

CC-Link® – Control and Communication Link - Open industrial network that enables devices from numerous manufacturers to communicate. It is predominantly used in machine, cell or process control applications in manufacturing and production industries, but can also be used in facilities management, process control and building automation.

CE – European Community Mark is a mandatory conformity mark for products placed on the market in the European Economic Area. With the CE Mark on a product, the manufacturer declares that the product conforms with applicable EC directives.

Cellular insulation – Expanded (“foam”) consisting of individual closed cells.

Certificate of Compliance (C of C) – Certificate which shows that the product being shipped meets the customer and/or regulatory specifications.

Certified Test Report (CTR) – Report detailing actual test data on a product. Tests are typically performed by a Quality Control Department technician and indicate that the product being shipped conforms to all requirements.

Characteristic impedance – Impedance that, when connected to the output terminals of a transmission line of any length, makes the line appear infinitely long. The ratio of voltage to current at every point along a transmission line on which there are no stranding waves.

CIP – Common Industrial Protocol - Industrial protocol for industrial automation applications. It is supported by ODVA™. Previously known as Control and Information Protocol, CIP encompasses a comprehensive suite of messages and services for the collection of manufacturing automation applications – control, safety, synchronization, motion, configuration and information. It allows users to integrate these manufacturing applications with enterprise-level Ethernet networks and the Internet.

Circuit sizes – Building wire gauge sizes 14 to 10 AWG.

Circular mil – Unit of area, equal to the area of a circle whose diameter is 1 mil (0.001 inch). Used chiefly in specifying cross-sectional areas of round conductors.

CL2 – Class 2 - UL 13 designation for 30V circuit rating, vertical tray 1685 standard flame rating, optional FT4/IEEE 1202.

CL2P – Class 2 Plenum - UL 13 designation for 30V circuit rating, NFPA-262 plenum flame rating.

CL2R – Class 2 Riser - UL 13 designation for 30V circuit rating, UL 1666 riser flame rating.

CL2X – Class 2 Limited Use - UL 13 designation for 30V circuit rating, VW-1 standard flame rating.

CL3 – Class 3 - UL 13 designation for 300V circuit rating, vertical tray UL 1685 standard flame rating, optional FT4/IEEE 1202.

CL3P – Class 3 Plenum - UL 13 designation for 300V circuit rating, NFPA-262 plenum flame rating.

CL3R – Class 3 Riser - UL 13 designation for 300V circuit rating, UL 1666 riser flame rating.

CL3X – Class 3 Limited Use - UL 13 designation for 300V circuit rating, VW-1 standard flame rating.

Class I, Division 2 – Defined by the NEC® (National Electrical Code) as ignitable concentrations of flammable gases, vapors or liquids are present under abnormal operating conditions.

CM – Communication Cables - UL 444 listed, Article 800 of the National Electrical Code® for cable intended for general use within buildings, 300V, vertical tray UL 1685 standard flame rating, optional FT4/IEEE 1202.

CMG – Communications General Purpose - UL 444 listed, Article 800 of the National Electrical Code® for cable intended for general use within buildings, 300V, FT4/IEEE 1202, flame rating.

CMX – Communications Residential - UL 444 listed, Article 800 of the National Electrical Code® for cable intended for general use within buildings, 300V, VW-1 flame rating.

Coating – Material (such as tin, nickel and silver) applied to the surface of a conductor to prevent environmental deterioration, facilitate soldering or improve electrical performance.

Coaxial cable – Coax cable consists of an electrically conductive wire inner surrounded by a layer of insulation material, a layer of shielding material, and an outer layer of insulation material, usually plastic. Coax cables are used for transmitting high-frequency telephone, telegraph, digital or television signals.

Cold flow – Any permanent deformation due to pressure or mechanical force without the aid of heat softening.

Cold test – Test to determine the performance of cables during and/or after subjection to a specified low temperature for a given time period. Conditioned cable wound around a specified mandrel, is examined for any breaks or cracks in the insulation and/or jacket.

Cold work – Hardening and embrittlement of metal by repeated flexing action.

Color code – Color system for circuit identification by use of solid color tracers, braids or surface printing.

Combination shields – Consist of foil and braid combined.



Common axis cabling – In multiple cable constructions, a twisting of all conductors around a “common axis” with two conductor groups then selected as pairs.

Compact stranded construction – Unidirectional or conventional concentric conductor manufactured to a specified diameter, approximately 8 to 10% below the nominal diameter of a non-compact conductor of the same cross-sectional area.

Composite cable – Cable containing more than one gauge size or a variety of circuit types.

Compound – Insulating or jacketing material made by mixing two or more ingredients.

Concentrate – Color additive.

Concentric stranding – Central wire surrounded by one or more layers of helically wound strands in a fixed round geometric arrangement.

Concentricity – Measurement of the location of the center of the conductor with respect to the geometric center of the surrounding insulations.