

FLEXMOUNT ™ BRACKETS & MOTOR SHAFT GROUNDING MODULES





THE ULTIMATE SOLUTION FOR MOTOR BEARING PROTECTION

WWW.AAKI.CA

REDUCE MAINTENANCE costs up to

THANK YOU FOR YOUR INTEREST IN AAKI GROUNDING SOLUTIONS

Stand out from the competition by prioritizing your customers' needs with Aaki Grounding Solutions. Our top-quality grounding products provide increased longevity and protection for your electric motor bearings.

With over three decades of experience in engineering, design and development, we are proud to be the go-to company to protect your motor bearings against damaging motor shaft voltages.

Here are some key points about Aaki that we are really proud of:

- Simplicity in design ensures durability while remaining cost effective.
- Our electric motor shaft grounding solutions are recognized for their ease of installation.
- We can customize our grounding solutions to feature your branding by adding your logo and contact information.
- Our team of experts are available to assist you in identifying and diagnosing your motor bearing problems.

We are committed to ensuring that our customers have all the information they need to make informed decisions when it comes to protecting their electric motors and equipment.

If you have any questions about our products, solutions, or need help solving a problem, please do not hesitate to contact us at 1-888-899-AAKI (2254) or by email at info@aaki.ca.

Thank you for considering Aaki as your grounding solution provider. We look forward to hearing from you soon.

Best regards,

Andy Kveps, P.Eng. Owner & Head of R&D Aaki Grounding Solutions

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QUICKLY FIND THE INFORMATION YOU NEED TABLE OF CONTENTS



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MOTOR SHAFT GROUNDING MODULES



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"ELECTRICAL DAMAGE CAUSED BY SHAFT VOLTAGES CAN SIGNIFICANTLY REDUCE THE LIFESPAN OF YOUR ELECTRIC MOTORS. INSTALLING A MOTOR SHAFT GROUNDING MODULE IS AN EFFECTIVE WAY TO PROTECT YOUR EQUIPMENT AND EXTEND ITS LIFE." - Brian K. Johnson, Senior Engineer at SKF USA Inc. "Electrical Damage to Bearings - published in the IEEE Transactions on Industry Applications in 2002."







- Dimensions: 36mm x 42mm x 10mm (1.42" X 1.65" X 0.39")
- Brush surface area: 70mm2
- Weight: 60g
- Material: High-current capacity copper graphite brush with a large surface area, capable of carrying up to 10 Amps, housed in a solid machined aluminum bronze construction
- · Fits fractional to small motor models 1 HP-100s of HPs
- Slotted screw holes for easy adjustment
- Accepts #10 socket head cap screws

PRODUCT OVERVIEW:

The simplistic design of our Motor Shaft Grounding Module ensures durability and advanced grounding solutions, while protecting electric motor bearings from harmful electrical currents. Machined from corrosion resistant aluminum bronze and complete with a high copper, contoured graphite brush and Brush Life Window Technology, this module is engineered to provide long-lasting protection against electrical currents. The compact design is easy to install and compatible with a wide range of motor models, making it an ideal solution for various industrial environments.

KEY FEATURES:

- Provides long-lasting protection against harmful electrical currents
- Contoured carbon brush with high copper content and Brush Life Window technology, providing years of service life
- · Easy to install and compatible with a wide range of motor models



AAKI MSGMs have been deployed under water, over water, underground, in the air and in space! MOTOR

LEXMOUNT™ RACKET

FLEXFORM™ TOOL

ERTMOUNT™ YSTEM

EXTENSION PLATES

> SPACER PLATES

DRILLBUDDY™ INSTALL TOOL

CONTACT

300428 R5

THE BRUSH LIFE WINDOW MAKES IT QUICK AND EASY TO INSPECT THE CARBON Brush during routine maintenance checks, reducing the time and EFFORT required for inspections

MOTOR SHAFT GROUNDING MODULE

TECHNICAL SPECIFICATIONS:

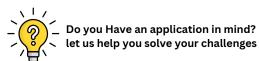
- Dimensions: 19mm x 34mm x 5.5mm (.75" X 1.34" X .22" thin)
- Brush Diameter: 4.25mm
- Weight: 16g
- Material: Solid machined aluminum bonze construction with high copper content graphite brush
- Fits fractional to small motor models
- Mounts using #6 mounting screws. Slotted holes for flexible mounting

PRODUCT OVERVIEW:

The Motor Shaft Grounding Module Mini is cost effective, compact solution designed for specifically for fractional and small HP motors. CNC Machined from a single billet of aluminum bronze and featuring a high copper content, high capacity brush, this module provides superior performance and long-lasting protection against harmful shaft currents in a compact package. The Motor Shaft Grounding Module Mini is easy to install and compatible with most motor models, making it an ideal solution in a wide range of industrial applications.

KEY FEATURES:

- · Slotted mounting holes allows for quick easy installation
- 70% copper content brush can handle large currents
- Brush Life Window Technology makes inspections a breeze
- · Low profile compact design fits in tight spaces (often inside the motor!)
- · Compatible with most motor models





VVK





ERTMOUNT™



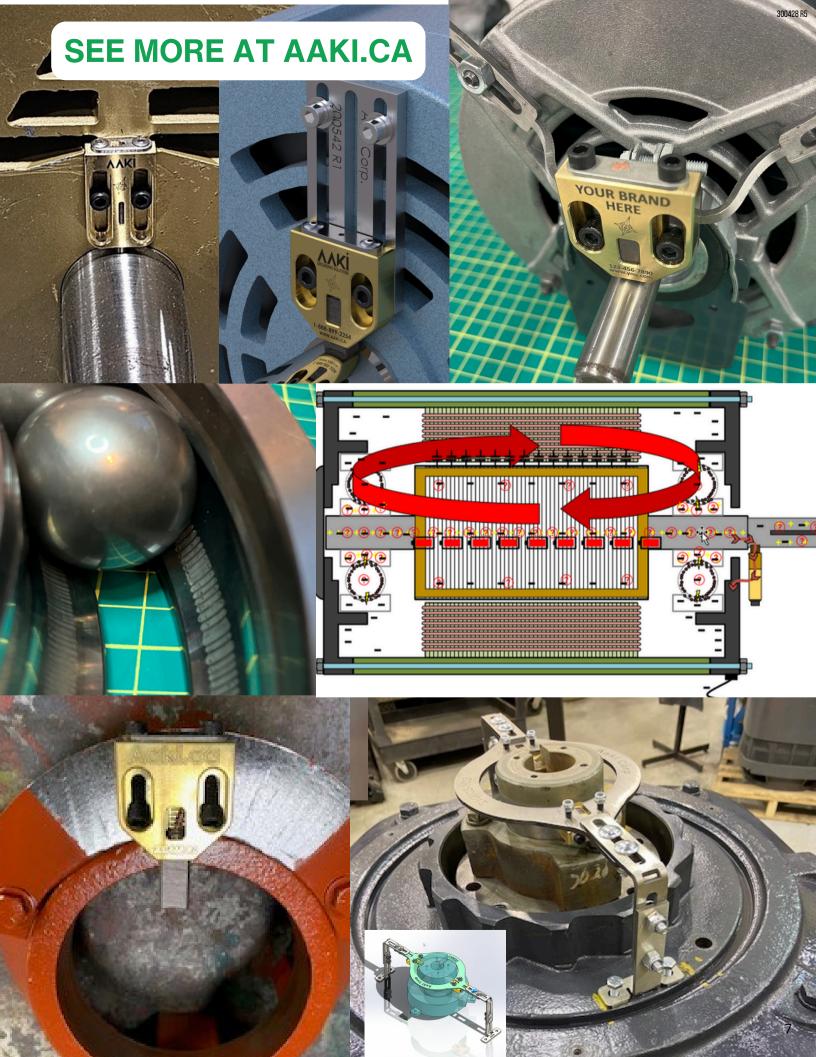
PLATES

SPACER PLATES

DRILLBUDDY™ INSTALL TOOL

CONTACT INFO





MSGM

Aaki Corp 210171 PATENT PENDING

FLE MOUNT TM BRACKET







IN EXTREME CASES, VFD-INDUCED ELECTRICAL DISCHARGE CAN CAUSE PITTING IN Bearings in just a few weeks, leading to premature bearing failure and Potentially catastrophic motor damage.

 E. Kurtz and D. Erickson "insulation and Bearing Failures in VFD-Driven Motors - published in Industry Applications Magazine."



TECHNICAL SPECIFICATIONS:

- Dimensions: See website for specific FleXmount[™] sizes and shapes
- Material: 304 stainless steel
- Mounts both Standard and Mini MSGMs

PRODUCT OVERVIEW:

The ultimate solution for mounting your Motor Shaft Grounding Module quickly, cost-effectively, and with a professional finish.

The process is quick and simple:

- · Choose a bracket that closest matches your motor endbell geometry
- Bend the Flex Arms with our FleXform[™] bending tool
- · Bolt the bracket in place

KEY FEATURES:

- 24 FleXmount[™] styles, covering a wide range of motor geometries
- Fit to almost any motor configuration
- · Slots in the bracket and MSGM offer significant freedom in mounting
- · Bending the bracket for the application takes less than a minute
- · Installation is rigid, secure, quick and reproducible
- · Save hours in installation time
- · Brackets can often be bolted on to existing bolt patterns No holes to drill!



Looking for the Perfect Bracket for Your Motor Retrofit? Don't see quite the right geometry?

AAKI CAN produce Custom Brackets in as little as one Week!



UNDING

FLEXFORM™ TOOL

ERTMOUNT™

NSION

SPACER PLATES

RILLBUDDY™ STALL TOOL



FLE FORM ™ TOOL



IN A STUDY CONDUCTED BY THE ELECTRIC POWER RESEARCH INSTITUTE (EPRI). IT WAS FOUND THAT THE USE OF MOTOR SHAFT GROUNDING SYSTEMS REDUCED BEARING FAILURE RATES BY UP TO 70% IN VFD APPLICATIONS. - Electric Power Research Institute (EPRI)

TECHNICAL SPECIFICATIONS:

- Dimensions: 24cm X 7cm X 3cm (9.5" X 2.75" X 1.2")
- Weight: 650g
- · Material: tool-steel punch and die
- For use with the FleXmount[™] product line

PRODUCT OVERVIEW:

The FleXform[™] Tool is essential for creating professional consistent installations.

The tool-steel dies attach to a standard Vise-Grip® (supplied), providing the user with essentially a progressive brake in the palm of your hand.

The unique design allows for easy manipulation of the FleXmount[™] bracket. Excellent for both shop and field installations.

Simply dial the tool to the desired bend angle, place the FleXmount[™] bracket into the tool, and with a simple squeeze, bend the mount to the desired angle.

The FleXform[™] tool creates accurate and consistent bends, ensuring perfect alignment to the motor shaft. Save time and effort during installation with the FleXform[™] Tool, an essential addition to any toolkit.

KEY FEATURES:

- · Made from durable, high-quality tool steel for long-lasting use
- Allows for easy manipulation of the FleXmount[™]
- Create accurate and consistent bends



Looking to connect with your customers?



FLEXFORM™

EXMOUNTTh

DING







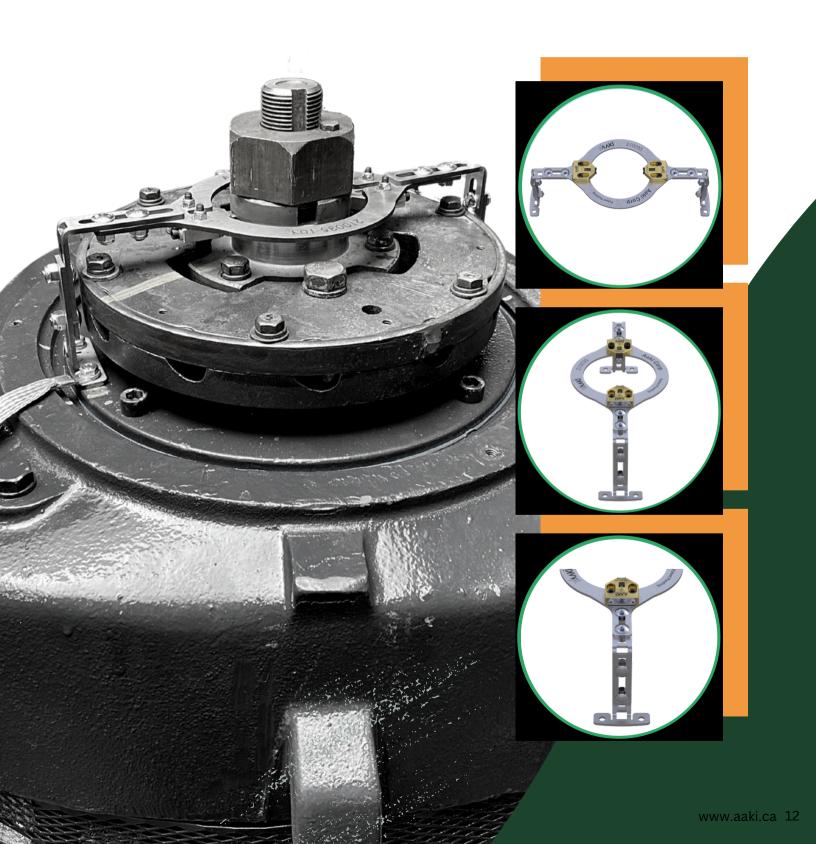
LBUDDY™





VER MOUNTTM BRACKET

MSGM



THE USE OF MOTOR SHAFT GROUNDING SYSTEMS IS RECOMMENDED BY THE AMERICAN PETROLEUM INSTITUTE (API) IN THEIR STANDARDS FOR CENTRIFUGAL PUMPS USED IN THE PETROLEUM, PETROCHEMICAL, AND NATURAL GAS INDUSTRIES. - API 610, centrifugal pumps used in the petroleum, petrochemical, and natural gas industries.

ØAAKİ VERTMOUNT™ BRACKET

TECHNICAL SPECIFICATIONS:

- · Dimensions: Varies with motor configuration
- Weight: Approximately 450g
- Bracket Material: 304 Stainless Steel
- 100 to 300 HP Hollow Shaft Vertical Motors

PRODUCT OVERVIEW:

The VerTmount[™] mounting system will allow the installer to mount one to four MSGMs on hollow shaft vertical motors.

The system mounts under the protective cap of the motor and typically can be installed <u>without drilling holes in the motor housing</u>

Kit Includes:

- · Configurable Grounding Brackets, motor mounts and MSGM mounting ring
- Two Aaki standard MSGMs (4 Available on request)
- Grounding Strap
- All required fasteners

KEY FEATURES:

- · Complete mounting system kit for hassle-free installation
- Typically no modification of the motor is required (No holes to drill!)
- · Cost-effective protection for equipment



UNIQUE SIZE OR SHAPE? We offer custom sizes Tailored to your specific needs. NDING

FLEXMOUNT™ BRACKET

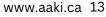
FLEXFORM™ TOOL

ERTMOUNT YSTEM

SPACER PLATES

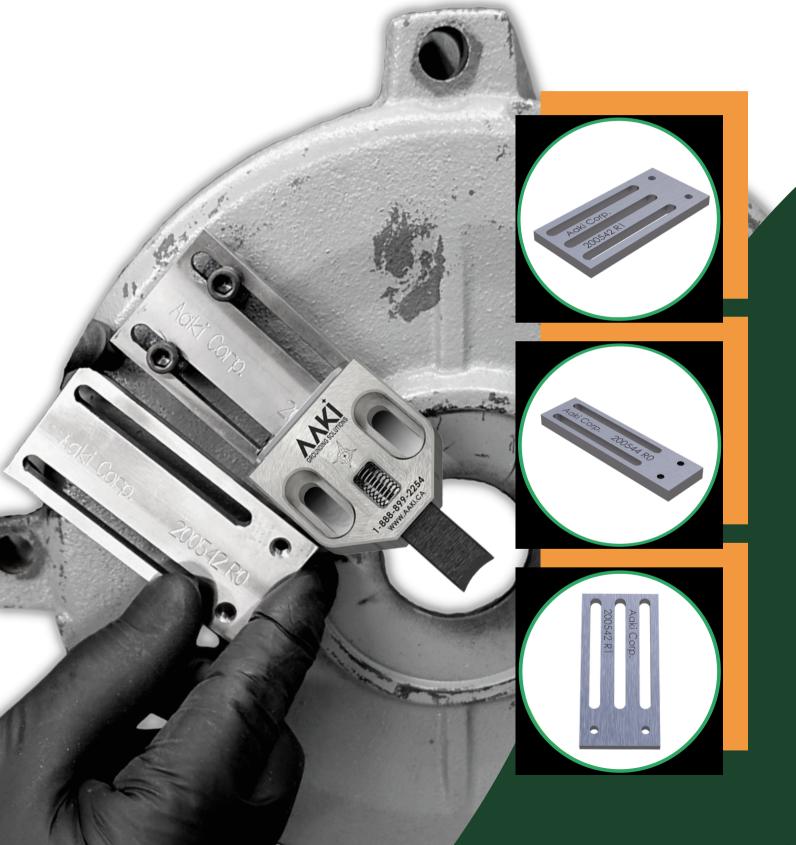
RILLBUDDY™ ISTALL TOOL

CONTACT



MSGM

EXTENSION PLATES



"MOTOR SHAFT VOLTAGE CAN CAUSE SIGNIFICANT BEARING DAMAGE IF NOT ADDRESSED. WITH THE INSTALLATION OF A MOTOR SHAFT GROUNDING SYSTEM. YOU CAN GREATLY EXTEND THE LIFE OF YOUR BEARINGS AND REDUCE THE RISK OF COSTLY DOWNTIME AND REPAIRS.'

- Eric Prevost, Business Development Manager at Electro Static Technology article: Preventing Electrical Damage to Motors: Protecting Bearings from VFD-Induced Electrical Discharge - published February 2016 issue of Pumps & Systems magazine.



TECHNICAL SPECIFICATIONS:

- Dimensions: 36mm x 75mm x 5mm (1.5" X 2.95" X 0.2")
- Weight: 83g
- Material: Mild Steel / Stainless Steel
- Fits Motor Shaft Grounding Module "Standard"
- Pre-tapped and slotted to accept #10 screws

PRODUCT OVERVIEW:

The Extension Plate is an innovative solution designed for Standard Size Motor Shaft Grounding Modules. Pre-tapped and slotted for easy installation, the extension plate can provide the installer with an alternate mounting location.

The Extension Plate is a simple, cost effective option for securely attaching a grounding module when mounting sites on the motor are limited.

KEY FEATURES:

- Pre-tapped to secure Standard Size MSGMs with #10 screws
- CNC machined construction
- Slots provide installer with a wide range of mounting sites on motor
- · Quickly achieve the perfect fit; cut down installation time
- Professional look and feel. Customers appreciate the value



all the products and services developed at aaki came from discussions and learnings from people just Like You







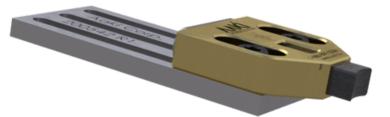






ORILLBUDDY™ NSTALL TOOL





"EDM PITTING IN MOTOR BEARINGS CAN CAUSE CATASTROPHIC FAILURE, RESULTING IN MOTOR REPLACEMENT AND UNSCHEDULED DOWNTIME." - EASA (Electrical Apparatus Service Association)

MARI NSGM EXTENSION PLATE



- Dimensions: 19mm x 70mm x 5mm (0.75" X 2.76" X 0.2")
- Weight: 40g
- Material: Mild Steel / Stainless Steel
- Fits Motor Shaft Grounding Modules "Mini"
- Pre-tapped and slotted to accept #6 screws

PRODUCT OVERVIEW:

When working in tight spaces mounting a MSGM can sometimes be a challenge. The mini extension plate takes the challenge of finding suitable mounting sites on smaller electric motors with minimal mounting space.

CNC Machined and Pre-tapped and slotted for easy installation, this module is suitable for non-typical configurations and assists the installer in even the most challenging mounting scenarios.

The Extension Plate is a cost-effective and easy-to-use solution for putting the Mini MSGM in the perfect spot on you motor installation.

KEY FEATURES:

- Significantly reduce installation time over building custom bracketry
- Pre-tapped and slotted for easy installation
- · Suitable for geometries where motor endbell mounting sites are limited
- · Can be used to adjust for the perfect fit, allowing for maximum protection

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Sail Boats Formula 1 Cars, Ferris wheels AAKI MSGMs are deployed in the strangest places...



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Corp.

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EXTENSION PLATES

> SPACER PLATES

DRILLBUDDY™ INSTALL TOOL

MSGM

SPACER PLATES, CYLINDERS



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"WITH THE USE OF MOTOR SHAFT GROUNDING MODULES, THE LIFESPAN OF YOUR ELECTRIC MOTORS CAN BE EXTENDED AND EQUIPMENT DOWNTIME CAN BE REDUCED, RESULTING IN COST SAVINGS FOR YOUR BUSINESS." - Electrical Construction & Maintenance Magazine

MARI NSGN SPACER PLATE

TECHNICAL SPECIFICATIONS:

- Dimensions (Thick Version): 33mm x 33mm x 5mm (1.3" X 1.3" X 0.19")
- Dimensions (Thin Version): 33mm x 33mm x 2mm (1.3" X 1.3" X 0.07")
- Weight: approx. 83g
- Material: Mild Steel / Stainless Steel
- For use with "Standard" MSGMs

PRODUCT OVERVIEW:

Often, the MSGM will need to be offset down the shaft of the motor to put the MSGM brush on the shaft in an area clear of grease, keyways and rough surfaces.

The Standard Spacer Plate is a simple, effective solution to achieve this offset.

This product is pre-sized and slotted for easy installation, eliminating the need for 'whittling' out hand made spacers, saving the installer significant time.

The result is a professional-looking finish, making it an excellent addition to any field toolkit or shop inventory.

Also available: Cylinder Spacer (PN: 210060) See website for more details

KEY FEATURES:

- Pre-sized Spacer Plate saves time and eliminates the need for manufacturing hand made spacers
- Professional look.
- Save significant time (\$\$\$)



Aaki

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WE have a YOUTUBE CHANNEL! @AakiSolutions -

Check out our Learning Centre https://aaki.ca/learning-centre/









DRILLBUDDY™ INSTALL TOOL

CONTACT INFO ACCORDING TO A REPORT BY THE ELECTRICAL APPARATUS SERVICE ASSOCIATION (EASA), BEARING DAMAGE IS ESTIMATED TO COST THE UNITED STATES ELECTRIC MOTOR INDUSTRY OVER \$3 BILLION ANNUALLY.

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TECHNICAL SPECIFICATIONS:

- Dimensions: 19mm x 34mm x 5.5mm (0.75" X 1.34" X 0.22")
- Weight: 14g
- Material: Mild Steel / Stainless Steel
- · Fits Motor Shaft Grounding Module "Mini"

PRODUCT OVERVIEW:

The Mini Size Spacer Plate is a compact and cost-effective solution designed to ensure a secure and stable mounting of Mini Size Motor Shaft Grounding Modules. This pre-sized Spacer Plate eliminates the need for hand making spacers, or using a stack of washers, saving time and producing a professionallooking result. Its compact design makes it ideal for tight or unique mounting scenarios, enabling a hassle-free installation process.

KEY FEATURES:

- · Secure and stable mounting of modules, reducing installation time
- · Pre-sized Spacer Plate saves time, produces professional-looking result
- · Compact size for tight or unique mounting scenarios, hassle-free installation





FLEXFORM™ TOOL

VERTMOUNT™ SYSTEM

EXTENSION PLATES

> SPACER PLATES

DRILLBUDDY™ INSTALL TOOL

> CONTACT INFO





There are no BOTS OR A.I. Answering our PHONES or EMAILS Just US...

DRILLBUDDY TM INSTALLATION TOOL



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"THE USE OF SPECIALIZED INSTALLATION TOOLS CAN GREATLY INCREASE EFFICIENCY and accuracy, saving time and reducing the risk of errors or damage during the installation process."

- Electrical Construction & Maintenance Magazine

AKİ DRILLBUDDY ™ INSTALLATION TOOL

TECHNICAL SPECIFICATIONS:

- Dimensions: 60 x 36 x 15 mm (2.4" X 1.5" X 0.6")
- Weight: 200g
- Materials: High Carbon Steel
- Suitable for drilling holes in motors in order to mount motor shaft grounding modules

PRODUCT OVERVIEW:

Our Motor Shaft Grounding Module DrillBuddy[™] Installation Tool is a specialized tool designed to simplify and speed up the installation process of our motor shaft grounding modules. This high-quality tool is specifically designed to align mounting holes in electric motor end bells for accurate and quick mounting of motor shaft grounding modules.

Simply set the DrillBuddy[™] on the motor shaft, choose the correct holes, and drill. A perfect and professional fit every time. No more messing with calipers and rulers where you wish you had a third hand!

KEY FEATURES:

- Designed to simplify and speed up the installation process of motor shaft grounding modules
- Create professional looking, consistent results in less time for less \$\$\$
- · Made from high-quality materials for durability and longevity
- · Essential tool for ensuring proper installation, saving time and money



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UNDING







SPACER PLATES



CONTACT INFO

WE ARE HERE TO HELP CONTACT INFORMATION:

Rest easy with Aaki by your side, ready to tackle any challenge or problem that keeps you up at night. Our dedicated team is here to provide the support and assistance you need.

If you have questions about our products or parts, our knowledgeable experts are just a call or email away. Should you need a custom solution, we can help with that also.

If you're interested in carrying Aaki products, we're excited to collaborate with you. Elevate your service shop or business with our custom branding services, creating a unique and professional image that sets you apart from the competition.

Reach out to us today and let Aaki be your trusted partner.

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EMAIL	info@aaki.ca	
YOUTUBE	@aakisolutions	



MOTOR

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