

// ENG  
// User Manual  
// EXP1040



Expansion Module  
RS485 serial port

# ISOLATED RS485 INTERFACE MODULE

## EXP 1040

### Instructions manual



**WARNING!**

- Carefully read the manual before the installation or use.
- This equipment is to be installed by qualified personnel, complying to current standards, to avoid damages or safety hazards.

Remove the dangerous voltage from the product before any maintenance operation on it.

- Products illustrated herein are subject to alteration and changes without prior notice.
- Technical data and descriptions in the documentation are accurate, to the best of our knowledge, but no liabilities for errors, omissions or contingencies arising therefrom are accepted.

**Introduction**

The modules for telegroup plug in expandable products are designed and developed to enhance the functions of connectivity, I/O, memory and analysis of the instrument to which it is connected.

The module COM 485 implements the isolated RS485 serial interface This module can be connected to a telegroup power factor controller equipped with slot for expansions. The module connection will be done simply by plug it in to the expansion slot of the power factor controller. At the power on of the system, the instrument will automatically recognize the units and the module parameters setup will be done directly from the power factor controller menu in an easy way.

**Description**

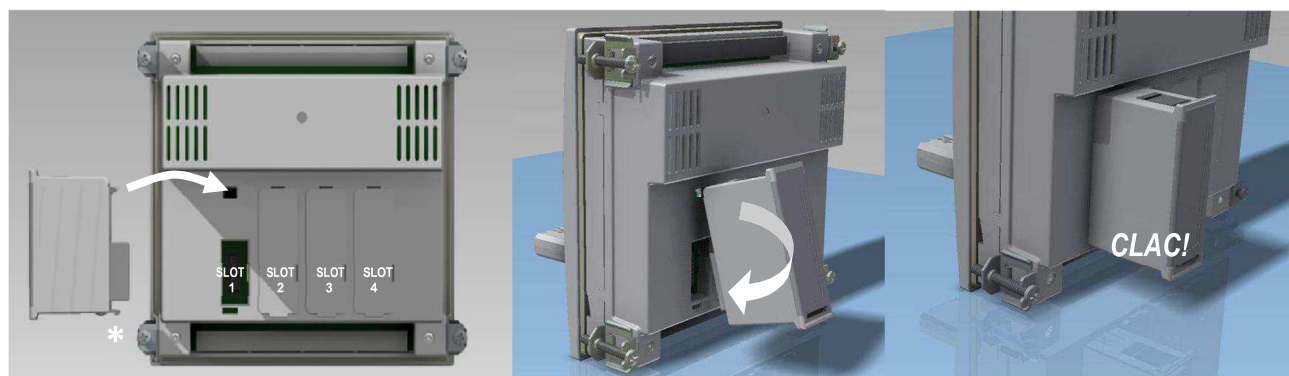
- Compact size (64mmx38mmx22mm).
- Direct plug in on the power factor controller.
- 4KVrms for 1 minute of insulation from the base module.
- RS485 communication interface.
- Programmable bitrates up to 38400Bps.

Telegroup Product Compatibility

COM 485 can be connected to a telegroup power factor regulator fitted by receptacle slot. Verify the compatibility with the following table:

	Rev. SW
PCRL5	>=00
PCRL8	>=00
PCRJ8	>=00

**Module connection procedure**



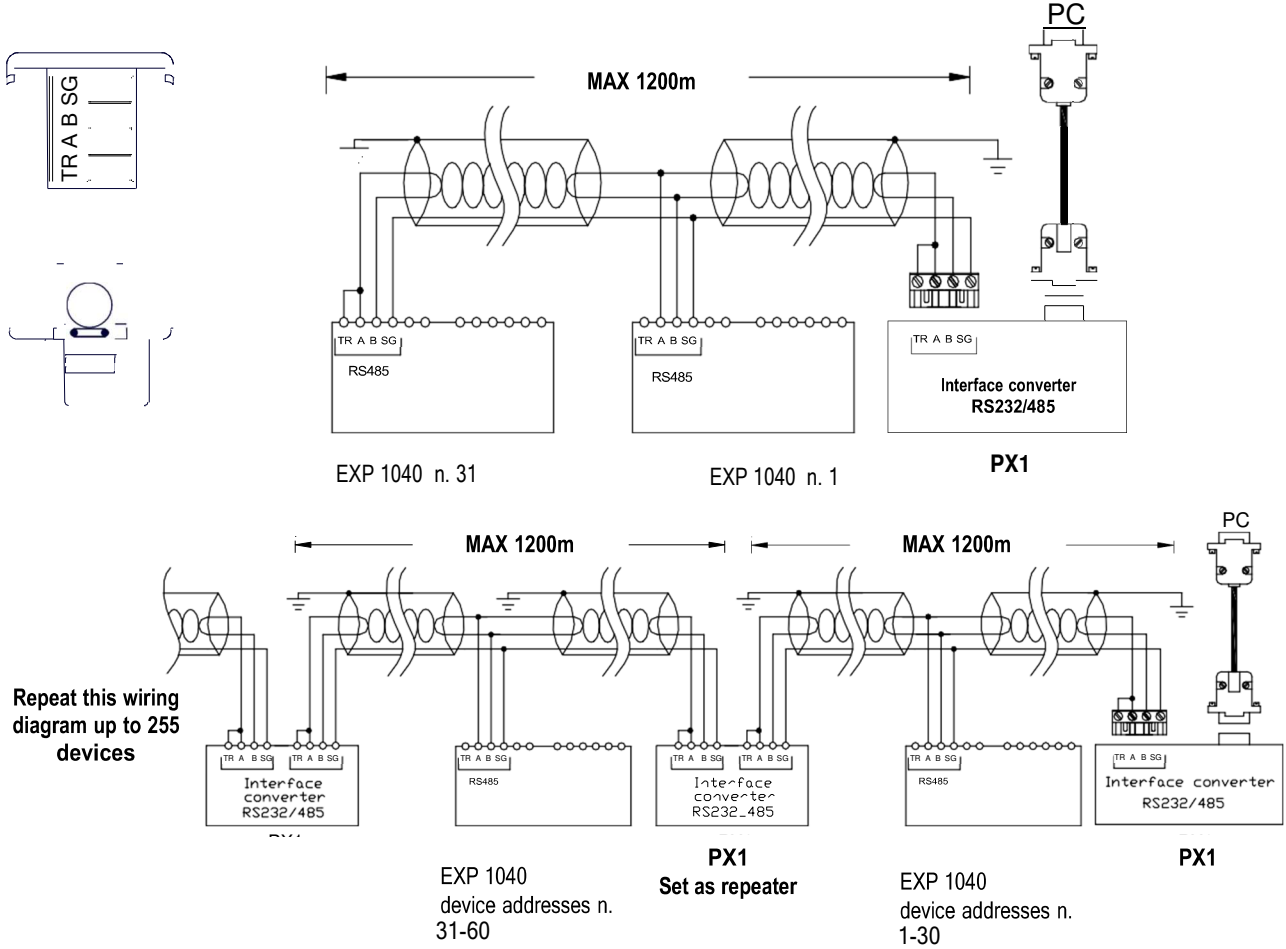
1. Remove any dangerous voltage.
2. Remove the terminal covers and the terminal block.
3. Remove the expansion slot cover of the telegroup power factor controller at the position in which the module will be plug in.
4. Insert the module as illustrated in the above picture.
5. Replace the terminal block and the terminal cover.
6. Power up the system (the power factor controller will automatically recognize the expansion unit).

**NOTE:** Remove any dangerous voltage and repeat the operations from step 5 to step 2 in the opposite direction. Press in the point indicated by the \* in the picture in order to remove the module.

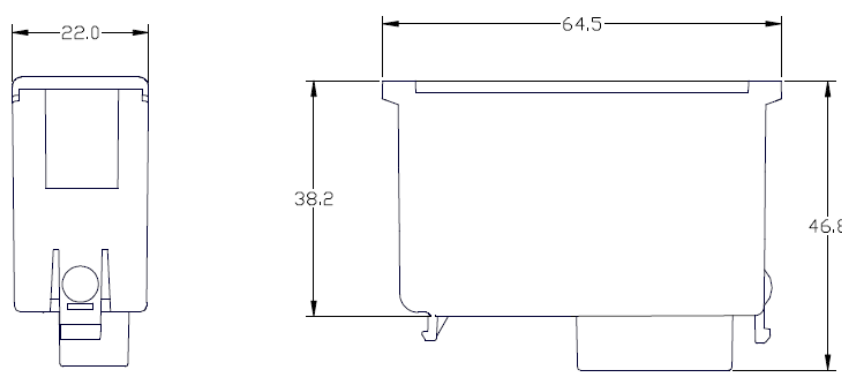
**Module parameters setup**

For the module parameters configuration, see the complete manual of the PCRJ8 power factor controller downloadable from the web site [www.telegroup.it](http://www.telegroup.it) download area concerning the low voltage power factor correction systems.

**Wiring diagrams**



**Mechanical dimensions [mm]**



## Technical characteristics

<b>Supply</b>	
Supply voltage	5V= (supplied by main instrument)
Supply current	50mA
Power consumption/dissipation	0.25W
<b>RS485 Serial interface</b>	
Baud-rate	Programmable 1200...38400 bps
<b>RS485 port connection</b>	
Connection	Plug in/Removable terminal type
Number of terminals	4
Cable cross section (min... max)	0,2...1,5 mm <sup>2</sup>
Tightening torque	0,18 Nm
<b>Base product connection</b>	
Terminal type	Plug-in connector
<b>Insulation voltage</b>	
Rated impulse withstand voltage U <sub>imp</sub>	7,3kV
Power frequency withstand voltage	4kV
<b>Ambient operating conditions</b>	
Operating temperature	-20 - +60°C
Storage temperature	-30 - +80°C
Relative humidity	<90% (IEC/EN 60068-2-70)
Maximum pollution degree	Degree 2
Overvoltage category	3
Climatic sequence	Z/ABDM (IEC/EN 60068-2-61)
Shock resistance	15g (IEC/EN 60068-2-27)
Vibration resistance	0,7g (IEC/EN 60068-2-6)
<b>Housing</b>	
Dimensions	64,5mmx38,2mmx22mm
Mounting	For inclusion in the plug in expansion slot
Material	Polyamide RAL7035
Degree of protection	IP20
Weight	55g
<b>Certification and compliance</b>	
Certifications	cULus
Reference standards	IEC/EN 61010-1, IEC/EN 61000-6-2 IEC/ EN 61000-6-3 UL508 and CSA C22.2-N°14
UL Marking	Use 60°C/75°C copper (CU) conductor only Connection cables size: 0,2mm <sup>2</sup> - 1,5mm <sup>2</sup> stranded or solid Field Wiring Terminals Tightening Torque: 0,18Nm

## **INFORMATION AND TECHNICAL SERVICE**

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