Matsunaga

Stavol®

AUTOMATIC VOLTAGE REGULATORS

Matsunaga

HIGH QUALITY HIGH RELIABILITY AUTOMATIC VOLTAGE REGULATORS.

Stavol® IT IS!

STAVOL quality speaks for itself. Precision-crafted, accurate and highly efficient-these units offer a host of peerless qualities including rapid correction, zero-waveform distortion, a wide range of input voltages and a compact and lightweight construction. STAVOL units are ideal for all electrical appliance/constant input voltage applications. Do not settle for less than the best.

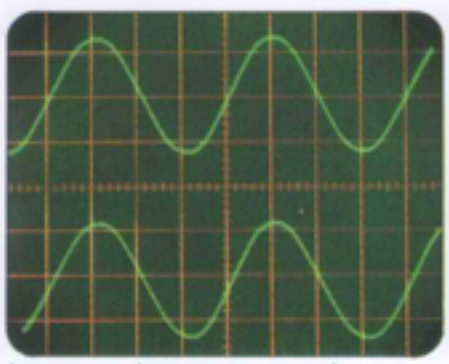
Specifications

	MODEL NM	MODEL 3-NM	
Input Voltage	150V~250V	160V~250V	275V~430V
Output Voltage	220V±3%, 110V±3%	220V±3%	380V±3%
Phase	Single-phase	3-Phase 3-Wire	3-Phase 4-Wire
Frequency	50Hz/60Hz		
Response Time	Within 0.8 sec. against 10% input voltage deviation.	Within 1 sec. against 10% input voltage deviation.	
Efficiency	Better than 90%(input voltage 198V, output voltage 220V and at rated load)	Better than 90%(input voltage 198V, output voltage 220V and at rated load)	Better than 90%(input voltage 342V, output voltage 380V and at rated load)
Power Factor	Better than 95%(input voltage 198V, output voltage 220V and at rated load)	Better than 95%(input voltage 198V, output voltage 220V and at rated load)	Better than 95%(input voltage 342V, output voltage 380V and at rated load)
Ambient Temperature	−5℃~+40℃		
Ambient Humidity	Less than 90% (relative humidity)		
Temperature Rise	Less than 75℃(input voltage 198V, output voltage 220V and at rated load)	Less than 75℃(input voltage 198V, output voltage 220V and at rated load)	Less than 75℃(input voltage 342V, output voltage 380V and at rated load)
Cooling System	Convection-cooled (Model 3kVA~ 20kVA Air blast)	Air blast (Model 3kVA : Air cooled)	
Control System	DC servo-motor		
Style	Stand-alone style		
Insulation Resistance	More than 5MΩ at DC 500V		
Dielectric Strength	Tested at AC 1500V for 1 min.	Tested at AC 1500V for 1 min.	Tested at AC 2000V for 1 min.

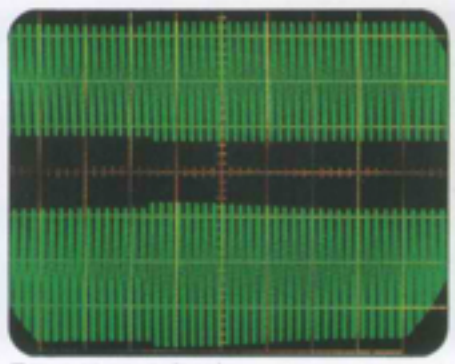
Applications

●Computers ●Test equipment ●Lighting equipment ●Alarm and security systems ●X-ray equipment ●Communication systems ●Medical equipment ●Calculating machines ●Auto process control equipment ●Broadcasting equipment ●Photographic processing equipment ●Numeric control machine tools ●Industrial robots ●Laboratory instruments ●TV sets ●Hi-fi equipment

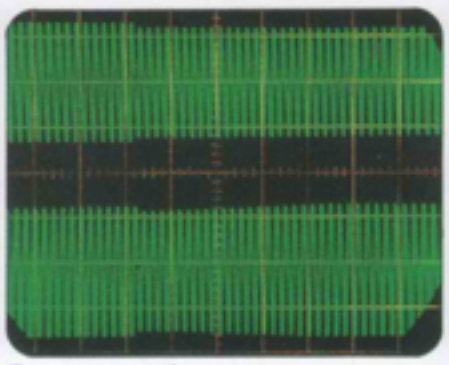
Performance



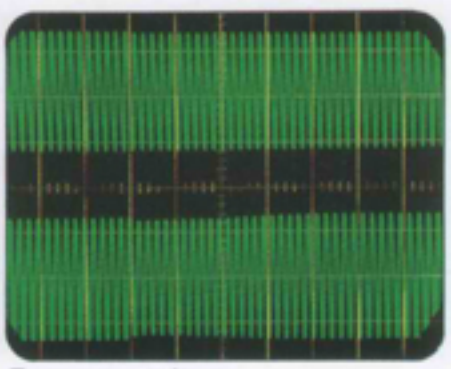
Input and output waveforms
power factor:1.0 Load:100%
(5msec/cm)



Response time
Input voltage change:+10%
(0.1sec/cm)



Response time
Input voltage change:−10%
(0.1sec/cm)



Response time
Load change:0→100%
(0.1sec/cm)

Ratings, dimensions and weight

Model	Power Output	Input Voltage	Output Voltage	W(mm)	D(mm)	H(mm)	Weight (kg)
SVC-500NM	500VA	Single-phase 150V～250V	110V±3% / 220V±3%	175	160	110	3.5
SVC-600NM	600VA			195	180	135	3.8
SVC-1000NM	1kVA			195	180	135	5.5
SVC-1200NM	1.2kVA			215	190	145	6.0
SVC-1500NM	1.5kVA			215	190	145	6.5
SVC-2000NM	2kVA			235	230	190	10
SVC-3000NM	3kVA			250	271	225	14
SVC-5000NM	5kVA			290	344	285	23
SVC-7500NM	7.5kVA			330	387	330	34
SVC-10000NM	10kVA	●Two different voltage can be supplied simultaneously in the manner illustrated.		380	490	425	60
SVC-15000NM	15kVA			370	570	415	70
SVC-20000NM	20kVA			500	630	560	120
SVC3-3NM-220	3kVA	3-Phase 3-Wire 160V～250V	→ 220V±3%	270	500	200	25
SVC3-6NM-220	6kVA			270	650	220	40
SVC3-9NM-220	9kVA			400	600	260	49
SVC3-15NM-220	15kVA			400	600	800	105
SVC3-20NM-220	20kVA			400	660	880	135
SVC3-30NM-220	30kVA			450	650	1370	190
SVC3-3NM-380	3kVA	3-Phase 4-Wire 275V～430V	→ 380V±3%	270	430	200	25
SVC3-6NM-380	6kVA			270	580	220	40
SVC3-9NM-380	9kVA			400	535	260	49
SVC3-15NM-380	15kVA			400	600	800	105
SVC3-20NM-380	20kVA			400	660	880	135
SVC3-30NM-380	30kVA			450	500	1370	205

● Frequency 50/60Hz

OPERATING INSTRUCTIONS

1.Please don't use SVC-NM in an over load condition or at over current rating. If you use SVC-NM in these cases, it may be broken or burnt out. SVC-NM can supply full capacity in the range from –10% of the nominal input voltage upto the maximum input range. (See Figure 1 & 2)

2.In case you use SVC-NM at low input voltage (10% less than the nominal voltage), please it in appropriate load condition, showing in Figure 1 & 2.

3.In case of output 110V usage of SVC-NM (single phase), please use it at less than half load condition. (See Figure 1)
In case of output 110V & 220V simultaneous usage of SVC-NM (single phase), also use it at less than half load condition.

4.Please use the good or much enough connecting cables between SVC-NM and load equipment, and also between SVC-NM and power source for avoiding voltage drop.

Figure 1: The limited output capacity by using conditions. (NM model)
Figure 2: The limited output capacity by using conditions. (3-NM model)

Figure 1 NM MODEL

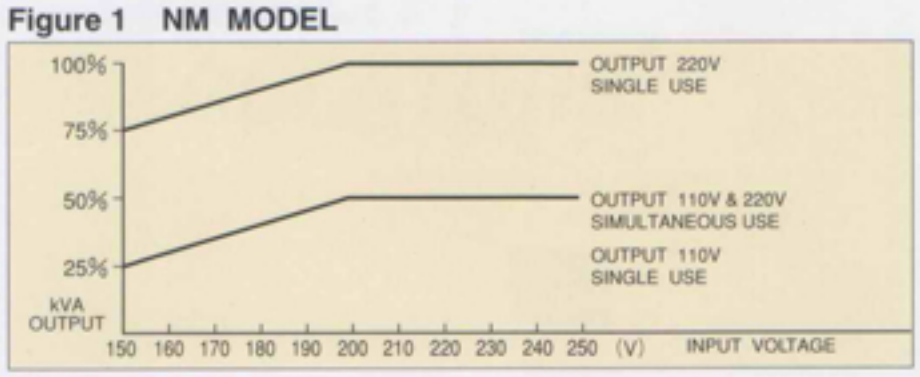
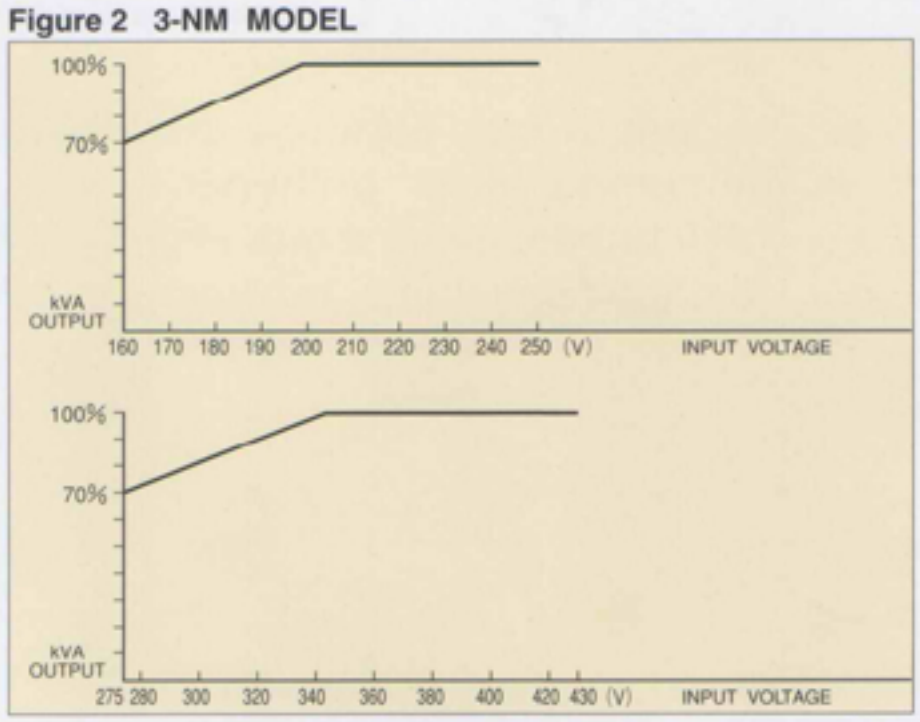
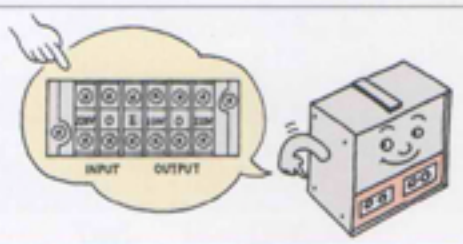
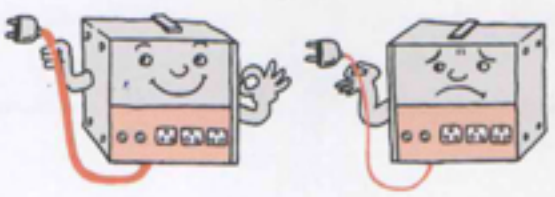
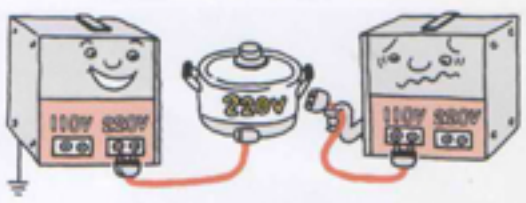
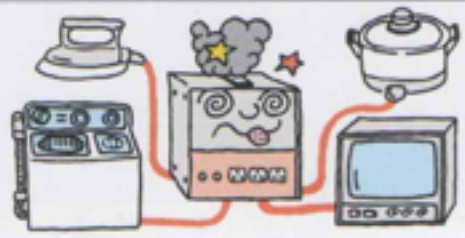
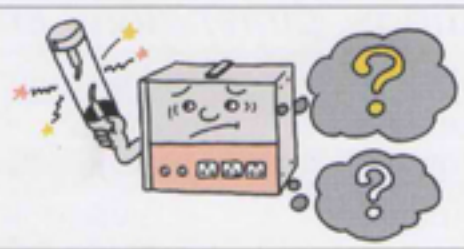
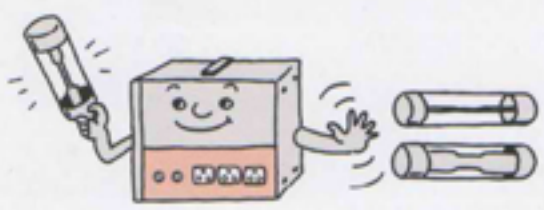


Figure 2 3-NM MODEL



Please check the power source voltage and the input voltage range of your "Stavol"	**NM MODEL** INPUT → OUTPUT 150V~250V → 110V / 220V **3-NM MODEL** 3-phase 3-wire 160V~250V → 220V 3-phase 4-wire 275V~430V → 380V
Please connect properly each input terminal according to the source voltage. (SVC-3000NM~ SVC-20000NM)	
Please use the good enough connecting cables.	
Please connect the load equipment to the same output voltage of "Stavol"	

Please don't use your "Stavol" in an over load condition.	
If the fuse is blown out, please check the load equipment and your "Stavol".	
Please replace a new fuse of same rating and never use another rating one or wire.	
Please set your "Stavol" in dry and cool place where no water nor petrol is.	

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