

**COUPLING TYPE**

Phase-to-ground/Phase-to-phase

**FREQUENCY RANGE**

40 to 500 KHz in programmable subbands

**COUPLING CAPACITANCE**

2,000 to 10,000 pF

**NOMINAL IMPEDANCE (POWER LINE SIDE)**

200, 300/400  $\Omega$  unbalanced

**NOMINAL IMPEDANCE (PLC EQUIPMENT SIDE)**

75/150  $\Omega$  bal./unbalanced

**COMPOSED ATTENUATION WITHIN SUBBANDS**

< 2dB

**RETURN LOSS WITHIN SUBBANDS**

> 12dB

**HF POWER**

500 W (P.E.P.)

**INTERMODULATION**

better than 80 dB at max. power

**50/60 HZ CURRENT IN THE PRIMARY TRANSFORMER**

1A continuous

**50/60 HZ OVERCURRENT**

50 A for 1s

**PRIMARY IMPEDANCE AT 50/60 HZ**

< 8  $\Omega$

**PRIMARY TEST VOLTAGE (1.2/50  $\mu$ S WAVE SHAPE)**

10 KVp

**PRIMARY TEST VOLTAGE TO SECONDARY AND TO GROUND (AT 50/60 HZ)**

5 KVrms

**SECONDARY TEST VOLTAGE TO PRIMARY AND TO GROUND (AT 50/60 HZ)**

5 KVrms

**OPERATING ENVIRONMENTAL CONDITIONS**

-25 °C to +70°C

**RESISTANCE TO EXTERNAL AGENTS**

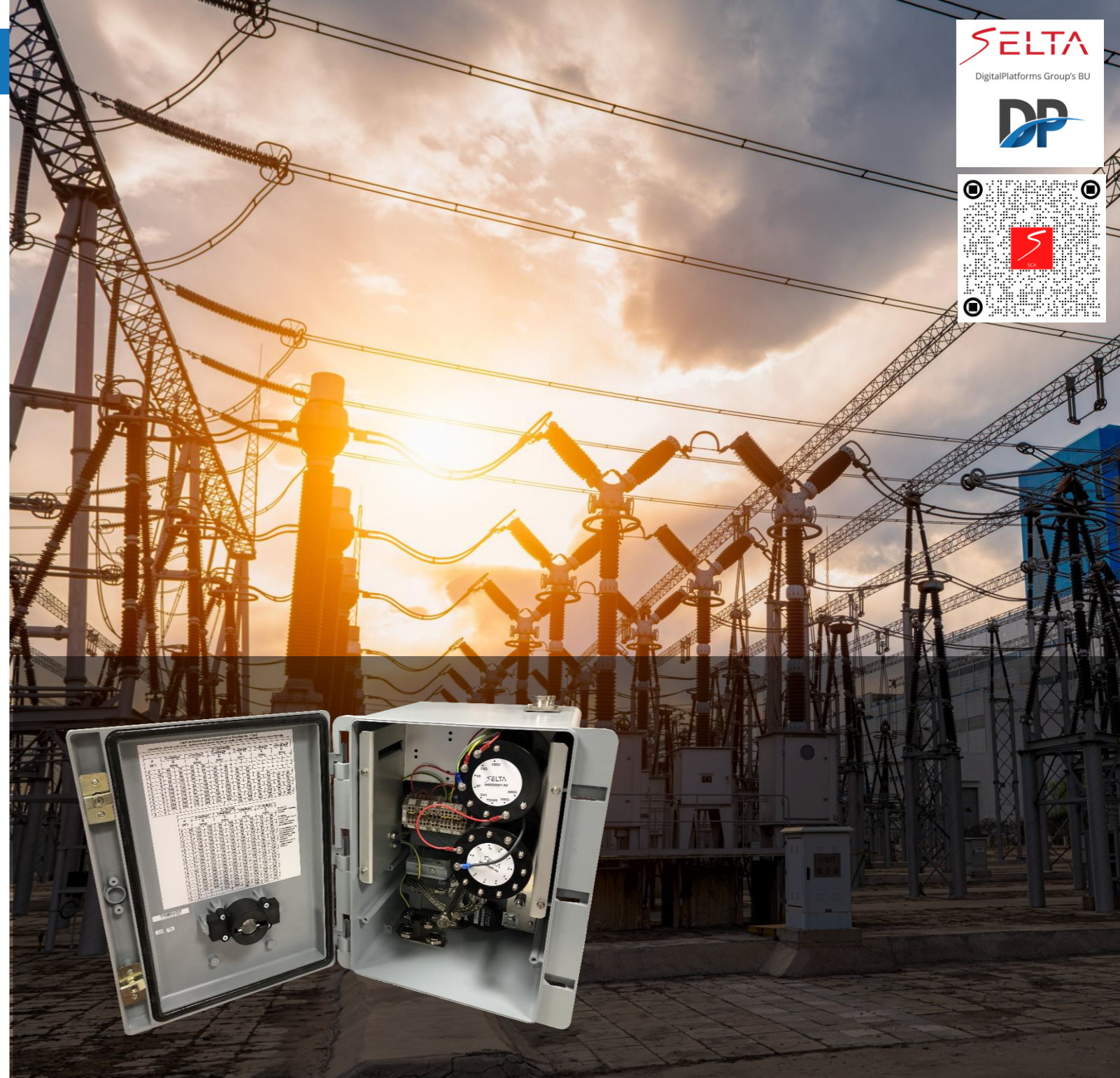
sunrays, rain, hail, snow, saline atmosphere, ice, chemicals etc.

**DIMENSIONS (LXHXD)**

355x420x320mm.

**WEIGHT**

12 Kg.



# SCA

## Universal Coupling Device



The **SCA/SGA** universal coupling device allows the connection between Power Line Carrier (PLC) equipment and the power line. It is one of the main equipment for the PLC systems, offering very important advantages:

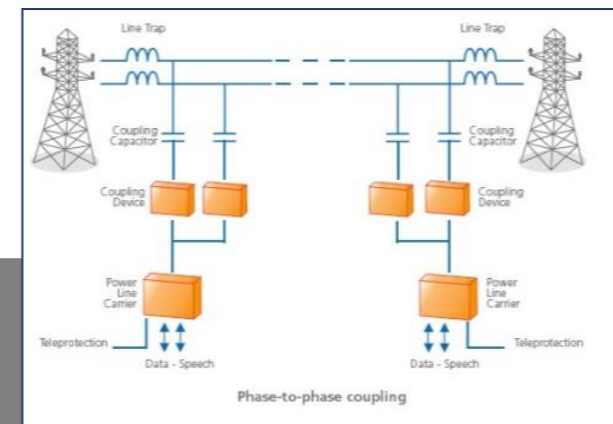
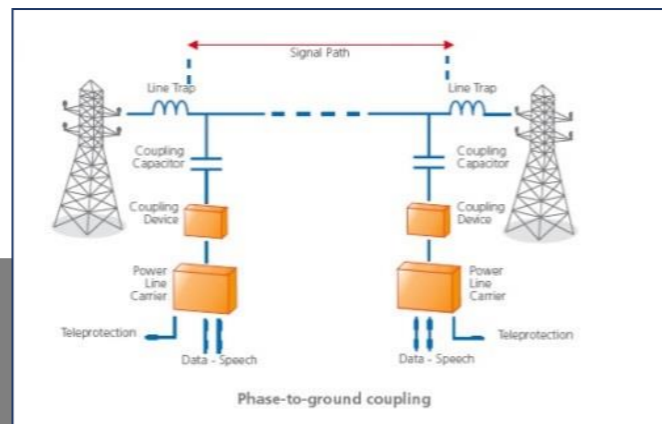
- **efficient** carrier frequency signal **transmission** between the PLC equipment and the power line
- **highest protection** of the low voltage equipment from the power frequency voltage and transient overvoltage
- easy to program and to install
- maximum operating safety
- 500 W PEP Power rating
- IEC-481 compliant
- long life for outdoor installation
- phase-to-ground and phase-to-phase coupling

## BENEFITS

- **COMPACT LAY-OUT**
  - ✓ Upper part: impedance matching/insulation transformer, tuning coil, HF hybrid transformer (optional), secondary surge arrester, secondary terminal strips.
  - ✓ Lower part: primary terminal, grounding switch, primary surge arrester.
- **WEATHER-PROOF PROTECTION BOX**  
A fiberglass reinforced polyester box guarantees long life for outdoor installation, even in damp and polluted environments.
- **Grounding switch**  
It can be operated by an external side handle ensuring straight grounding of the primary terminal. The interlocking with the door allows opening the box only after the actual grounding of the link, in order to provide safe operations.
- **PRIMARY SURGE ARRESTER (COMPLIANT WITH IEC 481)**
  - ✓ Non linear type with 660 Vrms rated voltage
  - ✓ Max. 100% impulse sparkover voltage (1.2/50  $\mu$ s) : 3300 V peak
  - ✓ Rated discharge current (8/20  $\mu$ s) : 5KA peak.

## PERFORMANCES

- **IMPEDANCE AND INSULATING TRANSFORMER WITH TUNING COIL**
  - ✓ Band pass filter with the coupling capacitor: the filter characteristic can be simply tuned by screw-jumpers
  - ✓ Impedance matching between the PLC terminal and the power line
  - ✓ Galvanic insulation between the primary terminal and coax cable to PLC equipment
  - ✓ Drainage coil function.
- **HF HYBRID TRANSFORMER (OPTIONAL)**
  - ✓ Phase-to-phase or inter-system coupling arrangements
  - ✓ Drop/insert
  - ✓ Paralleling of two PLC equipment with short frequency gap.
- **SECONDARY SURGE ARRESTER**  
Gas tube arrester with:
  - ✓ nominal DC breakdown voltage: 350 V
  - ✓ impulse discharge current (8/20  $\mu$ s): 20 KA
  - ✓ AC discharge current (50 Hz): 20 A (1 sec.)



(\*) Le schede elettroniche sono prodotte in conformità alla Direttiva 2011/65/UE (RoHS-2).



UMIDITA'



TEMPERATURA



SOSTENIBILITA'