

Automatic Controller

PCRL PCRJ

From January 2015, TELEGROUP will install in all Automatic PFC Systems, the **NEW Automatic PFC Controller of PCRL... PCRJ Series**.

Thanks to the technological evolution of the internal software and the addition of a number of options to control and display, **the New Series Regulators PCRL ... PCRJ** ensure **maximum performance in terms of quality and monitoring**.



PCRL

General Features PCRL

- Backlit LCD display with icons, with texts available in **6 languages (Italian, English, German, French, Spanish, Portuguese)**
- PCRL5 / 7, 5 standard outputs, expandable to 7
- PCRL8 / 14, 8 outputs standard, expandable to 14
- Automatic Recognition of the direction of the current
- **Operation of 4 Quadrants for Cogeneration**
- **Use of lines in medium voltage, through V.T.**
- Uniform use of batteries Capacitors
- Protection against micro-interruptions
- Protection for overcurrent and overtemperature
- Optical port for **USB communication and Wi-Fi to connect to the PC, Smartphone and Tablet**
- **USB interface, RS23, RS485 and Ethernet, with Expansion Modules**
- **Software PCRW** for setup and monitoring from PC



MODELS

PCRL5/7..... PCRL8/14

The PFC Controller has 5 standard outputs and **N. 1 Slot** on the back (PCRL5 / 7) or 8 standard outputs and **N. 2 Slots** on the back (PCRL8 / 14), which can be equipped with the following **Expansion modules EXP ...**

Expansion Module **EXP1002**

2 outputs for increasing the number of banks

Expansion Module **EXP1003**

3 outputs for increasing the number of banks

Expansion Module **EXP1020**

USB Interface

Expansion Module **EXP1030**

RS232 Interface

Expansion Module **EXP1040**

RS485 Interface

Expansion Module **EXP1050**

Ethernet Interface (valid only for PCRL8/14)



Automatic Controller

PCRL

Technical Features PCRL

- **Auxiliary Supply:** 100...440 Vac, 50/60 Hz (± 10 %)
- **Input Voltage:** 660 Vac L-L (346 Vac L-N)
- **Input Current:** Single-Phase connection 1 A o 5 A (configurable)
- **Power Factor Regulation** (0,5 ind...0,5 cap)
- **Voltage Measurements** 50 – 720 Vac L- L (50 – 415 Vac L-N)
- **Current Measurements** 0,025...1,2 A per fondo scala 1 A; 0,025 A..6 A, per fondo scala 5 A
- **Voltage and Current Measurements in TRMS**
- **Dimensions**
PCRL5/7 96x96 mm/0,350 Kg (fixing holes 91x91 mm)
PCRL8/144x144 mm / 0,750 Kg (fixing holes 138,5x138,5 mm)
- **Degree of Protection** IP54 on front, IP20 on terminals
- **Environmental Conditions:**
Operating Voltage -20 / + 60°C
Storage Temperature - 30 / + 80°C
Relative Humidity < 95 % not condensing
- **Standards:**
IEC61010-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL 508, CSA C22.2 n.14



Automatic Controller

PCRJ

General Features PCRJ

- Backlit LCD Display 120x80 pixel with text in **10 languages (Italian, English, German, French, Spanish, Portuguese, Czech, Polish, Russian + 1 customizable)**
- PCRJ eight standard outputs, expandable to 16
- Automatic Recognition of the direction of the current
- **Operation of 4 Quadrants for Cogeneration**
- **Use of lines in medium voltage, through V.T.**
- **Insertion of Capacitor Banks through Contactors or Thyristor Modules**
- Uniform use of batteries Capacitors
- Measurement of the installed reactive power on each step
- Registration of the number of insertions of each step
- **Operation in Master-Slave, can control up to 8 units**
- Harmonic analysis of the current and voltage
- Protection against micro-interruptions
- Protection for overcurrent and overtemperature
- Optical port for USB communication and Wi-Fi to connect to the PC, Smartphone and Tablet
- **USB interface, RS232, RS485 and Ethernet, with Expansion Modules**
- **Modbus-RTU and ASCII TCP**
- **Software PCRW** for setup and monitoring from PC



MODELS

PCRJ

The PFC Controller has 8 standard outputs plus **4 slot** on the back, which can be equipped with the following **Expansion modules EXP ...**

Expansion Module EXP1002

2 outputs for increasing the number of banks

Expansion Module EXP1003

3 outputs for increasing the number of banks

Expansion Module EXP1020

USB Interface

Expansion Module EXP1030

RS232 Interface

Expansion Module EXP1040

RS485 Interface

Expansion Module EXP1050

Ethernet Interface (valid only for PCRL8/14)

Expansion Module EXP1004

2 outputs for increasing the number of banks with Thyristor Switch



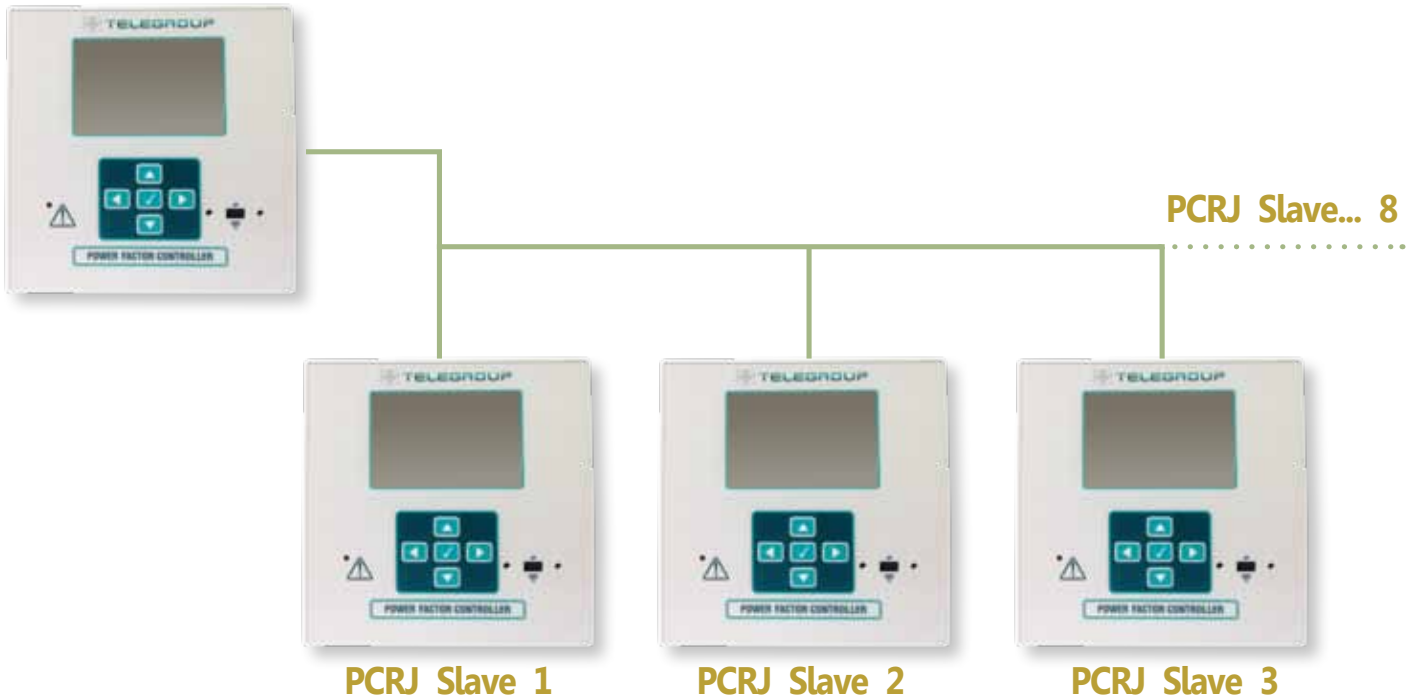
Technical Features PCRJ

- **Auxiliary Supply:** 100...415 Vac, 50/60 Hz ($\pm 10\%$)
- **Input Voltage:** 660 Vac L-L (346 Vac L-N)
- **Input Current:** Single-Phase or Three-Phase connection 5 A (1 A configurable)
- **Power Factor Regulation** (0,5 ind...0,5 cap)
- **Voltage Measurements:** 50 – 720 Vac
- **Current Measurements:** 0,025 A...6 A
- **Voltage and Current Measurements in TRMS**
- **Temperature Measurement:** -30 / + 80°C
- **Measure of overcurrent of Capacitors:** 0...250 %
- **Dimensions:** 144x144 mm / 0,750 Kg (fixing holes 138,5x138,5 mm)
- **Degree of Protection:** IP54 on front, IP20 on terminals
- **Standards:**
IEC61010-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL 508, CSA C22.2 n.14

CONFIGURATION **MASTER-SLAVE**

In the case of a division of the Automatic PFC System in more PFC Systems, the PFC Controller PCRJ (Master), is able to control up to 8 PFC Controllers PCRJ (Slaves).

The PFC Controllers PCRJ (Slaves), will receive the input for inserting and disconnecting the Contactors by the PFC Controller PCRJ (Master), while monitoring the state of each panel, will be made by the various PFC Controllers PCRJ (Slaves).



SOFTWARE AND ACCESSORIES

NEW Series Regulators PCRL ... PCRJ, are equipped with the Control software PCRW, through which you can make the quick setup controller via PC, connected to the controller through the cable connection 51-PCRW.

Through PCRW Software, you can monitor all the measures and parameters controlled by the regulator, plus the ability to save the parameters and download them in a totally instant another regulator.

The **Software PCRW**, allows the user the following:

- Display Graphics and Numerical measures and sizes
- Control of the State Controller
- Control of the state of Capacitors
- Measurement of kVAR current of each step
- View the number of insertion for each step
- Counter of real time insertion of each single step
- Access to all parameters Setup
- Save / Load / Print parameters
- Highlighting the values changed
- Return to the values of Setup

Software PCRW

Complete with cable 51-PCR with length 1.8 m

Connection cable 51-PCRW

Cable connection from PC to PCRL / PCRJ + EXP1030, length 1.8 m

