# RESISTANCE BOX



Resistance Box





**CONTROL GEAR EQUIPMENT FOR EOT CRANES** 





#### Resistance Box

Controlling motors with resistors is a universal method of speed control. The resistors are used to limit the in-rush current and adjust the torque and speed characteristics of AC and DC motor.

SPEEDAGE make Resistors are designed to meet requirements of A.C. & D.C. application for E.O.T. Cranes, Winches, Rubber Mills, Flour Mills, Coal Mines, Cement Mills, Power Plants, Conveyors, Coke Oven, Blowers etc. for speed control and developing starting torque. **Compliances:** The specifications comply with BSS 587:1957.

#### **Enclosure Features**

- Overhung top with canopy to prevent standing water and will support heavy ice and snow.
- Forged eyebolts are provided in all four corners for easy handlings.
- Removable front and rear louvered covers for easy access for connection and inspection.
- Corrosion resistant nameplate provides complete ratings and manufacturer's information.
- Galvanized Iron Sheet provides maximum protection.

# **Enclousre Option**

- Aluminium, mill galvanized, stainless steel and hot-dipped galvanized construction.
- Custom paint finish is also available.
- Top or side mounted entrance bushing(s).
- Screened covers for indoor applications.
- Support stands for elevating the enclosure above ground.

#### Data Requirements

- Motion (Hoist or Travel)
- Rotor Voltage and Rotor Current
- • Duty: Indoor/Outdoor.
- Horse power (HP)
- Type of control (Pendent Push Button/Master Controller/Drum Controller)
- Number of Speeds/Steps
- Duty: Starting/5 Minutes/10 Minutes/Continous





# Stainless Steel Punched Grid Type Resistors

Speedage Punched grid resistors consist of grid punched from corrosion resisting Nickel Chromium alloy sheet steels.

- The inherent strength of the steel itself is very high and owing to the pressed and reinforced construction the rigidity of the grids is completely immune to shock and vibration.
- To order a resistor assembly, simply obtain the motor information required for your particular

requirements and contact the engineering department at the Speedage Engineers factory to design a resistor assembly for your application.

### Dynamic Braking Resistors For Variables Frequency Drives

Dynamic braking resistors are used to absorb energy that is being regenerated back into a drive unit by a freewheeling motor and will release that energy in the form of heat.

#### **Neutral Grounding Resistors**

Neutral grounding Resistors are used to protect power transformer, power generators and other associated equipment in your power systems against 50/60 Hz faults (short circuit) and transient phenomena (lightning).

# Specifications

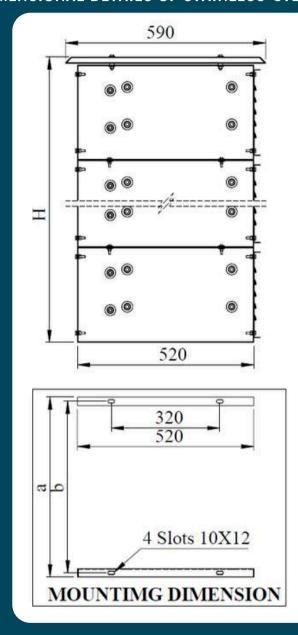
There are three parameters needed to specify the neutral grounding resistors.Rated voltage line to neutral or system voltage

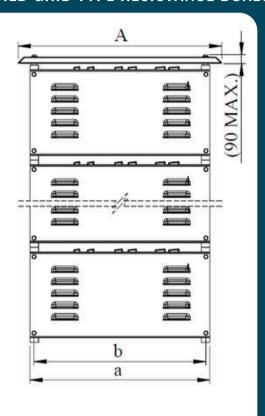
- Rated voltage line to neutral or system voltage
- Rated fault current.
- Rated "time on" of the line to neutral voltage not exceeding the allowable temperature rise





# DIMENSIONAL DETAILS OF STAINLESS-STEEL PUNCHED GRID TYPE RESISTANCE BOXES





# Installation / Dimensional Details of Stainless Steel Punched Grid Type Resistance Boxes

UPTO 16 GRIDS / STACK					UPTO 22 GRIDS / STACK				UPTO 30 GRIDS / STACK				
U	Init Size	Α	a	b	Unit Size	Α	а	b	Unit Size	Α	a	b	Н
	B1	600	530	505	C1	750	680	655	D1	900	830	805	310
	B2	600	530	505	C2	750	680	655	D2	900	830	805	590
	В3	600	530	505	C3	750	680	655	D3	900	830	805	870
	B4	600	530	505	C4	750	680	655	D4	900	830	805	1150
	B5	600	530	505	C5	750	680	655	D5	900	830	805	1430
	B6	600	530	505	C6	750	680	655	D6	900	830	805	1710







# Safety is Priceless

Safety is priceless. We produce high quality original Equipment for EOT cranes to assure safety. When we use high quality equipment in our EOT cranes, we actually save human and financial resources by eliminating the unnecessary maintenance, time and cost. It reduces the machine downtime and enhances overall production of the plant. Speedage Engineers high quality equipment for EOT cranes offers fail-safe original equipment for EOT cranes with better durability and reliability.

# Speedage Engineers India

More than 25 years, Speedage Engineers (India) Pvt. Ltd., has been one of the innovative and leading original equipment manufacturer of control gear equipment for EOT cranes. The product development and manufacturing philosophy of Speedage Engineers is based on "Safety is priceless".

We ensure to deliver high quality and safe product to our customers. Speedage maintains product quality leadership by constantly innovating and improving the products in response to customer requirements.

Our customer centric approach allowed us to serve our clients with high quality and full satisfaction.

# Product Applications for various indutries

EOT Cranes; Steel, Sugar, Fertilizers, Cement, Power, Heavy Engineering, Automobile Industries, Ports, and many other industries where Heavy material handling required.

#### **Product Range**

ELOPHY Thrusters, ELOPHY Brakes, Thrusters, Thruster Brakes, Master Controller, Resistance Boxes, Limit Switches, Cable Trolleys, Pendant Push Button stations, Rotating Geared Limit Switch, Radio Remote, Controls, Anti Collision Devices, Geared Couplings, Brake Drum Couplings.

#### Speedage Engineers (India) Pvt. Ltd.

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