QUICK CONNECTION GUIDE

ITR 2.0 B

LACECAL

LACECAL I+D
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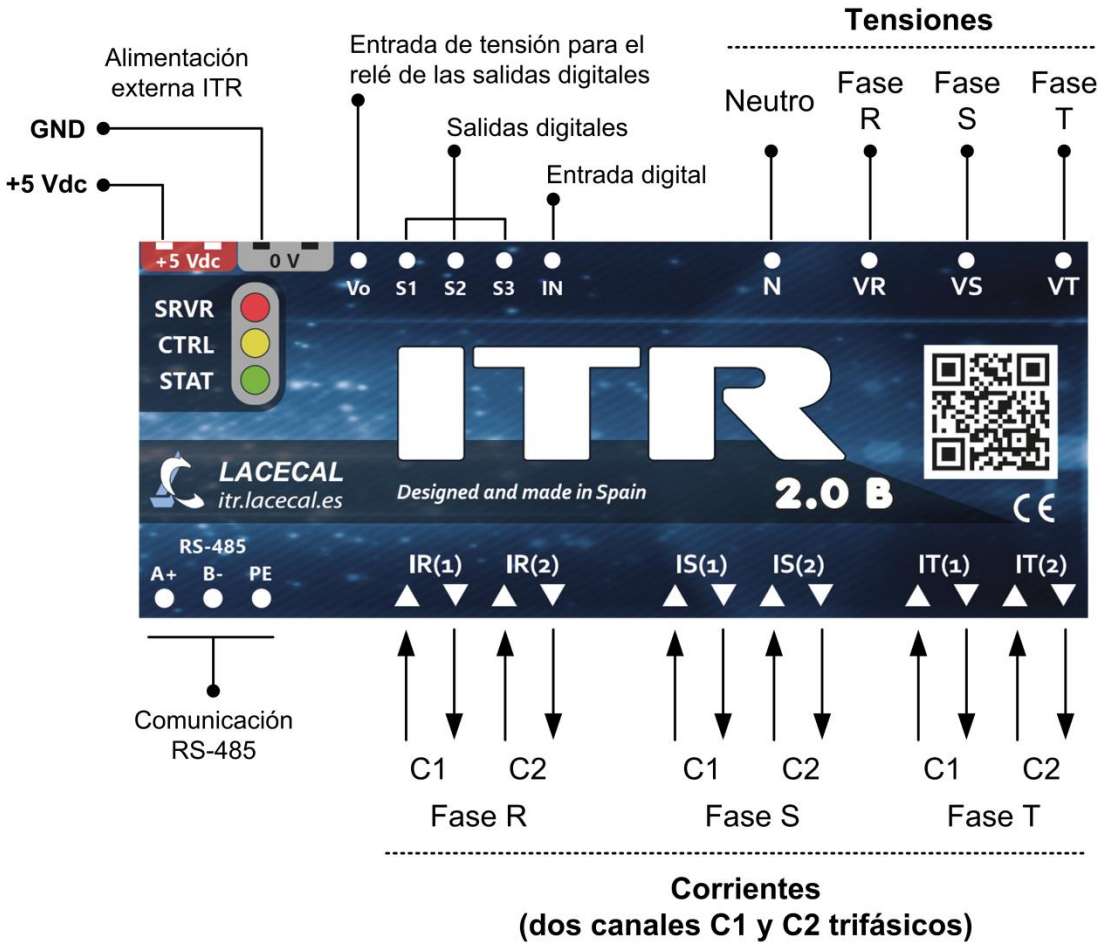
+5 Vdc
0 V
Vo
S1
S2
S3
IN
N
VR
VS
VT
SRVR
CTRL
STAT
ITR
LACECAL
itr.lacecal.es
Designed and made in Spain
2.0 B
RS-485
A+
B-
PE
IR(1)
IR(2)
IS(1)
IS(2)
IT(1)
IT(2)


Tensiones
Alimentación externa ITR
Entrada de tensión para el relé de las salidas digitales
Salidas digitales
Entrada digital
Neutro
Fase R
Fase S
Fase T
GND
+5 Vdc
+5 Vdc
0 V
Vo
S1
S2
S3
IN
N
VR
VS
VT
SRVR
CTRL
STAT
ITR
LACECAL
itr.lacecal.es
Designed and made in Spain
2.0 B
RS-485
A+
B-
PE
IR(1)
IR(2)
IS(1)
IS(2)
IT(1)
IT(2)
Comunicación RS-485
C1
C2
C1
C2
C1
C2
Fase R
Fase S
Fase T
Corrientes
(dos canales C1 y C2 trifásicos)

Installation recommendations and safety warnings

Maximum torque: 0.5 Nm

Supported cable cross-section:
0.05 - 3.31 mm² / 30 - 12 AWG

The voltage measurement circuit will be connected with cable of minimum section 1 mm^2. It must be provided with a magneto-thermal switch or equivalent device that allows disconnecting the equipment from the power supply network, and protected with 0.5 to 2 A fuses. The secondary lines of the current transformers shall be connected with cable with a minimum cross-section of 2.5 mm^2.

The external power supply shall be located close to the equipment, and its 5 Vdc output shall be connected with cable of the shortest possible length and minimum section of 2 mm^2.

The relays for load control or photovoltaic production cut-off shall be located close to the equipment, and their coils shall be connected to the equipment with cable of minimum section of 1 mm^2.

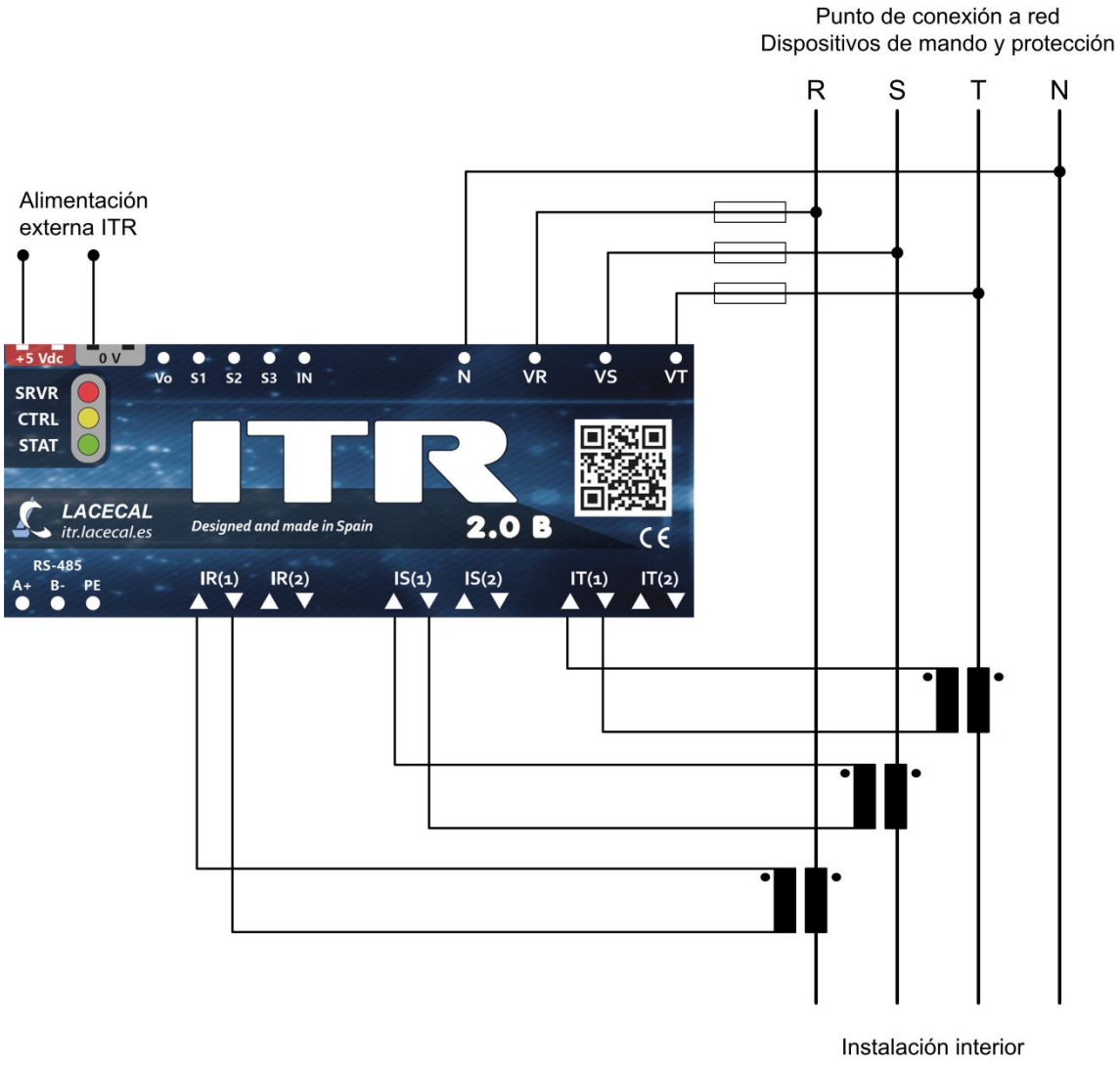
Installation of the equipment and maintenance operations must be carried out only by authorized and qualified persons, following the indications and safety measures stipulated in the regulations of the country where it is being used.

With the equipment connected, the terminals, opening of covers or removal of elements may give access to dangerous parts of the contact. The equipment must not be used until it has been completely installed. Handling the equipment while it is connected is dangerous to persons.

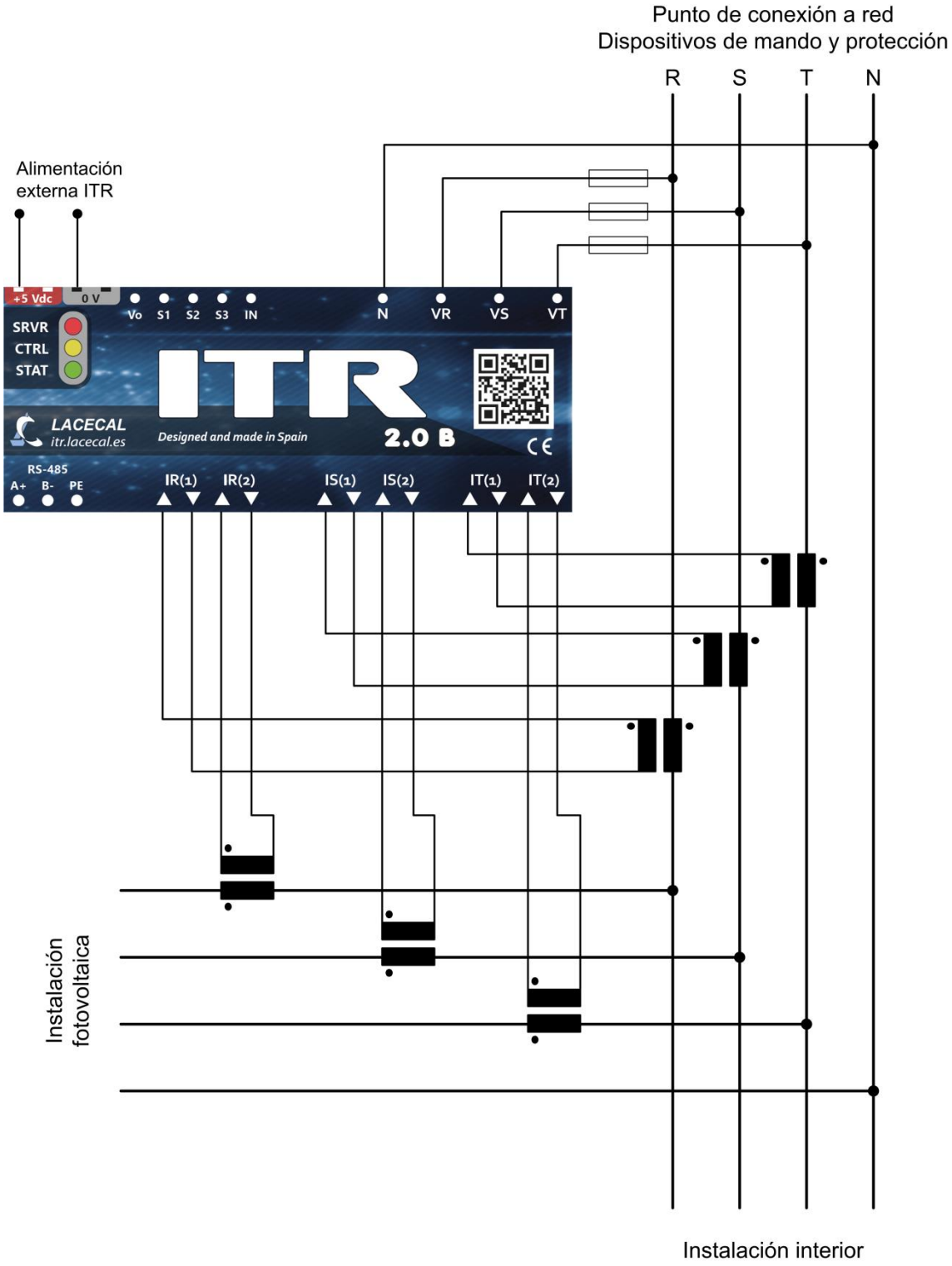
Before manipulating, modifying the wiring or replacing the equipment, the power supply must be disconnected and the measurement disconnected. It is essential to keep the cables in perfect condition to avoid accidents or damage to persons or installations.

The manufacturer of the equipment is not responsible for damages, whatever they may be, in the event that the user or installer does not heed the warnings and/or recommendations indicated.

Installation with a single current measurement at the point of connection to the grid

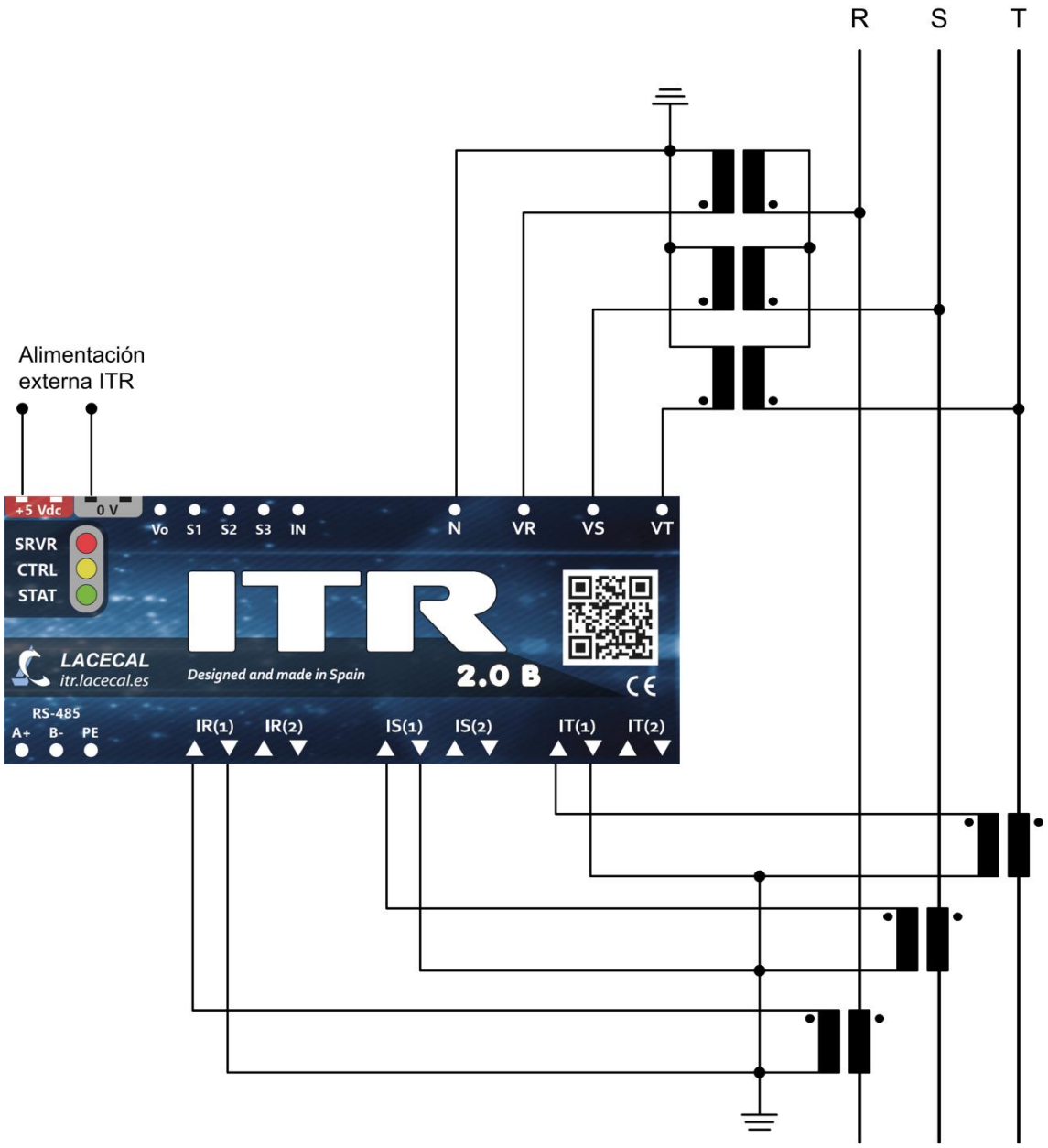


Installation with two current measurements, at the grid connection point and at the photovoltaic generation.



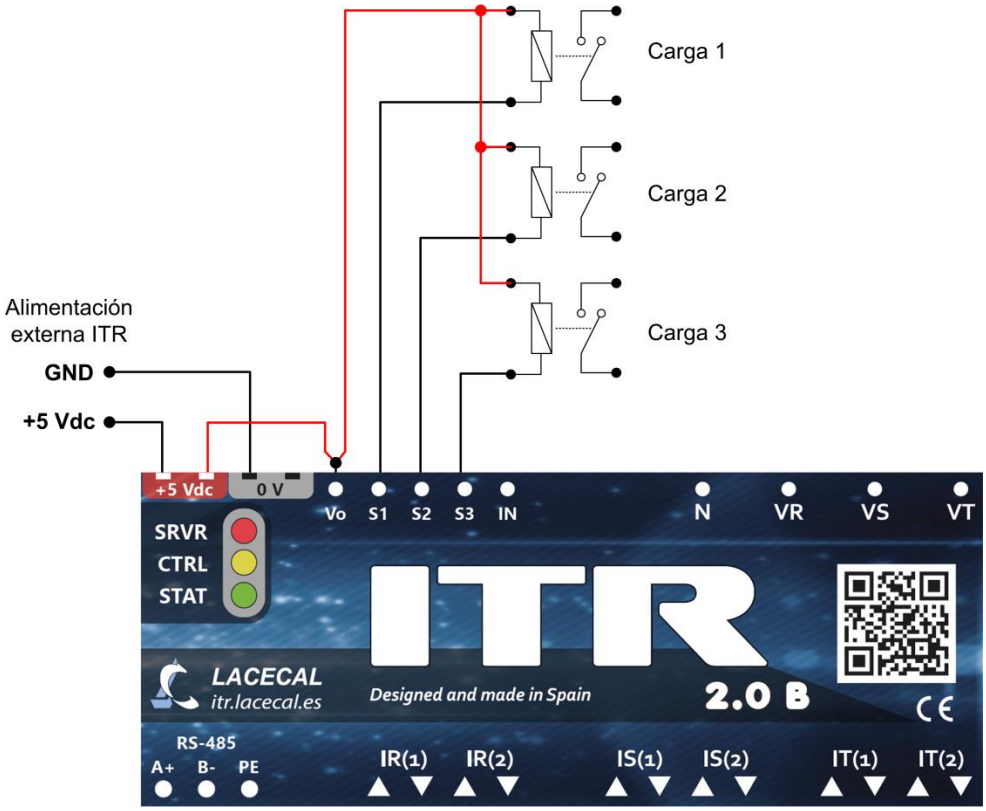
Installation with medium voltage measurement

Measuring voltage: 3 x 63.5/110 V



Connection of relays for load control or photovoltaic production cut off

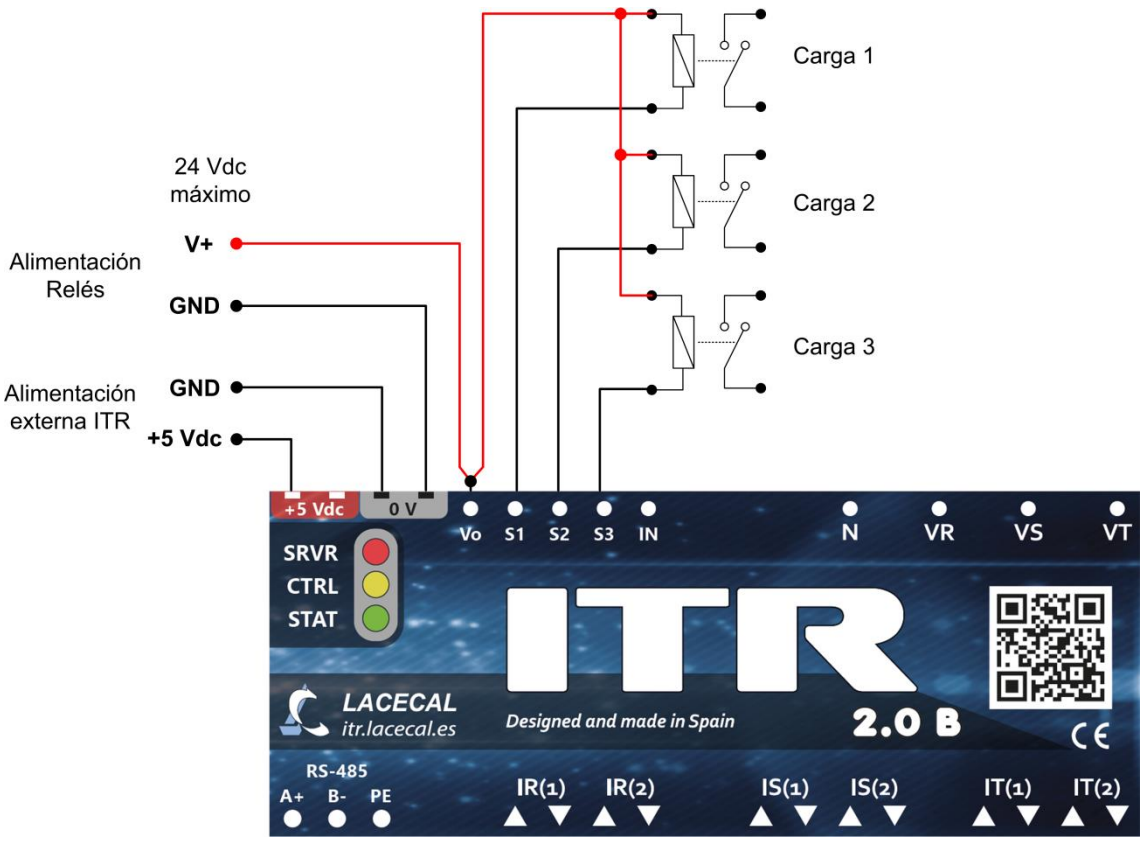
Relays with 5 Vdc coil



Corriente máxima consumida por la bobina de cada relé: 150 mA

Connection of relays for load control or photovoltaic production cut off

Relays with coil up to 24 Vdc



Corriente máxima consumida por la bobina de cada relé: 150 mA

Connection in installations with genset and grid connection using PV-D firmware