

## Polycab offers Switch gear and Control wiring cable generally confirming to BS 6231.



These are single core non sheathed electric cables of rated voltage 600/1000 V with PVC insulation. These cables are designed to use in wiring of switch, control metering, relay & instrument panels of power switchgear and for such purposes as internal connections in rectifier equipment and its motor starters and controllers.

These wires are available with specially designed thermoplastic PVC compound having temperature rating of 70° C, 90°C and 105° C.

**Conductor:** High conductivity annealed plain bunched copper conductor produced inhouse from state-of-the art Contirod line.

**Insulation:** Inhouse developed high insulation resistance thermoplastic PVC compound.

Polycab assures the highest quality standard in every product by having stringent quality control with requisite testing which are applied at every single stage from raw material to finished goods.

The construction is based on the application and requirement of the user against BS 6231.



[POLYCAB Type DK BS 6231 - Switch gear and Control gear wiring Cable, 600/1000 V AC](#)



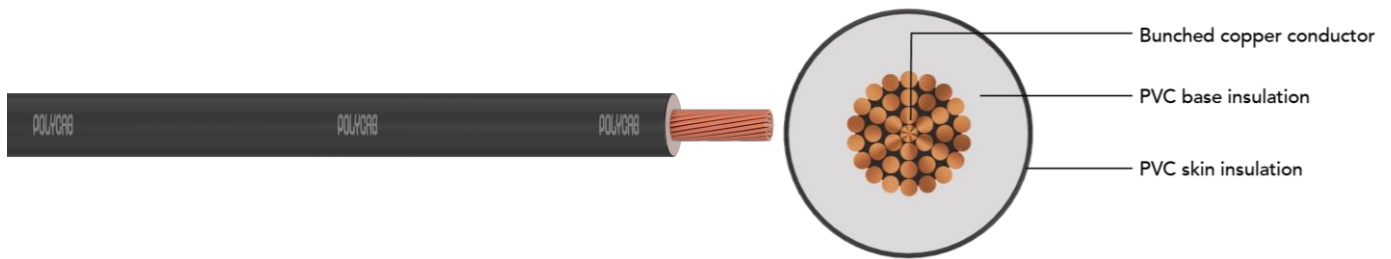
[POLYCAB Type CK BS 6231 - Switch gear and Control gear wiring Cable, 600/1000 V AC](#)



[POLYCAB Type BK BS 6231 - Switch gear and Control gear wiring Cable, 600/1000 V AC](#)

# POLYCAB Type BK BS 6231

## Switch gear and Control gear wiring Cable, 600/1000 V AC



### Application

POLYCAB Type BK 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.

### Voltage Rating

600/1000 V

### Operation Temperature

Fixed: -15°C to 70°C

### Construction

- Plain annealed copper conductor as per BS EN/IEC 60228, class 5
- Insulated with Polyvinyl Chloride Type TI 1 to EN 50363-3

### Core Identification

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

### Bending Radius

Fixed installation - 8 x Overall Diameter

### Standard and References:

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

### Test Voltage

3500V AC at (20±5) °C

### Compliance

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

### Approval



### OUR ACCREDITATION



ISO  
9001

ISO  
14001

ISO  
45001

NABL

ABS

IRS

## POLYCAB Type BK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC

Product Code	Nominal cross sectional area mm <sup>2</sup>	Insulation thickness mm	Overall Diameter (Approx.) mm	Weight (Approx.) kg/km
LDBS07CYUAYA001C0.5S	0.5	0.8	2.63	11
LDBS07CYUAYA001C.75S	0.75	0.8	2.8	14
LDBS07CYUAYA001C001S	1	0.8	2.97	17
LDBS07CYUAYA001C1.5S	1.5	0.8	3.27	22
LDBS07CYUAYA001C2.5S	2.5	0.8	3.7	33
LDBS07CYUAYA001C004S	4	0.8	4.3	49
LDBS07CYUAYA001C006S	6	0.8	4.8	68
LDBS07CYUAYA001C010S	10	1	6.33	115
LDBS07CYUAYA001C016S	16	1	7.6	174
LDBS07CYUAYA001C025S	25	1.2	9.57	266
LDBS07CYUAYA001C035S	35	1.2	10.73	364
LDBS07CYUAYA001C050S	50	1.4	12.93	520
LDBS07CYUAYA001C070S	70	1.4	14.77	715
LDBS07CYUAYA001C095S	95	1.6	16.67	966
LDBS07CYUAYA001C120S	120	1.6	18.4	1204
LDBS07CYUAYA001C150S	150	1.8	20.57	1481
LDBS07CYUAYA001C185S	185	2	22.67	1859
LDBS07CYUAYA001C240S	240	2.2	25.53	2379

#### OUR ACREDITATION



## POLYCAB Type BK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC

#### Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	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)		Maximum DC conductor resistance at 20°C Ω/km
	2 cables, single-phase a.c. or d.c. Amp.	3 or 4 cables, three-phase a.c. Amp.	2 cables, single-phase a.c. or d.c. Amp.	3 or 4 cables, three-phase a.c. Amp.	2 cables, single-phase a.c. or d.c. flat and touching Amp.	3 or 4 cables, three-phase a.c. flat and touching or trefoil Amp.	
1	10.5	10	13	11	15	13	19.5
1.5	14	13	17	15	19	17	13.3
2.5	19	17	23	20	26	24	7.98
4	25	23	30	27	35	31	4.95
6	32	29	39	34	45	41	3.3
10	44	40	54	48	62	56	1.91
16	58	56	72	65	83	75	1.21
25	78	71	98	86	111	101	0.78
35	96	86	121	107	137	125	0.554
50	115	105	146	130	177	162	0.386
70	146	132	186	166	227	208	0.272
95	177	159	225	201	275	253	0.206
120	204	182	261	232	320	294	0.161
150	233	210	291	254	370	339	0.129
185	265	238	331	287	423	388	0.106
240	311	277	388	336	500	458	0.0801

The ambient temperature is 30°C,

Conductor operating temperature 70°C.

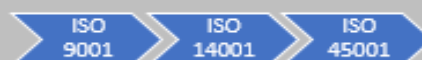
The above table is in accordance with Table 4D1A of BS 7671:2018

#### De-Rating Factor

De-rating factor for 70°C thermoplastic insulated cable

Air Temperature	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	0.91	0.82	0.71	0.58	0.41

#### OUR ACCREDITATION



# POLYCAB Type CK BS 6231

## Switch gear and Control gear wiring Cable, 600/1000 V AC



### Application

POLYCAB Type CK 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.

### Voltage Rating

600/1000 V

### Operation Temperature

Fixed: -15°C to 90° C

### Construction

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

### Core Identification

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

### Bending Radius

Fixed installation - 8 x Overall Diameter

### Standard and References:

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

### Test Voltage

3500V AC at (20±5) °C

### Compliance

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

### Approval



### OUR ACCREDITATION



ISO  
9001

ISO  
14001

ISO  
45001

NABL

ABS

IRS

## POLYCAB Type CK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC

Product Code	Nominal cross sectional area mm <sup>2</sup>	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	17
LDBS07CYUAYC001C1.5S	1.5	0.8	3.27	22
LDBS07CYUAYC001C2.5S	2.5	0.8	3.7	33
LDBS07CYUAYC001C004S	4	0.8	4.3	49
LDBS07CYUAYC001C006S	6	0.8	4.8	68
LDBS07CYUAYC001C010S	10	1	6.33	115
LDBS07CYUAYC001C016S	16	1	7.6	174
LDBS07CYUAYC001C025S	25	1.2	9.57	266
LDBS07CYUAYC001C035S	35	1.2	10.73	364
LDBS07CYUAYC001C050S	50	1.4	12.93	520
LDBS07CYUAYC001C070S	70	1.4	14.77	715
LDBS07CYUAYC001C095S	95	1.6	16.67	966
LDBS07CYUAYC001C120S	120	1.6	18.4	1204
LDBS07CYUAYC001C150S	150	1.8	20.57	1481
LDBS07CYUAYC001C185S	185	2	22.67	1859
LDBS07CYUAYC001C240S	240	2.2	25.53	2379

#### OUR ACREDITATION



## POLYCAB Type CK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC

#### Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	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)		Reference Method G (in free air)		Maximum DC conductor resistance at 20°C Ω/km
	2 cables, single-phase a.c. or d.c. Amp.	3 or 4 cables, three-phase a.c. Amp.	2 cables, single-phase a.c. or d.c. Amp.	3 or 4 cables, three-phase a.c. Amp.	Spaced by one cable diameter		Spaced by one cable diameter		
					2 cables, single-phase a.c. or d.c. flat and touching Amp.	3 or 4 cables, three-phase a.c. flat and touching or trefoil Amp.	2 cables, single-phase a.c. or d.c. or 3 cables three-phase a.c. flat		
							Horizontal Amp.	Vertical Amp.	
1	13	12	16	14	18	17	–	–	19.5
1.5	18	16	22	19	24	22	–	–	13.3
2.5	25	22	29	27	32	29	–	–	7.98
4	33	29	40	35	44	39	–	–	4.95
6	43	38	51	46	56	51	–	–	3.3
10	58	51	71	63	77	70	–	–	1.91
16	77	69	95	84	104	94	–	–	1.21
25	103	92	129	113	139	126	177	156	0.78
35	127	113	159	140	171	156	219	195	0.554
50	153	137	192	170	221	203	267	239	0.386
70	194	174	245	215	284	260	342	308	0.272
95	234	210	297	261	344	316	417	377	0.206
120	270	242	343	303	401	368	485	440	0.161
150	308	276	381	332	462	3915	560	511	0.129
185	351	314	436	372	529	485	641	587	0.106
240	411	369	512	437	625	572	758	697	0.0801

The ambient temperature is 30°C,

Conductor operating temperature 90°C.

The above table is in accordance with Table 4E1A of BS 7671:2018

#### De-Rating Factor

De-rating factor for 90°C thermoplastic or thermosetting insulated cable

Air Temperature	35°C to 45 °C	50°C	55°C	60°C	65°C
De-Rating Factor	1	0.96	0.83	0.67	0.47

#### OUR ACCREDITATION



## POLYCAB Type DK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC



#### 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.

#### Voltage Rating

600/1000 V

#### Operation Temperature

Fixed: -15°C to 90°C

Max.: 105°C with reduced life time

#### 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

#### Bending Radius

Fixed installation - 8 x Overall Diameter

#### Standard and References:

BS EN/IEC 60228

BS EN 50363-3

BS 6231

IEC 60332-1-2

#### Test Voltage

3500V AC at (20±5) °C

#### Compliance

Conductor resistance test

BS EN/IEC 60228

Insulation resistance

BS 6231

Flammability test

BS EN/IEC 60332-1-2

#### Approval



#### OUR ACCREDITATION



ISO  
9001

ISO  
14001

ISO  
45001

NABL

ABS

IRS



## POLYCAB Type DK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC

Product Code	Nominal cross sectional area mm <sup>2</sup>	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	17
LDBS07CYUAYC001C1.5S	1.5	0.8	3.27	22
LDBS07CYUAYC001C2.5S	2.5	0.8	3.7	33
LDBS07CYUAYC001C004S	4	0.8	4.3	49
LDBS07CYUAYC001C006S	6	0.8	4.8	68
LDBS07CYUAYC001C010S	10	1	6.33	115
LDBS07CYUAYC001C016S	16	1	7.6	174
LDBS07CYUAYC001C025S	25	1.2	9.57	266
LDBS07CYUAYC001C035S	35	1.2	10.73	364
LDBS07CYUAYC001C050S	50	1.4	12.93	520
LDBS07CYUAYC001C070S	70	1.4	14.77	715
LDBS07CYUAYC001C095S	95	1.6	16.67	966
LDBS07CYUAYC001C120S	120	1.6	18.4	1204
LDBS07CYUAYC001C150S	150	1.8	20.57	1481
LDBS07CYUAYC001C185S	185	2	22.67	1859
LDBS07CYUAYC001C240S	240	2.2	25.53	2379

#### OUR ACCREDITATION



## POLYCAB Type DK BS 6231

### Switch gear and Control gear wiring Cable, 600/1000 V AC

#### Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	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)		Reference Method G (in free air)		Maximum DC conductor resistance at 20°C Ω/km
	Spaced by one cable diameter		Spaced by one cable diameter		Spaced by one cable diameter		Spaced by one cable diameter		
	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		
	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Horizontal Amp.	Vertical Amp.	
1	13	12	16	14	18	17	–	–	19.5
1.5	18	16	22	19	24	22	–	–	13.3
2.5	25	22	29	27	32	29	–	–	7.98
4	33	29	40	35	44	39	–	–	4.95
6	43	38	51	46	56	51	–	–	3.3
10	58	51	71	63	77	70	–	–	1.91
16	77	69	95	84	104	94	–	–	1.21
25	103	92	129	113	139	126	177	156	0.78
35	127	113	159	140	171	156	219	195	0.554
50	153	137	192	170	221	203	267	239	0.386
70	194	174	245	215	284	260	342	308	0.272
95	234	210	297	261	344	316	417	377	0.206
120	270	242	343	303	401	368	485	440	0.161
150	308	276	381	332	462	3915	560	511	0.129
185	351	314	436	372	529	485	641	587	0.106
240	411	369	512	437	625	572	758	697	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

#### OUR ACCREDITATION

