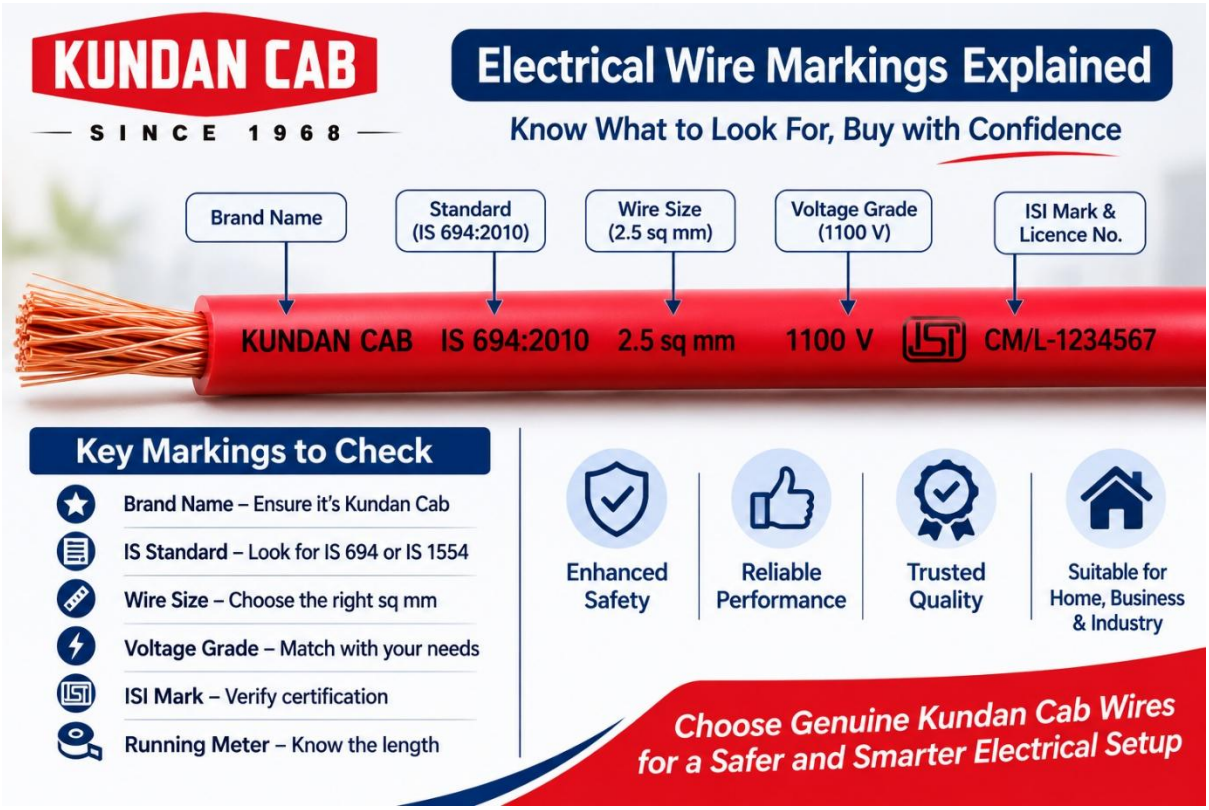
Electrical Wire Markings Explained: A Buyer's Guide to Identifying the Right Wire



Have you ever noticed letters, numbers and symbols printed along the surface of an electrical wire? These are not random codes. They provide important information about the wire's manufacturer, conductor size, voltage rating, applicable standards and other technical specifications.

For homeowners, electricians, contractors and electrical buyers, understanding these markings can make purchasing decisions easier. It also helps prevent confusion between products that may look similar but have different specifications.

This guide explains the common markings found on electrical wires and how to check them before purchasing.

What Are Electrical Wire Markings?

Electrical wire markings are printed details displayed on the wire's insulation or outer sheath. They help identify the product and communicate its technical specifications.

Depending on the product, these markings may include:

- Manufacturer or brand name
- Applicable Indian Standard

- Conductor size
- Voltage rating
- ISI mark and licence information, where applicable
- Product identification details
- Length or running meter markings

These details allow buyers and electricians to compare the printed information with the product packaging and technical datasheet.

1. Brand Name and Manufacturer Details

The brand name identifies the company responsible for manufacturing or marketing the product.

When purchasing electrical wires, check that the brand name is printed clearly and matches the name displayed on the packaging.

This is particularly important in markets where similar-sounding brand names may create confusion.

For example, Kundan Cab is an established electrical wire and cable brand that has been in the industry since 1968. Buyers looking for original Kundan Cab products should check the exact brand spelling and manufacturer details instead of relying only on a familiar-sounding name.

2. Understanding the IS Standard Number

The standard number indicates the technical standard associated with the product.

Two Indian Standards commonly encountered in the wire and cable industry are:

IS 694

IS 694 covers PVC insulated cables for working voltages up to and including 1,100 V. It is relevant to many types of residential and similar electrical wiring products.

IS 1554

IS 1554 covers PVC insulated heavy-duty electric cables. The applicable part and voltage category depend on the cable construction and intended application.

Checking the standard number helps buyers understand which product specification is being referenced. However, the printed standard number alone does not establish that a product has a valid BIS licence.

3. What Does the Wire Size Marking Mean?

Wire size is generally printed in square millimetres (sq mm). It represents the conductor's cross-sectional area.

Some commonly available wire sizes include:

Wire Size	General Application Examples
1.0 sq mm	Selected low-load lighting applications
1.5 sq mm	Common lighting and fan circuits
2.5 sq mm	Selected socket and power circuits
4.0 sq mm	Higher-load circuits, subject to design
6.0 sq mm	Selected high-load applications
10 sq mm	Specific distribution and equipment connections

These are general examples, not universal wiring recommendations. The correct size depends on current demand, cable length, installation method, ambient temperature, voltage drop and applicable electrical requirements.

Always consult a qualified electrician or electrical engineer before selecting a wire size.

4. Understanding Voltage Grade Markings

Voltage grade indicates the electrical system voltage for which the cable is designed.

For example, a marking of 1100 V or 1.1 kV indicates a cable voltage grade of up to 1,100 volts, subject to the product's specified rating.

This information is important because a cable must be suitable for the voltage of the electrical installation.

Do not assume that all wires from the same manufacturer have identical voltage ratings. Check the individual product specifications before purchasing.

5. What Does the ISI Mark Indicate?

The ISI mark is associated with product conformity to the relevant Indian Standard under the Bureau of Indian Standards certification scheme.

For products covered by mandatory certification requirements, buyers should verify that the product has the appropriate valid certification.

When checking a wire, look for:

- The ISI mark, where applicable
- The relevant Indian Standard number

- The manufacturer's identification
- The CM/L licence number, where applicable

Buyers can use the BIS CARE app or official BIS resources to check licence details and confirm whether the manufacturer and product category match the certification information.

Remember that an ISI symbol or a printed standard number should not be treated as proof of certification without verifying the licence.

6. What Are Running Meter Markings?

Some electrical wires carry running meter markings along their length.

These markings indicate the approximate length position of the wire and help electricians measure how much cable has been used.

For example, a running meter sequence can help identify the length consumed during an installation.

They are useful when checking cable usage and estimating the remaining length on a reel. However, meter markings should be considered alongside the actual coil length and product packaging rather than treated as independent proof of product quality.

7. Why Should Wire Markings Match the Packaging?

The information printed on the wire should be consistent with the details provided on its packaging or label.

Before purchasing, compare:

- Brand name
- Product name
- Conductor size
- Voltage grade
- Applicable standard
- Manufacturer details
- Batch or identification information, where provided

If the information differs, ask the seller or manufacturer to clarify the discrepancy before using the product.

A matching label and wire marking make product identification easier, but certification and authenticity should still be verified separately.

8. Common Mistakes Buyers Make When Reading Wire Markings

Even experienced buyers can overlook important product details when purchasing electrical wires.

Avoid these common mistakes:

Checking only the brand name: A familiar name does not confirm the wire's complete technical specifications.

Ignoring conductor size: Selecting a wire without checking its size can lead to an unsuitable electrical installation.

Assuming every wire has the same voltage rating: Different products may have different ratings.

Confusing a standard number with certification: A printed IS number is not a substitute for checking the applicable BIS licence.

Ignoring packaging details: The wire and its packaging should provide consistent product information.

Buying based only on price: Technical suitability and product authenticity should be considered before comparing prices.

How to Identify Original Kundan Cab Electrical Wires

When purchasing Kundan Cab wires, buyers should pay attention to the correct brand identity and product information.

Kundan Cab has been manufacturing wires and cables since 1968. Its product range includes house wires, multi-core cables and industrial cables for different electrical requirements.

To identify the original Kundan Cab brand:

1. Check that the brand name is spelled exactly as Kundan Cab.
2. Examine the printing on the wire and compare it with the packaging.
3. Verify the product size, voltage grade and applicable standard.
4. Check the ISI mark and relevant licence details where applicable.
5. Purchase through the official brand or an authorised dealer.

Kundan Cab is the original brand name to look for. Similar-sounding names should not be assumed to represent the same manufacturer.

Final Thoughts

Electrical wire markings provide useful information about the manufacturer, conductor size, voltage rating and applicable standards. Learning to read these details helps buyers compare products and identify specification mismatches before installation.

Before purchasing any electrical wire, check the printing on the cable, compare it with the packaging and verify relevant certification details. For additional confidence, choose the original Kundan Cab brand and purchase through its official or authorised sales channels.