



Designed & Manufactured By :

**alfa electricals** An ISO 9001:2008 Certified Co.

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## Universal Motor with Mechanical Brake Loading :

The universal motor is a type of electric motor that can operate on both AC and DC power. It is a commutated series-wound motor where the stator's field coils are connected in series with the rotor windings through a commutator. This type of electric motor can operate well on AC because the current in both the field coils and the armature (and the resultant magnetic fields) will alternate (reverse polarity) synchronously with the supply. Hence the resulting mechanical force will occur in a consistent direction of rotation, independent of the direction of applied voltage, but determined by the commutator and polarity of the field coils.

The system is supplied along with Control Panel & Mechanical Brake Loading Arrangement mounted on heavy duty 'C' Channel base Structure and anti-vibration pads. The Unique desing of Control Panel with MMIC Diagram to demonstrate & study its no-load and full-load characteristics while operating on AC; to determine its no-load and full-load characteristics while operating on DC; to compare the starting torque on both AC and DC supply.

**Powder Coated Panel Structure, fabricated from high quality 16/18 SWG M S Sheet with in-built storage facility. Cost-Effective Table Top Panel, Customized & Tailor made design is also available as per specific requirement of the Customer.**

### Specifications :

Motor : TEFC Foot Mounted

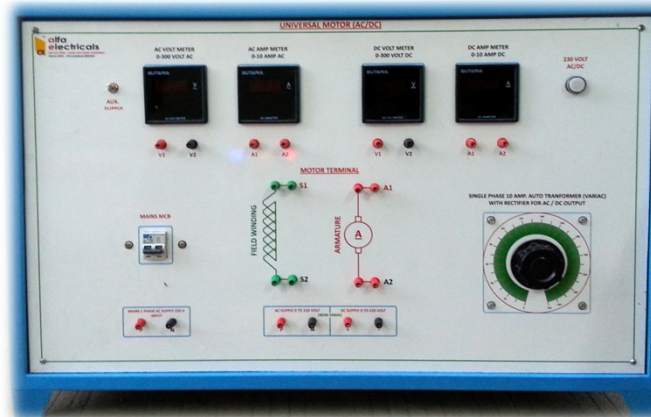
Type : Universal AC/DC

Ratings : 0.5 HP to 3 HP

Voltage : AC/DC 220V

Speed : 1500 RPM (Full Load)

Insulation Class : B / F



### Features :

100 % Copper Windings

Armature Stampings made from electrical grade Silicon Steel

Dynamically Balanced skewed Rotor for Noise & Vibration free operations

Constand & Uniform Pressure Carbon Brush Holders - Lesser Sparking

Dynamically Balanced loading drum pulley

Heavy duty 'C' channel base structure with Anti-Vibration Pad

Easy Installation and Portability - No Civil Work or foundation required

Choice for Digital or Analog Meters

**Mfg. of: All Types Of Electric Motors & Laboratory Equipment for Educational Institutes.**