

Precision Voltage & Frequency regulation
for sensitive equipment.

Regenerative load handling,

ACTIVE INDUSTRIAL POWER-CONDITIONER

AIPC303 10KVA - 200KVA

Optimises Equipment Life
by 30%-40%.
for CNC & Laser machines

- ▶ Reduces service cost of OEMs by 30%
- ▶ Maximises the **uptime of process**
- ▶ Improves profits by 30%

- ▶ Complete Power Conditioner
- ▶ High accuracy voltage conditioner
400VAC + 1% with a correction speed of 300V/5ms
- ▶ Frequency converter
- ▶ Static Stabiliser
- ▶ Power-factor corrector
- ▶ Galvanic isolation



Best In-house R&D
ISO 9001-2015

How to best protect your investment?

By providing impurity-free, high grade quality of power, which is the fuel for your infrastructure to perform optimally.

Using premium quality power conditioner with comprehensive power protection.

Power quality is an important consideration to any business that uses medium to large amounts of power. Chances are, inefficiencies in the supply of that power is costing you money. You may be paying for power that you do not use, or the quality of power you receive may be having detrimental effects on your equipment. High power bills, downtime and machine and equipment wear are all results of poor power quality.

Conventional servo controlled voltage stabilizer offers very poor response to dynamic voltage fluctuations and allows **intolerant levels of high voltage** to your equipment, (during the correction time) which increases **the risk of premature failure**.

The Industrial grade AIPC protects the connected equipment from

- | | | |
|------------------------|------------------|-------------|
| ▶ Frequency variations | ▶ Over voltage | ▶ Surges |
| ▶ Voltage fluctuations | ▶ Neutral drifts | ▶ Spikes |
| ▶ Under voltage | ▶ Voltage sag | ▶ Lightning |
-



INDUSTRIAL GRADE
DESIGNED FOR
HARSH ENVIRONMENT



STATIC **HIGH-SPEED**
VOLTAGE STABILISATION
USING IGBT



UNITY POWER FACTOR
CORRECTION
100% INDIGENOUS DESIGN.

Premature equipment failure, abrupt process interruption etc are the **tangible effects of low power quality**. Eventhough the effects are not immediately perceived, **the equipment life expectancy is cut short by 30%-40%** due to compromised quality of power.

Regenerative load handling, ACTIVE INDUSTRIAL POWER-CONDITIONER

Justify the investment done on the infrastructure by providing impurity-free, high grade of power which is the fuel for your infrastructure for optimum product life & process uptime.



-
- ▶ Fully DSP controlled, IGBT technology
 - ▶ Automatic input phase reversal correction
 - ▶ Single phase prevention
 - ▶ Input Power Factor corrected to near Unity
 - ▶ Raw power voltage THD is corrected
 - ▶ Acts as a constant frequency source
 - ▶ Protection against lightning and neutral drifts
-

HIGH ACCURACY VOLTAGE CONDITIONER

400VAC + 1% with a correction speed of 300V/5ms-20ms.
In comparison the Servo-controlled Voltage Stabiliser has a maximum correction speed of 70V/sec & the AIPC is faster by 100 times.

- ▶ **Constant Output Frequency**
50HZ $\pm$ 1% With an input frequency variations from 45-55Hz.
 - ▶ **Fail-safe protection against lightning.**
Also against neutral drifts, impurities in the input.
 - ▶ **Output Voltage THD - <5%**
Input voltage THD in Industrial areas varies from of 7-10%.
-

AIPC does not pass any high voltages to the load due to its fast voltage correction capability. In a conventional servo stabiliser the load is subjected to high voltage for a considerable amount of time (approximately 60 power cycles) due to slow response time. **This is one of the prime reasons for the premature failure of electronic and electrical equipment.**

10KVA - 200KVA AIPC 303

Series Industrial Power-Conditioner

TECHNICAL SPECIFICATIONS

TECHNOLOGY		DSP based, Power-conditioning technology using IGBT.
RATING		10KVA - 200KVA
INPUT		
Input Voltage		415VAC, 3Ø & N
Input Voltage Window		330VAC - 470VAC
Input Frequency		45-55Hz
Input PF	100% load	> 0.99 / <10% THDi.
Topology		IGBT based MPWM with instantaneous Sinewave Control
Output PF		08lagging to Unity
Nominal Voltage		400VAC
Regulation		(±) 1%
Frequency		50 Hz ± 0.1Hz
Waveform		True Sinewave
Total	Linear Load	< 1.5%
Harmonic	Non Linear Load	< 4%
Transient Response		Remains within +/- 5% & recover to normal within 20 msec
Over Load Capacity	100%	Continuous
	125%	1 Minute
	150%	5 Seconds
Crest Factor		3:1
Mode of Operation		Designed for Continuous operation
ISOLATION		Complete galvanic isolation
BYPASS		
Manual Bypass		Provided
Static bypass		Provided
ALARMS		
		• Input / Low / Fail • Output overload • Over temperature
LED Indications (Single LED with multi function)		• Mains on • PC On • Overload
User Friendly LCD Display shows the following parameters		
		• Input Voltage • Output Voltage
		• Load current • Output Frequency

Our esteemed customers have been using AIPC for various applications across the country from past 19yrs and have certified the performance of the same.

A FEW OF APPROVED VENDOR FOR

