



DC-Guardian for charging stations

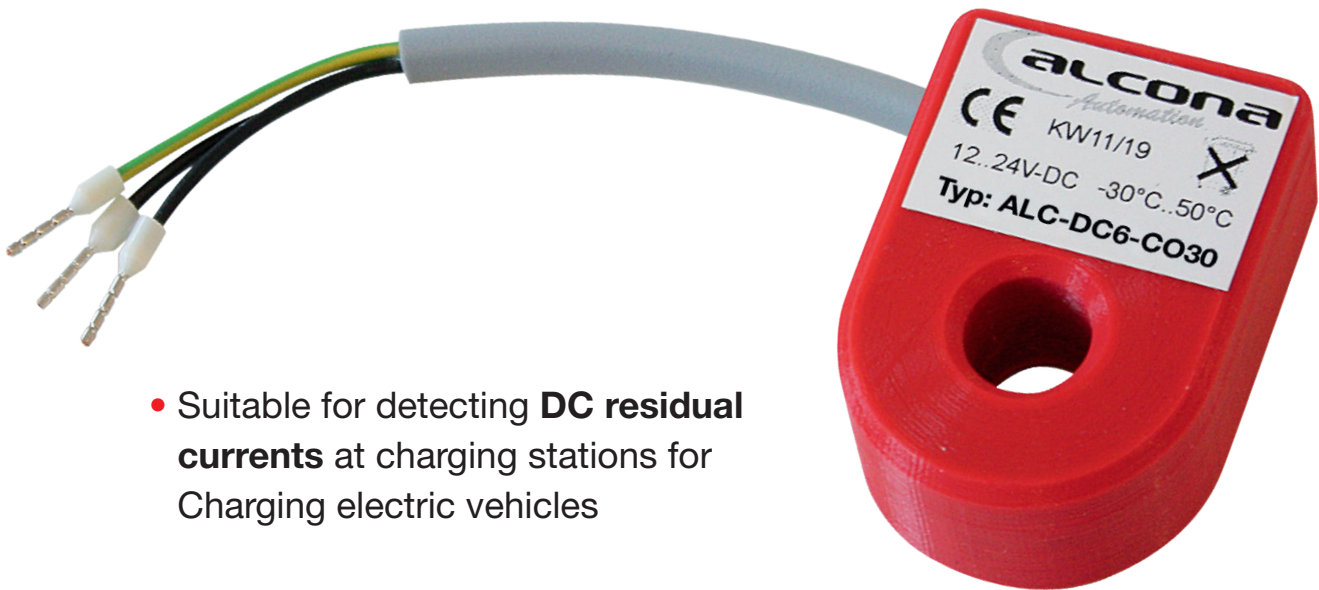
ALC-DC6-CO30



Plug-&-Play-convenience

Only 1 component

Made in Germany



- Suitable for detecting **DC residual currents** at charging stations for Charging electric vehicles
- System guarantees **safe shutdown** in conjunction with an existing RCD type A
- **6 mA DC residual current limit** corresponding DIN EN 61851-1 / IEC 62955
- Including **test button** for testing the protection equipment



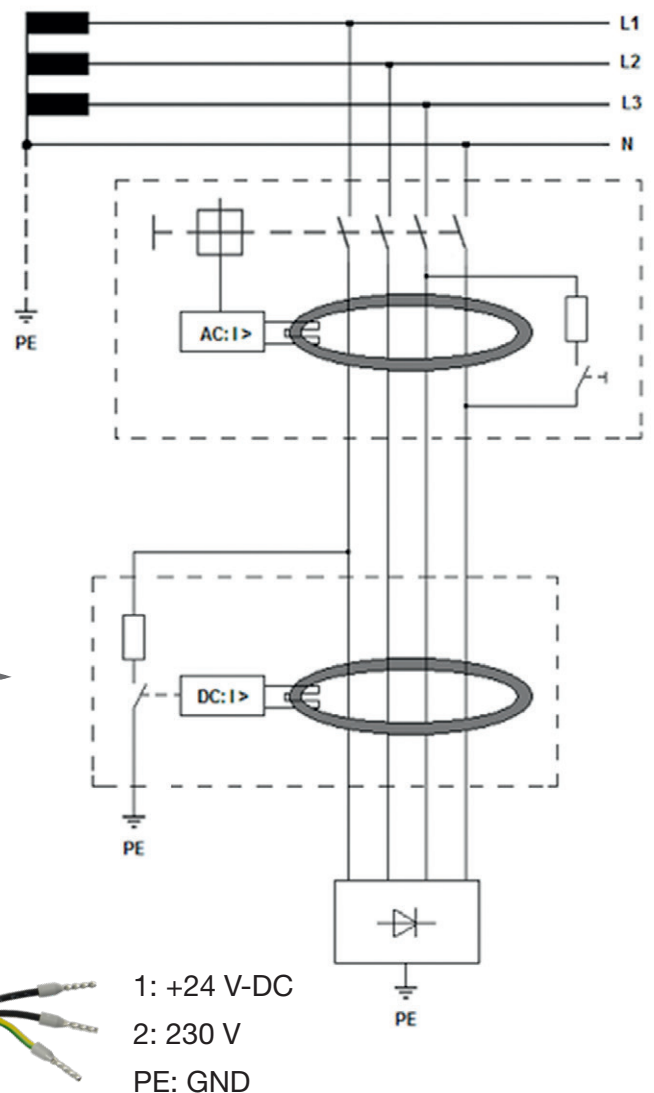
Intelligent protection device

Usually residual current circuit breakers (RCD) type A are used in a **TN or TT network**. Electric vehicles use charge side power semiconductors, which can produce **DC fault currents**. However, these DC fault currents can **affect** the protective of an RCD type A **negative**. For parallel occurring AC and DC residual currents, the RCD type A may need a **higher threshold current** or a **delayed switch-off time**. The limit for „blinding“ the RCD is a DC fault current of **≥ 6 mA**.

Functionality

Between the RCD type A installed in the house distribution system and the electric vehicle the **DC-Guardian ALC-DC6-CO30** will be installed in series. The conductors to be monitored (phases and neutral) must be routed through the coil. If the module detects a **DC fault current of ≥ 6 mA**, an **AC fault current** is generated, which **triggers** the residual current circuit breaker type A in the house distribution. This ensures a secure **all-pole power separation**.

Ideally, the DC monitor is installed directly in the charging station. The functionality can be tested by using the **test button**.



Technical specifications

DC current fault limit:
6 mA

Max. Load current:
32 A (3-Ph)

Rules:
DIN EN 61851-1, IEC 62955

Approval:
CE

Front dimensions:
40 x 57 mm

Depth:
26 mm

Inner Diameter:
13 mm

Cable length:
120 mm

Weight:
100 g

Temperature range:
-30..+70 °C

Supply voltage:
12..24 V-DC

AC trigger current:
70 mA