## SHARK™ DRIVE

The WEG SHARK™ line of Variable Frequency Drive is designed to complement the enclosure ruggedness of WEG's SHARK™ motor product line. The all Stainless Steel NEMA 4X Enclosure is ideal for high pressure hose washdown and corrosive environments that are typically found in the food processing and pharmaceutical industries. The SHARK™ Drive's complete package combination of the CFW09's triple control capability (Volts/Hertz, Sensorless or Closed Loop Vector) matched with the SHARK™ Drive's NEMA 4X enclosure rating allows the SHARK™ Drive to succeed in virtually all applications in any industrial environment.

## APPLICATIONS

- Pumps
- Fans / Blowers
- Conveyors
- Rollout tables
- Agitators
- Mixers

## OPTIONAL FEATURES

- Closed loop vector control RS-485 Serial Interface
- Fieldbus Comm: Profibus DP, DeviceNet or Modbus RTU*
- Encoder buffered output
- Additional digital and analog I/O

* Requires optional RS-232 or RS-485 interface

## STANDARD FEATURES

- NEMA 4X All Stainless Steel Enclosure
- V/Hz and sensorless Vector Control
- Self Tuning
- Single and Three-phase input voltage
- 200-240V or 380-480V input voltage
- 150% current overload capacity
- Dynamic Braking transistor
- 32 bit RISC microprocessor controlled PWM output
- 1.25/2.5/5/10kHz adjustable switching frequency
- Six isolated programmable digital inputs
- Three programmable relay outputs (250Vac/1A)
- Two isolated programmable analog inputs
- Two programmable analog outputs
- Protective features: Over current, motor overload, drive over temperature, output phase-to-phase and phase-to-ground short circuit, DC bus over and under voltage, power supply under voltage and phase loss and external fault
- Control features: Linear and "S" ramp acceleration and deceleration, local remote control, DC braking, torque boost, motor slip compensation, electronic pot, preset speeds, adjustable V/Hz profile, maximum and minimum adjustable frequency limits, two skip frequencies, adjustable output current limit, JOG, ride-thru and flying start and PID regulator
- Display readings: Motor speed, frequency, voltage, current and torque, output power (kW), four last faults, drive status, digital and analog I/O status, hours powered and hours running
- Ambient: 32ºF (0ºC) to 104ºF (40ºC), 3300 ft (1000m) altitude, 90% humidity, non-condensing

# SHARK™

## SHARK™ DRIVE – NEMA4X ENCLOSURE

| Motor Volts | Motor HP | Drive Amps | Catalog Number | Frame Size | Dimensions H x W x D | App. Shpg. Wt. (lbs.) | List Price | Multiplier Symbol |
|---|---|---|---|---|---|---|---|---|
| 230 V | **INPUT POWER SUPPLY: SINGLE OR THREE-PHASE - 230V** | | | | | | | |
| | 1.5 | 6 | CFW090006TDN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,087 | V1 |
| | 2 | 7 | CFW090007TDN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,303 | V1 |
| | 3 | 10 | CFW090010TDN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,509 | V1 |
| 230 V | **INPUT POWER SUPPLY: THREE PHASE - 230V** | | | | | | | |
| | 1.5 | 6 | CFW090006TDN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,087 | V1 |
| | 2 | 7 | CFW090007TDN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,303 | V1 |
| | 3 | 10 | CFW090010TDN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,509 | V1 |
| | 5 | 16 | CFW090016TDN4Z | 2 | 16.2 x 10.2 x 8.5 | 33 | $ 2,914 | V1 |
| 460 V | **INPUT POWER SUPPLY: THREE PHASE - 460V** | | | | | | | |
| | 1.5 | 3.6 | CFW090003TGN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,243 | V1 |
| | 2 | 4 | CFW090004TGN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,383 | V1 |
| | 3 | 5.5 | CFW090005TGN4Z | 1 | 14.2 x 9.2 x 8.5 | 22 | $ 2,522 | V1 |
| | 5 | 9 | CFW090009TGN4Z | 2 | 16.2 x 10.2 x 8.5 | 33 | $ 2,999 | V1 |
| | 7.5 | 13 | CFW090013TGN4Z | 2 | 16.2 x 10.2 x 8.5 | 33 | $ 3,419 | V1 |
| | 10 | 16 | CFW090016TGN4Z | 2 | 16.2 x 10.2 x 8.5 | 33 | $ 4,132 | V1 |

## SHARK™ DRIVE– OPTIONS & ACCESSORIES

| | Description | Catalog Number | List Price | Multiplier Symbol |
|---|---|---|---|---|
| Keypads | Standard Keypad with LED & LCD | HMI-CFW09-LCD | $ 202 | V1 |
| | Blank Keypad with Power & Error LED's for Local Installation | TCL-CFW09 | $ 27 | V1 |
| | Remote Station-Includes Start PB, Stop PB, and Speed Pot | CFW-REM | $ 505 | V1 |
| Communication | Profibus DP Communication Kit | KFB-PD | $ 993 | V1 |
| | DeviceNet Communication Kit | KFB-DN | $ 872 | V1 |
| I/O Expansion Boards | I/O Exp. Board A with Encoder Input, Encoder Output, RS-485 Serial Interface, I4 bit A/D, I4 bit D/A's, Digital Inputs and Outputs + Thermistor (PTC) Input | EBA.01-CFW09 | $ 1,345 | V1 |
| | I/O Exp. Board A with RS-485 Serial Interface, Digital Inputs and Outputs + Thermistor (PTC) Input | EBA.02-CFW09 | $ 317 | V1 |
| | I/O Exp. Board A with I4 bit A/D, I4 bit D/A's, Digital Inputs and Outputs + Thermistor (PTC) Input | EBA.03-CFW09 | $ 621 | V1 |
| | I/O Exp. Board B with Encoder Input, Encoder Output, RS-485 Serial Interface, Isolated Analog Input, Isolated Analog Outputs, Digital Inputs and Outputs + Thermistor (PTC) Input | EBB.01-CFW09 | $ 1,133 | V1 |
| | I/O Exp. Board B with Encoder Input, Digital Inputs and Outputs + Thermistor (PTC) Input | EBB.02-CFW09 | $ 533 | V1 |
| | I/O Exp. Board B with Isolated Analog Input, Isolated Analog Outputs, Digital Inputs and Outputs + Thermistor (PTC) Input | EBB.03-CFW09 | $ 634 | V1 |
| | I/O Exp. Board B with Encoder Input, 5V Power Supply for Encoder, Buffered Outputs for Encoder Signals, RS-485 Serial Port, 24V Digital Input, 2 X 24V OC Digital Outputs, 0…10V/4-20mA Analog Input, 2 X 4-20mA Analog Outputs and PTC | EBB.04-CFW09 | $ 1,413 | V1 |
| | I/O Exp. Board B with 2 X 4-20mA Analog Outputs | EBB.05-CFW09 | $ 426 | V1 |
| | I/O Exp. Board C with Encoder Input, 5-15VDC External Power Supply | EBC1.01-CFW09 | $ 184 | V1 |
| | I/O Exp. Board C with Encoder Input with internal Power Supply - 5VDC | EBC1.02-CFW09 | $ 511 | V1 |
| | I/O Exp. Board C with Encoder Input with internal Power Supply - 12VDC | EBC1.03-CFW09 | $ 529 | V1 |
| | I/O Exp. Board E with RS-485 Serial Interface, Digital Inputs and Outputs + Thermistor (PTC) Input | EBE.01-CFW09 | $ 183 | V2 |
| | PLC/Motion Control Board | PLC1.01 | $ 985 | V1 |
| | PLC/Motion Control Board | PLC2.00 | $ 1,170 | V1 |

**Note:** Dynamic Braking Resistors for the Shark Drive can be selected from page C-13.
Use Volts and HP for proper selection.

SHARK™

## SHARK™ DRIVE – TECHNICAL DATA

| | | | | |
|---|---|---|---|---|
| POWER SUPPLY | Voltage | Three-phase: | 220 - 230 V: 220 / 230 V (+10%, -15%) - 1 Ø up to 3HP without de-rating | |
| | | | 380 - 480 V: 380 / 400 / 415 / 440 / 460 / 480 V (+10%, -15%) | |
| | Frequency | 50 / 60 Hz +/- 2 Hz (48 ... 62 Hz) | | |
| | Phase Unbalance | Up to 3 % | | |
| | Cos φ (Displacement Power Factor) | Greater than 0.98 | | |
| ENCLOSURE | Degree of Protection | NEMA 4X - All Stainless Steel | | |
| CONTROL | Power Supply | Switched Mode Power Supply Fed from the DC Link | | |
| | Microprocessor | 32 bit RISC Technology | | |
| | PWM Technique | SVM Sine wave PWM (Space Vector Modulation) | | |
| | | Software Implemented Current, Flux and Speed Regulators (Full Digital) | | |
| | Control Modes | Scalar (Voltage Source – V / F) | | |
| | | Sensorless Vector (without encoder) | | |
| | | Flux Vector with Encoder | | |
| | Switching Frequency | 1.25 / 2.5 / 5.0 / 10 kHz | | |
| | Frequency Range | 0 ... 204 Hz for V / F and Vector with Encoder Control (60 Hz Motor) | | |
| | | 0 ... 170 Hz for V / F and Vector with Encoder Control (50 Hz Motor) | | |
| | | 0 ... 100 Hz for Sensorless Vector Control (50 or 60 Hz Motor) | | |
| | Overload Capacity | 150% for 60 seconds, every 10 minutes | | |
| | | 180% for 1 second every 10 minutes | | |
| | Efficiency | Greater than 97% | | |
| PERFORMANCE | Speed Control | V / F Mode | Regulation (with Slip Compensation): 1% of Motor Rated Speed | |
| | | | Resolution: 1 rpm (Keypad Reference) | |
| | | | Speed Regulation Range: 20:1 | |
| | | Sensorless Vector Mode | Regulation: 0.5% of Motor Rated Speed | |
| | | | Resolution: 1 rpm (Keypad Reference) | |
| | | | Range: 100:1 | |
| | | Flux Vector for Mode with Encoder | Regulation with: | |
| | | | 10 bit Analog Reference: +/- 0.1% of Motor Rated Speed | |
| | | | 14 bit Analog Reference: +/- 0.01% of Motor Rated Speed ① | |
| | | | Digital Reference (Ex: Keypad or Serial): +/- 0.01% of Motor Rated Speed | |
| | | | Range: Down to 0 rpm | |
| | Torque Control | Flux Vector Modes | Regulation: +/- 10% of Motor Rated Torque | |
| | | | Range: 0 ... 150% of Motor Rated Torque | |
| CONTROL INPUTS | Analog | 2 Programmable Differential Inputs (10 bit): 0...10 V, 0...20 mA or 4...20 mA | | |
| | | 1 Programmable Bipolar Input (14 bit): -10 ... +10 V, 0...20 mA or 4...20 mA ① | | |
| | | 1 Programmable Isolated Input (10 bit): 0 ... 10 V, 0...20 mA or 4...20 mA ① | | |
| | Digital | 6 Programmable Isolated Input: 24 Vdc | | |
| | | 1 Programmable Isolated Input: 24 Vdc ① | | |
| | | 1 Programmable Isolated Input: 24 Vdc (for Motor PTC Thermistor) ① | | |
| | Encoder | 1 Differential Input, with 12 Vdc Internal Isolated Power Supply (14 bit resolution) ① | | |
| CONTROL OUTPUTS | Analog | 2 Programmable Outputs (11 bit): 0 ... 10 V | | |
| | | 2 Programmable Bipolar Outputs (14 bit): -10 ... +10 V ① | | |
| | | 2 Programmable Isolated Outputs (11 bit): 0 ... 20 mA or 4 ... 20 mA ① | | |
| | Relay | 2 Programmable Outputs, Form C Contacts (NO/NC): 240 Vac, 1 A | | |
| | | 1 Programmable Output , Form A Contact (NO): 240 Vac, 1 A | | |
| | Transistor | 2 Programmable Isolated Outputs (Open Collector): 24 Vdc, 50 mA ① | | |
| | Encoder | 1 Isolated Differential Encoder Signals Output: 5 ... 15 Vdc External Power Supply ① | | |
| COMMUNICATION | Serial | RS-232 with KCS-CFW09 Kit ① | | |
| | | RS-485, Isolated, with EBA,EBE or EBB Board① | | |
| | Field Bus | Profibus DP, DeviceNet or Modbus RTU, with KFB kits ① | | |
| SAFETY | Protections | DC Link Over Voltage | Output Short Circuit | |
| | | DC Link Under Voltage | Output Ground Fault | |
| | | VFD Over Temperature | External Fault | |
| | | Motor Over Temperature ① | Self-diagnosis Fault | |
| | | Output Over Current | Programming Error | |
| | | Motor Overload (i x t) | Serial Communication Fault | |
| | | Dynamic Braking Resistor Overload | Motor or Encoder Connection Fault | |
| | | CPU / EPROM Error ( Watchdog ) | Power Supply Phase Fault ( 30 A and above models) | |
| | | Encoder Fault | Keypad Connection Fault | |
| AMBIENT | Temperature | 0 ... 104 °F (40 °C), up to 122 °F (50 °C) with 2% / °C Output Current De-rating | | |
| | Humidity | 5 ... 90% Non Condensing | | |
| | Altitude | 0 ... 3300 ft (1000 m) (up to 13100 ft (4000 m) with 10% / 1000 m Output Current De-rating | | |
| CONFORMITIES | EMC Directive 89 / 336 / EEC EN 61800-3 | Electromagnetic Compatibility – Industrial Environment EMC - Emission and Immunity | | |
| | LVD 73/23/EEC | Low Voltage Directive | | |
| | IEC 146 | Semiconductor Inverters | | |
| | UL 508 C | Power Conversion Equipment | | |
| | EN 50178 | Electronic Equipment for Use in Power Installations | | |
| | EN 61010 | Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use | | |
| CERTIFICATIONS | UL (USA) and cUL (CANADA) | Underwriters Laboratories Inc. USA | | |
| | CE (EUROPE) | Phoenix Test - Labs GmbH - Germany | | |

*Data subject to change without previous notice.*

① *Optional*

# SHARK™

## SHARK™ DRIVE – TECHNICAL DATA

| | | | |
|---|---|---|---|
| KEYPAD | Programming | General VFD Functions Programming | |
| | Commands | Start / Stop , Increase / Decrease Speed, JOG, FWD/REV and Local/Remote | |
| | Monitoring | Speed Reference (rpm) | Output Current (A) |
| | | Motor Speed (rpm) | Output Voltage (Vac) |
| | | Speed Proportional Value (Ex: ft/min) | VFD Status |
| | | Output Frequency (Hz) | Digital Inputs Status |
| | | DC Link Voltage (Vdc) | Transistor Outputs Status |
| | | Motor Torque (%) | Relay Outputs Status |
| | | Output Power (kW) | Analog Inputs Value |
| | | Hours Powered Up (h) | Four Last Faults |
| | | Hours Enabled (h) | Fault Messages |
| CONTROL FEATURES AND OPTIONS | Standard | Keypad with LCD + LED displays (HMI-CFW09-LCD) | |
| | | Password to protect VFD programming | |
| | | LCD display language selection: English, Spanish and Portuguese | |
| | | Control mode selection ( via parameter): V / F, Sensorless Vector or Vector with Encoder | |
| | | Fault auto-diagnosis and auto-reset | |
| | | Parameters reset to factory or user default | |
| | | VFD Self-tuning to motor and load (Vector Modes) | |
| | | Specific unit indication ( Ex: l/s, t/h, %, etc. ) | |
| | | Motor slip compensation (V / F Mode) | |
| | | Manual and automatic Torque Boost (V / F Mode) | |
| | | Adjustable V / F Curve (V / F Mode) | |
| | | Minimum and maximum speed limits | |
| | | Output current limit | |
| | | Adjustable motor overload protection | |
| | | Digital gain and offset adjustments for the analog inputs | |
| | | Digital gain adjustment for the analog outputs | |
| | | JOG function | |
| | | JOG + / JOG – Function (momentary speed increase/decrease, phase shift) | |
| | | COPY Function (VFD Þ Keypad or Keypad Þ VFD) | |
| | | Comparison functions for the digital outputs: | |
| | | N* > Nx; N > Nx; N < Nx ; N = 0; N = N*; Is > Ix ; Is < Ix; T > Tx and T < Tx<br>Where: N = Motor speed; N*= Speed reference; Is = Output Current and T= Motor torque | |
| | | Linear and S independent acceleration and deceleration ramps, two sets of ramps | |
| | | DC Braking | |
| | | Optimal Braking™ (Vector Modes) | |
| | | Built-in dynamic braking transistor – Models up to 45 A / 220-230 V and 30 A / 380-480 V | |
| | | Multi-speed function (up to 8 preset speeds) | |
| | | Speed Profiling function | |
| | | Hour meter and Wattmeter | |
| | | PID Regulator (for automatic control of level, pressure, flow, etc. ) | |
| | | FWD / REV selection | |
| | | Local / Remote operation selection | |
| | | Flying Start function (restart with the motor spinning) | |
| | | Skip Speed (critical speed rejection) | |
| | | Ride-Through (operation during momentary power loss) | |
| | | Built-in dynamic braking transistor:<br>Models: 6 ... 45 A / 220 - 230 V and 3.6 ... 30 A / 380 - 480 V | |
| | Options | NEMA 4 remote keypad (LCD + LED displays) | |
| | | Remote keypad cable (3.3, 6.6, 10, 16, 25 and 35 ft) | |
| | | Blank keypad for local installation | |
| | | Blank keypad for remote installation | |
| | | Remote Keypad frame kit | |
| | | I / O Expansion Boards | |
| | | FieldBus Communications kits<br>(Mounted inside VFD) | |

*Data subject to change without previous notice.*

## LINE & LOAD REACTORS – 3% Z (IMPEDANCE) NEMA 1 ENCLOSURE

| Motor Volts | Motor HP | Reactor AMPS | Catalog Number | Dimensions H x W x D | App. Shpg. Wt. (lbs.) | List Price | Multiplier Symbol |
|---|---|---|---|---|---|---|---|
| 230V | 3 | 12 | LRW012D3N1 | 8 x 8 x 6 | 16 | $ 390 | V1 |
| | 5 | 18 | LRW018D3N1 | 8 x 8 x 6 | 16 | $ 462 | V1 |
| | 7.5 | 25 | LRW025D3N1 | 13 x 13.22 x 13.09 | 42 | $ 573 | V1 |
| | 10 | 35 | LRW035D3N1 | 13 x 13.22 x 13.09 | 45 | $ 616 | V1 |
| | 15 | 45 | LRW045D3N1 | 13 x 13.22 x 13.09 | 54 | $ 734 | V1 |
| | 20 | 55 | LRW055D3N1 | 13 x 13.22 x 13.09 | 55 | $ 763 | V1 |
| | 25/30 | 80 | LRW080D3N1 | 13 x 13.22 x 13.09 | 74 | $ 847 | V1 |
| | 40 | 100 | LRW100D3N1 | 13 x 13.22 x 13.09 | 78 | $ 1,054 | V1 |
| | 50 | 130 | LRW130D3N1 | 13 x 13.22 x 13.09 | 60 | $ 1,142 | V1 |
| | 60 | 160 | LRW160D3N1 | 13 x 13.22 x 13.09 | 71 | $ 1,363 | V1 |
| | 75 | 200 | LRW200D3N1 | 13 x 13.22 x 13.09 | 79 | $ 1,445 | V1 |
| 460V | 1.5 | 2 | LRW002G3N1 | 8 x 8 x 6 | 11 | $ 340 | V1 |
| | 2/3 | 4 | LRW004G3N1 | 8 x 8 x 6 | 11 | $ 350 | V1 |
| | 5 | 8 | LRW008G3N1 | 8 x 8 x 6 | 14 | $ 377 | V1 |
| | 7.5 | 12 | LRW012G3N1 | 8 x 8 x 6 | 16 | $ 404 | V1 |
| | 10 | 18 | LRW018G3N1 | 8 x 8 x 6 | 16 | $ 472 | V1 |
| | 15 | 25 | LRW025G3N1 | 13 x 13.22 x 13.09 | 42 | $ 616 | V1 |
| | 20/25 | 35 | LRW035G3N1 | 13 x 13.22 x 13.09 | 45 | $ 635 | V1 |
| | 30 | 45 | LRW045G3N1 | 13 x 13.22 x 13.09 | 54 | $ 759 | V1 |
| | 40 | 55 | LRW055G3N1 | 13 x 13.22 x 13.09 | 55 | $ 786 | V1 |
| | 50/60 | 80 | LRW080G3N1 | 13 x 13.22 x 13.09 | 74 | $ 882 | V1 |
| | 75 | 100 | LRW100G3N1 | 13 x 13.22 x 13.09 | 78 | $ 1,134 | V1 |
| | 100 | 130 | LRW130G3N1 | 13 x 13.22 x 13.09 | 60 | $ 1,256 | V1 |
| | 125 | 160 | LRW160G3N1 | 13 x 13.22 x 13.09 | 71 | $ 1,495 | V1 |
| | 150 | 200 | LRW200G3N1 | 13 x 13.22 x 13.09 | 79 | $ 1,709 | V1 |
| | 200 | 250 | LRW250G3N1 | 24 x 18.38 x 16.75 | 99 | $ 2,783 | V1 |
| | 250 | 320 | LRW320G3N1 | 24 x 18.38 x 16.75 | 155 | $ 3,142 | V1 |
| | 300 | 400 | LRW400G3N1 | 24 x 18.38 x 16.75 | 145 | $ 4,000 | V1 |
| | 350/400 | 500 | LRW500G3N1 | 47 x 26.5 x 24.9 | 165 | $ 4,204 | V1 |
| | 450/500 | 600 | LRW600G3N1 | 47 x 26.5 x 24.9 | 205 | $ 4,829 | V1 |
| | 750/800 | 1000 | LRW1000G3N1 | available upon request | | $ 9,458 | V1 |

**Note:** These are non-stocked items, consult WEG for availability.

## PROFIBUS, MODBUS AND DEVICE NET

| Description | Catalog Number | List Price | Multiplier Symbol |
|---|---|---|---|
| SUPERDRIVE Software | SUPERDRIVE | $ 37 | V1 |
| SUPERDRIVE Software + USB Cable | SUPERDRIVE+USB | $ 301 | V1 |
| RS-232/485 Converter (mounted externally) | MIW -02 | $ 221 | V1 |
| WEG Fieldbus Module for Profibus-DP | MFW-01/PD | $ 1,665 | V1 |
| WEG Fieldbus Module for DeviceNet | MFW-01/DN | $ 1,499 | V1 |
| WEG Fieldbus Module for Modbus-RTU | MFW-01/MR | $ 1,537 | V1 |
| RS-485 Kit for PC | 417102506 | $ 900 | V1 |

## COMMUNICATION OPTIONS

The table below shows the hardware options required to provide WEG VFD's and Soft Starters with different serial communications or networking capabilities.

| | RS-232 | RS-485 | Profibus-DP | DeviceNet | Modbus-RTU |
|---|---|---|---|---|---|
| CFW08 | KCS-CFW08 | KCS-CFW08<br>MIW-02 | KCS-CFW08<br>MIW-02<br>MFW-01/PD | KCS-CFW08<br>MIW-02<br>MFW-01/DN | KCS-CFW08<br>MIW-02 |
| CFW09 | See CFW-09 Accessories | | | | |
| SSW03 | Standard | MIW-02 | MIW-02<br>MFW-01/PD | MIW-02<br>MFW-01/DN | MIW-02<br>MFW-01/MR |
| SSW04 | Standard | MIW-02 | MIW-02<br>MFW-01/PD | MIW-02<br>MFW-01/DN | MIW-02<br>MFW-01/MR |
| SSW05 | Standard | MIW-02 | MIW-02<br>MFW-01/PD | MIW-02<br>MFW-01/DN | MIW-02<br>MFW-01/MR |
| SSW06 | Standard | KRS-485-SSW06 | KFB-PD-SSW06 | KFB-DN-SSW06 | MIW-02<br>MFW-01/MR |


"RS-485 Kit for PC" is required when SUPERDRIVE communicates with a multi drive RS-485 network. It is composed of a RS-232/RS-485 converter and a cable to connect to PC.

## SUPERDRIVE

WEG Superdrive is a windows based software program that allows serial (RS - 232 or RS - 485) communication between a PC and all WEG Soft Starters and Variable Frequency Drives. Superdrive is an excellent programming, documentation, and troubleshooting tool for WEG Soft Starters and VFD's. Superdrive is available for free download at www.wegelectric.com. Hardware accessories may be required depending on the Soft Starter or VFD line.

## STANDARD FEATURES

- Online and Offline Soft Starter or VFD programming
- Command and Monitoring
- Parameter set storage in a computer file format