

H07Z-U & H07Z-R(6491B)

Wire refer to EN 50525-3-41
450/750V



Certificate

Application

Installation in surface mounted or embedded conduits, or similar closed systems and for fixed protected installation in lighting fittings, appliances, switchgear and control gear particularly for situations in which low emissions of smoke and acid gas is required in case of burning.

Construction

No.	Classification	Code		Construction detail
①	Conductor	CU	U for Class1	Annealed copper conductor
			R for Class2	BS EN60228(IEC60228) Class 1 or 2
②	Insulation	LSOH		LSOH according to EN50363-5 EI5

Cable marking

The outer sheath is marked in ink printing as follows:

The printing information of H07Z-R is showed as:

BASEC PRYSMIAN(S) BS EN 50525-3-41 H07Z-R 450/750V 6491B CAT A YYYY SIZE XXXXm

The printing information of H07Z-U is showed as:

BASEC PRYSMIAN(S) BS EN 50525-3-41 H07Z-U 450/750V 6491B CAT A YYYY SIZE XXXXm

Note: 1.5mm² – 6 mm² does not print meter mark on sheath



Core Identification

Brown, Blue, Black, Grey, Y/G

Other colours available as customer requirement

Applicable Standards

Design guidelines	BS EN 50525-3-41
Halogen properties	IEC60754-1, IEC60754-2
Flame retardant properties	IEC60332-1, IEC60332-3-22
Smoke density	IEC 61034

Technical Data

Rated voltage	450/750 V
Test voltage	2.5kV/15min
Temperature range	-15℃-90℃

Bending Radius

Minimum bending radius	Cable diameter D mm			
	D≤8	8<D≤12	12<D≤20	D>20
Normal use	4D	5D	6D	6D
Careful bending at termination	2D	3D	4D	4D
Notes: D=overall diameter of cable				

Cable Type Coding

6491B

H07Z-U/H07Z-R CU/LSOH 450/750V

No. of cores	×	C.S.A	Conductor type	Shape of Conductor	Nominal thickness of insulation	Approx. overall diameter	Approx. weight	DC resistance at max.20°C	Minimum insulation resistance at 90°C
n		mm²			mm	mm	Kg/km	Ω/km	MΩ/km
H07Z-U CU/LSOH 450/750V									
1	×	1.5	Class1	circular	0.7	2.8	20	12.1	0.011
1	×	2.5	Class1	circular	0.8	3.4	32	7.41	0.010
1	×	4	Class1	circular	0.8	3.9	48	4.61	0.0085
1	×	6	Class1	circular	0.8	4.4	67	3.08	0.0070
H07Z-R CU/LSOH 450/750V									
1	×	1.5	Class2	circular	0.7	3.0	21	12.1	0.010
1	×	2.5	Class2	circular	0.8	3.6	33	7.41	0.009
1	×	4	Class2	circular	0.8	4.1	48	4.61	0.0077
1	×	6	Class2	circular	0.8	4.7	67	3.08	0.0065
1	×	10	Class2	circular	1.0	6.1	115	1.83	0.0065
1	×	16	Class2	circular	1.0	7.2	173	1.15	0.0050
1	×	25	Class2	circular	1.2	8.9	273	0.727	0.0050
1	×	35	Class2	circular	1.2	10.0	366	0.524	0.0043
1	×	50	Class2	circular*	1.4	10.9	472	0.387	0.0043
1	×	70	Class2	circular*	1.4	12.6	668	0.268	0.0035
1	×	95	Class2	circular*	1.6	14.7	931	0.193	0.0035
1	×	120	Class2	circular*	1.6	16.1	1157	0.153	0.0032
1	×	150	Class2	circular*	1.8	17.9	1428	0.124	0.0032
1	×	185	Class2	circular*	2.0	20.1	1764	0.0991	0.0032
1	×	240	Class2	circular*	2.2	22.7	2318	0.0754	0.0032
1	×	300	Class2	circular*	2.4	25.3	2929	0.0601	0.0030
1	×	400	Class2	circular*	2.6	29.0	3759	0.0470	0.0028
1	×	500	Class2	circular*	2.8	32.2	4793	0.0366	0.0028
1	×	630	Class2	circular*	2.8	35.9	6057	0.0283	0.0025

Note *: compacted conductor

H07Z-U/H07Z-R CU/LSOH 450/750V

No. of cores	×	C.S.A	Current rating-three phase AC			Voltage drop-three phase AC			Short circuit current (1s)
			Horizontal flat touching free air	Trefoil touching free air	Horizontal flat spaced free air	Horizontal flat touching free air	Trefoil touching free air	Horizontal flat spaced* free air	
n		mm²	A	A	A	mV/A/m	mV/A/m	mV/A/m	kA(1s)
H07Z-U CU/LSOH 450/750V									
1	×	1.5	—	—	—	27.000	27.000	27.000	0.21
1	×	2.5	—	—	—	16.000	16.000	16.000	0.36
1	×	4	—	—	—	10.000	10.000	10.000	0.57
1	×	6	—	—	—	6.800	6.800	6.800	0.86
H07Z-R CU/LSOH 450/750V									
1	×	1.5	—	—	—	27.000	27.000	27.000	0.21
1	×	2.5	—	—	—	16.000	16.000	16.000	0.36
1	×	4	—	—	—	10.000	10.000	10.000	0.57
1	×	6	—	—	—	6.800	6.800	6.800	0.86
1	×	10	—	—	—	4.000	4.000	4.000	1.43
1	×	16	—	—	—	2.500	2.500	2.500	2.29
1	×	25	141	135	182	1.600	1.600	1.650	3.58
1	×	35	176	169	226	1.150	1.150	1.200	5.01
1	×	50	216	207	275	0.870	0.870	0.890	7.15
1	×	70	279	268	353	0.620	0.610	0.650	10.01
1	×	95	342	328	430	0.460	0.450	0.490	13.59
1	×	120	400	383	500	0.380	0.370	0.420	17.16
1	×	150	464	444	577	0.320	0.310	0.370	21.45
1	×	185	533	510	661	0.280	0.260	0.330	26.46
1	×	240	634	607	781	0.240	0.220	0.290	34.32
1	×	300	736	703	902	0.210	0.195	0.270	42.90
1	×	400	868	823	1085	0.195	0.175	0.260	57.20
1	×	500	998	946	1253	0.180	0.160	0.250	71.50
1	×	630	1151	1088	1454	0.170	0.150	0.240	90.09

Note Current ratings at ambient temprature 30℃

*: Flat spaced by one cable diameter

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
225/001/008
Issue No: 5

Certificate of Product Approval

Licensee:
Suzhou Draka Cable Co., Ltd.
No. 88 Kangyuan Road, Xiangcheng Economic Development District, Suzhou, 215131, China

Factory:
No. 88 Kangyuan Road, Xiangcheng Economic Development District, Suzhou, 215131, China

Standard:
BS EN 50525-3-41:2011

Description:
Single core non-sheathed cables with LSHF crosslinked insulation

Details:
These cables conform to BS EN 50525-3-41 and, by reference, conform to the appropriate requirements of: BS EN 60228 (IEC 60228), BS EN 60332-1-2 (IEC 60332-1-2), BS EN 61034-2 (IEC 61034-2), BS EN 60754-1 (IEC 60754-1), BS EN 60754-2 (IEC 60754-2), BS EN 60684-2 (IEC 60684-2) specifications.

These cables have been additionally tested to BS EN 60332-3-22 (IEC 60332-3-22).

Materials:
Insulation EI5, Sheath None

Brand Name:
N/A

Origin Mark:
PRYSMIAN (S) or DRAKA (S)

Permissable Approval Marks:

BASEC name | BASEC roundel

Signed for and on behalf of
BASEC Group Ltd

Date: 14/02/2024

Date of original issue: 01/09/2021

Check BASEC website to verify validity.

BASEC Group Ltd, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK
Registered in England No. 13950143, Tel: +44 (0)1908 267300
Email: mail@basec.org.uk Web: www.basec.org.uk

BSF079 Issue 5 (20-03-2023)

UKAS PRODUCT CERTIFICATION 0004

Expiry date:
01/06/2027

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
225/001/008

Issue No: 5

Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
4.1	H07Z-U	Class 1	1	1.5	6
4.1	H07Z-R	Class 2	1	1.5	630

Signed for and on behalf of
BASEC Group Ltd

Date: 14/02/2024

Date of original issue: 01/09/2021

Check BASEC website to verify validity.

BASEC Group Ltd, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK
Registered in England No.13950143, Tel: +44 (0)1908 267300
Email: mail@basec.org.uk Web: www.basec.org.uk

BSF079 Issue 5 (20-03-2023)

UKAS PRODUCT CERTIFICATION 0004

Expiry date:
01/06/2027