



Your Power Connection



+265 (1) 683 000 / 700

Since 1996

Two decades of excellence in Cable Manufacturing

About us

Business setup

Hanif Girach and the late **Abdul Latif Girach**, leading entrepreneurs and **Zakir H. Girach**, a Chartered Certified Accountant, founded **Cable Manufacturers**. They saw the need to increase Malawi's industrial base by locally producing cables which at the time were imported.

The manufacturing plant was commissioned in the early **1990's** in the well known **Chirimba Industrial Area** in the city of Blantyre, with an initial workforce of a few and today the company employs hundreds of workers. This has resulted in considerable foreign currency savings for the country in addition to creating the much needed employment.

Cable Manufacturers produced Malawi's first stranded copper conductors as far back as **1996** and the country's first Aluminium Conductor in **1998**.

Business Expansion

CM expanded its manufacturing activities from a small factory to several buildings within its 5 acre plot. The company manufactures a range of cables from Power to Electronics and Telecommunications.

In **2001** CM commissioned its full plant of Underground Armoured Cables. In **2011**, CM installed a large armoured cable plant that produces shaped armoured cables of sizes up to 500 sq mm. Today CM is the country's undisputed leader in the manufacture and supply of power cables, Aluminium Overhead Conductors, Bare Copper Wire, House Wiring and Flexible Cables.

Technical department

Our Technical team is headed by a consultant, professor in electrical engineering, an expert in cable design and manufacturing.

He has over 35 years of experience in Electrical Engineering, particularly in Cable Design, Quality Assurance & Power Systems.



Our Vision

To be the leading manufacturer of cables and overhead power conductors in central and southern Africa.

Corporate Mission

Our focus is to continue producing quality cables to international standards whilst ensuring efficient & timely delivery of cables. We strive to provide superior after sales services to all our customers. This will ensure zero importation of cables into our country.

Guarantee of Quality

Attention to quality is one of the reasons to our continued success. Emphasis at all levels is placed on our endeavor to achieve product performance, safety and reliability.

To this end, all company activities from design all through to production, inspection and dispatch are fully controlled, documented and under regular review.

Our professional, and committed team of dedicated staff have a wealth of experience, and expertise that help us achieve our goals.

Currently we hold quality systems and product approvals from our national authorities:



All our cables are manufactured to British Standards (BS) and comply with South African National Standards (SANS).

Laboratory

CM Laboratory is equipped with state-of-the-art equipment that enables it to test all cables from start to finish, for compliance with various standards to which they are manufactured. Customer cables are also analyzed by our laboratory to enable the manufacturing department to produce the same.

For instance where the standard range does not cover your requirements, our Technical Department is at hand to offer their expertise in designing the cable you require.

Cable Selection

It is essential that any design of a cable system selected for a particular project or distribution system is suitable for its intended use. Choice needs to be based on a range of factors including installation specifications, local regulations and the required performance characteristics, some of which are shown below:

- Normal current load
- Maximum fault current and its duration under fault conditions
- Voltage grade
- Subsoil conditions for underground installation e.g., presence of water, soil temperature and thermal resistivity, possible attack of rodents, termites etc.
- Cable fire performance requirements
- Compatibility with an existing distribution system

Our Products



1

Wiring cables

1.1 Conduit & trunking wiring cables

Single core, PVC Insulated General Purpose Cables

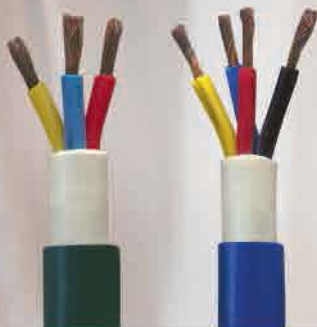
- Conductors:** Annealed Copper - 1.5 mm² to 400 mm²
Solid Conductor - Class 1
Stranded Conductor - Class 2
- Insulation:** PVC
- Voltage:** 450/750V or 600/1000V
- Specification:** BS 6004, SABS 1507-2, MBS 650



1.2 Surface wiring

Multicore Flat & Circular Sheathhead Cables, Flat Twin, Flat 3 Core, Flat 2 Core + Earth

- Conductors:** Annealed Copper - 1.0 mm² to 16 mm²
- Insulation:** PVC
- Voltage:** 300/500V
- Specifications:** BS 6004, SABS 1507-2, MBS 650
Power & Auxiliary Cables Type NYY 600/650V



1.3 Control & Switchgear wiring

- Conductors:** Plain Copper. Flexible Class 5, 0.5 mm² to 240 mm²
- Insulation:** PVC
- Voltage:** 600/1000V
- Specification:** BS 6231, SABS 1507-02 & MBS 650



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Flexible Wires & Cables

For use with appliances & equipment intended for domestic & office

2.1 PVC Insulated, Parallel Twin Flexible Ripcord 300/300 V

2.2 PVC Insulated, Twin Twisted Non Sheathed Flexible Cord 300/500V

2.3 PVC Insulated, PVC Sheathed Flexible Cord, Parallel Twin, Circular Twin,
3, 4 & 5 cores 300/500V

- Conductors:** Plain Copper Flexible Class 5, 0.5 mm² to 2.5 mm²
- Insulation:** PVC
- Voltage:** BS 6500, SABS 1507, MBS 650 & 15



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Distribution

3.1 Power & Auxiliary Armoured Underground Cables

Conductors: Copper or Aluminium - 25 mm² to 300 mm²
Solid - Class 1, Stranded - Class 2

Insulation: PVC or XLPE

Bedding: PVC

Armour: Single layer of Galvanised Steel Wire

Sheath: PVC Flame Retardant

Voltage: 600/1000V or 1900/3300V

Specification: BS 6346, BS 5467 SABS 1507 - 3 & MBS 528



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Overhead Power Transmission and Distribution

4.1 Aerial Bundled Conductors (ABC)

Conductors: Hard drawn Aluminium, Compacted Stranded Circular - Class 2
25 mm² to 150 mm²

Insulation: XLPE Black

Voltage: 600/1000V

Specification: BS 7850-5, SABS 1418 & PIESA 5004

4.2.1 All Aluminium Conductors

Conductors: 25 mm² to 100 mm²

4.2.2 Aluminium - Magnesium - Silicon Alloy Wires


Conductors: 50 mm² to 100 mm²

4.2.3 Aluminium Conductor Steel Reinforced

Conductors: 50 mm² to 100 mm²

Specification: BS 215: Part 1 & 2

MS EN 50183



Our manufacturing capacity enables us to produce sizes from 25 mm² to 400 mm²

Overhead, in the ground, through the walls and under water,
you'll find Cable Manufacturers' cables everywhere.....

Cable Manufacturers

Your Power Connection



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FLEXIBLE CORDS PVC INSULATED AND PVC SHEATHED TO BS 6500

CURRENT CARRYING CAPACITY AND VOLTAGE DROP							
Nom. Cross-Section Area	mm ²	0.5	0.75	1	1.5	2.5	4
Current Carrying Capacity D.C. or Single-Phase A.C. or 3 Phase A.C.	A	3	6	10	15	20	25
<i>Volt Drop Per Ampere Per Metre</i>							
D.C. or Single Phase A.C.	mV	83	56	43	31	18	11
3 Phase A.C.	mV	72	48	37	26	16	9.6
Correction factor for Ambient Temperature							
Conductor Operating Temperature: 70°C							
Ambient Temperature		30°C	35°C	40°C	45°C	50°C	55°C
Correction Factor		1	0.96	0.92	0.87	0.71	0.50

ARMoured CABLES COPPER CONDUCTORS PVC INSULATED TO BS 6346

CURRENT CARRYING CAPACITY (amperes)				
		<i>Ambient temperature: 30°C Conductor operating temperature: 70°C</i>		
Conductor Nom. Area	<i>Reference method 1 (clipped direct)</i>		<i>Reference method 11 (on a perforated horizontal or vertical cable tray) or Reference method 13 (free air)</i>	
	1 two core cable, single-phase a.c. or d.c.	1 three or four core cable, three phase a.c.	1 two core cable, single phase a.c. or d.c.	1 three or four core cable, three phase a.c.
mm ²	A	A	A	A
1.5	21	18	22	19
2.5	28	25	31	26
4	38	33	41	35
6	49	42	53	45
10	67	58	72	62
16	89	77	97	83
25	118	102	128	110
35	145	125	157	135
50	175	151	190	163
70	222	192	241	207
95	269	231	291	251
120	310	267	336	290
150	356	306	386	332
185	405	348	439	378
240	476	409	516	445
300	547	469	592	510
400	621	540	683	590

NOTE: Where the conductor is to be protected by semi-enclosed fuse to BS 3036, see item 6.2 of the preface to the Appendix 4 of IEE Wiring Regulation 16th Edition and for correction factor see tables 4B1, 4B3, 4C1 & 4C2 of the same Appendix.