

Halogen-free, mud resistant MV power cable, RFOU 3,6/6(7,2)kV, P2/P9



Flame retardant halogen-free medium voltage (MV) cable. Mud resistant

RFOU 3,6/6(7,2) kV

EPR/EPR/TCWB/EVA

NEK 606 CodeP2/P9

Operating temperature : 90°C
Operating Voltage : 3,6/6(7,2) kV

Standards applied

Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

IEC 60092-354	- Design
IEC 60228 class 2	- Conductor
IEC 60092-360	- Insulation
IEC 60092-360	- Sheath
IEC 60332-1-2	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

Construction

	Code Letter	
Conductor		Tinned stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semiconductive		Semiconductive layer (EP-rubber)
Insulation	R	EP-rubber, IEC 60092-360 (EPR)
Insulation screen semiconductive		Semiconductive layer (EP-rubber)
Lay up / Shielding		Cores are laid up together. Cores are identified by Brown, Black or Grey threads under and over the metallic screen on each conductor.
Inner covering	F	Flame retardant and halogen-free thermoset compound
Tape over inner covering		PET tape
Armour/screen	O	Tinned annealed copper wire braid
Tape over armour/screen		PET tape
Outer sheath	U	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC 60092-360)
Marking text		E.g. "meter" "year" DRAKA 04 RFOU 3,6/6(7,2)KV P2/P9 3 x 120/60 mm2 IEC 60332-3-22
Manufacturing unit		DRAKA 04 = Draka Industrial Cable, Germany
Outer sheath colour		Red



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Range and dimensions

Number of elements	Cross section core, mm ²	Cross section screen, mm ²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Inner covering, mm	Diameter inner covering, mm	Diameter Braid Wire, mm	Thickness Outer Sheath, mm	Diameter outer sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	16	11	5,2	2,5	1,0	16,5±1,0	0,3	1,6	22,0±1,5	850	452
1	25	11	6,5	2,5	1,0	18,0±1,0	0,3	1,6	23,0±1,5	970	554
1	35	13	7,4	2,5	1,0	19,0±1,0	0,3	1,6	24,0±1,5	1150	675
1	50	13	8,8	2,5	1,0	20,5±1,0	0,3	1,7	25,5±1,5	1300	830
1	70	16	10,3	2,5	1,0	22,0±1,0	0,3	1,8	27,5±1,5	1600	1060
1	95	16	12,1	2,5	1,0	24,0±1,5	0,3	1,9	29,5±1,5	2000	1323
1	120	20	13,6	2,5	1,0	25,0±1,5	0,4	1,9	31,5±2,0	2300	1677
1	150	22	15,1	2,5	1,2	27,0±1,5	0,4	2,0	33,5±2,0	2710	2041
1	185	25	16,8	2,5	1,2	28,5±1,5	0,4	2,0	35,0±2,0	3230	2433
1	240	25	19,1	2,6	1,2	31,5±1,5	0,4	2,1	37,5±2,0	3930	2993
1	300	30	21,5	2,8	1,2	34,0±1,5	0,4	2,2	41,0±2,5	4700	3626
3	16	35	5,2	2,5	1,2	34,5±1,5	0,4	2,3	42,0±2,5	3100	1419
3	25	35	6,5	2,5	1,2	37,5±1,5	0,4	2,4	45,0±2,5	3570	1706
3	35	35	7,4	2,5	1,2	39,5±1,5	0,4	2,5	47,0±2,5	4020	1972
3	50	35	8,8	2,5	1,4	43,0±2,0	0,4	2,6	50,5±3,0	4700	2462
3	70	45	10,3	2,5	1,4	46,0±2,0	0,5	2,7	54,5±3,0	5900	3047
3	95	50	12,1	2,5	1,4	50,0±2,0	0,5	2,8	58,5±3,0	7200	4108
3	120	60	13,6	2,5	1,6	53,5±2,0	0,5	3,0	62,5±3,5	8200	4988
3	150	75	15,1	2,5	1,6	56,5±2,0	0,5	3,1	66,5±3,5	9600	6173
3	185	95	16,8	2,5	1,6	60,5±2,5	0,6	3,2	70,0±3,5	11250	7364
3	240	95	19,1	2,6	1,8	66,5±2,5	0,6	3,5	77,0±4,0	14000	9033
3	300	95	21,5	2,8	1,8	70,0±3,0	0,6	3,6	80,5±4,5	16500	10794

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
	804200	RFOU 3.6/6KV 1X 16/11mm ² P2/P9	RED	-	7021528042009	-
	804201	RFOU 3.6/6KV 1X 25/11mm ² P2/P9	RED	-	7021528042016	-
	804202	RFOU 3.6/6KV 1X 35/13mm ² P2/P9	RED	-	7021528042023	-
	804203	RFOU 3.6/6KV 1X 50/13mm ² P2/P9	RED	-	7021528042030	-
	804204	RFOU 3.6/6KV 1X 70/16mm ² P2/P9	RED	-	7021528042047	-
	804205	RFOU 3.6/6KV 1X 95/16mm ² P2/P9	RED	-	7021528042054	-
	804206	RFOU 3.6/6KV 1X 120/20mm ² P2/P9	RED	-	7021528042061	-
	804207	RFOU 3.6/6KV 1X 150/22mm ² P2/P9	RED	-	7021528042078	-
	804208	RFOU 3.6/6KV 1X 185/25mm ² P2/P9	RED	-	7021528042085	-
	804209	RFOU 3.6/6KV 1X 240/25mm ² P2/P9	RED	-	7021528042092	-
	804210	RFOU 3.6/6KV 1X 300/30mm ² P2/P9	RED	-	7021528042108	-
	804220	RFOU 3.6/6KV 3X 16/35mm ² P2/P9	RED	-	7021528042207	-
	804221	RFOU 3.6/6KV 3X 25/35mm ² P2/P9	RED	-	7021528042214	-
	804222	RFOU 3.6/6KV 3X 35/35mm ² P2/P9	RED	-	7021528042221	-
	804223	RFOU 3.6/6KV 3X 50/35mm ² P2/P9	RED	-	7021528042238	-
	804224	RFOU 3.6/6KV 3X 70/45mm ² P2/P9	RED	-	7021528042245	-
	804225	RFOU 3.6/6KV 3X 95/50mm ² P2/P9	RED	-	7021528042252	-
	804226	RFOU 3.6/6KV 3X 120/60mm ² P2/P9	RED	-	7021528042269	-
	804227	RFOU 3.6/6KV 3X 150/75mm ² P2/P9	RED	-	7021528042276	-
	804228	RFOU 3.6/6KV 3X 185/95mm ² P2/P9	RED	-	7021528042283	-
	804229	RFOU 3.6/6KV 3X 240/95mm ² P2/P9	RED	-	7021528042290	-
	804230	RFOU 3.6/6KV 3X 300/95mm ² P2/P9	RED	-	7021528042306	-

Electrical values power cables

Number of elements	Cross section core, mm ²	Cross section screen, mm ²	Conductor type 2	Max. conductor resistance at 20°C, Ohm/km	Max. conductor resistance at 90°C, Ohm/km	Reactance at 50Hz, Ohm/km	Reactance at 60Hz, Ohm/km	Capacitance per phase, nF/km	Current rating IEC 60092-352 Table B.4, Ampere	Short circuit rating 1 second, Ampere
1	16	11	STCC	1,16	1,48	0,149	0,179	310	96	2240
1	25	11	STCC	0,734	0,936	0,139	0,167	360	127	3500
1	35	13	STCC	0,529	0,675	0,133	0,160	390	157	4900
1	50	13	STCC	0,391	0,499	0,126	0,152	440	196	7000
1	70	16	STCC	0,270	0,344	0,121	0,145	490	242	9800
1	95	16	STCC	0,195	0,249	0,115	0,138	560	293	13300
1	120	20	STCC	0,154	0,196	0,119	0,143	610	339	16800
1	150	22	STCC	0,126	0,161	0,109	0,131	660	389	21000
1	185	25	STCC	0,100	0,128	0,105	0,127	730	444	25900
1	240	25	STCC	0,0762	0,0972	0,102	0,122	780	522	33600
1	300	30	STCC	0,0607	0,0774	0,099	0,119	810	601	42000
3	16	35	STCC	1,16	1,48	0,121	0,145	310	67	2240
3	25	35	STCC	0,734	0,936	0,112	0,135	360	89	3500
3	35	35	STCC	0,529	0,675	0,108	0,129	390	110	4900
3	50	35	STCC	0,391	0,499	0,102	0,123	440	137	7000
3	70	45	STCC	0,270	0,344	0,097	0,117	490	169	9800
3	95	50	STCC	0,195	0,249	0,093	0,112	560	205	13300
3	120	60	STCC	0,154	0,196	0,090	0,108	610	237	16800
3	150	75	STCC	0,126	0,161	0,088	0,105	660	272	21000
3	185	95	STCC	0,100	0,128	0,085	0,102	730	311	25900
3	240	95	STCC	0,0762	0,0972	0,083	0,100	780	365	33600
3	300	95	STCC	0,0607	0,0774	0,082	0,098	810	421	42000

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
15 x D	9 x D	50 N /mm ²	-20°C



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