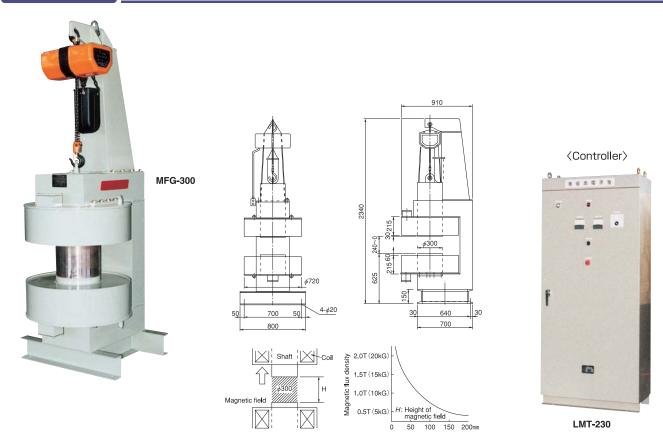
Model MFG MAGNETIC FIELD GENERATOR



## [Application]

Generates a powerful magnetic field for magnetization of magnetic substances and seed magnetic field treatment in agriculture and gardening.

## [Features]

- ●A simple configuration for installation within a floor area of less than 1 m2.
- A dedicated controller needs to be used.

## Main unit

Model	Capacity	Magnetic Flux Density	Mass
MFG-300	260 VDC • 21 A	Max.2T (20kG)	2800kg/6173 lb

## Controller

Model	Power Source	Output	Pi	ower Panel Dimension	าร	Mass
Model	Power Source	Output	Width	Depth	Height	Mass
LMT-230	3-phase 200 VAC	260 VDC-Max.30A	800 (31.5)	400 (15.7)	1800 (70.8)	250kg/551 lb

## ■How to Demagnetize and Precautions for Use

- •Move a workpiece over the demagnetizing surface slowly in the direction of A-B. Note that the workpiece must be moved more than 20 cm away from the end of the demagnetizer to be demagnetized effectively.
- •When the tunnel type demagnetizer is used, pass the workpiece through the tunneled hole.
- A recommended time for passing the workpiece is about 5 seconds.
   (Recommended speed from 3 to 5 m/min.)
- Some demagnetizers may be heated to considerably high temperature due to electromagnetic induction action, but this does not affect the demagnetizing operation at all. However, be sure to observe the working rate.
- If there is any other metal near the demagnetizer, it may also be heated. You should move such metal at least 5 cm away, and approx. 30 cm away for the tunnel type demagnetizer. However, if such separation is not possible, please use plastics or nonmagnetic materials such as SUS304 for peripheral machinery.
- ●The strong magnetic field produced by the demagnetizers may cause the CRT of computer and NC units to flicker. It will not adversely affect the operation of these units, but if it causes a recognition problem, such measures must be taken as keeping the CRT away from the demagnetizers and installing a magnetic shield on the CRT side.
- ●The demagnetizers have large inductance and low power factor. Take influence on the power source into consideration.
- ●The standard models can not be used on 220 VAC, 50 Hz. For such application, please contact us.

## Model KMD TABLE TYPE DEMAGNETIZER

## Compact but improved demagnetizing performance!







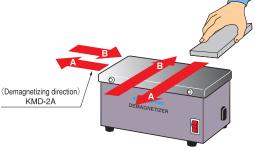
## [Application]

These demagnetizers produce an alternating magnetic field on the surface by use of an AC power source through which workpieces are passed to remove the magnetism remaining on their surface.

## [Features]

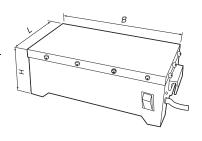
- Thick workpieces can be demagnetized effectively by passing the front and rear side over the demagnetizer.
- ●These demagnetizers are very powerful and can demagnetize steel materials such as high speed steel, bearing steel, nickel-chrome steel, spring steel, die steel, etc. which are difficult to demagnetize by standard demagnetizers (since these steels have the property similar to magnetic steel which retains residual magnetism and is hard to remove).
- These demagnetizers have good heat radiation and can withstand continuous power application.

For demagnetization, be sure to pass the workpiece without stopping it over the demagnetizer.



⟨Demagnetizing direction⟩
KMD-15C—50C

(B) and (L) in the figure apply to KMD-2A.



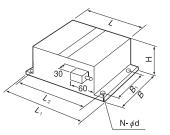
[mm (in)]

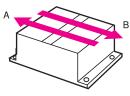
Model	Davies Carries	Power Capacity	Working Rate	Domonostinios Width		Dimensions		Mass
Model	Power Source	(Current)		Demagnetizing Width	В	L	Н	Mass
KMD-2A	3-phase 200 VAC 50/60Hz	2kVA (5.8A)		160 (6.29)	453 (17.8)	245 (9.64)	140 (5.51)	30kg/66 lb
KMD-15C	Single-phase 100 VAC 50/60Hz	140VA (1.4A)		80 (3.15)	150 (5.90)	120 (4,72)	80 (3,15)	5kg/11 lb
KMD-20C	Single-phase 100 VAC 50/60H2	300VA (3.0A)		130 (5.11)	200 (7.87)	120 (4.72)	80 (3.15)	7kg/15 lb
KMD-30C	Single-phase 200 VAC 50/60Hz	0.74kVA (3.7A)	100%ED	180 (7.08)	300 (11.8)			19kg/41 lb
KMD-40C	Single-phase 220 VAC 60Hz	1.04kVA (5.2A)		280 (11.0)	400 (15.7)	200 (7.87)	120 (4.72)	29kg/63 lb
KMD-50C	Single-phase 220 VAC 60H2	1.28kVA (6.4A)		380 (14.9)	500 (19.6)			37kg/81 lb

2m cord provided

# Model KMDS WATER-PROOF TYPE DEMAGNETIZER







(Demagnetizing direction) **KMDS** 

#### [Application]

These demagnetizers produce a strong magnetic filed on the surface by use of an AC power source to demagnetize workpieces on a belt which runs over close to the surface.

## [Features]

- They are water-proofed and will not fail when wetted by cutting oil or cooling water.
- They can be incorporated in belt type grinders or other automatic and continuous grinders.
- The very strong demagnetizing force produced provides some margin on gap width on the surface to allow a belt conveyor to run over the working face.

## Precautions for use

Cool them always by pouring water, 50% rated when you use them in dry area (electrifying them for 20 minutes and turning off for 20minutes.)

[mm (in)]

Model	Power Source	Power Capacity	Working Rate		Dimensions								
Wodel	Fower Source	(Current)	Working hate	В	L	Н	B <sub>1</sub>	N	φd	L <sub>1</sub>	L 2	Mass	
KMDS-1A	Single-phase 200 VAC	200VA (1A)	50% ED	150 (5.90)	206 (8,10)	100 (3.93)	_	2(0.07)		260 (10,2)	235 (9,25)	9.0kg/19 lb	
KMDS-2A	50/60Hz	400VA (2A)	Usable continuously	200 (7.87)	206 (8.10)	100 (3.93)	_	2(0.07)	8.5 (0.33)	260 (10.2)	235 (9.25)	13.5kg/30 lb	
KMDS-3A	30/00112	800VA (4A) when		400 (15.7)	350 (13.7)	120 (4.72)	120 (4.72)	4 (0.15)	(0.00)	410 (16.1)	380 (14.9)	41.0kg/90 lb	

%2m cord provided.

\*The switch is not housed.

## Model KMDU U TYPE DEMAGNETIZER





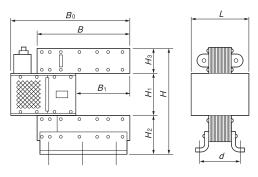
KMDU-25A

## [Application]

Suitable for demagnetizing bobs and die sets. This model is also recommended where long and irregular-shaped workpieces need to be demagnetized uniformly since its magnetic flux alternates vertically. Further, this model can easily be incorporated in a transportation system.

## [Features]

 Easy incorporation into a transportation system and easy removal and relocation.



													Littli (III) 3
Model	Power Source	Power Capacity	Working				[	Dimensions					Mass
Wodel	1 Ower Source		Rate	B∘	В	B <sub>1</sub>	Н	H₁	H₂	Н₃	L	d	iviass
KMDU-25A	Single-phase 200 VAC	14kVA ( 70A)	30%ED	630 (24.8)	500 (19.6)	250 (9.84)	480 (18.9)	200 (7.87)	150 (5.90)	130 (5.11)	350 (13.7)	270 (10.6)	180kg/ 397 lb
KMDU-50A	50/60Hz	30kVA (150A)	Max. 0.5h	940 (37.0)	770 (30.3)	500 (19.6)	715 (28.2)	300 (11.8)	215 (8.46)	200 (7.87)	420 (16.5)	270(10.6)	600kg/1323 lb

\*A different-voltage type (special type) is also available.

<sup>※</sup>A different-voltage type (special type) is also available.

## Model KMDT TUNNEL TYPE DEMAGNETIZER

Gate

Height

80

125

4.92

200

7.87

315

В

210

280

400

540

Width

100

160

250

9.84

400



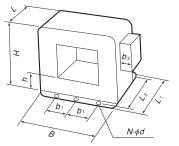


## [Application]

These demagnetizers can meet such demagnetizing needs as passing a bucket containing a large number of small workpieces and being incorporated in a line for continuous demagnetizing by conveyor transportation.

Various sizes are available to meet such requirements. They can also be used to demagnetize long workpieces and irregularly shaped workpieces.

- The good heat radiation design enables continuous operation.
- A uniform demagnetizing area can be obtained.
- ●Almost uniform demagnetization can act on the whole periphery of passing workpieces.



Н

205

245

350

13.7

460

b.

(2.36)

60

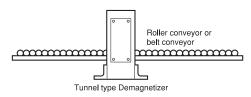
80

150

(5.90)

200

## (An example of application of KMDT



Caution: The conveyor must be made of nonmagnetic stainless steel or plastic.

							[mm (in)]
ner	nsions					Mass	Cable
	φd	b 2	L 1	L 2	h	iviass	(2RNCT)
	9.5		153	133	70	15kg/33.3 lb	
	(0.37)	40	(6.02)	(5.23)	(2.75)	13kg/33.3 lb	1,25mm <sup>3</sup>
5)		(1.57)	204	180	60	32kg/70.5 lb	1.2511111
			(8.03)	(7.08)	(2.36)	32kg/70.5 lb	
	12		284	260		80kg/177 lb	5.5mm <sup>3</sup>
	(0.47)	70	(11.1)	(10.2)	75	oung/177 lb	5.511111
3)		(2.75)	384	350	(2.95)		

140kg/308 lb

14mm<sup>3</sup>

\*The cable and switch are not provided. 

A different-voltage type (special type) is also available

Source Capacity

(Current)

0.46kVA (2.3A)

1.6kVA (8A)

6kVA (25A)

11kVA (55A)

## Model KMDTR

Power

Single-phase

200 VAC

50/60Hz

Model

KMDT-10A

KMDT-16A

KMDT-25A

KMDT-40A

#### **TUNNEL** TYPE DEMAGNETIZER

103

144

5.66

224

(8.81

304



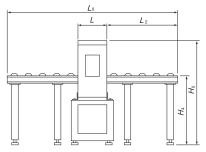
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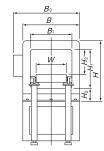
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(0.15

6

This model allows large and heavy workpieces to pass through the demagnetizing area at a nearly constant speed, though manual feed, on a roller conveyor. No extra manpower is required for repeating work, enhancing the demagnetizing efficiency.





## Model with roller conveyor

[mm (in) ]

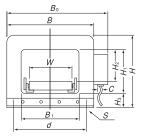
									[	Dimension:	s					
Model	Power Source	Source Capacity Current	Working	Conv	eyor	D	emagnetiz	er				Major Dir	mensions			
		Current	Rate	L o	W	L	В	Н	L o	В∘	В	H∘	H₁	H2	Н₃	H4
VMDTD 164		1.6kVA (8A)			90	144	280	245	928	320	160	720	125	60	60	
KMDTR-16A	Sing <b>l</b> e-phase	I.OKVA (OA)			(3.54)	(5.66)	(11.0)	(9.64)	(36.5)	(12.6)	(6.29)	(28.4)	(4.92)	(2.36)	(2.36)	
KMDTD 25A	l ° '	200 VAC 6kVA (30A)	100%	2000	150	224	400	350	888	470	250	795	200	120		600
KMDTR-25A	50/60Hz		ED	(78.7)	(5.90)	(8.81)	(15.7)	(13.7)	(34.9)	(18.5)	(9.84)	(31.3)	(7.87)	(4.72)	75	(23.6)
KMDTR-40A	30/60HZ	11k\/A (EEA)			305	304	540	460	848	610	400	905	315	235	(2.95)	
KWIDTH-40A		11kVA (55A)			(12.0)	(11.9)	(21.2)	(18.1)	(33.4)	(24.0)	(15.7)	(35.6)	(12.4)	(9.25)		

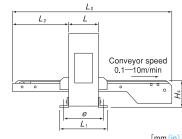
## Model KMDTC TUNNEL TYPE DEMAGNETIZER



#### [Application]

Recommended where a large amount of workpieces such as parts needs to be demagnetized continuously during transfer between processes. Various types can be selected according to the mass and amount of workpieces.





## Model with belt conveyor

[mm (in)]

		Source										ı	Dimensio	ons																					
Model	Power Source	Capacity	Working Rate	Motor	Conv	/eyor	D	emagnet	izer						Major D	imensio	ns																		
	Source	(Current)	nate		L o	W	L	В	Н	L <sub>1</sub>	L <sub>2</sub>	В∘	В₁	H₁	H2	Нз	H₄	С	d	е	S														
KMDTC-10A		0.46kVA			800	70	103	210	205	153	200	250	100	80	30	70	120	φ12	120	133	4 (0.15) -														
KWIDTC-TOA		(2.3A)			(31.5)	(2.75)	(4.05)	(8.26)	(8.07)	(6.02)	(7.87)	(9.84)	(3.93)	(3.15)	(1.18)	(2.75)	(4.72)	(0.47)	(4.72)	(5.23)	φ95 (3.74)														
KMDTC 164	KMDTC-16A Single-phase	1.6kVA	]		1000	120	144	280	245	204	400	320	160	125	50	60	135	φ16	160	180	4 (0.15) -														
KWDTC-16A	200 VAC	(8A) 100%	100%	25W	(39.3)	(4.72)	(5.66)	(11.0)	(9.64)	(8.03)	(15.7)	(12.6)	(6.29)	(4.92)	(1.96)	(2.36)	(5.31)	(0.62)	(6.29)	(7.08)	φ12 (0.47)														
KMDTO OF A		6kVA	ED		25W	25W	25W	25W	25W	25W	25W	25W	25W	25W	25W	25W	25W	25W		200	224	400	350	284		470	250	200	125			φ20	150	260	6 (0.23) -
<b>KMDTC-40A</b> 50/6	50/60HZ	(30A)					1500	(7.87)	(8.81)	(15.7)	(13.7)	(11.1)	500	(18.5)	(9.84)	(7.87)	(4.92)	75	150	(0.78)	(5.90) ×2	(10.2)	φ12 (0.47)												
	1	11kVA	1		(59.0)	300	304	540	460	384	(19.6)	610	400	315	240	(2.95)	(5.90)	φ26	200	350	6 (0.23) -														
KWIDTC-40A		(55A)				(11.8)	(11.9)	(21.2)	(18.1)	(15.1)		(24.0)	(15.7)	(12.4)	(9.44)			(1.02)	(7.87) X2	(13.7)	φ14 (0.55)														

<sup>\*\*</sup>Depending on workpieces, they may be pulled back in some cases by a demagnetizing force. In such a case, a belt with special scrapers need to be used. Please consult with us in advance. \*\*A different-voltage type (special type) is also available.

## 10 del KMD-F INVERTER CONTROL TYPE DEMAGNETIZER





## Less power and enhanced demagnetizing performance!





#### FA----1----1

This model is designed to generate an alternating magnetic field on the surface by an AC power source, where workpieces are passed to eliminate the magnetism remaining on the surface of workpieces.

#### [Features]

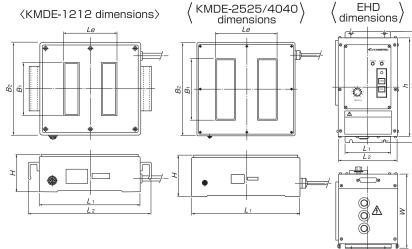
- Demagnetization is carried out by varying (sweeping) a frequency lower than commercial frequencies from a lower point to a higher point. This model has improved the demagnetizing performance without increasing the amount of electricity to use.
- ●The demagnetizing part is of the same dimensions as the conventional table type demagnetizer (KMD-C). With the same output current (AC effective value) as conventional models, the residual magnetism in workpieces (SKH material) can be reduced to one
- Workpieces are demagnetized by passing them over the demagnetizing surface at a constant speed, as with conventional
- Continuous power on specification, but heat generated in the demagnetizing part is less than conventional models.
- ●A demagnetizing output variable resistor is provided on the electrical unit that can vary the output current (AC effective value) in a range of 100% and 70%. This feature achieves demagnetization of low-carbon steels like S45C by less power (70%) than conventional models.

ſmm	(in)
E	

	Model	Power Source	Source Capacity	Output	Working Rate	Demagnetizing Width	Width	Height	Mass	
Demagnetizing part	KMD-F20	Single-phase 100 VAC	200VA (2.7A)	±20V	100%	130 (5.11)	200 (7.87)	180 (7.08)	80 (3.15)	6.5kg/ 14 lb
Electrical unit	EHD-20A	50/60Hz	200VA (2.7A)	MAX5A	100%	_	140 (5.51)	175 (6.89)	230 (9.05)	4.5kg/9.9 lb
Demagnetizing part	KMD-F30	Single-phase 200 VAC	400VA (3.4A)	±30V	100%	180 (7.08)	300 (11.8)	200 (7.87)	120 (4.72)	21.0kg/ 46 lb
Electrical unit	EHD-30A	50/60Hz	400VA (3.4A)	MAX7.5A	100%	_	220 (8.66)	175 (6.89)	250 (9.84)	5.8kg/ 13 lb

# Model KMDE STATIC TYPE DEMAGNETIZER







#### [Application]

Pressing the demagnetizing button completes demagnetization within a fixed time without moving workpieces.

#### [Features]

- A magnetomotive force greater than the AC demagnetizer has been set, which works well on hard workpieces such as bearing steels and cutter steels that are difficult to demagnetize with conventional demagnetizers.
- Since workpieces are demagnetized while keeping them stationary on the demagnetizer, it is not necessary to move workpieces as when using an AC demagnetizer. Thus, this model is suitable for demagnetization of large workpieces (e.g. molds) that are difficult to move.
- Since demagnetization is carried out according to the attenuation pattern programmed in the power unit, electricity needs to be applied only during demagnetization, saving electricity.
- ●The demagnetizer itself and the power unit are installed separately. Thus, they can be installed in an easy-to-operate place.

## A larger special demagnetizer is also available.

	Main	un	it							[r	nm (in)]	
N	/lodel	<b>L</b> 1	L <sub>2</sub>	Dime:	nsions B <sub>1</sub>	Bz	Н	Demagnetizing Area	Withstand Load	Capacity	Mass	
		230 280		120	120	210	85	120 (4.72) X	20kg/	180 VDC/	15kg/	
KML	DE-1212	(9.05)	(11.0)	(4.72)	(4.72)	(8.26)	(3.34)	120 (4.72)	44 lb	2.1A	33 lb	
KMI	DE 2525	400		250	250	380	150	250 (9.84) X	80kg/	180 VDC/	75kg/	
KMDE-2525 (15.7) - (9.84) (9.84) (14.9) (5.90) 250 (9.84) 176 lb 4.8A 16												
	e withstar	nd load	refers t	o unifor	m load	in the w	ork are	a.				

Applicable power unit (KMDE-1212/2525) [mr													
ĺ	Model			Dimension	ns		Power	Output	Mass				
	Wiodei	Lı	L 2	W	Н	h	rowei	Output	IVIASS				
	EHD-W205A	110	140	175	260	230	200 VAC	180 VDC/	4.7kg/				
	EUD-M502A	(4.22)	(E E4)	(6.90)	(10.2)	(0.0E)	4.7	E A	10 lb				

Main unit [mm (in)							nm (in)]			
	Model	Dimensions					Demagnetizing	Withstand	Conneity	Mass
	Model	L <sub>1</sub>	Le	B 1	Bz	Н	Area	Load	Capacity	IVIASS
	KMDE-4040	640	400	400	640	220	400 (15.7) ×	300kg/	180 VDC/	350kg/
		(25.2)	(15.7)	(15.7)	(25.2)	(8.66)	400 (15.7)	661 <b>l</b> b	9A	771 lb

%The withstand load refers to uniform load in the work area.

	Applica	[mm (in) ]							
	Model		[	Dimension	ns	Power	Output	Mass	
	wodei	L <sub>1</sub>	L 2	W	Н	h	Fower	Output	IVIASS
	EHD-W210A	190	220	175	290	250	200 VAC	180 VDC/	6kg/
		(7.48)	(8.66)	(6.89)	(11.4)	(9.84)	1φ	10A	13 lb

## Model KMDE-MP SINGLE POLE STATIC TYPE DEMAGNETIZER







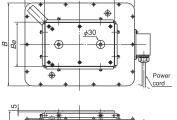
## [Application]

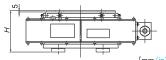
Recommended for demagnetization of thick workpieces and partial demagnetization of large workpieces.

Pressing the demagnetizing button completes demagnetization within a fixed time without moving workpieces.

## [Features]

- A strong magnetic field is generated in a wide area to make this model suitable for partial demagnetization of large workpieces and thick workpieces.
- Since demagnetization is carried out according to the attenuation pattern programmed in the power unit, electricity needs to be applied only during demagnetization, saving electricity.
- The demagnetizer itself and the power unit are installed separately. Thus, they can be installed in an easy-to-operate place.





							[11111 (1117 ]	
Model	Dimensions			Demagnetizing Area	- Capacity	Mass	Power Unit	
Wodel	L	В	Н	Be×Le	Сараспу	IVIASS	Fower Onit	
KMDE-MP1013	240 (9.44) 210 (8.26) 110 (4.33)		100 (3.93) ×130 (5.11)	180 VDC/2.1A	20kg/ 44 lb	EHD-W205A		
KMDE-MP1625	390 (15.3)	300 (11.8)	150 (5.90)	160 (6.29) ×250 (9.84)	180 VDC/4.7A	75kg/165 lb	EHD-W205A	
KMDE-MP2040	580 (22.8)	380 (14.9)	185 (7.28)	200 (7.87) ×400 (15.7)	180 VDC/7.8A	170kg/375 lb	EHD-W210A	

# atertich: KMDP-16 Model: KMDP-16

Model KMDP PEN TYPE DEMAGNETIZER

- ■Dimensions:  $\phi$ 30×264 mm
- (Demagnetizing area  $\phi$ 15 $\times$ 25 mm)
- Motor: Rating 2.4 V/0.125 A/12,650 rpm (no-load)
- Mass: 310g
- ■Charging adapter (standard accessory): Input 100 VAC (50/60 Hz) / Output 3.7 VDC, 70 mA

## [Application]

Recommended where magnetism on the surface of metallic workpieces in general need to be reduced in a limited area or locally.

This is useful to completely eliminate weak magnetism that remains locally in jigs and workpieces after they have been demagnetized by a large demagnetizer. It is also suitable for demagnetizing cutters of machines and punches and guide pins of press dies while they are mounted.

#### [Features]

- •A rare earth magnet having strong magnetic force is used at the end of the rotary magnetic field. This small and high performance demagnetizer can be used easily in limited space.
- The motor is driven by a chargeable battery. This demagnetizer has no cord and therefore can be used in any places. Also the battery needs not be replaced.
- Simple construction and simple exterior. Maintenance free and long lasting service life.

## Model KMDH HANDY TYPE DEMAGNETIZER



## [Application]

Suitable for demagnetizing tools such as drills, cutting tools, cutters magnetized slide calipers.

They can also be used for demagnetizing a part of large steel plates.

#### [Features]

Compact and handy.

## How to use

- The demagnetizer is turned on while the pushbutton switch is held pressed and turned off when you release it.
- The button must be pressed on during demagnetizing operation.
- Turn it off when the demagnetizer is more than 100 mm away from the demagnetizing work.
- Working rate: 70% ED (power on for 7 minutes and pausing for 3 minu-

[mm (in)]

	Model	Power Source	Source	Working	Demagnetizing	Dimensions			Mass
	Wodei	rower Source	Capacity	Rate	Width	Width	Length	Height	iviass
	KMDH-5	Single-phase 100 VAC	70VA 70%ED	709/ ED	50 (1.96)	86	102	119	2.3kg/
	KIVIDH-3	50/60Hz		70%ED		(3.38)	(4.01)	(4.68)	5.1 lb
Witho hoight is up to the grip. Wilm cord is provided									

\*A different-voltage type (special type) is also available.

## Model KMDC TOOL DEMAGNETIZER



## For demagnetization of magnetized tools such as drills, reamers and cutters and measuring equipment!



					[mm (in)]
Model	Power Source	Source Capacity	Input	Demagnetizing Dia	Mass
KMDC-40	Single-phase 100 VAC 50/60Hz	75VA	Momentary power on by pushbutton	φ40 (1.57)	0.9kg/2 lb

(in)]	objec:
ISS	If the
	tempe

## \*Cord length 2.5 mm (curled cord) included.

Easy demagnetization of a wide variety of magnetized objects including tools such as drills, milling cutters, reamers and cutters, round workpieces and measuring equipment.

#### [Features]

- Small and light weight for easy operation.
- Capable of removing small chips attracted by magnetism on drills and reamers while such tools are being mounted on machines.

## How to use

- ●Power is applied only while the pushbutton is held for demagnetization.
- Turn off (release the push-button) the demagnetizer after moving it away more than 100 mm from an ct demagnetized.
- demagnetizer is turned on frequently, the body erature rises. If the temperature rises too high. it is indicated by an overheat alarm seal. Stop using it for a while.