



**BENSHAW**  
Applied Motor Controls



**The Next Generation  
Medium Voltage Soft Starter**

# MVRNX Series

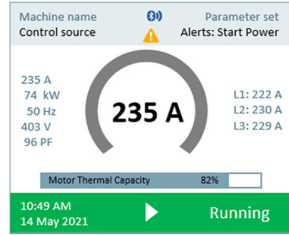
**“A generational change in processor speed, protection/monitoring functionality and communications capabilities.”**

- Bluetooth® Connectivity to Mobile App
- Seamless Troubleshooting
- Advanced Monitoring & Protection
- Easy-to-Use HMI Operator & Display
- Shortened Commissioning Times
- Standard & Heavy Duty Ratings
- Horizontal Bus Options to 2000A
- Stand-Alone Units or Lineups
- Configurable Options:
  - Seismic Ratings
  - Arc Resistant Design
  - Communication

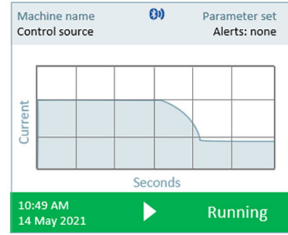


**Genius Motor Control**

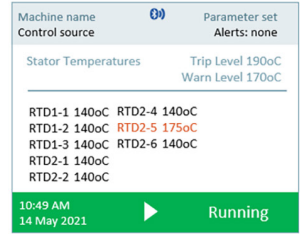
# MVRNX SERIES - KEY FEATURES



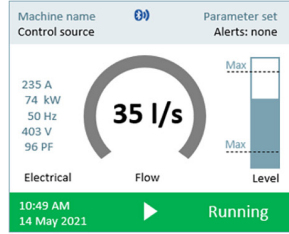
Electrical



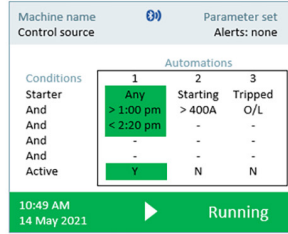
Time-Based Graphs



RTD Screens (x 3 stator, Bearing Other)



Pump Screen



Automation Screen (aka soft PLC)

Operative Starter Par. Set: Machine D		
Machine 1	▶ Running	0 A
Machine 2	⚙ Starting	0 A
Machine 3	▶ Running	0 A
Machine 4	▶ Running	0 A
Machine 5	○ Ready	0 A
Machine 6	○ Ready	0 A
Machine 7	⚠ Tripped	0 A
Machine 8	○ Ready	0 A

Multi-Motor Screen

## Expandable system

- HMI with full-color display (panel-mount)
- DIN rail-mounted control modules

## Built-in connectivity

- Bluetooth Low Energy (BLE) wireless connection to mobile app
- Built-in Modbus RTU
- 6 x digital inputs / 4 x relay outputs
- Analog output with digital offset and span adjustment
- USB-A socket
- CAN bus-based expansion to other modules

## Easy to understand interface

- Plain text menus and displays
- Color-coded status bar
- Informative on-screen metering
- Real-time clock
- Programmable metering
- Resettable run time and power consumption metering
- Multi-language menus and displays
- Passcode protection

## Versatile starting/stopping options

- Constant current
- Current/Voltage/Power ramps
- TruTorque
- 2 and 3 wire start/stop control

## Customizable protection

- Motor overload (thermal model)
- Undercurrent/Overcurrent
- Underpower/Overpower
- Undervoltage/Overvoltage
- Current imbalance
- Stalled motor protection
- Excess start time
- Line frequency
- Phase sequence
- Phase loss (single phasing)
- Power factor leading/lagging
- Residual or zero-sequence ground fault protection
- Backspin/restart timer
- Starts per hour
- Time between starts
- Power loss ride-through

## Motor control modes

- Soft start - supports two motor sets
- Smart ATL - injection test compatible
- Smart Wye/Delta

## Commissioning/troubleshooting tools

- Extensive trip and event logging
- Versatile trip actions
- High-speed waveform capture
- Self-test and run simulation mode

## Cybersecurity

- Secure Bluetooth pairing
- PIN number protection
- Digitally signed firmware

## Ideal for retrofit applications

- Existing/'legacy' soft starters
- ATL

## Optional features

- Seismic ratings
- Arc resistant design

## Optional expansion modules

- 8 or 16 RTD inputs, O/L biasing
- Ethernet/IP
- CAN bus isolation



**BENSHAW**  
Applied Motor Controls

**Benshaw, Inc.**  
615 Alpha Drive  
Pittsburgh, PA 15238 United States  
Toll Free: 1-800-441-8235  
Phone: 412-968-0100  
Fax: 412-968-5415  
Benshaw.com

**Benshaw Canada Controls, Inc.**  
550 Bright Street East  
Listowel, Ontario N4W 3W3  
Canada