Terminology

TERMINOLOGY

(In addition to terminology shown see N.E.C. section 100 and Nemo Standards for Industrial Control)

A-c—Alternating Current—A current changing both in magnitude and direction—most common current in use.

Accessory—(control use) A device that controls the operation of magnetic motor control. (Also see master switch, pilot device and pushbuttons.)

Across-The-Line—A method of motor starting—connects motor directly to supply line on starting or running. (Also called full voltage.)

Ampere—Unit of electrical current.

Automatic Starter—A self acting starter—completely controlled by master or pilot switches or some other sensing device.

Auxiliary Contact—Contact of a switching device in addition to the main circuit contacts and operated by the main contacts.

Brake—An electro-mechanical friction device to stop and hold a load. Generally electric release spring applied—coupled to motor shaft.

Busway—A system of enclosed power transmission—current and voltage rated.

Circuit Breaker—Automatic device—opens under abnormal current in carrying circuit—no injury to itself on current interruption—ampere, voltage and horsepower rated.

Contact—Current conducting member of a device to complete or interrupt a circuit.

Contactor—A device to repeatedly establish or interrupt an electric power circuit.

Controller—A device—group of devices—governs in predetermined manner delivery of electric power to apparatus connected to it.

Controller Function—Regulate—accelerate—decelerate—start—stop—reverse or protect devices connected to an electric controller.

Controller Service—Specific application of controller—
General Purpose—Standard or usual service.
Definite Purpose—Service condition for specific application other than usual.

D-c—Direct Current—A continuous one direction non-varying current.

Disconnect—A device—group of devices—removes conductors of a circuit from source of supply.

Drum Controller—Electrical contacts made on surface of rotating cylinder or sector—contacts made also by operation of a rotating cam.

Duty—Specific controller function—
Continuous Duty—constant load—indefinite long time period.
Short Time Duty—constant load—short or specified time period.
Intermittent Duty—varing load—alternate intervals—specified time periods.
Periodic Duty—intermittent duty with recurring load conditions.
Varying Duty—varying loads—varying time intervals—wide variations.

Electronic Control—Control system—vapor or gas filled tubes to perform function.

Enclosure—Degree of mechanical—electrical—environmental protection for control devices.

Eutectic Alloy—Low and sharp melting point—used in thermal overload relays—converts from solid to liquid state at specific recurring point.

Frequency—Number of complete variations—cycles—made by an alternating current per second.

Full Voltage Control—Also across-the-line—connects equipment directly to line supply on starting.

Fuse—Protecting device—fusible link—disconnects circuit on abnormal current—destroys itself—ampere and voltage rated.

High Voltage Control—Formerly all control above 600 volts—Now all above 5000 volts—See Medium Voltage for 600 to 5000 volt equipment.

Horsepower—Mechanical work rating of an electrical motor—comparative value of ability to do work.

Jogging (inch)—Momentary operation—small movement of driven machine.

Load Center—Service entrance—controls distribution—provides protection of residential power—generally circuit breaker type—Cutler Hammer Safetybreaker.

Local Control—Control function, initiation or change accomplished at the same location as the electric controller.

Low Voltage Protection (LVP)—magnetic control only—non-automatic restarting—3 wire control—power failure disconnects service—power restored manual restarting required.

Low Voltage Release (LVR)—magnetic control only—automatic restarting—2 wire control—power failure disconnects service—power restored controller automatically restarts.

Magnetic Contactor—A contactor—operated electro-mechanically.

Magnetic Controller—An electric controller—device functions operated by electromagnets.

Manual Controller—An electric controller—device functions operated by mechanical means—by hand.

Master Switch—A switch operating contactors,, relays or other remotely controlled electrical devices.

Medium Voltage Control—Formerly known as High Voltage—Includes 600 to 5000 volt apparatus—Air break or oil-immersed main contactors—High interrupting capacity fuses—150,000 Kva at 2300 volts, 250,000 Kva at 4000-5000 volts.