

SES H SERIES - THREE PHASE - 6 to 600 kVA

COST EFFICIENT VOLTAGE STABILISATION
with fast speed of response, high output voltage accuracy and inbuilt energy saving ability.

FEATURES

- **Automatic Voltage Regulation**
Step less automated voltage regulation - ideal for 95% of all applications.
- **Wide Range of Power Ratings**
Three Phase 6 to 600 KVA
- **Broad Input Voltage Swing Ranges**
Input Swing - $\pm 15\%$ (S15), $\pm 20\%$ (S20), $\pm 25\%$ (S25), $\pm 30\%$ (S30), $\pm 35\%$ (S35) & $\pm 40\%$ (S40) - to specify.
- **Precise Output Voltage Regulation**
Output Voltage Accuracy $\pm 0.5\%$ / $\pm 1.1\%$
- **Transient Voltage Surge Suppression**
TVSS - Protects loads against harmful high-energy surges, transients and spikes.
- **High Efficiency**
Better than 98% for low running costs.



SERVO ELECTRONIC DESIGN
AC VOLTAGE STABILISERS & REGULATORS
AC THREE PHASE - 6 TO 600 kVA

380/220V - 400/230V - 415/240V - 50 or 60Hz

SES
4 WIRE - WITH NEUTRAL
H - THREE PHASE

ENSURING A STABLE AC MAINS VOLTAGE

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 and unplanned down-time.

Ashley-Edison AC Voltage Stabilisers offer -

- **Voltage Stability & Protection**
Suitable for all electrical and electronic equipment, Ashley-Edison's SES AC Voltage Stabilisers continuously monitor the incoming supply. Should the incoming voltage rise or drop, the Stabilisers will automatically control the output to ensure the voltage reaching the load equipment always remains constant at the requisite voltage. With inbuilt Transient Voltage Surge Suppression (TVSS), they also protect electrical and electronic load equipment against, all too common, harmful high-energy surges, transients and voltage spikes.
- **Durability & Dependability**
With an impressively wide range of input voltage window options and precise tight output voltage regulation, the electro-mechanical / servo electronic design based SES Voltage Stabilisers have repeatedly proven their durability and dependability in some of the world's harshest and most demanding power environments. All SES AC Voltage Stabilisers include as standard many advanced protection and control features - such as Independent Phase Sensing, TVSS, Input Circuit Breaker, Bypass Control Switch and Soft-Switch On, which others only offer as expensive add-on options.
- **Energy Efficiency**
Configured to optimise energy usage and deliver energy cost savings, SES Stabilisers generate no magnetic interference, are completely unaffected by power factor, or load and frequency variations and are capable of withstanding high instantaneous overloads. Their compact and quiet nature means these they are suitable for indoor use and may be located near to sensitive equipment.
- **Unparalleled Protection and Value**
When looking for affordable durable Quality voltage protection, the SES Range of AC Voltage Stabilisers from Ashley-Edison lead the market in all respects.
- **Independent Phase Balancing & Control**
Independent phase voltage sensing and control to ensure the individual phase voltages remain stable - regardless of load unbalance .
- **Inbuilt High Overload Capability**
Ideal for loads with an inherent initial high current draw on start up.
- **Soft-Switch On / Start Up Load Protection**
Protection of the load from momentary over voltage situations on start up.
- **Over / Low Voltage Protection**
Ability to automatically shutdown the Voltage Stabiliser in the event of the input supply voltage going outside the input voltage window.
- **Bypass Control Switch**
Manual Electronic Controls Bypass Facility
- **Phase Failure Protection**
Protection of the load in the event of phase failure.
- **Front Panel Status Monitoring & Metering**
Front Panel display showing system status with internal output Voltmeter with phase selector switch.
- **Input Circuit Breaker**
Input over current protection fitted as standard.
- **Optional Accessories**
Output Circuit Breaker, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & Lightning Arrestors.
- **Compliance with International Standards**
Designed, manufactured and supplied to comply with leading international standards
- **CE Conformity**
Fully compliant and labelled

VOLTAGE CHOICES AVAILABLE

Also available as 3 Wire Solutions (No Neutral) - **SES-HD & LD SERIES**

4 WIRE SOLUTIONS

THREE PHASE WITH NEUTRAL (+ GROUND)

H SERIES

6 to 600 kVA

High Voltage Models:

380/220V, 400/230V or 415/240V.

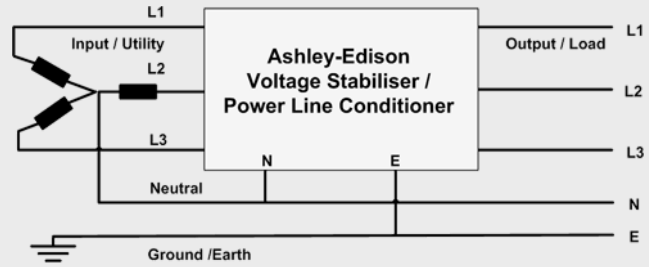
X468 Models: 440/254V, 460/265V or 480V277V

LY SERIES

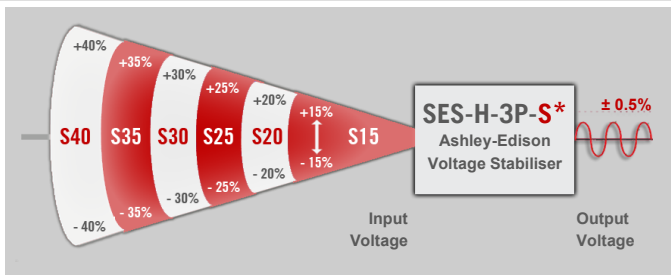
6 to 200kVA

Low Voltage Models:

190/110V, 200/115V, 208/120V or 220/127V.



H SERIES INPUT VOLTAGE WINDOW OPTIONS



In situations where there is a reasonably good mains supply, a Stabiliser offering an input variation swing of $\pm 15\%$ (**S15 Models**) will usually be more than acceptable, but in more remote locations, or countries where the national supply infrastructure is less developed, variations of $\pm 20\%$ or greater may be needed to be accommodated by the Stabiliser.

Please Note – These Stabilisers are not designed to support / protect voltage “back feed” applications, where energy is required to be also fed back into the utility supply.

H SERIES - SES-H-3P-S* Input Voltage Windows & Output Accuracy

Nominal Three Phase Voltage	Output Voltage Accuracy $\pm\%$ of Nominal	INPUT VOLTAGE SWINGS / SWING MODEL NO S* VARIANTS											
		S15		S20		S25		S30		S35		S40	
		6 to 600 kVA		6 to 600 kVA		6 to 500 kVA		6 to 400 kVA		6 to 300 kVA		6 to 300 kVA	
Readings		L-L	L-N	L-L	L-N	L-L	L-N	L-L	L-N	L-L	L-N	L-L	L-N
380V L-N: 220V	$\pm 0.5\%$	323 to 437V ($\pm 15\%$)	187 to 253V	304 to 456V ($\pm 20\%$)	176 to 264V	285 to 475V ($\pm 25\%$)	165 to 275V	266 to 494V ($\pm 30\%$)	154 to 286V	247 to 513V ($\pm 35\%$)	143 to 297V	228 to 532V ($\pm 40\%$)	132 to 308V
	$\pm 3\%$	315 to 448V (-17% / +18%)	183 to 260V	296 to 467V (-22% / +23%)	172 to 271V	277 to 486V (-27% / +28%)	161 to 282V	258 to 505V (-32% / +33%)	150 to 293V	239 to 524V (-37% / +38%)	139 to 304V	220 to 543V (-42% / +43%)	128 to 315V
	$\pm 5\%$	308 to 460V (-19% / +21%)	178 to 266V	289 to 479V (-24% / +26%)	167 to 277V	270 to 498V (-29% / +31%)	156 to 288V	251 to 517V (-34% / +36%)	145 to 299V	232 to 536V (-39% / +41%)	134 to 310V	213 to 555V (-44% / +46%)	123 to 321V
400V L-N: 230V	$\pm 0.5\%$	340 to 460V ($\pm 15\%$)	196 to 265V	320 to 480V ($\pm 20\%$)	184 to 276V	300 to 500V ($\pm 25\%$)	173 to 288V	280 to 520V ($\pm 30\%$)	161 to 299V	260 to 540V ($\pm 35\%$)	150 to 311V	240 to 560V ($\pm 40\%$)	138 to 322V
	$\pm 3\%$	332 to 472V (-17% / +18%)	191 to 271V	312 to 492V (-22% / +23%)	179 to 283V	292 to 512V (-27% / +28%)	168 to 294V	272 to 532V (-32% / +33%)	156 to 306V	252 to 552V (-37% / +38%)	145 to 317V	232 to 572V (-42% / +43%)	133 to 329V
	$\pm 5\%$	324 to 484V (-19% / +21%)	186 to 278V	304 to 504V (-24% / +26%)	175 to 290V	284 to 524V (-29% / +31%)	163 to 301V	264 to 544V (-34% / +36%)	152 to 313V	244 to 564V (-39% / +41%)	140 to 324V	224 to 584V (-44% / +46%)	129 to 336V
415V L-N: 240V	$\pm 0.5\%$	353 to 477V ($\pm 15\%$)	204 to 276V	332 to 498V ($\pm 20\%$)	192 to 288V	311 to 519V ($\pm 25\%$)	180 to 300V	291 to 540V ($\pm 30\%$)	168 to 312V	270 to 560V ($\pm 35\%$)	156 to 324V	249 to 581V ($\pm 40\%$)	144 to 336V
	$\pm 3\%$	344 to 490V (-17% / +18%)	199 to 283V	324 to 510V (-22% / +23%)	187 to 295V	303 to 531V (-27% / +28%)	175 to 307V	282 to 552V (-32% / +33%)	163 to 319V	261 to 573V (-37% / +38%)	151 to 331V	241 to 593V (-42% / +43%)	139 to 343V
	$\pm 5\%$	336 to 502V (-19% / +21%)	194 to 290V	315 to 523V (-24% / +26%)	182 to 302V	295 to 544V (-29% / +31%)	170 to 314V	274 to 564V (-34% / +36%)	158 to 326V	253 to 585V (-39% / +41%)	146 to 338V	232 to 606V (-44% / +46%)	134 to 350V

TYPICAL APPLICATIONS

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



TECHNICAL SPECIFICATION

Technology:	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
Input Voltage Swing:	±15% (or -17% +18% or -19% +21%) Three Phase, 4 Wire (with Neutral + Ground / Earth).
Output Voltage:	Presetable for any voltage between 380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. 440/254V, 460/265V & 480/277V models available on request. The permissible input voltage swing is relative to the preset output voltage.
Output Voltage Accuracy:	± 0.5%, ± 3% or ± 5% - auto selection based on input voltage swing.
Frequency:	47 - 65Hz
Response Time:	<1.5ms
Correction Time:	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.
Efficiency:	98%
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 minute 2 x max. current rating for 2 minutes
Surge Suppression:	TVSS - Protects loads against high-energy Spikes and Transient Voltages.
Total Harmonic Distortion:	Less than 1%
Independent Phase Control:	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
Soft-Switch On:	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.

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.
Construction:	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529.
Paint Colour:	RAL 7032 (Grey - Epoxy Powder Coating)
EMC Conformance:	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
CE Conformity:	CE Marked - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
Standard Warranty:	Three Years / 36 Months from date of supply
Standard Features:	Input Circuit Breaker Over/Low Voltage Protection Phase Failure Protection Bypass Control Switch Voltmeter / Phase Selector Switch (internal)
Optional Accessories:	Output Circuit Breaker Manual Maintenance Bypass Switch Ammeter (with Phase Selector Switch) Lightning Surge Arrestors No Volt Remote Monitoring Contacts Drip Proof Cowl for IP21 Ingress Protection Digital Power Metering (with RS-485 interface) - showing V, A, W, VA, AER, PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
Optional Step Down Voltage Feature:	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see SES-HL SERIES Step Down AC Voltage Stabilisers.
Optional Isolation Transformer:	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see PCS-H SERIES AC Power Conditioners.

Note: Optional Accessories added may affect dimensions - subject to confirmation.

S15 PRODUCT SELECTION TABLE

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-6H-3P-S15	6	9.1	8.7	8.3	300 x 550 x 590	62	331
SES-10H-3P-S15	10	15.2	14.4	13.9	300 x 550 x 590	63	331
SES-15H-3P-S15	15	22.8	21.6	20.9	300 x 550 x 590	73	331
SES-20H-3P-S15	20	30.4	28.9	27.8	300 x 550 x 590	77	331
SES-25H-3P-S15	25	38	36.1	35	300 x 550 x 590	86	331
SES-30H-3P-S15	30	46	43	42	300 x 550 x 590	87	331
SES-35H-3P-S15	35	53	51	49	380 x 670 x 780	130	332
SES-40H-3P-S15	40	61	58	56	380 x 670 x 780	131	332
SES-45H-3P-S15	45	68	65	63	380 x 670 x 780	132	332
SES-50H-3P-S15	50	76	72	70	380 x 670 x 780	134	332
SES-55H-3P-S15	55	84	79	77	380 x 670 x 780	143	332
SES-60H-3P-S15	60	91	87	83	380 x 670 x 780	144	332
SES-75H-3P-S15	75	114	108	104	490 x 800 x 990	209	333
SES-80H-3P-S15	80	122	115	111	490 x 800 x 990	240	333

Note: Higher kVA and alternative voltage options available to order / individual request.

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **0SES SERIES**

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-90H-3P-S15	90	137	130	125	490 x 800 x 990	242	333
SES-100H-3P-S15	100	152	144	139	490 x 800 x 990	244	333
SES-120H-3P-S15	120	182	173	167	540 x 900 x 1000	285	334
SES-150H-3P-S15	150	228	216	209	540 x 900 x 1000	311	334
SES-180H-3P-S15	180	273	260	250	1000 x 1300 x 580	465	335
SES-200H-3P-S15	200	304	289	278	1000 x 1300 x 580	500	335
SES-250H-3P-S15	250	380	361	348	1280 x 1480 x 660	710	336
SES-300H-3P-S15	300	456	433	417	1280 x 1480 x 660	810	336
SES-350H-3P-S15	350	532	505	487	1280 x 1950 x 880	960	337
SES-400H-3P-S15	400	608	577	556	1280 x 1950 x 880	980	337
SES-450H-3P-S15	450	684	649	626	1280 x 1950 x 880	1010	337
SES-500H-3P-S15	500	760	722	695	1280 x 1950 x 880	1030	337
SES-600H-3P-S15	600	911	866	835	1340 x 1950 x 1280	1420	338

TECHNICAL SPECIFICATION

Technology:	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
Input Voltage Swing:	±20% (or -22% +23% or -24% +26%) Three Phase, 4 Wire (with Neutral + Ground / Earth).
Output Voltage:	Presetable for any voltage between 380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. 440/254V, 460/265V & 480/277V models available on request. The permissible input voltage swing is relative to the preset output voltage.
Output Voltage Accuracy:	± 0.5%, ± 3% or ± 5% - auto selection based on input voltage swing.
Frequency:	47 - 65Hz
Response Time:	<1.5ms
Correction Time:	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.
Efficiency:	98%
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 minute 2 x max. current rating for 2 minutes
Surge Suppression:	TVSS - Protects loads against high-energy Spikes and Transient Voltages.
Total Harmonic Distortion:	Less than 1%
Independent Phase Control:	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
Soft-Switch On:	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.

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.
Construction:	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529.
Paint Colour:	RAL 7032 (Grey - Epoxy Powder Coating)
EMC Conformance:	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
CE Conformity:	CE Marked - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
Standard Warranty:	Three Years / 36 Months from date of supply
Standard Features:	Input Circuit Breaker Over/Low Voltage Protection Phase Failure Protection Bypass Control Switch Voltmeter / Phase Selector Switch (internal)
Optional Accessories:	Output Circuit Breaker Manual Maintenance Bypass Switch Ammeter (with Phase Selector Switch) Lightning Surge Arrestors No Volt Remote Monitoring Contacts Drip Proof Cowl for IP21 Ingress Protection Digital Power Metering (with RS-485 interface) - showing V, A, W, VA, AER, PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
Optional Step Down Voltage Feature:	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see SES-HL SERIES Step Down AC Voltage Stabilisers.
Optional Isolation Transformer:	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see PCS-H SERIES AC Power Conditioners.

Note: Optional Accessories added may affect dimensions - subject to confirmation.

S20 PRODUCT SELECTION TABLE

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-6H-3P-S20	6	9.1	8.7	8.3	300 x 550 x 590	71	331
SES-10H-3P-S20	10	15.2	14.4	13.9	300 x 550 x 590	72	331
SES-15H-3P-S20	15	22.8	21.6	20.9	300 x 550 x 590	78	331
SES-20H-3P-S20	20	30.4	28.9	27.8	300 x 550 x 590	89	331
SES-25H-3P-S20	25	38	36.1	35	380 x 670 x 780	123	332
SES-30H-3P-S20	30	46	43	42	380 x 670 x 780	125	332
SES-35H-3P-S20	35	53	51	49	380 x 670 x 780	141	332
SES-40H-3P-S20	40	61	58	56	380 x 670 x 780	143	332
SES-45H-3P-S20	45	68	65	63	380 x 670 x 780	145	332
SES-50H-3P-S20	50	76	72	70	490 x 800 x 990	200	333
SES-55H-3P-S20	55	84	79	77	490 x 800 x 990	213	333
SES-60H-3P-S20	60	91	87	83	490 x 800 x 990	215	333
SES-75H-3P-S20	75	114	108	104	490 x 800 x 990	250	333
SES-80H-3P-S20	80	122	115	111	540 x 900 x 1000	276	334

Note: Higher kVA and alternative voltage options available to order / individual request.

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **0SES SERIES**

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-90H-3P-S20	90	137	130	125	540 x 900 x 1000	278	334
SES-100H-3P-S20	100	152	144	139	540 x 900 x 1000	280	334
SES-120H-3P-S20	120	182	173	167	1000 x 1300 x 580	450	335
SES-150H-3P-S20	150	228	216	209	1000 x 1300 x 580	530	335
SES-180H-3P-S20	180	273	260	250	1000 x 1300 x 580	560	335
SES-200H-3P-S20	200	304	289	278	1280 x 1480 x 660	750	336
SES-250H-3P-S20	250	380	361	348	1280 x 1950 x 880	900	337
SES-300H-3P-S20	300	456	433	417	1280 x 1950 x 880	980	337
SES-350H-3P-S20	350	532	505	487	1340 x 1950 x 1280	1200	338
SES-400H-3P-S20	400	608	577	556	1340 x 1950 x 1280	1220	338
SES-450H-3P-S20	450	684	649	626	1340 x 1950 x 1280	1430	338
SES-500H-3P-S20	500	760	722	695	1340 x 1950 x 1280	1450	338
SES-600H-3P-S20	600	911	866	835	1340 x 1950 x 1280	1510	338

TECHNICAL SPECIFICATION

Technology:	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
Input Voltage Swing:	±25% (or -27% +28% or -29% +31%) Three Phase, 4 Wire (with Neutral + Ground / Earth).
Output Voltage:	Presetable for any voltage between 380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. 440/254V, 460/265V & 480/277V models available on request. The permissible input voltage swing is relative to the preset output voltage.
Output Voltage Accuracy:	± 0.5%, ± 3% or ± 5% - auto selection based on input voltage swing.
Frequency:	47 - 65Hz
Response Time:	<1.5ms
Correction Time:	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.
Efficiency:	98%
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 minute 2 x max. current rating for 2 minutes
Surge Suppression:	TVSS - Protects loads against high-energy Spikes and Transient Voltages.
Total Harmonic Distortion:	Less than 1%
Independent Phase Control:	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
Soft-Switch On:	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.

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.
Construction:	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529.
Paint Colour:	RAL 7032 (Grey - Epoxy Powder Coating)
EMC Conformance:	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
CE Conformity:	CE Marked - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
Standard Warranty:	Three Years / 36 Months from date of supply
Standard Features:	Input Circuit Breaker Over/Low Voltage Protection Phase Failure Protection Bypass Control Switch Voltmeter / Phase Selector Switch (internal)
Optional Accessories:	Output Circuit Breaker Manual Maintenance Bypass Switch Ammeter (with Phase Selector Switch) Lightning Surge Arrestors No Volt Remote Monitoring Contacts Drip Proof Cowl for IP21 Ingress Protection Digital Power Metering (with RS-485 interface) - showing V, A, W, VA, AER, PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
Optional Step Down Voltage Feature:	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see SES-HL SERIES Step Down AC Voltage Stabilisers.
Optional Isolation Transformer:	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see PCS-H SERIES AC Power Conditioners.

Note: Optional Accessories added may affect dimensions - subject to confirmation.

S25 PRODUCT SELECTION TABLE

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-6H-3P-S25	6	9.1	8.7	8.3	300 x 550 x 590	74	331
SES-10H-3P-S25	10	15.2	14.4	13.9	300 x 550 x 590	75	331
SES-15H-3P-S25	15	22.8	21.6	20.9	300 x 550 x 590	87	331
SES-20H-3P-S25	20	30.4	28.9	27.8	380 x 670 x 780	123	332
SES-25H-3P-S25	25	38	36.1	35	380 x 670 x 780	145	332
SES-30H-3P-S25	30	46	43	42	380 x 670 x 780	147	332
SES-35H-3P-S25	35	53	51	49	490 x 800 x 990	206	333
SES-40H-3P-S25	40	61	58	56	490 x 800 x 990	208	333
SES-45H-3P-S25	45	68	65	63	490 x 800 x 990	210	333
SES-50H-3P-S25	50	76	72	70	490 x 800 x 990	220	333
SES-55H-3P-S25	55	84	79	77	490 x 800 x 990	265	333
SES-60H-3P-S25	60	91	87	83	490 x 800 x 990	267	333
SES-75H-3P-S25	75	114	108	104	540 x 900 x 1000	311	334

Note: Higher kVA and alternative voltage options available to order / individual request.

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **0SES SERIES**

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-80H-3P-S25	80	122	115	111	1000 x 1300 x 580	479	335
SES-90H-3P-S25	90	137	130	125	1000 x 1300 x 580	482	335
SES-100H-3P-S25	100	152	144	139	1000 x 1300 x 580	485	335
SES-120H-3P-S25	120	182	173	167	1000 x 1300 x 580	520	335
SES-150H-3P-S25	150	228	216	209	1280 x 1480 x 660	750	336
SES-180H-3P-S25	180	273	260	250	1280 x 1950 x 880	900	337
SES-200H-3P-S25	200	304	289	278	1280 x 1950 x 880	950	337
SES-250H-3P-S25	250	380	361	348	1280 x 1950 x 880	1010	337
SES-300H-3P-S25	300	456	433	417	1340 x 1950 x 1280	1350	338
SES-350H-3P-S25	350	532	505	487	1340 x 1950 x 1280	1450	338
SES-400H-3P-S25	400	608	577	556	1340 x 1950 x 1280	1480	338
SES-450H-3P-S25	450	684	649	626	1340 x 1950 x 1280	1790	338
SES-500H-3P-S25	500	760	722	695	1340 x 1950 x 1280	1800	338

TECHNICAL SPECIFICATION

Technology:	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
Input Voltage Swing:	±30% (or -32% +33% or -34% +36%) Three Phase, 4 Wire (with Neutral + Ground / Earth).
Output Voltage:	Presetable for any voltage between 380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. 440/254V, 460/265V & 480/277V models available on request. The permissible input voltage swing is relative to the preset output voltage.
Output Voltage Accuracy:	± 0.5%, ± 3% or ± 5% - auto selection based on input voltage swing.
Frequency:	47 - 65Hz
Response Time:	<1.5ms
Correction Time:	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.
Efficiency:	98%
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 minute 2 x max. current rating for 2 minutes
Surge Suppression:	TVSS - Protects loads against high-energy Spikes and Transient Voltages.
Total Harmonic Distortion:	Less than 1%
Independent Phase Control:	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
Soft-Switch On:	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.

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.
Construction:	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529.
Paint Colour:	RAL 7032 (Grey - Epoxy Powder Coating)
EMC Conformance:	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
CE Conformity:	CE Marked - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
Standard Warranty:	Three Years / 36 Months from date of supply
Standard Features:	Input Circuit Breaker Over/Low Voltage Protection Phase Failure Protection Bypass Control Switch Voltmeter / Phase Selector Switch (internal)
Optional Accessories:	Output Circuit Breaker Manual Maintenance Bypass Switch Ammeter (with Phase Selector Switch) Lightning Surge Arrestors No Volt Remote Monitoring Contacts Drip Proof Cowl for IP21 Ingress Protection Digital Power Metering (with RS-485 interface) - showing V, A, W, VA, AER, PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
Optional Step Down Voltage Feature:	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see SES-HL SERIES Step Down AC Voltage Stabilisers.
Optional Isolation Transformer:	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see PCS-H SERIES AC Power Conditioners.

Note: Optional Accessories added may affect dimensions - subject to confirmation.

S30 PRODUCT SELECTION TABLE

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-6H-3P-S30	6	9.1	8.7	8.3	300 x 550 x 590	82	331
SES-10H-3P-S30	10	15.2	14.4	13.9	300 x 550 x 590	83	331
SES-15H-3P-S30	15	22.8	21.6	20.9	380 x 670 x 780	123	332
SES-20H-3P-S30	20	30.4	28.9	27.8	380 x 670 x 780	135	332
SES-25H-3P-S30	25	38	36.1	35	490 x 800 x 990	203	333
SES-30H-3P-S30	30	46	43	42	490 x 800 x 990	205	333
SES-35H-3P-S30	35	53	51	49	490 x 800 x 990	241	333
SES-40H-3P-S30	40	61	58	56	490 x 800 x 990	243	333
SES-45H-3P-S30	45	68	65	63	490 x 800 x 990	245	333
SES-50H-3P-S30	50	76	72	70	540 x 900 x 1000	275	334
SES-55H-3P-S30	55	84	79	77	540 x 900 x 1000	313	334
SES-60H-3P-S30	60	91	87	83	540 x 900 x 1000	315	334

Note: Higher kVA and alternative voltage options available to order / individual request.

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **0SES SERIES**

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-75H-3P-S30	75	114	108	104	1000 x 1300 x 580	435	335
SES-80H-3P-S30	80	122	115	111	1000 x 1300 x 580	510	335
SES-90H-3P-S30	90	137	130	125	1000 x 1300 x 580	515	335
SES-100H-3P-S30	100	152	144	139	1000 x 1300 x 580	520	335
SES-120H-3P-S30	120	182	173	167	1280 x 1480 x 660	800	336
SES-150H-3P-S30	150	228	216	209	1280 x 1950 x 880	1050	337
SES-180H-3P-S30	180	273	260	250	1280 x 1950 x 880	1110	337
SES-200H-3P-S30	200	304	289	278	1280 x 1950 x 880	1140	337
SES-250H-3P-S30	250	380	361	348	1340 x 1950 x 1280	1620	338
SES-300H-3P-S30	300	456	433	417	1340 x 1950 x 1280	1810	338
SES-350H-3P-S30	350	532	505	487	1340 x 1950 x 1280	1820	338
SES-400H-3P-S30	400	608	577	556	1340 x 1950 x 1280	1840	338

TECHNICAL SPECIFICATION

Technology:	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
Input Voltage Swing:	±35% (or -37% +38% or -39% +41%) Three Phase, 4 Wire (with Neutral + Ground / Earth).
Output Voltage:	Presetable for any voltage between 380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. 440/254V, 460/265V & 480/277V models available on request. The permissible input voltage swing is relative to the preset output voltage.
Output Voltage Accuracy:	± 0.5%, ± 3% or ± 5% - auto selection based on input voltage swing.
Frequency:	47 - 65Hz
Response Time:	<1.5ms
Correction Time:	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.
Efficiency:	98%
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 minute 2 x max. current rating for 2 minutes
Surge Suppression:	TVSS - Protects loads against high-energy Spikes and Transient Voltages.
Total Harmonic Distortion:	Less than 1%
Independent Phase Control:	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
Soft-Switch On:	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.

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.
Construction:	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529.
Paint Colour:	RAL 7032 (Grey - Epoxy Powder Coating)
EMC Conformance:	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
CE Conformity:	CE Marked - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
Standard Warranty:	Three Years / 36 Months from date of supply
Standard Features:	Input Circuit Breaker Over/Low Voltage Protection Phase Failure Protection Bypass Control Switch Voltmeter / Phase Selector Switch (internal)
Optional Accessories:	Output Circuit Breaker Manual Maintenance Bypass Switch Ammeter (with Phase Selector Switch) Lightning Surge Arrestors No Volt Remote Monitoring Contacts Drip Proof Cowl for IP21 Ingress Protection Digital Power Metering (with RS-485 interface) - showing V, A, W, VA, AER, PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
Optional Step Down Voltage Feature:	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see SES-HL SERIES Step Down AC Voltage Stabilisers.
Optional Isolation Transformer:	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see PCS-H SERIES AC Power Conditioners.

Note: Optional Accessories added may affect dimensions - subject to confirmation.

S35 PRODUCT SELECTION TABLE

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-6H-3P-S35	6	9.1	8.7	8.3	300 x 550 x 590	89	331
SES-10H-3P-S35	10	15.2	14.4	13.9	300 x 550 x 590	90	331
SES-15H-3P-S35	15	22.8	21.6	20.9	380 x 670 x 780	136	332
SES-20H-3P-S35	20	30.4	28.9	27.8	380 x 670 x 780	145	332
SES-25H-3P-S35	25	38	36.1	35	490 x 800 x 990	208	333
SES-30H-3P-S35	30	46	43	42	490 x 800 x 990	210	333
SES-35H-3P-S35	35	53	51	49	540 x 900 x 1000	296	334
SES-40H-3P-S35	40	61	58	56	540 x 900 x 1000	298	334
SES-45H-3P-S35	45	68	65	63	540 x 900 x 1000	300	334
SES-50H-3P-S35	50	76	72	70	1000 x 1300 x 580	440	335
SES-55H-3P-S35	55	84	79	77	1000 x 1300 x 580	472	335
SES-60H-3P-S35	60	91	87	83	1000 x 1300 x 580	475	335

Note: Higher kVA and alternative voltage options available to order / individual request.

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **0SES SERIES**

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-75H-3P-S35	75	114	108	104	1000 x 1300 x 580	510	335
SES-80H-3P-S35	80	122	115	111	1280 x 1950 x 880	870	337
SES-90H-3P-S35	90	137	130	125	1280 x 1950 x 880	875	337
SES-100H-3P-S35	100	152	144	139	1280 x 1950 x 880	910	337
SES-120H-3P-S35	120	182	173	167	1280 x 1950 x 880	940	337
SES-150H-3P-S35	150	228	216	209	1280 x 1950 x 880	1110	337
SES-180H-3P-S35	180	273	260	250	1340 x 1950 x 1280	1470	338
SES-200H-3P-S35	200	304	289	278	1340 x 1950 x 1280	1650	338
SES-250H-3P-S35	250	380	361	348	1340 x 1950 x 1280	1750	338
SES-300H-3P-S35	300	456	433	417	1340 x 1950 x 1280	1850	338

TECHNICAL SPECIFICATION

Technology:	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
Input Voltage Swing:	±40% (or -42% +43% or -44% +46%) Three Phase, 4 Wire (with Neutral + Ground / Earth).
Output Voltage:	Presetable for any voltage between 380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. 440/254V, 460/265V & 480/277V models available on request. The permissible input voltage swing is relative to the preset output voltage.
Output Voltage Accuracy:	± 0.5%, ± 3% or ± 5 % - auto selection based on input voltage swing.
Frequency:	47 - 65Hz
Response Time:	<1.5ms
Correction Time:	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds.
Efficiency:	98%
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 minute 2 x max. current rating for 2 minutes
Surge Suppression:	TVSS - Protects loads against high-energy Spikes and Transient Voltages.
Total Harmonic Distortion:	Less than 1%
Independent Phase Control:	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
Soft-Switch On:	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.

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.
Construction:	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529.
Paint Colour:	RAL 7032 (Grey - Epoxy Powder Coating)
EMC Conformance:	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
CE Conformity:	CE Marked - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
Standard Warranty:	Three Years / 36 Months from date of supply
Standard Features:	Input Circuit Breaker Over/Low Voltage Protection Phase Failure Protection Bypass Control Switch Voltmeter / Phase Selector Switch (internal)
Optional Accessories:	Output Circuit Breaker Manual Maintenance Bypass Switch Ammeter (with Phase Selector Switch) Lightning Surge Arrestors No Volt Remote Monitoring Contacts Drip Proof Cowl for IP21 Ingress Protection Digital Power Metering (with RS-485 interface) - showing V, A, W, VA, AER, PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
Optional Step Down Voltage Feature:	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see SES-HL SERIES Step Down AC Voltage Stabilisers.
Optional Isolation Transformer:	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see PCS-H SERIES AC Power Conditioners.

Note: Optional Accessories added may affect dimensions - subject to confirmation.

S40 PRODUCT SELECTION TABLE

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-6H-3P-S40	6	9.1	8.7	8.3	380 x 670 x 780	128	332
SES-10H-3P-S40	10	15.2	14.4	13.9	380 x 670 x 780	130	332
SES-15H-3P-S40	15	22.8	21.6	20.9	380 x 670 x 780	145	332
SES-20H-3P-S40	20	30.4	28.9	27.8	490 x 800 x 990	210	333
SES-25H-3P-S40	25	38	36.1	35	540 x 900 x 1000	280	334
SES-30H-3P-S40	30	46	43	42	540 x 900 x 1000	282	334
SES-35H-3P-S40	35	53	51	49	1000 x 1300 x 580	459	335
SES-40H-3P-S40	40	61	58	56	1000 x 1300 x 580	462	335
SES-45H-3P-S40	45	68	65	63	1000 x 1300 x 580	465	335
SES-50H-3P-S40	50	76	72	70	1000 x 1300 x 580	485	335
SES-55H-3P-S40	55	84	79	77	1000 x 1300 x 580	507	335
SES-60H-3P-S40	60	91	87	83	1000 x 1300 x 580	510	335

Note: Higher kVA and alternative voltage options available to order / individual request.

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **0SES SERIES**

MODEL	kVA	Max Rating @ (Amps per Phase)			Dimensions & Weight		Enclosure Type
		380V	400V	415V	W x H x D (mm)	(Kg)	
SES-75H-3P-S40	75	114	108	104	1280 x 1480 x 660	750	336
SES-80H-3P-S40	80	122	115	111	1280 x 1950 x 880	1030	337
SES-90H-3P-S40	90	137	130	125	1280 x 1950 x 880	1040	337
SES-100H-3P-S40	100	152	144	139	1280 x 1950 x 880	1050	337
SES-120H-3P-S40	120	182	173	167	1280 x 1950 x 880	1110	337
SES-150H-3P-S40	150	228	216	209	1340 x 1950 x 1280	1500	338
SES-180H-3P-S40	180	273	260	250	1340 x 1950 x 1280	1650	338
SES-200H-3P-S40	200	304	289	278	1340 x 1950 x 1280	1680	338
SES-250H-3P-S40	250	380	361	348	1340 x 1950 x 1280	1850	338
SES-300H-3P-S40	300	456	433	417	1340 x 1950 x 1280	2030	338

STANDARD ENCLOSURE TYPES

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **OSES** SERIES

331 & 332 Enclosures

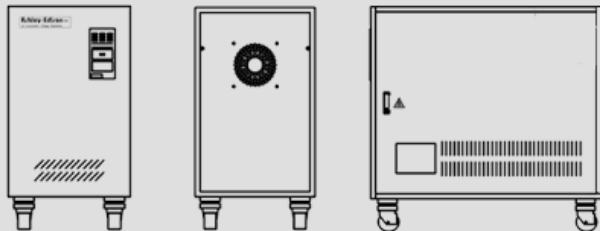
Bottom Cable Entry

On Casters

Front

Rear

Right Side



Physical Size:

331	300(W) x 550(H) x 590(D) mm	11.9"(W) x 21.7"(H) x 23.3"(D) inches
332	380(W) x 670(H) x 780(D) mm	15.0"(W) x 26.4"(H) x 30.8"(D) inches

333 & 334 Enclosures

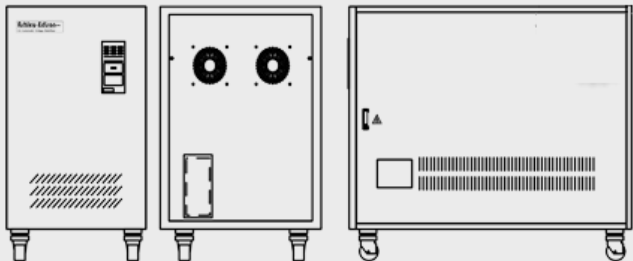
Bottom Cable Entry

On Casters

Front

Rear

Right Side



Physical Size:

333	490(W) x 800(H) x 990(D) mm	19.3"(W) x 31.5"(H) x 39.0"(D) inches
334	540(W) x 900(H) x 1000(D) mm	21.3"(W) x 35.5"(H) x 39.4"(D) inches

335 Enclosure

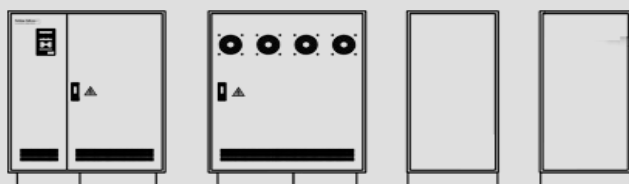
Bottom Cable Entry

Front

Rear

Left Side

Right Side



Physical Size:

335	1000(W) x 1300(H) x 580(D) mm	39.4"(W) x 51.2"(H) x 22.9"(D) inches
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336, 337, 338 & 339 Enclosures

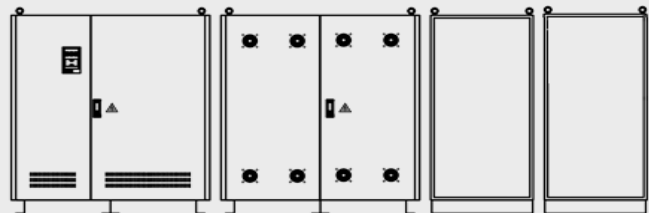
336 - Bottom Cable Entry 337, 338 & 339 - Top Cable Entry (Bottom to Special Order)

Front

Rear

Left Side

Right Side



Physical Size:

336	1280(W) x 1480(H) x 660(D) mm	50.4"(W) x 58.3"(H) x 26.0"(D) inches
337	1280(W) x 1950(H) x 880(D) mm	50.4"(W) x 76.8"(H) x 34.7"(D) inches
338	1340(W) x 1950(H) x 1280(D) mm	52.8"(W) x 76.8"(H) x 50.4"(D) inches
339	1470(W) x 1950(H) x 1340(D) mm	57.9"(W) x 76.8"(H) x 52.8"(D) inches

AVAILABILITY

We offer probably the best availability on AC Voltage Stabiliser & Power Conditioning solutions.

Many of our most popular ratings are readily available from stock at the factory or from one of our strategically located Service and Distribution Hubs. Where a solution is not readily available, due to our considerable investment in component inventory and fine-tuned accredited build processes, we are able to ensure very short lead times on deliveries – *even for the largest of models!*

WANT TO KNOW MORE

Want to learn more about our Servo Electronic AC Voltage Regulators / Stabilisers and Power Conditioners?

Please ask for a copy of our

Servo Electronic Overview Brochure



NEED HELP SELECTING THE RIGHT MODEL FOR YOUR NEEDS?

Check-out our Online Selection Tool at

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CUSTOM BUILT SOLUTIONS

Ashley-Edison, with a strong and wide manufacturing base, is able to meet the requirements of customers from our own in-house professional resources.

Where bespoke / custom built solutions are required we are able to call upon our extensive portfolio of proven standard designs and tailor offerings to accommodate, without breaking the bank, most individual specific requirements.

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For Stable, Clean & Optimised AC Voltage

