

AC Power Conditioner

POWER CONDITIONING PROTECTS AGAINST LINE DISTURBANCES



Ashley-Edison Super-Isolation Technology

AC Mains voltage fluctuations, common mode noise, and high energy transients causes many equipment to behave erratic and malfunction. Some equipment even breakdown because of these problems. Failure to keep this voltage stable results in more costly repairs.

Ashley-Edison's AC Power Line Conditioners are designed to maintain the mains voltage constant all the time. Using their super-isolation design, the conditioner will correct the mains voltage should they go high or low. They are characterised by their extreme tolerance for very wide input fluctuations, even when the input voltage drops to as low as 40%, the output will be maintained at nominal voltage $\pm 5\%$. The other additional features are non-moving parts and no electronic control circuitry and thereby eliminating any need for maintenance. They are virtually maintenance-free. The other advantage of this design is its ability to withstand a ride-through even when there is a very short power failure, output will still be maintained for 3msecs. This is also extremely useful when there are frequent short breaks or voltage dips in the mains supply, especially useful for sensitive electronic equipment. They can withstand high instantaneous overloads without causing any damage. Their super-isolation feature will suppress any lightning spikes or lightning surges. Compact in size and quiet in operation, these conditioners are very suitable for indoor use.

Features

- **Input Voltage Range**
Input Voltage Range from -20% $+10\%$ ($\pm 40\%$)
- **Output Voltage Regulation**
Output Voltage Accuracy $\pm 1\%$, ($\pm 5\%$)
- **Isolation Transformer**
Provide 110 db of common-mode noise attenuation and neutral ground bonding
- **Spike Suppression**
Protect loads against high-energy surges and lightning strikes
- **Energy Storage**
(RIDE THROUGH) No loss of output for input power losses for up to 3msec
- **High Efficiency**
Better than 90%
- **MTBF**
25 years and above
- **Compliance with International Standards**
IEC 439, BS6527, IEEE 587
- **CE Conformity**
EN55022, EN50082-2, ENV50140-1
- **Warranty**
2 Years

Applications

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

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Technical Specifications

Input Voltage	110V or 220V, - 20% +10% ($\pm 40\%$) Single Phase
Output Voltage	110V or 220V (other voltage available to order)
Output Voltage Accuracy	$\pm 1\%$, ($\pm 5\%$)
Frequency	50Hz or 60Hz (customer to specify)
Speed of response	30msec (1.5cycles)
Efficiency	90%
Surge ratings	200% of rated load for 10 seconds 500% of rated load for 10msec
Surge Suppression	Protect loads against high-energy Spikes and transient voltage meets ANSI/IEEE and IEC standards
Noise Attenuation	
Common-mode noise	110db@100khz
Normal-mode noise	60db@100khz
Total Harmonic Distortion	Less than 3%
Energy Storage	(RIDE THROUGH) No loss of output for input power losses for up to 3msec

Environment	Temperature range -20 to 50 °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, BS5490/IEC529
Conformance	BS 6527, BS6667, IEEE587
CE Conformity	EN55022, EN50082-2,ENV50140-1
Warranty	Two years



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Model: PCV-S40 50Hz Single Phase

Model:	Rating KVA	Input /Output Voltage	Dim (mm) W x H x D	Weight (Kgs)
PCV-05-L-50-S40	0.5	110V	215 x 190 x 350	26
PCV-05-H-50-S40	0.5	220V	215 x 190 x 350	26
PCV-1-L-50-S40	1	110V	215 x 190 x 350	39
PCV-1-H-50-S40	1	220V	215 x 190 x 350	39
PCV-2-L-50-S40	2	110V	270 x 460 x 490	66
PCV-2-H-50-S40	2	220V	270 x 460 x 490	66
PCV-3-L-50-S40	3	110V	270 x 460 x 490	89
PCV-3-H-50-S40	3	220V	270 x 460 x 490	89
PCV-5-L-50-S40	5	110V	270 x 460 x 490	112
PCV-5-H-50-S40	5	220V	270 x 460 x 490	112

- Note: 1) Model: PCV-05 to PCV-3 fitted with input cable 1.5mtrs and 13A Universal Socket outlet. As for Model: PCV-5 are supplied with hardwire input/output terminals.
 2) 230V & 240V options available to order.
 3) Special voltage configurations available to order
 4) Higher Kva rating options available to order
 5) Three Phase Power Conditioner available to order

Model: PCV-S40 60Hz Single Phase

Model:	Rating KVA	Input /Output Voltage	Dim (mm) W x H x D	Weight (Kgs)
PCV-05-L-60-S40	0.5	110V	215 x 190 x 350	23
PCV-05-H-60-S40	0.5	220V	215 x 190 x 350	23
PCV-1-L-60-S40	1	110V	215 x 190 x 350	33
PCV-1-H-60-S40	1	220V	215 x 190 x 350	33
PCV-2-L-60-S40	2	110V	270 x 460 x 490	58
PCV-2-H-60-S40	2	220V	270 x 460 x 490	58
PCV-3-L-60-S40	3	110V	270 x 460 x 490	75
PCV-3-H-60-S40	3	220V	270 x 460 x 490	75
PCV-5-L-60-S40	5	110V	270 x 460 x 490	101
PCV-5-H-60-S40	5	220V	270 x 460 x 490	101

- Note: 1) Model: PCV-05 to PCV-3 fitted with input cable 1.5mtrs and Socket outlet. As for Model: PCV-5 are supplied with hardwire input/output terminals.
 2) 200V & 208V options available to order.
 3) Special voltage configurations available to order
 4) Higher Kva rating options available to order
 5) Three Phase Power Conditioner available to order