

## Fraud preventing service cable

Fraud preventing



U301

U302



**MICHAUD Exclusivity**  
Eliminates fraudulent connections

### Application

The concentric insulated service cable is used for the connection between the low voltage network and the premise. It is designed to limit fraud and thus to reduce non-technical losses thanks to a peripheral neutral cable. Any unauthorised connection to this cable will create a short-circuit and will automatically cut off electricity supply. It is stretched overhead to a maximum range of 40m.

### Description

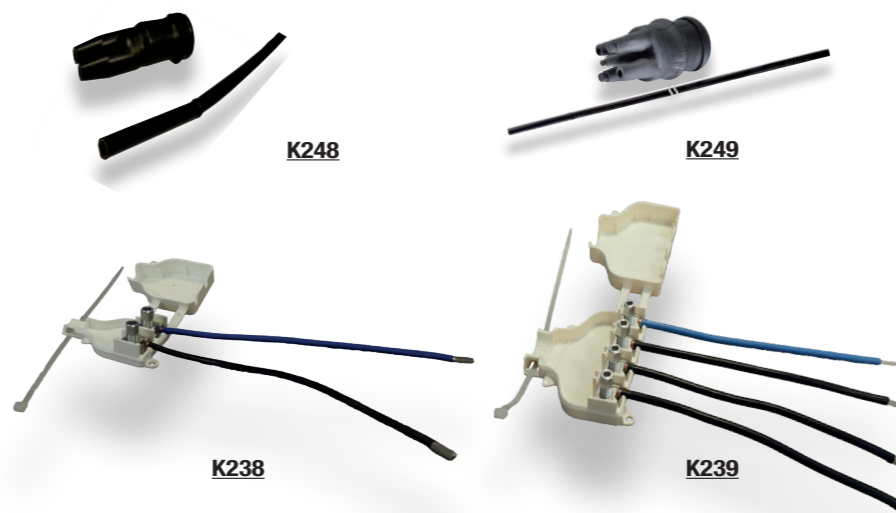
- The single phase or three phases cable comprises:
  - One or three-phase conductor(s) insulated in the central part
  - 1 peripheral insulated neutral conductor.
- Service voltage rate: is 600V.
- The conductor's core is made of aluminium.
- The insulation is made of cross-linked polyethylene.

The cables meet the criteria of the **IEC 60502** and **NFC 33 209** standards.

	U301	U307	U302	U308
Phase conductors section (mm <sup>2</sup> )	1 x 13	1 x 16	3 x 20	3 x 25
Cable diameter (mm)	11.1	11.6	24.5	24.2
Material of the phase insulation	XLPE	XLPE UV	XLPE	XLPE UV
Minimum insulation phase thickness (mm)	1.03	0.98	1.03	0.98
Average insulation phase thickness (mm)	1.14	1.2	1.14	1.2
Neutral conductor section (mm <sup>2</sup> )	13	16	20	25
Material of neutral insulation	UV PE	XLPE UV	UV PE	XLPE UV
Minimum insulation thickness of neutral (mm)	0.89	0.89	1.22	1.00
Average insulation thickness of neutral (mm)	≥1.14	1.14	≥1.32	1.40
Operating voltage (V)	600	600 / 1000	600	600 / 1000
Maximum intensity (A)	45	60	60	90
Resistivity at 20°C (Ω/km) ≤2.5	0.045	1.91	0.045	1.2
Breaking strength (daN)	> 150	> 150	> 150	> 150

Code	Designation	Conditioning	Weight (kg)	Sales unit
U301	AERIAL SERVICE CONCENTRIC CABLE 13mm <sup>2</sup> SINGLE PHASE	500m ring	80	1
U307	AERIAL SERVICE CONCENTRIC CABLE 16mm <sup>2</sup> SINGLE PHASE	500m ring	100	1
U302	AERIAL SERVICE CONCENTRIC CABLE 20mm <sup>2</sup> THREE PHASES	3000m ring	200	1
U308	AERIAL SERVICE CONCENTRIC CABLE 25mm <sup>2</sup> THREE PHASES	750m ring	250	1

## Cable fulfilment



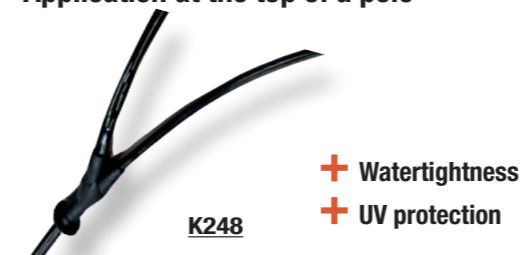
### Application

These accessories enable to realise the fulfilment of the single phase or three phase concentric cable before performing a connection at the top of a pole, inside the cabinet or behind the meter panel. The kits ensure the insulation and the sealing of the anti-fraud conductor. The end connectors receive the fulfilment of the concentric cable and enable the leading-in cables connection to electrical equipment terminals.

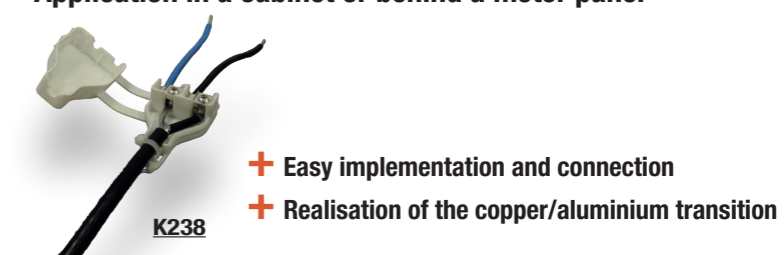
### Description

- The fulfilment kit is composed of a sheath and a sealing end.
- The fulfilment end connector comprises:
  - An IP envelop equipped with a tie to hold the cable,
  - Copper tails of 10 or 16mm<sup>2</sup> cross-section.
- The connection is performed by means of stripping technology.
- The tightening efficiency is ensured with shear head screws.
- Once installed, the fulfilment end connector brings an additional protection against fraud because the cable can not be pulled through the cable gland to access the phases.

### Application at the top of a pole



### Application in a cabinet or behind a meter panel



Code	Designation	Match with	Weight (kg)	Sales unit
K248	FRAUD-PREVENTING SINGLE-PHASE CABLE FULFILMENT KIT	U301 and U307	0.040	1
K249	FRAUD-PREVENTING THREE-PHASE CABLE FULFILMENT KIT	U302 and U308	0.040	1
K238	FRAUD-PREVENTING SINGLE-PHASE CABLE FULFILMENT END CONNECTOR	U301 and U307	0.110	1
K239	FRAUD-PREVENTING THREE-PHASE CABLE FULFILMENT END CONNECTOR	U302 and U308	0.250	1

## Tool for stripping



### Application

This tool is used to strip the cable in order to reconstitute and isolate the neutral for connection.

Code	Designation	Weight (kg)	Sales unit
K311-13	DECLADDING CLAMP 13mm <sup>2</sup>	0.100	1
K311-16	DECLADDING CLAMP 16mm <sup>2</sup>	0.100	1
K311-25	DECLADDING CLAMP 21-25mm <sup>2</sup>	0.120	1

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