160008223840

中国认可
国际互认
检测
TESTING
CNAS L0207

报告编号
Reference№ CT21-03176

检 测 报 告
Test Report

样品名称 Name of sample	Concentric-Lay-Stranded Aluminum Conductors, Aluminum-Alloy Reinforced
样品型号 Type of sample	ACAR ASTM B524 ACAR
委托方 Consigner	HANGZHOU EASY ELECTRIC WIRE AND CABLE CO., LTD
试验类型 Kind of test	Commission test

上海国缆检测股份有限公司
SHANGHAI NATIONAL CENTER OF TESTING AND INSPECTION FOR ELECTRIC CABLE AND WIRE CO., LTD

国家电线电缆质量检验检测中心
CHINA NATIONAL CENTRE OF TESTING AND INSPECTION FOR ELECTRIC CABLE AND WIRE

TICW 国缆检测
地址：上海市宝山区真陈路888号 邮编：200444
电话：021-65493333 传真：021-65490171
电子邮箱：ewec@ticw.com.cn
报告查询网站：www.ticw.com.cn

Type and size	ACAR ASTM B524 ACAR-1250MCM-48/13	Reference No.	CT21-03176

No.	Test Items	Unit	Requirements	Test Results	Verdict
1	Structure size				
1.1	Number of Al wires	No.	48	48	P
1.2	Number of Al alloy wires	No.	13	13	P
2	Conductor diameter	mm	/	32.74	N
3	Surface quality		The conductor shall be free of all imperfections not consistent with good commercial practice	Pass	P
4	Lay				
4.1	Direction of lay		Adjacent wire layers shall be stranded with reverse lay directions, the direction of lay of the external layer shall be "right-hand".	Reverse,"right-hand"	P
4.2	Lay ratio		Lay radio of every layer, should not more than the close inner one.		P
4.2.1	Inner layer		10~16	15.4	P
4.2.2	Adjacent inner layer		10~16	12.4	P
4.2.3	Adjacent outer layer		10~16	12.2	P
4.2.4	Outer layer		10~16	10.9	P
5	The properties of Al alloy wire (Stranded)				
5.1	Appearance		The wire shall be free of all imperfections not consistent with good commercial practice.	Pass	P
5.2	Diameter	mm	3.635±0.036	3.633	P

Note: "P" means this item does meet the requirement, "F" means this item does not meet the requirement, "N" means this item does not require to the verdict.

Type and size	ACAR ASTM B524 ACAR-1250MCM-48/13	Reference No.	CT21-03176

No.	Test Items	Unit	Requirements	Test Results	Verdict
5.3	Tensile strength				
5.3.1	Average for a Lot	MPa	≥299 (315×0.95)	341	P
5.3.2	Individual tests	MPa	≥290 (305×0.95)	328	P
5.4	Elongation after fracture (L_0=250 mm) (Individual test)	%	≥3.0	5.4	P
5.5	DC resistivity at 20℃	Ω· mm²/m	≤0.032841	0.031930	P
5.6	Bending(looped around its own diameter with a mandrel)		No fracture shall occur.	No fracture occurred.	P
6	Properties of Al wires (stranded)				
6.1	Appearance		The wire shall be free of imperfections not consistent with good commercial practice.	Pass	P
6.2	Diameter	mm	3.635±0.036	3.636	P
6.3	Tensile strength				
6.3.1	Average for a Lot	MPa	≥162 (170×0.95)	184	P
6.3.2	Individual tests	MPa	≥152 (160×0.95)	175	P
6.4	Elongation after fracture (L_0=250 mm)				
6.4.1	Average for a Lot	%	≥1.9	2.0	P
6.4.2	Individual tests	%	≥1.8	2.0	P

Note: "P" means this item does meet the requirement, "F" means this item does not meet the requirement, "N" means this item does not require to the verdict.

Type and size	ACAR ASTM B524 ACAR-1250MCM-48/13		Reference No.	CT21-03176	
No.	Test Items	Unit	Requirements	Test Results	Verdict
6.5	DC resistivity at 20℃				
6.5.1	Average for a Lot	Ω· mm²/m	≤0.028172	0.028063	P
6.5.2	Individual tests	Ω· mm²/m	≤0.028265	0.028160	P
6.6	Bending(looped around its own diameter with a mandrel)		No fracture shall occur.	No fracture occurred.	P

End of Report

Note: "P" means this item does meet the requirement, "F" means this item does not meet the requirement, "N" means this item does not require to the verdict.