



Power Conditioner is a combination of Servo Controlled Voltage Stabiliser and Isolation Transformer. It is designed to protect sensitive equipment from all type of Power disturbances such as input voltage fluctuations and Electrical noise generated by breakers, Heavy duty Machineries, Capacitor Panels, induction hardening, Cranes, Welding etc. The use of invertors, Drives, Switching power supplies further polluted the electrical environment, causing severe supply problems to load like CNC machines, Medical equipment, Computers, Communication Equipment and Lightings etc.

NEEL POWERCON is the solution for these problems and eliminates major electrical disturbances and provides clean Supply to the Loads.

Standard Products

Type	KVA Ratings	Model	Servo Motor	Input Voltage Range (VAC)	Output Voltage (VAC)
Single Phase	1 ~ 20	P1D	DC	170 ~ 270	230
Three Phase Air Cooled	10 ~ 40	P3A	AC	340 ~ 480	415 / 208
	10 ~ 150	P3D	DC		

- a) DC motors provide faster rate of voltage correction
b) Please contact our sales and application engineers for further guidance

- ⇒ Digital Frequency Meter.
- ⇒ Digital meter for phase currents and voltages at input as well as output.
- ⇒ Input phase loss indication / Protection
- ⇒ Advanced electronic circuits to maintain constant output voltage on DG power
- ⇒ Energy saving

Applications

- ⇒ CNC Machines
- ⇒ Medical Diagnostic Equipment
- ⇒ Electronic Equipment
- ⇒ Lab Equipment
- ⇒ SMT Production
- ⇒ Assembly Lines
- ⇒ Textile Machinery
- ⇒ Process Controls
- ⇒ Elevators
- ⇒ Telecommunication Systems

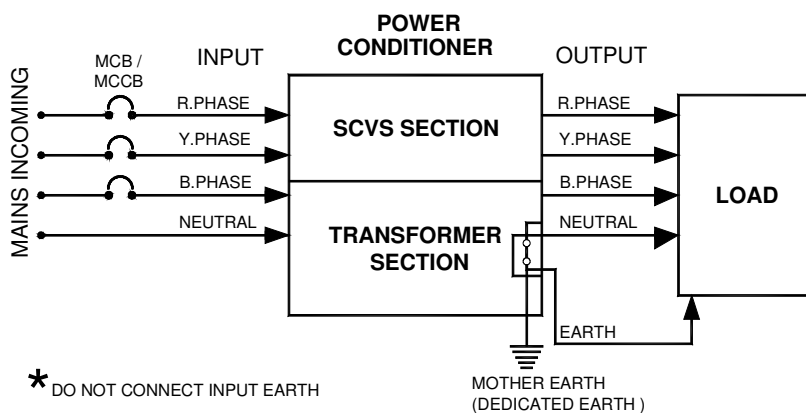
Technical Specifications

Regulation	+/- 2 % steady state +/- 5 % dynamic state
Frequency	47 – 53 Hz.
Response Time	< 10 m.sec .
Rate of Correction	Upto -105 V / Sec.
Coupling Capacitance	Better Than 0.1pF
Common Mode Noise Rejection	100dB
Duty	100% Continuous / 110% for 2 Hrs. / 150% for 30 Min.
Wave form Distortion	Nil (Same as input)
Harmonic Distortion	None
Effect of Load Power Factor	Nil
Unbalanced Line and Load	Independent phase sensing and control provides for 100 % load imbalance within the rating of equipment
Control Panel	Full function Auto / Manual controls
Output Voltage Protection.	Electronics Adjustable Output Under and Over Volt. Alarm / time Delay Circuit / Trip and By pass Facility
Servo Motor Protection	Voltage Cut-off for Servo Motor at Input Under / Over Voltage
Environment	Temperature range – 0 to 45 °C. Suitable for indoor Tropical use. 90% RH (non-condensing)
Construction	Rugged Construction / Caster wheels for easy movements
Cooling	Air Cooled
Colour	RAL – 7035 (Grey) – Other on Request

Optional Add-on Features

- | | |
|------------------------------------------------------------------|-----------------------------------------------------------------------------|
| ⇒ Circuit breaker with over Load and Short Circuit protection | ⇒ Ground Fault Monitoring with Trip and Indication (Leakage Current) |
| ⇒ Non-standard KVA ratings / Input & Output voltages | ⇒ Surge Suppressor (Metal Oxide Varistor) |
| ⇒ Phase Reverse Protection at input and Cut off. -3 Phase system | ⇒ Surge Protective Device 8/20 micro sec. as per IEC 61000-4-4 / 61000-4-5. |
| ⇒ Output cut-off if Neutral is missing at Input | ⇒ Stabiliser By pass Switch |
| ⇒ Input Under and Over Voltage indication and Cut off | ⇒ Other Colour (Please specify RAL shade number) |
| | ⇒ Output Over Load by Electromechanical / Electronics |

Typical schematics for product installation



Approx Weight and Sizes for STANDARD products

Single phase Air Cooled models

Rating (KVA)	Input Volt. (VAC)	Output Volt. (VAC)	Width (mm)	Depth (mm)	Height (mm)	Weight (Kg)
1 - 5	170 - 270	230	503	550	674	65

Three phase Air Cooled models

Rating (KVA)	Input Volt. (VAC)	Output Volt. (VAC)	Width (mm)	Depth (mm)	Height (mm)	Weight (Kg)
5 ~ 20	340 - 480	415 / 208	990	590	1060	300
25 ~ 40	340 - 480	415 / 208	1040	690	1175	550
50	340 - 480	415 / 208	1190	740	1275	675
60 ~ 100	340 - 480	415 / 208	1340	840	1400	800
125 ~ 150	340 - 480	415 / 208	1390	850	1570	1000

Nonstandard KVA, Input Voltage range and Out Voltages are also available on request.

NEELKANTH reserves the right to amend design and specification without notice as continuous efforts are Made to improve product performance.

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Our Products and Services

Servo Controlled Voltage Stabilizer *** Linear Stabilisers *** Power Conditioners *** Ultra Isolation Transformer ***
'K' Rated Transformer *** Furnace Transformers *** Powerlux / Optilux Lighting Energy Savers ***
Real Time Power Factor Correction Systems *** Ground Fault Monitoring Systems *** Power Quality Audits and Analysis