



7, Autogennaya Str., Kharkov, 61099, Ukraine. Phone: (+38-057) 728-1244, 728-1241. Fax: (+38-057) 728-1243, (+38-0572) 946-830 E-mail: market@yuzhcable.com.ua

## ППГнг-FRHF 3x4-1 ТУ У 31.3-00214534-069:2011

Fire resistant power cables with copper conductors, with halogen-free polymer compound insulation, with polymer compound outer sheath, flame-retardant, halogen-free

Cables are used for laying:

• power supply cable lines of NPP electric equipment, wiring in office premises , which are computerized and intelligent, in kindergartens, schools, hospitals and for cable lines of spectating complexes and sport structures

• power supply cable lines of NPP safety system equipment, circuits wiring of fire safety systems (fire alarm circuits, power supply of fire-fighting pumps, lightning of emergency exits and evacuation routes, smoke exhaust and blowing ventilation systems, evacuation elevators); for wiring in hospital surgical wings, emergency and equipment (current collectors) power supply circuits, operating in a fire emergency

Manufacturing of extruded fire-resistant barrier is possible

Fire safety code in accordance with ДСТУ 4809:2007: ПБ123122580

Products of this mark meet the requirements:

- single wire cable flame retardance
- bunched cable flame retardance category A
- toxicity class Tk3 of the combustion products of nonmetallic elements (toxicity index over 120 g/m<sup>3</sup>)
- class  $\[mu]T\kappa 1$  on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m<sup>2</sup>/kg)
- class ДПк2 on smoke-forming ability by combustion (minimum luminous flux more than 60 %)
- corrosive class Kk2 of combustion products of non-metallic elements (the number of halogen hydrides less than 150 mg/g, pH more than 4.3, specific conductivity less than 10  $\mu$ S/mm)
- flame-resistant class Ex90 under fire conditions at standard temperature conditions ДСТУ Б В.1.1-4
- flame-resistant class FE180 under fire conditions with a temperature not less than 750 °C





7, Autogennaya Str., Kharkov, 61099, Ukraine. Phone: (+38-057) 728-1244, 728-1241. Fax: (+38-057) 728-1243, (+38-0572) 946-830 E-mail: market@yuzhcable.com.ua

## ППГнг-FRHF 3x4-1 ТУ У 31.3-00214534-069:2011



Fire resistant power cables with copper conductors, with halogen-free polymer compound insulation, with polymer compound outer sheath, flame-retardant, halogen-free

## **TECHNICAL SPECIFICATIONS**

Rated voltage	kV	1
Number and rated area of conductors	mm²	3 x 4
Phase insulation thikness	mm	1
Permissible continious current rating (AC of industrial frequen	су) *	
• by aerial laying	А	36
Maximum permissible conductor temperature		
Continious	°C	+70
in emergency operation	°C	+90
at short circuit	°C	+250
Operating temperature range	°C	-50 +50
Minimum bending radius by laying	mm	142.5
Rated outer diameter of the cable (for reference) **	mm	19
Cable weight (approximate)	kg/km	480
Rated factory cable length and gross weight of the delivery	m, t	# 12: 910 · 0.5
on the drums ***		

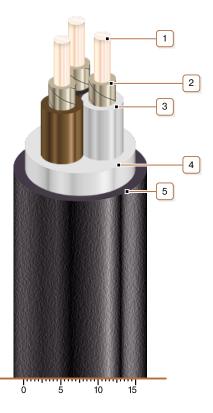
Notes:

When ordering it is neccesary to agree the factory length of the product with the manufacturer

\* Long permissible current loads are calculated for the following conditions: air temperature plus 25 °C, soil temperature plus 15 °C,

thermal resistivity of soil 1.2 °K·m/W, laying depth in the soil 0.7 m

 $^{**}$  The external diameter may differ from the rated up to  $\pm$  10 %



## **CONSTRUCTION**

- 1. Copper conductor
- 2. Fire-resistant barrier

Note: Manufacturing of extruded fire-resistant barrier is possible

- 3. Halogen-free polymer compound insulation
- 4. Halogen-free polymer compound inner sheath
- 5. Polymer compound outer sheath:flame-retardant and halogen-free

Note: Conductor twisting is not illustrated