Electronic Discharge Units for Parallel Connected Capacitors 0.1 to 100 µF

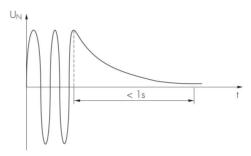
On luminaires with parallel compensation and designed for plug connection to the mains supply, the plugs retain their charge for a relatively long time after disconnection from the power supply. The discharge resistors built into the compensation capacitor are designed for stationary lamps and when disconnected from the mains permit a voltage reduction to 50 V after 1 minute at the earliest.

According to European standard EN 60598-1, the compensation capacitor on mobile lamps must be discharged to 34 V within 1 second. Until now so-called discharge chokes built like conventional ballasts have been used for this purpose. These conventional discharge chokes are connected in parallel to the compensation capacitor and after disconnection from the power supply rapidly discharge the capacitor owing to their low ohmic resistance.

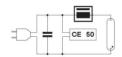
In their rated operating conditions, conventional discharge chokes exhibit a considerable inductive reactance which diminishes the effect of the compensation capacitor particularly if it has a low capacitance.

Furthermore, conventional discharge chokes cause considerable losses and feature high weight.

With the aid of the electronic discharge unit CE 50, it is possible to discharge a capacitor with a capacitance of up to 100 µF to 34 V within 1 second, i.e. within the time specified in EN 60598-1.



Thanks to its high reliability, low inherent losses, small dimensions and low weight, the CE 50 represents an inexpensive solution to the problem of capacitor discharge.



CE 50

All electronic, wear resistant switching element

Casing: aluminium

Nominal voltage: 34–264 V Nominal frequency: 50–60 Hz

Internal loss: < 0.5 W Inherent heating: < 6 K

Max. permitted casing temperature: 95 °C

Push-in terminals: 1 mm²

Fastening: male nipple with pre-assembled washer

and nut Weight: 40 g Type: CE 50

Ref. No.: 140537



