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Insulated Cores Type SI 60227 IEC01

1. Applications

For building wire installed in conduit in dry location and inter-wiring in switch board and control panel. Suitable for fixed protected installation in, or on, lighting for voltages up to and including 450/750V a.c.

2. Reference Standards and documents

The cables covered by this specification are manufactured and tested as per the following references:

2.1	Conforms to IEC 60227-1 Standard: *"Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V".*
2.2	Conforms to IEC 60228 Standard: *"Conductors of insulated cables*
2.4	Conforms to European Union Regulation (EC) No. 1907/2006, concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (*REACH Regulation*).
2.5	Conforms to EU Directive No. 2002/95/CE on Restriction on Hazardous Substances, (*RoHS Directive*).
2.6	Conforms to IEC 60332-1-2 (*Flame propagation test*)

3. Insulated Core Type SI 60227 IEC01 Construction

A solid conductor for 1.5-6 mm² or compacted circular stranded conductor for 10 – 400 mm², has an extruded with polyvinyl chloride (PVC) colored insulation applied around.

TYPICAL DRAWING

Available insulation colors (as per Israel Electricity Law):

Insulation Color	Color Code	Suffix to use in the P/N
Brown	BN	(1)
Brown + Orange Strip	BN/OG	(13)
Brown + Black Strip	BN/BK	(10)
Blue	BU	(6)
Yellow + Green Strip	YE/GN	(45)

The distribution of the colors for the core colored green-and-yellow shall comply with the following condition (which is in accordance with IEC 60173): for every 15 mm length of core, one of these colors shall cover at least 30 % and not more than 70 % of the surface of the core, the other color covering the remainder.

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4. Cable Data

4.1 SI 60227 IEC01 FR1 SINGLE-CORE INSULATED COPPER CONDUCTOR

Construction and Dimensional Data

Catalog number (1)	Conductor cross-sectional area	Nominal		Approximate		Minimum bending radius at 20°C	Max. conductor resistance at 20°C	Short circuit rating, 1sec (2)
		Conductor diameter	Insulation thickness	Outer diameter	Cable weight			
	mm²	mm	mm	mm	kg/km	mm	Ω/km	kA
130044(1)	1.5	1.35	0.6	2.5	18.3	15	12.1	0.17
130052(1)	2.5	1.72	0.7	3.1	28.7	19	7.41	0.29
130060(1)	4	2.21	0.8	3.8	44.8	23	4.61	0.46
130079(1)	6	2.6	0.8	4.2	63.7	25	3.08	0.69
130086(1)	10	3.8	1.0	5.8	110	35	1.83	1.1
130095(1)	16	4.7	1.0	6.7	165	40	1.15	1.8
130109(1)	25	5.9	1.2	8.5	260	50	0.727	2.9
130117(1)	35	7.0	1.2	9.5	355	55	0.524	4.0
130125(1)	50	8.3	1.4	11.5	475	70	0.387	5.7
130133(1)	70	9.9	1.4	13.0	655	80	0.268	8.0
130141(1)	95	11.7	1.6	15.0	935	90	0.193	10.9
130150(1)	120	13.2	1.6	16.5	1,165	100	0.153	13.8
130168(1)	150	14.5	1.8	18.5	1,420	110	0.124	17.2
130176(1)	185	16.3	2.0	20.5	1,800	125	0.0991	21.2
130184(1)	240	18.6	2.2	23.0	2,340	140	0.0754	27.6
130195(1)	300	20.9	2.4	26.0	2,930	155	0.0601	34.5
130207(1)	400	23.7	2.6	29.0	3,760	175	0.047	45.9

1. *The Catalog Numbers listed in the table above are for Brown (1) colored insulation.*
   For other colors please refer to table from part 3 for the suffixes.
2. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 70ºC up to 160ºC in 1.0 sec.*

Rated Voltage
450/750 V

Conductor Flexibility
Stranded Cl.2

Maximum
Conductor
Temperature in
Service 70ºC

Minimum Bending
Radius 6(xD)

Flame Retardant IEC
60332-1-2

Lead Free