

IEQSY – PQS

TECHNICAL DATA SHEET

IEQSY - PQS (POWER QUALITY SUPPLY)

converts poor quality energy into more productive, efficient and safe energy.

IEQSY-PQS improves all the electrical parameters affecting power quality in real time by combining Artificial Intelligence (AI) with the sum of energy efficiency technologies known to date. Actually, it is the most complete and innovative energy efficiency equipment on the market providing a solution for current and future requirements.



IEQSY – PQS INCLUDES

- ✓ Phase Balancing
- ✓ Reactive Compensator
- ✓ Harmonic Filter
- ✓ PLC (Siemens 1500)
- ✓ IOT 2050 (IA)
- ✓ Optimizes tension
- ✓ Wave Cutting
- ✓ Eliminates Micro Breaks
- ✓ Cybersecurity
- ✓ Tailor-made equipment

USUAL APPLICATIONS

Data Center

Industry

Retail y Supermarkets

Logistics

Agri-Food

Healthcare

DIMENSIONS

REFERENCE	AHF	HEIGHT	WIDTH	DEPTH	KG
IEQSY PQS 630 A	150 A	2100 mm	1800 mm	800 mm	750
IEQSY PQS 1250 A	300 A	2100 mm	2400 mm	800 mm	1500
IEQSY PQS 2000 A	600 A	2100 mm	2400 mm	800 mm	1700
IEQSY PQS 2500 A	600 A	2100 mm	2400 mm	800 mm	2500
IEQSY PQS 3200 A	600 A	2100 mm	3200 mm	800 mm	2750
IEQSY PQS 4000 A	600 A	2100 mm	3200 mm	800 mm	3250

IEQSY – PQS

TECHNICAL SPECIFICATIONS

ITEM	DESCRIPTION
Input Voltage	3 x 400V. – 50 Hz (Three-phase equipment). (±5%)
Output Voltage	3 x 400V. – 50 Hz (Three-phase equipment) (±5%)
Switching Speed	No power outage
Power Factor	Between 0,9 and 1 by capacitor banks in the installation.
Sizing Drivers	According to REBT plus 15%.
System Losses	Less than 1%.
Switching System	Motorized.
Reactance	Vector compensation system. Automatic phase partial balancing.
Harmonic distortion in tension	< 3 % thd V
Management of Harmonics	Reduction of Harmonics in current (% Thd I). <20 % thd I
Internal Protections	Protection by means of ultra-fast fuses with fault warning and polar management by means of control card.
Protections	Magneto thermal Protection and difference existing in the CGBT.
Management System	Through automata (PLC) with external access and registration of events.
Indicators System	Through a closet screen HMI
Dielectric Strength	2000 volts/m.
Isolation	Higher than 2 M Ohms.
European Conformity	Low Voltage Directive: 2006/42/CE of the European Parliament and of the Council of May 17, 2006 relating to machines and which modifies the 95/16/CE directive. 2014/35/UE, electromagnetic compatibility directive, 2014/30/EU Other Applied Regulations: UNE ISO 13849, UNE HD 60364-5-52, UNES EN IEQC 62061:2021, EN IEC 61204-3:2018 – EN 61954:2011 – EN 52477-1; IN 55011:2016; EMC; EN61000-6-2:2019, EN 61000-6-4:2019; EN 60947-6-1; UNE 50575:2015
Operating Temperature	In enclosure not higher than 50 °C. Internal not higher than 55 °C.

IEQSY – PQS ACTIVE

PASSIVE HARMONIC FILTER

IEQSY HARMONIC AND REACTIVE CONTROL SYSTEMS

Rated input	400V (±5%)
Power grid frequency	50 Hz / 60 Hz
Parallel operation	Unlimited
Overall efficiency	≥ 97%
Power grid structure	3P 3W, 3P 4W
CT	50/5 ~ 5000/5

PERFORMANCE INDICATORS

Rated capacity	600 A or 400 kvar
Harmonic compensation	Available
Reactive power compensation	Available
Unbalance compensation	Available
Filtering range	2 to 50 orders
Filtering degree	Adjustable from 2 to 50
Filter performance	THDi<5%
Overall response time	< 10ms
Target power factor	0,99
Control algorithms	FFT, Intelligent and instantaneous reactive power
Switching frequency	20kHz
Noise level	< 60d B

COMMUNICATIONS AND MONITORING CAPABILITIES

Communications ports	RS 485 Communication And MODBUS -RTU Protocol
Communications protocols	TCP/IP, Modbus and TCP/IP
Module display interface	Touch screen
PC software	Optional
Protection functions	Over-voltage protection, under-voltage protection, short-circuit protection, inverter bridge inverse protection, over-compensation protection and so on
Fault alarm	Available at most 500 alarm records
Monitoring	Independent monitoring and centralized monitoring

MECHANICAL PROPERTIES

Altitude	1% up 2000 m. Between 2000 m to 4000 m, according to GB/T3859.2, the power decreases by 1% for every additional 100 m.
Operating temperature	(-10° to 45°)
Relative humidity	5% to 95% non-condensing
Protection class	Ip20 (other IPn classes are customizable.)