

SNI voltage stabilizer

SNI1 (single-phase) and SNI3 (three-phase) voltage stabilizers of IEK® brand are intended for maintaining stable single/three-phase supply voltage of residential and industrial loads of 220 V/3 x 220 V, 50 Hz at power fluctuations within wide range of value and period of time.

They are applied for stabilizing voltage when working with highly-sensitive equipment in industrial sites, medical institutions, telecommunication companies, low-rise building as well as housing and public utility sector. SNI voltage regulators provide for extending the service life of alarm systems, computer equipment etc.

Correspond to standards EN 55014-1, EN 55014-2, EN 60335-1, EN 61000-3-2.



These devices were awarded gold medal of the International Exhibition “Elektro-2009” in nomination “Best Electrical Equipment” for their high quality, reliability and exploitation ratings as well as efficient engineering solutions.

Advantages

- Stepless adjustment of output voltage.
- Improved accuracy of output voltage stabilizing: $220 \pm 3\%$.
- Modern schematic solutions.
- Six protection levels: against overload, short-circuit, overheating, hazardous overvoltage, hazardous under-voltage, surge voltages.
- High efficiency.

- No distortions in sinusoidal shape of output voltage curve.
- Good resistance against short-term overloads.
- Extra wide range of products: 0.5 to 150 kVA
- Extended manufacturer's warranty period: 3 years from purchase date.
- Broad national network of service centers for IEK® voltage stabilizers.

Electromechanical voltage stabilizers of SHIFT series

The voltage stabilizer of SHIFT series perfectly suits to the task of steady power supply even under conditions of constantly lowered mains voltage, maintaining the voltage level with high accuracy ($220\text{ V} \pm 3\%$).



Power, kVA	Maximum input current, A	Type of circuit breaker	Overall dimensions, cm (W×D×H)	Weight, kg	Product ID
3,5	16	Circuit breaker C16 A 2P	16×25×37	13,2	IVS12-1-03500
5,5	25	Circuit breaker C25 A 2P	18×37×39	16,6	IVS12-1-05500
8	36	Circuit breaker C40 A 2P	18×37×39	20,55	IVS12-1-08000
10	45	Circuit breaker C50 A 2P	20×30×43	25,7	IVS12-1-10000

Electromechanical voltage stabilizers of SNI series

Electromechanical voltage stabilizers of SNI series are represented in the products' stock by widest range of power (0.5 to 150 kVA), where models list includes the stabilizers for different types of mains: single-phase (SNI1 series) and three-phase (SNI3 series).

SNI electromechanical voltage stabilizers have high energy efficiency performances, increased stabilization precision and good resistance against overloads. The advantages mentioned above are highly appreciated primarily by commercial customers.

Single-phase, SNI1



Power, kVA	Maximum input current, A	Fuse link/Circuit breaker, type	Overall dimensions, cm (W×D×H)	Weight, kg	Product ID
0,5	2,25	Fuse link, In 5A	19,3×16,5×13	4,5	IVS10-1-00500
1	4,5	Fuse link, In 7A	22,5×26×20	6,5	IVS10-1-01000
1,5	6,75	Fuse link, In 8A	22,5×20×26	7,5	IVS10-1-01500
2	9	Circuit breaker VA47-29 C10 2P	22,5×29×21,5	10	IVS10-1-02000
3	13,5	Circuit breaker VA47-29 C16 2P	22,5×31×25	12,5	IVS10-1-03000
5	22,5	Circuit breaker VA47-29 C20 2P	22×31,7×28,3	18	IVS10-1-05000



7	32	Circuit breaker VA47-29 C32 2P	27,3×31,1×44	26	IVS10-1-07000
10	45	Circuit breaker VA47-29 D50 2P	27,3×31,1×44	27	IVS10-1-10000
15	67	Circuit breaker VA47-29 D63 2P	33×38,5×65	60	IVS10-1-15000
20	80	Circuit breaker VA47-100 D100 2P	57,5×48×84	75	IVS10-1-20000
30	125	Circuit breaker VA88-32 In 125A 3P	65×55×110	160	IVS10-1-30000

Three-phase, SNI3



3 (3×1)	3×4,5	Circuit breaker VA47-29 C8 3P	31,5×45,5×17,5	18	IVS10-3-03000
6 (3×2)	3×9	Circuit breaker VA47-29 C10 3P	27,5×37,3×67	33,5	IVS10-3-06000
7,5 (3×2,5)	3×10	Circuit breaker VA47-29 C10 3P	32×35,5×76,8	43,5	IVS10-3-07500
15 (3×5)	3×22,5	Circuit breaker VA47-29 C20 3P	43,8×39×79,3	78	IVS10-3-15000
20 (3×6,6)	3×32	Circuit breaker VA47-29 C32 3P	51×44×85	102	IVS10-3-20000
30 (3×10)	3×45	Circuit breaker VA47-29 D50 3P	51×44×97,5	111	IVS10-3-30000
45 (3×15)	3×68	Circuit breaker VA88-32 80A 3P	79×58,5×128	200	IVS10-3-45000
60 (3×20)	3×90	Circuit breaker VA88-32 100A	79×58,5×139	220	IVS10-3-60000
90 (3×30)	3×150	Circuit breaker VA88-33 160A	54×109×70,5	270	IVS10-3-90000



100 (3×33)	3×167	Circuit breaker VA88-33 160A	85×152×64	420	IVS10-3-100000
150 (3×50)	3×250	Circuit breaker VA88-35 250A	100×170×720	550	IVS10-3-150000

Technical Features

Feature	SHIFT	SNI1	SNI3	
Rated output power P_n at input voltage of 200 V, kVA	3,5; 5,5; 8; 10	0,5; 1; 1,5; 2; 3; 5; 7; 10; 15; 20; 30	3; 6; 7,5; 15; 20; 30; 45; 60; 90	100; 150
Operating input voltage range U_{in} , V	120÷250	160÷250	– phase: 160÷250 – line: 280÷430	– – line: 304÷456
Max. input voltage range, V	–	135÷275	– phase: 135÷275 – line: 235÷475	– – line: 256÷511
Output voltage U_{out} , V	220	220	– phase: 220 – line: 380	– phase: 220 – line: 380
Output voltage maintenance accuracy in operating input voltage range, %	± 3	± 3	± 3	± 3
Tripping voltage from increased output voltage U_{max} , V	243±4	246	246 (for each phase voltage)	246 (for each phase voltage)
Tripping voltage from decreased output voltage, U_{min} , V	188±4	184	184 (for each phase voltage)	184 (for each phase voltage)
Thermal protection at increase of transformer temperature, °C	120±5	105	105	105
Output voltage delay	standard	5 s	5 s	5 s
	long	255 s	5 min	no yes
Bypass function	yes	no	no	yes
Efficiency, %	≥ 90	≥ 90	≥ 90	≥ 90
Response time, s	< 1 (for voltage range of ±10%)			
Ambient temperature range, °C	0 ÷ + 40	–5 ÷ + 40	–5 ÷ + 40	–5 ÷ + 40
Degree of protection	IP20	IP20	IP20	IP20
Climatic version and location category according to GOST 15150	UHL4	UHL4	UHL4	UHL4

Delivery Package

SNI1

- stabilizer – 1 pcs.
- operation manual. Passport – 1 pcs.
- warranty card – 1 pcs.
- spare fuses (for models 0,5; 1; 1,5 kVA) – 2 pcs.
- spare autotransformer brush – 1 pcs.
- packaging – 1 pcs.

SNI3

- stabilizer – 1 pcs.
- operation manual. Passport – 1 pcs.
- warranty card – 1 pcs.
- spare autotransformer brushes – 1 pcs.
- packaging – 1 pcs.

SHIFT

- voltage stabilizer: 1 pc.
- operation manual, data sheet: 1 pc.
- warranty card: 1 pc.
- set of brackets for wall mounting: 1 pc.
- packing box: 1 pc.