

ONLINE DOUBLE-CONVERSION
VOLTAGE STABILIZER

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CATALOG QUANT

2025

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LLC "RPF "QUANT-ENGINEERING" – Winner of the National Award "Choice of the Country"

"Choice of the Country" for us, this is a confirmation that consumers have acknowledged the quality of our products and selected us over other manufacturers. This choice has contributed to the growth of our company, as confirmed by independent experts, resulting in the awarding of the "Choice of the Country" prize.

In the future, this recognition motivates our team to broaden the range of existing products and launch fundamentally new items of the highest quality!

The "QUANT" project was initiated on May 24, 2019, by a team of power electronics developers. It began with the joint creation of a technical specification that embodied all the dreams and expectations of consumers for the "ideal outlet in the house." Over the course of two years, the developers refined critical parameters without compromising quality, largely thanks to innovative solutions. This ensured manufacturability through an improved design, software optimization, and automation of operations.

The starting point was the development of a comprehensive technical specification that combined the best features, addressing consumer desires for the "ideal stabilizer." The QUANT inverter voltage stabilizers were essentially developed from scratch: from circuitry, algorithms, and software to component selection, design, and construction.

This thorough approach led to improvements in nearly all performance metrics: from stabilization quality to enhanced protection for both the load and the device itself. At the same time, the size and weight of the stabilizers were significantly reduced. Users can now conveniently place QUANT stabilizers in their homes, as the updated mounting system allows for secure installation, even on drywall.

The QUANT voltage stabilizers also stand out for their uncompromising exterior design. The casing is durable, compact, and features a distinctive design with a velvety metallic polymer coating.

Thus, in the process of manufacturing double-conversion protected stabilizers for the mass market, none of the important system characteristics were overlooked!

The "Quant" trademark stands for quality. We are satisfied when you are satisfied.

We strive for excellence - with a high-quality product, friendly service, and prompt delivery!

With respect, LLC "SPF "QUANT-ENGINEERING"



About QUANT Stabilizers

The Quant Online Double-Conversion Voltage Stabilizer is a modern device designed to regulate input voltage fluctuations before they affect the output.

The Single-Phase Quant Voltage Stabilizer is an online double-conversion stabilizer with proactive protection that does not require energy storage. It detects and neutralizes all voltage spikes and surges. Regardless of the input conditions, the output consistently provides a nominal voltage of 220V or 230V. Through the process of double conversion, all harmful interference is completely eliminated, ensuring the connected load is fully protected.

The Three-Phase Quant Voltage Stabilizer comprises three single-phase Quant inverter

stabilizers operating in coordination with a phase control unit.

The key advantage of the Quant three-phase stabilizer over conventional three-phase stabilizers with synchronization is its ability to keep single-phase devices operational even when two phases are unavailable due to external issues.

Principle of operation of Quant online double-conversion voltage stabilizers: when a voltage spike occurs at the input of the stabilizer, it takes up to 10 microseconds for the spike to pass through the stabilizer's filters before reaching your household appliances. This creates a time delay between the input and output voltages. During this brief period, the Quant stabilizer reacts and adjusts the output voltage to the nominal value of 220V or 230V (user's choice), ensuring it is 100% safe for consumption.

Since the Quant stabilizer is continuous (stepless), it does not have any voltage regulation delay at the output, unlike traditional step-type stabilizers. This means that Quant is an instantaneous-response stabilizer, ensuring that even regular incandescent light bulbs do not flicker.

Both single-phase and three-phase Quant models are intended for the safe operation of electrical loads in apartments, houses, cottages, offices, as well as for use with solar power systems, provided that the total power consumption of the load does not exceed the stabilizer's rated capacity.



Single-Phase Stabilizer



QUANT

01



Small model

QUANT-5.5

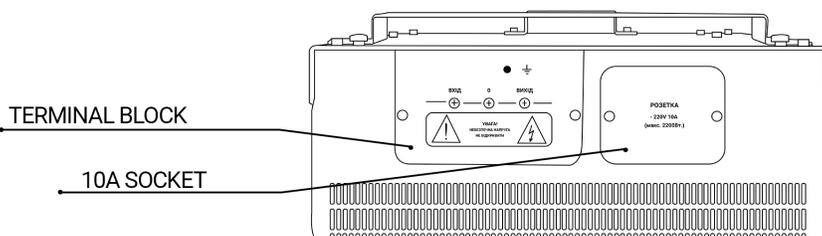
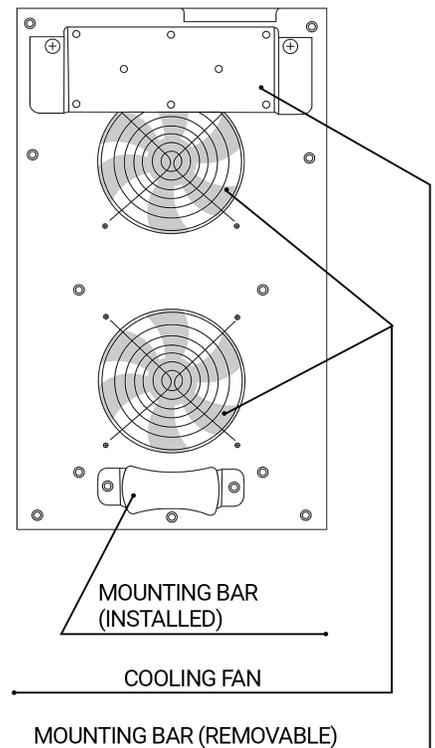
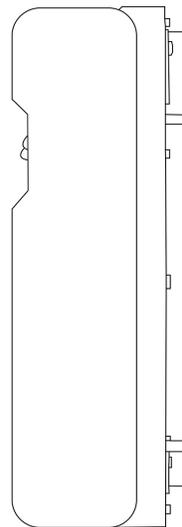
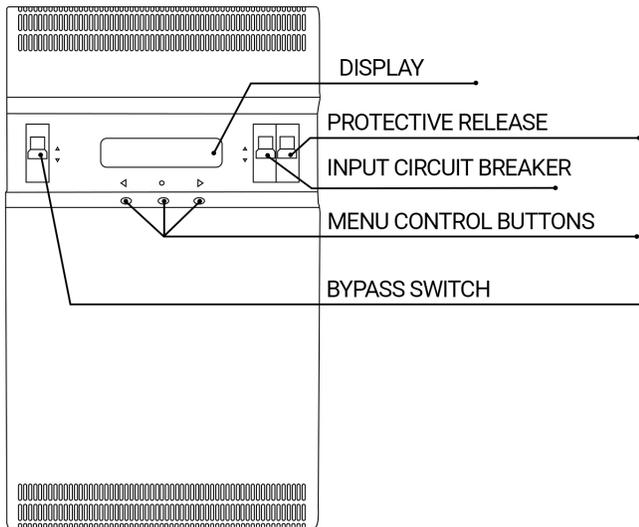
QUANT-7

QUANT-9

QUANT-11



STABILIZER DIAGRAM



Large model

QUANT-14

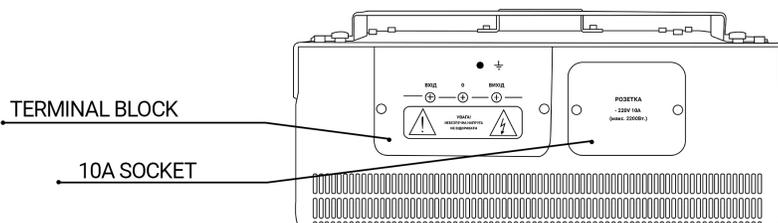
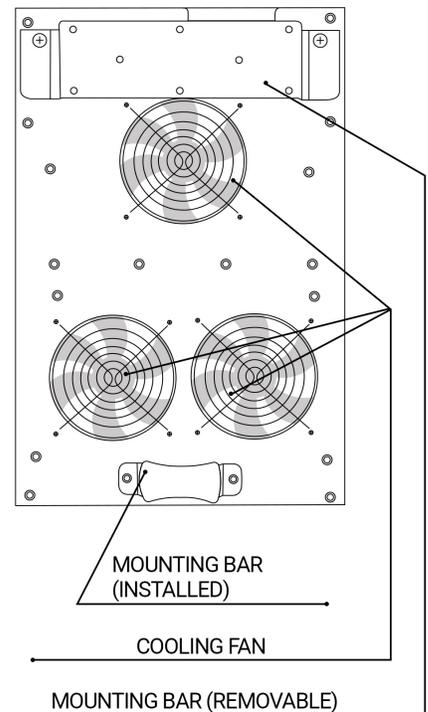
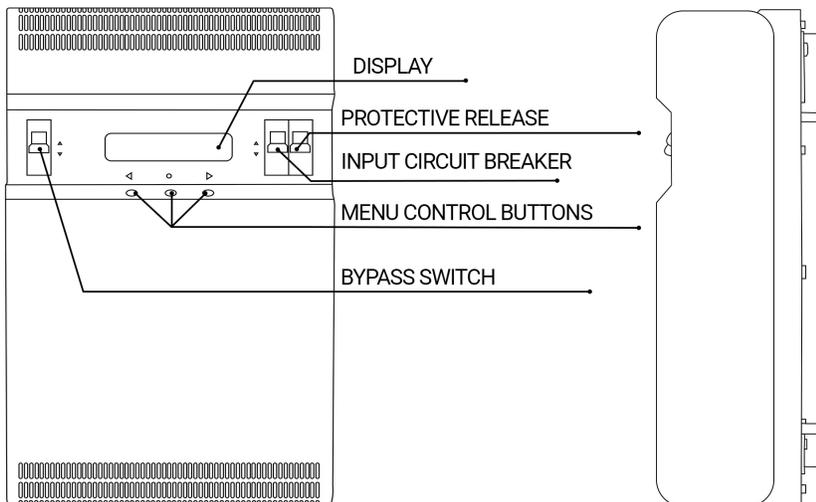
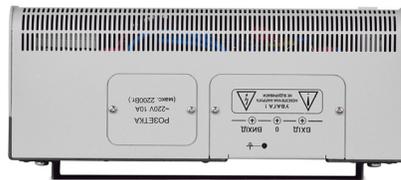
QUANT-18



Quant-14

Quant-18

STABILIZER DIAGRAM



Model range



Quant-5.5

Quant-7

Quant-9

Quant-11

Quant-14

Quant-18

Parameters	Quant-5.5	Quant-7	Quant-9	Quant-11	Quant-14	Quant-18
Regulation type	Online double-conversion voltage stabilizer with advanced protection					
Number of steps	There are no steps. Smooth adjustment.					
Output power at 220V, kW	5.5	7	8.8	11	13.8	17.6
Output power at 110V, kW	2.75	3.5	4.4	5.5	6.9	8.8
Output voltage, V	220 or 230					
Nominal input current, A	25	32	40	50	63	80
Overload current and short circuit, A	50	60	80	100	120	140
Off time with load >125%, sec.	10					
Off time with load >150% - short circuit, sec.	1					
Regulator accuracy, %	0,5					
Input voltage range, V	90-350					
Regulation range, V	90-350					
Operating frequency range, Hz	45-50					
Operating temperature range, °C	+5 ...+40					
Humidity range, %	40...80					
Delay before switching on, sec.	6					
Mounting method	Hinged					
Protection index	IP20					
Cooling	Forced. Low-noise.					
Number of phases	1					
Generator compatibility	No					
Reactive load current compensator function	Yes					
Current limiting function	Yes					
Power measurement	Yes					
Mechanical Bypass	Yes					
Soft start function	Yes					
Display	Yes					
Color	Light grey					
Power consumption, W	15	16	17	24	26	30
Dimensions, mm, HxWxD	435x250x125	435x250x125	435x250x125	435x250x125	470x330x130	470x330x130
Weight, kg	11	11	11	15	15	16
Warranty, months.	60					
Warranty, months, months.	60					
Country of origin	Ukraine, Zhytomyr					
Country of brand registration	Ukraine					
Goods manufacturer	LLC "RPF "QUANT-ENGINEERING"					

Three-Phase Stabilizer



QUANT

02



Model range



Quant-16.5



Quant-21



Quant-27



Quant-33



Quant-42



Quant-54



Quant-66



Quant-84



Quant-108

Модель	Quant-16.5	Quant-21	Quant-27	Quant-33	Quant-42	Quant-54
Regulation type	Online double-conversion voltage stabilizer with advanced protection					
Number of steps	There are no steps. Smooth adjustment.					
Output power per phase at an input voltage of 220V, kW	5.5	7	8.8	11	13.8	17.6
Output power for all three phases at an input voltage of 220V, kVA _T	16.5	21	26.4	33	41.4	52.8
Output power per phase at an input voltage of 110V, kW	2.75	3.5	4.4	5.5	6.9	8.8
Output power for all three phases at an input voltage of 110V, kW	8.25	10.5	13.4	16.5	20.7	26.4
Output voltage, V	220 or 230					
Output voltage correction, %	+/- 3% with a step of 0,1%					
Continuous input or output current per phase, maximum, A	25	32	40	50	63	80
Overload current and short circuit, A	50	60	80	100	120	140
Off time with load >125%, sec.	12					
Off time with load >150% - short circuit, sec.	1.5					
Regulator accuracy, %	0.5					
Input voltage range, V	90-350					
Regulation range, V	90-350					
Operating frequency range, Hz	45-50					
Operating temperature range, °C	+5 ...+40					
Humidity range, %	40...80					
Delay before switching on, sec.	6					
Mounting method	Hinged					
Connection type	Terminal block					
Protection index	IP20					
Cooling	Forced. Low-noise.					
Number of phases	3					
Generator compatibility	No					
Presence of phase control relay	Yes					
Presence of phase summator	No					
Synchronization of the output voltage phase with the input voltage phase	Yes					
Reactive load current compensator function	Yes					
Current limiting function	Yes					
Power measurement	Yes					
Mechanical Bypass	Yes					
Output socket 220/230 V	Yes					
Colour	Light grey					
Power consumption per phase, W	15	16	17	24	26	30
Dimensions of one module, mm (HxWxD)	435x250x125	435x250x125	435x250x125	435x250x125	470x330x130	470x330x130
Net weight of one module, kg	11	11	11	15	15	16
Warranty, months.	60					
Warranty, months, months.	60					
Country of origin	Ukraine, Zhytomyr					
Country of brand registration	Ukraine					
Goods manufacturer	LLC "RPF "QUANT-ENGINEERING"					



Quant three-phase voltage stabilizers consist of three single-phase online double-conversion voltage stabilizers that operate in conjunction with a phase control unit.

The main difference between the Quant three-phase voltage stabilizers and conventional three-phase stabilizers with a synchronizer is that the Quant stabilizer

does not block the operation of single-phase loads, even when two phases are absent for some reason.

The Quant phase control unit is based on the multifunctional protection device Phase Control Relay (RNPP 311M) from "Novatek-Electro" and magnetic starters from Schneider Electric.

Модель	Quant-66	Quant-84	Quant-108
Regulation type	Online double-conversion voltage stabilizer with advanced protection		
Number of steps	There are no steps. Smooth adjustment.		
Output power per phase at an input voltage of 220V, kW	22	27.6	35.2
Output power for all three phases at an input voltage of 220V, kVA τ	66	82.8	105.6
Output power per phase at an input voltage of 110V, kW	11	13.8	17.6
Output power for all three phases at an input voltage of 110V, kW	33	41.4	52.8
Output voltage, V	220 or 230		
Output voltage correction, %	+/- 3% with a step of 0,1%		
Continuous input or output current per phase, maximum, A	100	126	160
Overload current and short circuit, A	200	252	280
Off time with load >125%, sec.	12		
Off time with load >150% - short circuit, sec.	1.5		
Regulator accuracy, %	0.5		
Input voltage range, V	90-350		
Regulation range, V	90-350		
Operating frequency range, Hz	45-50		
Operating temperature range, °C	. +5 ... +40		
Humidity range, %	40...80		
Delay before switching on, sec.	6		
Mounting method	Hinged		
Connection type	Terminal block		
Protection index	IP20		
Cooling	Forced. Low-noise.		
Number of phases	3		
Generator compatibility	No		
Presence of phase control relay	Yes		
Presence of phase summator	No		
Synchronization of the output voltage phase with the input voltage phase	Yes		
Reactive load current compensator function	Yes		
Current limiting function	Yes		
Power measurement	Yes		
Mechanical Bypass	Yes		
Output socket 220/230 V	Yes		
Colour	Light grey		
Power consumption per phase, W	44	44	50
Dimensions of one module, mm (HxWxD)	435x250x125	470x330x130	470x330x130
Net weight of one module, kg	15	20	20
Warranty, months.	60		
Warranty, months, months.	60		
Country of origin	Ukraine, Zhytomyr		
Country of brand registration	Ukraine		
Goods manufacturer	LLC "RPF "QUANT-ENGINEERING"		

Quant-66, Quant-84, Quant-108 are six single-phase inverter voltage stabilizers from Quant, which operate with a power summator.

The Quant power summator is a reliable device housed in a steel casing, featuring an electrically insulated transformer and terminals for connecting the stabilizers and the total load. The summator is available in a three-phase version with a phase control unit. Each phase of

the summator can combine two stabilizers with a total capacity of up to 17.6 kW.

The phase control unit, in combination with the summator module, ensures phase-by-phase control for loads that require strict three-phase power, such as three-phase motors. If any phase fails or is missing, the phase control unit will disconnect all three phases from the load, preventing damage.

Industrial Stabilizer



QUANT

03



Explanation of the operating principle of **QUANT-132** in the educational and rehabilitation center “Dzherelo”.



Watch the video

In the video, the QUANT-132 in the «Dzherelo» educational and rehabilitation center (the facility includes a powerful kitchen with a large number of electric stoves, and electric vehicle chargers), an engineer provides a detailed demonstration of the device’s operation.

The facility consumes 200 A of current per phase, meaning it has a three-phase power supply with a total current consumption of approximately 600 A.

The QUANT-132 consists of 12 stabilizers, each rated at 11 kW, two primary power summators, and a main summator. The voltage from the stabilizers is distributed throughout the facility via the distribution panel.

Each phase is supplied by 4 stabilizers, each rated at 11 kW (total 44 kW). These stabilizers are organized in pairs and by phase.

The primary voltage summators operate for each pair within each stabilizer group (there are a total of 6 stabilizer groups). They correct small voltage deviations within each group and ensure synchronized operation of the stabilizers. The primary summators are equipped with voltage and phase protection relays. If one of the phases is lost for any reason, two circuit breakers in the primary summators will trigger, cutting off power

to the entire system to protect the three-phase loads.

The main summator supplies 200 A per phase to a three-position switch, which can supply consumers either from the grid or from the stabilizers (it has three positions: «Stabilizers» / «Neutral position» / «Bypass (grid)»).

The QUANT-132 protection system activates in case of overload, overheating, or phase loss. If one stabilizer loses power, the entire power from the de-energized stabilizer «flows» into the second stabilizer (within the same pair). If the first pair has no power, the power will transfer to the second pair. If the first stabilizer in the second pair loses power, the remaining stabilizer will handle the entire load (if its power rating allows). If there is not enough power, one phase will be disconnected, triggering the protection in the primary summators and cutting off the entire system’s power supply.

The system restart occurs in the following sequence: first, turn off the circuit breakers on the primary summators, then turn on the voltage stabilizers whose circuit breaker was switched off. After the stabilizers are fully loaded, check the voltage relays on the primary summators, and if all three phases are visible, turn on the circuit breakers on the primary summators simultaneously.

Model range



Quant-132 (12x11)



Quant-168 (12x14)



Quant-216 (12x18)

Модель	Quant-132	Quant-168	Quant-216
Regulation type	Online double-conversion voltage stabilizer with advanced protection		
Number of steps	There are no steps. Smooth adjustment.		
Output power per phase at an input voltage of 220V, kW	44	56	72
Output power for all three phases at an input voltage of 220V, kVA _T	132	168	216
Output power per phase at an input voltage of 110V, kW	22	28	36
Output power for all three phases at an input voltage of 110V, kW	66	84	108
Output voltage, V	220 or 230		
Output voltage correction, %	+/- 3% with a step of 0,1%		
Continuous input or output current per phase, maximum, A	200	260	320
Overload current and short circuit, A	400	520	640
Off time with load >125%, sec.	12		
Off time with load >150% - short circuit, sec.	1.5		
Regulator accuracy, %	0.5		
Input voltage range, V	90-350		
Regulation range, V	90-350		
Operating frequency range, Hz	45-50		
Operating temperature range, °C	+5 ...+40		
Humidity range, %	40...80		
Delay before switching on, sec.	6		
Mounting method	Hinged		
Connection type	Terminal block		
Protection index	IP20		
Cooling	Forced. Low-noise.		
Number of phases	3		
Generator compatibility	No		
Presence of phase control relay	Yes		
Presence of phase summator	No		
Synchronization of the output voltage phase with the input voltage phase	Yes		
Reactive load current compensator function	Yes		
Current limiting function	Yes		
Power measurement	Yes		
Mechanical Bypass	Yes		
Output socket 220/230 V	Yes		
Colour	Light grey		
Power consumption per phase, W	50	50	50
Dimensions of one module, mm (HxWxD)	435x250x125	470x330x130	470x330x130
Net weight of one module, kg	15	20	20
Warranty, months.	60		
Warranty, months, months.	60		
Country of origin	Ukraine, Zhytomyr		
Country of brand registration	Ukraine		
Goods manufacturer	LLC "RPF "QUANT-ENGINEERING"		

Quant-132, Quant-168, and Quant-216 are systems composed of 12 single-phase online double-conversion voltage stabilizers working in conjunction with power summators (two primary summators and one general summator).

The Quant power summator is a robustly enclosed device housed in a steel case, equipped with an electrically isolated transformer and terminals for connecting stabilizers and the resulting high-capacity load.

The summator is designed in a three-phase configuration and includes a phase control unit. Each phase of this summator can combine up to four stabilizers, each with a capacity of up to 18 kW, providing a total of 72 kW per phase or 216 kW across all phases.

The phase control unit, in conjunction with the general summator, ensures individual phase monitoring for loads requiring strict three-phase power supply, such as three-phase motors.

Advantages of QUANT Stabilizers

Compared to stabilizers of other types

High Stabilization Accuracy

Digital control and advanced conversion techniques ensure an output voltage accuracy that surpasses standard requirements.

Wide Input Voltage Range

The stabilizer operates effectively not only under extremely low and high input voltages but also handles sudden fluctuations from low to high and vice versa with precision.

Clustered Stabilizer Integration

The ability to parallel multiple stabilizers allows for the creation of high-power systems ranging from 5 kW to over 100 kW.

Instantaneous Response

No need to guess what might harm your equipment—your devices will always receive a precise 220/230V output without spikes or overvoltages.

24/7 Operability

Continuous operation 24/7 under 100% load.

Interference Filter

Special filtering on the input and output of the stabilizer protects against disturbances in the electrical grid.

Perfect Sinusoidal Output Voltage

Corrects the voltage waveform in the network if it is already distorted at the input.

Surge Absorber

For the first time, a “perpetual” protection against surge spikes has been implemented, effectively limiting surges throughout the entire service life without the need to replace cartridges, similar to UPS.

Double Conversion of Electricity “On the Fly”

The stabilizer not only operates at very low and very high voltage levels but also functions correctly during voltage fluctuations, from low to high levels and vice versa.

Absolute Phase Sequence Adherence in Three-Phase Systems

The stabilizer outputs the corrected input voltage, not a newly generated one (based on the double conversion principle without energy storage). Therefore, it is guaranteed that the output voltage phase always precisely corresponds to the input phase (naturally, the frequency is also synchronized).





5+ Years Warranty

Components from trusted suppliers or in-house production, designed to operate in an under-loaded mode, form the foundation for the long-term reliability of the device.



Silence Operation

Special reactors in the form of a monolithic design, developed and manufactured in-house, produce no sound even at maximum power.



Durability

All load-bearing components are designed with a margin for long-term operation without wear or degradation. Components with a limited service life are not used, even for surge protection.



The “no-transformer design”

A unique “on-the-fly” conversion mechanism without energy storage, based on online technology with double voltage conversion.



Full electronic protection

For the first time, true safety against voltage surges in the network, along with standard protections against short circuits, overheating, overcurrent, and more.



Active cooling

Even under maximum load, all components of the stabilizer operate in an optimized thermal mode.



High efficiency

Provides high-quality power supply without wasting energy unnecessarily.



Low weight and compact size

It fits into any interior without taking up much space. The low weight ensures easy and simple installation.



High overload capacity

It has a power reserve for short-term loads with high inrush currents, such as those from induction motors.

Accessories

QUANT

04



Phase Control Unit

Phase Control Unit is used when the power supply is three-phase, all three phases are stabilized (using three single-phase QUANT stabilizers), and either the entire three-phase load (or part of it) requires strict three-phase power supply. This needs to be controlled to prevent damage or malfunctioning of the equipment.

The Phase Control Unit is not required for three-phase loads that are not sensitive to phase imbalance, phase sequence (rotation direction), and/or the presence of all three phases (3 out of 3), such as powerful heaters that are loaded across three phases to balance currents in the neutral wire. These consumers should be direct-

ly connected to the outputs of the stabilizers, as they do not require protection against disconnection and can continue to operate under such deviations.

The Phase Control Unit is not necessary for single-phase loads. Lighting, computer equipment, and similar loads should be connected directly to the QUANT stabilizer outputs. If the most reliable connection is required, even in the case of one or two phases being lost, a phase selection relay should be used additionally.



Model range



Quant-16.5



Quant-21



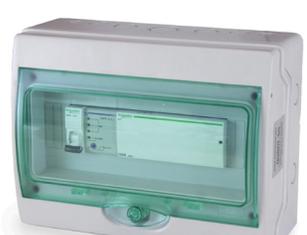
Quant-27



Quant-33



Quant-42



Quant-54

Generator Integration Unit

The Generator Integration Unit, abbreviated as GIU, is designed to connect a generator as a backup power source to the voltage stabilizer and create a bypass power line to exclude the stabilizer from the power chain when the generator is in operation. This prevents damage to both the generator and the stabilizer.

The manual version of the GIU allows for manual selection of the power source using a toggle switch. The manual version has a phase and neutral for connecting the main power line and a phase and neutral for connecting the generator's power line. In all versions of the GIU, there is no grounding circuit or lines for connecting it.



Model range



Quant-G1 (up to 40A)



Quant-G2 (up to 63A)

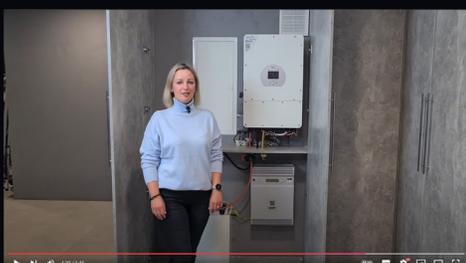
Official YouTube Channel



VOLTAGE STABILIZER
Quant
OUR MERIT - SAFE VOLTAGE



REAL CASES FROM CUSTOMERS



ONLINE DOUBLE-CONVERSION VOLTAGE STABILIZER

Marketing Advantages of QUANT:



Wide Range of Products



Upgrade to a More Powerful Model



Official Manufacturer's Warranty



Professional Selection



Free Delivery Across Ukraine



OUR MERIT - SAFE VOLTAGE!

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