# Prysmian

#### A Brand of Prysmian Group

## AXCMK-HF 4X150/41

#### Low smoke halogen free screen protected 1 kV power cable



#### **APPLICATION**

For fixed installation indoors, outdoors and underground; as well as in building structures e.g. directly in concrete (but not in sliding joints). Especially for circumstances where it is required to have installation cables with a low emission of smoke and corrosive gases in case of fire.

#### **CERTIFICATIONS AND DESIGN STANDARDS**

IEC 60502-1   1 kV & 3 kV power cables with extruded insulation.     HD 604-51   1 kV & 3,3 kV power cables with special fire performance     EN 50575:2014/A1:2016   Cables for general applications in construction works subject to reaction to fire requirements     HD 308 S2   Identification of cores in cables and flexible cords     EN 60332-1-2   Vertical flame propagation for a single insulated wire or cable     EN 60332-3   Tests on electric and optical fibre cables under fire conditions. Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables.     IEC 60754   Corrosive gases     IEC 60754   Smoke density     Conductor material   Aluminium     Core insulation material   XLPE     Core insulation waterial   XLPE     Core insulation waterial   XLPE     Material outer sheath   Halogenfree polymer     Material outer temperature after assembling without vibration (min)   -40     [C]   Vresistant     Versistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15     Berding radius (rule)   12x OD
HD 604-5I   1 kV & 3,3 kV power cables with special fire performance     EN 50575:2014/A1:2016   Cables for general applications in construction works subject to reaction to fire requirements     HD 308 S2   Identification of cores in cables and flexible cords     EN 60332-1-2   Vertical fame propagation for a single insulated wire or cable     EN 60332-3   Tests on electric and optical fibre cables under fire conditions. Part 3: Test for vertical fame spread of vertically-mounted bunched wires or cables.     EEC 60754   Corrosive gases     IEC 61034   Smoke density     Conductor material   Aluminium     Core insulation material   XLPE     Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -0     [°C]   Versistant   Yes     Permitted cable outer temperature during assembling (min) [°C]   -15
EN 50575:2014/A1:2016   Cables for general applications in construction works subject to reaction to fire requirements     HD 308 S2   Identification of cores in cables and flexible cords     EN 60332-1-2   Vertical flame propagation for a single insulated wire or cable     EN 60332-3   Tests on electric and optical fibre cables under fire conditions. Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables.     EEC 60754   Corrosive gases     EC 61034   Smoke density     Conductor material   Aluminium     Conductor surface   Bare     Core insulation material   XLPE     Core identification (acc. HD 308 S2)   Yes     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   UV resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
EN 60332-1-2   Vertical flame propagation for a single insulated wire or cable     EN 60332-3   Tests on electric and optical fibre cables under fire conditions. Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables.     IEC 60754   Corrosive gases     IEC 61034   Smoke density     Conductor material   Aluminium     Conductor surface   Bare     Core insulation material   XLPE     Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Versistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
EN 60332-3   Tests on electric and optical fibre cables under fire conditions. Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables.     IEC 60754   Corrosive gases     IEC 61034   Smoke density     Conductor material   Aluminium     Conductor surface   Bare     Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Ves     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
IEC 60754   Corrosive gases     IEC 61034   Corrosive gases     IEC 61034   Smoke density     Conductor material   Aluminium     Conductor surface   Bare     Core insulation material   XLPE     Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Yes     VI resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
IEC 61034   Smoke density     Conductor material   Aluminium     Conductor surface   Bare     Core insulation material   XLPE     Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Yes     UV resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
Conductor materialAluminiumConductor surfaceBareCore insulation materialXLPECore identification (acc. HD 308 S2)YesMaterial outer sheathHalogenfree polymerMax. conductor temperature [°C]90Permitted cable outer temperature after assembling without vibration (min)-40[°C]YesUV resistantYesPermitted cable outer temperature during assembling/handling (min) [°C]-15
Conductor surfaceBareCore insulation materialXLPECore identification (acc. HD 308 S2)YesMaterial outer sheathHalogenfree polymerMax. conductor temperature [°C]90Permitted cable outer temperature after assembling without vibration (min)-40[°C]YesUV resistantYesPermitted cable outer temperature during assembling/handling (min) [°C]-15
Conductor surfaceBareCore insulation materialXLPECore identification (acc. HD 308 S2)YesMaterial outer sheathHalogenfree polymerMax. conductor temperature [°C]90Permitted cable outer temperature after assembling without vibration (min)-40[°C]YesUV resistantYesPermitted cable outer temperature during assembling/handling (min) [°C]-15
Core insulation material   XLPE     Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Yes     UV resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
Core identification (acc. HD 308 S2)   Yes     Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Yes     UV resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
Material outer sheath   Halogenfree polymer     Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
Max. conductor temperature [°C]   90     Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   VV resistant     UV resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
Permitted cable outer temperature after assembling without vibration (min)   -40     [°C]   Vresistant     UV resistant   Yes     Permitted cable outer temperature during assembling/handling (min) [°C]   -15
[°C] UV resistant Yes Permitted cable outer temperature during assembling/handling (min) [°C] -15
UV resistant Yes Permitted cable outer temperature during assembling/handling (min) [°C] -15
Permitted cable outer temperature during assembling/handling (min) [°C] -15
Bending radius (rule) 12x OD
Reaction-to-fire class (acc. EN 13501-6) Cca
Smoke development class (acc. EN 13501-6) s1
Euro class flaming droplets/particles (acc. EN 13501-6) d1
Euro class acidity (acc. EN 13501-6) a1
Flame retardant In accordance with EN 13501-6

We reserve the right to change as a result of product development and/or changes in product standard.

### A Brand of Prysmian Group

#### **PRODUCT PROPERTIES**

Conductor category	Class 2 = stranded
Shape of conductor	Sector-shaped
Nominal cross section conductor [mm <sup>2</sup> ]	150
Number of cores	5
With protective conductor	Yes
Colour outer sheath	Black
Nominal outer diameter [mm]	47
Conductor resistance at 20° C [Ohm/km]	0.206
Current carrying capacity in air [A]	316
Current carrying capacity in ground [A]	280
Cable weight [kg/km]	3,000
Min. bending radius during installation [mm]	0
DOP number	1001452

Current load in air, installation method E, temperature 25°C Current load in ground, installation method D2 (directly in ground). Ground temperature 15°C, thermal resistivity 1,0 K·m/W

Item name	EAN-code (GTIN)	Packaging type	Standard packaging quantity
AXCMK-HF C-PRO 4X150/41 AN 1KV - AMCMK-H	6410006019861	Drum	500

We reserve the right to change as a result of product development and/or changes in product standard.