

**OPCS H SERIES** - SINGLE PHASE - 3 to 60 kVA

**POWER CONDITIONING PROTECTION**  
against voltage fluctuations and line disturbances - ensuring a **CLEAN** supply.

**FEATURES**

- **Automatic Voltage Regulation**  
Step less automated voltage regulation - ideal for 95% of all applications.
- **Wide Range of Power Ratings**  
Single Phase - 3 to 60 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  $\pm 1\%$
- **Transient Voltage Surge Suppression**  
TVSS - Protects loads against harmful high-energy
- **Input Isolation Transformer**  
Offering enhanced Transient Voltage and Electrical Noise protection.



**OUTDOOR** - IP54 / NEMA 3 STYLE  
**AC POWER LINE CONDITIONERS**

SERVO ELECTRONIC DESIGN - **SINGLE PHASE** - 3 TO 60 kVA

**OPCS**

220V - 230V - 240V - 50 or 60Hz

**H - SINGLE PHASE**

**DELIVERING AN ENHANCED LEVEL OF POWER PROTECTION**

AC mains voltage fluctuations and line disturbances 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 Power Line Conditioners offer -**

- **An Enhanced Clean Supply**  
Incorporating all the features and protection levels found in an OSES Series Stabiliser, Ashley-Edison OPCS Power Conditioners also offer, through the integration of a double wound isolation transformer, enhanced transient voltage surge defense and additional common and transverse electrical noise protection - delivering what is commonly referred to as a "CLEAN" supply.
- **Durability & Dependability**  
With an impressively wide range of input voltage window options and precise output voltage regulation, the electro-mechanical / electronic servo design based OPCS Power Conditioners have repeatedly proven their durability and dependability in some of the world's harshest and most demanding power environments.
- **Energy Efficiency**  
Characterised by high efficiency, OPCS Conditioners are completely unaffected by power factor and load variations. Able to withstand high instantaneous overloads, OPCS Conditioners do not generate any magnetic interference - making them ideal for being located near to sensitive equipment. Through delivering a regulated, stable and optimised voltage to the equipment they support, OPCS Conditioners ensure you only pay for the actual energy you need.

**NOTE:** For most applications, where electrical noise is not considered to be an issue, a Voltage Stabiliser / Regulator is usually the most appropriate and more cost-efficient solution for delivering dependable stable voltage.

- **High Efficiency**  
Better than 98% for low running costs.
- **Inbuilt High Overload Capability**  
Ideal for loads with an inherent initial high current draw on start up.
- **Over / Low Voltage Protection**  
Ability to automatically shutdown the Power Conditioner in the event of the input supply voltage going outside the input voltage window
- **Input Circuit Breaker**  
Standard protection on all models
- **Lightning Surge Protection**  
Protection against extremely high voltage surges and transients caused by lightning strikes on the supply line.
- **Bypass Control Switch**  
Manual Electronic Controls Bypass Facility
- **Soft Switch On / Start Up Load Protection**  
Load protection on Start Up
- **Free Standing Outdoor Enclosure**  
Presented in a robust free standing enclosure to IP54 / NEMA 3 style Ingress Protection
- **Optional Accessories**  
Output Circuit Breaker, Full Manual Maintenance
- **Compliance with International Standards**  
Designed, manufactured and supplied to comply with leading international standards
- **CE Conformity**  
Fully compliant and labelled

## VOLTAGE CHOICES AVAILABLE

### 2 WIRE SOLUTIONS

SINGLE PHASE WITH NEUTRAL (+ GROUND)

#### H SERIES

3 to 60 kVA

High Voltage Models:

220V, 230V or 240V.

Other voltages available on individual request / quotation.

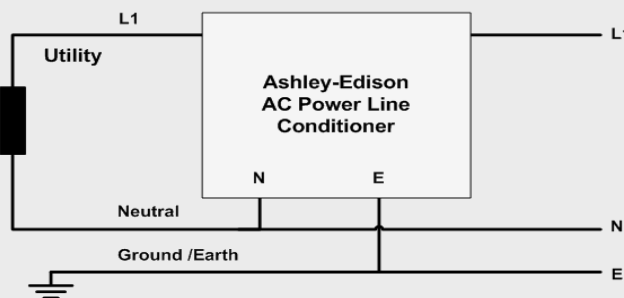
#### L SERIES

3 to 50 kVA

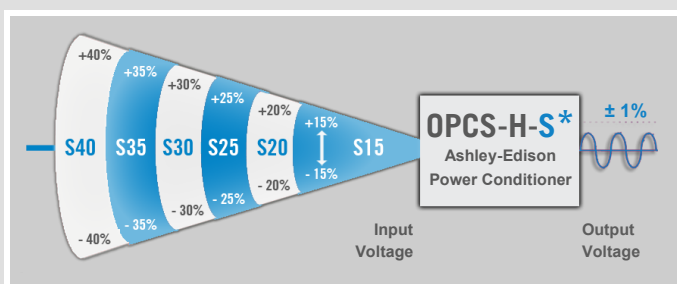
Low Voltage Models:

100V, 110V, 115V, 120V or 127V.

Other voltages available on individual request / quotation.



## H SERIES INPUT VOLTAGE WINDOW OPTIONS



In situations where there is a reasonably good mains supply, a Power Conditioner 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 Conditioner.

**Please Note** – These Conditioners 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 - OPCS-H-S\* Input Voltage Windows & Output Accuracy

Nominal Single Phase Voltage	Output Voltage Accuracy $\pm\%$ of Nominal	INPUT VOLTAGE SWINGS / SWING MODEL NO VARIANTS					
		S15	S20	S25	S30	S35	S40
		3 to 60 kVA	3 to 50 kVA	3 to 40 kVA	3 to 30 kVA	3 to 20 kVA	3 to 20 kVA
220V	$\pm 1\%$	187v to 253v ( $\pm 15\%$ )	176v to 264v ( $\pm 20\%$ )	165v to 275v ( $\pm 25\%$ )	154v to 286v ( $\pm 30\%$ )	143v to 297v ( $\pm 35\%$ )	132v to 308v ( $\pm 40\%$ )
	$\pm 3\%$	183v to 260v (-17% / +18%)	172v to 271v (-22% / +23%)	161v to 282v (-27% / +28%)	150v to 293v (-32% / +33%)	139v to 304v (-37% / +38%)	128v to 315v (-42% / +43%)
	$\pm 5\%$	178v to 266v (-19% / +21%)	167v to 277v (-24% / +26%)	156v to 288v (-29% / +31%)	145v to 299v (-34% / +36%)	134v to 310v (-39% / +41%)	123v to 321v (-44% / +46%)
230V	$\pm 1\%$	196v to 264v ( $\pm 15\%$ )	184v to 276v ( $\pm 20\%$ )	173v to 287v ( $\pm 25\%$ )	161v to 299v ( $\pm 30\%$ )	150v to 310v ( $\pm 35\%$ )	138v to 322v ( $\pm 40\%$ )
	$\pm 3\%$	191v to 271v (-17% / +18%)	179v to 283v (-22% / +23%)	168v to 294v (-27% / +28%)	156v to 306v (-32% / +33%)	145v to 317v (-37% / +38%)	133v to 329v (-42% / +43%)
	$\pm 5\%$	186v to 278v (-19% / +21%)	175v to 290v (-24% / +26%)	163v to 302v (-29% / +31%)	152v to 313v (-34% / +36%)	140v to 324v (-39% / +41%)	129v to 336v (-44% / +46%)
240V	$\pm 1\%$	204v to 276v ( $\pm 15\%$ )	192v to 288v ( $\pm 20\%$ )	180v to 300v ( $\pm 25\%$ )	168v to 312v ( $\pm 30\%$ )	156v to 324v ( $\pm 35\%$ )	144v to 336v ( $\pm 40\%$ )
	$\pm 3\%$	199v to 283v (-17% / +18%)	187v to 295v (-22% / +23%)	175v to 307v (-27% / +28%)	163v to 319v (-32% / +33%)	151v to 331v (-37% / +38%)	139v to 343v (-42% / +43%)
	$\pm 5\%$	194v to 290v (-19% / +21%)	182v to 302v (-24% / +26%)	170v to 314v (-29% / +31%)	158v to 326v (-34% / +36%)	146v to 338v (-39% / +41%)	134v to 350v (-44% / +46%)

## TYPICAL APPLICATIONS

- Computers & Network Systems
- Medical Equipment
- Electronics Equipment
- Testing Equipment
- Laboratory Equipment
- Process Control Systems
- Base Transceiver Stations
- TV/Radio Broadcasting Stations
- Audio/Video Systems
- Security Systems
- Photo Processing Systems
- Marine Navigation Systems



## TECHNICAL SPECIFICATION

<b>Technology:</b>	Servo Electronic - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).			
<b>Input Voltage Swing Variant Options Available: (S*)</b>	<b>Model / Accuracy</b>	<b>± 1%</b>	<b>± 3%</b>	<b>± 5%</b>
	<b>S15</b>	± 15%	-17% +18%	-19% +21%
	<b>S20</b>	± 20%	-22% +23%	-24% +26%
	<b>S25</b>	± 25%	-27% +28%	-29% +31%
	<b>S30</b>	± 30%	-32% +33%	-34% +36%
	<b>S35</b>	± 35%	-32% +33%	-34% +36%
	<b>S40</b>	± 40%	-42% +43%	-44% +46%
<b>Output Voltage:</b>	Presettable for any voltage between 220V, 230V, 240V, (Customer to specify), Single Phase, 2 Wire. 254V & 277V models available to special order.  The permissible input voltage swing is relative to the preset output voltage.			
<b>Output Voltage Accuracy:</b>	± 1%, ± 3% or ± 5% - auto selection based on input voltage swing.			
<b>Frequency:</b>	47 - 65Hz			
<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 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes			
<b>Surge Suppression:</b>	TVSS - Protects loads against high-energy Spikes and Transient Voltages.			
<b>Surge Arrestors:</b>	40kA at 275V AC Class III (IEC 61643-1: 1998-2, EN 61643-11: 2001)			
<b>Total Harmonic Distortion:</b>	Less than 1%			

<b>Shielded Isolation Transformer:</b>	Noise Attenuation - Common Mode - 120db@100khz - Normal Mode Noise - 60db@100khz
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges
<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>Construction:</b>	Enclosures to IP54 (NEMA 3 Style) - BS EN 60529.
<b>Paint Colour:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC (The EMC Directive) and 2006/95/EC (The Low Voltage Directive).
<b>Standard Warranty:</b>	Two Years / 24 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker Over / Low Voltage Protection Input / Output Terminals Lightning Surge Arrestor Bypass Control Switch Voltmeter - Internal
<b>Optional Accessories:</b>	Output Breaker Ammeter Manual Maintenance Bypass Switch Thermostatically Controlled Heater - for low temperature applications Digital Power Metering (with RS-485) - showing V,A,W,VA,AER,PF & kWh AquaStop Protective Coating - protection against damp and moisture ingress
<b>Optional Step Down Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>OPCS-HL SERIES</b> Step Down AC Voltage Stabilisers.

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

## PRODUCT SELECTION TABLE

Model	Rating kVA	Max Rating (Amps)			Dimensions & Weights
		@ 220V	@ 230V	@ 240V	
OPCS-3H-S*	3	13.6	13.0	12.5	Dimensions & Weights available on Request - according to the S* Swing Model Variant required.
OPCS-4H-S*	4	18	17	17	
OPCS-5H-S*	5	23	22	21	
OPCS-8H-S*	8	36	35	33	
OPCS-10H-S*	10	46	44	42	
OPCS-15H-S*	15	68	65	63	
OPCS-20H-S*	20	91	87	83	
OPCS-30H-S*	30	136	130	125	
OPCS-40H-S*	40	182	174	167	
OPCS-50H-S*	50	227	217	208	
OPCS-60H-S*	60	273	261	250	

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

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ALSO available in  
Indoor IP20 / NEMA 1 Style  
Enclosures - PCS SERIES

