Load interface Relay module

XM15

USER MANUAL OF THE DEVICE

XM15-Load interface Relay module

Requests for any specific information on the product and/or on relating options not contained in the synthetic manual, may be sent to our web site: www.energyteam.it, section "CONTACTS", sending an @mail to the "TECHNICAL AREA" indicating the specific request.

Energy Team reserves the right to make the modifications it deems necessary without having to give any prior notice.

CONTENTS

INTRODUCTION

The X-Meter counts 4 ON-OFF output activators to manage 4 output switches with 24Vac/Vdc maximum voltage and 100mA maximum current. These outputs must be interfaced with an XM15 module to manage standard loads in a 230Vac single phase network.

XM15 is 220Vac single-phase voltage powered with 4 independent relays available, (one for each X-Meter output) each one of them can switch a 250Vac and 5A current load.

Each relay has all three single interchange contacts (C, NC, NO) outputs (terminal board) available with two protection converters (275V) for voltage surges. Each one of the XM15's 4 relays has a LED light indicating when active (or when the corresponding output on the X-Meter is active) and a manual test button for switching the interchange.

 COMPLIANCE APPLIED

XM15 Relay module agrees to the following regulations:

- EMC 89/336/EEC
- Emissions EN 50081-1 1992
- EN 5022 CL. B
- Immunity EN50082-1 1992
- Safety EN61010

And subsequent updates. To avoid personal injury, carry out the installation according to regulations in force and the instructions in this manual, taking into account the insulation value specified for the instrument.

The device shows the following symbols:

	Pay attention - consult the manual
	Note
	Waste disposal according to law
CE	CE Marking.

GENERAL SAFETY WARNING

Non-adherence to the following points can lead to serious injury or death.

- Use the suitable personal protection devices and adhere to the current regulations governing electrical safety.

-This device must be installed exclusively by qualified personnel who have read all of the information relative to the installation.

- Check that the voltage supply and measurement are compatible with the range permitted by the device. Do not power on the device if its appearance is not intact.

- Ensure that all current and voltage supplies are disconnected prior to carry out any control, visual inspections and test on the device.

- Always assume that all circuits are under voltage until they are completely disconnected, subjected to tests and labelled.

- Disconnect all the power supplies prior to work on the device.

- Always use a suitable voltage detection device to check that the supply is interrupted.

- Pay attention to any dangers and carefully check the work area ensuring that no instruments or foreign objects have been left inside the compartment in which the device is housed.

- The correct use of this device depends on a correct manipulation, installation and use.

- Failure to adhere to the basic installation information can lead to injuries as well as damage to the electric instruments or to any other product. if the product is used in a manner not specified by the manufacturer, the anticipated safety could be compromised.

- NEVER connect an external fuse in by-pass.

- Disconnect all the Input and Output wires before carrying out a dielectric rigidity test or an insulation test on the panel in which the device is installed. The tests carried out at a high voltage can damage the device's electronic components.

- Don’t expose the module to temperature ranges outside those reported on the data-sheet. Don’t install it in sites with strong vibrations, corrosive gases, excessive dirt or high humidity. Use it only in the operating limits.

- Don’t modify the feature of the module, as: removing the covers; making holes on the case; replacing its accessories with other coming from unknown manufacturers not described on the manual’s list, because this operation may cause a malfunction and a damage of the instrument. In addition, don’t modify the layout of the internal components.

The manufacturer declines any responsibility in case of use of the instrument out of manual's specifications.

ATTENTION !
It is strictly forbidden to install and use the device to anyone who does not possess the characteristics listed.

The device is made in compliance with the directives in force in the European Union and with the technical standards that incorporate the requirements, as evidenced by the CE mark on the device itself and in this publication.

NOTE:
For cleaning the front part of the instrument, use only a cloth.

NOTE:
During normal operation, the product must not be subjected to impacts of any kind.

NOTE:
For any calibration and maintenance contact the Energy Team. In case of malfunction or failure, send the device back by attaching a precise description of the fault.

NOTE:
This manual is an integral part of the product and must therefore be kept with care.

ATTENTION!
The installation and the cabling of the device must be carried out only by qualified personnel. Danger of electrocution, burning and electric arc. Use the personal protection devices suitable to adhere to the current regulations governing electrical safety. Prior to carry out any connections check the sectioning of the electric supply with the voltage detection device.

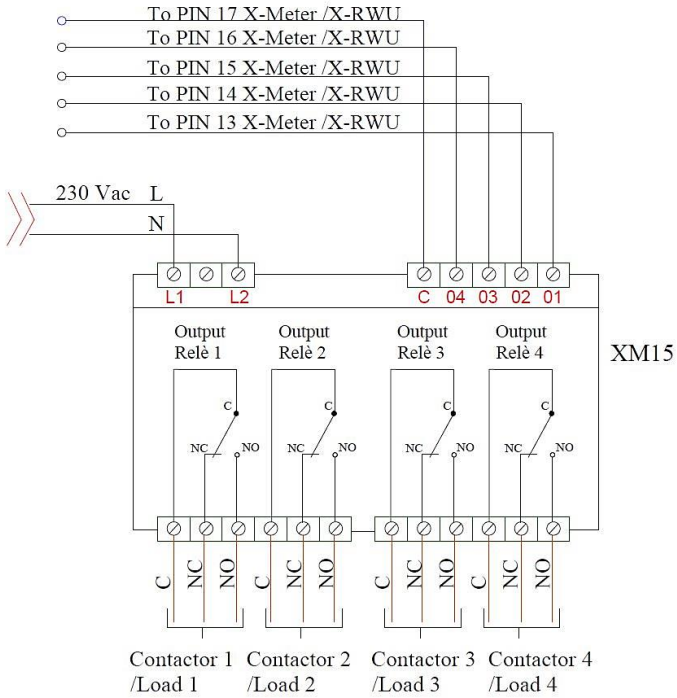
TECHNICAL FEATURES

Electric General	
Power Supply	230Vac ±6%
Protection on Power Supply	Fuses 5x20R da 50mA
Galvanic Isolation in Output	250V
Consumption	Max 2,6VA
Working Temperature	-10°C ÷ +50°C
Nr. Outputs	4 Relay 1 Interchange -C, NC, NO
Protection on C. Comm.	275V
Estimated cycles at full load	100000
Type of Command	Electric /Manual
Signal	LED
Max Switched Current	
AC1 (230Vac)	5A /1kW Max
AC15 (230 Vac)	3A /750VA Max
DC1	30V/5A; 110V/0,5A; 220V/0,15A; Max
AC MOTOR (230 Vac)	0,55kW 2/3HP Max
Mechanical	
Dimensions	6TE 108mm x 58mm H
Case	Flame retardant plastic
Protection degree	IP40
Installation	On DIN rail
Weight	350gr
Relay intellation	CS Base
Terminal Board type	Removable Polarized
Operation test	Manual
Operating temperature	-20°C ÷ +65°C
Relative Humidity	90% without condensation

IMPORTANT NOTE:

It is necessary to insert a primary disconnection means, which can be a fuse or a thermal magnetic switch. The delayed fuse on the power supply must have a current value appropriately sized according to the power, must be easily accessible and must be clearly marked as a means of disconnection of the instrument. In addition, the instrument must be installed inside an electrical panel on a DIN rail, only the front panel must be accessible.

INPUT-OUTPUT TERMINAL BOARD AND RELATIVE CABLE SECTIONS



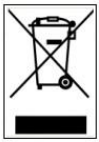
- Terminals on screw clamps.
- Output cable from relay: Max Section 2,5 mm^2 (13 AWG).
- Max switched current : see Pag. 8

GENERAL SAFETY REGULATIONS

- The XM15 device must be used by specialized and qualified personnel only.
- Disconnect device from mains and all terminals before opening the container.
- Do not use in presence of water.
- Strictly comply with the indications and diagrams in this manual when connecting the device.

WARRANTY

Energy Team guarantees that the supplied products are free from defects and suitable for use. If any malfunction occurs and these are due to manufacturing defects, E.T. will respond within the terms and modalities foreseen by General Conditions of Supply, with particular reference to articles 5B (terms and duration), 1C (limits), 5D (other warranties). Whatever operation or manumission made by third parties not expressly authorized determines in each case the immediate termination of the warranty.



DISPOSAL

WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)
Don't dispose among generic waste but collect separately for recycling and disposal operations according by law.

NOTE:
If you have any doubts about the installation procedure or the use of the product, contact the technical assistance or the local distributor

Energy Team S.p.A.
Via della Repubblica, 9, 20090 Trezzano sul Naviglio (MI)
P +39 02 40405033 – F. +39 02 48405035 - E info@energyteam.it - PEC pec@pec.energyteam.it - W www.energyteam.it

Rif.	Doc.	Rev.	Date:	Realized by:	Approved by:
093_ma	PT/08-51	1	24/07/2018	L.Gramegna	M. Bianchi