



中国认可  
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检测  
TESTING  
CNAS L7928

Report No.	JC202409DX022
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# TEST REPORT

Sample	Aluminum core crosslinked polyethylene insulated polyvinyl chloride sheathed power cable
Type	YJLV-8.7/10 3×70
Clientele	Henan Huanghe Wire & Cable Co, Ltd.
Manufacturer	Henan Huanghe Wire & Cable Co, Ltd.
Test Category	type tests



**方圆检测认证集团有限公司**  
FANGYUAN TESTING AND CERTIFICATION GROUP CO., LTD



## Declaration

1. The report is invalid if it is not stamped with the "Special Seal for Testing Report" and the "Cross Seal".
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Sample	Aluminum core crosslinked polyethylene insulated polyvinyl chloride sheathed power cable	Type	YJLV-8.7/10 3×70
Clientele	Henan Huanghe Wire & Cable Co, Ltd.	Sample Number	18 meters
Manufacturer	Henan Huanghe Wire & Cable Co, Ltd.	Sample Description	well-tended appearance
Sample Reception date	September 18, 2024	Date of Test	September 19, 2024 to October 14, 2024
Test site	Wire and cable test room Environmental test Room 1 Combustion performance test room Environmental test Room 2	Test Category	type tests
Sample Description	8.7/10KV AL Conductor XLPE insulation Copper Tape Shield PVC inner sheath PVC outer sheath 3 core 70mm <sup>2</sup>		
Test Standard	IEC 60502-2:2014, Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Un—1.2 kV) up to 30 kV (Um=36 kV) —Part 2: Cables for rated voltages from 6 kV(Um=7.2 kV) up to 30 kV(Un —36 kV),MOD		
Test Item	type tests		
Test Conclusion	The inspected items meet the requirements of IEC 60502-2:2014. (Special seal for test report) date of issue: October 14, 2024		
Note	In "Single Conclusion" of the report, "P" indicates that a single conclusion meets the requirements, "F" indicates that a single conclusion does not meet the requirements, "N" indicates that it is not tested or considered, and "—" indicates that it is not applicable.		



Approved by: 易羽      Audited by: 何路华      Tested by: 王梦晗

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type specification			YJLV-8.7/10 3×70			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>structure</i></b>						
Color of insulated wire core under test	/	/	yellow	green	red	—
Number of conductor strands	/	At least 12	14	14	14	P
Thickness of insulation at its thinnest point	mm	Minimum 3.95	4.34	4.22	4.31	P
Insulation eccentricity	%	Max. 15	5	8	8	P
Copper strip thickness	mm	Minimum 0.09	0.10	0.10	0.10	P
Minimum overlay ratio of copper strip	%	Minimum 5	12	11	12	P
Strip thickness	mm	/		/		—
Strip clearance ratio	%	/		/		—
Thickness at the thinnest point of the sleeve	mm	/		/		—
Thickness of sheath at thinnest point	mm	Minimum 1.88		2.61		P
outside diameter of cable	mm	/		51.40		—

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type specification			YJLV-8.7/10 3 × 70	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>sign</i></b>				
Logo content	/	The sheath surface of the finished cable shall be continuously marked with the manufacturer's name, product model, specification and rated voltage	be up to the mustard	P
Sign continuity: The distance between the end of one complete sign and the beginning of the next complete sign	mm	Max. 500	117	P
Mark abrasion resistance	/	Ink printing marks should be erasable	be up to the mustard	P
Mark definition	/	All signs should be legible	be up to the mustard	P

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type specification			YJLV-8.7/10 3×70			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>electrical specifications</i></b>						
Conductor resistance (20°C)	Ω/km	Max. 0.443	0.413	0.423	0.427	P
Bending test and subsequent partial discharge test (Bend 3 times)	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P
partial discharge test	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P
tan δ	× 10 <sup>-4</sup>	Max. 10	2	3	3	P
Thermal cycle test and final partial discharge test (heating cycle lasts 8h, cycle repeat 20 times)	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P

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type specification			YJLV-8.7/10 3×70			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Electrical properties</i></b>						
Impulse voltage test and subsequent power frequency voltage test (impulse voltage 75kV, withstand 10 positive and 10 negative polarity) (Power frequency voltage 30.5kV, time 15min)	/	No-breakdown	No-breakdown	No-breakdown	No-breakdown	P
4h voltage test Test conditions: power frequency voltage 4U0 (35kV)	/	No-breakdown	No-breakdown	No-breakdown	No-breakdown	P
Stripping test conditions: stripping Angle approximately 180° Speed (250±50) mm/min Aging conditions: temperature (100±2) °C time 168h						
Peeling strength of sample before aging	N	Maximum 45 Minimum 5	21 16	20 17	18 15	P
Peeling strength of samples after aging	N	Maximum 45 Minimum 5	13 11	16 10	15 13	P
Insulation surface inspection	/	The insulation surface should be free of damage and residual semi-conductive shielding traces	No damage or residue	No damage or residue	No damage or residue	P
Pre-aging semi-conductive shield resistivity	Ω · m	Max. 500	130	141	133	P
Pre-aging semi-conductive shield resistivity	Ω · m	Max. 1000	12	15	17	P

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type specification			YJLV-8.7/10 3×70			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Electrical properties</i></b>						
Aged resistivity of semi-conductive shield	$\Omega \cdot m$	Max. 500	107	111	113	P
Aged semi-conductive shield resistivity	$\Omega \cdot m$	Max. 1000	18	17	18	P
<b><i>Mechanical properties of insulation</i></b>						
Pre-aging tensile strength - median value	N/mm <sup>2</sup>	Minimum 12.5	20.8	21.4	21.7	P
Elongation at break before aging - median value	%	Minimum 200	530	525	540	P
Mechanical properties of air oven after aging Aging conditions: temperature (135±3) °C, time 168h						
Change rate of tensile strength before and after aging	%	Max. ±25	+11	+9	+10	P
Change rate of elongation at break before and after aging	%	Max. ±25	+9	+9	+7	P

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type specification			YJLV-8.7/10 3×70			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Mechanical properties of insulation</i></b>						
Mechanical properties of the finished cable segment after aging Aging conditions: temperature (100±2) °C time 168h						
Change rate of tensile strength before and after aging	%	Max. ±25	+11	+12	+11	P
Change rate of elongation at break before and after aging	%	Max. ±25	-8	-9	-9	P
Thermal extension test conditions: temperature (200±3) °C, mechanical stress 20N/cm <sup>2</sup> Time 15min						
Elongation under load	%	Max. 175	40	50	40	P
Permanent elongation after cooling	%	Max. 15	0	0	0	P

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type specification			YJLV-8.7/10 3×70			
Test Item	Unit	Specified limit	Test result		Evaluation	
<b><i>Mechanical properties of insulation</i></b>						
Thermal shrinkage test temperature (130±3) °C, time 1h allowable shrinkage rate	%	Max. 4	1	2	2	P
Water absorption test - gravimetric analysis test conditions: temperature (85±2)°C time 336h weight increase value	mg/cm <sup>2</sup>	Max. 1	0.1	0.2	0.1	P
<b><i>Sheath mechanical and physical properties</i></b>						
Pre-aging tensile strength - median value	N/mm <sup>2</sup>	Minimum 12.5			18.5	P
Elongation at break before aging - median value	%	Minimum 150			280	P

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type specification			YJLV-8.7/10 3×70	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
Mechanical properties of air oven after aging. Aging conditions: temperature (100±2) °C, time 168h	N/mm <sup>2</sup>			
Tensile strength after aging - median value	N/mm <sup>2</sup>	Minimum 12.5	20.8	P
Elongation at break after aging - median value	%	Minimum 150	255	P
Change rate of tensile strength before and after aging	%	Max. ±25	+12	P
Change rate of elongation at break before and after aging	%	Max. ±25	-9	P

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type specification			YJLV-8.7/10 3×70	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
<p>Mechanical properties of the finished cable segment after aging Aging conditions: temperature (100±2) °C time 168h</p>				
<p>Change rate of tensile strength before and after aging</p>	%	Max. ±25	+9	P
<p>Change rate of elongation at break before and after aging</p>	%	Max. ±25	-11	P
<p>High temperature pressure test test conditions: (90±2) °C, time 6h indentation median value and the average thickness of the sheath ratio</p>	%	Max. 50	22	P

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type specification			YJLV-8.7/10 3×70	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
<p>Low temperature impact test of finished cable Test conditions: temperature (-15±2) °C, time 16h</p>	/	no cracking	no cracking	P
<p>Low temperature tensile test test conditions: temperature (-15±2) °C, time 4h elongation - minimum value</p>	%	Minimum 20	220	P
<p>Water absorption test - gravimetric analysis test conditions Temperature (70±2) °C for 24h weight increase value</p>	mg/cm <sup>2</sup>	/	/	—

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type specification			YJLV-8.7/10 3×70	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
Thermal shock test test conditions: temperature (150±3)°C, time 1h	/	no cracking	no cracking	P
Shrinkage test temperature (80±2) °C, Time 5 h Period 5 allowable shrinkage rate	%	/	/	—
Thermogravimetric test time 168h Temperature (100±2) °C Maximum allowable weight loss	mg/cm <sup>2</sup>	Max. 1.5	0.2	P

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type specification			YJLV-8.7/10 3×70	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Combustion performance test</i></b>				
Bunch-burning test Nominal volume of non-metallic materials: L/m fire supply time: min carbonization height above the bottom edge of the nozzle	m	/	/	—
Single vertical combustion test  The distance between the lower edge of the upper bracket and the starting point of the carbonized portion	mm	/	/	—
The burn extends down the distance of the lower edge of the top bracket	mm	/	/	—
flaming droplets	/	/	/	—
Other Notes	/			



—End of report—



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# TEST REPORT

Sample	Aluminum core crosslinked polyethylene insulated steel wire armouring PVC sheathed power cable
Type	YJLV32-8.7/15 3×240
Clientele	Henan Huanghe Wire & Cable Co, Ltd
Manufacturer	Henan Huanghe Wire & Cable Co, Ltd
Test Category	type tests



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Report No.: JC202409DX023

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Sample	Aluminum core crosslinked polyethylene insulated steel wire armouring PVC sheathed power cable	Type	YJLV32-8.7/15 3×240
Clientele	Henan Huanghe Wire & Cable Co, Ltd	Sample Number	18 meters
Manufacturer	Henan Huanghe Wire & Cable Co, Ltd	Sample Description	well-tended appearance
Sample Reception date	September 18, 2024	Date of Test	September 19, 2024 to October 14, 2024
Test site	Wire and cable test room Environmental test Room 1 Combustion performance test room Environmental test Room 2	Test Category	type tests
Sample Description	8.7/15KV AL Conductor XLPE insulation Copper Tape Shield PVC inner sheath Steel Wire armoured PVC outer sheath 3 core 240mm <sup>2</sup>		
Test Standard	IEC 60502-2:2014, Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Un—1.2 kV) up to 30 kV (Um=36 kV) —Part 2: Cables for rated voltages from 6 kV(Um=7.2 kV) up to 30 kV(Un —36 kV),MOD		
Test Item	type tests		
Test Conclusion	The inspected items meet the requirements of IEC 60502-2:2014. (Special seal for test report) date of issue: October 14, 2024		
Note	In "Single Conclusion" of the report, "P" indicates that a single conclusion meets the requirements, "F" indicates that a single conclusion does not meet the requirements, "N" indicates that it is not tested or considered, and "—" indicates that it is not applicable.		



Approved by: 易明      Audited by: 何路华      Tested by: 王梦晗

# TEST REPORT

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type specification			YJLV32-8.7/15 3×240			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>structure</i></b>						
Color of insulated wire core under test	/	/	yellow	green	red	—
Number of conductor strands	/	At least 30	33	33	33	P
Thickness of insulation at its thinnest point	mm	Minimum 3.95	4.14	4.06	4.18	P
Insulation eccentricity	%	Max. 15	9	12	8	P
Copper strip thickness	mm	Minimum 0.09	0.10	0.10	0.10	P
Minimum overlay ratio of copper strip	%	Minimum 5	13	11	12	P
Wire armouring diameter	mm	Minimum 3.00		3.18		P
Thickness at the thinnest point of the sleeve	mm	Minimum 1.32		2.31		P
Thickness of sheath at thinnest point	mm	Minimum 2.36		2.90		P
outside diameter of cable	mm	/		81.4		—

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type specification			YJLV32-8.7/15 3×240	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>sign</i></b>				
Logo content	/	The sheath surface of the finished cable shall be continuously marked with the manufacturer's name, product model, specification and rated voltage	be up to the mustard	P
Sign continuity: The distance between the end of one complete sign and the beginning of the next complete sign	mm	Max. 500	117	P
Mark abrasion resistance	/	Ink printing marks should be erasable	be up to the mustard	P
Mark definition	/	All signs should be legible	be up to the mustard	P

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type specification			YJLV32-8.7/15 3×240			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>electrical specifications</i></b>						
Conductor resistance (20°C)	Ω/km	Max. 0.125	0.119	0.120	0.119	P
Bending test and subsequent partial discharge test (Bend 3 times)	pC	detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P
partial discharge test	pC	detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P
tan δ	×10 <sup>-4</sup>	Max. 10	4	5	4	P
Thermal cycle test and final partial discharge test (heating cycle lasts 8h, cycle repeat 20 times)	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P

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type specification			YJLV32-8.7/15 3×240			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Electrical properties</i></b>						
Impulse voltage test and subsequent power frequency voltage test (impulse voltage 75kV, withstand 10 positive and 10 negative polarity) (Power frequency voltage 30.5kV, time 15min)	/	No-breakdown	No-breakdown	No-breakdown	No-breakdown	P
4h voltage test Test conditions: power frequency voltage 4U0 (35kV)	/	No-breakdown	No-breakdown	No-breakdown	No-breakdown	P
Stripping test conditions: stripping Angle approximately 180° Speed (250±50) mm/min Aging conditions: temperature (100±2) °C time 168h						
Peeling strength of sample before aging	N	Maximum 45 Minimum 5	24 18	21 18	19 17	P
Peeling strength of samples after aging	N	Maximum 45 Minimum 5	14 10	17 11	14 12	P
Insulation surface inspection	/	The insulation surface should be free of damage and residual semi-conductive shielding traces	No damage or residue	No damage or residue	No damage or residue	P
Pre-aging semi-conductive shield resistivity	Ω · m	Max. 500	132	140	135	P
Pre-aging semi-conductive shield resistivity	Ω · m	Max. 1000	15	18	15	P

# TEST REPORT

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type specification			YJLV32-8.7/15 3×240			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Electrical properties</i></b>						
Aged resistivity of semi-conductive shield	$\Omega \cdot m$	Max. 500	108	113	111	P
Aged semi-conductive shield resistivity	$\Omega \cdot m$	Max. 1000	19	18	18	P
<b><i>Mechanical properties of insulation</i></b>						
Pre-aging tensile strength - median value	N/mm <sup>2</sup>	Minimum 12.5	19.7	20.5	19.7	P
Elongation at break before aging - median value	%	Minimum 200	495	470	490	P
Mechanical properties of air oven after aging Aging conditions: temperature (135±3) °C, time 168h						
Change rate of tensile strength before and after aging	%	Max. ±25	+9	-6	+10	P
Change rate of elongation at break before and after aging	%	Max. ±25	-4	+5	-5	P

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type specification			YJLV32-8.7/15 3×240			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Mechanical properties of insulation</i></b>						
<p>Mechanical properties of the finished cable segment after aging Aging conditions:  temperature (100±2) °C  time 168h</p>						
Change rate of tensile strength before and after aging	%	Max. ±25	+6	+6	-8	P
Change rate of elongation at break before and after aging	%	Max. ±25	-8	+7	+4	P
<p>Thermal extension test conditions: temperature (200±3) °C, mechanical stress 20N/cm<sup>2</sup>  Time 15min</p>						
Elongation under load	%	Max. 175	50	45	45	P
Permanent elongation after cooling	%	Max. 15	0	0	0	P

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type specification			YJLV32-8.7/15 3×240				
Test Item	Unit	Specified limit	Test result			Evaluation	
<b><i>Mechanical properties of insulation</i></b>							
Thermal shrinkage test temperature (130±3) °C, time 1h allowable shrinkage rate	%	Max. 4	1	1	1	P	
Water absorption test - gravimetric analysis test conditions: temperature (85±2)°C time 336h weight increase value	mg/cm <sup>2</sup>	Max. 1	0.2	0.1	0.2	P	
<b><i>Sheath mechanical and physical properties</i></b>							
Pre-aging tensile strength - median value	N/mm <sup>2</sup>	Minimum 12.5				18.5	P
Elongation at break before aging - median value	%	Minimum 150				270	P

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type specification			YJLV32-8.7/15 3×240	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
Mechanical properties of air oven after aging. Aging conditions: temperature (100±2) °C, time 168h	N/mm <sup>2</sup>			
Tensile strength after aging - median value	N/mm <sup>2</sup>	Minimum 12.5	20.6	P
Elongation at break after aging - median value	%	Minimum 150	250	P
Change rate of tensile strength before and after aging	%	Max. ±25	+11	P
Change rate of elongation at break before and after aging	%	Max. ±25	-7	P

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type specification			YJLV32-8.7/15 3×240	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
<p>Mechanical properties of the finished cable segment after aging Aging conditions: temperature (100±2) °C time 168h</p>				
Change rate of tensile strength before and after aging	%	Max. ±25	+13	P
Change rate of elongation at break before and after aging	%	Max. ±25	-9	P
High temperature pressure test test conditions: (90±2) °C, time 6h indentation median value and the average thickness of the sheath ratio	%	Max. 50	23	P

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type specification			YJLV32-8.7/15 3×240	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
<p>Low temperature impact test of finished cable Test conditions: temperature (-15±2) °C, time 16h</p>	/	no cracking	no cracking	P
<p>Low temperature tensile test test conditions: temperature (-15±2) °C, time 4h elongation - minimum value</p>	%	Minimum 20	250	P
<p>Water absorption test - gravimetric analysis test conditions Temperature (70±2) °C for 24h weight increase value</p>	mg/cm <sup>2</sup>	/	/	—

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type specification			YJLV32-8.7/15 3×240	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
Thermal shock test test conditions: temperature (150±3)°C, time 1h	/	no cracking	no cracking	P
Shrinkage test temperature (80±2) °C, Time 5 h Period 5 allowable shrinkage rate	%	/	/	—
Thermogravimetric test time 168h Temperature (100±2) °C Maximum allowable weight loss	mg/cm <sup>2</sup>	Max. 1.5	0.1	P

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type specification			YJLV32-8.7/15 3×240	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Combustion performance test</i></b>				
Bunch-burning test Nominal volume of non-metallic materials: 1L/m fire supply time: min carbonization height above the bottom edge of the nozzle	m	/	/	—
Single vertical combustion test  The distance between the lower edge of the upper bracket and the starting point of the carbonized portion	mm	/	/	—
The burn extends down the distance of the lower edge of the top bracket	mm	/	/	—
flaming droplets	/	/	/	—
Other Notes	/			

—End of report—





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CNAS L7928

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# TEST REPORT

Sample	Aluminum core crosslinked polyethylene insulated steel wire armouring PVC sheathed power cable
Type	YJLV32-8.7/15 3×95
Clientele	Henan Huanghe Wire & Cable Co, Ltd.
Manufacturer	Henan Huanghe Wire & Cable Co, Ltd.
Test Category	type tests



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# TEST REPORT

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Sample	Aluminum core crosslinked polyethylene insulated steel wire armouring PVC sheathed power cable	Type	YJLV32-8.7/15 3×95
Clientele	Henan Huanghe Wire & Cable Co, Ltd.	Sample Number	18 meters
Manufacturer	Henan Huanghe Wire & Cable Co, Ltd.	Sample Description	well-tended appearance
Sample Reception date	September 18, 2024	Date of Test	September 19, 2024 to October 14, 2024
Test site	Wire and cable test room Environmental test Room 1 Combustion performance test room Environmental test Room 2	Test Category	type tests
Sample Description	8.7/15KV AL Conductor XLPE insulation Copper Tape Shield PVC inner sheath Steel Wire armoured PVC outer sheath 3 core 95mm <sup>2</sup>		
Test Standard	IEC 60502-2:2014, Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Un—1.2 kV) up to 30 kV (Um=36 kV) —Part 2: Cables for rated voltages from 6 kV(Um=7.2 kV) up to 30 kV(Un —36 kV),MOD		
Test Item	type tests		
Test Conclusion	The inspected items meet the requirements of IEC 60502-2:2014. (Special seal for test report) date of issue: October 14, 2024		
Note	In "Single Conclusion" of the report, "P" indicates that a single conclusion meets the requirements, "F" indicates that a single conclusion does not meet the requirements, "N" indicates that it is not tested or considered, and "—" indicates that it is not applicable.		



Approved by:

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Tested by:

王梦晗

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type specification			YJLV32-8.7/15 3×95			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>structure</i></b>						
Color of insulated wire core under test	/	/	yellow	green	red	—
Number of conductor strands	/	At least 15	16	16	16	P
Thickness of insulation at its thinnest point	mm	Minimum 3.95	4.39	4.47	4.48	P
Insulation eccentricity	%	Max. 15	6	9	7	P
Copper strip thickness	mm	Minimum 0.09	0.10	0.10	0.10	P
Wire armouring diameter	mm	Minimum 2.38		3.19		P
Thickness at the thinnest point of the sleeve	mm	Minimum 1.08		1.81		P
Thickness of sheath at thinnest point	mm	Minimum 1.96		3.41		P
outside diameter of cable	mm	/		66.74		—

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Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>sign</i></b>				
Logo content	/	The sheath surface of the finished cable shall be continuously marked with the manufacturer's name, product model, specification and rated voltage	be up to the mustard	P
Sign continuity: The distance between the end of one complete sign and the beginning of the next complete sign	mm	Max. 500	120	P
Mark abrasion resistance	/	Ink printing marks should be erasable	be up to the mustard	P
Mark definition	/	All signs should be legible	be up to the mustard	P

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type specification			YJLV32-8.7/15 3×95			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>electrical specifications</i></b>						
Conductor resistance (20°C)	Ω/km	Max. 0.320	0.301	0.305	0.310	P
Bending test and subsequent partial discharge test (Bend 3 times)	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P
partial discharge test	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P
tan δ	× 10 <sup>-4</sup>	Max. 10	4	5	4	P
Thermal cycle test and final partial discharge test (heating cycle lasts 8h, cycle repeat 20 times)	pC	No detectable discharge exceeding the declared sensitivity	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	No detectable discharge exceeding the declared sensitivity was detected	P

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Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Electrical properties</i></b>						
Impulse voltage test and subsequent power frequency voltage test (impulse voltage 75kV, withstand 10 positive and 10 negative polarity) (Power frequency voltage 30.5kV, time 15min)	/	No-breakdown	No-breakdown	No-breakdown	No-breakdown	P
4h voltage test Test conditions: power frequency voltage 4U0 (35kV)	/	No-breakdown	No-breakdown	No-breakdown	No-breakdown	P
Stripping test conditions: stripping Angle approximately 180° Speed (250±50) mm/min Aging conditions: temperature (100±2) °C time 168h						
Peeling strength of sample before aging	N	Maximum 45 Minimum 5	24 18	21 18	19 17	P
Peeling strength of samples after aging	N	Maximum 45 Minimum 5	14 10	17 11	14 12	P
Insulation surface inspection	/	The insulation surface should be free of damage and residual semi-conductive shielding traces	No damage or residue	No damage or residue	No damage or residue	P
Pre-aging semi-conductive shield resistivity	Ω · m	Max. 500	130	141	133	P
Pre-aging semi-conductive shield resistivity	Ω · m	Max. 1000	12	15	17	P

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type specification			YJLV32-8.7/15 3×95			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Electrical properties</i></b>						
Aged resistivity of semi-conductive shield	$\Omega \cdot m$	Max. 500	107	111	113	P
Aged semi-conductive shield resistivity	$\Omega \cdot m$	Max. 1000	18	17	18	P
<b><i>Mechanical properties of insulation</i></b>						
Pre-aging tensile strength - median value	N/mm <sup>2</sup>	Minimum 12.5	20.8	20.4	19.7	P
Elongation at break before aging - median value	%	Minimum 200	495	490	480	P
Mechanical properties of air oven after aging Aging conditions: temperature (135±3) °C, time 168h						
Change rate of tensile strength before and after aging	%	Max. ±25	+7	-5	+6	P
Change rate of elongation at break before and after aging	%	Max. ±25	-7	-7	+9	P

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type specification			YJLV32-8.7/15 3×95			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Mechanical properties of insulation</i></b>						
<p>Mechanical properties of the finished cable segment after aging Aging conditions: temperature (100±2) °C time 168h</p>						
<p>Change rate of tensile strength before and after aging</p>	%	Max. ±25	+6	-8	-8	P
<p>Change rate of elongation at break before and after aging</p>	%	Max. ±25	-8	-10	6	P
<p>Thermal extension test conditions: temperature (200±3) °C, mechanical stress 20N/cm<sup>2</sup> Time 15min</p>						
<p>Elongation under load</p>	%	Max. 175	65	55	55	P
<p>Permanent elongation after cooling</p>	%	Max. 15	0	0	0	P

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type specification			YJLV32-8.7/15 3×95			
Test Item	Unit	Specified limit	Test result			Evaluation
<b><i>Mechanical properties of insulation</i></b>						
Thermal shrinkage test temperature (130±3) °C, time 1h allowable shrinkage rate	%	Max. 4	1	1	1	P
Water absorption test - gravimetric analysis test conditions: temperature (85±2)°C time 336h weight increase value	mg/cm <sup>2</sup>	Max. 1	0.1	0.2	0.1	P
<b><i>Sheath mechanical and physical properties</i></b>						
Pre-aging tensile strength - median value	N/mm <sup>2</sup>	Minimum 12.5	18.6			P
Elongation at break before aging - median value	%	Minimum 150	280			P

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type specification			YJLV32-8.7/15 3×95	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
Mechanical properties of air oven after aging. Aging conditions: temperature (100±2) °C, time 168h	N/mm <sup>2</sup>			
Tensile strength after aging - median value	N/mm <sup>2</sup>	Minimum 12.5	20.2	P
Elongation at break after aging - median value	%	Minimum 150	260	P
Change rate of tensile strength before and after aging	%	Max. ±25	9	P
Change rate of elongation at break before and after aging	%	Max. ±25	-7	P

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type specification			YJLV32-8.7/15 3×95	
Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
<p>Mechanical properties of the finished cable segment after aging Aging conditions: temperature (100±2) °C time 168h</p>				
Change rate of tensile strength before and after aging	%	Max. ±25	+9	P
Change rate of elongation at break before and after aging	%	Max. ±25	-4	P
High temperature pressure test test conditions: (90±2) °C, time 6h indentation median value and the average thickness of the sheath ratio	%	Max. 50	22	P

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Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
<p>Low temperature impact test of finished cable Test conditions: temperature (-15±2) °C, time 16h</p>	/	no cracking	no cracking	P
<p>Low temperature tensile test test conditions: temperature (-15±2) °C, time 4h elongation - minimum value</p>	%	Minimum 20	225	P
<p>Water absorption test - gravimetric analysis test conditions Temperature (70±2) °C for 24h weight increase value</p>	mg/cm <sup>2</sup>	/	/	—

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Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Sheath mechanical and physical properties</i></b>				
Thermal shock test test conditions: temperature (150±3)°C, time 1h	/	no cracking	no cracking	P
Shrinkage test temperature (80±2) °C, Time 5 h Period 5 allowable shrinkage rate	%	/	/	—
Thermogravimetric test time 168h Temperature (100±2) °C Maximum allowable weight loss	mg/cm <sup>2</sup>	Max. 1.5	0.2	P

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Test Item	Unit	Specified limit	Test result	Evaluation
<b><i>Combustion performance test</i></b>				
<p>Bunch-burning test Nominal volume of non-metallic materials: 1L/m fire supply time: min carbonization height above the bottom edge of the nozzle</p>	m	/	/	—
<p>Single vertical combustion test</p> <p>The distance between the lower edge of the upper bracket and the starting point of the carbonized portion</p>	mm	/	/	—
<p>The burn extends down the distance of the lower edge of the top bracket</p>	mm	/	/	—
<p>flaming droplets</p>	/	/	/	—
Other Notes	/			



——End of report——