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MK 90 /H07V2-R

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 stranded copper, EN/IEC 60228 class 2
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-R	1,5 WH H07V2-R	1,5 BN H07V2-R	1,5 BK H07V2-R	1,5 GN H07V2-R	1,5 OG H07V2-R	1,5 BU H07V2-R	1,5 GNYE H07V2-R	2,5 GY H07V2-R	2,5 BN H07V2-R
Product code	1101480	1101481	1101482	1101483	1101485	1101486	1101487	1101488	1101490	1101492
Nominal cross-sectional area of conductor mm ²	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	2,5	2,5
Nominal thickness of insulation mm	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,8	0,8
Fire load MJ/m	0,146	0,146	0,146	0,146	0,146	0,146	0,146	0,146	0,208	0,208
Fire load kWh/m	0,041	0,041	0,041	0,041	0,041	0,041	0,041	0,041	0,058	0,058
Nominal cable diameter mm	2,990	2,990	2,990	2,990	2,990	2,990	2,990	2,990	3,610	3,610
Nominal cable weight kg/km	21,109	21,109	21,109	21,109	21,109	21,109	21,109	21,109	32,605	32,605
Metall weight Cu kg/m	0,014	0,014	0,014	0,014	0,014	0,014	0,014	0,014	0,022	0,022
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	0,0	0,0	0,1	0,1
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	24	24	24	24		24	24	24	29	29
Minimum bending radius, final bending mm	9	9	9	9		9	9	9	11	11
Minimum bending radii										
During handling and installation, cable cm	2	2	2	2		2	2	2	3	3
In final installation, cable cm	1	1	1	1		1	1	1	1	1
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	12,1	12,1	12,1	12,1	12,1	12,1	12,1	12,1	7,41	7,41

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Technical information	2,5 BK H07V2-R	2,5 RD H07V2-R	2,5 BU H07V2-R	2,5 GNYE H07V2-R	4 BN H07V2-R	4 BK H07V2-R	4 BU H07V2-R	4 GNYE H07V2-R	6 GY H07V2-R	6 BN H07V2-R
Product code	1101493	1101496	1101497	1101498	1101502	1101503	1101507	1101508	1101510	1101512
Nominal cross-sectional area of conductor mm ²	2,5	2,5	2,5	2,5	4	4	4	4	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	0,208	0,208	0,208	0,208	0,261	0,261	0,261	0,261	0,317	0,277
Fire load kWh/m	0,058	0,058	0,058	0,058	0,072	0,072	0,072	0,072	0,088	0,077
Nominal cable diameter mm	3,610	3,610	3,610	3,610	4,180	4,180	4,180	4,180	4,750	4,710
Nominal cable weight kg/km	32,605	32,605	32,605	32,605	49,529	49,529	49,529	49,529	68,838	66,844
Metall weight Cu kg/m	0,022	0,022	0,022	0,022	0,037	0,037	0,037	0,037	0,053	0,053
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,3	0,3
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	29	29	29	29	33	33	33	33	38	38
Minimum bending radius, final bending mm	11	11	11	11	13	13	13	13	14	14
Minimum bending radii										
During handling and installation, cable cm	3	3	3	3	3	3	3	3	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	7,41	7,41	7,41	7,41	4,61	4,61	4,61	4,61	3,08	3,08

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Technical information	6 BK H07V2-R	6 BU H07V2-R	6 GNYE H07V2-R	10 GY H07V2-R	10 BN H07V2-R	10 BK H07V2-R	10 BU H07V2-R	10 GNYE H07V2-R	16 BK H07V2-R	16 BU H07V2-R
Product code	1101513	1101517	1101518	1101521	1101522	1101523	1101527	1101528	1101533	1101537
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	0,317	0,317	0,317	0,509	0,509	0,509	0,509	0,509	0,602	0,602
Fire load kWh/m	0,088	0,088	0,088	0,142	0,142	0,142	0,142	0,142	0,167	0,167
Nominal cable diameter mm	4,750	4,750	4,750	6,050	6,050	6,050	6,050	6,050	7,250	7,250
Nominal cable weight kg/km	68,838	68,838	68,838	111,466	111,466	111,466	111,466	111,466	177,078	177,078
Metall weight Cu kg/m	0,053	0,053	0,053	0,086	0,086	0,086	0,086	0,086	0,147	0,147
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	48	48	48	48	48	58	58
Minimum bending radius, final bending mm	14	14	14	18	18	18	18	18	22	22
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	3,08	3,08	3,08	1,83	1,83	1,83	1,83	1,83	1,15	1,15

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Technical information	16 GNYE H07V2-R	25 GY H07V2-R	25 BK H07V2-R	25 BU H07V2-R	25 GNYE H07V2-R	35 BN H07V2-R	35 BK H07V2-R	35 BU H07V2-R	35 GNYE H07V2-R	50 GY H07V2-R
Product code	1101538	1101540	1101543	1101547	1101548	1101552	1101553	1101557	1101558	1101560
Nominal cross-sectional area of conductor mm ²	16	25	25	25	25	35	35	35	35	50
Nominal thickness of insulation mm	1,0	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,4
Fire load MJ/m	0,602	0,879	0,894	0,879	0,894	1,059	1,059	1,059	1,059	1,437
Fire load kWh/m	0,167	0,244	0,248	0,244	0,248	0,294	0,294	0,294	0,294	0,399
Nominal cable diameter mm	7,250	8,790	8,900	8,790	8,900	10,050	10,050	10,050	10,050	11,700
Nominal cable weight kg/km	177,078	270,937	271,704	270,937	271,704	363,955	363,955	363,955	363,955	493,863
Metall weight Cu kg/m	0,147	0,227	0,227	0,227	0,227	0,311	0,311	0,311	0,311	0,422
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,8	1,2	1,2	1,2	1,2	1,7	1,7	1,7	1,7	2,5
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	58	70	71	70	71	80	80	80	80	94
Minimum bending radius, final bending mm	22	26	27	26	27	30	30	30	30	35
Minimum bending radii										
During handling and installation, cable cm	6	7	7	7	7	8	8	8	8	9
In final installation, cable cm	2	3	3	3	3	3	3	3	3	4
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	1,15	0,727	0,727	0,727	0,727	0,524	0,524	0,524	0,524	0,387

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Technical information	50 BK H07V2-R	50 BU H07V2-R	50 GNYE H07V2-R	70 BN H07V2-R	70 BK H07V2-R	70 BU H07V2-R	70 GNYE H07V2-R	95 BN H07V2-R	95 BK H07V2-R	95 BU H07V2-R
Product code	1101563	1101567	1101568	1101572	1101573	1101577	1101578	1101582	1101583	1101587
Nominal cross-sectional area of conductor mm ²	50	50	50	70	70	70	70	95	95	95
Nominal thickness of insulation mm	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,6	1,6	1,6
Fire load MJ/m	1,437	1,437	1,437	1,756	1,756	1,756	1,747	2,372	2,372	2,372
Fire load kWh/m	0,399	0,399	0,399	0,488	0,488	0,488	0,485	0,659	0,659	0,659
Nominal cable diameter mm	11,700	11,700	11,700	13,500	13,500	13,500	13,450	15,800	15,800	15,800
Nominal cable weight kg/km	493,863	493,863	493,863	694,810	694,810	694,810	694,353	969,593	969,593	969,593
Metall weight Cu kg/m	0,422	0,422	0,422	0,607	0,607	0,607	0,607	0,851	0,851	0,851
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	2,5	2,5	2,5	3,5	3,5	3,5	3,5	4,7	4,7	4,7
Max. pulling force by pulling-stocking kN										
Minimum bending radii										
Minimum bending radius, handling mm	94	94	94	108	108	108	108	126	126	126
Minimum bending radius, final bending mm	35	35	35	41	41	41	40	47	47	47
Minimum bending radii										
During handling and installation, cable cm	9	9	9	11	11	11	11	13	13	13
In final installation, cable cm	4	4	4	4	4	4	4	5	5	5
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	0,387	0,387	0,387	0,268	0,268	0,268	0,268	0,193	0,193	0,193

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Technical information	95 GNYE H07V2-R	120 BN H07V2-R	120 BK H07V2-R	120 BU H07V2-R	120 GNYE H07V2-R
Product code	1101588	1101592	1101593	1101597	1101598
Nominal cross-sectional area of conductor mm ²	95	120	120	120	120
Nominal thickness of insulation mm	1,6	1,6	1,6	1,6	1,6
Fire load MJ/m	2,372	2,564	2,564	2,564	2,566
Fire load kWh/m	0,659	0,712	0,712	0,712	0,713
Nominal cable diameter mm	15,800	17,400	17,400	17,400	17,410
Nominal cable weight kg/km	969,593	1204,188	1204,188	1204,188	1204,288
Metall weight Cu kg/m	0,851	1,076	1,076	1,076	1,076
Maximum forces during installation when pulling by					
Max. pulling force by pulling-eye kN	4,7	6,0	6,0	6,0	6,0
Max. pulling force by pulling-stocking kN					
Minimum bending radii					
Minimum bending radius, handling mm	126	139	139	139	139
Minimum bending radius, final bending mm	47	52	52	52	52
Minimum bending radii					
During handling and installation, cable cm	13	14	14	14	14
In final installation, cable cm	5	5	5	5	5
DC resistance					
Max. DC resistance of conductor at 20 °C Ω/km	0,193	0,153	0,153	0,153	0,153