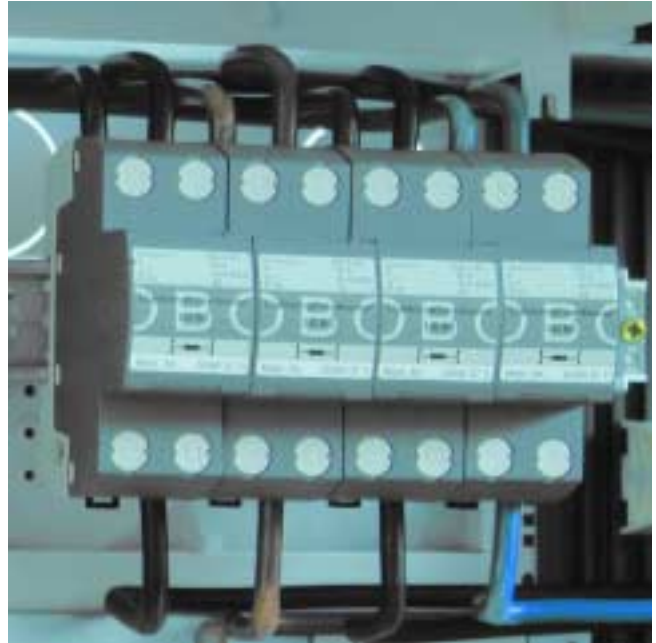


## Decoupling inductance LightningCoordinator LC 63



### Operation and fields of application

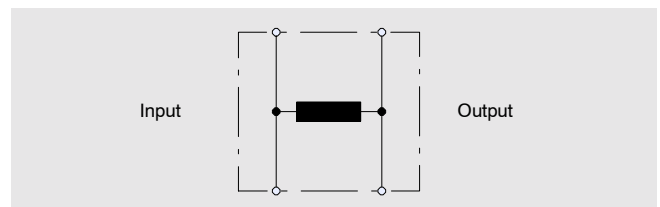
If there are several surge protection devices in a network, they may influence each other, and this may mean that the parallel arresters must be coordinated in terms of energy. The effect of this coordination is that, in the event of a voltage surge due to lightning, the lightning arrester (class B) responds reliably, diverting the high-energy currents, so protecting the other surge arrester(s) (class C or D) from overload.

This energy coordination is provided by LightningCoordinator type LC 63. This device establishes coordination between spark-gap lightning arresters (requirement class B) and varistor-based surge arresters (requirement class C). The LightningCoordinator also ensures the coordination of NPE arresters of different requirement classes.

It is only necessary to install the LightningCoordinator if the distance between lightning arrester and surge arrester at the zone interfaces (total line length) is not more than five meters. Where this is the case, the natural inductances of the conduction path are not sufficient, and a decoupling inductance must therefore be connected between the protection devices which operate in different ways.

Typical fields of application are compact surge protection installations in a separate housing, and installations with arresters of requirement classes B and C inside a distribution board.

The good commutation properties of the LightningCoordinator are due to its optimally arranged inductance. The large cross-section of the strip-shaped coil conductor gives a low DC resistance, resulting in only a slight temperature rise in normal operation.



Block diagram of LC 63

### Mounting

LightningCoordinator type LC 63 is designed for snap-fitting to standard commercial 35 mm top-hat rails. It is connected to integral terminals in the coil housing.

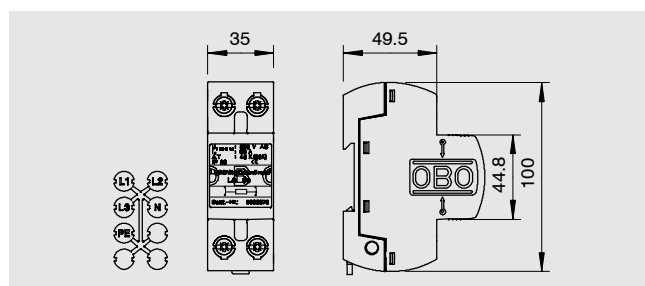
## Technical data

OBO LightningCoordinator		LC 63
Type		LC 63
Nominal voltage	$U_N$	< 500 V / 50-60 Hz
Rated load current	$I_L$	63 A
Inductance (50-60 Hz)	$L_n$	5 $\mu$ H $\pm$ 10%
DC resistance	$R_{cu}$	1 m $\Omega$
Temperature rise	$\Delta T$	45 K (63 A)
Max. required series fuse		63 A gL/gG
Temperature range	$\vartheta$	-40 °C to +85 °C
IP Code to IEC 60 529 / EN 60 529		IP 20
Connection cross-section rigid/flexible/stranded Tightening torque ( $M_A$ ) at least 4 Nm		10-50 / 10-25 / 10-35 mm <sup>2</sup> AWG 8-2
Mounting		Snap-fitting on 35 mm top-hat rail to DIN EN 50022
Dimensions to DIN 43880	Height Width Depth	100 mm 35 mm 75 mm

Subject to technical alterations

## Ordering data

Type	Description	Order no.
LC 63	Complete	<b>5096 97 0</b>



### Features at a glance LC 63

### Advantages in use

Compact design in a 35 mm housing	▶ Space-saving surge protection concept
Two connection options, for one or two outputs	▶ Simple installation via several terminals
Rated current up to 63 A	▶ Elements up to max. 63 A in the conductor branch can be decoupled
Outstanding inductive characteristics with transient and energy-rich lightning currents	▶ Reliable operation of the lightning arrester guaranteed in the event of a fault
Separate channel in the lower side area	▶ Further possibility for direct connection