

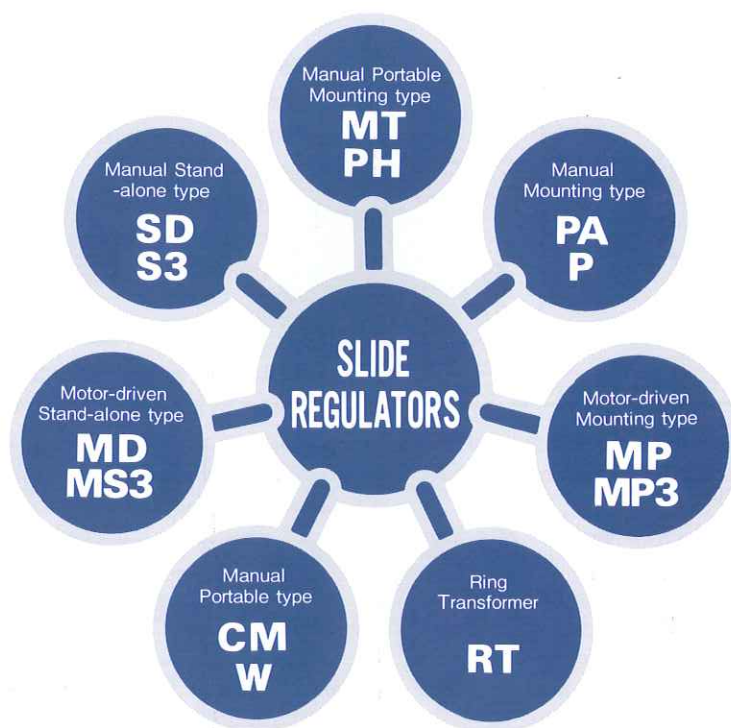
SD

SLIDE REGULATORS

(VARIABLE TRANSFORMERS)

The Slide Regulator is of indispensable unit to the voltage adjustment!

This Slide Regulator has been used for electric appliances, controlling boards, amusement equipments etc., in a variety of situations such as factories, laboratories, schools and homes in all over the world. Choose the suitable type in a range of 50VA~600kVA, matching with capacity, specifications, construction and so on. The Slide Regulator is our own brand.



■ Features

● REGULATION

Less than 7% at half of output voltage.

● EFFICIENCY

Power loss is fairly lower than resistor.

● WAVEFORM DISTORTION

Nothing.

● HEAT PROOF

120°C at the highest for class E insulation.

● INSULATION RESISTANCE

More than 3~20MΩ at DC 500V megger.

● DIELECTRIC STRENGTH

AC 1500V for 1 min.

● TORQUE

Same torque in every rotation.

● CONTROLLING

Output voltage is set in every stage and rotation is smooth enough.

● SAFETY RATING

Rated capacity is set to 0~100V for 100V model and 0~200V for 200V model. Piled up regulators for big capacity are balanced in parallel between each regulator by the reactor.

● DURABILITY AND STRUCTURE

The best design for each situation.

● INSTALLATION

Sturdy and simple installation.

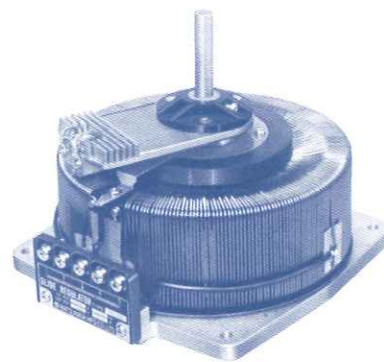
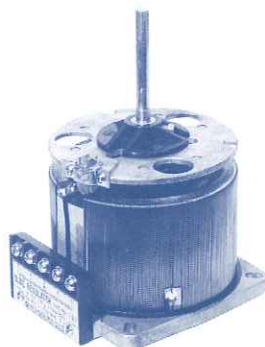
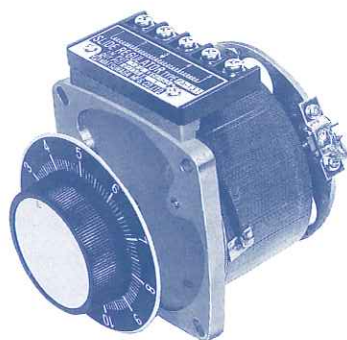
● MODEL

Capacity, specifications, construction etc. are chosen from the range of 50VA to 600kVA.

MT • PH • PA

MANUAL MOUNTING TYPE

MT stands for mini type.
PH stands for compact.
The shaft is adjustable
for PA type.



● Features

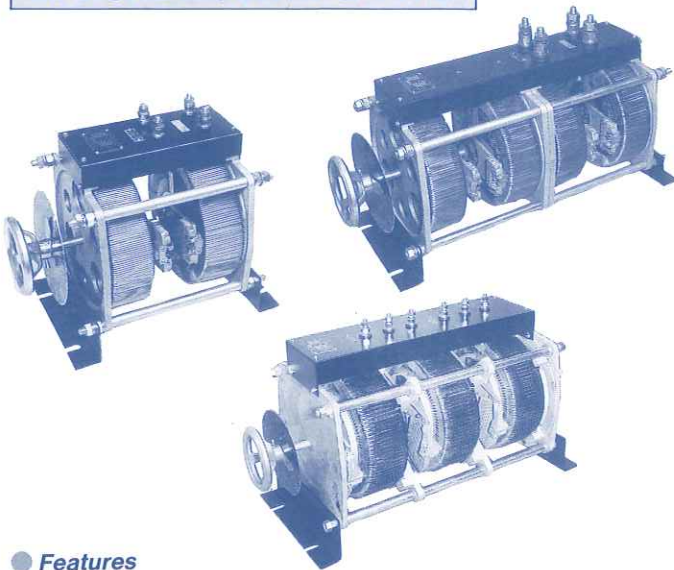
1. Compact and light weight. (MT,PH)
2. Easy to install. (MT,PH)
3. Suitable for equipment whose space is limited. (MT,PH)
4. For the 5 terminals model, a knob can be fitted, whether it is on a base or a slide plate, so that the voltage increases when it is turned clockwise. (PA)
5. The shaft length is adjustable. (PA)
6. Wear and tear of the carbon: less than 1mm after the continual 100,000 uses.
7. Torque is kept regularly.

Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
MT-105	1	100V	50 / 60Hz	0-100V	0.5A	50 VA
PH-130.5	1	100V	50 / 60Hz	0-130V	0.5A	50 VA
PH-131	"	"	"	"	1 A	100 VA
PH-131.5	"	"	"	"	1.5A	150 VA
PH-132	"	"	"	"	2 A	200 VA
PA-131	1	100V	50 / 60Hz	0-130V	1 A	100 VA
PA-132	"	"	"	"	2 A	200 VA
PA-133	"	"	"	"	3 A	300 VA
PA-135	"	"	"	"	5 A	500 VA
PA-1310	"	"	"	"	10 A	1 kVA
PA-1315	"	"	"	"	15 A	1.5kVA
PA-1320	"	"	"	"	20 A	2 kVA
PA-1330	"	"	"	"	30 A	3 kVA
PA-155	1	100V	50 / 60Hz	0-150V	5 A	500 VA
PA-1510	"	"	"	"	10 A	1 kVA
PA-1515	"	"	"	"	15 A	1.5kVA
PA-1520	"	"	"	"	20 A	2 kVA
PA-241	1	200V	50 / 60Hz	0-240V	1 A	200 VA
PA-241.5	"	"	"	"	1.5A	300 VA
PA-242.5	"	"	"	"	2.5A	500 VA
PA-245	"	"	"	"	5 A	1 kVA
PA-247.5	"	"	"	"	7.5A	1.5kVA
PA-2410	"	"	"	"	10 A	2 kVA
PA-2415	"	"	"	"	15 A	3 kVA

P.P3

MANUAL MOUNTING TYPE

P&P3 are of manual mounting type Slide Regulator with no waveform distortion and high efficiency.



Features

1. 2kVA and 3kVA transformers are used in a parallel connection and each one is balanced by the reactor.
2. The slider is divided in order to make the contact to the coiled ground surface smooth.
3. A special material made primarily of carbon and graphite with the addition of a small amount of metallic powder is used for the slider to give greater conductivity and durability.
4. Leg frames for easy attachment are installed.
5. With respect to the large capacity type, a single transformer such as 4kVA, 5kVA, 7.5kVA, and 10kVA is used.
6. High efficiency and no waveform distortion.
7. In reference to the large capacity type more than 20kVA,

Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
P-1340	1	100V	50 / 60Hz	0-130V	40 A	4 kVA
P-1350	"	"	"	"	50 A	5 kVA
P-1375	"	"	"	"	75 A	7.5kVA
P-13100	"	"	"	"	100 A	10 kVA
P-13120	"	"	"	"	120 A	12 kVA
P-13150	"	"	"	"	150 A	15 kVA
P-13200	"	"	"	5-130V	200 A	20 kVA
P-2420	1	200V	50 / 60Hz	0-240V	20 A	4 kVA
P-2425	"	"	"	"	25 A	5 kVA
P-2437.5	"	"	"	"	37.5A	7.5kVA
P-2450	"	"	"	"	50 A	10 kVA
P-2460	"	"	"	"	60 A	12 kVA
P-2475	"	"	"	"	75 A	15 kVA
P-24100	"	"	"	5-240V	100 A	20 kVA
P-24150	"	"	"	"	150 A	30 kVA
P-24200	"	"	"	"	200 A	40 kVA
P3-242.5	3	200V	50 / 60Hz	0-240V	2.5A	860 VA
P3-245	"	"	"	"	5 A	1.7kVA
P3-247.5	"	"	"	"	7.5A	2.6kVA
P3-2410	"	"	"	"	10 A	3.4kVA
P3-2415	"	"	"	"	15 A	5.2kVA
P3-2420	"	"	"	"	20 A	6.9kVA
P3-2430	"	"	"	"	30 A	10.3kVA
P3-2440	"	"	"	"	40 A	13.8kVA
P3-2450	"	"	"	"	50 A	17.3kVA
P3-2475	"	"	"	5-240V	75 A	26.0kVA
P3-24100	"	"	"	"	100 A	34.6kVA
P3-24150	"	"	"	"	150 A	52.0kVA
P3-24200	"	"	"	"	200 A	69.2kVA

a silver alloy slider is used to achieve maximum current capacity from the limited contact area.

SD 0~300V

MANUAL STAND-ALONE TYPE

Model	Capacity	Specifications
SD-305	1.5kVA	1φ50/60Hz 200V/0-300V 5A
SD-3010	3 kVA	" " 10A
SD-3015	4.5kVA	" " 15A
SD-3020	6 kVA	" " 20A
SD-3030	9 kVA	" " 30A
SD-3040	12 kVA	" " 40A
SD-3050	15 kVA	" " 50A
SD-3060	18 kVA	" " 60A
SD-3075	22.5kVA	" 200V/8-300V 75A
SD-305B	1.5kVA	1φ50/60Hz 100V/0-300V 5A
SD-3010B	3 kVA	" " 10A
SD-3015B	4.5kVA	" " 15A
SD-3020B	6 kVA	" " 20A
SD-3030B	9 kVA	" " 30A



SD·S3

MANUAL STAND-ALONE TYPE

SD & S3 are of stand-alone type Slide Regulator having cylindrical construction for saving spaces.

We adopt the silver alloy slider for the models from 20kVA.



Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
SD-131	1	100V	50 / 60Hz	0-130V	1 A	100 VA
SD-132	"	"	"	"	2 A	200 VA
SD-133	"	"	"	"	3 A	300 VA
SD-135	"	"	"	"	5 A	500 VA
SD-1310	"	"	"	"	10 A	1 kVA
SD-1320	"	"	"	"	20 A	2 kVA
SD-1330	"	"	"	"	30 A	3 kVA
SD-1340	"	"	"	"	40 A	4 kVA
SD-1350	"	"	"	"	50 A	5 kVA
SD-1375	"	"	"	"	75 A	7.5kVA
SD-13100	"	"	"	"	100 A	10 kVA
SD-1510	1	100V	50 / 60Hz	0-150V	10 A	1 kVA
SD-1520	"	"	"	"	20 A	2 kVA
SD-241	1	200V	50 / 60Hz	0-240V	1 A	200 VA
SD-241.5	"	"	"	"	1.5A	300 VA
SD-242.5	"	"	"	"	2.5A	500 VA
SD-245	"	"	"	"	5 A	1 kVA
SD-2410	"	"	"	"	10 A	2 kVA
SD-2415	"	"	"	"	15 A	3 kVA
SD-2420	"	"	"	"	20 A	4 kVA
SD-2425	"	"	"	"	25 A	5 kVA
SD-2437.5	"	"	"	"	37.5A	7.5kVA
SD-2450	"	"	"	"	50 A	10 kVA
SD-245B	1	100V	50 / 60Hz	0-240V	5 A	1 kVA
SD-2410B	"	"	"	"	10 A	2 kVA
SD-2415B	"	"	"	"	15 A	3 kVA
SD-2420B	"	"	"	"	20 A	4 kVA
SD-2425B	"	"	"	"	25 A	5 kVA
SD-265	1	200V	50 / 60Hz	0-260V	5 A	1 kVA
SD-2610	"	"	"	"	10 A	2 kVA
SD-2615	"	"	"	"	15 A	3 kVA
SD-2620	"	"	"	"	20 A	4 kVA
SD-2625	"	"	"	"	25 A	5 kVA
SD-2637.5	"	"	"	"	37.5A	7.5kVA
SD-2650	"	"	"	"	50 A	10 kVA
S3-242.5	3	200V	50 / 60Hz	0-240V	2.5A	860 VA
S3-245	"	"	"	"	5 A	1.7kVA
S3-247.5	"	"	"	"	7.5A	2.6kVA
S3-2410	"	"	"	"	10 A	3.4kVA
S3-2415	"	"	"	"	15 A	5.2kVA
S3-2420	"	"	"	"	20 A	6.9kVA
S3-2430	"	"	"	"	30 A	10.3kVA

● Features

1. Wear and tear of carbon : less than 1mm after continuous 100,000 repeating cycles.
2. High efficiency and no waveform distortion appear in the regulator like an induction voltage regulator.
3. A silver alloy slider is used to take the output voltage.
4. Cylindrical type to save space. (less than 10kVA)
5. The slider is divided in order to make the contact to the coiled ground surface smooth. (over 2kVA)
6. Leg frames for easy attachment are installed.
7. With respect to the models more than 4kVA, transformers of 2kVA and 3kVA are used in a parallel connection and each ones is balanced by the reactor.
8. Transformers of 4kVA, 5kVA, 7.5kVA, and 10kVA are used for the large capacity type.
9. In reference to the large capacity type more than 20kVA, a silver alloy slider is used.

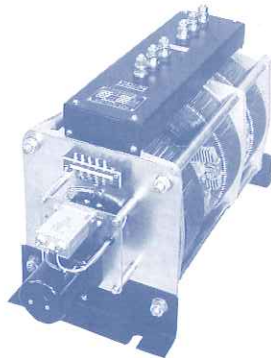
Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
SD-13120	1	100V	50 / 60Hz	0-130V	120 A	12 kVA
SD-13150	"	"	"	"	150 A	15 kVA
SD-13200	"	"	"	5-130V	200 A	20 kVA
SD-13300	"	"	"	"	300 A	30 kVA
SD-2460	1	200V	50 / 60Hz	0-240V	60 A	12 kVA
SD-2475	"	"	"	"	75 A	15 kVA
SD-24100	"	"	"	5-240V	100 A	20 kVA
SD-24150	"	"	"	"	150 A	30 kVA
SD-24200	"	"	"	"	200 A	40 kVA
SD-24250	"	"	"	"	250 A	50 kVA
SD-24300	"	"	"	"	300 A	60 kVA
S3-2440	3	200V	50 / 60Hz	0-240V	40 A	13.8kVA
S3-2450	"	"	"	"	50 A	17.3kVA
S3-2475	"	"	"	5-240V	75 A	26.0kVA
S3-24100	"	"	"	"	100 A	34.6kVA
S3-24150	"	"	"	"	150 A	52.0kVA
S3-24200	"	"	"	"	200 A	69.2kVA
S3-24300	"	"	"	"	300 A	103.9kVA

MP•MP3

MOTOR-DRIVEN MOUNTING TYPE

Features

1. This unit is motor-driven type, and can be used by remote controller.
2. The slider automatically is stopped at each end of up/down turn by the limit switch.
3. Ball bearings are used in shaft rotation. (over 1 ϕ 4 kVA and 3 ϕ 6.9 kVA)

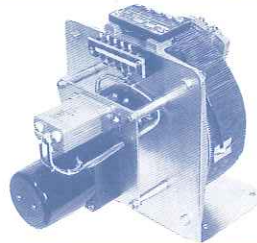


MD•MS3

MOTOR-DRIVEN STAND-ALONE TYPE

Features

1. Time taken to rotate from zero to maximum for standard models is fixed at 30 sec. Several gears for changing the speed (5sec. ~2min.) are available as an option.



Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
MP-131	1	100V	50 / 60Hz	0-130V	1 A	100 VA
MP-132	"	"	"	"	2 A	200 VA
MP-133	"	"	"	"	3 A	300 VA
MP-135	"	"	"	"	5 A	500 VA
MP-1310	"	"	"	"	10 A	1 kVA
MP-1315	"	"	"	"	15 A	1.5kVA
MP-1320	"	"	"	"	20 A	2 kVA
MP-1330	"	"	"	"	30 A	3 kVA
MP-1340	"	"	"	"	40 A	4 kVA
MP-1350	"	"	"	"	50 A	5 kVA
MP-1375	"	"	"	"	75 A	7.5kVA
MP-13100	"	"	"	"	100 A	10 kVA
MP-13120	"	"	"	"	120 A	12 kVA
MP-13150	"	"	"	"	150 A	15 kVA
MP-13200	"	"	"	5-130V	200 A	20 kVA
MP-155	1	100V	50 / 60Hz	0-150V	5 A	500 VA
MP-1510	"	"	"	"	10 A	1 kVA
MP-1515	"	"	"	"	15 A	1.5kVA
MP-1520	"	"	"	"	20 A	2 kVA
MP-241	1	200V	50 / 60Hz	0-240V	1 A	200 VA
MP-241.5	"	"	"	"	1.5A	300 VA
MP-242.5	"	"	"	"	2.5A	500 VA
MP-245	"	"	"	"	5 A	1 kVA
MP-2410	"	"	"	"	10 A	2 kVA
MP-2415	"	"	"	"	15 A	3 kVA
MP-2420	"	"	"	"	20 A	4 kVA
MP-2425	"	"	"	"	25 A	5 kVA
MP-2437.5	"	"	"	"	37.5A	7.5kVA
MP-2450	"	"	"	"	50 A	10 kVA
MP-2460	"	"	"	"	60 A	12 kVA
MP-2475	"	"	"	"	75 A	15 kVA
MP-24100	"	"	"	5-240V	100 A	20 kVA
MP-24150	"	"	"	"	150 A	30 kVA
MP-24200	"	"	"	"	200 A	40 kVA
MP3-242.5	3	200V	50 / 60Hz	0-240V	2.5A	860 VA
MP3-245	"	"	"	"	5 A	1.7kVA
MP3-247.5	"	"	"	"	7.5A	2.6kVA
MP3-2410	"	"	"	"	10 A	3.4kVA
MP3-2415	"	"	"	"	15 A	5.2kVA
MP3-2420	"	"	"	"	20 A	6.9kVA
MP3-2430	"	"	"	"	30 A	10.3kVA
MP3-2440	"	"	"	"	40 A	13.6kVA
MP3-2450	"	"	"	"	50 A	17.3kVA
MP3-2475	"	"	"	5-240V	75 A	26.0kVA
MP3-24100	"	"	"	"	100 A	34.6kVA
MP3-24150	"	"	"	"	150 A	52.0kVA
MP3-24200	"	"	"	"	200 A	69.2kVA

Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
MD-131	1	100V	50 / 60Hz	0-130V	1 A	100 VA
MD-132	"	"	"	"	2 A	200 VA
MD-133	"	"	"	"	3 A	300 VA
MD-135	"	"	"	"	5 A	500 VA
MD-1310	"	"	"	"	10 A	1 kVA
MD-1320	"	"	"	"	20 A	2 kVA
MD-1330	"	"	"	"	30 A	3 kVA
MD-1340	"	"	"	"	40 A	4 kVA
MD-1350	"	"	"	"	5 A	5 kVA
MD-1375	"	"	"	"	75 A	7.5kVA
MD-13100	"	"	"	"	100 A	10 kVA
MD-13120	"	"	"	"	120 A	12 kVA
MD-13150	"	"	"	"	150 A	15 kVA
MD-13200	"	"	"	5-130V	200 A	20 kVA
MD-13300	"	"	"	"	300 A	30 kVA
MD-155	1	100V	50 / 60Hz	0-150V	5 A	500 VA
MD-1510	"	"	"	"	10 A	1 kVA
MD-1520	"	"	"	"	20 A	2 kVA
MD-241	1	200V	50 / 60Hz	0-240V	1 A	200 VA
MD-241.5	"	"	"	"	1.5A	300 VA
MD-242.5	"	"	"	"	2.5A	500 VA
MD-245	"	"	"	"	5 A	1 kVA
MD-2410	"	"	"	"	10 A	2 kVA
MD-2415	"	"	"	"	15 A	3 kVA
MD-2420	"	"	"	"	20 A	4 kVA
MD-2425	"	"	"	"	25 A	5 kVA
MD-2437.5	"	"	"	"	37.5A	7.5kVA
MD-2450	"	"	"	"	50 A	10 kVA
MD-2460	"	"	"	"	60 A	12 kVA
MD-2475	"	"	"	"	75 A	15 kVA
MD-24100	"	"	"	5-240V	100 A	20 kVA
MD-24150	"	"	"	"	150 A	30 kVA
MD-24200	"	"	"	"	200 A	40 kVA
MD-24250	"	"	"	"	250 A	50 kVA
MD-24300	"	"	"	"	300 A	60 kVA
MD-24400	"	"	"	"	400 A	80 kVA
MD-24500	"	"	"	"	500 A	100 kVA
MS3-242.5	3	200V	50 / 60Hz	0-240V	2.5A	860 VA
MS3-245	"	"	"	"	5 A	1.7kVA
MS3-247.5	"	"	"	"	7.5A	2.6kVA
MS3-2410	"	"	"	"	10 A	3.4kVA
MS3-2415	"	"	"	"	15 A	5.2kVA
MS3-2420	"	"	"	"	20 A	6.9kVA
MS3-2430	"	"	"	"	30 A	10.3kVA
MS3-2440	"	"	"	"	40 A	13.6kVA
MS3-2450	"	"	"	"	50 A	17.3kVA
MS3-2475	"	"	"	5-240V	75 A	26.0kVA
MS3-24100	"	"	"	"	100 A	34.6kVA
MS3-24150	"	"	"	"	150 A	52.0kVA
MS3-24200	"	"	"	"	200 A	69.2kVA
MS3-24300	"	"	"	"	300 A	103.9kVA
MS3-24400	"	"	"	"	400 A	138.5kVA
MS3-24500	"	"	"	"	500 A	173.2kVA
MS3-24600	"	"	"	"	600 A	207.8kVA

CM

MANUAL PORTABLE TYPE

Easy operation & handy type.



● Features

1. Attached voltmeter, on/off switch, input cord, output receptacle.

Model	Rated Specifications					
	Phase	Input Voltage	Frequency	Output Voltage	Max. Current	Capacity
CM-135	1	100V	50/60Hz	0-130V	5 A	500 VA
CM-1310	"	"	"	"	10 A	1 kVA
CM-1320	"	"	"	"	20 A	2 kVA
CM-1510	1	100V	50/60Hz	0-150V	10 A	1 kVA
CM-242.5	1	200V	50/60Hz	0-240V	2.5A	500 VA
CM-245	"	"	"	"	5 A	1 kVA
CM-2410	"	"	"	"	10 A	2 kVA

W

ISOLATED TYPE

Isolating double bobbin type.



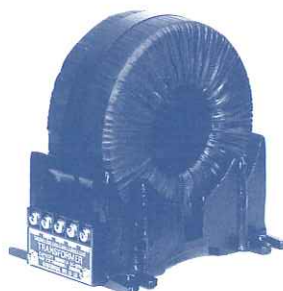
Model	Capacity	Specifications		
M-155W	750 VA	1 ϕ 50/60Hz	100V/0-150V	5A
M-1510W	1.5 kVA	"	"	10A
M-303W	900 VA	1 ϕ 50/60Hz	100V/70-300V	3A
M-305W	1.5 kVA	"	"	5A
M-3010WM	3 kVA	"	"	10A

※ Model No. M-3010WM is of the stand-alone type.

RT

RING TRANSFORMER

The voltage free set type, ring transformer.



● Features

1. Terminals of 100V, 115V, 200V & 220V are used for both input and output.
2. Since this transformer is a ring type, optional voltage and current are picked up by wiring the coil through the ring.

Model	Capacity	Specifications	
RT-100	100 VA	1 ϕ 50/60Hz 100V • 115V 200V • 220V	
RT-200	200 VA		
RT-300	300 VA		
RT-500	500 VA		
RT-1K	1 kVA		
RT-2K	2 kVA		
RT-3K	3 kVA		