

# GM2 SERIES GENERAL PURPOSE MICRODRIVE

The Benshaw GM2 Series is a sensorless vector, variable frequency drive. This micro-drive may be small...but don't let looks fool you. The GM2 Series offers enhanced performance and reliable operation in a robust, yet compact, user-friendly design. Powerful, yet small...it is the ideal choice for cost sensitive OEM or end user requirements. And it is the ideal drive for Benshaw distributors to keep in stock because of its versatility. The GM2 Series is easy to install, simple to program and offers dual ratings for both normal and heavy duty applications.



## STANDARD FEATURES - HARDWARE

- Dual Rated - Normal and Heavy Duty
  - 240V: 1HP~15 HP (ND), 0.5 HP~10HP (HD)
  - 480V: 1HP~15 HP (ND), 0.5 HP~10 HP (HD)
- Display - 4 digit, 7 Segment with 4 LED Indicators
- Protected Chassis - UL Open (IP20)
- DIN Rail mounting (up to 7.5 HP, 5.5 kW)
- EMC Filter (480V only)
- Internal Brake IGBT
- Single Phase Input (derating required)
- Built in Potentiometer
- RJ45 Port (Modbus-RTU)

## STANDARD FEATURES - SOFTWARE

- Modbus - RTU
- Control - V/Hz, Sensorless Vector, Slip Compensation
- Auto Tuning
- Torque Limits
- PID Control
- Regen Avoidance
- Kinetic Energy Buffering (KEB), Ride Through

## COMMUNICATIONS

Standard: Modbus-RTU

Option: Ethernet/IP - Modbus-TCP

**WinDRIVE:** PC Based software for Commissioning and Monitoring

Feature	Benefit
Robust Design	Construction of the air flow design minimizes exposure of critical components (IGBT, PCB, etc.) to outside contaminants
Built-in EMC Filter	Embedded C3 EM filter to meet EN618000-3 standards and provide noise reduction
V/F Acceleration and Deceleration Function	<ul style="list-style-type: none"> <li>• Auto torque boost (ATB) enhancing acceleration performance in V/F mode</li> <li>• Flux braking enhancing deceleration performance in V/F mode</li> </ul>
Sensorless Vector Control	Performs enhanced high torque at low speed with sensorless vector control
KEB Operation (Kinetic, Energy Buffering)	DC link voltage is maintained during power loss or brownout by using regenerative energy from the motor
Flying Start	Select optimal flying start operation for different applications
Fan Life-cycle Diagnosis	Keypad displays a replacement warning at 50,000 hours of fan operating time or user setting level of fan replacement
Material Design	Enhanced thermal resistance and increased thickness to prevent damage

## GM2 SERIES - PRICING

### 240V - Open Chassis

Model Number	Normal Duty 120% OL / 1 min.		Heavy Duty 150% OL / 1min.		Dimensions (inches)			Weight (lbs)	List Price
	HP	Amps	HP	Amps	H	W	D		
VFD-RSI-001-GM2-2C	1.0	3.1	0.5	2.5	6.46	3.40	5.50	2.3	\$353
VFD-RSI-002-GM2-2C	2.0	6	1.0	5	6.46	3.40	5.50	2.3	\$371
VFD-RSI-003-GM2-2C	3.0	9.6	2.0	8	6.98	3.98	6.25	3.0	\$397
VFD-RSI-005-GM2-2C	5.0	12	3.0	11	6.98	3.98	6.25	3.1	\$413
VFD-RSI-007-GM2-2C	7.5	18	5.0	17	7.60	5.31	6.25	4.2	\$503
VFD-RSI-010-GM2-2C	10	30	7.5	24	9.46	7.10	6.00	6.8	\$790
VFD-RSI-015-GM2-2C	15	40	10	32	9.46	7.10	6.00	7.1	\$892

### 480V - Open Chassis

Model Number	Normal Duty 120% OL / 1 min.		Heavy Duty 150% OL / 1min.		Dimensions (inches)			Weight (lbs)	List Price
	HP	Amps	HP	Amps	H	W	D		
VFD-RSI-001-GM2-4C	1.0	2	0.5	1.3	6.46	3.40	5.50	2.3	\$371
VFD-RSI-002-GM2-4C	2.0	3.1	1.0	2.5	6.46	3.40	5.50	2.4	\$387
VFD-RSI-003-GM2-4C	3.0	5.1	2.0	4	6.98	3.98	6.25	3.2	\$407
VFD-RSI-005-GM2-4C	5.0	6.9	3.0	5.5	6.98	3.98	6.25	3.2	\$428
VFD-RSI-007-GM2-4C	7.5	10	5.0	9	7.60	5.31	6.25	4.4	\$484
VFD-RSI-010-GM2-4C	10	16	7.5	12	9.46	7.10	6.00	7.1	\$691
VFD-RSI-015-GM2-4C	15	23	10	16	9.46	7.10	6.00	7.2	\$738

## GM2 Series - Accessories

Model Number	Description	List Price
PC-100093-00	Ethernet / IP, Modbus - TCP option, dual port	\$270
KP-100002-00	Keypad / display, remote, w / 1M cable	\$95
KP-100002-01	Keypad / display, remote, w / 2M cable	\$95
KP-100002-02	Keypad / display, remote, w / 3M cable	\$98
KP-100002-03	Keypad / display, remote, w / 5M cable	\$102
EN-101036-00	Conduit box, 1HP - 2HP, 230V / 480V	\$64
EN-101036-01	Conduit box, 3HP - 5HP, 230V / 480V	\$66
EN-101036-02	Conduit box, 7.5HP, 230V / 480V	\$71
EN-101036-03	Conduit box, 10HP - 15HP, 230V / 480V	\$79