2491X / H05V-K / H07V-K EN 50525-2-31 Flexible Cable

Eland Product Group: A3X

APPLICATION

PVC panel wiring for use in the switch control, relay and instrumentation panels of power switchgear and for purposes such as internal connectors in rectifier equipment, motor starters and controllers.

CHARACTERISTICS

Voltage Rating Uo/U
H05V-K: 300/500V
H07V-K: 450/750V

Temperature Rating
Fixed: -30°C to +70°C
Flexed: -5°C to +70°C

Minimum Bending Radius
Fixed: 6 x overall diameter

CONSTRUCTION

Conductor
Class 5 flexible copper conductor

Insulation
PVC (Polyvinyl Chloride)

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

CABLE THIRD-PARTY ACCREDITATION

Cables are tested and accredited by BASEC, The British Approvals Service for Cables

STANDARDS

EN 50525-2-31, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.

UKAS ISO/IEC 17025 Accredited Testing Laboratory 8578
bsi. ISO 9001 Quality Management FS 672069 | ISO 14001 Environmental Management EMS 672067 | ISO 45001 Occupational Health and Safety Management OHS 672066

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.

CPR COMPLIANT EN 50575

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.

bsi. RoHS Trusted KITEMARK™ KM 634267 RoHS CE HAR

DIMENSIONS

H05V-K

ELAND PART NO.	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A3X*00050	0.5	2.2	9
A3X*00075	0.75	2.4	11
A3X*0010	1	2.5	14

H07V-K

ELAND PART NO.	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A3X*0015	1.5	2.9	20
A3X*0025	2.5	3.6	31
A3X*0040	4	4.1	46
A3X*0060	6	4.7	75
A3X*010	10	6.1	125
A3X*016	16	7.3	199
A3X*025	25	9	299
A3X*035	35	10.2	421
A3X*050	50	12.1	539
A3X*070	70	13.8	730
A3X*095	95	16.3	973

*Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below: e.g. A3XRD0015 = 1.5mm² Red

COLOUR CODES

COLOUR	Black	Blue	Grey	Green/ Yellow	Orange	Red	Pink	Yellow	Violet	Brown	White
CODE	BK	BL	GR	GY	OR	RD	PK	YW	VI	BR	WH

CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
		Plain Wires	Metal-Coated Wires
0.5	0.21	39	40.1
0.75	0.21	26	26.7
1	0.21	19.5	20
1.5	0.26	13.3	13.7
2.5	0.26	7.98	8.21
4	0.31	4.95	5.09
6	0.31	3.3	3.39
10	0.41	1.91	1.95
16	0.41	1.21	1.24
25	0.41	0.78	0.795
35	0.41	0.554	0.565
50	0.41	0.386	0.393
70	0.51	0.272	0.277
95	0.51	0.206	0.21

The above table is in accordance with EN 60228

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ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA mm²	IN A THERMAL INSULATED WALL Amps		ON A WALL Amps		IN FREE AIR mV/A/m
	2 Core	3 Core	2 Core	3 Core	1 Core
0.5	-	-	-	-	-
0.75	-	-	-	-	15
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

Ambient temperature of 30°C

DE-RATING FACTORS

AMBIENT TEMPERATURE	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
DE-RATING FACTOR	1.22	1.17	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61	0.50