SHARE OUT THE RISK 
BY
PARALLEL REDUNDANT 
VOLTAGE STABILIZER

- Professional Solution for high power voltage management: Up to 50MVA
- Parallel connection up to 16 pieces of units
- Reduce your carbon footprint with energy saving application

High efficiency (typical %97)
All different network applications.

We Manage Voltage
You Save Energy

EDITELEKTRONiK
EDITELEKTRONİK
VOR
PARALLEL REDUNDANT VOLTAGE STABILIZER
What is the Parallel Redundant Voltage Stabilizer?

VOR, is an AC voltage optimisation and regulation unit which supplies continuous, safe and constant voltage to critical industrial machines and equipments. It adjusts the unstable and fluctuating utility voltage to the calculated value according to the facility’s special conditions and holds it stable at that value.

Parallel Architecture;

VOR voltage regulators works parallely by short circuiting the inputs and outputs of each unit. VOR units which can be connected parallely up to 16 pieces, works like a single unit. With the patented “parallel voltage regulator” technology, they can maintain synchronous operation, fast and safe voltage regulation. All the units can work as a “master” with the specially developed high speed CAN BUS communication protocol.

There is no need for an extra unit or a device for parallel operation. If any of the regulators fails, the remaining units will continue to work in parallel without any interruption. VOR units, can be supplied from a single source (transformer) or from separate sources with same specifications.

---

Figure-1: Parallel architecture design configuration I

Figure-2: Parallel architecture design configuration II
**N+1 Redundancy:**
Uninterruptable redundant full power operation with parallel connection of one more additional regulator!

If any of the regulators are shut-down for repairing or maintenance purposes, the remaining ones will continue to supply the system. Repaired unit can be taken online automatically without any interruption.

**Scalable and Flexible Design:**
Invest in your facility’s power plant step by step. With scalable and flexible VOR regulators, don’t make the procurement according to your future plans. Just invest in your current power requirement.

At the beginning stage, you don’t need to decide the total system power or the quantity of the units. Just decide one single unit’s power rating then when you need more power, you can make an addition to the system with a new regulator.

When you need less power, you can just simply shut down one of the regulators. Manage your capacity and efficiency with scalable and flexible VORs.

**Voltage Regulator for Parallel Redundant UPS Applications:**

UPS systems are mostly designed with +/-15% typical input voltage range. When the grid voltage gets out of this range, they discharge system batteries. Now You can enlarge the input voltage range of your UPS systems up to +/-40% by connecting a VOR regulator to the input. This way, UPS systems will work safer at the places where the grid voltage fluctuates;Devices and batteries will have a longer lifetime.

This will protect the critical loads from the under/over voltage risk during a maintenance bypass, overload or a failure.

The one and only suitable solution for the static transfer switches of Parallel connected UPS systems is VOR parallel voltage regulators.
**High Power Applications up to 50MVA;**

Unique and only voltage management solution for high power industrial applications. You can supply safe and constant voltage to a 50MVA power rated big facility or to a town, by connecting parallel 16 pieces of regulators each with 3.2MVA power rating. Vor regulators as a single unit, can be manufactured from 100KVA up to 3200KVA both for 1 phase and 3 phase.

**Share out the Risk by Parallel Redundant Voltage Management;**

In industrial applications and critical facilities, using only 1 transformer, 1 voltage regulator, 1 distribution unit and 1 UPS as a power supplier is a big risk. If any of these equipments fails, all facility will stop until the issue is solved. It is hard and it takes time to supply the service and spare parts supply of high power industrial devices. Use Parallel Redundant Voltage method solution which eliminates the risk of long time stop of your facility. When one or more units of power management or VOR regulators are shut down for maintenance purposes, the remaining units still continue to supply your devices. By using VOR regulator, with the cost of having one single high power unit, you may have the parallel redundant voltage management solution. Be ready for all negative scenarios.

---

**Figure-6: Share Out The Risk**

<table>
<thead>
<tr>
<th>RED SCENARIO</th>
<th>BLUE SCENARIO</th>
<th>GREEN SCENARIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the X marked units fail, then Facility runs with 400KVA power and 20% capacity.</td>
<td>If the X marked units fail, then Facility runs with 800KVA power and 40% capacity.</td>
<td>If the X marked units fail, then Facility runs with 1200KVA power and 60% capacity. And other scenarios.</td>
</tr>
</tbody>
</table>
Make energy saving, reduce your carbon footprint,
With the “Smart Voltage Management Software” which is developed for VOR units, real time voltage and power management is done with the highest efficiency and the best performance in energy saving applications. VOR units, supplies professional solutions for the facilities where the power requirement changes according to the seasons or daily shift hours. The minimum power consumption of the facility during the year, is measured and each VOR units' power rating is chosen accordingly.

With the below formula, the minimum quantity of the VOR regulators which will be parallely connected, is calculated.

\[ N = \frac{P}{P_{VOR}} \]

To operate with full power in case of a failure or maintenance, one more spare regulator unit is added to the total quantity.

\[ N_{TOT} = N + 1 \]

\[ P_{TOT} = N_{TOT} \times P_{VOR} \]

Necessary amount of the regulators can be run according to the power requirement of the facility; the remainings are shut down. By this practice, the power consumption of the unnecessary VOR units will be saved. With this system only the required power and voltage is managed. All this turn on/off process is done uninterruptedly.

- \( P \) = Power rating of the facility
- \( P_{VOR} \) = Power rating of a single VOR unit
- \( N \) = Minimum quantity of the VOR units that is necessary for the facility
- \( N_{TOT} \) = Total VOR units' quantity
- \( P_{TOT} \) = Total installation power rating of the facility
Industrial Voltage Management For All Kind of Grid Network Applications;

VOR units, as a stand alone unit or as a parallel system, can be manufactured compatible for all kind of grid voltages. 3 Phase and 1 Phase applications, 208V - 380V - 400V - 415V - 480V - 600V 50Hz / 60Hz.

With High Speed SCR Technology;
CPU controlled, high speed switching thyristor technology is used in VOR units. Thyristors which switch on the zero-cross of the grid signal, do not create any harmonics. Real power is transmitted via the booster transformer to the load. Only the necessary power for voltage buck and boost, is transmitted through the thyristors. Very fast voltage stabilization is done on instant voltage changes. Sensitive electronic devices do not get affected or harmed from this voltage fluctuation.

Maintenance-free Design;
No mechanical or electro-mechanical parts are used for voltage regulation in VOR units. There are no parts which can worn out or need periodical maintenance, like brushes, graphites or coils. It can work with full performance in dusty environment. It is suitable for warm places with humidity. Units can be manufactured for indoor and outdoor applications.

Current Sharing;
The VOR regulators which have the same power and technical specifications, share the load current. The load sharing accuracy is better than +/-5%. With the patented “parallel voltage regulator” technology, equal output voltage is maintained on all units. With this technology total load is shared equally between the parallely connected regulators and no circulation current occurs between the regulators. The conductivity difference on the semi-conductor components, is eliminated with “load balance unit” included in the VOR’s.

Wide Input Voltage Range and High Output Accuracy;
VOR regulators have a flexible input voltage range which can be determined according to the users’ requirements. VOR units can be manufactured in the input voltage range of down to “-60%” and up to “+50%” of the nominal voltage.

Industrial Voltage Management For All Kind of Grid Network Applications;
VOR units, as a stand alone unit or as a parallel system, can be manufactured compatible for all kind of grid voltages.

Figure-11: With high speed SCR technology

Figure-10: Wide input voltage range. High output accuracy.
Remote Management and Monitoring:
Each and every one of the VOR units, has a “Remote Management and Monitoring” (RMU) interface. Via this interface, users can manage the regulators remotely, set the ratings and change the working parameters. Users can make the units turn on/off without affecting the other parallel units. They can monitor the status of the unit together with the error messages, logs, voltage and load information.

RMU Has The Below Options:
- **MOD-BUS RTU**: User can manage the unit by connecting with modbus protocol and monitor all the technical parameters.
- **Ethernet web server**: User can connect to the VOR unit from anywhere on the world and from any computer with making a network connection via internet. User can control the unit via the web browser based managing and monitoring panel without any need of extra software.
- **GPRS interface**: In the near future, with the addition of GPRS interface, it will also be possible to connect, to monitor and to manage the unit via GSM line.

Applications:
- Factory
- Hospitals And Healthcare Facilities
- Government Buildings
- Communication
- Residential
- Oil&gass
- Machinery
- Banking And Finance Institutions
- Office Power
- Business Towers
- Data Center
- Industry
- Energy Save Applications
- Special High Power Dc Supply Applications

Figure-13: Remote Management and Monitoring Interfaces

Figure-14: Application
Structural Specifications

- 200 KVA - 50.000 KVA power range with three phase and single phase applications.
- All industrial voltage value.
  - 208VAC three phase / 120VAC Single phase, 50 / 60 Hz.
  - 380VAC three phase / 220VAC Single phase, 50 / 60 Hz.
  - 400VAC three phase / 230VAC Single phase, 50 / 60 Hz.
  - 415VAC three phase / 240VAC Single phase, 50 / 60 Hz.
  - 480VAC three phase / 277VAC Single phase, 50 / 60 Hz.
  - 600VAC three phase / 347VAC Single phase, 50 / 60 Hz.
- Wide input voltage range up to -%60, +%40.
- High speed regulation with Smart voltage correction software.
- Maintenance-free Electronic voltage management technology with CPU controlled thyristor units.
- Independent voltage Regulation.
- %100 unbalanced voltage and Load Capability.
- Parallel connection feature for high power and redundant practices.
- High Efficiency (typical %97).
- Parallel connection of regulator units for more capacity and redundancy.
- Equal load sharing.
- Selective on / off and the ability to temporarily isolate a Regulator with a problem.
- Simple and easy parallel communication technology with only 1 communication cable.
- Safe usage for all electrical devices.
- Remote management and monitoring with ETHERNET and MOD-BUS RTU interfaces.
- User friendly, easy and comprehensive LCD Display and mimic diagram.
- Electronic overload protection.
- Under voltage/over voltage protection.
- Over temperature and thyristor failure protection.
- Thermostat controlled fans for air cooling.
- Flexible design and software that can easily be oriented to different grid and voltage conditions.
- Manuel by pass switch for maintenance (optional).
- Uninterruptable automatic by pass function (optional).
- Special design for dusty industrial environments with high humidity or vibration.
- Compact structure with high quality material and minimum malfunction hazard.
- Production according to ISO 9001:2008 Quality Management System.
# TECHNICAL SPECIFICATIONS OF VOR SERIES 3 PHASE PARALLEL REDUNDANT VOLTAGE STABILIZERS

<table>
<thead>
<tr>
<th>Model</th>
<th>VOR 3P100</th>
<th>VOR 3P150</th>
<th>VOR 3P200</th>
<th>VOR 3P300</th>
<th>VOR 3P400</th>
<th>VOR 3P500</th>
<th>VOR 3P600</th>
<th>VOR 3P700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (kVA)</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>700</td>
</tr>
<tr>
<td>Power Factor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## INPUT

- **Voltage**: 380 VAC Three Phase + Neutral (Voltage ratings are available.)
- **Voltage Tolerance**: XS(-15%,+15%), S(-25%,+15%), M(-35%,+15%), L(-50%,+15%)
- **Frequency**: 50Hz ± 5%
- **Input Connection**: Copper busbar terminal

## OUTPUT

- **Voltage**: 380 VAC Three Phase + Neutral (Voltage ratings are available.)
- **Voltage Tolerance**: ± 2% (up to ± 1%)
- **Frequency**: 50 Hz ± 5%
- **Current**: 151A, 227A, 303A, 454A, 606A, 757A, 909A, 1060A
- **Overload Capability**: 101%-125% 3 min., 126%-150% 10 sec., 151% load 0.2 sec., after then output shut-off
- **Response Time**: 20 msec
- **Correction Speed**: 500 V/sec (Optional full regulation up to 3 cycles)
- **Efficiency**: > 97% typical
- **Output Connection**: Copper busbar terminal

## COMMUNICATION INTERFACE

- **Parallel Communication Interface**: CAN-BUS communication up to 100mt distance with CAT-5 cable
- **Remote Management and Monitoring Interface**: Browser based remote management with ethernet connection, MOD-BUS RTU with RS485 connection, GPRS Module (Optional)
- **LCD Display**: Input Voltage Value, Output Voltage Value, Output Load Percent, Output Frequency, Stabilizer settings, Stabilizer Condition and Failure Info, Warnings (Overload, over temperature, input failure, output failure, etc)
- **Dry Contacts**: Dry contacts for device status (optional)

## PROTECTION

- **Input Voltage Protection**: Stabilizer shut off electronically under / over voltage
- **Output Voltage Protection**: Stabilizer shut off electronically under / over voltage
- **Input Current Protection**: MCCB
- **Output Current Protection**: MCCB with motor
- **Output Overload Protection**: 101%-125% 3 min., 126%-150% 10 sec., 151%-200% load 0.2 sec., above 200% immediately output shut-off
- **Over Temperature Protection**: Stabilizer shut off to over - temperature
- **Manual By-Pass Switch**: (-0-1-0) position manual By-Pass switch for failure and maintenance (optional)
- **Surge Arrester**: Suitable surge arrester unit for lightning and high voltage (optional)

## ENVIRONMENTAL CONDITIONS

- **Operating Temperature**: -10 °C ~ +40 °C (optional cooling units on request)
- **Altitude**: < 3000 m
- **Humidity**: 90% none condensed
- **Acoustic Noise**: < 55dB, < 60dB

## CABINET SPECIFICATIONS

- **Type / Protection Class**: Indoor/IP 21 (optional outdoor cabinets on request)
- **Color**: RAL 7035
- **Base**: Wheel / Plinth
- **Cooling**: Air forced Fans
- **Dimensions (WxDxH) cm**: 60x80x150, 80x90x170, 80x100x170, 90x100x170, 90x120x190, 240x80x170
- **Weight (kg)**: 300, 400, 750, 900, 1100, 1200, 1400, 1900
# TECHNICAL SPECIFICATIONS OF VOR SERIES 3 PHASE PARALLEL REDUNDANT VOLTAGE STABILIZERS

<table>
<thead>
<tr>
<th>Model</th>
<th>VOR 3P800</th>
<th>VOR 3P900</th>
<th>VOR 3P1000</th>
<th>VOR 3P1250</th>
<th>VOR 3P1600</th>
<th>VOR 3P2000</th>
<th>VOR 3P2500</th>
<th>VOR 3P3200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (Kva)</td>
<td>800</td>
<td>900</td>
<td>1000</td>
<td>1250</td>
<td>1600</td>
<td>2000</td>
<td>2500</td>
<td>3200</td>
</tr>
<tr>
<td>Power Range</td>
<td>0,9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Configuration</td>
<td>Up to 16 units can be connected in parallel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## INPUT
- **Voltage**: 380 VAC Three Phase + Neutral (Voltage ratings are available.)
- **Voltage Tolerance**: X5(-15%,+15%), S5(-25%,+15%), M5(-35%,+15%), L5(-50%,+15%)
- **Frequency**: 50Hz ± 5%
- **Input Connection**: Copper busbar terminal

## OUTPUT
- **Voltage**: 380 V AC Three Phase + Neutral (Voltage ratings are available.)
- **Voltage Tolerance**: ± 2% (up to ± 1%)
- **Frequency**: 50 Hz ± 5%
- **Current**: 1212A 1363A 1515A 1893A 2424A 3030A 3787A 4848A
- **Overload Capability**: 101%-125% 3 min., 126%-150% 10 sec., 151% load 0,2 sec., after then output shut-off
- **Response Time**: 20 msec
- **Correction Speed**: 500 V/sec (Optional full regulation up to 3 cycles)
- **Efficiency**: > 97% typical
- **Output Connection**: Copper busbar terminal

## COMMUNICATION INTERFACE
- **Parallel Communication Interface**: CAN-BUS communication up to 100mt distance with CAT-5 cable
- **Remote Management and Monitoring Interface**: Browser based remote management with ethernet connection., MOD-BUS RTU with RS485 connection, GPRS Module
- **LCD Display**: Input Voltage Value, Output Voltage Value, Output Load Percent, Output Frequency, Stabilizer settings, Stabilizer Condition and Failure Info, Warnings (Overload, over temperature, input failure, output failure, etc)
- **Dry Contacts**: Dry contacts for device status (optional)

## PROTECTION
- **Input Voltage Protection**: Stabilizer shut off electronically under / over voltage
- **Output Voltage Protection**: Stabilizer shut off electronically under / over voltage
- **Input Current Protection**: MCCB with motor
- **Output Current Protection**: MCCB with motor
- **Output Overload Protection**: 101%-125% 3 min., 126%-150% 10 sec., 151%-200% load 0,2 sec., above 200% immediately output shut-off
- **Over Temperature Protection**: Stabilizer shut off to over - temperature
- **Manual By-Pass Switch**: (i-o-i) position manual By-Pass switch for failure and maintenance (optional)
- **Surge Arrester**: Suitable surge arrester unit for lightning and high voltage (optional)

## ENVIRONMENTAL CONDITIONS
- **Operating Temperature**: -10 °C ~ +40 °C (optional cooling units on request)
- **Altitude**: < 3000 m
- **Humidity**: 90% none condensed
- **Acoustic Noise**: < 60dB < 65 dB

## CABINET SPECIFICATIONS
- **Type / Protection Class**: Indoor/IP 21 (optional outdoor cabinets on request)
- **Color**: RAL 7035
- **Base**: Wheel / Plinth
- **Cooling**: Air forced Fans
- **Dimensions (WxDxH)**: 240x80x170 250x100x170 290x120x190 300x180x210
- **Weight (kg)**: 2200 2500 2800 3000 3500 4000 4700 5500
<table>
<thead>
<tr>
<th>OPTION</th>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel connection management unit</td>
<td>PCU</td>
<td>Any desired quantity of regulators can be connected parallely up to 16 pieces for special high power applications and redundant operation</td>
</tr>
<tr>
<td>Non-standard input voltage value</td>
<td>xxxV</td>
<td>VOR series voltage regulators can be produced at any required input voltage value that must be stated clearly by the order confirmation.</td>
</tr>
<tr>
<td>Non-standard input voltage range</td>
<td>XS,M,L,XL</td>
<td>VOR series voltage regulators can be produced at different input voltage ranges. The required range levels must be stated clearly by the order confirmation. Maximum input voltage range: -60%, +40%</td>
</tr>
<tr>
<td>Non-standard output voltage value</td>
<td>xxxV</td>
<td>VOR series voltage regulators can be produced at any required output voltage value that must be stated clearly by the order confirmation.</td>
</tr>
<tr>
<td>Non-standard output voltage tolerance</td>
<td>R</td>
<td>Output voltage tolerances of regulators can be +/-1%, +/-2%, +/-3%, +/-5%</td>
</tr>
<tr>
<td>Adjustable output voltage</td>
<td>ADJ</td>
<td>Output voltage of VOR series regulators can be adjusted by the LCD panel. Maximum adjusting range is +/-15%</td>
</tr>
<tr>
<td>Non-standard frequency</td>
<td>FRQ</td>
<td>VOR series voltage regulators are produced to function with 50Hz network frequency. If 60 Hz is required this must be stated clearly by the order confirmation.</td>
</tr>
<tr>
<td>Output protection MCCB</td>
<td>OCB</td>
<td>Optional MCCB may be added to the regulator output to provide additional protection.</td>
</tr>
<tr>
<td>Automatic uninterruptible By-Pass</td>
<td>ABP</td>
<td>Automatic uninterruptible by-pass unit* which switches the loads to the utility without any interruption, can be added to VOR series voltage regulators in case of an overload or any failure condition.</td>
</tr>
<tr>
<td>Input/Output transformer</td>
<td>TRF</td>
<td>Isolation Transformer or Voltage Changing Auto-Transformer can be supplied for both input and output of VOR series voltage regulators. Required transformer specifications must be given by the order.</td>
</tr>
<tr>
<td>Special enclosure</td>
<td>K</td>
<td>VOR series voltage regulators can be produced with both INDOOR and OUTDOOR in special cabinets having different IPXX protection classes.</td>
</tr>
<tr>
<td>Input/Output EMC filter</td>
<td>EMC</td>
<td>Specially designed EMC-Filters can be added optionally to the both input and output of VOR series voltage regulators. Filter specifications must be stated by offer/order.</td>
</tr>
<tr>
<td>Input/Output surge protector</td>
<td>SPD</td>
<td>High-Voltage Protection and Surge Arrester can be added to the both input and output of VOR series voltage regulators. The required protection classes and the specifications (CLASS-I,CLASS-II,CLASS-III) must be given with the order.</td>
</tr>
<tr>
<td>Remote monitoring and management unit</td>
<td>RMU</td>
<td>For remote monitoring and managing of VOR series voltage regulators, Remote Management and Monitoring unit can be added optionally. No any other software is needed for this RMU unit which provides a browser based communication over LAN- connection or internet.</td>
</tr>
<tr>
<td>Dry contacts</td>
<td>C</td>
<td>NO-NC dry contactor sockets can be applied for ON-OFF and Automatic By-Pass modes of the regulators.</td>
</tr>
<tr>
<td>Non-standard Input/Output terminal</td>
<td>T</td>
<td>Terminal connections and cabinet dimensions can be edited according to the project requirements.</td>
</tr>
<tr>
<td>Special design and accessories</td>
<td>SPM</td>
<td>VOR voltage regulators can be designed specially with respect to direct customer needs and technical specifications. All special requirements and detailed technical drawings and specifications for accessories must be provided by the customer at the offer/order stage.</td>
</tr>
<tr>
<td>Special operating temperature</td>
<td>SOT</td>
<td>Custom devices which can operate in special climate conditions with different operating temperature levels, can be manufactured on demand.</td>
</tr>
</tbody>
</table>
Cabinet Dimensions

<table>
<thead>
<tr>
<th>POWER</th>
<th>Cabinet Number</th>
<th>Width W (cm)</th>
<th>Depth D (cm)</th>
<th>Height H (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 KVA</td>
<td>1</td>
<td>60</td>
<td>80</td>
<td>150</td>
</tr>
<tr>
<td>150 KVA</td>
<td>2</td>
<td>80</td>
<td>90</td>
<td>170</td>
</tr>
<tr>
<td>200 KVA</td>
<td>3</td>
<td>80</td>
<td>100</td>
<td>170</td>
</tr>
<tr>
<td>300 KVA</td>
<td>4</td>
<td>90</td>
<td>100</td>
<td>170</td>
</tr>
<tr>
<td>400 KVA</td>
<td>4</td>
<td>90</td>
<td>100</td>
<td>170</td>
</tr>
<tr>
<td>500 KVA</td>
<td>5</td>
<td>90</td>
<td>120</td>
<td>190</td>
</tr>
</tbody>
</table>
**Parallel Redundant Selection Table**

<table>
<thead>
<tr>
<th>Target Power</th>
<th>VOR Power Unit</th>
<th>N Unit For Parallel Applications</th>
<th>N+1 Units For Parallel Redundant Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 KVA</td>
<td>100 KVA</td>
<td>2 X 100 KVA</td>
<td>3 X 100 KVA</td>
</tr>
<tr>
<td>300 KVA</td>
<td>100 KVA</td>
<td>3 X 100 KVA</td>
<td>4 X 100 KVA</td>
</tr>
<tr>
<td>400 KVA</td>
<td>100 KVA</td>
<td>4 X 100 KVA</td>
<td>5 X 100 KVA</td>
</tr>
<tr>
<td>600 KVA</td>
<td>200 KVA</td>
<td>3 X 200 KVA</td>
<td>4 X 200 KVA</td>
</tr>
<tr>
<td>800 KVA</td>
<td>200 KVA</td>
<td>4 X 200 KVA</td>
<td>5 X 200 KVA</td>
</tr>
<tr>
<td>1000 KVA</td>
<td>250 KVA</td>
<td>4 X 250 KVA</td>
<td>5 X 250 KVA</td>
</tr>
<tr>
<td>2000 KVA</td>
<td>500 KVA</td>
<td>4 X 500 KVA</td>
<td>5 X 500 KVA</td>
</tr>
<tr>
<td>3000 KVA</td>
<td>1000 KVA</td>
<td>3 X 1000 KVA</td>
<td>4 X 1000 KVA</td>
</tr>
<tr>
<td>4000 KVA</td>
<td>1000 KVA</td>
<td>4 X 1000 KVA</td>
<td>5 X 1000 KVA</td>
</tr>
<tr>
<td>6000 KVA</td>
<td>1000 KVA</td>
<td>6 X 1000 KVA</td>
<td>7 X 1000 KVA</td>
</tr>
<tr>
<td>8000 KVA</td>
<td>1000 KVA</td>
<td>8 X 1000 KVA</td>
<td>9 X 1000 KVA</td>
</tr>
<tr>
<td>10000 KVA</td>
<td>1000 KVA</td>
<td>10 X 1000 KVA</td>
<td>11 X 1000 KVA</td>
</tr>
<tr>
<td>12000 KVA</td>
<td>1250 KVA</td>
<td>10 X 1250 KVA</td>
<td>11 X 1250 KVA</td>
</tr>
<tr>
<td>14000 KVA</td>
<td>1250 KVA</td>
<td>12 X 1250 KVA</td>
<td>13 X 1250 KVA</td>
</tr>
<tr>
<td>16000 KVA</td>
<td>1600 KVA</td>
<td>10 X 1600 KVA</td>
<td>11 X 1600 KVA</td>
</tr>
<tr>
<td>18000 KVA</td>
<td>2000 KVA</td>
<td>9 X 2000 KVA</td>
<td>10 X 2000 KVA</td>
</tr>
<tr>
<td>20000 KVA</td>
<td>2000 KVA</td>
<td>10 X 2000 KVA</td>
<td>11 X 2000 KVA</td>
</tr>
<tr>
<td>25000 KVA</td>
<td>2500 KVA</td>
<td>10 X 2500 KVA</td>
<td>11 X 2500 KVA</td>
</tr>
<tr>
<td>30000 KVA</td>
<td>2500 KVA</td>
<td>12 X 2500 KVA</td>
<td>13 X 2500 KVA</td>
</tr>
<tr>
<td>35000 KVA</td>
<td>2500 KVA</td>
<td>14 X 2500 KVA</td>
<td>15 X 2500 KVA</td>
</tr>
<tr>
<td>40000 KVA</td>
<td>3200 KVA</td>
<td>14 X 3200 KVA</td>
<td>15 X 3200 KVA</td>
</tr>
<tr>
<td>45000 KVA</td>
<td>3200 KVA</td>
<td>14 X 3200 KVA</td>
<td>15 X 3200 KVA</td>
</tr>
<tr>
<td>50000 KVA</td>
<td>3200 KVA</td>
<td>16 X 3200 KVA</td>
<td>-</td>
</tr>
</tbody>
</table>
About Us

✓ Founded in Istanbul, Turkey in 1995.
✓ Our target is to be a world known brand on electrical control and management units manufacturing.
✓ We continuously renew and improve our products.
✓ We present professional power and energy management solutions to our clients with high technology voltage control and optimisation units which are manufactured by our expert team.

Our Products

• Static Voltage Stabilizers
• Parallel Redundant Voltage Stabilizers
• Voltage Control & Energy Saver Units
  • Universal Type SAG Generators
  • Industrial Type Battery Chargers
• Dry Type Isolation Transformers
• Uninterrupted Power Supplies