



# DIN Filter - Coupler



**Product number : FD10**

**230VAC -  
50 Hz - 63A**

## Key Features

- Installed at the breaker panel/fuse box, prevents X10 signals from leaving / entering the home.
- Couples signals across phases.
- Rated 230V/63A

## Benefits

The signal transmission of high frequency pulses via the mains network can be affected by active or passive interferences. When used correctly, the filter/phase coupler will extensively suppress these interferences.

Typical active interference sources are appliances that do not conform to the EMC regulations. In addition there are wireless intercommunication systems which use mains borne signaling. They transmit high frequency signals into the mains network.

These disturbances are usually carried into the house network from outside, e.g. from neighbours or industrial installations. They are suppressed by the filter/phase coupler. Remaining interferences generated within the house network are without significance as the special dynamic filtering techniques of the X10 system ensure undisturbed performance.

The FD10 also includes the ability to couple X10 signals across phases. For installation with three phases, use three FD10 filters and couple the filters by connecting their terminals K to the next phase, respectively.

## Technical data

- Supply voltage:  
230 V +10% -15% 50 Hz
- Maximum current: 63 A
- Filter centre frequency: 120 kHz
- Filter band width:  
5 kHz min. (3 dB points)
- Forward attenuation:  
-20 dB min. at zero current  
-15 dB min. at 63 A
- Reverse attenuation: 15 dB min.
- EMC emission: EN 50082-1; EN61000-3-2; EN61000-3-3
- Electrical safety: EN 60950; EN 60065
- Forward input impedance: 20 Ohms min. at 120 kHz
- Coupling loss: 2 dB max. at 120 kHz
- Connections: screw type terminals for phase (supply), phase (house), neutral, coupling
- Ambient temperature:  
- 10° C to + 40° C (operation)  
- 20° C to + 70° C (storage)