

## Glossary

**0–10 V** — A common analog process control signal voltage range.

**4–20 mA** — A common analog process control signal current range.

### A

**A** — Common abbreviation for Ampere (see ampere)

**AAR** — American Association of Railroads.

**ABRASION RESISTANCE** — Ability to resist surface wear.

**AB Switch** — A coaxial cable switch capable of switching one cable to one of two branch cables, A or B.

**AC** — (1) Alternating current, (2) A UL cable type with flexible metal tape armor.

**ACAR** — Aluminum conductor, aluminum-reinforced cable.

**ACCELERATED LIFE TEST** — A test in which a cable is subjected to extreme conditions to determine the life of a cable.

**ACSR** (aluminum conductor, steel reinforced) — A bare composite of aluminum and steel wires, usually aluminum around steel.

**ACSR/AW** — Aluminum conductor, steel reinforced, using aluminum clad steel wire.

**ACSR/AZ** — Aluminum conductor, steel reinforced, using aluminum steel wire.

**ACSR/GA** — Aluminum conductor, steel reinforced, using Class A zinc-coated steel wire.

**ACSR/GB** — Aluminum conductor, steel reinforced, using Class B zinc-coated steel wire.

**ACSR/GC** — Aluminum conductor, steel reinforced, using Class C zinc-coated steel wire.

**A/D** — Analog/Digital. An integrated circuit device that converts analog signals to digital signals.

**ADDRESS** — The location of a terminal, a peripheral device, a node, or any other unit or component in a network, or process control system.

**ADHESIVE-BONDED** — Cables bonded by adding an adhesive coating to the surface of the cable components, then joining and curing the adhesive to form a cable. See Bonded Cables.

**ADMITTANCE** — A measure of how easily alternating current flows in a circuit. Admittance is the reciprocal of impedance. It is expressed in mhos.

**AEIC** — Association of Edison Illuminating Companies.

**AERIAL CABLE** — A cable suspended in the air on poles or other overhead structure.

**AF** — Audio frequency.

**AGC** — Automatic gain control.

**AGING** — The irreversible change of material properties after exposure to an environment for an interval of time.

**AIA** — Aluminum Interlocked Armor. A type of cable sheath.

**AIR CORE CABLE** — A cable in which the interstices in the cable core are not filled with a moisture barrier.

**AIRCRAFT WIRE** — An electrical wire primarily designed for the extreme conditions (temperature, altitude, solvents, fuels, etc.) of airborne equipment.

**AIR SPACED COAX** — A coaxial cable in which air is basically the dielectric material. The conductor may be centered by means of a spirally wound synthetic filament, beads or braided filaments. This construction is also referred to as an air dielectric.

**AL** — Aluminum

**ALLOY** — A substance (usually metallic) composed of two or more individual substances.

**ALS** — A type of cable consisting of insulated conductors enclosed in a continuous, closely fitting aluminum tube.

**ALTERNATING CURRENT** — Electric current that periodically reverses direction. Alternating current is generally abbreviated AC.

**AM** — Amplitude modulation. A method of adding information to an electronic signal where the height (amplitude) of the wave is changed to convey the added information.

**AMBIENT** — Conditions existing at a location prior to energizing of equipment (example: ambient temperature).

**AMPACITY** — The rms current which a device can carry within specified temperature limitations in a specified environment: dependent upon, a) temperature rating, b) power loss, c) heat dissipation.

**AMPERE** — A standard unit of current. Designated as the amount of current that flows when one volt of emf is applied across one ohm of resistance. An ampere of current is flowing when one coulomb of charge is passing a point every second.

**AMPERE-TURN** — The product of amperes times the number of turns in a coil.

**AMPLIFIER** — A device used to boost the strength of an electronic signal.

**AMPLITUDE** — The maximum value of a varying wave form.

**AMPLITUDE MODULATION (AM)** — Transmission method in which variations in the voltage or current waveform of a signal carry encoded information.

**ANALOG** — Not digital. A continuously varying waveform.

**ANNEAL** — To soften and relieve strains in any solid material, such as metal or glass, by heating to just below its melting point and then slowly cooling it. This also generally lowers the tensile strength of the material, while improving its flex life.

**ANNEALED WIRE** — See Soft Wire.

**ANNULAR CONDUCTOR** — A number of wires stranded in reversed concentric layers around a core.

**ANNUNCIATOR WIRE** — Usually single solid copper, sometimes twisted pair or triplexed for open wiring of bell circuits and other low voltage systems.

**ANSI (American National Standards Institute)** — An organization that publishes nationally recognized standards.

**ANTENNA LEAD-IN WIRE** — (Not coaxial) Parallel twin lead construction, plastic jacketed with fixed 300 ohm impedance for connecting a remote antenna to a receiver.

**ANTENNA ROTOR CABLE** — Multiconductor flat or round cable used to supply power to a motorized antenna, and control wires for changing direction of rotation.

**ANTIOXIDANT** — Retards or prevents degradation of materials exposed to oxygen (air).

**APPLIANCE WIRE AND CABLE** — A classification covering insulated wire and cable for internal wiring of appliances and equipment.

