

# **RH5Z1-OL 18/30KV**

# Aluminium medium voltage cables 30kV



Medium voltage cables for rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 36 kV) used for industrial installations or for a distribution network. Designed for fixed installations indoors, outdoors or in buried installations. Conductor shape round, class 2 = stranded; red outer sheath

Outher sheath materials: ALCUDIA C-240-UV (BAG) and GRANIC 535 (BIGBAG)

#### STANDARDS AND CERTIFICATIONS

RoHS (REACH)

EN 60228 Conductors of insulated cables

**DND 02100** Insulated cables for overhead and underground medium

voltage networks up to 30 kV

IEC 60502-2 Cables for rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV

Um = 36 kV

**EN 60754-1** Test on gases evolved during combustion of materials from

cables. Halogen acid gas content.

### **CABLE DESIGN**

Conductor material Aluminium
Core insulation material XLPE
Radial water blocking cable Yes
Material outer sheath Other
Cable shape Round

### **ELECTRICAL & THERMAL PARAMETERS**

 Nominal voltage U0 [V]
 18,000

 Nominal voltage U [V]
 30,000

 Test voltage [kV]
 63

Rated voltage U0/U (Um) 18/30 (36) kV

Max. conductor temperature [°C]90Max. conductor temperature at short circuit [°C]250Laying temperature (min) [°C]-20Laying temperature (max) [°C]50

Technical data, dimensions and weights are subject to change. All sizes and values without tolerances are reference values. Specifications are for products supplied by Prysmian: any modification or alteration of products may give different results. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian. The information is correct to the best of our knowledge at the time of publication. Prysmian reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorized by Prysmian. © All rights reserved by Prysmian 2024 • <a href="https://www.prysmian.com">www.prysmian.com</a>



### **CHEMICAL PROPERTIES**

Resistant to UV Yes UV resistant Yes Silicon free Yes Lead free Yes

### **CHARACTERISTICS**

Outdoor installation Yes Suitable for concrete installation Nο Underground installation Yes Suitable as installation cable Yes

Bending radius (rule) During installing: 15 x D single-core cables

#### SUSTAINABILITY COMMITMENT

Our commitment to a low-carbon future remains unwavering as we strive to create sustainable solutions while upholding quality standards. We prioritize sustainability and environmental protection in our daily operations, collaborating with local communities to ensure workplace safety and safeguard the areas we operate in.

Sustainability and environmental responsibility is evident also in our packaging solutions across the CEE region. We use fully recyclable drum cover foils to minimize environmental impact. Our packaging for rings is made from 30% recycled materials, supporting a circular economy. Additionally, our boxes are made from recyclable, environment-friendly cardboard, promoting eco-conscious choices. By choosing Prysmian, you are not only selecting high-quality products but also contributing to a

Check for more details about our sustainability commitment here: Sustainability: report and responsibility.











# **CABLE PROPERTIES**

Basic construction	SAP code	Nominal thickness insulation [mm]	Nominal diameter over insulation [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Bending radius, during laying (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Short circuit current conductor (Isec) [kA]	Short circuit current screen (Isec) [kA]
1x240RM	20217917	6.7	32.5	40.3	1,666	605	0.125	23.1	4
1x240RM	20046882	6.7	32.5	41.4	1,717	621	0.125	23.1	4
1x240RM	20303275	6.7	32.5	41.4	1,771	621	0.125	23.1	4.1
1x300RM	17100103008	7.25	36.3	43.6	1,960	654	0.1	28.8	4.3
1x400RM	20303276	6.7	38.5	47.3	2,355	710	0.0778	38.3	4.6
1x630RM	20262783	7.25	46.2	53.4	3,234	801	0.0469	60.2	5.3

# **CURRENT CARRYING CAPACITY**

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Cross-section (mm²)	Direct in ground trefoil (A)	Direct in ground flat spaced (A)	Air trefoil (A)	Air flat spaced (A)
70	186	192	230	278
95	221	229	280	338
120	252	260	324	391
150	281	288	368	440
185	317	324	424	504
240	367	373	502	593
300	414	419	577	677
400	470	466	673	769
500	535	524	781	884
630	608	578	903	996
800	681	630	1029	1105
1000	753	681	1165	1219
1200	885	790	1274	1305

Ground temperature: 20°C; Air temperature: 30°C Depth of laying: 0,8 m; Soil resistivity, moist: 1,5 K.m/W Screen bonded at both ends