

Start-up Switches for HS and HI Lamps 35 to 1000 W and HM Lamps 50 to 700 W

To bridge a phase of darkness during the starting-up period of high-pressure discharge lamps and also after a brief interruption of the power supply until the high-pressure discharge lamps are restarted

For mercury vapour lamps (HM), high-pressure sodium lamps (HS), metal halide lamps (HI) and ceramic discharge lamps (C-HI)

For HS, HI and C-HI lamps only if used together with a superimposed ignitor

Nominal voltage/frequency:
 220-230 V \pm 10%/50-60 Hz
 240 V \pm 10%/50 Hz

Max. permitted casing temperature t_c : 85 °C

Screw terminals: 0.75-2.5 mm²

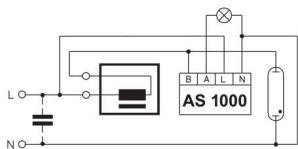
Fastening: male nipple with pre-assembled washer and nut

Max. wattage of incandescent lamp: 1000 W

Automatic switch-off at 60% of the discharge lamp's luminous flux

During the ignition and start-up period, the start-up switch activates an incandescent lamp to provide a basic level of lighting. After a brief interruption in the supply voltage during the re-ignition of the discharge lamp, the integrated control electronics also bridges the phase of darkness by switching on the auxiliary lighting. The incandescent lamp is automatically switched off when the discharge lamp has achieved a sufficient luminous flux (approx. 60%).

Circuit for HM lamps

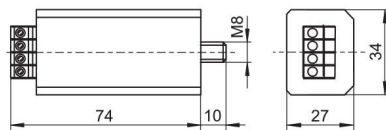
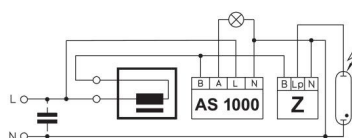


AS 1000 K

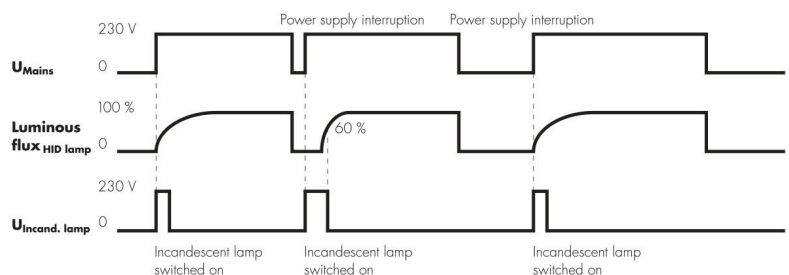
Casing: PC
 Weight: 100 g
 Internal loss: < 0.8 W
 Inherent heating: < 10 K
 Type: AS 1000 K

Ref. No.: 140627

Circuit for HS and HI lamps



The time diagram shows some typical switching examples of a luminaire equipped with a high-pressure discharge lamp, incandescent lamp and start-up switch AS 1000 K.



Ignitors and Accessories for Discharge Lamps

AS 1000 K A10

Specially for using with electronic ballasts or pulse ignitors for high-pressure discharge lamps

Casing: PC

Delayed switching: 655 sec. (50 Hz)

For luminaires of protection class I and II

Max. contact current: 6 A at λ 0.5, 10 A at λ 1

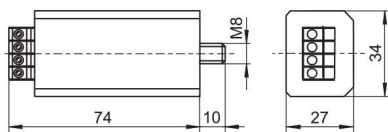
Internal loss: < 1 W

Inherent heating: < 12 K

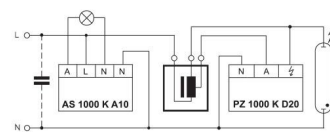
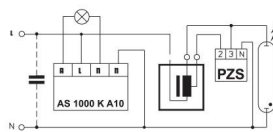
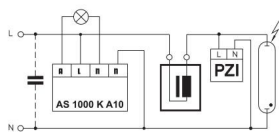
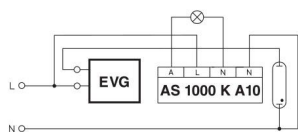
Weight: 100 g

Type: AS 1000 K A10

Ref. No.: 141193



Circuit with electronic ballast



The time diagram shows some typical switching examples of a luminaire equipped with a high-pressure discharge lamp, incandescent lamp and start-up switch AS 1000 K A10.



1

2

3

4

5

6

7

8

9

10

Electronic Discharge Units for Parallel Connected Capacitors 0.1 to 100 μF

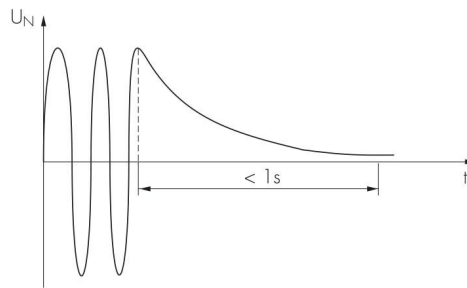
On luminaires with parallel compensation and designed for plug connection to the mains supply, the plugs retain their charge for a relatively long time after disconnection from the power supply. The discharge resistors built into the compensation capacitor are designed for stationary lamps and when disconnected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

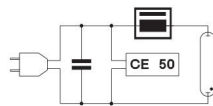
In their rated operating conditions, conventional discharge chokes exhibit a considerable inductive reactance which diminishes the effect of the compensation capacitor particularly if it has a low capacitance.

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

