

Comparison and handling

of the Aluminum rubber cable 07BN4-AF

Due to missing normative directions for flexible aluminum rubber cables, the rubber cable 07BN4-AF is manufactured in accordance with VDE 0285-525-2-21 (EN 50525-2-21). The structure as well as the scope of application mostly correlate with H07RN-F. However, insulation material of a higher quality is being used to enable a maximum conductor temperature of 90° C and an increased ambient temperature of up to 80 °C. Thus, a higher ampacity is possible compared to standard copper wires and the nominal cross sections do not have to be increased as usual.

Comparison of ampacities

	H07RN-F	07BN4-AF
Max. conductor temperature	60 °C	90 °C
Max. ambient temperature	55 °C	80 °C
Number of conductors x nominal cross section in mm ²	ampacity in A	ampacity in A
1X70	185	206
1X95	222	253
1X120	260	296
1X150	300	343
1X185	341	395
1X240	407	471
1X300	468	566
1X400	553	676
4G70	178	187
4G95	210	227
4G120	246	282
4G150	282	304
4G185	319	358
4G240	377	409
5G4	30	35
5G6	38	42
5G10	54	58
5G16	71	77
5G25	94	97
5G35	117	120
5G50	148	146
5G70	185	187
5G95	222	227
5G120	246	263
5G150	282	304
5G185	319	358
5G240	377	436

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Extensive experiments were conducted by Gustav Klauke GmbH with regard to connection technology, inter alia tensile tests according to IEC 61238-1 as well as heating tests according to UL 486A-486B.

To ensure a proper connection, a standard cable lug for aluminum conductors for the next largest nominal cross section is being used and compressed with an arbor press. Thereby, the battery-operated pressing tool 10 – 240 mm² EKM 60 ID from Klauke is recommended.

[Link to the cable lugs, AL-Cu data sheet](#)

Upon request, we are able to provide a DEKRA certificate for the aluminum rubber cable 07BN4-AF.