



Technical data

- Power and control cable adapted to DIN VDE 0276 part 604, HD 604 S1 part 1 and part 5G
- **Temperature range**
during installation -5°C to +50°C
fixed installation -30°C to +90°C
- Permissible **operating temperature** at conductor +90°C
- **Nominal voltage** U_0/U 0,6/1 kV
- **Test voltage** 4 kV
- **Minimum bending radius**
single-core 15x cable \varnothing
multi-core 12x cable \varnothing
- **Radiation resistance**
up to 100×10^6 cJ/kg (up to 100 Mrad)

Cable structure

- Aluminium-conductor, to DIN VDE 0295 cl.1 or cl.2, single-wire or multi-wire, BS 6360 cl.1 or cl.2, IEC 60228 cl.1 or cl.2
- Core insulation of cross-linked polyethylene (XLPE) compound type 2X11 to HD 604 S1
- Core identification to DIN VDE 0293-308
- Core identification for 3+½ conductor
J-type: GN-YE (½), BN, BK, GY
O-type: BU (½), BN, BK, GY
- Cores stranded in layers (for multi-core cables)
- Overall filled inner sheath
- Covered by filling compound or taping
- Outer sheath of thermoplastic polyolefine, ompound type HM4 to HD 604 S1
- Sheath colour black

Properties

- Halogen-free, no separation of corrosive or toxic gases
- Limited propagation of fire
- Low smoke development
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Tests

- Flame test acc. to DIN VDE 0482-332-3-24, BS 4066 part 3, DIN EN 60332-3-24, IEC 60332-3-24 (previously DIN VDE 0472 part 804 test method C)
- Corrosiveness of combustion gases acc. to DIN VDE 0482 part 267, DIN EN 50267-2-2, IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Halogen-free acc. to DIN VDE 0482 part 267, DIN EN 50267-2-1, IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Smoke density acc. to DIN VDE 0482 part 1034-1+2, DIN EN 61034-1+2, IEC 61034-1+2, BS 7622 part 1+2 (previously DIN VDE 0472 part 816)

Note

- rm = round conductor, multi-wire;
se = sector-shaped conductor, single-wire;
sm = sector-shaped conductor, multi-wire
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- **LSOH** = Low Smoke Zero Halogen

Application

Halogen-free power cables for energy with enhanced characteristics in case of fire are used for applications where harm to human life and damage to property must be prevented in the event of fire, e. g. in power stations, industrial installations, communal establishments, hotels, airports, underground stations, railway stations, hospitals department stores, banks, schools theaters, multi-storey buildings, process control centres etc. Suitable for fixed installation in dry, damp or wet environments, in, above, on and beneath plaster as well as in masonry walls and in concrete. These cables are suitable for outdoor applications and in underground by using in conduits or tubes. For the installation in conduit all precautions must be taken that no accumulation of water can occur in the pipes.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Part no.	J type	O type	No.cores x cross-sec. mm ²	Outer Ø app. mm	Alu weight kg / km	Weight app. kg / km	AWG-No.
50073	50128		1 x 25 rm	9,9	73,0	132,0	4
50074	50129		1 x 35 rm	11,0	102,0	166,0	2
50075	50130		1 x 50 rm	12,5	145,0	211,0	1
50076	50131		1 x 70 rm	14,1	203,0	283,0	2/0
50077	50132		1 x 95 rm	16,1	276,0	376,0	3/0
50078	50133		1 x 120 rm	17,5	348,0	456,0	4/0
53562	53553		1 x 150 rm	19,6	435,0	560,0	300 kcmil
50079	50134		1 x 185 rm	21,8	537,0	697,0	350 kcmil
53561	50135		1 x 240 rm	24,0	696,0	878,0	500 kcmil
50080	53554		1 x 300 rm	26,7	870,0	1073,0	600 kcmil
50081	50136		1 x 400 rm	29,7	1160,0	1347,0	750 kcmil
50082	53555		1 x 500 rm	33,1	1450,0	1705,0	1000 kcmil

Part no.	J type	O type	No.cores x cross-sec. mm ²	Outer Ø app. mm	Alu weight kg / km	Weight app. kg / km	AWG-No.
50083	50137		3 x 16 rm	16,3	139,0	364,0	6
50084	50138		3 x 25 rm	19,6	218,0	530,0	4
50085	50139		3 x 35 rm	22,1	305,0	684,0	2
50086	50140		3 x 35 se	19,0	305,0	486,0	2
50087	50141		3 x 50 sm	22,4	435,0	655,0	1
50088	50142		3 x 50 se	21,2	435,0	622,0	1
50089	50143		3 x 70 sm	26,1	609,0	903,0	2/0
50090	50144		3 x 70 se	25,2	609,0	859,0	2/0
50091	50145		3 x 95 sm	29,1	827,0	1174,0	3/0
50092	50146		3 x 95 se	27,8	827,0	1115,0	3/0
50093	50147		3 x 120 sm	32,2	1044,0	1446,0	4/0
50094	50148		3 x 120 se	30,8	1044,0	1379,0	4/0

Continuation ▶

(N)A2XH power cable, 0,6/1 kV, halogen-free, without functionality



Part no. J type	O type	No.cores x cross-sec. mm ²	Outer Ø app. mm	Alu weight kg / km	Weight app. kg / km	AWG-No.	Part no. J type	O type	No.cores x cross-sec. mm ²	Outer Ø app. mm	Alu weight kg / km	Weight app. kg / km	AWG-No.
50095	50149	3 x 150 sm	36,2	1305,0	1780,0	300 kcmil	50109	50171	4 x 95 sm	33,3	1102,0	1538,0	3/0
50096	50150	3 x 150 se	33,9	1305,0	1685,0	300 kcmil	50110	50172	4 x 95 se	32,1	1102,0	1467,0	3/0
50097	50154	3 x 185 sm	40,1	1610,0	2197,0	350 kcmil	50111	50173	4 x 120 sm	37,2	1392,0	1903,0	4/0
50098	50155	3 x 185 se	37,6	1610,0	2089,0	350 kcmil	50112	50174	4 x 120 se	35,5	1392,0	1817,0	4/0
50099	50156	3 x 240 sm	44,9	2088,0	2782,0	500 kcmil	50113	50175	4 x 150 sm	41,3	1740,0	2328,0	300 kcmil
50100	50157	3 x 240 se	41,8	2088,0	2634,0	500 kcmil	50114	50176	4 x 150 se	39,4	1740,0	2223,0	300 kcmil
50101	50158	3 x 70 / 35 sm	28,3	711,0	1044,0	2/0	50115	50177	4 x 185 sm	45,7	2146,0	2874,0	350 kcmil
50102	50159	3 x 120 / 70 sm	35,1	1247,0	1704,0	4/0	50116	50178	4 x 185 se	43,4	2146,0	2750,0	350 kcmil
53550	50160	3 x 150 / 70 sm	39,7	1508,0	2065,0	300 kcmil	50117	50179	4 x 240 sm	51,2	2784,0	3646,0	500 kcmil
50103	50161	3 x 185 / 95 sm	43,7	1885,0	2563,0	350 kcmil	50118	50180	4 x 240 se	48,0	2784,0	3465,0	500 kcmil
53551	50162	3 x 240 / 120 sm	49,1	2436,0	3237,0	500 kcmil	50119	50181	5 x 25 rm	23,9	362,0	763,0	4
53560	50163	4 x 16 rm	19,0	186,0	460,0	6	50120	50182	5 x 35 rm	27,0	508,0	986,0	2
50104	50164	4 x 25 rm	21,7	290,0	636,0	4	50121	50183	5 x 50 rm	31,3	725,0	1309,0	1
50105	50165	4 x 35 sm	22,4	406,0	649,0	2	50122	50184	5 x 70 rm	35,8	1015,0	1771,0	2/0
50106	50166	4 x 35 se	21,6	406,0	623,0	2	50123	50185	5 x 95 sm	36,5	1378,0	1891,0	3/0
50107	50167	4 x 50 sm	25,4	580,0	845,0	1	50124	50186	5 x 120 sm	39,2	1740,0	2306,0	4/0
53556	50168	4 x 50 se	24,6	580,0	810,0	1	50125	50187	5 x 150 sm	45,4	2175,0	2865,0	300 kcmil
50108	50169	4 x 70 sm	29,7	812,0	1178,0	2/0	50126	50188	5 x 185 sm	50,1	2683,0	3534,0	350 kcmil
53552	50170	4 x 70 se	28,8	812,0	1126,0	2/0	50127	50189	5 x 240 sm	55,2	3480,0	4482,0	500 kcmil

Dimensions and specifications may be changed without prior notice. (RQ02)