteristics	
Efficiency	92 %
Ambient temperature (operating) at 100% load	–50° C …+50 °C
Ambient temperature (storage)	–65° C …+100 °C
Heat loss at output power of 1200 W	95 W
Thermal resistance between ambient and heat sink	0,31 °C/W
Overheating alarm	10 degrees less than thermal protection
Humidity	95 % @35 °C
Insulation strength, input/output	~1500 V
Insulation strength, input/case	~1500 V
Insulation strength, output/case	~500 V
Isolation resistance input/output, input/case, output/case @ 500 V	>20 MOhm
EMC standards	EN55011, class B
Safety standards	IEC/EN60950
MTBF (T = 30° C; Pout = 0,8 • Poutmax)	100 000 hours
Case type	19’’ 3U, INPAC 10828-052
Cooling	Natural convection without built-in fans
Weight (not more than)	12 kg

1) All specifications are valid for normal climate conditions, at Uin.nom., Iout.nom., unless otherwise stated.
2) During overcurrent event, the block operates as a constant current generator with a reduction of output voltage without time limitation; output capacity isn't limited, the block can be used as a charging device.
3) Maximal ambient operating temperature depends on the actual output power, and when reducing load below 100 %, maximal operating ambient temperature increases compared to the previously indicated value, all according to the real heat loss and thermal resistance. The value of maximal ambient temperature is indicated with regards to tripping of overheating alarm.
4) The tripping temperature value of overheating alarm is defined by the thermal sensor, located inside the power block, and is in range of <82;87>° C.

External appearance of JETAB1200-5K27-P, connection, alarm



Block's dimensions are: 446 mm (width) x 375 mm (length) x 132,5 mm (height). Length dimension is stated without accounting for components on the front panel of the block and knobs.
At the front panel there are power switch, protective grounding bolt M8 (case), power input connector X1, output voltage connectors X2-X6 and connector of overheating alarm X7. Connectors X1-X7 are situated in block in such way that when connecting 90-degree plug, the vertical part of the plug will be facing upward.
Vertical state of the power switch rotary knob corresponds to state “ON”, horizontal state corresponds to state “OFF”, switching is done by turning switch handle by 90° clockwise.

Designation and connection of connectors

Connector	Purpose, type	Connection				
X1	Input power, "2РТТ20Б5Ш7В"	1	2	3	4	5
		phase A	phase B	phase C	neutral	case
X2-X6	Output voltage 27 V, "2РТТ20Б3Г5В"	1	2	3		
		+27В	0В	case		
X7	Overheating alarm, "СНЦ23-7/18В"	1	2	3	4…7	
		+CH	-	- CH	-	

LED signalization

1. LED of input power presence (green) is located under the power input connector X1. It indicates the presence of input power as well lack of output power.
2. LED of output power presence (green) is located under the power output connectors X2-X6. Constant light indicates the presence of the output voltage, also that the output voltage has a value of not less than 0,8 not more than 1,2 of Uout (nominal).
3. Overheating alarm LED (red) is located under connector of overheating alarm X7. Within the output voltage it signals that the temperature inside the radiator unit reached level at 10 ° C lower than the thermal protection, switching off the unit. During alarm activating by overheating, the unit continue normal operating without decrease я nominal power.

Remote signalizing

During the overheating, in addition to LED signalization at the front panel, there is a galvanically isolated signal (two wires) +CH, -CH on connector X7. The signal is formed by optocoupler transistor, with collector connected to +CH, emitter to –CH. Collector-emitter voltage from the external control circuit must not exceed 60V, the current through the transistor in open state must not exceed 20 mA (must be limited by an external resistor).
With the presence of voltage at the output and with the absence of overheating signal, the optocoupler transistor is opened (normal unit operation). In all other cases, the transistor is closed. With current of 10-20 mA flowing through the opened transistor, voltage drop on pins -CH, +CH doesn't exceed 1,5 V.

Certificates

Certificate ISO 9001*

CE conformity declaration

* Quality management system the company throughout all departments, including R&D department, is certified in compliance with ISO requirements

Notes

Please mind that information presented in this document is not complete. More extensive information (additional requirements, typical connection schemes, operation rules and etc.) can be provided upon request.

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