Nexans Ref.: 36082298 Country Ref.: 0406686

The cable may be used for fixed installation indoors and outdoors, also in ground and water, for control and signalling functions in power electrical applications.

DESCRIPTION

MCMO-HF is a halogenfree insulated, copper wire screened, HFFR sheathed control cable with circular, solid copper conductors. The cable is designed according to HD 627 in applicable parts. The conductors have resistance and number of wires according to IEC 60228 class 1. The cores are identified by numbers according to HD 308. The sheath is marked type/manufacturer/year+month/metre marking. MCMO-HF meets the requirements for class Dcas2d2a2 according to CPR. The cable is certified by SETI.

Lifemark(TM) recycling marking

The external surface of the outer sheath is embossed with a text which specifies all components in the polymers and prepares the cable for future recycling.

Standards

MCMO-HF is manufactured and tested according to SFS 3713 (HD 627.4 D-2).

Certification

Certified by SETI.

Quality and environmental management system

Certified according to ISO 9001, IRIS, ISO/TS 16949 and ISO 14001.



Lifemark™

DECLARATION OF PERFORMANCE

Dca-s2,d2,a2

STANDARDS

International HD 627.4 S1/C1; IEC 60332-1





Solid











148 mm



All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans. Generated 12/1/22 www.nexans.fi Page 1 / 2



MCMO-HF 450/750 V (CPR)

MCMO-HF 450/750 V 12X2,5

CHARACTERISTICS

Conductor materialCopperConductor shapeRound normalInsulationHFFROuter sheathHFFR (Halogene Free Reareant)ColourGreeyLead freeYesConductor flexibilitySolidDimensional characteristics12Number of cores2.5 mm²Number of pairs13Conductor cross-section2.5 mm²Average insulation thickness0.8 mmAverage insulation thickness0.8 mmAverage sheath thickness16 mm²Electract characteristics16 mm²Imminum installation temperature7.41 Ohm/kmAked Voltage Uo/U (Um)450 / 750 VRead Voltage Uo/U (Um)10 °CMaimum operating temperature70 °CMaimum operating temperature70 °CAmbient static operating temperature70 °CLengthGoonLengthGoonPackaging48 mmPackaging49 meWater proofKesWater proofKesOutKesOutKesMoning radius148 mmHortKesMaintoni pradius148 mmMax Dresistance500 mKestance600 m <th>Construction characteristics</th> <th></th>	Construction characteristics	
InsulationHFFROuter sheathHFFR (Halogene Free Flame Retardant)ColourGreyLead freeYesConductor flexibilitySolidDimensional characteristicsYesNumber of cores12Number of pairs12Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness0.1 mmElectrical characteristics0.0 Ohm/kmRasted Voltage Uo/U (Um)450 / 750 VUsage characteristics10 °CMaximum operating temperature10 °CMaximum operating temperature10 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistance148 mm	Conductor material	Copper
Outer sheathHFFR (Halogene Free Flame Retardant)ColourGreyLead freeYesConductor flexibilitySolidDimensional characteristicsIteration of coresNumber of cores12Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmAverage sheath thickness1.6 mmElectrical characteristics1.6 mmMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics10°CMinimum installation temperature70°CShort-circuit max. conductor temperature10°CAmbient static operating temperature, range40 - 70°CLergth500 mLaying operation bending radius148 mmPackagingK9U.V resistanceK9	Conductor shape	Round normal
ColourGreyColourGreyLead freeYesConductor flexibilitySolidDimensional characteristics12Number of cores12Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics1Max. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics10°CMinimum installation temperature70°CShort-circuit max. conductor temperature10°CAmbient static operating temperature, range-40 - 70°CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceK9	Insulation	HFFR
Lead freeYesConductor flexibilitySolidDimensional characteristics12Number of cores12Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics0.0 Ohm/kmMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics70 °CMinimum installation temperature70 °CShort-circuit max. conductor temperature70 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceK9	Outer sheath	HFFR (Halogene Free Flame Retardant)
Conductor flexibilitySolidDimensional characteristics1Number of cores12Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics1Max. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 °CVasage characteristics70 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 · 70 °CLaying operation bending radius148 mmPackagingK9U.V resistanceK9	Colour	Grey
Dimensional characteristicsNumber of cores12Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmAverage insulation thickness0.8 mmAverage sheath thickness1.6 mmElectrical characteristics1.6 mmMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics70 °CMinimum installation temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceK9	Lead free	Yes
Number of cores12Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmAverage sheath thickness1.6 mmElectrical characteristics0.0 Ohm/kmMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics10 °CMinimum installation temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceK9	Conductor flexibility	Solid
Number of pairs1Number of pairs1Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics1Max. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics1Minimum installation temperature-10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Dimensional characteristics	
Conductor cross-section2.5 mm²Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics7.41 Ohm/kmResistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature70 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Number of cores	12
Nominal outer diameter18.5 mmAverage insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics1.6 mmMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics0.0 Ohm/kmMinimum installation temperature-10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Number of pairs	1
Average insulation thickness0.8 mmApproximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristics7.41 Ohm/kmMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics10°CMinimum installation temperature-10°CMaximum operating temperature70°CShort-circuit max. conductor temperature150°CAmbient static operating temperature, range-40 - 70°CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Conductor cross-section	2.5 mm ²
Approximate weight56.6 kg/100mAverage sheath thickness1.6 mmElectrical characteristicsMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics-10 °CMinimum installation temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Nominal outer diameter	18.5 mm
Average sheath thickness1.6 mmElectrical characteristicsMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristicsMinimum installation temperature-10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Average insulation thickness	0.8 mm
Electrical characteristicsMax. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristicsMinimum installation temperature-10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Approximate weight	56.6 kg/100m
Max. DC resistance of the conductor at 20°C7.41 Ohm/kmResistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics	Average sheath thickness	1.6 mm
Resistance of the screen0.0 Ohm/kmRated Voltage Uo/U (Um)450 / 750 VUsage characteristics	Electrical characteristics	
Rated Voltage Uo/U (Um)450 / 750 VUsage characteristics	Max. DC resistance of the conductor at 20°C	7.41 Ohm/km
Usage characteristicsMinimum installation temperature-10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Resistance of the screen	0.0 Ohm/km
Minimum installation temperature-10 °CMaximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Rated Voltage Uo/U (Um)	450 / 750 V
Maximum operating temperature70 °CShort-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Usage characteristics	
Short-circuit max. conductor temperature150 °CAmbient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Minimum installation temperature	
Ambient static operating temperature, range-40 - 70 °CLength500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Maximum operating temperature	70 °C
Length500 mLaying operation bending radius148 mmPackagingK9U.V resistanceYes	Short-circuit max. conductor temperature	150 °C
Laying operation bending radius148 mmPackagingK9U.V resistanceYes	Ambient static operating temperature, range	-40 - 70 °C
Packaging K9 U.V resistance Yes	Length	500 m
U.V resistance Yes	Laying operation bending radius	148 mm
	Packaging	К9
Water proof Good		Yes
	Water proof	Good

SELLING AND DELIVERY INFORMATION

MCMO-HF will be delivered in lengths of 500 m. The drum is marked with manufacturer, type of cable and length. The ends of the cable are sealed.

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