Instruction manual for accessories: I/O relay modules, temperature and humidity probe for UNIVERSAL+ 7WR range









Accessories for UNIVERSAL+ 7WR - user's / installation manual

It is essential that, prior to use, the user/installer fully understand the present accessories as also the annexed manuals pertaining to the unit. Should any doubt arise, please refer to the Authorised Distributor or the Manufacturer.

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Published in Spain by Safeline, S.L. 3st edition (May 2020)



Consult appended manuals for specific models:

Generic UNIVERSAL+ 7WR M1, M2 and M3 manual

Generic UNIVERSAL+ 7WR M4, Rogowski M4 and MINI M4 manua Annex-manual - UNIVERSAL+ 7WR M1 Differential, type A Annex-manual - UNIVERSAL+ 7WR M1 Differential, type B Annex-manual - UNIVERSAL+ 7WR M2 Differential, type A Annex-manual - UNIVERSAL+ 7WR M3 Differential, type A Annex-manual - UNIVERSAL+ 7WR M5 Differential, type A Annex-manual - UNIVERSAL+ 7WR M5 Differential, type B Annexe to UNIVERSAL+ 7WR M5 Differential, type B Annexe to UNIVERSAL+ 7WR M4 manual Annexe to UNIVERSAL+ 7WR Rogowski M4 manual

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Chapter 2 - User's/installation guide

2.1 Precautions / warnings for the user / installer

- Despite this unit's being of maximum safety, both from a design and features standpoint, the utmost care must always be taken when using it. It must not be used until its characteristics and mode of operation have been fully understood.
- Consult the specific manuals of the UNIVERSAL+ 7WR model to be connected .
- Do not apply current nor use the unit until all its connections have been connected up and it has been correctly installed in a standard enclosure. Due to an eventual risk of breakage, once current has been supplied to the unit, its connections must not be disconnected/connected except in the case of supply for same (230V AC).
- Do not connect the unit up to voltages other than 230 V AC ± 20%. %.
- Caution: all the connecting terminals of the I/O relay modules, temperature and humidity probe and the AUX. IN-OUT connector are not insulated from the mains. The contacts of the output relays, however, do have insulation from the mains.
- If the compatibility between the UNIVERSAL+ 7WR models, temperature-humidity probe and the I/O relay modules is not respected, errors and abnormal functioning of the protections will occur.
- If I/O relays are used to trigger an external relay-contactor, it is mandatory that a noise block (capacitor and resistance) be incorporated in parallel with the external relay contactor coil.
- Consult the identifying label at the rear of the unit.
- The maximum intensity (6A RMS AC1) of the contacts of the output relays must not be exceeded .
- Do not expose to liquids or humidity.
- Do not drop, knock or expose to vibrations.
- Do not expose to sources of heat.
- Do not expose to environmental temperatures, depending on version, below 0°, -25° C. or over 40°, 50°, 70° C.
- Do not expose to magnetic sources or emissions (electric motors and transformers, electro-magnets, magnets, etc.
- Under no circumstance whatsoever must the unit be opened and the interior manipulated. The safety seals must remain intact. Should they
 be broken, the correct functioning of the unit could be jeopardised.
- In the event of any of the above occurring, the authorised technical service must be contacted immediately in order for the unit to be checked.
- The unit must be completely disconnected from the mains before cleaning with a soft, dry cloth or brush.

ATTENTION - IMPORTANT!

This unit must be installed in a closed, standard enclosure and be and inaccessible to the user.

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.

- WIRING. PRECAUTIONS/WARNINGS FOR THE USER/INSTALLER

By way of a protective cover and to avoid contact and dust, the male connector, AUXILIARY IN/OUT, is fitted ex-factory covered with another female connector.

To remove this connector and connect in its turn the wired connector to the UNIVERSAL+ 7WR modules, cut off the AC supply, remove this connector and replace it with the new wired female connector (**only cables supplied by the manufacturer**). This connector cannot be manipulated with the unit live. Consult the specific manuals of the UNIVERSAL+ 7WR model to be connected .

Connection between the temperature/humidity module and the UNIVERSAL+ 7WR must be carried out solely using the cables supplied by the manufacturer.

No manipulation whatsoever of the connection terminals nor any interconnection must be carried out with the unit live.

One risk of the unit not functioning correctly could be originated principally by an incorrect wiring up of the connection terminals. It is, therefore, of the **utmost importance that this wiring be carried out correctly in accordance with the following protocol:**

- An homologated "male pin" is to be incorporated in the naked core of the stripped pliable conductor. These terminals are placed in the corresponding grooves as far in as they will go.
- Ensure that the conductor lead is correctly fixed with the pertinent tightening torque, i.e. there must be no displacement of the terminal nor any damage to the screws on head, thread, fillet or washer, any of which would be to the subsequent detriment of the assemblies and screw connections.

Transport and handling

This being a highly sophisticated electronic unit, it must be transported and handled with care as per the precautions stipulated in the foregoing section "Precautions/Warnings".

2.3 Installation

The installation must be carried out by responsible, competent and qualified technical personnel once the present manual has been fully understood. (Consult the specific manuals of the UNIVERSAL+ 7WR model to be connected).

The location of the unit must meet the requirements and respect the precautions stipulated in "Precautions/Warnings".

The unit must be installed in a standard single-phase installation, active phase and neutral having a difference of potential of 230V AC, and also a protection conductor of operative earth. Moreover, the installation must have, at its main switch panel, appropriate protections against over-intensities (fuses) and differentials.



2.4 Wiring

The unit is fitted with top quality connection terminals. Each terminal has notches to enable easier fixing of the wires and prevent accidental removal. Likewise, the clamping screws have a self-fixing system which avoids their falling out should they work loose.

Connect terminals POWER L1 to line 1 (phase 1) and POWER N to the neutral of the 230V mains line, 50Hz sinusoidal alternating current-Connect the remaining terminals as indicated for the typical or chosen configuration. Please, refer to "Wiring diagrams" and the specific

manuals of the UNIVERSAL+ 7WR model to be connected

It is imperative that the wiring of the terminals and the tightening of the screws in the fanning strip be effected correctly.

"Wiring diagrams" should be consulted. Should any doubt arise, the manufacturer or authorised distributor should be consulted.

Chapter 3 - Compatibility of I/O relay modules with UNIVERSAL+ 7WR range

3.1 Relay modules compatible with UNIVERSAL+ 7WR M1

UNIRELE 1234OUT UNIRELE 4IN-AB1234OUT

Configurations possible with I/O relay modules and UNIVERSAL+ 7WR M1 Differential, type A

Configuration 1: One UNIRELE 1234OUT module (configured as module 1 or 2) Configuration 2: Two UNIRELE 1234OUT modules (one configured as module 1 and the other as module 2) Configuration 3: One UNIRELE 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 4: Two UNIRELE 4IN-AB1234OUT modules (one configured as module 1 and the other as module 2) Configuration 5: One UNIRELE 1234OUT module and one 4IN-AB1234OUT module (one configured as module 1 and the other as module 2)

3.2 Relay modules compatible with UNIVERSAL+ 7WR M2

UNIRELE CDOUT UNIRELE 12340UT UNIRELE 4IN-AB12340UT UNIRELE 4IN-CD12340UT

Configurations possible with I/O relay modules and UNIVERSAL+ 7WR M2

Configuration 1: One UNIRELE CDOUT module Configuration 2: One UNIRELE 4IN-CD1234OUT module (configured as module 1 or 2) Configuration 3: One UNIRELE CDOUT module and one 1234OUT module (the latter configured as module 1 or 2) Configuration 4: One UNIRELE CDOUT module and one 4IN-AB1234OUT module (the latter configured as module 1 or 2) Configuration 5: One UNIRELE 4IN-CD1234OUT module and one 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 5: One UNIRELE 4IN-CD1234OUT module and one 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 6: One UNIRELE CDOUT module and two UNIRELE 1234OUT module s (one configured as module 1 and the other as module 2)

3.3 Relay modules compatible with UNIVERSAL+ 7WR M3

UNIRELE 1234OUT UNIRELE 4IN-AB1234OUT



Configurations possible with I/O relay modules and UNIVERSAL+ 7WR M3

Configuration 1: One UNIRELE 1234OUT module (configured as module 1 or 2) Configuration 2: Two UNIRELE 1234OUT modules (one configured as module 1 and the other as module 2) Configuration 3: One UNIRELE 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 4: Two UNIRELE 4IN-AB1234OUT modules (one configured as module 1 and the other as module 2) Configuration 5: One UNIRELE 1234OUT module and one 4IN-AB1234OUT module (one configured as module 1 and the other as module 2)

3.4 Relay modules compatible with UNIVERSAL+ 7WR M4

UNIRELE ABOUT UNIRELE 1234OUT UNIRELE 4IN-AB1234OUT

Configurations possible with I/O relay modules and UNIVERSAL+ 7WR M4

Configuration 1: One UNIRELE ABOUT module Configuration 2: One UNIRELE 1234OUT module (configured as module 1 or 2) Configuration 3: One UNIRELE 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 4: One UNIRELE ABOUT module and one 1234OUT module (the latter configured as module 1 or 2) Configuration 5: One UNIRELE 1234OUT module and one 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 5: One UNIRELE 1234OUT module and one 4IN-AB1234OUT module (configured as module 1 or 2) Configuration 6: Two UNIRELE 4IN-AB1234OUT modules (one configured as module 1 and the other as module 2) Configuration 7: One UNIRELE ABOUT module and two UNIRELE 1234OUT modules (one configured as module 1 and the other as module 2)

3.5 Relay modules compatible with UNIVERSAL+ 7WR XREM:

UNIRELE 1234OUT UNIRELE 4IN-1234OUT

Configurations possible with I/O relay modules and UNIVERSAL+ 7WR XREM:

Configuration 1: One UNIRELE 1234OUT module (configured as module 2) Configuration 2:

One UNIRELE 4IN-1234OUT module (configured as module 2)

3.6 Relay modules compatible with UNIVERSAL+ 7WR M2

UNIRELE CBOUT UNIRELE 1234OUT UNIRELE 4IN-AB1234OUT

Configurations possible with I/O relay modules and UNIVERSAL+ 7WR M2

Configuration 1: One UNIRELE CBOUT module Configuration 2: One UNIRELE CBOUT module and one 1234OUT module (the latter configured as module 1 or 2) Configuration 3: One UNIRELE CBOUT module and one 4IN-AB1234OUT module (the latter configured as module 1 or 2) Configuration 4: One UNIRELE CBOUT module and two UNIRELE 1234OUT module s (one configured as module 1 and the other as module 2)



Chapter 4 – Characteristics I/O relay modules

4.1 - Technical characteristics: UNIRELE 4IN-AB1234OUT

6 OUT AB1234 RELAYS, 4 INPUT RELAYS, 2 REMOTE IN AND CONNECTION TEMPERATURA / HUMEDAD PROBE

Input voltage option (230VU) Input voltage option (230V) Consumption Working temperature

Changeover output relays Built-in fuse (in the contact common to output relays) Input relay (logical inputs) Built-in fuse (in the input common to input relays 1,2,3,4 shunt-trip) Dimensions Weight Guarantee Universal AC and DC supply: (85V – 265V AC 47-440HZ) and (125V – 370V DC) 230V AC ± 10% 50/60Hz alternating sinusoidal 3,8W at 230V 50HZ 0° to +45° C. Standard version -10° to +55° C. Industrial version: models with "I" suffix -25° to +70° C. Extended industrial version: models with "E" suffix AC 50/60 Hz 250V 6A max. AC1 (use at 5A max. AC1) 6.3A T 250 V (for each output relay) Shunt-trip 230 V AC 50/60Hz 315 mA T 250 V 155mm (8,5 modules), height:40mm 35mm DIN rail 400 grs. 3 years





4.2 Description: connection terminals UNIRELE 4IN-AB1234OUT

۸ ۸	1 NO RELÉ A 2 COM RELÉ A 3 NC RELÉ A	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY A (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY A (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY A (5A MAX. AC1)
۸ ۸	1 NO RELÉ B 2 COM RELÉ B 3 NC RELÉ B	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY B (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY B (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY B (5A MAX. AC1)
۸ ۸	1 NO RELÉ 1 2 COM RELÉ 1 3 NC RELÉ 1	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 1 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 1 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 1 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 2 2 COM RELÉ 2 3 NC RELÉ 2	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 2 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 2 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 2 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 3 2 COM RELÉ 3 3 NC RELÉ 3	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 3 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 4 2 COM RELÉ 4 3 NC RELÉ 4	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 4 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 4 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 4 (5A MAX. AC1)
~ ~ ~ ~ ~ ~	4 INPUT RELE1 5 INPUT RELE2 6 INPUT RELE3 7 INPUT RELE4 8 COMÚN INPUT	SHUNT-TRIP RELAY1 230V AC SHUNT-TRIP RELAY2 230V AC SHUNT-TRIP RELAY3 230V AC SHUNT-TRIP RELAY4 230V AC COMMON SHUNT-TRIPS RELAYS 1,2,3 and 4
٨	AUXILIARY IN-OUT	CONNECTION TO UNIVERSAL+ 7WR MODULES AND INPUT/OUTPUT RELAY MODULES USE ONLY SUPPLIED LEADS AND CONNECTORS (Refer to specific manuals for UNIVERSAL+ 7WR models to be connected)
~ ~ ~ ~ ~ ~	9 0 V 10 SDA1 11 SCL1 12 +3V3 13 REM. IN1 14 REM. IN2	O V POWER TEMPERATURE AND HUMIDITY SENSOR SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR COMMON REMOTES IN1, IN2 AND POWER TEMPERATURE AND HUMIDITY PROBE INPUT REMOTE IN 1 INPUT REMOTE IN 2
لم لم	L POWER 230V N POWER 230V	POWER PHASE (LINE) 230V AC POWER NEUTRAL

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.



4.3 - Technical characteristics: UNIRELE 4IN-CD1234OUT

6 RELÉS OUT CD1234, 4 RELÉS INPUT, 2 REMOTE IN AND CONNECTION TEMPERATURA / HUMEDAD PROBE

Input voltage option (230VU) Input voltage option (230V) Consumption Working temperature

Changeover output relays Built-in fuse (in the contact common to output relays) Input relay (logical inputs) Built-in fuse (in the input common to input relays 1,2,3,4 shunt-trip) Dimensions Weight Guarantee Universal AC and DC supply: (85V – 265V AC 47-440HZ) and (125V – 370V DC) 230V AC ± 10% 50/60Hz alternating sinusoidal 3,8W at 230V 50HZ 0° to +45° C. Standard version -10° to +55° C. Industrial version: models with "I" suffix -25° to +70° C. Extended industrial version: models with "E" suffix AC 50/60 Hz 250V 6A max. AC1 (use at 5A max. AC1) 6.3A T 250 V (for each output relay) Shunt-trip 230 V AC 50/60Hz 315 mA T 250 V 155mm (8,5 modules), height: 40mm, 35mm DIN rail 400 grs. 3 years





4.4 Description: connection terminals UNIRELE 4IN-CD1234OUT

۸ ۸	1 NO RELÉ C 2 COM RELÉ C 3 NC RELÉ C	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY C (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY C (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY C (5A MAX. AC1)
۸ ۸	1 NO RELÉ D 2 COM RELÉ D 3 NC RELÉ D	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY D (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY D (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY B (5 D MAX. AC1)
۸ ۸	1 NO RELÉ 1 2 COM RELÉ 1 3 NC RELÉ 1	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 1 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 1 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 1 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 2 2 COM RELÉ 2 3 NC RELÉ 2	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 2 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 2 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 2 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 3 2 COM RELÉ 3 3 NC RELÉ 3	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 3 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 4 2 COM RELÉ 4 3 NC RELÉ 4	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 4 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 4 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 4 (5A MAX. AC1)
~ ~ ~ ~ ~ ~	4 INPUT RELE1 5 INPUT RELE2 6 INPUT RELE3 7 INPUT RELE4 8 COMÚN INPUT	SHUNT-TRIP RELAY1 230V AC SHUNT-TRIP RELAY2 230V AC SHUNT-TRIP RELAY3 230V AC SHUNT-TRIP RELAY4 230V AC COMMON SHUNT-TRIPS RELAYS 1,2,3 and 4
A	UXILIARY IN-OUT	CONNECTION TO UNIVERSAL+ 7WR MODULES AND INPUT/OUTPUT RELAY MODULES USE ONLY SUPPLIED LEADS AND CONNECTORS (Refer to specific manuals for UNIVERSAL+ 7WR models to be connected)
~ ~ ~ ~ ~ ~	9 0 V 10 SDA1 11 SCL1 12 +3V3 13 REM. IN1 14 REM. IN2	O V POWER TEMPERATURE AND HUMIDITY SENSOR SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR COMMON REMOTES IN1, IN2 AND POWER TEMPERATURE AND HUMIDITY PROBE INPUT REMOTE IN 1 INPUT REMOTE IN 2
۸ ۸	L POWER 230V N POWER 230V	POWER PHASE (LINE) 230V AC POWER NEUTRAL

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.



4.5 - Technical characteristics: UNIRELE 1234OUT

4 RELÉS OUT 1234, 2 REMOTE IN AND CONNECTION TEMPERATURA / HUMEDAD PROBE

Input voltage option (230VU) Input voltage option (230V) Consumption Working temperature

Changeover output relays Built-in fuse (in the contact common to output relays) Dimensions Weight Guarantee Universal AC and DC supply: (85V - 265V AC 47-440HZ) and (125V - 370V DC) 230V AC \pm 10% 50/60Hz alternating sinusoidal 3,8W at 230V 50HZ 0° to +45° C. Standard version -10° to +55° C. Industrial version: models with "I" suffix -25° to +70° C. Extended industrial version: models with "E" suffix AC 50/60 Hz 250V 6A max. AC1 (use at 5A max. AC1) 6.3A T 250 V (for each output relay) 82mm (4,5 modules), height: 40mm, 35mm DIN rail 250 grs. 3 years





4.6 Description: connection terminals UNIRELE 1234OUT

۸ ۸ ۸	1 NO RELÉ 1 2 COM RELÉ 1 3 NC RELÉ 1	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 1 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 1 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 1 (5A MAX. AC1)
▲ ▲	1 NO RELÉ 2 2 COM RELÉ 2 3 NC RELÉ 2	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 2 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 2 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 2 (5A MAX. AC1)
.↓ .↓	1 NO RELÉ 3 2 COM RELÉ 3 3 NC RELÉ 3	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 3 (5A MAX. AC1)
۸ ۸	1 NO RELÉ 3 2 COM RELÉ 3 3 NC RELÉ 3	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY 3 (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY 3 (5A MAX. AC1)
A	JXILIARY IN-OUT	CONNECTION TO UNIVERSAL+ 7WR MODULES AND INPUT/OUTPUT RELAY MODULES USE ONLY SUPPLIED LEADS AND CONNECTORS (Refer to specific manuals for UNIVERSAL+ 7WR models to be connected)
~ ~ ~ ~ ~ ~	9 0 V 10 SDA1 11 SCL1 12 +3V3 13 REM. IN1 14 REM. IN2	O V POWER TEMPERATURE AND HUMIDITY SENSOR SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR COMMON REMOTES IN1, IN2 AND POWER TEMPERATURE AND HUMIDITY PROBE INPUT REMOTE IN 1 INPUT REMOTE IN 2
4	L POWER 230V	POWER PHASE (LINE) 230V AC

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.

4.7 - Technical characteristics: UNIRELE ABOUT

2 RELÉS OUT AB and 2 REMOTE IN

Working temperature

Changeover output relays Built-in fuse (in the contact common to output relays) Dimensions Weight Guarantee 0° to +45° C. Standard version -10° to +55° C. Industrial version: models with "I" suffix -25° to +70° C. Extended industrial version: models with "E" suffix AC 50/60 Hz 250V 6A max. AC1 (use at 5A max. AC1) 6.3A T 250 V (for each output relay) 43mm (2,5 modules), height: 40mm, 35mm DIN rail 50 grs. 3 years





4.8 Description: connection terminals UNIRELE ABOUT

لم لم	1 NO RELÉ A 2 COM RELÉ A 3 NC RELÉ A	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY A (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY A (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY A (5A MAX. AC1)
لم	1 NO RELÉ B	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY B (5A MAX. AC1)
الم	2 COM RELÉ B	OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY B (5A MAX. AC1)
الم	3 NC RELÉ B	OUTPUT POTENTIAL-FREE CONTACT, NC RELAY B (5A MAX. AC1)
A	UXILIARY IN-OUT	CONNECTION TO UNIVERSAL+ 7WR MODULES AND INPUT/OUTPUT RELAY MODULES USE ONLY SUPPLIED LEADS AND CONNECTORS (Refer to specific manuals for UNIVERSAL+ 7WR models to be connected)
لم	12 +3V3	COMMON REMOTES IN1, IN2
لم	13 REM. IN1	INPUT REMOTE IN 1
لم	14 REM. IN2	INPUT REMOTE IN 2

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.



4.9 - Technical characteristics: UNIRELE CDOUT

2 RELÉS OUT CD and 2 REMOTE IN

Working temperature

Changeover output relays Built-in fuse (in the contact common to output relays) Dimensions Weight Guarantee 0° to +45° C. Standard version -10° to +55° C. Industrial version: models with "I" suffix -25° to +70° C. Extended industrial version: models with "E" suffix AC 50/60 Hz 250V 6A max. AC1 (use at 5A max. AC1) 6.3A T 250 V (for each output relay) 43mm (2,5 modules), height: 40mm, 35mm DIN rail 50 grs. 3 years





4.10 Description: connection terminals UNIRELE CDOUT

▲ 1 N0	O RELÉ C	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY C (5A MAX. AC1)
▲ 2 C0	OM RELÉ C	OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY C (5A MAX. AC1)
▲ 3 N0	C RELÉ C	OUTPUT POTENTIAL-FREE CONTACT, NC RELAY C (5A MAX. AC1)
▲ 1 N(O RELÉ D	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY D (5A MAX. AC1)
▲ 2 C(OM RELÉ D	OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY D (5A MAX. AC1)
▲ 3 N(C RELÉ D	OUTPUT POTENTIAL-FREE CONTACT, NC RELAY D (5A MAX. AC1)
AUXIL	IARY IN-OUT	CONNECTION TO UNIVERSAL+ 7WR MODULES AND INPUT/OUTPUT RELAY MODULES USE ONLY SUPPLIED LEADS AND CONNECTORS (Refer to specific manuals for UNIVERSAL+ 7WR models to be connected)
▲ 12 ·	+3V3	COMMON REMOTES IN1, IN2
▲ 13	REM. IN1	INPUT REMOTE IN 1
▲ 14	REM. IN2	INPUT REMOTE IN 2

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.



4.11 - Technical characteristics: UNIRELE CBOUT

2 RELÉS OUT CB and 2 REMOTE IN

Working temperature

Changeover output relays Built-in fuse (in the contact common to output relays) Dimensions Weight Guarantee 0° to +45° C. Standard version -10° to +55° C. Industrial version: models with "I" suffix -25° to +70° C. Extended industrial version: models with "E" suffix AC 50/60 Hz 250V 6A max. AC1 (use at 5A max. AC1) 6.3A T 250 V (for each output relay) 43mm (2,5 modules), height: 40mm, 35mm DIN rail 50 grs. 3 years





4.12 Description: connection terminals of UNIRELE CBOUT

۸ ۸ ۸	1 NO RELÉ C 2 COM RELÉ C 3 NC RELÉ C	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY C (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY C (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY C (5A MAX. AC1)
۸ ۸	1 NO RELÉ B 2 COM RELÉ B 3 NC RELÉ B	OUTPUT POTENTIAL-FREE CONTACT, NO RELAY B (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, COMMON RELAY B (5A MAX. AC1) OUTPUT POTENTIAL-FREE CONTACT, NC RELAY B (5A MAX. AC1)
A	UXILIARY IN-OUT	CONNECTION TO UNIVERSAL+ 7WR MODULES AND INPUT/OUTPUT RELAY MODULES USE ONLY SUPPLIED LEADS AND CONNECTORS (Refer to specific manuals for UNIVERSAL+ 7WR models to be connected)
۸ ۸	12 +3V3 13 REM. IN1 14 REM. IN2	COMMON REMOTES IN1, IN2 INPUT REMOTE IN 1 INPUT REMOTE IN 2

CONNECTION AND DISCONNECTION OF REMOTES IN BETWEEN COMMON REMOTE AND REMOTES 1 AND 2 TO BE CARRIED OUT WITH A RELAY WITH POTENTIAL-FREE CONTACTS AND WITH A 4KV POTENTIAL INSULATION.



Chapter 5 – Technical characteristics temperature and humidity probe modules 5.1 - Technical characteristics: SENSOR TH2 temperature and humidity probe module

Temperature
Humidity
Dimensions
Weight
Guarantee
Power

from -40 °C to +70 °C Typical precision: +- 0,5 °C de 10% a 90% Typical precision: +- 4,5% HR 33mm x 48mm, height:15mm 35 grs. 3 years 3V3

To be connected directly to the terminals of I/O relay modules and to accessories for T/H sensor, 14-pin C/P terminal connector (UNIVERSAL+ 7WR modules)



Description of connection terminals

Y	0 V
A	SDA1
A	SCL1
A	+3V3

O V POWER TEMPERATURE AND HUMIDITY SENSOR SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR POWER TEMPERATURE AND HUMIDITY PROBE (+3V3)

The connection between the temperature/humidity probe module and the I/O relay modules to be effected solely using cables supplied by manufacturer.



5.3 - Technical characteristics: UNI TH5 temperature and humidity probe module

Temperature Humidity Dimensions Weight Guarantee Power from -40 °C to +70 °C Typical precision: +- 0,5 °C de 10% a 90% Typical precision: +- 4,5% HR 18mm (1 module), height: 72mm, 35mm DIN rail 60 grs. 3 years 3V3

To be connected directly to the terminals of I/O relay modules and to accessories for T/H sensor, 14-pin C/P terminal connector (UNIVERSAL+ 7WR modules)



Description of connection terminals

\checkmark	0 V
\checkmark	SDA1
${\Bbb A}$	SCL1
\checkmark	+3V3

O V POWER TEMPERATURE AND HUMIDITY SENSOR SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR POWER TEMPERATURE AND HUMIDITY PROBE (+3V3)

The connection between the temperature/humidity probe module and the I/O relay modules to be effected solely using cables supplied by manufacturer.



5.3 - Technical characteristics: UNI SEN TH10 temperature and humidity probe module

Temperature Humidity Dimensions Weight Guarantee Power from -40 °C to +70 °C Typical precision: +- 0,5 °C de 10% a 90% Typical precision: +- 4,5% HR 20.5mm x 25.5mm, height:15mm 35 grs. 3 years 3V3

To be connected directly to the 14-pin C/P connector of the UNIVERSAL+ 7WR M1, M2, M3, M5, M4 and ROGOWSKI M4 modules

This type of sensor goes into the 14-pin C/P connector of the UNIVERSAL+ 7WR modules and cannot be connected to other accessories



5.4 - Technical characteristics: UNI SEN TH20 temperature and humidity probe module

Temperature Humidity Dimensions Weight Guarantee Power from -40 °C to +70 °C Typical precision: +- 0,5 °C de 10% a 90% Typical precision: +- 4,5% HR 20.5mm x 25.5mm, height:18mm 35 grs. 3 years 3V3

To be connected directly to the 14-pin C/P connector of the UNIVERSAL+ 7WR M1, M2, M3, M5, M4 and ROGOWSKI M4 modules

This type of sensor does not go into the 14-pin C/P connector of the UNIVERSAL+ 7WR modules and can be connected to other accessories





5.5 - Technical characteristics: UNI SEN TH30 temperature and humidity probe module

Temperature Humidity Dimensions Weight Guarantee Power from -40 °C to +70 °C Typical precision: +- 0,5 °C de 10% a 90% Typical precision: +- 4,5% HR 19mm x 21mm, height:8mm 35 grs. 3 years 3V3

To be connected directly to the terminals of I/O relay modules and to accessories for T/H sensor, 14-pin C/P terminal connector (UNIVERSAL+ 7WR modules)



Description of connection terminals

- * 0V
- ▲ SDA1
- ▲ SCL1
- ≜ +3V3

O V POWER TEMPERATURE AND HUMIDITY SENSOR SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR POWER TEMPERATURE AND HUMIDITY PROBE (+3V3)

5.6 - Technical characteristics: UNI SEN TH1 temperature and humidity probe module

Temperature Humidity Cable length Guarantee Power from -40 °C to +80 °C Typical precision: +- 0,5 °C de 10% a 90% Typical precision: +- 4,5% HR 1 meter 3 years 3V3

Warning: Solely for UNIVERSAL+ 7WR M5 Warning: Solely for UNIVERSAL+ 7WR M4 (AUXILIARY SUPPLY) Warning: Solely for UNIVERSAL+ 7WR ROGOWSKI M4 Warning: Solely for UNIVERSAL+ 7WR TH

To be connected directly to the terminals of I/O relay modules and to accessories for T/H sensor, 14-pin C/P terminal connector (UNIVERSAL+ 7WR modules)



Descripción de bornas de conexión

¥	0 V	WIRE COLOR BLACK (O V POWER TEMPERATURE AND HUMIDITY SENSOR)
¥	SDA1	WIRE COLOR GREEN (SDA COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR)
7	SCL1	WIRE COLOR YELLOW (SCL COMMUNICATION FOR TEMPERATURE AND HUMIDITY SENSOR
A	+3V3	WIRE COLOR RED (POWER TEMPERATURE AND HUMIDITY PROBE +3V3)



Chapter 6 – Accessories for T/H sensor, 14-pin C/P terminal connector C/P (UNIVERSAL+ 7WR modules)

6.1 - Accessories for T/H sensor, 14-pin C/P terminal connector, model ADAPSENSORTH2

Dimensions

17mm x 25.5mm, height:28mm

To be connected directly to the 14-pin C/P connector of the UNIVERSAL+ 7WR M1, M2, M3, M5, M4 and ROGOWSKI M4 modules

This type of accessory goes into the 14-pin C/P connector of the UNIVERSAL+ 7WR modules and cannot be connected to other accessories



6.1 - Accessories for T/H sensor, 14-pin C/P terminal connector, model ADAPSENSORTH2CP1

Dimensions

32mm x 25.5mm, height:28mm

To be connected directly to the 14-pin C/P connector of the UNIVERSAL+ 7WR M1, M2, M3, M5, M4 and ROGOWSKI M4 modules

This type does not go into the 14-pin C/P connector of the UNIVERSAL+ 7WR modules and can be connected to other accessories





Chapter 7 - Diagnoses and trouble-shooting

7.1 Diagnoses and trouble-shooting (Please, refer to the corresponding manual of the UNIVERSAL+ 7WR unit to be connected)

- 1. Communication error temperature and humidity probe
- 2. Communication error external modules

1. Communication error temperature and humidity probe

Verify the wiring of the temperature and humidity probe, cut off the supply to the unit and then switch on again. Go to the submenu "temperature and humidity probe", disable the probe and then enable it again.

There is an anomaly in the temperature and humidity probe. Do NOT use it. Consult the technical service.

2. Communication error external modules

Verify the wiring of the external modules, cut off the supply to the unit and to the modules and then switch the unit on again. Go to the submenu "External module I/O x" and disable the communications of the modules and then enable again. There is an anomaly in one or both the external modules. Do NOT use them. Disable them and consult the technical service



Chapter 8 – Verification and start-up

8.1 Start-up

Connect all up-stream conductors by means of switches, sectionalisers or others.

The initiation sequence will automatically be carried out and the unit will be operative. Please, refer to the corresponding manual of the UNIVERSAL+ 7WR unit to be connected.

Chapter 9 – Technical service

9.1 Technical service

Authorised technical service: solely by the manufacturer

Chapter 10 – Maintenance

10.1 Maintenance

On a minimal yearly basis, the user must check that the measurements of the electrical parameters of the unit coincide with those stipulated in the technical characteristics, To this end, competent technical personnel at the factory will revise the unit and proceed to calibrate it if need be.



Chapter 11 – Guarantee

11.1 Guarantee card

GUARANTEE CARD (photocopy or print and send to Safeline)

Sureline model Serial nbr Date of purchase
Stamp of establishment where unit purchased (with complete address)
Complete name and address of purchaser
e-mail
Main use to which the Sureline unit is to be put
Notes

I hereby authorise Safeline to keep me periodically informed
Yes No

GUARANTEE

SAFELINE, S.L., as a leader in the field of electrical and electronic safety equipment endeavours to maintain an extensive service along with up-dated information to the users of its products. To this end, it is indispensable that the user fills out and returns the present guarantee further to purchase of his SURELINE unit.

Period of guarantee: three years as from date of purchase.

Conditions and application of the SURELINE guarantee: Your SURELINE unit is guaranteed against any defect of manufacture or original components as determined by our Technical Service. Any repair or substitution does not extend the guarantee period.

The guarantee covers::

- Reception of the unit for its repair or servicing.
- Cost of all components, replacements and labour on original components

The guarantee does not cover:

- Transport.
- Breakdown caused by non-original components or devices
- Defects caused by incorrect installation.
- Damage caused by incorrect usage, or errors arising from repairs and internal manipulation by unauthorised persons.
- .- Consumables: fuses, thermal fuses, varistors and labour involved in replacement of same

The guarantee is automatically forfeited in the event of:

- Breakage or deterioration of the seals of any of the original SURELINE elements
- Incorrect usage due to non-observance of the recommendations given in the SURELINE manual.

Repair service: All repair service, both within and outside of the guarantee period, is by SAFELINE, S.L. and its Authorised Technical Assistance Services







SAFELINE, S.L.

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