



Pion-C

Pion-C is a capacitor power supply device, which is designed to ensure the operation of digital relay protection and automation devices at facilities with alternating or rectified current.

The device provides power supply to the digital relay protection devices and their digital inputs, as well as to the trip coils of a CB, in case power interruption or complete power supply disappearance.

Pion-K is used on connections, the protection time of which is comparable to or exceeds the operating time of the digital relay protection and automation device after the disappearance of the supply voltage.

Pion-C is also used to ensure stable functionality and guarantee stable voltage supply of logic discrimination function, protection against arc flash in switchgear compartments, circuit breaker failure function.

The unit can be used to provide power to telemechanics devices and other equipment during short-term power outages, for example, during the operation of automatic input of a reserve in the supply network.

The installation of the Pion-C unit is recommended in the low voltage compartment of the switchgear or in a voltage transformer cubicle.

6000 mF
of bank capacity
ensures sufficient operating time for all powered devices throughout the entire operation period



Built-in short-circuit protection enables quick detection and disconnection of the output circuit



Diagnostics of the power bus of the output voltage monitoring relay



Starting current no more than 0.5A ensuring selectivity when matching protection devices in secondary circuits

Technical characteristics

Rated input voltage, V	$\cong 220$
Permissible input voltage range, V	$\approx 187- 265$ $= 220-370$
The maximum difference between the input and output voltage, when powered by an external network, V	4
Rated frequency of input voltage, Hz	50
Maximum allowable ripple of input voltage, %	100
Power consumption (no load), W	$5\pm 10\%$
Return voltage of the relay for monitoring the presence of output voltage, V	$170\pm 5\%$
Required transition voltage to work from the internal capacitor, V	$180\pm 5\%$
The time of full charge of the capacitor in the presence of 220 V AC, s, not more than	25
Switching time to operation from the capacitor in case power supply outage, ms	3 ± 2
Inrush current (no load), A	0,5
The maximum current consumption (no load), A	0,05
Max power consumption at the input with a load of 10 watts and a discharged capacitor bank	3
Capacitor bank capacity, μF	6000
Peak input power input at a load of 10 W and a discharged capacitor bank of	100 V max for not more than 200 ms
Time of output voltage reduction to 25 V (no load) when the unit is disconnected from the supply circuit, min, no more than	10
Operating temperature range, $^{\circ}\text{C}$	-40 ... +50



Thanks to low start up current of Pion-C we guarantee sensitivity and selectivity for all IEDs on busbars due to integrated control system.

