

## AC Automatic Voltage Stabilisers & Regulators

**Cost Efficient Voltage Stabilisation Solutions with Fast Speed of Response and High Output Voltage Accuracy**

AC mains voltage fluctuations can cause equipment to behave erratically and malfunction. Some systems may even break down due to these fluctuations, noise or spikes. Failure to ensure the incoming mains voltage is stable and clean, can often result in costly equipment repairs.

Ashley-Edison, utilizing **Advanced Digital Controller** for our Electromechanical / Electronic Servo **SES Series** Voltage Stabilisers, are designed to ensure that, should the incoming mains voltage drift high or low, the output voltage remains constant continuously. Characterised by high efficiency, they are completely unaffected by Power Factor, Load and Frequency variations. They are capable of withstanding high instantaneous overloads and do not generate any magnetic interference. Compact in size, quiet in operation, these Voltage Stabilisers are suitable for indoor use and may be located near to sensitive equipment. Our Voltage Stabilisers are equipped with **Bypass Control Switches**. These switches can be activated when required.

**Soft Switch-ON** feature will ensure that the Voltage Stabiliser is at its minimum upon switch-on before it commence full stabilization. Lack of this feature may cause high output voltage surge in stabiliser.



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### Models:

#### (LY) Models

200/115V; 208/120V or 220/127V  
(Three Phase) (Wye)

#### (LD) Models

200V; 208V or 220V  
(Three Phase) (Delta)

### Features:

- **Wide Range of Voltage Stabiliser**  
Three Phase Up to 500KVA
- **Input Swing Range**  
Input Swing Range Available from  $\pm 15\%$ ,  $\pm 20\%$ ,  $\pm 25\%$ , (To Specify)
- **Output Voltage Regulation**  
(LY) Output Voltage Accuracy  $\pm 0.5\%$ ,  
(LD) Output Voltage Accuracy  $\pm 1\%$ ,
- **High Efficiency**  
Better than 98%
- **Independent Phase Control Circuit**  
Sensing on all Individual Three Phases
- **Soft Switch-ON**  
Ensure that the Voltage Stabiliser is at its minimum before it commence full stabilization
- **Standard Protection Features**  
Input circuit breaker  
Over/low voltage protection  
Phase-failure protection  
Bypass control switch  
Voltmeter / Selector Switch( Internal)
- **Optional Accessories**  
Output circuit breaker  
Ammeter/selector switch  
Frequency meter  
Manual maintenance bypass switch  
Lightning arrester
- **Compliance with International Standards**  
BS EN50081-1;2/IEC 61000-4-3;4  
BS EN5490/IEC 60529
- **CE Conformity**  
EN55022, EN50082-2, ENV50140-1
- **Warranty**  
2 Years

### Applications:

- Computers
- Medical Equipment
- Electronics Equipment
- Testing Equipment
- Laboratory Equipment
- POS Terminals
- Process Control Systems
- TV/Radio Broadcasting Stations
- Elevators
- Audio/Video Systems
- Security Systems
- Production Line
- CNC Equipment
- SMT Equipment



### AC Automatic Voltage Stabilisers & Regulators

#### Technical Specifications

|                                  |   |
|----------------------------------|---|
| <b>Input Voltage</b>             | 208/120VAC ± 15% 3 Phase 4 Wire (3P+N) (Wye)  |
| <b>Output Voltage</b>            | (Pre-settable for any voltage between 200/115V; 208/120V or 220/127V (3P+N) (Wye)                                     |
| <b>Output Voltage Accuracy</b>   | ± 0.5%  |
| <b>Frequency</b>                 | 47 – 65 Hz  |
| <b>Response Time</b>             | <1.5ms  |
| <b>Correction Time</b>           | A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.   |
| <b>Efficiency</b>                | 98%   |
| <b>Power Factor</b>              | Any lagging to 0.95 leading   |
| <b>Surge ratings</b>             | 10 x max current rating for 2 seconds<br>3 x max current rating for 1 minutes<br>2 x max current rating for 5 minutes |
| <b>Surge Suppression</b>         | Protect loads against high-energy spikes and transient voltage.   |
| <b>Total Harmonic Distortion</b> | <1%   |
| <b>Independent Phase Control</b> | Maintain each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.                    |

|   |  |
|---|--|
| <b>Soft Switch-ON</b>   | Ensure that the output voltage is at its minimum upon Switch-On before it commence full stabilization  |
| <b>Environment</b>  | 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. |
| <b>Standard Features</b>  | Input circuit breaker<br>Over/Low voltage protection<br>Phase failure protection<br>Bypass control switch<br>Voltmeter/selector switch (internal)  |
| <b>Construction</b>   | Enclosures to IP20, BS EN5490 / IEC 60529  |
| <b>EMC Conformance</b>  | BS EN50081-1;2 / IEC 61000-4-3;4   |
| <b>CE Conformity</b>  | EN55022, EN50082-2, ENV50140-1   |
| <b>Optional Accessories</b>   | Output circuit breaker<br>Ammeter/selector switch<br>Frequency meter<br>Lightning arrester<br>Manual maintenance bypass switch   |
| Note: Optional accessories added may affect dimension, subject to confirmation.                               |  |
| Note: 1) Special voltage configurations available on order<br>2) Higher KVA rating options available on order |  |



#### Three Phase Model: SES-LY-3P-S15

| Model:           | Rating KVA | Amps @ 200V | Amps @ 208V | Amps @ 220V | Dimensions (mm) W x H x D | Weight (Kgs) |
|------------------|------------|-------------|-------------|-------------|---------------------------|--------------|
| SES 6LY-3P-S15   | 6          | 17          | 16.7        | 15.7        | 300 x 550 x 590           | 65           |
| SES 10LY-3P-S15  | 10         | 28.8        | 27.7        | 26          | 300 x 550 x 590           | 66           |
| SES 15LY-3P-S15  | 15         | 43.3        | 41.6        | 39          | 300 x 550 x 590           | 74           |
| SES 20LY-3P-S15  | 20         | 58          | 56          | 53          | 300 x 550 x 590           | 81           |
| SES 30LY-3P-S15  | 30         | 87          | 83          | 79          | 300 x 550 x 590           | 91           |
| SES 45LY-3P-S15  | 45         | 130         | 125         | 118         | 380 x 670 x 780           | 144          |
| SES 60LY-3P-S15  | 60         | 173         | 167         | 157         | 490 x 800 x 990           | 166          |
| SES 75LY-3P-S15  | 75         | 217         | 208         | 197         | 500 x 900 x 1000          | 223          |
| SES 100LY-3P-S15 | 100        | 289         | 278         | 262         | 500 x 900 x 1000          | 260          |
| SES 120LY-3P-S15 | 120        | 346         | 333         | 315         | 1000 x 1300 x 580         | 410          |
| SES 150LY-3P-S15 | 150        | 433         | 416         | 394         | 1000 x 1300 x 580         | 650          |
| SES 180LY-3P-S15 | 180        | 520         | 500         | 472         | 1000 x 1300 x 580         | 700          |
| SES 200LY-3P-S15 | 200        | 577         | 555         | 523         | 1000 x 1300 x 580         | 750          |
| SES 250LY-3P-S15 | 250        | 722         | 694         | 656         | 1280 x 1950 x 820         | 900          |
| SES 300LY-3P-S15 | 300        | 866         | 833         | 787         | 1280 x 1950 x 820         | 960          |
| SES 400LY-3P-S15 | 400        | 1155        | 1110        | 1050        | 1280 x 1950 x 1200        | 1420         |
| SES 500LY-3P-S15 | 500        | 1443        | 1388        | 1312        | 1280 x 1950 x 1200        | 1550         |

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### AC Automatic Voltage Stabilisers & Regulators

#### Technical Specifications

|                                  |   |   |  |
|----------------------------------|---|---|--|
| <b>Input Voltage</b>             | 208VAC ± 15% 3 Phase 3Wire (3P3W) (Delta)   | <b>Soft Switch-ON</b>   | Ensure that the output voltage is at its minimum upon Switch-On before it commence full stabilization  |
| <b>Output Voltage</b>            | (Pre-settable for any voltage between 200V; 208V or 220V (3P3W) (Delta)   | <b>Environment</b>  | 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. |
| <b>Output Voltage Accuracy</b>   | ± 1%  | <b>Standard Features</b>  | Input circuit breaker<br>Over/Low voltage protection<br>Phase failure protection<br>Bypass control switch<br>Voltmeter/selector switch (internal)  |
| <b>Frequency</b>                 | 47 – 65 Hz  | <b>Construction</b>   | Enclosures to IP20, BS EN5490 / IEC 60529  |
| <b>Response Time</b>             | <1.5ms  | <b>EMC Conformance</b>  | BS EN50081-1;2 / IEC 61000-4-3;4   |
| <b>Correction Time</b>           | A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.   | <b>CE Conformity</b>  | EN55022, EN50082-2, ENV50140-1   |
| <b>Efficiency</b>                | 98%   | <b>Optional Accessories</b>   | Output circuit breaker<br>Ammeter/selector switch<br>Frequency meter<br>Lightning arrester<br>Manual maintenance bypass switch   |
| <b>Power Factor</b>              | Any lagging to 0.95 leading   | Note: Optional accessories added may affect dimension, subject to confirmation.                               |  |
| <b>Surge ratings</b>             | 10 x max current rating for 2 seconds<br>3 x max current rating for 1 minutes<br>2 x max current rating for 5 minutes | Note: 1) Special voltage configurations available on order<br>2) Higher KVA rating options available on order |  |
| <b>Surge Suppression</b>         | Protect loads against high-energy spikes and transient voltage.   |   |  |
| <b>Total Harmonic Distortion</b> | <1%   |   |  |
| <b>Independent Phase Control</b> | Maintain each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.                    |   |  |

#### Three Phase Model: SES-LD-3P-S15

| Model:           | Rating KVA | Amps @ 200V | Amps @ 208V | Amps @ 220V | Dimensions (mm) W x H x D | Weight (Kgs) |
|------------------|------------|-------------|-------------|-------------|---------------------------|--------------|
| SES 6LD-3P-S15   | 6          | 17          | 16.7        | 15.7        | 300 x 550 x 590           | 64           |
| SES 10LD-3P-S15  | 10         | 28.8        | 27.7        | 26          | 300 x 550 x 590           | 65           |
| SES 15LD-3P-S15  | 15         | 43.3        | 41.6        | 39          | 300 x 550 x 590           | 74           |
| SES 20LD-3P-S15  | 20         | 58          | 56          | 53          | 300 x 550 x 590           | 79           |
| SES 30LD-3P-S15  | 30         | 87          | 83          | 79          | 300 x 550 x 590           | 94           |
| SES 45LD-3P-S15  | 45         | 130         | 125         | 118         | 380 x 670 x 780           | 142          |
| SES 60LD-3P-S15  | 60         | 173         | 167         | 157         | 380 x 670 x 780           | 166          |
| SES 75LD-3P-S15  | 75         | 217         | 208         | 197         | 490 x 800 x 990           | 225          |
| SES 100LD-3P-S15 | 100        | 289         | 278         | 262         | 490 x 800 x 990           | 255          |
| SES 120LD-3P-S15 | 120        | 346         | 333         | 315         | 500 x 900 x 1000          | 308          |
| SES 150LD-3P-S15 | 150        | 433         | 416         | 394         | 500 x 900 x 1000          | 350          |
| SES 180LD-3P-S15 | 180        | 520         | 500         | 472         | 1000 x 1300 x 580         | 500          |
| SES 200LD-3P-S15 | 200        | 577         | 555         | 523         | 1000 x 1300 x 580         | 545          |
| SES 250LD-3P-S15 | 250        | 722         | 694         | 656         | 1280 x 1380 x 660         | 755          |
| SES 300LD-3P-S15 | 300        | 866         | 833         | 787         | 1280 x 1380 x 660         | 830          |
| SES 400LD-3P-S15 | 400        | 1155        | 1110        | 1050        | 1280 x 1950 x 820         | 1030         |
| SES 500LD-3P-S15 | 500        | 1443        | 1388        | 1312        | 1280 x 1950 x 820         | 1080         |

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