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MKEM 90 / H07V2-K

Installation wire heat resistant

450/750 V

Application

Installation wire for fixed installations indoors. For internal wiring of electrical devices. Maximum conductor temperature in normal operation 90 °C. The conductor insulation must be protected against UV-radiation. The cable is flame-retardant according to CPR-class Eca.

Design

Standards	EN 50525-2-31
Reaction to fire	Eca; EN 13501-6, EN 50575:2014+A1:2016
Conductor	Circular flexible copper, EN/IEC 60228 class 5
Insulation	PVC-compound
Core Identification	Yellowgreen Blue Brown Black Grey Orange Red



Temperature limits

Max. conductor temperature °C	90
Max. cond. temp. short circuit max. 5 s °C	160
Min. cable temperature during operation °C	-40
Min. cable temperature during handling °C	-15
Min. cable temperature during transport °C	-40

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Technical information	1,5 GY H07V2-K	1,5 BN H07V2-K	1,5 BK H07V2-K	1,5 RD H07V2-K	1,5 BU H07V2-K	1,5 GNYE H07V2-K	2,5 BN H07V2-K	2,5 BK H07V2-K	2,5 RD H07V2-K	2,5 BU H07V2-K
Product code	1101820	1101822	1101823	1101826	1101827	1101828	1101832	1101833	1101836	1101837
Nominal cross-sectional area of conductor mm ²	1,5	1,5	1,5	1,5	1,5	1,5	2,5	2,5	2,5	2,5
Nominal thickness of insulation mm	0,7	0,7	0,7	0,7	0,7	0,7	0,8	0,8	0,8	0,8
Fire load MJ/m	0,131	0,131	0,131	0,131	0,131	0,131	0,192	0,192	0,192	0,192
Fire load kWh/m	0,036	0,036	0,036	0,036	0,036	0,036	0,053	0,053	0,053	0,053
Nominal cable diameter mm	2,900	2,900	2,900	2,900	2,900	2,900	3,600	3,600	3,600	3,600
Nominal cable weight kg/km	18,514	18,514	18,514	18,514	18,514	18,514	27,670	27,670	27,670	27,670
Metall weight Cu kg/m	0,012	0,012	0,012	0,012	0,012	0,012	0,018	0,018	0,018	0,018
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,1	0,1
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	23	23	23	23	23	23	29	29	29	29
Minimum bending radius, final bending mm	9	9	9	9	9	9	11	11	11	11
Minimum bending radii										
During handling and installation, cable cm	2	2	2	2	2	2	3	3	3	3
In final installation, cable cm	1	1	1	1	1	1	1	1	1	1
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	13,3	13,3	13,3	13,3	13,3	13,3	7,98	7,98	7,41	7,98

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Technical information	2,5 GNYE H07V2-K	4 BN H07V2-K	4 BK H07V2-K	4 RD H07V2-K	4 BU H07V2-K	4 GNYE H07V2-K	6 GY H07V2-K	6 BN H07V2-K	6 BK H07V2-K	6 RD H07V2-K
Product code	1101838	1101842	1101843	1101846	1101847	1101848	1101850	1101852	1101853	1101856
Nominal cross-sectional area of conductor mm ²	2,5	4	4	4	4	4	6	6	6	6
Nominal thickness of insulation mm	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Fire load MJ/m	0,192	0,222	0,222	0,222	0,222	0,222	0,284	0,284	0,284	0,284
Fire load kWh/m	0,053	0,062	0,062	0,062	0,062	0,062	0,079	0,079	0,079	0,079
Nominal cable diameter mm	3,600	4,000	4,000	4,000	4,000	4,000	4,800	4,800	4,800	4,800
Nominal cable weight kg/km	27,670	43,814	43,814	43,814	43,814	43,814	59,020	59,017	59,017	59,017
Metall weight Cu kg/m	0,018	0,033	0,033	0,033	0,033	0,033	0,045	0,045	0,045	0,045
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,1	0,2	0,2	0,2	0,2	0,2	0,3	0,3	0,3	0,3
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	29	32	32	32	32	32	38	38	38	38
Minimum bending radius, final bending mm	11	12	12	12	12	12	14	14	14	14
Minimum bending radii										
During handling and installation, cable cm	3	3	3	3	3	3	4	4	4	4
In final installation, cable cm	1	1	1	1	1	1	1	1	1	1
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	7,98	4,95	4,95	4,61	4,95	4,95	3,08	3,30	3,30	3,08

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Technical information	6 BU H07V2-K	6 GNYE H07V2-K	6 OG H07V2-K	10 GY H07V2-K	10 BN H07V2-K	10 BK H07V2-K	10 BU H07V2-K	10 GNYE H07V2-K	16 GY H07V2-K	16 BN H07V2-K
Product code	1101857	1101858	1703420	1101860	1101862	1101863	1101867	1101868	1101870	1101872
Nominal cross-sectional area of conductor mm ²	6	6	6	10	10	10	10	10	16	16
Nominal thickness of insulation mm	0,8	0,8	0,8	1,0	1,0	1,0	1,0	1,0	1,0	1,0
Fire load MJ/m	0,284	0,284	0,284	0,463	0,463	0,463	0,463	0,463	0,544	0,554
Fire load kWh/m	0,079	0,079	0,079	0,129	0,129	0,129	0,129	0,129	0,151	0,154
Nominal cable diameter mm	4,800	4,800	4,800	6,200	6,200	6,200	6,200	6,200	7,000	7,100
Nominal cable weight kg/km	59,020	59,020	59,017	110,970	110,970	110,970	110,970	110,970	164,201	164,720
Metall weight Cu kg/m	0,045	0,045	0,045	0,088	0,088	0,088	0,088	0,088	0,137	0,137
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,3	0,3	0,3	0,5	0,5	0,5	0,5	0,5	0,8	0,8
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	38	38	38	50	50	50	50	50	56	57
Minimum bending radius, final bending mm	14	14	14	19	19	19	19	19	21	21
Minimum bending radii										
During handling and installation, cable cm	4	4	4	5	5	5	5	5	6	6
In final installation, cable cm	1	1	1	2	2	2	2	2	2	2
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	3,30	3,30	3,08	1,91	1,91	1,91	1,91	1,91	1,15	1,15

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Technical information	16 BK H07V2-K	16 RD H07V2-K	16 BU H07V2-K	16 GNYE H07V2-K	25 BK H07V2-K	25 BN H07V2-K	25 RD H07V2-K	25 BU H07V2-K	25 GNYE H07V2-K	35 BN H07V2-K
Product code	1101873	1101876	1101877	1101878	1101883	1101882	1101886	1101887	1101888	1101892
Nominal cross-sectional area of conductor mm ²	16	16	16	16	25	25	25	25	25	35
Nominal thickness of insulation mm	1,0	1,0	1,0	1,0	1,2	1,2	1,2	1,2	1,2	1,2
Fire load MJ/m	0,544	0,554	0,544	0,544	0,820	0,820	0,820	0,820	0,820	1,024
Fire load kWh/m	0,151	0,154	0,151	0,151	0,228	0,228	0,228	0,228	0,228	0,285
Nominal cable diameter mm	7,000	7,100	7,000	7,000	8,700	8,700	8,700	8,700	8,700	10,300
Nominal cable weight kg/km	164,201	164,720	164,201	164,201	251,021	251,021	251,021	251,021	251,021	345,208
Metall weight Cu kg/m	0,137	0,137	0,137	0,137	0,210	0,210	0,210	0,210	0,210	0,294
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,8	0,8	0,8	0,8	1,2	1,2	1,2	1,2	1,2	1,7
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	56	57	56	56	70	70	70	70	70	82
Minimum bending radius, final bending mm	21	21	21	21	26	26	26	26	26	31
Minimum bending radii										
During handling and installation, cable cm	6	6	6	6	7	7	7	7	7	8
In final installation, cable cm	2	2	2	2	3	3	3	3	3	3
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	1,21	1,15	1,21	1,21	0,780	0,727	0,727	0,780	0,780	0,524

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Technical information	35 BK H07V2-K	35 RD H07V2-K	35 BU H07V2-K	35 GNYE H07V2-K	50 BN H07V2-K	50 BK H07V2-K	50 RD H07V2-K	50 BU H07V2-K	50 GNYE H07V2-K	70 BN H07V2-K
Product code	1101893	1101896	1101897	1101898	1101902	1101903	1101906	1101907	1101908	1101912
Nominal cross-sectional area of conductor mm ²	35	35	35	35	50	50	50	50	50	70
Nominal thickness of insulation mm	1,2	1,2	1,2	1,2	1,4	1,4	1,4	1,4	1,4	1,4
Fire load MJ/m	1,024	1,024	1,024	1,024	1,316	1,316	1,316	1,316	1,316	1,533
Fire load kWh/m	0,284	0,285	0,284	0,284	0,366	0,366	0,366	0,366	0,366	0,426
Nominal cable diameter mm	10,300	10,300	10,300	10,300	11,500	11,500	11,500	11,500	11,500	13,500
Nominal cable weight kg/km	345,201	345,208	345,201	345,201	485,788	485,786	485,788	485,788	485,788	659,674
Metall weight Cu kg/m	0,294	0,294	0,294	0,294	0,420	0,420	0,420	0,420	0,420	0,583
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	1,7	1,7	1,7	1,7	2,5	2,5	2,5	2,5	2,5	3,5
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	82	82	82	82	92	92	92	92	92	108
Minimum bending radius, final bending mm	31	31	31	31	35	35	35	35	35	41
Minimum bending radii										
During handling and installation, cable cm	8	8	8	8	9	9	9	9	9	11
In final installation, cable cm	3	3	3	3	3	3	3	3	3	4
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	0,554	0,524	0,554	0,554	0,387	0,386	0,387	0,386	0,386	0,268

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Technical information	70 BK H07V2-K	70 BU H07V2-K	70 GNYE H07V2-K	95 BN H07V2-K	95 BK H07V2-K	95 BU H07V2-K	95 GNYE H07V2-K	120 BN H07V2-K	120 BK H07V2-K	120 BU H07V2-K
Product code	1101913	1101917	1101918	1101922	1101923	1101927	1101928	1101932	1101933	1101937
Nominal cross-sectional area of conductor mm ²	70	70	70	95	95	95	95	120	120	120
Nominal thickness of insulation mm	1,4	1,4	1,4	1,6	1,6	1,6	1,6	1,6	1,6	1,6
Fire load MJ/m	1,534	1,534	1,534	2,128	2,128	2,128	2,128	2,493	2,493	2,493
Fire load kWh/m	0,426	0,426	0,426	0,591	0,591	0,591	0,591	0,693	0,693	0,693
Nominal cable diameter mm	13,500	13,500	13,500	16,200	16,200	16,200	16,200	18,400	18,400	18,400
Nominal cable weight kg/km	659,678	659,678	659,678	931,411	931,414	931,411	931,411	1156,673	1156,673	1156,673
Metall weight Cu kg/m	0,583	0,583	0,583	0,825	0,825	0,825	0,825	1,032	1,032	1,032
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	3,5	3,5	3,5	4,7	4,7	4,7	4,7	6,0	6,0	6,0
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	108	108	108	130	130	130	130	147	147	147
Minimum bending radius, final bending mm	41	41	41	49	49	49	49	55	55	55
Minimum bending radii										
During handling and installation, cable cm	11	11	11	13	13	13	13	15	15	15
In final installation, cable cm	4	4	4	5	5	5	5	6	6	6
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	0,272	0,272	0,272	0,193	0,206	0,206	0,206	0,153	0,161	0,153

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Technical information	120 GNYE H07V2-K	150 BN H07V2-K	150 BU H07V2-K	150 BK H07V2-K	150 GNYE H07V2-K
Product code	1101938	1101942	1101947	1101943	1101948
Nominal cross-sectional area of conductor mm ²	120	150	150	150	150
Nominal thickness of insulation mm	1,6	1,8	1,8	1,8	1,8
Fire load MJ/m	2,493	3,156	3,156	3,156	3,156
Fire load kWh/m	0,693	0,877	0,877	0,877	0,877
Nominal cable diameter mm	18,400	20,700	20,700	20,700	20,700
Nominal cable weight kg/km	1156,673	1445,489	1445,490	1445,490	1445,489
Metall weight Cu kg/m	1,032	1,288	1,288	1,288	1,288
Maximum forces during installation when pulling by					
Max. pulling force by pulling-eye kN	6,0	7,5	7,5	7,5	7,5
Max. pulling force by pulling-stocking kN					
Minimum bending radii					
Minimum bending radius, handling mm	147	166	166	166	166
Minimum bending radius, final bending mm	55	62	62	62	62
Minimum bending radii					
During handling and installation, cable cm	15	17	17	17	17
In final installation, cable cm	6	6	6	6	6
DC resistance					
Max. DC resistance of conductor at 20 °C Ω/km	0,161	0,129	0,129	0,129	0,129