

## KAKKU INDUSTRIAL CONTROLLERS

### SERIES MSC – 2510

#### 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 ad 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.
- Universal design for both AC & DC applications.
- **KAKKU** industrial 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.
- Long life with reliable performance and trouble free operation.

#### APPLICATION

**KAKKU** Industrial Master Controllers Series MSC – 2510 are used for remote control of electric drives of EOT cranes, winches, conveyors and other similar applications where mechanism is to be run at one speed in either direction. These are also used for switching on lifting magnets in heavy duty cranes & as emergency master switches.

#### TECHNICAL DATA

Ambient Temperature	: 55°C.
Mounting Arrangement	: Surface mounting
Housing	: Cast Iron/ Al.
Enclosure Category	: As per IP-54 of IS : 2147-1962.
Terminals	: Suitable for conductor size 2.5mm <sup>2</sup> .
No. of operating positions	: 1 – 0 – 1.
No. of circuits	: Upto 4.

#### RATINGS

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

Permissible Switchings : 800 operations per hour

#### SELECTION CHART

Type	Action	Max. No. of Contacts/ Circuits
MSC – 2511	STAYPUT	4
MSC – 2512	SPRING RETURN	4
MSC – 2513	STAYPUT	2
MSC – 2514	SPRING RETURN	2

#### DIMENSIONS

- As per relevant figures shown in the dimensional data sheet.

#### OPTIONAL EXTRAS

- Enclosure as per IP-55 or superior.
- Contacts with thermal rating of 40Amps.

- Provision of make before break contacts.
- Special type of handle. (furnish drawing)
- Suitable base plate at bottom to match any mounting dimension. (furnish drawing)
- Epoxy paint for special applications.
- Switches having stayput position on one side and spring return on the other.

#### ORDERING INFORMATION

- Give **KAKKU** type.
- Contact sequence chart indicating opening & closing of each contact in every position of the controller.
- Name plate details of operation i.e. 'FORWARD-REVERSE', 'ON-OFF' etc.
- 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**

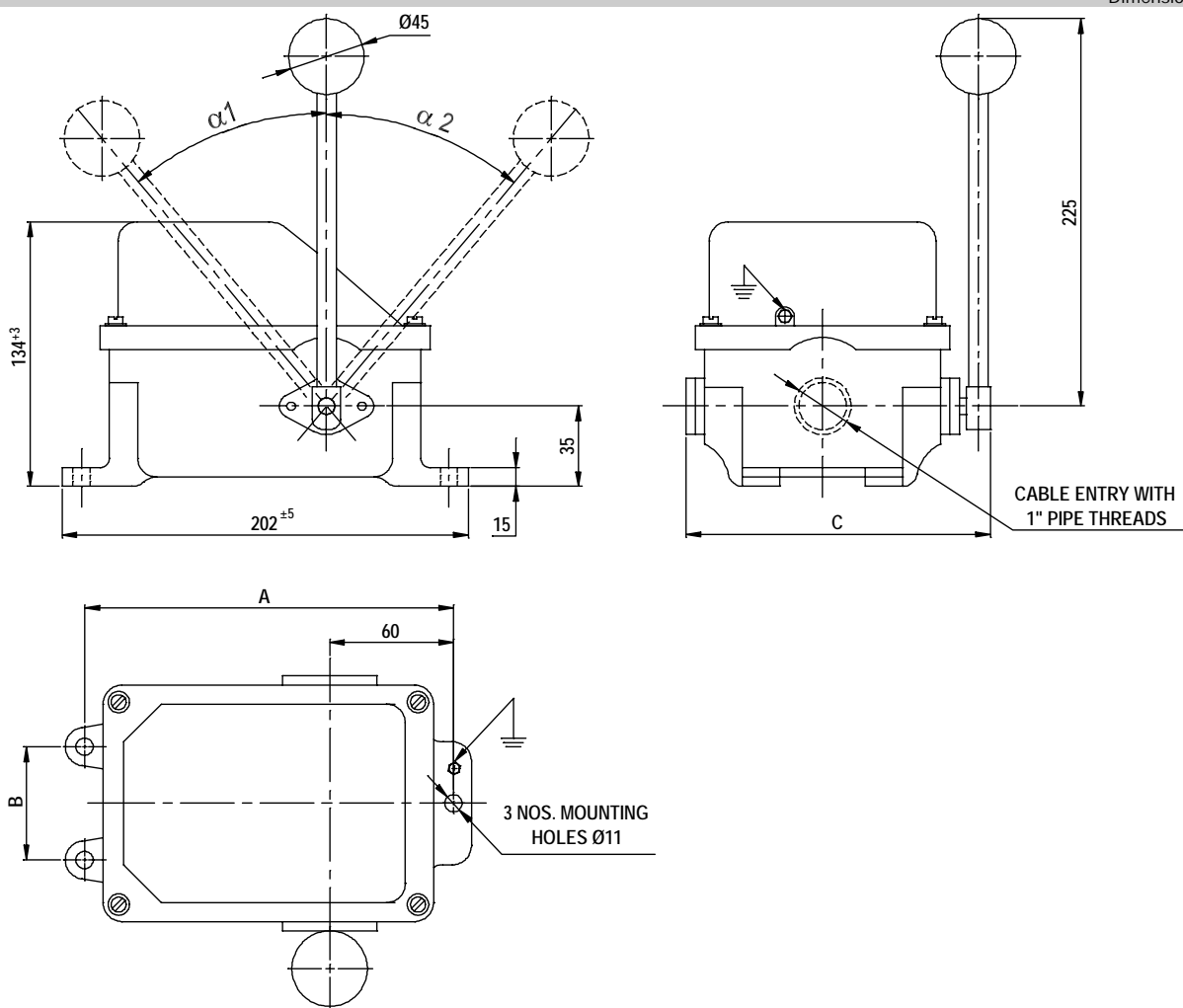


FIGURE - 1 : MASTER CONTROLLER

Type	Versions	No. of Contacts	A	B	C
MSC-2511	STAYPUT $\alpha 1 = \alpha 2 = 50^\circ$	4	178	113	214
MSC-2512	SELF RESET $\alpha 1 = \alpha 2 = 30^\circ$	4	178	113	214
MSC-2513	STAY PUT $\alpha 1 = \alpha 2 = 50^\circ$	2	174	54	160
MSC-2514	SELF RESET $\alpha 1 = \alpha 2 = 30^\circ$	2	174	54	160
MSC-2515	STAY PUT $\alpha 1 = 45^\circ$ SELF RESET $\alpha 2 = 30^\circ$	2	174	54	160
MSC-2516	STAY PUT $\alpha 1 = 45^\circ$ SELF RESET $\alpha 2 = 30^\circ$	4	178	113	214