

POLYCAB MARINE IEC 60092-353 0.6/1.0 kV VFD

Screened & Armoured VFD Cable, 0.6/1.0 (1.2) kV AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB MARINE Single and Multicore core Screened & Armoured VFD cable is suitable to use in sea vessels and offshore platforms where transient voltage occurs in motors during operation i.e. for Variable Frequency drive applications.

CHARACTERISTICS

Voltage Rating

0.6/1.0 (1.2) KV AC

Operation Temperature

-30°C to +90°C

Short Circuit Temp. 250°C

Bending Radius

Min. 12D (OD > 25 mm); Min. 10D (OD < 25 mm);
(8D for sector shaped conductors)

D is cable diameter

Test Voltage

3500V AC at (20±5)°C

OUTSTANDING FEATURES

- Halogen Free
- Reduced Flame Propagation
- Flame Retardant
- Low Smoke Emission

STANDARD FOLLOWS

IEC 60228:2005

IEC 60092-350:2020

IEC 60092-352:2005

IEC 60092-353:2016

IEC 60092-360:2014

COMPLIANCE

Fire Retardant	IEC 60332-3-22 (cat.A)
Flame Retardant	IEC 60332-1-2
Halogen free	IEC 60754-1 / IEC 60684-2
Corrosivity of Gases	IEC 60754-2
Smoke Density	IEC 61034-1 and 2

CONSTRUCTION

- Annealed plain stranded flexible copper conductor as per IEC 60228, Class-5 (tinned on request),
- Extruded XLPE Insulation, (Extruded HEPR Insulation available on demand)
- Insulated Cores assembled along with 3Earth cores together,
- Copper/Polyester tape Screened,
- Annealed plain Copper Braid Armour,
- Extruded Polyolefin HF-SHF1 Outer Sheath(HF-SHF2 on request),

Core Identification

- 3 core: brown, black, grey;
- Earth core: green/yellow;

NOTES

Colour: Black.(others colour on request).
Inner covering / fillers optional

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DIMENSIONS AND WEIGHTS:

Product Code	No. of Cores	Cross Sectional Area (mm ²)	Nom. Insulation Thickness (mm)	Nom. Braid Wire Dia. (mm)	Nom. Cable Overall Dia. (mm)	Cable Weight Approx. (kg / km)
BCIE07CXCBEV03C016SSAXXXP	3	16	0.7	0.30	20.3	825
BCIE07CXCBEV03C025SSAXXXP	3	25	0.9	0.30	24.3	1185
BCIE07CXCBEV03C035SSAXXXP	3	35	0.9	0.30	27.0	1535
BCIE07CXCBEV03C050SSAXXXP	3	50	1.0	0.30	30.8	2255
BCIE07CXCBEV03C070SSAXXXP	3	70	1.1	0.30	35.7	3070
BCIE07CXCBEV03C095SSAXXXP	3	95	1.1	0.40	40.2	4055
BCIE07CXCBEV03C120SSAXXXP	3	120	1.1	0.40	44.3	4990
BCIE07CXCBEV03C150SSAXXXP	3	150	1.2	0.40	49.0	6085
BCIE07CXCBEV03C050SSAXXXP	3	50 + 16	1.0	0.30	30.8	2355
BCIE07CXCBEV03C095SSAXXXP	3	95 + 25	1.2	0.40	40.2	5515
BCIE07CXCBEV03C120SSAXXXP	3	120 + 25	1.4	0.40	44.3	5865
BCIE07CXCBEV03C150SSAXXXP	3	150 + 25	1.4	0.40	49.0	6610

ELECTRICAL CHARACTERISTICS:

Conductor cross-sectional area mm ²	Max. Conductor Resistance		Current Rating for continuous service Conductor temperature max. +90°C, Ambient temperature max. +45°C Amps
	at 20°C DC	at 90°C AC	
	Ohm/km		
16	1.21	1.55	67
25	0.780	0.998	89
35	0.554	0.709	110
50	0.386	0.494	137
70	0.272	0.325	169
95	0.206	0.263	205
120	0.161	0.206	237
150	0.129	0.165	272

Current Ratings are in accordance with IEC 60029-352 Table B.4.

Ambient temperature de-rating factors, according to IEC 60092-352 Table-3

Temperature (°C)	35	40	45	50	55	60	65	70	75
De-rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58