

Electrical Cable Test Datasheet

Sample / Dummy Data for Testing Purposes

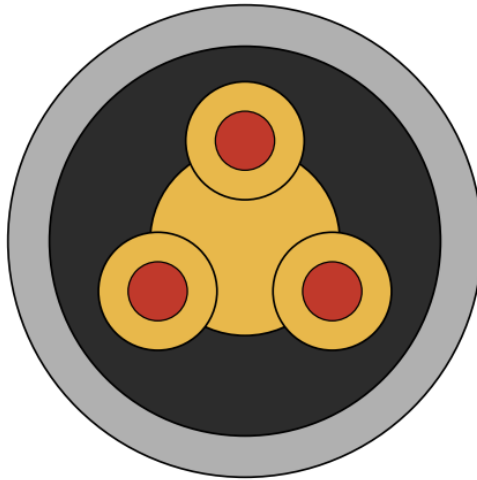
General Information

Parameter	Value
Cable type	XLPE Insulated, PVC Sheathed Power Cable
Cable code	XLPE/PVC-3C-95
Manufacturer	Al-Furat Cables Co.
Standard	IEC 60502-1
Voltage rating	0.6/1 kV
Batch / Lot no.	BL-2026-0714
Manufacturing date	2026-06-15
Test date	2026-07-20
Sample length	5 meters
Number of cores	3
Conductor material	Copper, stranded, Class 2

Construction Details

Parameter	Value
Conductor cross-section	95 mm ²
Insulation thickness	2.4 mm
Insulation material	XLPE (Cross-linked Polyethylene)
Sheath material	PVC (Type ST2)
Sheath thickness	2.2 mm
Overall diameter	32.5 mm
Nominal weight	2,450 kg/km

3-Core XLPE/PVC Cable Cross-Section



Electrical Test Results

Test	Result	Spec Limit	Status
Conductor resistance @ 20°C	0.193 Ω/km	≤ 0.201 Ω/km	Pass
Insulation resistance	285 MΩ·km	≥ 100 MΩ·km	Pass
High voltage test (AC, 5 min)	3.5 kV, no breakdown	No breakdown	Pass
Spark test	6 kV, no fault	No fault	Pass

Mechanical Test Results

Test	Result	Spec Limit	Status
Tensile strength (conductor)	245 N/mm²	≥ 200 N/mm²	Pass
Elongation at break	22%	≥ 12%	Pass
Bending test	No cracks, 3 cycles	No cracks	Pass

Physical Test Results

Test	Result	Spec Limit	Status
Insulation thickness check	2.42 mm avg	≥ 2.3 mm	Pass
Sheath thickness check	2.25 mm avg	≥ 2.0 mm	Pass
Flame retardancy (IEC 60332-1)	Self-extinguished, 60s	Self-extinguishing	Pass

Environmental / Aging Tests

Test	Result	Spec Limit	Status
Thermal aging (135°C, 168 hrs)	92% tensile retention	≥ 80% retention	Pass
Water absorption test	1.8 mg/cm²	≤ 5 mg/cm²	Pass

Inspection Summary

Field	Value
Overall result	PASS
Inspected by	Eng. Sara Al-Kaabi
Approved by	Eng. Mohammed Al-Rashid
QC stamp / reference	QC-2026-0714-A