

# KAKKU MILL DUTY MASTER CONTROLLER

## SERIES MSC – 2000

### SPECIAL FEATURES

Double break contacts with high quality silver cadmium oxide contact tips having arc-retarding & anti-welding properties.

Provided with specially treated oil resistant rubber gaskets at all the joints to make it completely dust proof.

Cams and contact block of high grade phenolic fibrous moulding material having excellent electrical & mechanical properties.

Unified design, such that the main parts as well as individual components are identical over the entire range.

Star wheel for positive notching at each step and pronounced notching at neutral.

Universal design for both AC & DC applications.

**KAKKU** master controllers are also noted for ease of assembly dis-assembly & adjustments as well as free access to all the parts.

Contact sequence chart pasted on inside face of cover and name plate of operational details indicated clearly.

Pointer for indicating handle position.

Long life with reliable performance and trouble free operation.

### APPLICATION

**KAKKU** Mill Duty Master Controllers Series MSC-2000 are used for remote control of electric drives of EOT cranes, hoists, transfer cars, grab-buckets, unloaders, steel mills, conveyors and other heavy material handling equipments. **KAKKU** also manufactures various combination of dualized arrangement of these master controllers.

### TECHNICAL DATA

Ambient Temperature	: 55°C.
Mounting Arrangement	: Surface Mounting.
Housing	: Cast Al.
Enclosure category	: As per IP-55 of IS : 2147-1962.
Terminals	: Suitable for conductor size 2.5mm <sup>2</sup> .
Max. No. of operating positions.	: 5 – 0 – 5 .
Max. No. of Contacts/ Circuits	: upto 24.

### RATINGS

Rated Voltage	Permissible Continuous Current	Making Current upto 500V AC	Breaking Current at Inductive Load (Amps.)			
			DC			Upto 500V AC
			110V	220V	440V	
Upto 500VAC or DC	10A	50A	2.5	1.5	0.5	10

Permissible Switchings : 800 operations per hour.

### DUAL MASTER CONTROLLERS

A combination of two master controllers are mounted on a common mounting plate. The two controllers are operated either individually or both together by a common handle.

### DIMENSIONS

As per relevant figures shown in the dimensional data sheets.

### SELECTION CHART

TYPE	Max. No. of contacts/ circuits	Fig.
MSC-2000/8	8	1
MSC-2000/12*	12	1
MSC-2000/16	16	2
MSC-2000/20	20	3
DUAL MASTER CONTROLLER		
MSC-2000(8X8)	8+8	4
MSC-2000(12X8)	12+8	4
MSC-2000(16X8)	16+8	4
MSC-2000(12X12)	12+12	4
MSC-2000(16X12)	16+12	4
MSC-2000(16X16)	16+16	4

\* Eqvt. to erst-while USSR Series КП- 1000Т.

### OPTIONAL EXTRAS

- Enclosure as per IP – 65.
- Provision of make before break contacts.
- Spring return of handle to neutral.
- Special type of handle. (furnish drawing)
- Suitable base plate at bottom to match any mounting dimensions. (furnish drawing)
- Epoxy paint for special applications.

### ORDERING INFORMATION

- Give **KAKKU** type.
- No. of operating positions or steps.
- Contact sequence chart indicating opening & closing of each contact in every position of the controller.
- Name plate details of operation i.e. 'HOIST – LOWER', 'FORWARD – REVERSE' etc.
- For dual controller specify operation i.e. individual or simultaneous.
- Specify optional extras if any.

*Product improvement is a continuous process at KAKKU. Hence data given in this catalogue is subject to revision without notice.*



Symbol Of Reliability

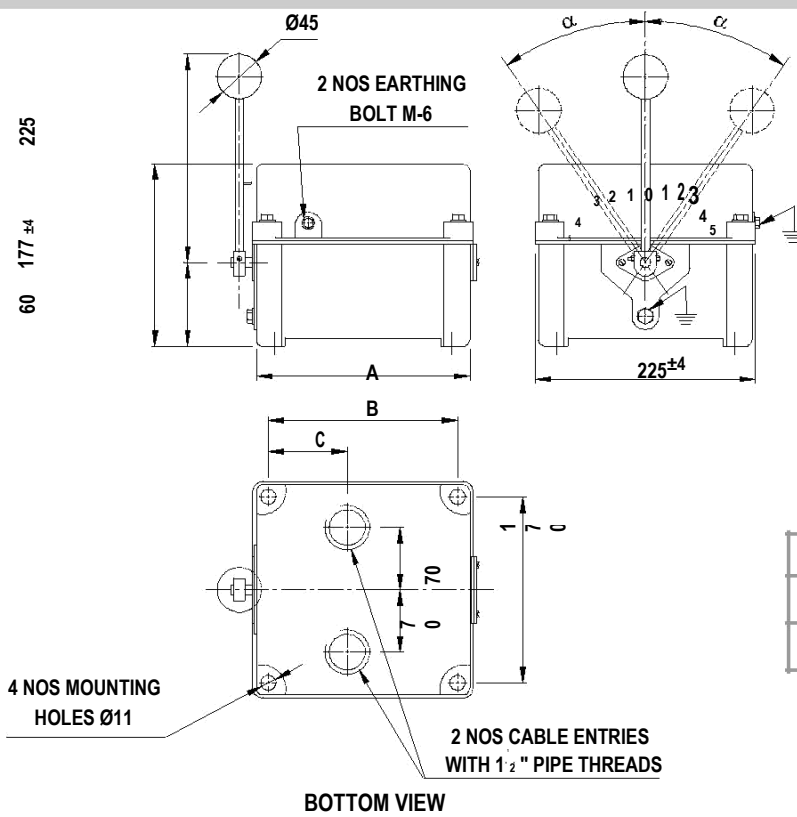


Fig. - 1 : MASTER CONTROLLER

Type	A	B	C
MSC - 2000/8	180	130	56
MSC - 2000/12	220	170	71

$\alpha(\text{MAX.})$  FOR 5 - 0 - 5 POSITION = 72°

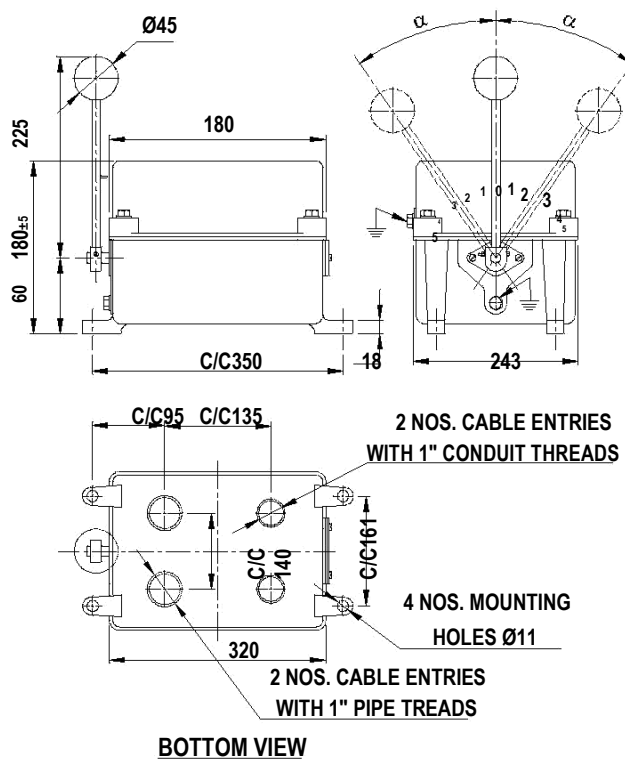


Fig. - 2 : MASTER CONTROLLER

Type : MSC - 2000/16

$\alpha(\text{MAX.})$  FOR 5 - 0 - 5 POSITION = 72°

