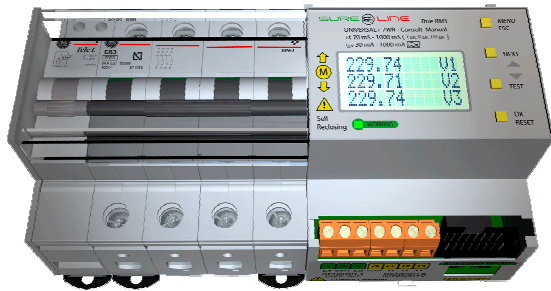


UNIVERSAL+ 7WR (DOV1 / RDI1 / OVD1) differential protection unit, MCB, overvoltage and low voltage with automatic reclosures, differential intensity protection type A / B. RMS, Peak, AC and DC measurements. Protections programmable in value and delay. RMS, Peak, AC, DC voltage and Hz frequency measurements Very high-speed electrical protections, with built-in reclosure motor-drive, against power outages



MCB from 6 to 63A, 4-pole (Icu 10-15kA)



Ultra-immunised differential protection



MCB from 6 to 63A, 2-pole (Icu 10-15kA)

Other Model DOV2 / RDI2 / OVD2: MCB from 10 to 125A, 2 and 4-pole, with automatic reclosure (Icu 50kA).

The 230V units withstand overvoltages of 425V permanent and 1000V Pk
Differential protection type A / B with automatic reclosure ($I_{\Delta n}$ 30-1000mA; Δt from 40ms to 1000ms) Programmable in value and delay (RMS and Peak alarms). Differential intensity protection type B up to 3kHz
RMS, Peak, AC and DC differential intensity measurements
MCB protection with automatic reclosure
RMS and Peak overvoltage protection with automatic intelligent reclosure Programmable in value and delay
RMS low voltage protection with automatic intelligent reclosure Programmable in value and delay
RMS, Peak, AC, DC voltage measurements and Hz frequency
Programming 0-30 reclosures and interval between reclosures for differential intensity with configurable reset
Programming 0-10 reclosures and interval between reclosures for MCB with configurable reset
Two output relays A and B (relay A blocking and relay B voltage watchdog)
Programmable auxiliary voltage watchdog relay
Two external inputs (unblocking and reset) and (cut-off/ start-up) programmable, signal-action
Independent cut-off counters for all protections
Maximum and minimum measurements log
Manual cut-off with security code
Incremental differential intensity test, manually and automatically (automatically prior to reclosure)
Built to permit reconnection of the new digital counters
Very high-speed MCB cut-off (2P=2ms, 4P=5ms)
Double MCB cut-off device <i>With double the energy storage capacity, permitting MCB to be cut-off even without a power supply</i>
Backlit, 12x3-character screen. Intuitive menus. Long texts: easy to read scroll-down
Programmable mean RMS display - 100, 200, 300, 400 and 500ms
Programmable switch-on delay in the event of power supply failure and over and low voltage (delay from 0 to 999 s)
Programming protected by security code
Preventive cut-off upon AC supply failure – insufficient power supply (not programmable)
Ex-factory default configuration. Language: configurable in Spanish or English.
Standards: EN 60947-2 (annexe B):2018, UNE 20-600-77, EN 50550:2011 (consult manual)
Programmable acoustic warnings (enabled or disabled). 3-year guarantee

UNIVERSAL+ 7WR	DOV1	RDI1	OVD1	
Single-phase 2-pole (M) only L1 / Three-phase 4-pole (T) L1, L2, L3				
Differential protection type A / B. RMS, Peak, AC and DC measurements				
RMS, Peak, AC and DC measurements	•	•		
Differential type A. Alternating (AC) sinusoidal and alternating rectified sinusoidal	•	•		
Differential type B. Alternating sinusoidal up to 3kHz, alternating rectified sinusoidal and direct current (DC)	•	•		
Built to permit reconnection to the new digital counters	•	•	•	
Measurement				
Differential intensity, True RMS	•	•		
Differential intensity, Pk	•	•		
Differential intensity, DC (IDdc)	•	•		
Differential intensity, AC (IDac)	•	•		
Voltage, True RMS L1, L2, L3	•	•	•	
Voltage, Pk L1, L2, L3	•	•	•	
Voltage, DC (Vdc) L1, L2, L3	•	•	•	
Voltage, AC (Vac) L1, L2, L3	•	•	•	
Voltage, True RMS between phases L1-2, L2-3, L3-1 (only in 3-phase versions)	•	•	•	
Line frequency L1, L2, L3	•	•	•	
Protections / Alarms, programmable in value and delay, with automatic reclosure / intelligent reclosure				
Differential intensity RMS (IDn RMS)	•	•		
Differential intensity Pk (ID Pk)	•	•		
Overvoltage RMS L1, L2, L3	•		•	
Overvoltage, set >300V RMS L1, L2, L3 (Gradual action curve Voltage / Time - Norm EN 50550)	•		•	
Overvoltage, set >350V RMS L1, L2, L3 (Gradual action curve Voltage / Time - Norm EN 50550)	•		•	
Overvoltage, Pk L1, L2, L3	•		•	
Low voltage, RMS L1, L2, L3	•	•	•	
Remote input 1 (digital input)	•	•	•	
Remote input 2 (digital input)	•	•	•	
Preventive cut-off upon AC supply failure – insufficient power supply (not programmable)	•	•	•	
Phase loss L1, L2, L3 (not programmable)	•	•	•	
Individual MCB cut-off counters				
Counter: upon differential intensity	•	•		
Counters: upon overvoltage V1, V2, V3.	•		•	
Counters: upon low voltage V1, V2, V3.	•	•	•	
Counter: upon MCB .	•	•	•	
Counter: upon remote input 1 and counter: upon remote input 2 (digital inputs)	•	•	•	
Counter: upon blocking	•	•		
Counter: upon Power OFF (loss of AC supply)	•	•	•	
Total counter and total accrued counter (undeletable)	•	•	•	
Incremental differential intensity test (to be carried out routinely)				
Manual incremental differential intensity test (differential tester)	•	•		
Autotest incremental differential test (prior to reclosure)	•	•		
MCB tripping test	•	•	•	
Maximum and minimum measurements logs				
Maximum differential intensity measurement	•	•		
Maximum voltage measurement L1, L2 y L3. Minimum voltage measurement L1, L2 y L3	•	•	•	
Maximum frequency measurement V1, V2 y V3. Minimum frequency measurement V1, V2 y V3	•	•	•	
Enablement/disablement relay A				
Enablement upon differential blocking	•	•		
Enablement upon MCB blocking	•	•	•	
Disablement upon absence of differential blocking	•	•		
Disablement upon absence of MCB	•	•	•	
Enablement/disablement relay B				
Disablement upon low voltage < 185V (incorrect voltage or voltage loss).	•	•	•	
Enablement upon correct voltage > 185V.	•	•	•	
Outstanding characteristics				
Programmable auxiliary voltage watchdog relay	•	•	•	
True RMS, Peak (Pk), AC and DC measurements	•	•	•	
Mean RMS programmable display, 100, 200, 300, 400 and 500ms	•	•	•	
Very high-speed MCB cut-off (2P=2ms, 4P=5ms)	•	•	•	
Intelligent reclosures and sequential reclosures	•	•	•	
Sequential, automatic or manual reclosures	•	•	•	
Backlit, 12x3-character screen. Intuitive menus. Long texts: easy to read scroll-down	•	•	•	
Chronological log of last cut-off and chronological log of last alarm. With values.	•	•	•	
Two output relays A and B (relay A blocking and relay B voltage watchdog)	•	•	•	
Two external inputs (unblocking and reset) and (cut-off/ start-up) programmable, signal-action.	•	•	•	
Programmable switch-on delay in the event of power supply failure (delay from 0 to 999 s)	•	•	•	
Manual connection and disconnection (with or without code)	•	•	•	
4-digit protection PIN	•	•	•	
Programmable acoustic warnings (enabled or disabled)	•	•	•	
Language: configurable in Spanish or English.	•	•	•	
Ex-factory default configuration . 3-year guarantee	•	•	•	
Precision of measurement version 0,5% and 1% (V).	•	•	•	

Wiring diagrams

UNIDAD UNIVERSAL+ 7WR DOV1 UNIDAD UNIVERSAL+ 7WR RDI1

MODELO UNIVERSAL+ 7WR - DOV1 - M

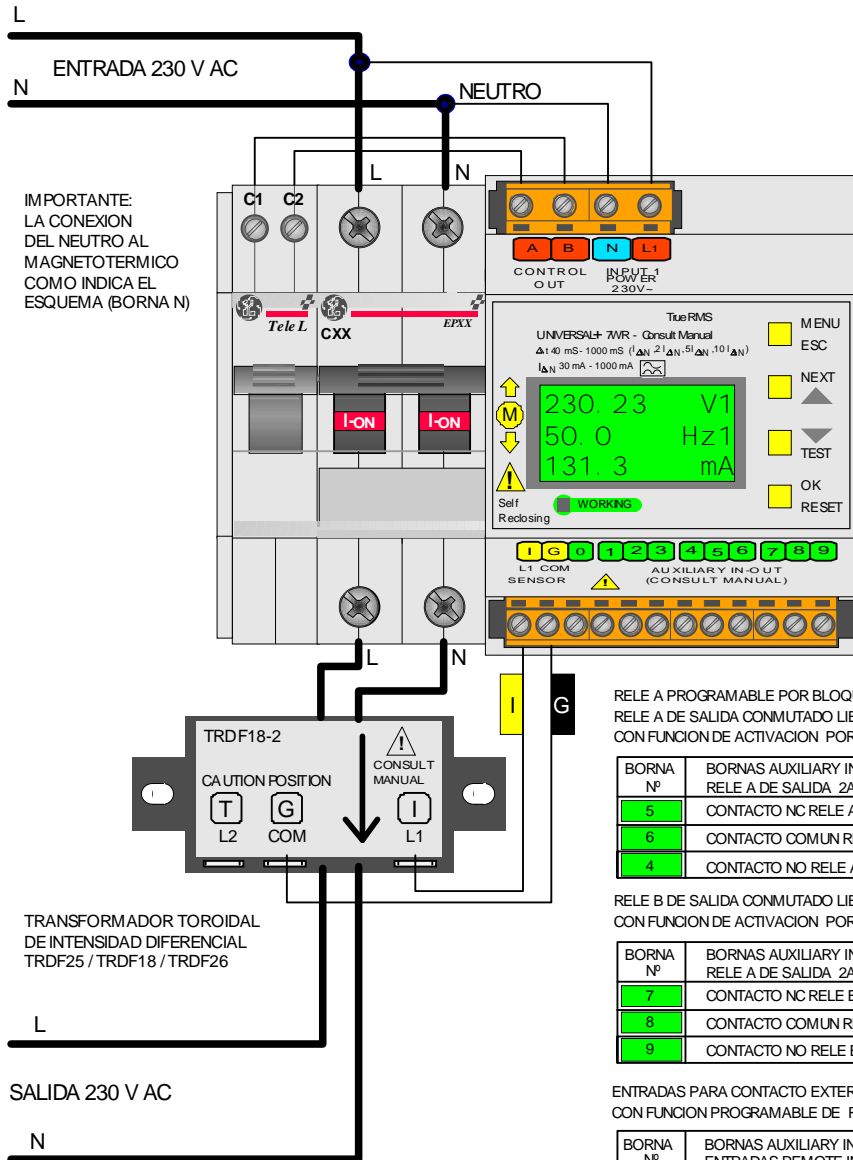
MODELO UNIVERSAL+ 7WR - RDI1 - M

CONFIGURACION MONOFASICA 2 POLOS 6, 10, 16, 20, 25, 32, 40, 50, 63A.



**VERSION INTENSIDAD
DIFERENCIAL TIPO A**

Versión relés auxiliares A B de salida



IMPORTANTE:
LA CONEXION
DEL NEUTRO AL
MAGNETOTERMICO
COMO INDICA EL
ESQUEMA (BORNA N)

TRANSFORMADOR TOROIDAL
DE INTENSIDAD DIFERENCIAL
TRDF25 / TRDF18 / TRDF26

SALIDA 230 V AC

TRDF25 / TRDF18 / TRDF26:
TRANSFORMADOR TOROIDAL DE INTENSIDAD DIFERENCIAL
PASAR LOS CONDUCTORES FASE (L) Y NEUTRO (N)
POR EL ORIFICIO DEL TRANSFORMADOR TOROIDAL
INDIVIDUALMENTE EMPAREJADO Y CALIBRADO PARA SU MODULO
NO INTERCAMBIAR

RELE A PROGRAMABLE POR BLOQUEOS, ALARMAS Y FUNCIONES
RELE A DE SALIDA CONMUTADO LIBRE DE POTENCIAL (CONFIGURADO RELE DE BLOQUEO)
CON FUNCION DE ACTIVACION POR BLOQUEO DE DIFERENCIAL Y MAGNETOTERMICO

BORNA Nº	BORNAS AUXILIARY IN-OUT RELE A DE SALIDA 2A MAX AC1
5	CONTACTO NC RELE A
6	CONTACTO COMUN RELE A
4	CONTACTO NO RELE A



RELE B DE SALIDA CONMUTADO LIBRE DE POTENCIAL (RELE VIGILANTE DE SOBRE-INFRATENSION)
CON FUNCION DE ACTIVACION POR TENSION CORRECTA (RDI1 INFRATENSION)

BORNA Nº	BORNAS AUXILIARY IN-OUT RELE B DE SALIDA 2A MAX AC1
7	CONTACTO NC RELE B
8	CONTACTO COMUN RELE B
9	CONTACTO NO RELE B



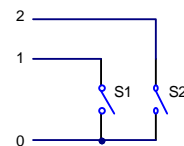
ENTRADAS PARA CONTACTO EXTERNO LIBRE DE POTENCIAL
CON FUNCION PROGRAMABLE DE RESET (IN 1) Y DESCONEXION (IN 2)

BORNA Nº	BORNAS AUXILIARY IN-OUT ENTRADAS REMOTE IN 1 Y 2
T/0	COMUN REMOTES IN
1	ENTRADA REMOTE IN 1
2	ENTRADA REMOTE IN 2

S1 Y S2 CONTACTO LIBRE DE POTENCIAL EXTERNO
PARA ORDEN EXTERNA DEL REMOTE IN 1 Y 2

REMOTE IN 1: ORDEN EXTERNA DESBLOQUEO,
PUESTA A CERO DE LA CUENTA DE REARMES,
Y RECONEXION DEL DISPOSITIVO

REMOTE IN 2: ORDEN EXTERNA DE
DESCONEXION / RECONEXION



BORNA Nº	BORNAS AUXILIARY IN-OUT
3	BORNA NO CONECTAR

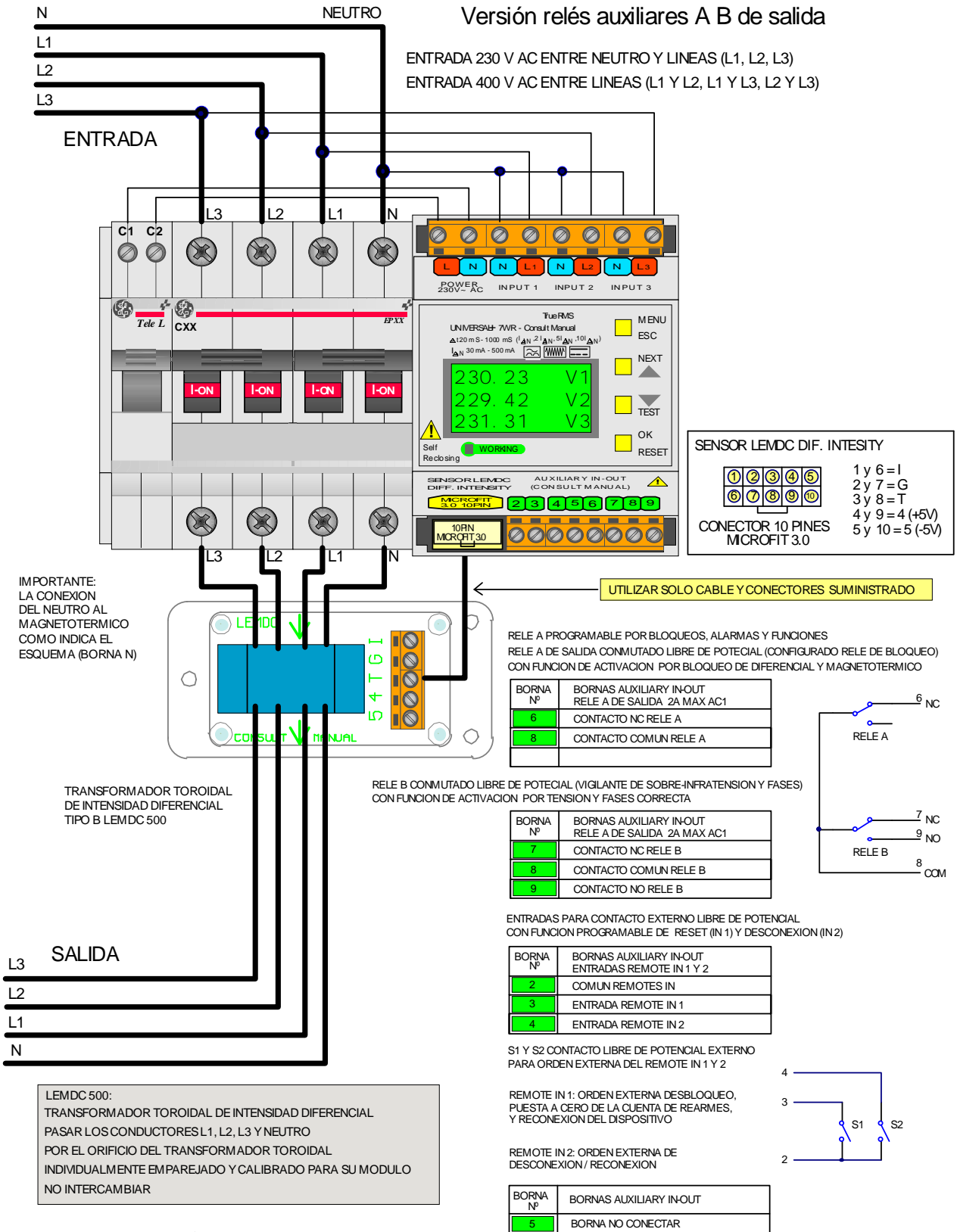


CONSULTAR MANUAL DE INSTRUCCIONES

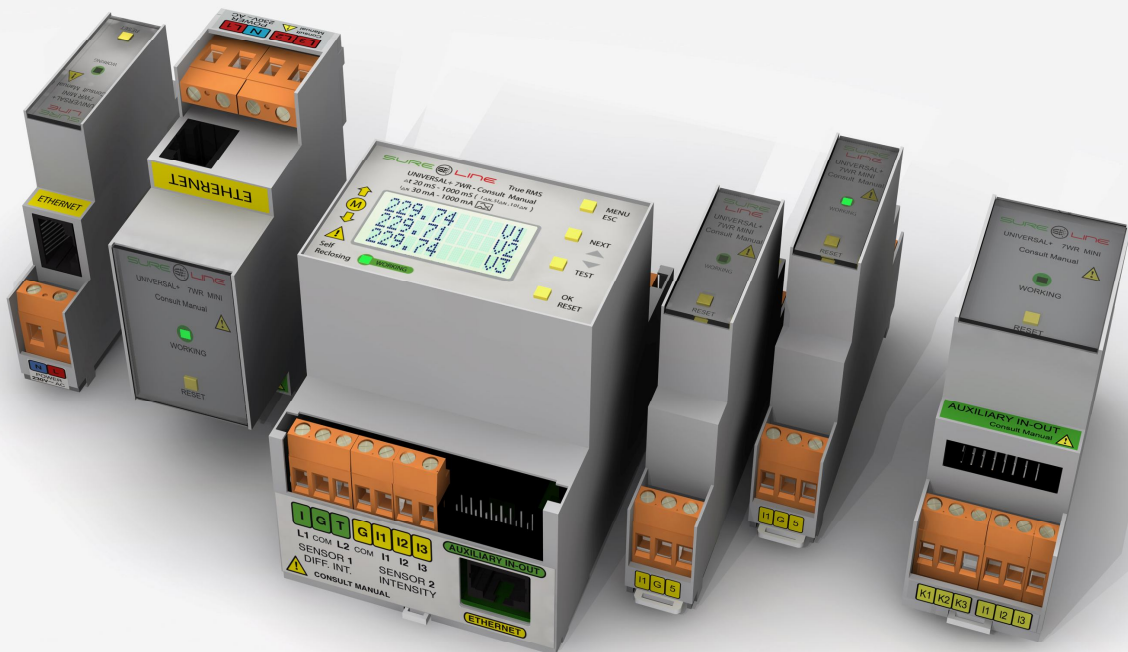
UNIDAD UNIVERSAL+ 7WR DOV1
 UNIDAD UNIVERSAL+ 7WR RDI1
 MODELO UNIVERSAL+ 7WR - DOV1 - T
 MODELO UNIVERSAL+ 7WR - RDI1 - T
 CONFIGURACION TRIFASICA 4 POLOS 6, 10, 16, 20, 25, 32, 40, 50, 63A.



VERSION INTENSIDAD DIFERENCIAL TIPO B



CONSULTAR MANUAL DE INSTRUCCIONES



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