technical data

input voltage

· single phase: 230V ±12%

· three phase: 415V ±12%

output voltage (true rms)

· single phase: 230VAC ±1.5%

· three phase: 415VAC ±1.5%

rated kva

· single phase: 1KVA - 30KVA

· three phase: 3KVA–150KVA

output waveform/ distortion

· sinewave/follow input

response time

· 0.05 ~ 0.07 sec/V

frequency

· 50 / 60Hz

efficiency

· > 95%

over current protection

· MCB / MCCB

operating temperature

· 0°C – 45°C

SPD surge protection

· 1 Phase Standard

· 3 phase (optional)

phase loss sensing protection

· phase sensing relay (optional)

automatic output delay on system

· time delay (optional)

voltage fluctuation

In the real world power line voltage occurs frequently especially in industrial area. Every electrical equipments and devices do have a working voltage limit/ tolerance. Some equipment are build to tolerate ±10% of nominal voltage while others ±5% or less depending on sensitivity.

effects

The correct operation of electrical and electronic equipment depends on the voltage accuracy and stability. In the event of long time over voltage, it will lead to damage of the equipment; while long time under voltage will cause malfunction and computation errors of the electrical and electronic equipment.

solutions

Installing QPS Automatic Voltage Stabilizer (AVS) or power line conditioner will ensure the continuity and quality of production.

Input voltage variation from:

Single Phase : 230VAC ±12%

Three Phase : 415VAC ±12% + Neutral (3 phase 4 wire)

- excellent output voltage accuracy of within ±1.5% set value.
- regulation correction time approximately 0.05 ~ 0.07 sec per volt.
- minimum maintenance due to its simplicity in design.
- easy installation.
- tailor made to special voltages and configuration for example, three phase voltage without neutral or for outdoor configurations.

QPS Servo - Motor Automatic Voltage Stabilizer provides a continuous monitoring of the output voltage (true RMS sensing) by means of an electronic Control Circuit that compares the instantaneous output voltage with the set value. When changes are detected due to fluctuation of supply voltage or sudden changes in load, an electrical signal will be transmitted to the servo – motor which is coupled onto the brush gear of the variable transformer, causes the brush gear to rotate until the appropriate voltage is restored. This method of stabilization does not create interference or harmonic to the supply system. QPS Three phase Automatic Volltage Stabilizers also designed to cater for unbalanced load. This made possible with its independent phase monitoring system.

QPS Automatic Volltage Stabilizers offer high quality performance at competitive prices. They solve voltage unstable problems and increase productivity.

power line conditioner

QPS power line conditioner (PLC) is a AVS with the inclusion of a shielded isolation transformer

QPS®

V-series automatic voltage stabilizer / power line conditioner

applications

· CNC wire- cut / EDM
· CNC drilling machine
· CNC milling machine
· X – Ray equipment
· Industrial robots
· Communication system
· PLC Equipment
· Broadcasting equipment
· Photographic processing equipment
· Photocopy machine
· Test equipment
· Computers
· Medical equipment
· LAB equipment

standard features

· over current circuit breaker
· analog voltmeter
· phase indicator lamps
· phase selector switch for voltmeter (for three phase only)

optional features

· surge protection device (SPD)
· phase loss (3 phase model) c/w programmble under / over voltage detector / phase sequence monitoring
· automatic output delay on system
· manual bypass switch

single phase standard fittings
single phase models
. standard fittings come with phase pilot lamp, over current breaker and voltmeter with selector switch.

input termination
power cord c/w 13A BS 3 pin plug – (model 1KVA , 2KVA & 3KVA)
power cord c/w 15A BS 3 pin plug – (model 4KVA)
terminal block for hardwire – model 5KVA ~ 30KVA

output termination
13A BS 3 pin socket – (model 1KVA ~ 15KVA)
terminal block for hardwire – (model 3KVA ~ 30KVA)

three phase standard fittings
over current breaker – (model 3KVA ~ 150KVA)
voltmeter input – line / phase voltage – (model 30KVA ~ 150KVA)
voltmeter output – (model 3KVA ~ 150KVA)

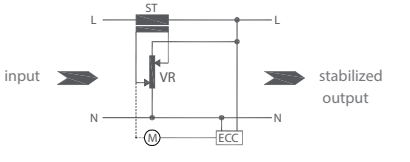
phase pilot lamp, input & output termination
terminal block – (model 3KVA ~ 150KVA)

diagram

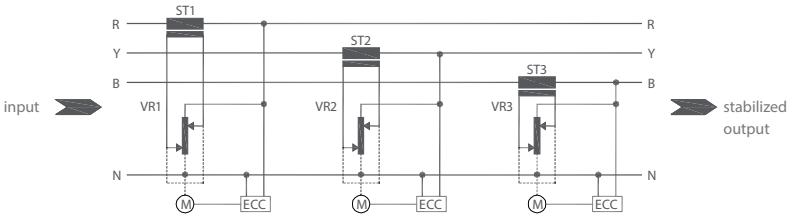
Single Phase & Three Phase Servo – Motor Voltage Stabilizer Block Diagram

Legend

ST – series transformer
VR – variable transformer
ECC – elelctric control circuit
M – servo-motor

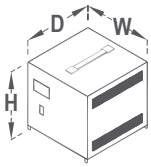


single phase avs / avr

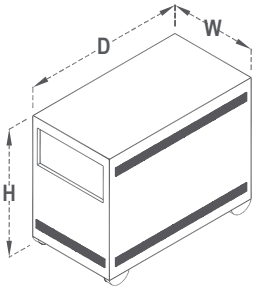


3-phase avs / avr independent phase control

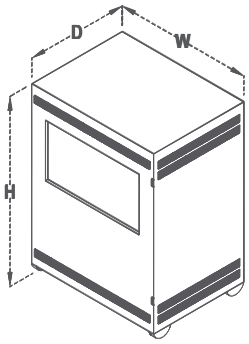
dimension



cabinet 1



cabinet 2



cabinet 3

single phase V series 230VAC

technical specification

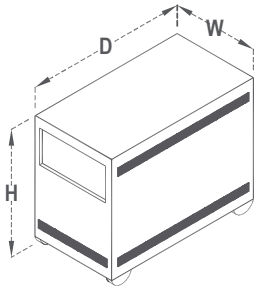
model	cabinet	power rated output (KVA)	rated/ output current (A)	input voltage variation (%)	output accuracy	dimensions (mm) (+/-) h	w	d	weight (kg) (+/-)
VSS1 - 2	1	1	4	230V ± 12%	±1.5%	183	200	220	8
VSS2 - 2	1	2	9	230V ± 12%	±1.5%	200	230	245	10
VSS3 - 2	1	3	13	230V ± 12%	±1.5%	283	260	330	23
VSS4 - 2	1	4	17	230V ± 12%	±1.5%	283	260	330	24
VSS5 - 2	1	5	22	230V ± 12%	±1.5%	283	260	330	24
VSS7 - 2	2	7.5	33	230V ± 12%	±1.5%	370	270	560	45
VSS10 - 2	2	10	43	230V ± 12%	±1.5%	370	270	560	50
VSS15 - 2	2	15	65	230V ± 12%	±1.5%	370	270	560	53
VSS20 - 2	3	20	87	230V ± 12%	±1.5%	640	400	375	57
VSS25 - 2	3	25	109	230V ± 12%	±1.5%	640	400	375	68
VSS30 - 2	3	30	130	230V ± 12%	±1.5%	640	400	375	73

remarks: the dimensions indicated above is applicable for Automatic Voltage Stabilizer only. Please refer to the staff for power line conditioner dimensions if required.

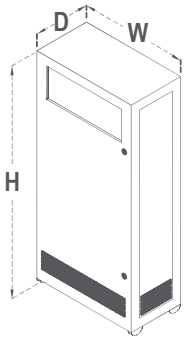
QPS®

V-series three phase automatic voltage stabilizer / power line conditioner

dimension



cabinet 1



cabinet 2

three phase V series 415VAC

technical specification

model	cabinet	power rated output (KVA)	rated / output current (A)	input voltage variation (%)	output accuracy	dimensions (mm) (+/-)			weight (kg)
						h	w	d	(+/-)
VST3 - 4	1	3	4	415V ± 12%	±1.5%	530	295	460	32
VST6 - 4	1	6	8	415V ± 12%	±1.5%	530	295	460	36
VST10 - 4	1	10	14	415V ± 12%	±1.5%	660	360	600	75
VST15 - 4	1	15	21	415V ± 12%	±1.5%	660	360	600	78
VST20 - 4	1	20	28	415V ± 12%	±1.5%	660	360	600	96
VST30 - 4	1	30	42	415V ± 12%	±1.5%	690	380	810	115
VST40 - 4	1	40	56	415V ± 12%	±1.5%	690	380	810	128
VST45 - 4	1	45	63	415V ± 12%	±1.5%	690	380	810	134
VST50 - 4	1	50	70	415V ± 12%	±1.5%	690	380	810	136
VST60 - 4	1	60	84	415V ± 12%	±1.5%	690	380	810	180
VST75 - 4	1	75	104	415V ± 12%	±1.5%	810	475	1070	213
VST100 - 4	1	100	139	415V ± 12%	±1.5%	810	475	1070	248
VST125 - 4	1	125	174	415V ± 12%	±1.5%	810	475	1070	270
VST150 - 4	2	150	209	415V ± 12%	±1.5%	1490	660	580	385

remarks: the dimensions indicated above is applicable for Automatic Voltage Stabilizer only. Please refer to the staff for power line conditioner dimensions if required.