



ENGLISH

# RSMK

Rugged Aluminum NEMA 1 / IP40 Enclosure

Stock No. 136-3112

## Primary Features

Horsepower 1/8 to 1 HP, Programmable  
115/230 VAC - 1ph Input  
Output 230 VAC - 3ph  
Starting Torque 200%  
Digital Display with LED Status Indicators  
Class "A" (CE) RFI Filter

## GFCI Compatible

Allows equipment to operate with Ground Fault Circuit Interruption circuit breakers or outlets.

## Benefits

### Saves Time

Easy to Install and Simple to Operate.  
Does not require commissioning.

*With CSP™\* you are up and running in less than 10 minutes.*

### Motors Last Longer

#### Proprietary CL Software

*Provides overload protection, prevents motor burnout and eliminates nuisance tripping. UL approved as electronic overload protector for motors.*

### Energy Saving

*Uses only the power the application requires.  
Replacing constant speed with variable speed will significantly reduce energy costs.*

### Customization for OEM's

When an off the shelf drive does not meet your needs, we will work with you to provide a custom drive solution, Ready to Use, "Out-of-the-Box."

*Customization includes: Pre-calibrating or programming of a stock control, adding a custom label or branding, custom software, PLC functions or designing a new control.*



\*CSP™ = Common Sense Programming. Parameters are organized into easy-to-understand intuitive groups.



## Additional Features

### Sensorless Flux Vector Control

Flux Vector Compensation with Static Auto-Tune provides excellent speed regulation with high torque loads throughout the entire speed range. Auto energy saving at light loads. Smooth motor torque.

### Electronic Inrush Current Limit (EICL™) Protection

Eliminates harmful inrush AC line current during power up.

### Multi-Function Output Relay

Can be used to turn equipment on or off, to signal a warning if the drive is put into “Stop” Mode, or to signal if a fault has occurred.

### Jog-Local/Remote

Set the drive to Jog Mode or changes between Local (Keypad) or Remote Operation.

### On/Off AC Line Switch

Disconnects the AC Line.

### Built-in Potentiometer

Quickest way to change motor speed.

### Ride-Through

Provides smooth recovery to the previous set speed during a momentary power loss.

### Holding Torque at Zero Speed

Resists motor shaft rotation when the drive is in “Stop” mode.

### Regeneration Protection

Eliminates tripping due to high bus voltage caused by rapid deceleration of high inertial loads.

### Undervoltage and Overvoltage Protection

Shuts down the drive if the AC line input voltage goes above or below the operating range.

### Short Circuit Protection

Shuts down the drive if a short circuit occurs at the motor (phase-to-phase).

## Drive Options

### IODA Input/Output Multi-Function Board

Adds up to 17 points of additional I/O.

### On/Off AC Line Switch

Disconnects the AC line.



## Applications

- Actuators • Air Cleaners • Amusement Rides
- Ball Pitching Machines • Blowers • Boat Lifts
- Bowling Alley Lane Cleaners • CNC • Conveyors
- Door and Gate Openers • Drilling • Duct Cleaners
- Dumbwaiters • Elevators and Hoists
- Exercise Equipment • Fabric Processing • Fans
- Feeders • Film Processing • Floor Cleaning
- Food Processing • Garment Cutting
- Grinding and Polishing • Hoppers • Horse Walkers
- HVAC • Indexers • Irrigation • Laminating
- Lift Station Pumps • Machine Tools
- Medical • Milling • Mixers • Oven Conveyors
- Packaging • Paint Blenders, Shakers, and Sprayers
- Paper Handling • Portable Equipment Used with GFCIs
- Pottery Wheels • Printing
- Pumps • Range Hoods • Sandblasting • Saws
- Sewing • Stretch Wrap • Textile • Treadmills
- Therapeutic Vibrators • Washing Machines
- Wave Soldering • Web Processing • Wheelchair Lifts
- Whole House Vacuums and Attic Fans
- Wire Feeders • Wood and Metal Lathes and Cutters
- Winders and Unwinders



## Ratings

115/230 VAC 1-Phase Input • 230 VAC 3-Phase Output

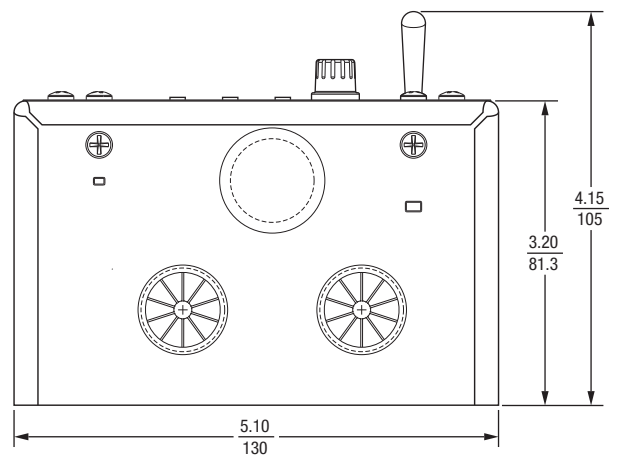
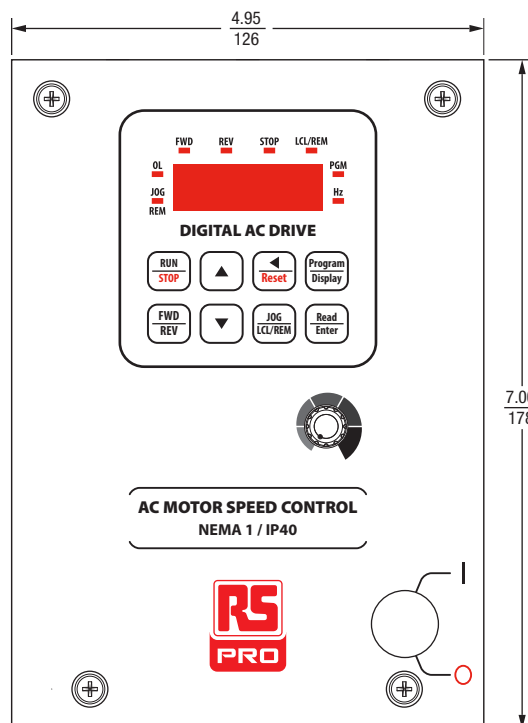
| Stock No. | Model No. | Ratings   |       | Net Weight |      |
|-----------|-----------|-----------|-------|------------|------|
|           |           | HP, (kW)  | Amps  | Lbs.       | kg   |
| 136-3112  | RSMK24DF* | 1, (0.75) | 3.6** | 2.48       | 1.12 |

\*F\* Suffix for Built-In Class "A" (CE) RFI (EMI) AC Line Filter. — \*\*2.4 Amps @ 115 VAC.

## Specifications

|   |                        |
|---|------------------------|
| Maximum Load (% of Current Overload for 2 Minutes)                | 150                    |
| Switching Frequency (kHz)   | 8, 10, 12              |
| Output Frequency Resolution (Hz)                                  | 0.06                   |
| Minimum Output Frequency to Motor (Hz)                            | 0.3                    |
| Acceleration Time (Seconds)                                       | 0.1 – 180.0            |
| Deceleration Time (Seconds)                                       | 0.3 – 180.0            |
| Speed Range (Ratio)   | 60:1                   |
| Speed Regulation (30:1 Speed Range, 0 – Full Load) (% Base Speed) | 2.5                    |
| Stalled Motor Trip Time (Seconds)                                 | 6                      |
| Braking   | DC Injection           |
| Operating Temperature Range (°C / °F)                             | 0 – 40 / 32 – 104      |
| Storage Temperature (°C / °F)                                     | -25 – +85 / -13 – +185 |

## Dimensions – (Inches/mm)



## General Connection Diagram

