

# CRANE CONTROL EQUIPMENTS

SINCE 1988

*A vital support of your Cranes*



Established Since 1988

Complete In-house Testing Facilities

Approved with various Govt. agencies

Computer Aided Design.

Compatible with all other makes.

AN ISO 9001-2008 Certified Company Since 2009.



# RESISTANCE BOXES (WIRE GRID & PUNCH GRID)

## INTRODUCTION

Resistance boxes are used to add resistance in an electric motor circuit for modifying the performance characteristic of Slip Ring Electric Motors of EOT Cranes, Rubber Mills, Steel Rolling Mills, Cement Plants, Power Plants, Conveyors, Coke Oven, Blowers etc. for speed control and developing starting torque with low starting currents. They are also used as Dynamic Breaking Resistor for **V.V.F.A.C.** Drives, electric loading of **AC** Altimeters, **DC** Generators and Dynamometers.

Resistors are designed to meet requirements of both **A.C.& D.C.** Application.

## TYPE OF RESISTORS :

The basic types of resistors are gap :

1. Stainless steel Wire Grid Resistors
2. Stainless Steel Punched Grid Resistors
3. Fechral Punched Grid Resistors

## CURRENT RATINGS :

Resistors are manufactured for current ratings from **10 to 800 Amps**. Continuous duty resistors of higher ratings are made by using two - or more parallel paths. Resistors with short time rating up to **3000 Amps** (or even higher), for neutral earthing are possible for system voltage up to and above **11 KV**.

## STAINLESS STEEL WIRE GRID RESISTORS :

These resistors consist of stainless steel wires or strip in form of grids. The current rating generally range from **7 Amps** to **100 Amps** for continuous duty applications with single or multiple paths.

## STAINLESS STEEL GRID RESISTORS :

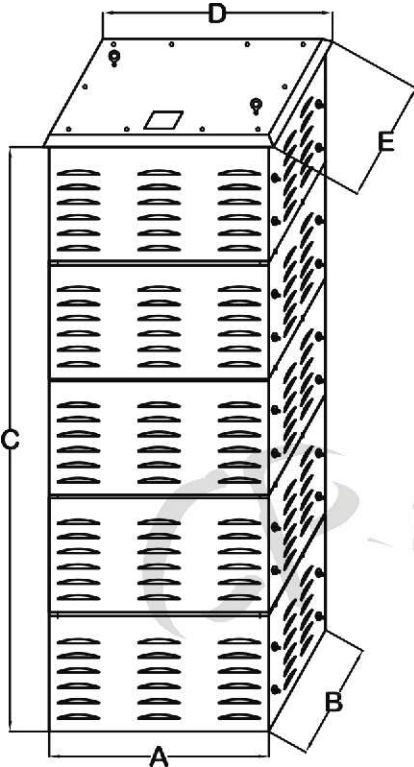
Punched steel grid resistors consist of grids punched from corrosion resisting nickel chromium alloy sheet steels. The punched steel grids are completely immune to shock & vibration. They function reliably under the worst operating conditions and are particularly suited for steel mill duty. These resistors are available in wide range of current ratings from **8 Amps** to **800 Amps** for continuous duty with single or multiple parallel paths.

## FEATURES :

Enclosure material	Galvanized Sheet Steel (Hotdip)
Mounting	Floor mounting
Degree of protection	IP - 21 / 22 / 23.
Current Rating (SS W-Grid)	7 to 100 Amps Continues.
Current Rating (SS P-Grid)	7 to 800 Amps, Continues.
Cooling	Air Cooled
Temperature rise	225° / 250° / 375° C
Cable Entry	Bottom



# DIMENSION DETAIL OF RESISTANCE BOXES



## S S WIRE GRID TYPE

TYPE	LENGTH (A)	WIDTH (B)	HEIGHT (C)	TOP COVER (D)	COVER (E)
1 S-380	380	460	210	600	600
2 S-380	380	460	390	600	600
1 L	600	460	210	760	630
2 L	600	460	390	760	630
3 L	600	460	570	760	630
4 L	600	460	750	760	630
5 L	600	460	930	760	630

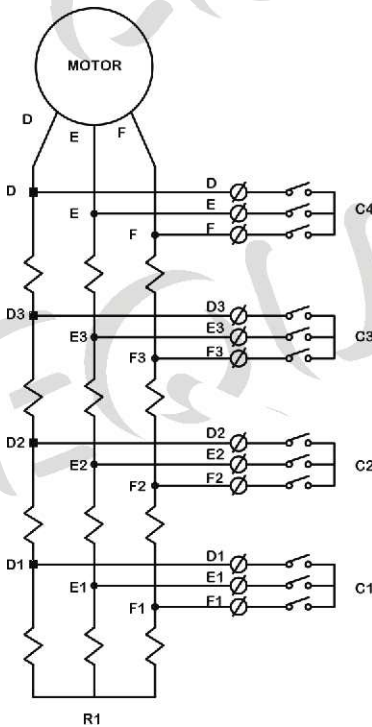
## S S PUNCHED GRID TYPE

TYPE	LENGTH (A)	WIDTH (B)	HEIGHT (C)	TOP COVER (D)	COVER (E)
1 SS	380	530	320	600	440
1 S	530	530	320	600	600
2 S	530	530	600	600	600
1 L	680	530	320	760	630
2 L	680	530	600	760	630
3 L	680	530	880	760	630
4 L	630	530	1160	760	630
5 L	630	530	1440	760	630
1L-830	830	530	320	900	630
2L-830	830	530	600	900	630
3L-830	830	530	880	900	630
4L-830	830	530	1160	900	630
5L-830	830	530	1440	900	630
1 L	1160	530	320	1250	645
2 L	1160	530	600	1250	645
3 L	1160	530	880	1250	645
4 L	1160	530	1160	1250	645
5 L	1160	530	1440	1250	645

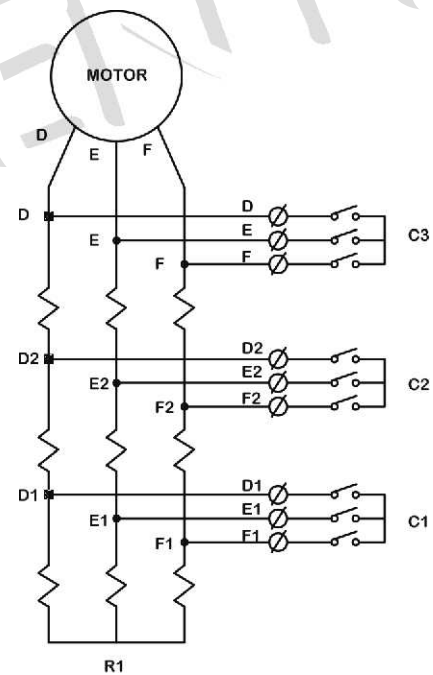
ALL DIMENSIONS ARE IN MM

In case of 3 Steps the no. of connections shall be 9 nos where as in case of 4 Steps the no. of connections shall be 12 nos

## CONNECTION DIAGRAM OF RESISTANCE BOXES



C1-C4 = RESISTANCE CONTACTOR  
 R1 = RESISTANCE BOX  
 D-F3 = TERMINALS OF RESISTANCE BOX



C1-C3 = RESISTANCE CONTACTOR  
 R1 = RESISTANCE BOX  
 D-F2 = TERMINALS OF RESISTANCE BOX

# An Introduction about us at Crane Control Equipments.

We are a leading **ISO 9001- 2008 CERTIFIED COMPANY** established in the year **1988** manufacturing **Control Gear Equipment**, used in **EOT Cranes** , **Cane Unloaders** as well as **Grabbing Cranes** etc. which include the following.

**STARTING RESISTORS**

- **AUTO Matic ROTOR STARTER PANEL**

**DYNAMIC BRAKING RESISTORS**

- **PUNCHED GRID RESISTANCE BOXES**

**MASTER CONTROLLER**

- **S.S.WIRE GRID RESISTANCE BOXES**

**LEVER LIMIT SWITCH**

- **ELECTRO HYDRAULIC THRUSTOR BRAKES**

**ROTARY LIMIT SWITCH**

- **ELECTRO HYDRAULIC THRUSTORS**

**CURRENT COLLECTORS**

- **ELECTRO MAGNETIC BRAKES**

**CABLE REELING DRUMS**

- **FLEXIBLE GEARED COUPLINGS**

**CABLE TROLLEYS**

- **ABB make V V V F DRIVES**

We are also manufacturing Starting / Slip Resistors used for starting high capacity Slip ring Motors in industries such as Sugar Mills, Rolling Mills etc. as well as Dynamic Braking Resistors for AC Drives.

Our **USP** has been to provide excellent service to both **Crane manufacturers** as well as users and most of the Crane manufacturers are installing our products as **original equipment**.

**Our products are approved in both private as well as Government organisations.**

**We are in fact also a regular supplier to various Electricity Boards ,Railway Workshops and other government organisations all over India and our material is also being exported out side India.**

Our products are designed, based on the respective Indian Standards and hence can be interchanged with other brands provided of course if the other manufacturer has also followed the correct Indian Standards while designing and manufacturing his product. Also in our company we have an on going process of **R&D** for improving the Quality of our products.

Since we are regularly manufacturing the products at times we can even supply material at short notice there by reducing the down time of the **customer's system during maintenance or brake down.**

Supplying equipment at short notice does not mean that the equipment does not under go proper tests.

An in house testing facility and quality control department checks every product as per the relevant standards before it is despatched from our works.

In addition to the complete range of Control Gear Equipment and in keeping with our commitment to provide our customers with the best possible services, we also supply **SHROUDED BUS BAR CONDUCTORS** as well as **RADIO REMOTE CONTROLS**, so that at our factory where we have a single out let, we can provide our customer be it a Crane manufacturer or a Crane user this unique service:

**“The availability of complete range of Control Gear Products under one Roof”**

# CRANE CONTROL EQUIPMENTS



ROTARY GEARED LIMIT



LEVER LIMIT SWITCH



COUNTER WT. LIMIT SWITCHES



CROSS BAR LIMIT SWITCHES



WORM DRIVE LIMIT SWITCH



DIFFERENTIAL LIMIT SWITCHES



MASTER / CAM CONTROLLER



DUAL MASTER CONTROLLER



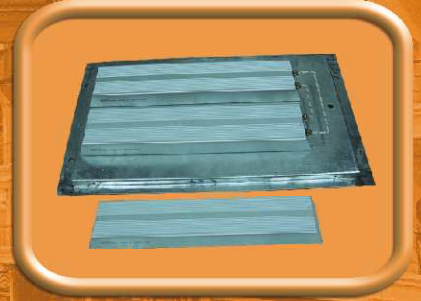
PENDANT PUSH BUTTON



RESISTANCE BOXES



DYNAMIC PUNCHED GRID TYPE



DBR MOULDED TYPE



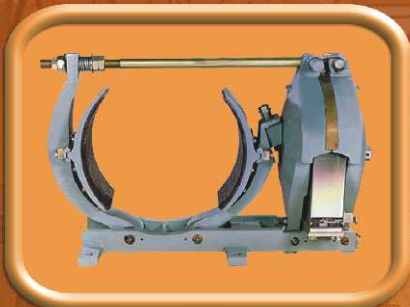
ELECTRO HYDRAULIC THRUSTER BRAKES



ELECTRO-HYDRAULIC THRUSTERS



A.C. ELECTROMAGNETIC BRAKES



D.C. ELECTRO - MAGNETIC BRAKES



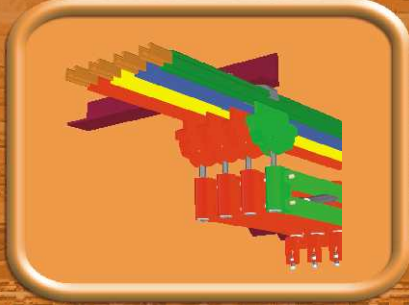
BRAKE DRUM COUPLING



FLEXIBLE GEARED COUPLING



RADIO REMOTE CONTROL



SHROUDED DSL



CURRENT COLLECTORS



DISC BRAKE



SNATCH BLOCK



RAIL CLAMPS



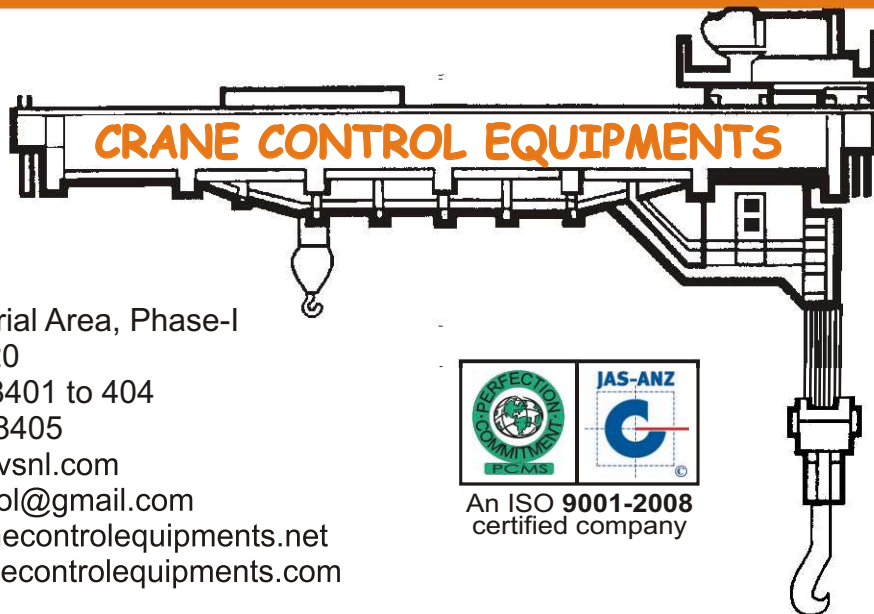
FLEXIBLE TRAILING CABLE



CABLE TROLLEYS



CABLE REELING DRUM



**Works :**

F-66, Okhla Industrial Area, Phase-I

New Delhi - 110 020

Ph. : +91-11-26818401 to 404

Fax : +91-11-26818405

E-Mail : ccedelhi@vsnl.com

cranecontrol@gmail.com

website : [www.cranecontrolequipments.net](http://www.cranecontrolequipments.net)

[www.cranecontrolequipments.com](http://www.cranecontrolequipments.com)



An ISO 9001-2008 certified company