

October, 07th 2015

Type Test Report

DATWYLER PVC – Elevator travelling cable – FL

Cable Type: 6677-F

Cable Item No.: 148833

Standards with reference to: EN 50214 / EN 50288-5-2

Application: Elevator travelling flat cable for indoor and panoramic elevators.

i.v. Stefan Regli
Quality Manager
Safety, Elevator and Automation



i.v. André Marrer
Head of Sales and Product Management Cables



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Dätwyler type: 6677-F; Part-no. 148833

Dimension: 24 G x 0.75mm²

With reference to EN 50214 (clause 5)

Ref. No.	Tests	Test method	Specified values	Results
1	Electrical Tests			
1.1	Resistance of conductors	HD 21.2 / 2.1	0.75 mm ² < 26 Ohm/km	PASS
1.2	Voltage test on completed cable at 2000 V	HD 21.2 / 2.2	No breakdown	PASS
1.3	Voltage test on cores at 1500 V	HD 21.2 / 2.3	No breakdown	PASS
1.4	Insulation resistance at 70°C	HD 21.2 / 2.4	0.75 mm ² > 0.011 MOhm*km	PASS
1.5	Long term resistance of insulation to direct current	HD 21.2 / 2.5	No breakdown	PASS
2	Constructional and dimensional characteristics			
2.1	Compliance with constructional provisions	IEC 60228 HD 21.1 HD 21.1	Conductor: Classe 5 Insulation: T15 Sheath: TM4	PASS PASS PASS
2.2	Measurement of insulation thickness	HD 21.2 / 1.9	mean > 0.6 mm	PASS
2.3	Measurement of sheath thickness	EN 50214 / 5.1.3.5	e1: minimum > 0.6 mm e2: mean > 0.8 mm e3: mean > 1.2 mm	PASS PASS PASS
3	Mechanical properties of insulation			
3.1	Tensile test before and after ageing	EN 60811-1-1 / 9.1	Tensile strength > 10.0 N/mm ² Elongation > 150 %	PASS
3.2	Loss of mass test	EN 60811-3-2 / 8	Mass loss < 2 mg/cm ²	PASS
4	Mechanical properties of sheath			
4.1	Tensile test before and after ageing	EN 60811-1-1 / 9.2	Tensile strength > 10.0 N/mm ² Elongation > 150 %	PASS PASS
4.2	Loss of mass test	EN 60811-3-2 / 8	Mass loss < 2 mg/cmm ²	PASS
5	Pressure test at high temperature			
5.1	Insulation	EN 60811-3-1 / 8.1	Deformation < 50 %	PASS
5.2	Sheath	EN 50214 / A.2	Deformation < 50 %	PASS
6	Bending and impact test at low temperature			
6.1	Bending test for insulation -30°C	EN 60811-1-4 / 8.1	No cracks	PASS
6.2	Bending test for sheath	EN 60811-1-4 / 8.2	No cracks	PASS
6.5	Impact test for insulation -30°C	EN 60811-1-4 / 8.5	No cracks	PASS
6.6	Impact test for sheath - 30°C	EN 50214 / A.3	No cracks	PASS
6.7	Unrolling test at low temperature -20°C	EN 50214 / A.4	Coil free from the remainder	PASS
7	Heat shock test			
7.1	Insulation	EN 60811-3-1 / 9	No cracks	PASS
7.2	Sheath	EN 50214 / A.5	No cracks	PASS
8	Mechanical properties of complete cables			
8.1	Static flexibility test	EN 50214 / A.6	Distance L < 700 mm	PASS
8.2	Flexing test	EN 50214 / A.7	No short circuit	PASS
8.3	Adherence test between cores and sheath	EN 50214 / A.10	Sliding force > 3.0 N	PASS
9	Test under fire conditions			
		EN 50214 / A.11	Distance > 50 mm	PASS