TECHNOKABEL®

CE RoHS EMAG®

ISO 9001:2008

YHKGYFtZnyn 0,6/1 kV

MINING POWER CABLES

APPLICATIONS

YHKGYFtZnyn 0,6/1 kV are armoured, mining power cables with individually shielded wires intended to work in power engineering installations.

Cables can be applied in:
- opencast and underground mines, except explosive condition zones,
- underground mines in their non-methane and methane fields in areas of „a", „b" or „c" degree explosion hazard,
- underground mines in workings of class A or B coal dust explosion hazard.

Steel tape armoured cables can be installed in mine workings with an angle of inclination up to 45°.

Cables have positive **Technical Opinion** No. **2242/2011** regarding application in underground mines and **Certificate**s No. **2242/A1/2011** and **2242/A2/2011** issued by **TI EMAG Institute.**

CONSTRUCTION

- bare annealed copper conductors, meeting requirements of class 1 or 2 per PN-EN 60228,
- PVC insulation, colours of insulation: natural, red and blue,
- copper tape shield,
- copper single wire or multiwire conductor as a central element,
- shielded conductors laid-up around the central element,
- inner covering on cable core, PVC or unvulcanised rubber,
- PVC inner sheath,
- galvanized steel tape armour,
- special (oxygen index bigger than 29%) PVC cable sheath, yellow, other colours also available.

CHARACTERISTICS

Operating voltage Uo/U	0.6/1 kV
Voltage test	4 kV rms
Conductor temperature limit	
in work conditions	+ 70°C
in short-circuit	+ 160°C

Temperature range	
during operation	from - 30 to + 70°C
during installation	from - 5 to + 70°C
Minimum bending radius	12 x cable diameter
Cable combustibility	flame retardant
Combustibility tests	PN-EN 60332-1-2, IEC 60332-1-2 PN-EN 60332-3-24, IEC 60332-3-24 (cat. C)
Reference standards	WT-TK-27

CE = the cable meets requirements of the low voltage directive 2014/35/EU

Product No.	Number of conductors x conductor cross-section	Cable outer diameter (appr.)	Copper index	Cable weight (appr.)	DC conductor resistance at 20°C, maximum	Inductance, approximate	Inductive reactance	Current carrying capacity	Short-circuit current rating for 1 sec*
	mm^2	mm	kg/km	kg/km	Ω/km	mH/km	Ω/km	A	kA
1645 001	3 x 10/6	26.6	346	1345	1.830	0.34	0.108	68	1.15
1645 002	3 x 16/16	28.3	614	1610	1.150	0.33	0.104	88	1.84
1645 003	3 x 25/16	32.4	874	2130	0.727	0.31	0.098	117	2.88
1645 005	3 x 35/16	33.5	1162	2370	0.524	0.31	0.096	142	4.03
1645 006	3 x 50/16	37.5	1594	3290	0.387	0.30	0.091	172	5.75
1645 007	3 x 70/25	41.2	2256	3890	0.268	0.28	0.089	213	8.05
1645 008	3 x 95/25	46.6	3072	5640	0.193	0.27	0.088	261	10.93

* 1 second short-circuit current rating is calculated assuming that the temperature of power conductors during short-circuit equals the maximum conductor operating temperature under normal conditions.

Other cross-sections and conductor counts available on request.

TECHNOKABEL S.A. reserves the right to change specifications without prior notice.

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