



Innovative Power Solutions & Voltage Stabilizers

PCU Catalog





PCU

Uninterruptible Power Supply and Inverter



Key Features

- On-Line Double Conversion Technology
- Galvanic Isolation Transformer
- 2KVA-60KVA power range for Single phase
- 10KVA-200KVA power range for three phase
- IGBT and PWM technology
- Automatic By-Pass system
- Maintenance By-Pass Switch
- Internal Battery Option
- Extendable Battery Duration
- Operator Panel with LCD Display
- TS EN ISO 9001: 2015 Quality Certified
- It is produced on order

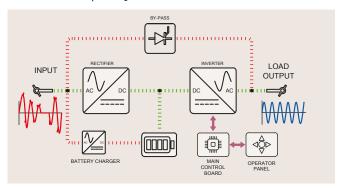
Optional Features

- Inverter application
- 48V-110V-160V-250VDC input options (for Invertors)
- 50Hz 60Hz frequency option
- Adjustable Output Voltage option
- · High capacity Battery Charging
- Redundant operation (only 2 pcs)
- Ethernet Web Server and Mod-Bus RTU interface



PCU Uninterruptible Power Supply

PCU uninterruptible power supply is an AC power supply designed to supply sensitive electronic devices and machines with constant voltage and constant frequency.



It has been developed to completely filter all kinds of disturbances in the grid voltage and to protect sensitive electronic devices against low voltage, high voltage and phase interruptions.

It uses the battery group to continue working in power cuts.

Galvanic isolation transformer provides 2500V isolation between network installation and sensitive electronic loads.

Design Features;

PCU uninterruptible power supply is produced with actual on-line Double conversion technology. It supplies power to output loads in sinusoidal waveform, constant frequency and constant voltage.

Automatic By-Pass Unit transfers the loads to the network without interruption in case of overload or fault.

Maintenance By-Pass switch is for operating the loads from the network in case of failure and maintenance. There may be an interruption during the Maintenance By-Pass process.

Applications

- ✓ Computer systems
- ✓ Office devices
- ✓ Sensitive electronic machines
- ✓ Industrial automation systems
- ✓ Security systems
- ✓ Audio and imaging system



Expandable Battery Capacity

The battery capacity of the PCU uninterruptible power supply can be increased. Battery capacity can be increased as desired by adding additional charging units. The charger uses the Constant Voltage/ Constant Current characteristic to operate the batteries for the longest time at peak performance.

Flexible and Durable

It has an easy installation feature, no calibration or adjustment is required during installation. It has a Wide Input Voltage range. It does not use batteries when the input voltage drops. It is resistant to electrical noises and voltage fluctuations in the network voltage. There is fuse protection for Input, Output and Battery. It can be customized in accordance with customer needs and produced in different technical specifications.



PCU Uninterruptible Power Supply has an ergonomic and user-friendly Operator Panel designed to monitor device parameters.

Operator panel has LCD display, mimic diagram, selection and application buttons and light signals.

Monitorable parameters: Input Voltages, Output Voltages, Load Percentage, Battery Voltage, Operating Frequency, Fault and error codes. Audible and light warnings

Please contact with sales representative for special production requests and the right solutions.



Technical specifications

Power (kVA) In the range of 2KVA - 200KVA, at certain powers Technology Actual Double Conversion Technology with IGBT Power Factor 0.70 Input Rated Input Voltage 220VAC IPhase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance - %15 , + %15 Frequency 50 Hz. + /- %5 (60 Hz. optional) Output Voltage Range 220VAC IPhase+Neutral+Ground (Different voltage values are optional) Voltage Range 220VAC IPhase+Neutral+Ground 380VAC 3Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance +/-%1 Overload Capacity For 125% 60sec., for150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD <3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Over Temperature Protection Electronic Over Temperature Protection Current Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint Coloin Specially designed cabinet, IP21 Indoor type Paint Coloin Specially designed cabinet, IP21 Indoor type Paint Coloin Specially designed Power Paint RAL-7032 Air cooling With Ethernet controlled fan.	PCU Uninterruptible Power Supply	
Technology Actual Double Conversion Technology with IGBT O.70 Input Rated Input Voltage Rated Input Voltage 220VAC IPhase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance -%15 , +%15 Frequency 50 Hz. +/-%5 (60 Hz. optional) Voltage Range 220VAC IPhase+Neutral+Ground (Different voltage values are optional) Voltage Range 220VAC IPhase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance 4/-%1 Overload Capacity For 125% 60sec., for150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD < 3% Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Electronic Over Temperature Protection Environmental Conditions Operating Temperature - 10 °C - +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	General Features	
Power Factor O.70 Input	Power (kVA)	In the range of 2KVA - 200KVA, at certain powers
Input Rated Input Voltage 220VAC IPhase+Neutral+Ground 380VAC 3Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance -%15 , +%15 Frequency 50 Hz. +/-%5 (60 Hz. optional) Output Voltage Range 220VAC IPhase+Neutral+Ground 380VAC 3Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance +/-%1 Overload Capacity For 125% 60sec., for150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD	Technology	Actual Double Conversion Technology with IGBT
Rated Input Voltage 220VAC IPhase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance -%15 , +%15 Frequency 50 Hz. +/-%5 (60 Hz. optional) Output Voltage Range 220VAC IPhase+Neutral+Ground 380VAC 3Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance +/-%1 Overload Capacity For 125% 60sec., for 150% 5 sec., for 200% 0.1 sec. Efficiency > 85% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Over Tomperature Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Diparting Temperature Protection Environmental Conditions Operating Temperature - 10 °C - +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Each Total Capacity Advanced Protection Capacity Powder Paint RAL-7032	Power Factor	0.70
Voltage Tolerance -%15 , +%15 Frequency 50 Hz. +/-%5 (60 Hz. optional) Output Voltage Range 220VAC 1Phase+Neutral+Ground 380VAC 3Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance +/-%1 Overload Capacity For 125% 60sec., for150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD <3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Electronic Overload Protection Environmental Conditions Operating Temperature Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Epoxy-Polyester Powder Paint RAL-7032	Input	
So Hz. +/-%5 (60 Hz. optional)	Rated Input Voltage	
Output Voltage Range 220VAC 1Phase+Neutral+Ground 380VAC 3Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance 4/-%1 Overload Capacity For 125% 6Osec., for150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD <3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C - +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Voltage Tolerance	-%15 , +%15
Voltage Range 220VAC 1Phase+Neutral+Ground (Different voltage values are optional) Voltage Tolerance +/-%1 Overload Capacity For 125% 60sec., for 150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD <3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Frequency	50 Hz. +/-%5 (60 Hz. optional)
Voltage Tolerance +/-%1 Overload Capacity For 125% 60sec., for 150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD <3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Output	
Overload Capacity For 125% 60sec., for 150% 5 sec., for 200% 0.1 sec. Efficiency > 85% THD < 3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Voltage Range	
Efficiency > 85% THD <3% Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Voltage Tolerance	+/-%1
THD <3% Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Current Protection Current Protection Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C - +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Overload Capacity	For 125% 60sec., for 150% 5 sec., for 200% 0.1 sec.
Transformer Output Galvanic Isolation Transformer By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Efficiency	> 85%
By-Pass Uninterruptible Static By-Pass and Maintenance By-Pass switch Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	THD	<3%
Management Monitoring and Communication Interfaces Operator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Current Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Transformer	Output Galvanic Isolation Transformer
Derator Panel LCD Display Panel, Input Voltage, Output Voltage, Load Percentage, Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Environmental Conditions Operating Temperature Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	By-Pass	Uninterruptible Static By-Pass and Maintenance By-Pass switch
Frequency, Battery Voltage, Fault and Status information, Light and Audible Warnings Remote Management Interface Browser-based remote monitoring with Ethernet connection (optional) Protection Functions Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Management Monitoring ar	nd Communication Interfaces
Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Operator Panel	
Overload Protection Electronic Overload Protection Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Remote Management Interface	Browser-based remote monitoring with Ethernet connection (optional)
Current Protection Input Circuit Breaker and Output Circuit Breaker Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Protection Functions	
Over Temperature Protection Electronic Over Temperature Protection Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Overload Protection	Electronic Overload Protection
Environmental Conditions Operating Temperature -10 °C ~ +40 °C Altitude Operating Height 1.500m Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Current Protection	Input Circuit Breaker and Output Circuit Breaker
Operating Temperature Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Over Temperature Protection	Electronic Over Temperature Protection
Altitude Operating Height Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Environmental Conditions	
Humidity 90% none condensed Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Operating Temperature	-10 °C ~ +40 °C
Cabinet Specifications Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Altitude Operating Height	1.500m
Type-Protection Class Specially designed cabinet, IP21 Indoor type Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Humidity	90% none condensed
Paint-Color Epoxy-Polyester Powder Paint RAL-7032	Cabinet Specifications	
	Type-Protection Class	Specially designed cabinet, IP21 Indoor type
Cooling Air cooling with thermostat controlled fan.	Paint-Color	Epoxy-Polyester Powder Paint RAL-7032
-	Cooling	Air cooling with thermostat controlled fan.

