(N)HXH FE180 PH120
(N)HXH FE180 E30-E90

CABLE STRUCTURE

Conductor	Electrolytic annealed, class 1 solid (RE) or class 2 (RM) stranded plain copper wires
Insulation	Special fire resistant cross linked compound, type HIC
Core identification	According to DIN VDE 0293-308, HD 308 S2 or EN 50334
Inner Covering	Special flame retardant, halogen-free compound
Sheath	Halogen-free flame retardent compound, type HMT1
Color :	Orange

MAIN CHARACTERISTICS

Construction	HD604 S1 Part 5 Section H, VDE 0276-604
General Requirements	IEC 60502-1 +A1, VDE 0276 VDE 0276-603
Guide to Use	VDE 0250-1
Electrical Tests	DIN VDE 0276-604 :2008-02, HD604 S1,
Non - electrical Tests	HD 505, HD 605 DIN VDE 0276-604 :2008-02,
Conductor Resistance	HD604 S1 Part 5 Section H IEC 60228, VDE 0295, BS 6360
Flame Retardant	IEC 60332-1-2, IEC 60332-3-22, DIN VDE 0276-604
Insulation Integrity FE180	IEC 60332-21 (180 min.)
System Circuit Integrity	DIN 4102-12 (30 - 90 min.)
Fire Resistance with mechanical shock *(up to 20 mm Ø)*	EN 50200, VDE 0482-200 (120 min.)
Halogen free	EN 50267-2-2, IEC 60754-1/2
Smoke Density	EN 61034-1/2

OPERATING CHARACTERISTICS

Rated Voltage	600 / 1000 V
AC Test Voltage	4 kV
Operating Tempetature	-30˚C to +90˚C
Conductor Short-Circuit Temp.	250˚C (Max. 5 sec.)
Min. Installation Temp.	-5˚C
Min. Bending Radius *(during installation)*	
Single Core Cable	15 x Outer Diameter
Multi Core Cable	12 x Outer Diameter
Maximum permissible tensile stress	with cable grip for Cu: 50 N/mm2
Current Carrying Capacities	VDE 0298-4 Tab.5 & Tab.6, IEC 60364-5-52 Tab B52.1 & B52.3, B52.5, B52 .12

APPLICATIONS

These power cables with special performance for use in power stations and intended supply power to equipments which must operate in fire conditions and during fire fighting. Suitable for indoor applications, outdoor applications, protection must be provided against exposure to direct sunlight. If th cable laid directly in earth a protective conduit should have to be used.

Cross Section (mm^2)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (fixed installation) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
1x1,5	6,20	57	93	12,10
1x2,5	6,60	71	99	7,41
1x4	7,10	90	107	4,61
1x6	7,60	113	114	3,08
1x10	8,40	160	126	1,83
1x16	10,20	240	153	1,15
1x25	11,70	345	176	0,73
1x35	12,80	450	192	0,524
1x50	14,30	590	215	0,387
1x70	16,10	810	242	0,268
1x95	18,50	1090	278	0,193
1x120	19,60	1318	294	0,153
1x150	21,80	2025	327	0,124
1x185	24,00	2030	360	0,0991
1x240	27,20	2650	408	0,0754
1x300	29,60	3165	444	0,00601
2x1,5	11,00	178	132	12,10
2x2,5	11,80	215	142	7,41
2x4	12,80	275	154	4,61
2x6	13,80	340	166	3,08
2x10	15,40	460	185	1,83
2x16	19,00	710	228	1,15
2x25	22,00	1010	264	0,73
2x35	24,20	1285	290	0,524
2x50	28,00	1740	336	0,387
2x70	31,50	2350	378	0,268
2x95	36,20	3130	434	0,193
3x1,5	9,40	143	113	12,10
3x2,5	10,40	190	125	7,41
3x4	11,70	258	140	4,61
3x6	13,00	340	156	3,08
3x10	15,70	522	188	1,83

Cross Section (mm^2)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (fixed installation) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
3x16	21,50	902	258	1,15
3x25	24,70	1290	296	0,73
3x35	27,30	1657	328	0,524
3x50	29,80	1664	358	0,387
3x70	33,90	2990	407	0,268
3x95	38,90	4000	467	0,193
3x120	41,50	4800	498	0,153
3x150	46,00	5980	552	0,124
3x185	50,70	7360	608	0,0991
3x240	57,60	9600	691	0,0754
3x35+16	28,30	1837	340	0,524
3x50+25	31,40	2407	377	0,387
3x70+35	35,80	3282	430	0,268
3x95+50	41,10	4450	493	0,193
3x120+70	45,40	5585	545	0,153
3x150+70	48,80	6577	586	0,124
3x185+95	54,40	8298	653	0,0991
3x240+120	60,40	10560	725	0,0754
4x1,5	10,20	172	122	12,10
4x2,5	11,20	226	134	7,41
4x4	12,60	312	151	4,61
4x6	14,50	430	174	3,08
4x10	17,40	663	209	1,83
4x16	23,80	1146	286	1,15
4x25	26,70	1594	320	0,73
4x35	29,50	2054	354	0,524
4x50	32,90	2681	395	0,387
4x70	38,10	3721	457	0,268
4x95	43,00	4984	516	0,193
4x120	47,30	6161	568	0,153
4x150	52,00	7500	624	0,124
4x185	56,50	9440	678	0,0991

Cross Section (mm^2)	Nominal Overall Diameter (mm)	Approximate Weight (kg / km)	Min.Bending Radius (fixed installation) (mm)	Max. Resistance of Conductors at 20°C (ohm / km)
4x240	64,10	12350	769	0,0754
5x1,5	11,10	205	133	12,10
5x2,5	12,40	276	149	7,41
5x4	13,90	382	167	4,61
5x6	16,00	528	192	3,08
5x10	19,20	812	230	1,83
5x16	25,70	1373	308	1,15
5x25	29,00	1928	348	0,73
5x35	32,20	2505	386	0,524
5x50	36,10	3283	433	0,387
5x70	42,30	4620	508	0,268
5x95	47,60	6164	571	0,193
5x120	52,10	7590	625	0,153
5x150	57,40	9295	689	0,124
5x185	63,70	11582	764	0,0991
5x240	70,90	14840	851	0,0754
7x1,5	12,10	248	145	12,10
7x2,5	13,50	338	162	7,41
10x1,5	15,70	410	188	12,10
12x1,5	16,10	443	193	12,10
12x2,5	18,00	605	216	12,10
19x1,5	19,10	637	229	12,10
24x1,5	22,90	892	275	12,10
30x1,5	24,20	1030	290	12,10