

THREE-PHASE STATIC VOLTAGE REGULATOR

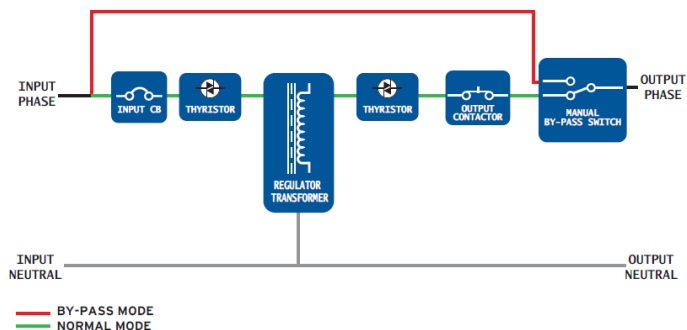
SET 04-19





power from 10 to 45kVA

Powers from 10kVA to 500kVA
 Standard input voltage range: (-%25 / +15%)
 Intelligent voltage regulation firmware
 High speed voltage regulation (500V/sec.)
 High efficiency (>97%)
 Protection against overload, over temperature, high voltage, low voltage and other faults.
 Suitable for heavy industrial working conditions
 Static technology without maintenance
 Built against overvoltages, voltage peaks and dips/increases with independent phase regulation to correct the voltage even in the event of total load unbalance
 Self-test at startup
 Parallel connection for special high power applications
 LCD display for easy monitoring



Typical block diagram



power from 60 to 300kVA

PRODUCT SPECIFICATIONS

WHAT IS A STATIC VOLTAGE STABILIZER?

SET static voltage stabilizers are devices used for voltage control and user protection, via a microprocessor board that manages a semiconductor system with high-speed technology.

They adapt the voltage value to the correct one required by industrial devices that are growing rapidly and are becoming increasingly sensitive, and are designed to meet their continuous need for safe and correct energy.

WHAT ARE THE FIELDS OF APPLICATION?

SET static voltage stabilizers can be produced with different and very wide input voltage ranges for places where mains voltages drop and rise excessively, evaluate and regulate the mains voltage in 0.020 seconds for mains voltage drops up to -60% or increase up to 40%, and correct at a rate of 500V/sec.

In this way, high-cost industrial devices are protected against dangerous voltage changes and also allows systems to work with high efficiency and without interruption.

HOW DO WE DESIGN THEM?

SET static voltage stabilizers have been designed with a compact and modular structure and a solid yet aesthetically pleasing industrial aesthetic, built in such a way that they can be easily connected to electrical systems anywhere in the world. It is possible to integrate "BUS-BARS" on request for the connection of the input or output.

We can modify requirements such as input voltage, output voltage, and load types upon request.

Data and warnings can be viewed on the large LCD display, standard on the SET series.

It is possible to connect to devices on the web, view everything information on the LCD display and change the main settings of the device values remotely with the "remote view and management".

HOW DO WE PROTECT YOUR SYSTEMS?

SET voltage stabilizers have low voltage, low voltage, over temperature, overload, short circuit and phase failure protection: protections for your own operational safety and also for all electronic devices in your company.

There is a "Manual By-pass" unit which allows the voltage to be directly transferred to the mains load to provide flexibility of use and working safety.

They are equipped with input and (optional) output circuit breakers.

STRUCTURAL SPECIFICATIONS

- Three-phase from 10kVA to 500kVA
- All industrial voltage values (208-380 - 400-415 - 480 - 600V)
- Wide range of input voltages available on request -65% / +45%
- Maintenance-free new technology with microprocessor control.
- High speed regulation (up to 500V/sec.)
- High efficiency (>97%)
- CPU controlled thyristor unit for power management
- Protection against overload, over temperature, high voltage, low voltage etc.
- Flexible design and software that can easily adapt to different network and voltage conditions.
- Automatic input switch and by-pass switch to work with the network, in cases of malfunction or for maintenance needs.
- Real modular static design with THYRISTOR technology used in power units.
- "Remote Management System" and software support through which the user can remotely manage all information.
- Production according to ISO 9001: 2008 Quality Management System.
- New technological design that is suitable for industrial environments in dusty situations, presence of humidity and vibrations.
- Absence of maintenance.
- Safe use for all electrical devices.
- Minimal size, long life.
- Easy and complete user and synoptic LCD display
- Compact structure with minimal risk of malfunction thanks to high quality materials
- Surge arrester against sudden voltage increases and atmospheric discharges (OPT)
- Spare parts guaranteed for 10 years
- Parallel connection for special high power applications
- Self-test system at startup

MODEL SET	04	05	06	08	09	11	12	13	14	15	16	17	18	19
Power (kVA/kW)	10	15	22	30	45	60	75	100	150	200	250	300	400	500
INPUT														
Voltage	400Vac 3ph.+N													
Voltage range	-25% +15% @ 300Vac ~ 460Vac (optional ±15%, -35%+15%, -50%+15%)													
Frequency	50/60Hz ±5%													
Connection type	Terminal block									Bars				
OUTPUT														
Voltage	400Vac													
Voltage precision	± 2%													
Current (A)	14	22	32	43	65	87	108	143	217	289	362	434	579	724
Overload (microprocessor controlled)	101% - 125% load 3" 126% - 150% load 10" 150% load disabling output in 0.2"													
Frequency	50/60Hz ±5%													
Power factor	1													
Adjustment speed	ca. 500 V/sec													
Efficiency	min. 97%													
Connection type	Terminal block									Bars				
LCD Display	LCD display 4 x 16 characters input voltage - output voltage - % load - output frequency - Stabilizer status and fault Info - overload - overtemperature - no input alarm													
Communication	RS-232 and SNMP Monitoring Port + software (optional)													
PROTECTIONS														
Output	with input outside the range -40%+25% output disabled via contactor													
Current	electronic protection with microprocessor and output disabling input thermal magnetic switch													
By-Pass	Yes													
Isolation transformer	available on request													
ENVIRONMENT														
Max temperature	-10 °C ~ +40 °C													
Altitude	2000 mt													
Humidity	95% (without condensation)													
Noise level	< 50dB													
PHISICAL														
Color	RAL7035													
Dim. (WxDxH) cm	35x79x80					60x70x170			70x90x 150	80x90x 170	80x100x170		90x120x190	
Weight (Kg)	100	105	115	130	170	220	270	300	550	750	820	900	1050	1200

Technical data and images are indicative only and may be changed at any time without notice

IMMAGINI



DA 10kVA A 45kVA



DA 60kVA A 300kVA



DA 400kVA



Naicon

UNIT



Diloc



Elsist



Naicon srl Via il Caravaggio, 25 Trecella I 20060 Pozzuolo Martesana - Milano (Italy)
Tel. +39 02 95.003.1 Fax +39 02 95.003.313 www.naicon.com e-mail: naicon@naicon.com