



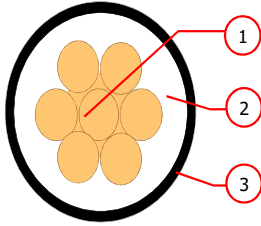
TOGETHER WE GROW

PT JEMBO CABLE COMPANY Tbk.

Schedule of Technical Data

TCU/PVC/NYLON
600 V

FAA AC 150/5345-7F



- 1. Conductor : Tinned Annealed copper wire class 2
- 2. Insulation : Extruded PVC 105° C
- 3. Outer Sheath : Nylon Jacket (Black)

Core identification : White

Marking by Ink Jet Printing :

e.g. JEMBO CABLE TCU/PVC/NYLON 4 mm² 600 V

Length Marking by Ink Jet Printing with interval 1 meter

CONSTRUCTION

Item Number	Nominal Size	Conductor			Insulation	Nylon Jacket	Approx. OD of Cable	Approx. Cable Weight	Standard Length per drum
		No of wire	Shape	Approx. dia.	Nom. Thickness	Nom. Thickness			
	mm ²	-	-	mm	mm	mm	mm	kg/km	m
A060503010004RMC	1 x 4	7	rm	2,58	0,51	0,3	4,4	50	1000

rm : Round Stranded

Tolerance of overall diameter : OD ≤ 20 mm : ± 1.0 mm, 20 mm < OD ≤ 40 mm : ± 2 mm, OD > 40 mm : ± 5%

CHARACTERISTICS

Item Number	Nominal Size	Max. DC Conductor Resistance at 20°C	Min. Insulation Resistance at 20°C	Short Circuit at 1 sec.	AC Voltage test
	mm ²	Ohm/km	M.Ohm.km	kA	kV / 5min.
A060503010004RMC	1 x 4	4,7	25	0,43	3,5

- Minimum bending radius:

- Installed : 12 x OD

- Standard packing : wooden drum

TYPE TEST CERTIFICATE

SERTIFIKAT PENGUJIAN JENIS

Certificate No.: QI-23/01/0187

Nomor Sertifikat

Issued date: 18 January 2023

Diterbitkan tanggal

TESTING OBJECT : Power cable (*Kabel listrik tiga inti*)
Objek pengujian
TYPE : CU/PVC/NYLON
Jenis
SIZE : 1 x 4 mm²
Ukuran
RATED VOLTAGE : 600 V
Tegangan
BRAND : JEMBO CABLE
Merek
TESTED FOR : PT JEMBO CABLE COMPANY, Tbk.
Diuji untuk
ADDRESS : Jl. Pajajaran Desa Gandasari , Kec. Jatiuwung, Tangerang 15137
Alamat
DATE OF TEST : 03 January 2023 – 17 January 2023
Tanggal uji

Test results on the object tested comply with the standard requirement:
Hasil pengujian pada objek yang diuji memenuhi persyaratan standar:

TYPE B FAA AC 150/5345-7F, NEMA WC 70/ICEAS-95-658 & AS 1125

Referring to test report no.: QI-23/01/0187
Berdasarkan laporan pengujian nomor : QI-23/01/0187

The certificate applies only the object tested. The responsibility for conformity of any object having the same designations with that tested rests with manufacturer.

Sertifikat ini hanya berlaku untuk objek yang diuji. Tanggung jawab kesesuaian pada setiap objek yang diuji memiliki penunjukan yang sama dengan objek yang diuji dengan pabrikan.

Tangerang, 18 January 2023



Sugiyanto
Electric Manager
Qualis Lab.

Valid until : 18 January 2028
Berlaku hingga 18 January 2028

This certificate is good as long as the related standard is valid
Sertifikat ini berlaku sepanjang standar uji terkait masih berlaku

The results relate only to the items tested. This report shall not be reproduced except in full.
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PT. Qualis Indonesia || Testing, Certification, Inspection, Calibration

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T: (021) 4585 0885/87 || F: (021) 4585 0661 || www.qualis-indonesia.com

TEST REPORT

LAPORAN HASIL UJI

Test Category <i>Kategori uji</i>	TYPE TEST <i>Uji Jenis</i>	Test report no. <i>No. laporan uji</i>	QI-23/01/0187
Work order no. <i>No. order kerja</i>	WO/2023010232	Issue date <i>Tanggal penerbitan</i>	18 January 2023
Test performance date <i>Tanggal pengujian</i>	03 January 2023 – 17 January 2023	Valid until <i>Berlaku hingga</i>	18 January 2028

Client's name <i>Namaklien</i>	PT JEMBO CABLE COMPANY, Tbk.
Address <i>Alamat</i>	Jl. Pajajaran Desa Gandasari , Kec. Jatiuwung, Tangerang 15137

Product under test <i>Produk uji</i>	Power cable (<i>Kabel listrik tiga inti</i>)
Type <i>Jenis</i>	CU/PVC/NYLON
Size <i>Ukuran</i>	1 x 4 mm ²
Rated voltage <i>Tegangan</i>	600 V
Brand <i>Merek</i>	JEMBO CABLE
Customer <i>Pelanggan</i>	PT JEMBO CABLE COMPANY, Tbk.
Sample submission date <i>Tanggal penerimaan sampel</i>	02 January 2023
Test method <i>Metode uji</i>	TYPE B FAA AC 150/5345-7F, NEMA WC 70/ICEAS-95-658 & AS 1125
Sample condition <i>Kondisi sampel</i>	The sample was submitted by customer, received in good condition and with no defect observed
Test laboratory <i>Laboratorium penguji</i>	PT. Qualis Indonesia

Tested by
Diuji oleh

Suhartono
Technician

Reviewed by
Diperiksa oleh

Sugihartono
Supervisor

Approved by
Disahkan oleh

Sugiyanto
Laboratory Manager

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Description sample

Keterangan contoh uji

Description sample <i>Keterangan contoh uji</i>	
Type <i>Jenis</i>	: CU/PVC/NYLON
Size <i>Ukuran</i>	: 1 x 4mm ²
Rated voltage <i>Tegangan pengenal</i>	: 600 V
Total core <i>Jumlah inti</i>	: 1
Cross sectional area <i>Luas penampang area</i>	: 4 mm ²
Conductor material <i>Bahan konduktor</i>	: Copper
Insulation material <i>Bahan insulasi</i>	: PVC
Sheath material <i>Bahan selubung</i>	: NYLON
Color <i>Warna</i>	: Black / Hitam
Quantity of sample <i>Jumlah sampel</i>	: 100 m

Summary of test result

Ringkasan laporan hasil uji

The type test results for this cable are comply to standard requirements TYPE B FAA AC150/5345-7F, NEMA WC70/ICEAS-95-658 & AS 1125

Hasil pengujian jenis untuk kabel tersebut memenuhi persyaratan standar TYPE B FAA AC150/5345-7F, NEMA WC71/ICEAS-96-658, & AS 1125

Testing and measuring equipment:*Peralatan pengujian dan pengukuran*

No.	Equipment
1	Conductor resistance Tester
2	AC Withstand Voltage Tester
3	High Voltage Insulation Hi Tester
4	Profile Projector For Dimension Measurement
5	Micrometer and dial gauge
6	Vernier Caliper
7	Tensile Strength Machine
8	Analitical Balance
9	Oven
10	Water chamber
11	Volume resistivity test set
12	Cold chamber

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APPENDIX DATA OF TEST RESULTS
LAMPIRAN DATA HASIL UJI

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1. Electrical Test.

1.1 Resistance of conductor at 20°C

Item test	Unit	Requirement	Measurement	Conformity
- Resistance of conductor at 20°C	M.Ω./km	Max : 4.61	4.52	Passed

1.2 Insulation Resistance test

Item test	Unit	Requirement	Measurement	Conformity
- Insulation Resistance at 15.6°C.	M.Ω.1000 feet	Min : 3000	27.598	Passed

1.3 Voltage test for 5 minutes

Item test	Unit	Requirement	Measurement	Conformity
- Voltage test for 5 minutes at 3.5 kV	-	No break down	No break down	Passed

1.4 Increase in capacitance

Item test	Unit	Requirement	Measurement	Conformity
- 1 – 14 Days	%	Max : 6	2	Passed
- 7 – 14 Days	%	Max : 3	2	Passed

2. Construction & Dimension Test.

2.1 Conductor

Item test	Unit	Requirement	Measurement	Conformity
- Number of wire	n/mm	Min. : 7	7	Passed
- Outer diameter	mm	Apx : 2.50	2.51	Passed
- Material	-	Coated and uncoated copper	Uncoated copper	Passed

2.2 PVC Insulation

Item test	Unit	Requirement	Measurement	Conformity
- Nominal thickness	mm	Nom. : 0.381	Avg. : 0.521	Passed
- Minimum	mm	Min. : 0.358	Min. : 0.511	Passed

2.3 Thickness of Outer sheath Nylon

Item test	Unit	Requirement	Measurement	Conformity
- Nominal thickness	mm	Not Applicable	Avg. : 0.32	-
- minimum thickness	mm	Min : 0.102	Min: 0.30	Passed
- material	-	Nylon-11	Nylon-11	Passed

2.4 Outer sheath Nylon

Item test	Unit	Requirement	Measurement	Conformity
- Diameter of Outer sheath	mm	Apx.: 4.3	Avg. : 4.32	Passed

2.5 Cable Marking :

JEMBO CABLE CU/PVC/NYLON 1 X 4 mm² 600V 2022

3 Non Electrical Test

3.1 Mechanical test of PVC insulation

Item test	Unit	Requirement	Measurement	Conformity
Without Ageing				
a. Tensile Strength	Mpa	Min. : 13.8	17.42	Passed
b. Elongation	%	Min. : 150	272	Passed
After ageing 136±1°C/168 h				
a. Tensile Strength	Mpa	Not Applicable	15.88	Passed
b. Elongation	%	Not Applicable	258.6	Passed
c. Retention, min. % of Tensile Strength	%	Min. : 75	91.2	Passed
d. Retention, min.% of elongation	%	Min. : 65	95.1	Passed
After Oil Immersion 100±1°C/96h				
a. Tensile Strength	Mpa	Not Applicable	15.24	-
b. Elongation	%	Not Applicable	241.6	-
c. Retention, min. % of Tensile Strength	%	Min. : 50	87.5	Passed
d. Retention, min.% of elongation	%	Min. : 50	88.8	Passed

3.2 Heat shock test

Item test	Unit	Requirement	Measurement	Conformity
Heat shock test at 121°C	%	No Crack	No Crack	Passed

3.3 Heat Distortion of HDPE

Item test	Unit	Requirement	Measurement	Conformity
- Heat Distortion at 136°C	%	Max : 25	13.2	Passed

3.4 Flame test

Item test	Unit	Requirement	Measurement	Conformity
Flame test type B	-	Passed	Passed	Passed

3.5 Clod Bend

Item test	Unit	Requirement	Measurement	Conformity
Clod Bend -25±2C/1 h	-	No Crack	No Crack	Passed

--AKHIR LAPORAN HASIL UJI--
- END OF THE TEST REPORT -

