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±3%.
- Modern schematic solutions.
- Six protection levels: against overload, short-circuit, overheating, hazardous overvoltage, hazardous undervoltage, 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 V ± 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.

	Power, kVA	Maximum input current, A	Fuse link/Circuit breaker,type	Overall dimensions, cm (W×D×H)	Weight, kg	Product ID
Single-phase, SNI1						
	0,5	2,25	Fuse link, In 5A	19,3×16,5×13	4,5	IVS10-1-00500
	1	4,5	Fuse link, I_n 7A	22,5×26×20	6,5	IVS10-1-01000
	1,5	6,75	Fuse link, I_n 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 x150	Circuit breaker VA88-33 160A	54x109x70,5	270	IVS10-3-90000
	100 (3×33)	3x167	Circuit breaker VA88-33 160A	85x152x64	420	IVS10-3-100000
	150 (3×50)	3x250	Circuit breaker VA88-35 250A	100x170x720	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: – line:	160÷250 280÷430	– – line:	 304÷456
Max. input voltage range, V		–	135÷275	– phase: – line:	135÷275 235÷475	– – line:	 256÷511
Output voltage U_{out}, V		220	220	– phase: – line:	220 380	– phase: – line:	220 380
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		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.