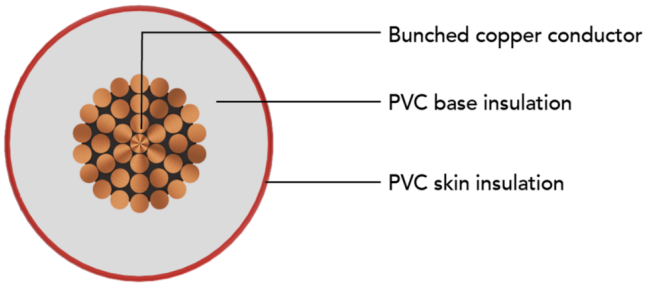
POLYCAB Type DK BS 6231
Switch gear and Control gear wiring Cable, 600/1000 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB Type DK BS 6231 single core non-sheathed thermoplastic insulated cable is suitable for wiring of switch, control, metering, relay & instrument panels of power switchgear and for such purpose as internal connections in rectifier equipment and its motor starters and controllers.

CHARACTERISTICS

Voltage Rating
600/1000 V

Operation Temperature
Fixed: -15°C to 90° C
Max.: 105°C with reduced lifetime

Bending Radius
Fixed installation - 8 x Overall Diameter

CONSTRUCTION

• Plain annealed copper conductor as per BS EN/IEC 60228, class 5
• Insulated with Polyvinyl Chloride to EN 50363-3

Core Identification
Black/Blue/Brown/Grey/Orange/Pink/Red/Turquoise/Violet/White/ Green/Yellow

Test Voltage
3500V AC at (20±5) °C

OUTSTANDING FEATURES

- Flame Propagation
- Flexible
- Smooth and Glossy finish
- Panel wiring
- High insulation resistance

STANDARD FOLLOWS

BS EN/IEC 60228
BS EN 50363-3
BS 6231
IEC 60332-1-2

COMPLIANCE

Conductor resistance test BS EN/IEC 60228
Insulation resistance BS 6231
Flammability test BS EN/IEC 60332-1-2

APPROVAL

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POLYCAB
IDEAS. CONNECTED.

WEIGHT & DIMENSION DATA :

Product Code	Nominal cross sectional area mm²	Insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS07CYUAYC001C0.5S	0.5	0.8	2.63	11
LDBS07CYUAYC001C.75S	0.75	0.8	2.8	14
LDBS07CYUAYC001C001S	1	0.8	2.97	18
LDBS07CYUAYC001C1.5S	1.5	0.8	3.27	23
LDBS07CYUAYC001C2.5S	2.5	0.8	3.7	33
LDBS07CYUAYC001C004S	4	0.8	4.3	50
LDBS07CYUAYC001C006S	6	0.8	4.8	69
LDBS07CYUAYC001C010S	10	1	6.33	117
LDBS07CYUAYC001C016S	16	1	7.6	174
LDBS07CYUAYC001C025S	25	1.2	9.57	269
LDBS07CYUAYC001C035S	35	1.2	10.73	368
LDBS07CYUAYC001C050S	50	1.4	12.93	525
LDBS07CYUAYC001C070S	70	1.4	14.77	720
LDBS07CYUAYC001C095S	95	1.6	16.67	973
LDBS07CYUAYC001C120S	120	1.6	18.4	1212
LDBS07CYUAYC001C150S	150	1.8	20.57	1491
LDBS07CYUAYC001C185S	185	2	22.67	1872
LDBS07CYUAYC001C240S	240	2.2	25.53	2394

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct) Spaced by one cable diameter		Reference Method G (in free air) Spaced by one cable diameter		Maximum DC conductor resistance at 20°C
	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, three-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat		
							Horizontal	Vertical	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
1	16	14	19	17	22	20	–	–	19.5
1.5	21	19	26	22	28	26	–	–	13.3
2.5	29	26	34	31	37	34	–	–	7.98
4	38	34	47	41	51	45	–	–	4.95

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	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, three-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat		
							Horizontal	Vertical	
mm²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
6	50	44	59	54	65	59	–	–	3.3
10	68	59	83	73	90	82	–	–	1.91
16	90	80	111	98	121	110	–	–	1.21
25	120	107	150	132	162	147	206	182	0.78
35	148	132	185	163	199	182	255	227	0.554
50	178	160	224	198	258	237	311	279	0.386
70	226	203	286	251	331	303	399	359	0.272
95	273	245	346	304	401	369	486	440	0.206
120	315	282	400	353	468	429	566	513	0.161
150	359	322	444	387	539	493	653	596	0.129
185	409	366	508	434	617	566	748	685	0.106
240	479	430	597	510	729	667	884	813	0.0801

The ambient temperature is 30°C,
Conductor operating temperature 105 °C.
The above table is in accordance with Table 4E1A of BS 7671:2018

De-Rating Factor

De-rating factor for various ambient temperature

Air Temperature	35°C to 55 °C	60°C	65°C	70°C	75°C
De-Rating Factor	1	0.96	0.83	0.67	0.47