



6491X/H07V-U

6491X/H07V-R

450/750V

BS EN 50525-2-31

Single core PVC insulated non sheathed cables for general purposes

APPLICATIONS

Installation in surface mounted or embedded conduits, or similar closed systems.
Suitable for fixed protected installation in, or on, lighting or controlgear for voltages up to 1000V a.c. or, up to 750V d.c. to earth.

Standard length cable packing: 50 m of 100 m in rings or on spools, or 500 m on drums.
Other forms of packing and delivery are available on request.

CONSTRUCTION

Conductors: Annealed copper conductor class 1 solid (H07V-U), class 2 stranded (H07V-R)

Primary insulation: PVC compound type T1 1

Colour of insulation: green/yellow, blue, black, brown, grey, orange, pink, red, turquoise, violet, white

CHARACTERISTICS

Maximum conductor operating temperature: +70°C

Lowest ambient temperature for fixed installation: -40°C

Lowest installation temperature: -5°C

Maximum short-circuit conductor temperature: +160°C

Test voltage: 2500V



Fire performance

Flame retardant: EN 60332-1-2

CPR – class reaction to fire (acc EN 50575): Eca

Technical and Electrical Characteristics

Number and cross-sectional area of conductor	Approximate overall diameter	Approximate net weight of cables	Maximum conductor resistance at temperature 20°C	Minimum insulation resistance at temperature 70°C
n × mm²	mm	kg/km	Ω/km	MΩ.km
H07V-U				
1,5	2,7	20	12,1	0,011
2,5	3,3	31	7,41	0,010
4	3,7	45	4,61	0,0087
6	4,2	63	3,08	0,0074
10	5,4	105	1,83	0,0072
H07V-R				
1,5	3,0	21	12,1	10
2,5	3,6	33	7,41	0,0099
4	4,1	48	4,61	0,0082
6	4,5	66	3,08	0,0070
10	5,8	110	1,83	0,0067
16	6,8	167	1,15	0,0056
25	8,5	262	0,727	0,0053
35	9,6	353	0,524	0,0046
50	11,3	480	0,387	0,0046
70	12,6	672	0,268	0,0040
95	15,0	932	0,193	0,0039
120	16,4	1158	0,153	0,0035
150	18,4	1432	0,124	0,0035
185	20,3	1789	0,0991	0,0035
240	23,2	2325	0,0754	0,0034

Current ratings acc. to IEC 60364-5-523

Permissible operating temperature at conductor: 70°C; ambient temperature: 30°C

Cross-sectional area of conductor	Single core cables in insulating tubes, in a thermally insulated walls		Single core cables in insulating tubes on a wall		In open air *
	2	3	2	3	1
Number of loaded cores					
Cross-section, mm²	Current ratings in Ampere (A)				
1	-	-	-	-	19
1,5	14,5	13,5	17,5	15,5	24
2,5	19,5	18	24	21	32
4	26	24	32	28	42
6	34	31	41	36	54
10	46	42	57	50	73
16	61	56	76	68	98
25	80	73	101	89	129
35	99	89	125	110	158
50	119	108	151	134	198
70	151	136	192	171	245
95	182	164	232	207	292
120	210	188	269	239	344
150	240	216	-	-	391
185	273	245	-	-	448
240	321	286	-	-	528

* Current rating acc. to VDE 0298-4, ambient temperature: 30°C

Convention factors for deviating ambient temperature

Ambient Temperature, °C	10	15	20	25	30	35	40	45	50	55	60
Conversion factors	1,22	1,17	1,12	1,06	1,00	0,94	0,87	0,79	0,71	0,61	0,50

The information contained in this document, including the tables and drawings, are provided for illustrative purposes only and not a commercial offer; nor may it constitute the basis for pursuing any claim against TELE-FONIKA KABLE SA. The suitability of any product including properties, should be made by a qualified person; having already gained the appropriate permissions and documentation, to ensure compliance with any applicable law or regulation.