

Need of a chuck controller

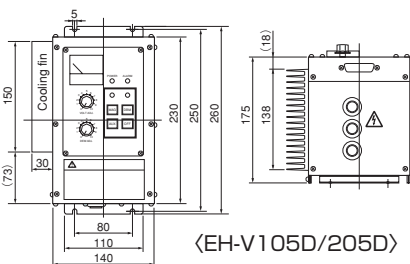
Direct current (DC) is required to generate a magnetic force in the electromagnetic chuck. Also when removing a workpiece after machining, electrical demagnetization is required to reduce the residual holding power. For this purpose, an Electro Chuck Master or a chuck controller consisting of a rectifier and demagnetizer (chuck master dedicated to demagnetization and changeover switch) is required.

- Rectifier: Rectifies an input from an alternating current (AC) power source to direct current (DC) and supplies it to the electromagnetic chuck.
- Demagnetizer: Once a workpiece has been attracted to the electromagnetic chuck, it cannot be removed easily due to its residual holding power even if the power is turned off. The demagnetizer is used to attenuate the DC power from the rectifier and eliminate the residual magnetism.

Model EH-V ELECTRO CHUCK MASTER*



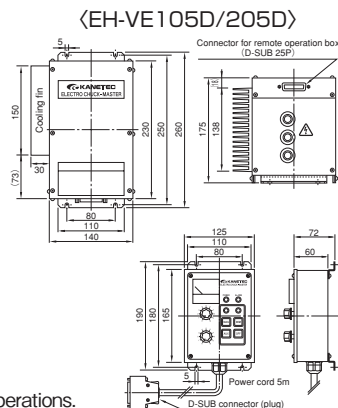
EH-V205D



<EH-V105D/205D>



EH-VE105D



<EH-VE105D/205D>

[Application]

Rectifies an input from an AC power source to DC and outputs it to the electromagnetic chuck.

[Features]

- Developed as a non-contact type chuck master to realize high speed consistent demagnetizing effect. Also various protective functions have been incorporated.
- Because a relay (consumable part) is not used, this model can be used continuously and withstand frequent ON/OFF operations.
- The attractive force of electromagnetic chuck can be controlled by adjusting voltage.
- The rapid automatic demagnetization function is activated to reduce the residual holding power in electromagnetic chucks.
- As a separate type of Model EH-V 105D/205D (operation unit incorporated), a remote operation box is attached for remote operation. For 10A operation, select model EH-VE210D.

Remote operation type

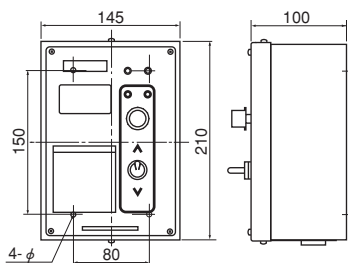
Model	Power Source	Output	Width	Height	Depth	Mass
EH-V105D	single-phase 100 VAC	0-90 VDC 5A	170 (6.69)	260 (10.2)	175 (6.89)	4.5kg/ 10 lb
EH-V205D	single-phase 200 VAC					4.5kg/ 10 lb(Main unit) 1kg/ 2.2 lb(Operation box)
EH-VE105D	single-phase 100 VAC					5.9kg/ 13 lb(Main unit) 1kg/ 2.2 lb(Operation box)
EH-VE205D	single-phase 200 VAC					
EH-VE210D		0-90 VDC 10A	282 (11.1)	290 (11.4)		

*If the magnetic force needs not be adjusted, select Model ES-M.

Model ES-M ELECTRO CHUCK MASTER*



ES-M305B



[Application]

Rectifies an input from an AC power source to DC and outputs it to the electromagnetic chuck. To eliminate the residual holding power in the electromagnetic chuck, the rapid automatic demagnetization function is activated.

[Features]

- An interlock circuit is incorporated.
- Demagnetization is completed quickly by simply pushing the switch. The program has been designed to give consistent demagnetizing effect within a short time.
- Model ES-M305B can be used on both input voltages of 100 VAC and 200 VAC.
- The anti-noise feature ensures consistent performance in certain noisy environment.
- The DC output voltage is constant.
- The fundamental functions required to control electromagnetic chucks are incorporated neatly.

Caution for use Model ES-M103B is a low-cost, readily available type and therefore may lack some functions described above.

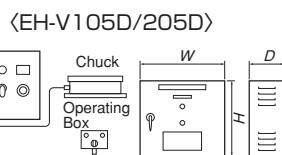
Model	Power Source	Output		Dimensions			Mounting		Mounting Hole	Mass
		Voltage	Current	Width	Height	Depth	Width	Height		
ES-M103B	single-phase 100 VAC	90 VDC	3A	145 (5.70)	210 (8.26)	100 (3.93)	80 (3.15)	150 (5.90)	4-φ 4.5 (φ 0.17)	2.3kg/ 5.1 lb
ES-M305B	single-phase 100/200 VAC*		5A							2.5kg/ 5.5 lb

*1...Switch selection *If the magnetic force needs not be adjusted, select Model EH.

Model ES-V ELECTRO CHUCK MASTER*



ES-V220A



[Application]

The input from an AC power source is rectified to DC and 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 in electromagnetic chucks.

[Features]

- Most suitable for large sized electromagnetic chucks and connecting type electromagnetic chucks.
- Low voltage range for variable output is very stable.

Model	Power Source	Output		Dimensions			Mounting		Mounting Hole	Mass	Operating Box			
		Voltage	Current	Width	Height	Depth	Width	Height			Depth	Cable		
ES-V220A	Single-phase 200 VAC	0-90 VDC	20A	600 (23.6)	550 (21.6)	250	400	596 (23.4)	4-φ 10	60kg/133 lb	100	155	70	5m (196.8) provided
ES-V230A		Volume	30A	650 (25.5)	600 (23.6)	(9.84)	(15.7)	646 (25.4)	(φ 0.39)	80kg/177 lb	(3.93)	(6.10)	(2.75)	

ELECTROMAGNETIC CHUCK CONTROLLERS
 PERMANENT MAGNETIC CHUCKS
 PERMANENT MAGNETIC CHUCKS
 BLOCKS FOR MC
 VACUUM CHUCKS
 PROMELTA SYSTEM
 SINE BAR CHUCKS
 MAGNETIC BLOCKS
 WORKING TOOLS
 MEASURING TOOL HOLDERS
 MAGNETIC TOOLS
 MAGNETIC TOOLS