Solid State Automatic Voltage Stabilizer

SS and SS3 SERIES

3KVA ~ 100KVA

HIGH SPEED PWM AND IGBT TECHNOLOGY

PWM AC to AC Converter Design

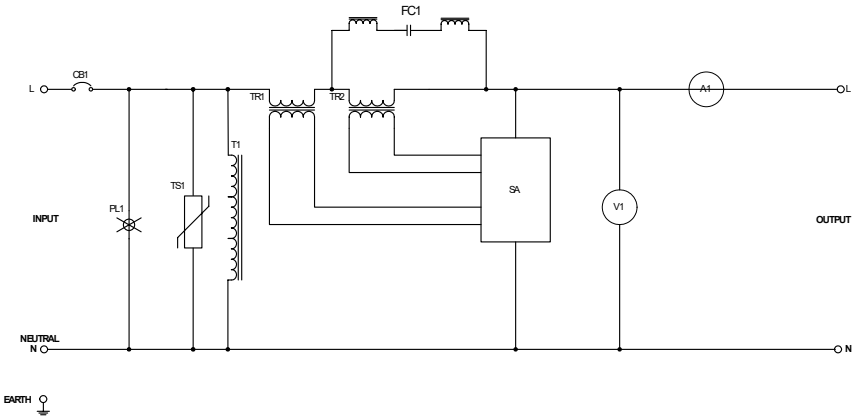
Solid State Automatic Voltage Stabilisers utilizing ***PWM AC to AC Converter*** are highly reliable. **No moving parts**, high e□ciency and **maintenance-free.**

Features:

- **Wide Range of Voltage Stabiliser**
  Single Phase Up to 10KVA
  Three Phase Up to 100KVA
- **Input Swing Range**
  Input Swing Range Available from ±10%, ±15%,±20% ,± 30%
- **Output Voltage Regulation**
  Output Voltage Accuracy ± 0.5%,
- **Transverse Noise**
  Provide 60db of transverse noise attenuation
- **Shielded Isolation Transformer (Option, to specify)**
  Provide 110 db of common-mode noise attenuation and neutral ground bonding
- **Spike Suppression**
  Protect loads against high-energy surges and lightning strikes
- **High E□ciency**
  Better than 95%
- Digial LCD Display
  LED Status Indication
- **Optional Accessories**
  Input circuit breaker
  Output circuit breaker
  Over/low voltage protection
  Phase-failure protection
  Frequency meter
  Manual maintenance bypass switch
- **Compliance with International Standards**
  BS EN50081-1;2/IEC 61000-4-3;4
  BS EN5490/IEC 60529
- **Warranty**
  1 Year

Applications:

- Computers
- Medical Equipment
- Electronics Equipment
- Testing Equipment
- Laboratory Equipment
- POS Terminals
- Process Control Systems



Intact Controls, SS & SS3 Series Voltage Stabiliser / Regulator utilizes the latest in High speed PWM & I G B T technology to ensure the mains voltage remains constant at all times. As a High speed PWM & I G B T solution, ***SSR & SSR3*** stabilisers utilise a complex, yet highly reliable, electronic design principle to increase or reduce the magnitude of the voltage in a series transformer winding, thereby delivering and maintaining a constant output voltage. The arrangement is realised using Pulse Width Modulation technique. The duty ratio of the PWM signal decide the magnitude of the voltage in the series winding to increase or decrease. For example, when the input voltage drops, the duty ratio increase to make up the voltage drop.

Intact Controls

Solid State Automatic Voltage Stabilizer

Technical Specifications

Input Swing Range Available (*) *(To Specify)*	± 10%, ± 15%, ± 20% 3 Phase 4 Wire (3P+N),Single Phase 2 Wire (1P+N)
Output Voltage	Presettable for any voltage between 220/127V; 380/220V; 400/230V; 415/240V; 480/277V; 600/346V; 690/399V
Output Voltage Accuracy	± 0.5%
Frequency	47 – 65 Hz
Response Time	<1.5ms
Correction Time	3 ~ 5 cycles
Efficiency	95%
Power Factor	Any lagging to 0.95 leading
Surge ratings	10 x max current rating for 2 seconds 3 x max current rating for 1 minutes 2 x max current rating for 5 minutes
Surge Suppression	Protect loads against high-energy spikes and transient voltage.(optional)
Noise Attenuation Transverse noise	60db@100khz

Environment	Temperature range –15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C. Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m.Derate by 2.5% for each additional 500m.
Standard Features	Loss of Phase & Phase Reversal Alarms Over Temperature Alarm Over Voltage & Low Voltage Alarms Voltmeter/selector switch Ammeter/selector switch Provide No-volt free contact (N.C & N.O)
Construction	IP-20,IP-44,IP-55
EMC Conformance	BS EN50081-1;2 / IEC 61000-4-3;4
Warranty	One Year
Optional Accessories	Input circuit breaker Output circuit breaker Over/Low voltage protection Phase failure protection Frequency meter Manual maintenance bypass switch

Three Phase Stabilizer

Voltage Range: 200/115V, 208/120V, 220/127V, 380/220V, 400/230V, 415/240V, 440/254V, 480/277V 600/346V,690/399V

Model. No.	Power	Overall Dimensions (mm)			Total Wt.
	(KVA)	(H)	(W)	(D)	Kg.
SS3-3K	3.0	1310	520	640	35.6
SS3-5K	5.0	1310	520	640	45.0
SS3-10K	10.0	1310	520	640	182.0
SS3-15K	15.0	1840	670	820	197.0
SS3-25K	25.0	1840	670	820	215.0
SS3-50K	50.0	1920	720	860	256.0
SS3-60K	60.0	1920	720	860	264.0
SS3-80K	80.0	1920	720	860	284.0
SS3-100K	100.0	2100	790	900	335.0

Note : Tolerance on the given dimension ±2mm ;

Single Phase Stabilizer

Voltage Range: 110,120,127,200, 208, 220, 230, 240,

Model. No.	Power	Overall Dimensions (mm)			Total Wt.
	(KVA)	(H)	(W)	(D)	Kg.
SS-1K	1.0	860	480	680	35.6
SS-1K5	1.5	860	480	680	45.0
SS-3K	3.0	860	480	680	78.0
SS-5K	5.0	860	480	690	95.0
SS-7K5	7.5	900	690	490	105.0
SS-10K	10.0	900	690	490	105.0