

KAKKU RECTIFIER CONTROL PANELS FOR DC BRAKES

TYPE RP-7, RP-10 & RP-13

SALIENT FEATURES

■ GENERAL

KAKKU brake rectifier panels are sheet steel enclosed floor mounting and free standing type, having two compartments. The top compartment is meant for resistor and in the bottom compartment, contactors, relays, rectifier bridges are mounted.

■ TORQUE AND DUTY ADVANTAGE

With the help of KAKKU brake rectifier panels, the brakes can be used to deliver maximum torque (rated for 25% CDF) even at continuous duty.

■ POWER SAVER

Use of economy resistor helps in saving power.

■ ENCLOSURE

The standard enclosure for rectifier unit conforms to IP-54 and that of resistor unit to IP-33 degree of protection as per IS-2147-1962.

■ RECTIFIER

The rectifier used have high capacity to sustain over voltage and high current transients.

■ RESISTORS

Fechral wire wound resistors are used in the resistor unit. Each resistor element is of very high thermal capacity, compact in size and conveniently replaceable.

■ COMPONENTS

Contactors and time delay relays of reputed make with proven performance and suitable ratings are used in the rectifier panels.

■ PAINTING

The sheet steel enclosures undergo rigorous metal treatment process of de-rusting, de-greasing, phosphatising and are applied with two coats of synthetic enamel paint over one coat of primer. For special applications the panel can be epoxy painted. The paint is oven baked.

APPLICATION

KAKKU brake rectifier panels are used in conjunction with DC shunt brakes for equipments having AC mains supply e.g. EOT Cranes, Conveyers etc. for converting the AC supply to DC supply, for operation of the DC electro-magnets of the brake. The standard rectifier panels are provided with silicon rectifiers.

TYPE OF PANEL

KAKKU Brake Rectifier Panels are manufactured, making them suitable for operation of one or more brakes. The standard panels available are as under

Single Brakes - Individual Operation

Two Brakes - Simultaneous Operation

Two Brakes - Individual Operation

Panels can be supplied for other combinations upon specific requirements.

SUPPLY VOLTAGE

The rectifier panel is designed either for common supply voltage (for main & control circuits) or separate supply voltages (separately each for main & control circuits).

Supply voltage : 240V, 415V, 440V. 50Hz.AC

Control Voltage : 110V, 220V, 240V, 415V, 440V.
50Hz. AC

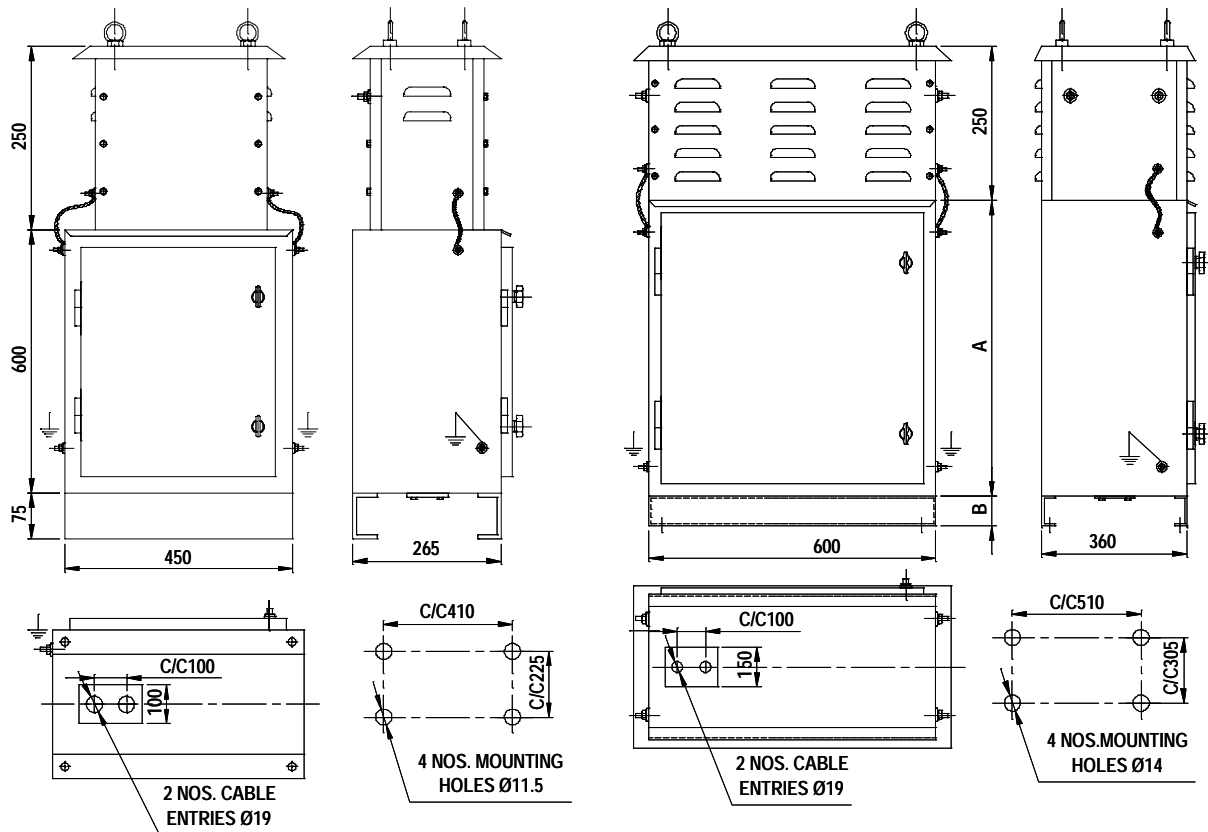
SELECTION CHART

KAKKU Type	Brake Size	No. of Brakes	Operation	Fig.
RP - 10	100 - 315	Single	Individual	1
RP - 10	100 - 315	Two	Simultaneous	1
RP - 7	400 & 500	Single	Individual	2
RP - 7	100 - 500	Two	Individual	2
RP - 13	600	Single	Individual	2
RP - 13	400 & 600	Two	Simultaneous	2

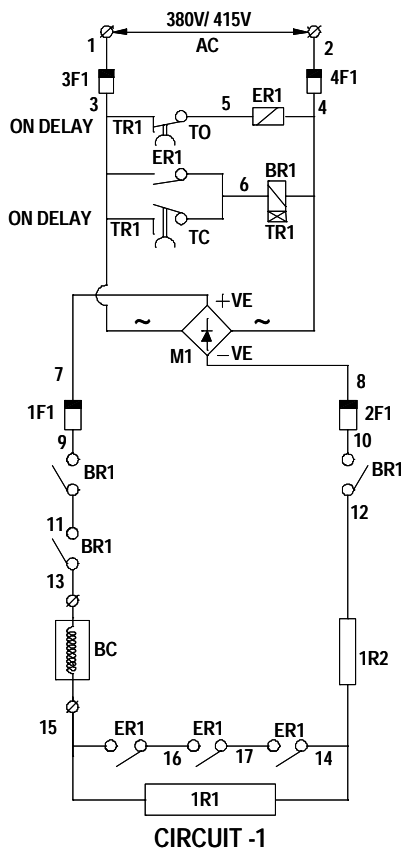
Product improvement is a continuous process at KAKKU. Hence data given in this catalogue is subject to revision without notice.



Symbol Of Reliability



**FIG. : 1 RECTIFIER PANEL
TYPE : RP-10**



**FIG. : 2 RECTIFIER PANEL
TYPE : RP-7, RP-13**

TYPE	A	B
RP-7	600	75
RP-13	900	100

Notes :-

1. Permanent resistance 1R2 may not be necessary for brakes type KBD-100 to KBD-315
2. For two brakes operating simultaneously circuit diagram remains same except that two brake-coils connected in parallel.
3. For individual operation of two brakes, the circuit will be repeated twice.
4. Transformers can be provided for control circuits alongwith its fuses, against specified requirements.

Main Components

- 1F1 TO 6F1 - FUSES
- 1R1, 1R2 - RESISTANCE
- ER1 - CONTACTOR
- M1 - RECTIFIER
- BC - BRAKE COIL
- BR1, TR1 - INTEGRAL UNIT OF CONTACTOR AND TIME DELAY RELAY

5. Circuit-1 common supply for main & control circuit & circuit-2 separate supply for main & control circuit.