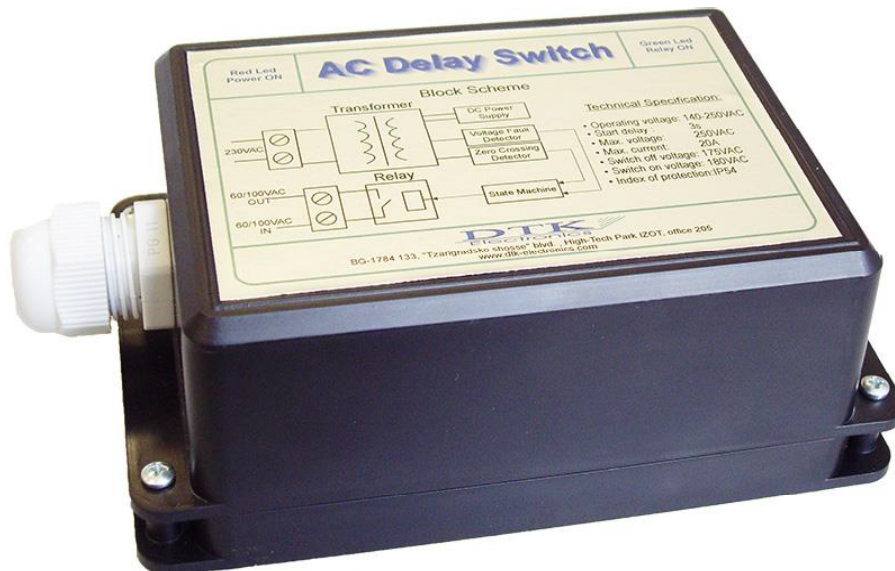


## **i-Prot** Intelligent AC protection



### Description

**i-Prot** is a unit destined to protect cable TV and communication network equipment against current and voltage surges at the time of emergency drop and restore of the mains supply, as well as against increase of current while voltage lowers below the acceptable extents. The protection is realized by means of defined switching on and off of cable network supply, based on mains voltage analysis. In case of an unallowable voltage lowering is registered, the unit breaks the network supply and keeps watching the mains voltage. When it gets back to normal range, the unit takes a decision to switch on the supply after a waiting period of 2.5 or 5 s. Same procedure is performed after full stop of mains voltage. This delay causes the network supply to be restored after passing the transition processes and connected with them overvoltage peaks and instability of the mains, and is manually selected 2.5 or 5 s with a jumper. Switching on and off occurs when AC voltage sine crosses the zero, the current along the network increases gradually and thus current stresses are totally eliminated.

### Application

**i-Prot** is particularly suitable for protection of networks and equipment supplied from mains with unstable voltage and frequent drops. It is placed close to network PSU and can switch the primary side (230 VAC) - fig.2 as well as the second side (60 ÷ 100 VAC) – fig.3. The unit is manufactured in insulated plastic housing and is intended for indoor installation.

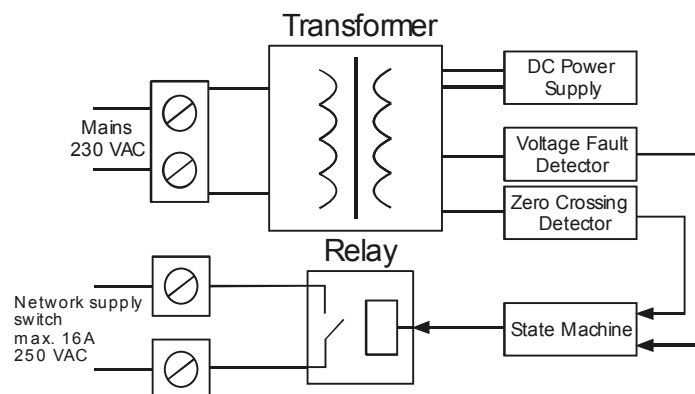
**Features**

- Defined switching on and off after analysis of input mains voltage;
- Delayed switching on 2.5 or 5 s (manually selected);
- LED indication for presence of mains voltage and switched on output voltage;
- Index of protection IP54.

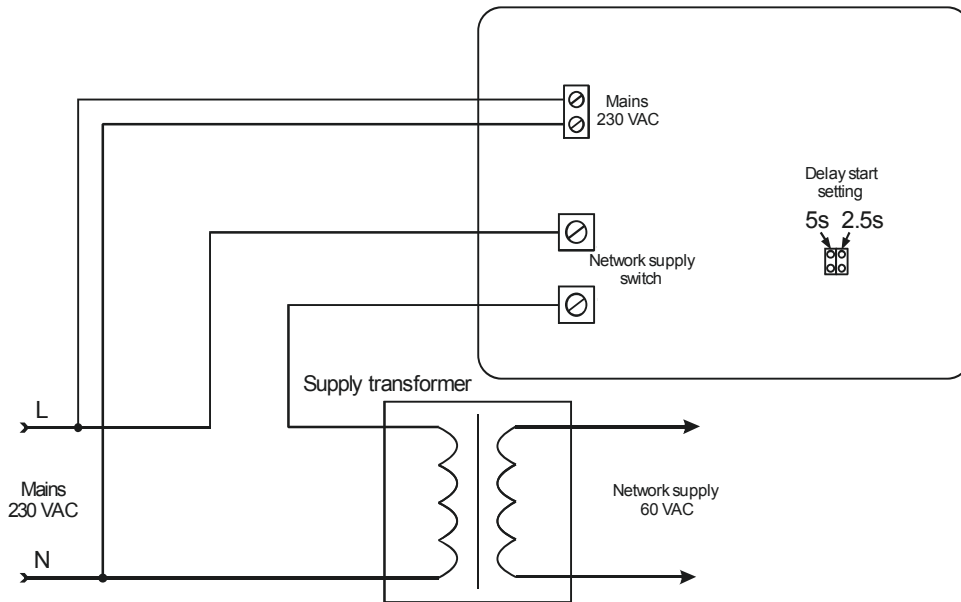
**Technical specification**

Mains voltage	140 ÷ 250 VAC
Max. switchable voltage	250 VAC
Max. switchable current	16 A
Mains voltage switch off threshold	175 VAC
Mains voltage switch on threshold	180 VAC
Switch on delay (manually selected)	2.5 or 5 s
Power consumption	4.5 W
Ambient temperature range	-20 ÷ +50°C
Index of protection	IP54
Dimensions (L x W x H)	152 x 85 x 53 mm
Weight	0.410 kg

**Fig. 1. Block diagram**



**Fig. 2. Switching primary side of transformer**



**Fig. 3. Switching secondary side of transformer**

