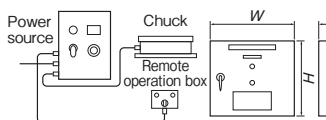


Model ES-V ELECTRO CHUCK MASTER*



ES-V220A

[Connection of Model ES-V]



[Application]

An input from an AC power source is rectified to DC, which is output to electromagnetic chucks. The output voltage can be varied to control the holding power of electromagnetic chucks. The automatic demagnetization function is activated to reduce the residual magnetism of the electromagnetic chucks.

[Features]

- Suitable for large sized electromagnetic chucks and connecting type electromagnetic chucks that require a relatively large electric capacity.
- The low voltage range for variable output is very stable.

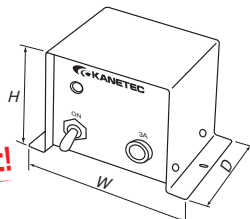
Model	Power Source	Output			Dimensions			Mounting Hole Pitch		Mounting Hole	Mass	Remote Operation Box		
		Voltage	Current	Depth	Width	Height	Depth	Width	Height			Depth	Cord	
ES-V220A	Single-phase 200 VAC,50/60Hz	0-90 VDC	20A	600(23.6)	550(21.6)	250	400	596(23.4)	4-φ10	60kg/133 lb	100	155	70	5m(196.8)
ES-V230A	200 VAC,50/60Hz		30A	650(25.5)	600(23.6)	(9.84)	(15.7)	646(25.4)	(φ0.39)	80kg/177 lb	(3.93)	(6.10)	(2.75)	

Model KR RECTIFIER FOR ELECTROMAGNETIC CHUCK

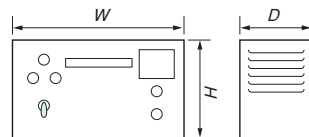


KR-N103A

Very compact!



KR-T203



Model KR-N

[Application]

These rectifiers rectify an input from an AC power source to direct current and output it to electromagnetic chucks via a demagnetizer. They can also be used as a source to supply DC to electromagnetic holders.

[Features]

- The very compact size (volume reduced by 50% from our conventional models) saves installation space and can be installed in a control panel, too.
- Since this is connected to a magnet on the backside, connection time can be reduced substantially.
- External control terminals are provided as standard features for automatic operation by means of external contacts, etc.
- Power cable (2 m) and plug included.

Model KR-T

[Application]

These rectifiers rectify an input from an AC power source to direct current and output it to electromagnetic chucks via a demagnetizer. The output voltage can be varied to control the holding power of electromagnetic chucks.

[Features]

- Both 100 VAC and 200 VAC can be used.
- An output voltmeter is provided.
- The output can be varied in a wide range to provide a wide range of adjustment of the holding power.
- Power cable (2 m) included.

Model	Power Source	Output		Dimensions			Mass
		Voltage	Current	Width	Height	Depth	
KR-N101A	Single-phase 100 VAC,50/60Hz	90 VDC	1A	100(3.93)	77(3.03)	106(4.17)	1.0kg/2.2 lb
KR-N103A		3A					
KR-T201	Single-phase 100/200 VAC,50/60Hz	0-120 VDC	1A	280(11.0)	140(5.51)	184(7.24)	5.5kg/ 12 lb
KR-T203		3A	8.5kg/ 18 lb				
KR-T205		5A	14.0kg/ 31 lb				

*The output voltage of Model KR-T is stable when above 30 V.

Model ESR CHUCK MASTER* DEDICATED TO DEMAGNETIZATION



ESR-N102

[Application]

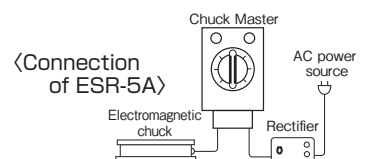
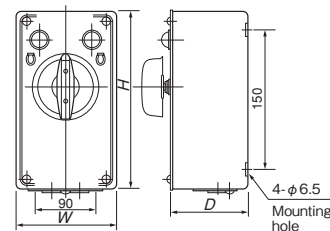
Model ESR-N102 rectifies an input from an AC power source to DC and outputs it to electromagnetic chucks. For demagnetization, the attenuating alternating output is operated manually. A rectifier is built in.

Model ESR-5A relays DC output to electromagnetic chucks and for demagnetization, the attenuating alternating output is operated manually. A rectifier needs to be installed in the preceding stage.

[Features]

- Turning the dial repeats reversal of the circuit and changing over of resistance values for easy demagnetization.
- Thanks to the manual type, this can be applied to diversified workpieces by simply turning the dial.

Model	Electrical Rating		Dimensions			Mounting Hole Pitch		Mounting Hole	Mass
	Input	Output	Width	Height	Depth	Width	Height		
ESR-N102	100 VAC,50/60Hz	90 VDC-2A	110(4.33)	205(8.07)	85(3.34)	90	150	4-φ6.5	1.8kg/3.9 lb
ESR-5A	Max. 120 VDC	Max. 120 VDC-4A		190(7.48)	84(3.30)	(3.54)	(5.90)	(φ0.25)	1.7kg/3.7 lb



Model S-2A SELECTOR SWITCH FOR DEMAGNETIZATION



S-2A

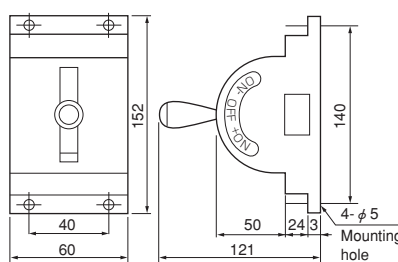
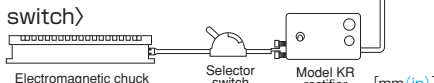
[Application]

A switch to relay DC output from the rectifier to electromagnetic chucks and is operated manually to select the output for demagnetization.

[Features]

- Easy installation and light weight. Simple and robust construction.

[Wiring of selector switch]



Model	Electrical Rating		Dimensions			Mounting Hole Pitch		Mounting Hole	Mass
	Voltage	Current	Width	Height	Depth	Width	Height		
S-2A	Max. 120 VDC	2A	60(2.36)	121(4.76)	152(5.98)	40(1.57)	140(5.51)	4-φ5(φ0.19)	0.4kg/0.8 lb

ELECTROMAGNETIC CHUCKS

CHUCK CONTROLLERS

PERMANENT ELECTROMAGNETIC CHUCKS

BLOCKS FOR MC

VACUUM CHUCKS

PROMELTA* SYSTEM

SINE BAR CHUCKS

BLOCKS, HOLDERS, MINI CHUCKS

HOLDING TOOLS

MEASURING TOOL HOLDERS

MAGNETIC HOLDERS

MAGNETIC TOOLS