



WorldWide
ELECTRIC CORPORATION

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worldwideelectric.com

**Drives &
Controls**



Motor Control Products Catalog

2023-2024

WorldWide Electric has a complete line of Motor Controls including Variable Frequency Drives, Reduced Voltage Soft Starters, Across the Line Motor Starters, Enclosed Solutions and Accessories for the most demanding requirements.



WorldWide Electric Motors

Proven, reliable designs

WorldWide Electric motor controls ensure your motor is properly protected while controlling starting, stopping, and operating speed. Our extensive inventory of motor controls includes chassis and enclosed variable frequency drives, chassis and enclosed soft starters, across the line starters, contactors and overload relays, pilot devices, and heavy duty disconnect switches.

Our Motor Controls are backed by exceptional technical support. Our highly knowledgeable team is available during standard business hours for basic programming and troubleshooting assistance and 24/7, including weekends and holidays, for emergency breakdown support.



Application Questionnaire for Drive & Soft Starters

Completed by: _____ Date: _____

Customer Name: _____ Contact: _____

Address: _____ Phone #: _____

City: _____ State: _____ Project: _____

1. Application Type:

Fan, Blower, Centrifugal Pump? ☐ Yes = Variable TQ / Normal Duty

☐ No = Constant TQ / Heavy Duty

☐ Axial Fan ☐ Centrifugal Pump ☐ Centrifuge ☐ Conveyor / Screw Auger

☐ Cooling Tower Fan ☐ Rock Crusher ☐ PDP Pump ☐ Mixer

☐ Other: _____

2. Special Load Considerations (Examples in parenthesis):

☐ High inertia / regenerative: (like flywheel or centrifuge) _____

☐ Speed control tolerance (% or RPM): _____

☐ High starting torque: (loaded conveyor or head pressure): _____

☐ Shock load (rock crusher, punch press): _____

☐ Gearbox between motor & load (5:1 or 35:1 - provide ratio): _____

☐ Other: _____

3. Incoming Power Data:

Incoming power to drive: _____ Hz: _____ ☐ Single Phase ☐ 3-Phase

Outgoing voltage to motor: _____ Hz: _____ ☐ Single Phase ☐ 3-Phase

4. Motor Data:

Horsepower: _____ RPM: _____ ☐ New ☐ Existing

Volts: _____ Full Load Amps*: _____ Service Factor: _____

Running Amps - Normal: _____ Running Amps - Heaviest Load: _____

☐ VFD / inverter rated motor = NEMA MG1 Part 31 with 1600-volt insulation rating

☐ NOT VFD / inverter rated = NEMA MG1 Part 30 with 1000-volt insulation rating

*Rewound motors: Confirm running amps, as original nameplate data is likely NOT valid.

NOTE: If multiple motors are to be controlled by a single drive, attach individual motor information on a separate page. Please provide total ampacity of combined motors.

Application Questionnaire for Drive & Soft Starters (continued)



5. Drive Output Information:

Cable distance from VFD to motor: _____ (estimate total cable FEET)

Cable type: ☐ Not VFD rated cable ☐ VFD / Inverter rated cable

6. Speed Adjustments & Duty Cycle:

Maximum RPM: _____ Minutes at max speed/hr: _____

Minimum RPM: _____ Minutes at min speed/hr: _____

Acceleration time: _____ Any limit? _____

Deceleration time: _____ Any limit or is coast possible? _____

7. Will drive follow an automatic process signal? ☐ Yes ☐ No

If yes, specify signal type quantity of signals: 4-20mA _____ 0-10vDC _____

Examples: Operator Potentiometer, PLC signal, Pressure or Temperature feedback signal

8. Installation Environment: ☐ Indoor ☐ Outdoor

Required drive enclosure: ☐ Chassis ☐ NEMA 1 – clean room

☐ NEMA 12 indoor dusty ☐ NEMA 3R outdoor ☐ NEMA 4 indoor or outdoor dusty

☐ NEMA 4X corrosive ☐ NEMA 7 or 9 Hazardous / Explosive

Maximum temperature: _____ deg F Minimum temperature: _____ deg F

Site Elevation in feet: _____ Humidity above 95%: _____

9. Do you anticipate using any of these protection devices?

☐ Input Line Reactor ☐ Output Reactor ☐ Motor dv/dt filter

☐ Drive isolation transformer ☐ Broadband harmonic filter (IEEE519 Harmonic Concerns)

10. Serial Communication Requirements:

☐ Modbus ☐ Ethernet ☐ Other _____

11. Other application details: _____

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Section 1: Remote Monitoring and Control

Remote Operating Module: ROM1

WorldWide Electric's ROM 1 allows you to reduce your time spent in the field to check up on your operations by providing information at your fingertips. A simple add-on to your existing equipment, the ROM 1 will enable you to view system statuses in real-time, view automatically-generated reports, and get notified of critical issues via email and text alerts 24/7.

As a control device, you can immediately power up or down your equipment from your mobile phone anywhere you have service. It provides additional control* inputs and outputs, to connect and monitor other devices, such as pressure, temperature, or flow. The ROM 1 is cloud-based, straightforward to set up and operate, and WorldWide Electric's Technical Support team has your back - helping you step-by-step.

Product Specifications

Product Features

- Ease of Use
- Easy to Install
- Small footprint
- DIN-rail Mounted
- Standard Industrial IO Connections
- Simple Online Setup from your Phone
- Cloud-based Software Application

Monitoring and Control Features

- Automated Reports
- Real-time Alerts
- Location Tracking
- "Last-Gasp" Battery for Loss-of-Power Alert
- Industrial IO for Start/Stop Control, PID Control, Logic Tables and VFD, or Soft Starter Control

Easy to Maintain

- Automated Software Updates
- Unlimited Technical Support
- Renewable 3-Year Plan



WorldWide Electric Remote Operating Module

ROM Device Model	List Price
ROM1	Consult Factory

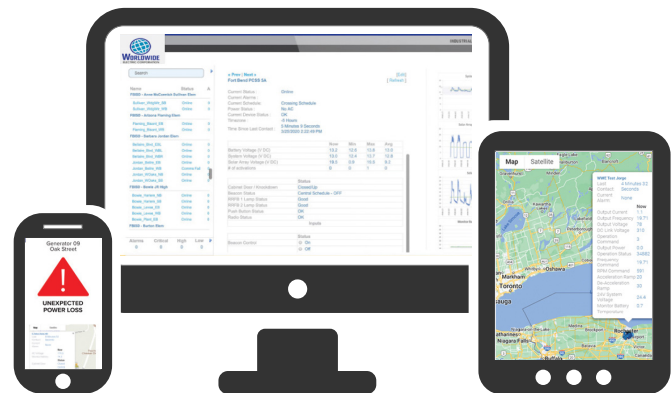
Included Connectivity	
Cell Modem	4G Cat M1
GPS	Yes
OTA Software Update	Yes

Industrial I/O	Operation	
Analog Inputs (Voltage 0-30 VDC)		3
Analog Inputs (Voltage 4-20mA)		3
Analog Inputs (Voltage 0-280 VAC)		1
Digital Outputs (Open Collector)	Start/Stop Control	1
Digital Inputs (Voltage 3-30 VDC) / Pulse	Alarm Status	4
Analog Outputs (Current 4-20 mA)	Frequency Control	1
RS485 Port		MODBUS™

Miscellaneous	
Control Capability	PID Control/Logic Table/VFD or Soft Start Control
Non-volatile Memory	Yes
Operating Temperature	-37°C to 74°C
Humidity	5-95% Non-Condensing
Dimensions	1" x 2.375" x 45"
Input Voltage	10-30V DC
Power Consumption DC	< 20mA @ 12VDC

Additional Product Notes

- Use of ROM1 with our WSIQ products using MODBUS™ protocol will require the purchase and installation of the Modbus RTU communication card, model # WSIQ-COM-MB or WSIQ-COM-MB2 found on page 26 of this catalog.





The WorldDrive Chassis from WorldWide Electric

The WorldDrive – Performance and Flexibility. No matter what your need is the WorldDrive variable frequency drive from WorldWide Electric can help you meet your challenge. WorldDrives are designed and manufactured for a breadth of applications and scalable through our communications protocols. These chassis can also be ordered in a variety of enclosed packages, either configured from our catalog or custom-designed by our team of engineers to meet your specific application. Whether you are building a machine, driving a pump, operating a conveyor, or controlling most other applications, WorldWide Electric likely has a drive solution for you.

Section 2: Variable Frequency Drives - Chassis



The World Drive Product Family Comparison

	WDGP Series	WDG2 Series	WD4X Series
Voltages and HP Ranges	240V Single-Phase 1/2-2 hp		240V Single-Phase 1/2-10 hp VT
	240V Three-Phase 10-40 hp VT 240V Three-Phase 1/2-30 hp CT	230V Three-Phase 3/4-30 hp VT 230V Three-Phase 1/2-30 hp CT	240V Three-Phase 1-20 hp CT
			480V Single-Phase 1/2-15 hp VT
	480V Three-Phase 10-40 hp VT 480V Three-Phase 1/2-30 hp CT	460V Three-Phase 1/2-30 hp VT 460V Three-Phase 3/4-40 hp CT	480V Three-Phase 1/2-30 hp CT
Motor Control Mode	V-Hz Slip Compensation Sensorless Vector	V-Hz Slip Compensation Sensorless Vector	V-Hz Slip Compensation Sensorless Vector PM Sensorless Vector
Operation Mode	PID Multi-Step Frequency 2-Wire 3-Wire Energy Savings	PID Multi-Step Frequency 2-Wire 3-Wire Fire Mode	PID Multi-Step Frequency 2-Wire 3-Wire Torque Control Energy Savings Fire Mode
Enclosure Ratings	NEMA 1 / IP20 With Conduit Box Option	NEMA 1 / IP20 With Conduit Box Option	NEMA 4X / IP66 Indoor
Communications	Modbus RTU	Modbus RTU Optional: Ethernet/IP Modbus/TCP	Modbus RTU Optional: Ethernet/IP Modbus/TCP
Braking IGBT	Built-in	Built-in	Built-in
All brake resistors are external devices purchased separately	All brake resistors are external devices purchased separately	All brake resistors are external devices purchased separately	All brake resistors are external devices purchased separately
Overload Capacity	120% Overload for 60 seconds VT 150% Overload for 60 seconds CT	120% Overload for 60 seconds VT 150% Overload for 60 seconds CT	150% Overload for 60 seconds CT
Digital Inputs	8	5	5
Pulse Train Input	0	0	1
Digital Outputs	1 Complementary Relay	1 Complementary Relay 1 Normally Open	1 Complementary Relay 1 Pulse Train Output
Open Collector Output	1	0	1
Analog In	2	2	2
Analog Out	1	1	1
Safety Digital Inputs	No	No	2 Safe Torque Off Inputs
24VDC Power Supply	150mA	100mA	150mA
Real Time Clock	No	No	No
Required Circuit Protection	Circuit Breaker or Fuse	Circuit Breaker or Fuse	Circuit Breaker or Fuse
Software	DrivePro	DrivePro 2	DrivePro
Options	NEMA 1 Conduit Box NEMA 1 Remote Keypad	NEMA 1 Conduit Box Remote Keypad and Mount Ethernet/IP Communication Card	Ethernet/IP Communication Card

Section 2: Variable Frequency Drives - Chassis



The World Drive Product Family Comparison

	WDFC Series	N700E Series
Voltages and HP Ranges	240V Single-Phase 1/2-10 hp VT	240V Single-Phase 1/2-3 hp VT
	240V Three-Phase 1-25 hp VT 240V Three-Phase 1/2-20 hp CT	240V Three-Phase 10-125 hp VT 240V Three-Phase 1/2-100 hp CT
	480V Single-Phase 1/2-350 hp VT	
	480V Three-Phase 1-800 hp VT 480V Three-Phase 1/2-650 hp CT	480V Three-Phase 1/2-550 hp VT
Motor Control Mode	V-Hz Slip Compensation Sensorless Vector PM Sensorless Vector	V-Hz Sensorless Vector
Operation Mode	PID 2-Wire 3-Wire Multiple Motor Control Damper Control Pump Clean & Pipe Break Fire Mode	PID 2-Wire 3-Wire
Enclosure Ratings	NEMA 1 / IP20 With Conduit Box Option Plenum Rated	NEMA 1 / IP20 With Conduit Box Option
Communications	Modbus RTU Metasys-N2 BACnet MS/TP Optional: Ethernet/IP or Modbus/TCP	Modbus RTU Optional: Ethernet/IP Modbus/TCP
Braking IGBT	Built-in up to 40 hp	Built-in up to 30 hp
All brake resistors are external devices purchased separately	All brake resistors are external devices purchased separately	All brake resistors are external devices purchased separately
Overload Capacity	120% Overload for 60 seconds VT 150% Overload for 60 seconds CT	120% Overload for 60 seconds VT 150% Overload for 60 seconds CT
Digital Inputs	7	6
Pulse Train Input	1	0
Digital Outputs	5	1 Complementary Relay 2 Normally Open
Open Collector Output	1	0
Analog In	2	2
Analog Out	2	1
Safety Digital Inputs	No	No
24VDC Power Supply	100mA	35mA
Real Time Clock	Yes	No
Required Circuit Protection	Circuit Breaker or Fuse	Circuit Breaker or Fuse
Software	Drive Pro	None
Options	NEMA 1 Conduit Box Flange Mount Kit NEMA 1 & NEMA 4X Keypad Mount Ethernet/IP Communication Card IO Expansion Card	NEMA 1 Conduit Box Advanced Keypad NEMA 1 Remote Keypad Mount Ethernet/IP Communication Card

Section 2: Variable Frequency Drives - Chassis

WDN700E Series High Performance Variable Frequency Drive - 230V

The WDN700E Series High Performance Drives offer powerful control solutions with exceptional speed control and torque response which provides superior vector performance. The WDN700E's compact size and sensorless vector control technology provides perfectly optimized performance for industrial and commercial applications.

Certificates of international compliance (UL/cUL, CE) for the WDN700E series make it perfect for global applications. Compatible with the most common loads such as: fans, blowers, compressors, pumps, mixers, agitators, feeders, centrifuges, cranes, hoists, presses, extruders, and textile spinning machines.

Product Specifications

- Sensorless Vector Control
- 0.01 - 400 Hz
- 60 sec. 150% overload, CT applications
- 60 sec. 120% overload, VT applications
- 3000 second accel/decel
- DC braking
- Auto-tuning
- Sixteen pre-set speeds
- Adjustable carrier frequencies
- PID control
- Frequency jump
- Analog gain bias
- Jog run
- Electronic thermal overload
- Auto-torque boost, trip history monitor and software lock
- Speed search function
- Intelligent input function
- RS485 - Modbus communications
- Other communications options available - Consult factory
- Input voltage range: 200-240V Single / Three Phase (-10% +10%)



230 Volt, Single-Phase In / 230 Volt, Three-Phase Out

HP	Output Current	Model Number ¹	List Price	Dimensions (in) H x W x D	Approx. Weight (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
						Model Number	List Price
0.5	3	N700E-004SF	\$878.94	5.04 x 2.67 x 5.04	2.6	Standard	—
1	5	N700E-007SF	\$914.33	5.04 x 2.67 x 5.04	2.6	Standard	—
2	7	N700E-015SF	\$1,061.80	5.04 x 4.25 x 5.6	3.3	Standard	—
3	11	N700E-022SF	\$1,149.10	5.04 x 4.25 x 5.6	3.3	Standard	—

230 Volt, Three-Phase In / 230 Volt, Three-Phase Out

Constant Torque 150% Overload		Variable Torque 120% Overload		Model Number ¹	List Price	Dimensions (in) H x W x D	Approx. Weight (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
HP	Output Current	HP	Output Current					Model Number	List Price
0.5	3	—	—	N700E-004LF	\$855.35	5.04 x 2.67 x 5.04	2.6	Standard	—
1	5	—	—	N700E-007LF	\$887.20	5.04 x 2.67 x 5.04	2.6	Standard	—
2	7	—	—	N700E-015LF	\$1,045.29	5.04 x 2.67 x 5.04	2.6	Standard	—
3	11	—	—	N700E-022LF	\$1,131.41	5.04 x 4.25 x 5.6	3.3	Standard	—
5	17	—	—	N700E-037LF	\$1,454.67	5.04 x 5.42 x 5.78	4.4	Standard	—
7.5	24	10	30	N700E-055LFC	\$2,593.15	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$155.43
10	32	15	44	N700E-075LFC	\$3,062.71	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$155.43
15	45	20	50	N700E-110LFC	\$3,925.13	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$155.43
20	64	25	73	N700E-150LFC	\$4,535.07	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$176.47
25	76	30	85	N700E-185LFC	\$5,040.02	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$176.47
30	90	40	90	N700E-220LFC	\$5,901.26	15.4 x 9.85 x 7.4	22	CBOX-15-22	\$176.47
40	114	50	140	N700E-300LF*	\$9,704.87	21.7 x 10.7 x 10.5	55	CBOX-30LF	\$577.32
50	140	60	170	N700E-370LF*	\$11,426.17	25.6 x 11.7x x 10.5	78	CBOX-37-45LF	\$598.35
60	170	75	205	N700E-450LF*	\$13,758.60	25.6 x 11.7x x 10.5	78	CBOX-37-45LF	\$598.35
75	211	100	261	N700E-550LF*	\$16,528.72	30.0 x 13.7 x 10.9	105	CBOX-55-75LF	\$693.01
100	251	125	310	N700E-750LF*	\$21,650.14	30.0 x 13.7 x 10.9	105	CBOX-55-75LF	\$693.01

¹ Catalog Numbers without the letter "C" at the end do not support communications cards.

* These models do not accept the use of the ROP7 and N700E-LCD-KIT-LF. You must use the keypad from the face of the VFD which is removable and one of the NOP1-XX Cables.

Remote Keypads & Cables

Model Number	Description	List Price
N700E-LCD-KIT-HF	LCD Keypad, for use with N700E-055HFC to N700E-3500HFC	\$492.00
ROP7	LED Remote Keypad Unit, for use with any N700E VFD except N700E-300LF to N700E-750LF	\$251.26
NOP1-1A	Cable, 1.5 Meter	\$53.76
NOP1-3A	Cable, 3 Meter	\$85.31
KROP1-22MM	3 x 22mm Operator Station	\$1,650.13

N700E Communication Option Description

Model Number	Description	List Price
N700E-ETH-C	N700E drive: Ethernet IP or Ethernet TCIP	\$2,355.55

Additional Product Notes

All WorldWide WDN700E drives can be used for single-phase input / three-phase output. Consult factory to size appropriately. Always check and verify motor full load amps before selecting a VFD.

Section 2: Variable Frequency Drives - Chassis



WDN700E Series High Performance Variable Frequency Drive - 460V

The WDN700E Series High Performance Drives offer powerful control solutions with exceptional speed control and torque response which provides superior vector performance. The WDN700E's compact size and sensorless vector control technology provides perfectly optimized performance for industrial and commercial applications.

Certificates of international compliance (UL/cUL, CE) for the WDN700E series make it perfect for global applications. Compatible with the most common loads such as: fans, blowers, compressors, pumps, mixers, agitators, feeders, centrifuges, cranes, hoists, presses, extruders, and textile spinning machines.

Product Specifications

- Sensorless Vector Control
- 0.01 - 400 Hz
- 60 sec. 150% overload, CT applications
- 60 sec. 120% overload, VT applications
- 3000 second accel/decel
- DC braking
- Auto-tuning
- Sixteen pre-set speeds
- Adjustable carrier frequencies
- PID control
- Frequency jump
- Analog gain bias
- Jog run
- Electronic thermal overload
- Auto-torque boost, trip history monitor and software lock
- Speed search function
- Intelligent input function
- RS485 - Modbus communications
- Other communications options available - Consult factory
- Input voltage range: 380-480V Single / Three Phase (-10% +10%)



SECTION 2
VFD - CHASSIS

460 Volt, Three-Phase In / 460 Volt, Three-Phase Out									
Constant Torque 150% Overload		Variable Torque 120% Overload		Model Number ¹	List Price	Dimensions (in) H x W x D	Approx. Weight (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
HP	Output Current	HP	Output Current					Model Number	List Price
0.5	1.8	—	—	N700E-004HF	\$1,086.57	5.04 x 4.25 x 5.6	2.6	Standard	—
1	3.4	—	—	N700E-007HF	\$1,139.67	5.04 x 4.25 x 5.6	2.6	Standard	—
2	4.8	—	—	N700E-015HF	\$1,315.46	5.04 x 4.25 x 5.6	3.3	Standard	—
3	7.2	—	—	N700E-022HF	\$1,643.43	5.04 x 4.25 x 5.6	3.3	Standard	—
5	9.2	—	—	N700E-037HF	\$1,844.00	5.04 x 5.42 x 5.78	4.4	Standard	—
7.5	12	10	15	N700E-055HFC	\$2,568.38	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$155.43
10	16	15	22	N700E-075HFC	\$3,141.76	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$155.43
15	23	20	29	N700E-110HFC	\$3,925.13	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$155.43
20	32	25	37	N700E-150HFC	\$4,535.07	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$176.47
25	38	30	43	N700E-185HFC	\$5,040.02	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$176.47
30	45	40	57	N700E-220HFC	\$6,021.60	15.4 x 9.85 x 7.4	17	CBOX-15-22	\$176.47
40	58	50	70	N700E-300HFC	\$8,660.76	20.86 x 12.28 x 10.63	48	CBOX-30-37	\$319.04
50	75	60	85	N700E-370HFC	\$10,200.38	20.86 x 12.28 x 10.63	48	CBOX-30-37	\$319.04
60	90	75	105	N700E-450HFC	\$12,341.68	21.57 x 13.46 x 11.02	60	CBOX-45-55	\$427.73
75	110	100	135	N700E-550HFC	\$13,968.60	21.57 x 13.46 x 11.02	66	CBOX-45-55	\$427.73
100	149	125	160	N700E-750HFC	\$18,286.59	27.48 x 15.6 x 11.02	110	CBOX-75-90	\$475.64
125	176	150	195	N700E-900HFC	\$23,038.74	27.48 x 15.6 x 11.02	110	CBOX-75-90	\$475.64
150	217	200	230	N700E-1100HFC	\$25,231.95	29.13 x 18.89 x 11.81	132	CBOX-110-132	\$781.82
200	260	250	285	N700E-1320HFC	\$29,087.48	29.13 x 18.89 x 11.81	132	CBOX-110-132	\$781.82
250	300	300	370	N700E-1600HFC	\$50,043.90	36.22 x 19.92 x 15.35	242	CBOX-160-220	\$1,145.28
300	415	350	450	N700E-2200HFC	\$51,374.70	36.22 x 19.92 x 15.35	242	CBOX-160-220	\$1,145.28
400	525	450	600	N700E-2800HFC	\$67,846.78	40.15 x 31.73 x 15.55	375	CBOX-280-350	\$1,667.67
500	656	550	680	N700E-3500HFC	\$76,397.84	40.15 x 31.73 x 15.55	375	CBOX-280-350	\$1,667.67

¹ Catalog Numbers without the letter "C" at the end do not support communications cards.

Remote Keypads & Cables

Model Number	Description	List Price
N700E-LCD-KIT-HF	LCD Keypad, for use with N700E-055HFC to N700E-3500HFC	\$492.00
ROP7	LED Remote Keypad Unit, for use with any N700E VFD except N700E-300LF to N700E-750LF	\$251.26
NOP1-1A	Cable, 1.5 Meter	\$53.76
NOP1-3A	Cable, 3 Meter	\$85.31
KROP1-22MM	3 x 22mm Operator Station	\$1,650.13

N700E Communication Option Description		
Model Number	Description	List Price
N700E-ETH-C	N700E drive: Ethernet IP or Ethernet TCIP	\$2,355.55

Additional Product Notes

All WorldWide WDN700E drives can be used for single-phase input / three-phase output. Consult factory to size appropriately. Always check and verify motor full load amps before selecting a VFD.

Section 2: Variable Frequency Drives - Chassis

WDN700E Series High Performance Variable Frequency Drive - Specifications

Specification			Description		
Control Method			Sensorless Vector PWM		
Output Frequency Range			0.01~400Hz		
Frequency Accuracy			Digital: Max Frequency ±0.01% Analog: Max Frequency ±0.1%		
Frequency Resolution			Digital setting: 0.01 Hz (< 100 Hz), 0.1 Hz (> 100 Hz) Analog, DC 5V Input: Max frequency / 500 Analog, DC 0~10V, 4~20mA: Max frequency / 1,000		
V/f Characteristic			Base frequency: 0~400 Hz free set Torque pattern selection available (constant torque / reduced torque)		
Overload Capacity			150%: 60 seconds (heavy duty) 120%: 60 seconds (normal duty)		
Acceleration / Deceleration Time			0.1~3,000 seconds (linear / curve selection available) 2 nd Acceleration / Deceleration setting available		
DC Braking			Performs between minimum frequency and established braking frequency Level and time setting available		
Input	Frequency Setting	Standard Operator	Set via volume up / down keys		
		External Signal	1 W, 1~2 kΩ variable resistor DC 0~10 V (input impedance 10 kΩ), 4~20 mA (input impedance 250Ω)		
	Forward Reverse Start/Stop	Standard Operator	Run key / Stop key (change forward / reverse by function command)		
		External Signal	Forward run / stop, reverse run / stop set by terminal assignment (1a, 1b selection available)		
	Intelligent Input Terminal		FW (Forward) RV (Reverse) CF-1~4 (Multi-speed) RD (Reset)	AT (Analog input current / voltage transfer) USP (Unattended Start Protection) EXT (External Trip) FRS (Free Run Stop)	JG (Jogging Command) SFT (Software Lock Command) 2CH (2 nd Acc/Dec) SET (2 nd Motor Constants Setting)
Output	Intelligent Output Terminal		RUN (Run Signal) FA1 (Frequency Arrival Signal [at set frequency]) FA2 (Frequency Arrival Signal [at or above set frequency])		OL (Overload Advanced Notice Signal) OD (Output Deviation of PID Signal) AL (Alarm Signal)
	Frequency Monitor		Analog meter (DC0~10V full scale, Max 1 mA) Analog output frequency signal and analog output current signal Analog output voltage signal selection available		
	Alarm Output Contact		Off when inverter alarm (b contact output) / Auto switch ON And OFF Intelligent output terminal use available		
Main Functions			Auto-tuning AVR Function V/F Setting Curve Accel. / Decel. Selection Frequency Upper / Lower Limit, 6 Level Multi-speed Start Frequency Set Carrier Frequency Setting (0.5~15 kHz) PID Control Frequency Jump Analog Gain Bias Control		Jogging Run Electronic Thermal Level Control Retry Auto Torque Boost Trip History Monitor Software Lock S-shape Accel. / Decel. Frequency Conversion Display USP 2nd Control
Protective Functions			Over-current Protection Overload (electronic thermal) Over-voltage Communication Error Under-voltage Output Short		USP Error EEPROM Error External Trip Ground Fault Temperature Trip
Environmental Conditions		Ambient Temperature	-10~50°C (over 40°C: set carrier frequency below 2.0 kHz)		
		Storage Temperature	-20~60°C (while transporting: short time)		
		Ambient Humidity	Below 90% RH (non-condensing)		
		Vibration	5.9 m/s2 (0.6 G). 10~55 Hz (JIS C0911 test methodology)		
		Location	Less than 1,000 m above sea level, Indoor (no corrosive gas, no flammable gas, no oil-drop, no dust)		
Options			Remote Operator Remote Operator Cable Regenerative Braking Resistor		

Section 2: Variable Frequency Drives - Chassis



Accessories for WDN700E — Braking Resistors

VFD Model Number	Dynamic Braking Resistors - Heavy Duty Cycle					Braking Modules		
	Model Number	Ohms	Kilo-Watts	Quantity Required	List Price (Each)	Model Number	Quantity Required	List Price (Each)
230 Volt, Single-Phase								
N700E-004SF	RB-00P3-50	50	0.3	1	\$70.12	Built-In	—	—
N700E-007SF	RB-00P3-50	50	0.3	1	\$70.12	Built-In	—	—
N700E-015SF	RB-00P3-50	50	0.3	1	\$70.12	Built-In	—	—
N700E-022SF	RB-00P6-35	35	0.6	1	\$169.45	Built-In	—	—
230 Volt, Three-Phase								
N700E-004LF	RB-00P3-50	50	0.3	1	\$70.12	Built-In	—	—
N700E-007LF	RB-00P3-50	50	0.3	1	\$70.12	Built-In	—	—
N700E-015LF	RB-00P3-50	50	0.3	1	\$70.12	Built-In	—	—
N700E-022LF	RB-00P6-35	35	0.6	1	\$169.45	Built-In	—	—
N700E-037LF	RB-01P2-35	35	1.2	1	\$218.54	Built-In	—	—
N700E-055LFC	RB-01P2-17	17	1.2	1	\$182.31	Built-In	—	—
N700E-075LFC	RB-01P2-17	17	1.2	1	\$182.31	Built-In	—	—
N700E-110LFC	RB-01P2-17	17	1.2	1	\$182.31	Built-In	—	—
N700E-150LFC	RB-04P5-8.7	8.7	4.5	1	\$1,286.68	Built-In	—	—
N700E-185LFC	RB-05P6-6	6	5.6	1	\$1,557.81	Built-In	—	—
N700E-220LFC	RB-06P6-6	6	5.6	1	\$1,645.46	Built-In	—	—
N700E-300LF	RB-09P0-HD-3.5	3.5	9	1	\$2,547.66	BRD-K3-370L	1	\$2,142.13
N700E-370LF	RB-11P2-HD-3.5	3.5	11.2	1	\$2,933.32	BRD-K3-370L	1	\$2,142.13
N700E-450LF	RB-13P5-HD-2.4	2.4	13.5	1	\$3,288.59	BRD-K3-550L	1	\$2,414.44
N700E-550LF	RB-16P5-HD-2.4	2.4	16.5	1	\$3,992.11	BRD-K3-550L	1	\$2,414.44
N700E-750LF	Consult Factory	—	—	—	—	—	—	—
460 Volt, Three-Phase								
N700E-004HF	RB-00P6-100	100	0.6	1	\$218.54	Built-In	—	—
N700E-007HF	RB-00P6-100	100	0.6	1	\$218.54	Built-In	—	—
N700E-015HF	RB-00P6-100	100	0.6	1	\$218.54	Built-In	—	—
N700E-022HF	RB-00P6-100	100	0.6	1	\$218.54	Built-In	—	—
N700E-037HF	RB-00P6-100	100	0.6	1	\$218.54	Built-In	—	—
N700E-055HFC	RB-01P8-HD-70	70	1.8	1	\$343.59	Built-In	—	—
N700E-075HFC	RB-02P4-HD-50	50	2.4	1	\$781.82	Built-In	—	—
N700E-110HFC	RB-03P3-HD-50	50	3.3	1	\$781.82	Built-In	—	—
N700E-150HFC	RB-04P5-HD-30	30	4.5	1	\$1,380.17	Built-In	—	—
N700E-185HFC	RB-05P6-HD-20	20	5.6	1	\$1,666.50	Built-In	—	—
N700E-220HFC	RB-06P6-HD-20	20	6.6	1	\$1,764.67	Built-In	—	—
N700E-300HFC	RB-09P0-HD-12	12	9	1	\$2,642.32	BRD-VZ3-370H	1	\$2,142.13
N700E-370HFC	RB-11P2-HD-12	12	11.2	1	\$3,042.00	BRD-VZ3-370H	1	\$2,142.13
N700E-450HFC	RB-13P5-HD-8	8	13.5	1	\$3,411.29	BRD-VZ3-550H	1	\$2,414.44
N700E-550HFC	RB-16P5-HD-6	8	16.5	1	\$4,142.86	BRD-VZ3-550H	1	\$2,414.44
N700E-750HFC	RB-22P5-HD-6	6	22.5	1	\$5,068.43	BRD-VZ3-750H	1	\$2,775.55
N700E-900HFC	RB-22P5-HD-6	6	22.5	2	\$5,068.43	BRD-VZ3-550H	2	\$2,414.44
N700E-1100HFC	RB-22P5-HD-6	6	22.5	2	\$5,068.43	BRD-VZ3-750H	2	\$2,775.55
N700E-1320HFC	RB-22P5-HD-6	6	22.5	2	\$5,068.43	BRD-VZ3-750H	2	\$2,775.55
N700E-1600HFC	RB-45P0-3	3	45	2	\$10,273.60	FBU100-160-4	1	\$10,443.06
N700E-2200HFC	RB-45P0-3	3	45	2	\$10,273.60	FBU100-220-4	1	\$13,967.70
N700E-2800HFC	RB-45P0-3	3	45	4	\$10,273.60	FBU100-160-4	2	\$10,443.06
N700E-3500HFC	RB-67P5-3	3	67.5	2	Consult Factory	FBU100-220-4	2	\$13,967.70

Additional Product Notes

Shown above are values for typical heavy duty applications.

For applications with known duty cycle and braking torque requirements, please consult factory for selection assistance.

Section 2: Variable Frequency Drives - Chassis

WDG2 - General Purpose Variable Frequency Drives

Introducing the WDG2 General Purpose Drive. Incorporating enhanced functionality, **integrated speed potentiometer**, remote keypad and optional communication cards, the NEW WorldDrive WDG2 is the right choice for most general-purpose applications.

Product Specifications

- Volts to frequency (V/f), slip compensation, and sensorless vector control
- 150% overload for 60 sec
- 200-230V, Three-phase, 1-30 HP CT Rated
- 380-480V, Three-phase, 1-30 HP CT Rated
- Input voltage range:
 - 200-230 V Single / Three Phase (-15%, +10%)
 - 380-480 V Three-Phase (-15%, +10%)
- Output Frequency: 0-400 Hz, Sensorless: 0-300 Hz
- Carrier Frequency: 1-15 kHz
- Protection degree: IP20 Open default
- Optional NEMA 1 Conduit Box
- Conformal Coated printed circuit boards
- Built-in Modbus-RTU and PID loop control
- Dynamic braking (Optional External Resistors).
- Ground fault protection
- Manual and automatic torque boost
- UL, cUL listed, CE certified



230 Volt, Three-Phase In / 230 Volt, Three-Phase Out

Constant Torque (Heavy Duty) 150% Overload		Variable Torque (Normal Duty) 120% Overload		Model Number	List Price	Dimensions (in) ¹ H x W x D	Approx. Weight ¹ (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
HP	Output Current	HP	Output Current					Model Number	List Price
0.5	2.5	0.75	3.1	WDG20004-2	\$719.73	6.5 x 3.4 x 5.5	2.3	WDG2CBOX-1	\$170.03
1	5	1	6	WDG20008-2	\$745.74	6.5 x 3.4 x 5.5	2.3	WDG2CBOX-1	\$170.03
2	8	3	9.6	WDG20015-2	\$878.28	7 x 4 x 6.3	3.1	WDG2CBOX-2	\$187.57
3	11	---	12	WDG20022-2	\$951.37	7 x 4 x 6.3	3.1	WDG2CBOX-2	\$187.57
5	17	5	18	WDG20040-2	\$1,221.43	7.6 x 5.3 x 6.3	4.2	WDG2CBOX-3	\$203.35
7.5	24	10	30	WDG20055-2	\$2,177.75	9.5 x 7.1 x 6	7.0	WDG2CBOX-4	\$219.12
10	32	15	40	WDG20075-2	\$2,572.93	9.5 x 7.1 x 6	7.0	WDG2CBOX-4	\$219.12
15	47	20	56	WDG20110-2	\$3,296.36	11.4 x 7.1 x 6.8	10.7	WDG2CBOX-5	\$344.50
20	60	25	70	WDG20150-2	\$3,809.22	13.6 x 8.7 x 7.4	16.8	WDG2CBOX-6	\$363.58
25	75	30	82	WDG20185-2	\$4,232.88	15.7 x 10.2 x 7.4	24.7	WDG2CBOX-7	\$383.72
30	88	---	---	WDG20220-2	\$4,957.56	15.7 x 10.2 x 7.4	24.7	WDG2CBOX-7	\$383.72

460 Volt, Three-Phase In / 460 Volt, Three-Phase Out

0.5	1.3	0.75	2	WDG20004-4	\$912.97	6.5 x 3.4 x 5.5	2.3	WDG2CBOX-1	\$170.03
1	2.5	1.5	3.1	WDG20008-4	\$957.57	6.5 x 3.4 x 5.5	2.3	WDG2CBOX-1	\$170.03
2	4	3	5.1	WDG20015-4	\$1,103.74	7 x 4 x 6.3	3.1	WDG2CBOX-2	\$187.57
3	5.5	---	6.9	WDG20022-4	\$1,381.23	7 x 4 x 6.3	3.1	WDG2CBOX-2	\$187.57
5	9	5	10	WDG20040-4	\$1,548.46	7.6 x 5.3 x 6.3	4.2	WDG2CBOX-3	\$203.35
7.5	12	10	16	WDG20055-4	\$2,156.70	9.5 x 7.1 x 6	7.0	WDG2CBOX-4	\$219.12
10	16	15	23	WDG20075-4	\$2,638.57	9.5 x 7.1 x 6	7.0	WDG2CBOX-4	\$219.12
15	24	20	31	WDG20110-4	\$3,298.85	11.4 x 7.1 x 6.8	11.1	WDG2CBOX-5	\$344.50
20	31	25	38	WDG20150-4	\$3,810.46	11.4 x 7.1 x 6.8	11.1	WDG2CBOX-5	\$344.50
25	39	30	45	WDG20185-4	\$4,232.88	13.6 x 8.7 x 7.4	17.6	WDG2CBOX-6	\$363.58
30	45	40	61	WDG20220-4	\$5,057.90	13.6 x 8.7 x 7.4	17.6	WDG2CBOX-6	\$363.58

Accessories

Description	Model Number	List Price
Remote Keypad with 2-Meter Cable for use with WDG2 Drives	WDG2CABLE-2	\$214.00



¹ Given weights and dimensions are approximate

Additional Product Notes

All WDG2 drives can be used for single-phase input / three-phase output. Consult factory to size appropriately.

Section 2: Variable Frequency Drives - Chassis

WDGP Series General Purpose Variable Frequency Drive Chassis and Accessories

Built with you, the user in mind. Specializing in simplicity without sacrificing performance, the WorldDrive General Purpose variable frequency drive is built with V/F, Slip Compensation and Sensorless Vector control and has a compact footprint in 6 frame sizes: 0.5HP to 30HP. A user friendly keypad interface allows for fast and easy parameterization in all of your general purpose applications. UL, cUL Listed and CE Certified.

Product Specifications

- V/F, Slip Compensation control, Sensorless Vector Control
- 150% overload for 60 sec
- 200-230V, Single-phase, 0.5-2HP
- 200-230V, Three-phase, 1-30HP
- 380-480V, Three-phase, 1-30HP
- Input voltage range: 200-230V Single / Three Phase (-15%, +10%)
- Input voltage range: 380-480V Three Phase (-15%, +10%)
- Output Frequency: 0-400Hz Sensorless: 0-300Hz
- Carrier Frequency: 1-15kHz
- Protection degree: NEMA 1 / IP20
- Conformal Coated printed circuit boards
- Built-in: Modbus-RTU
- UL, cUL, CE Certified



230 Volt, Single-Phase In / 230 Volt, Three-Phase Out

HP	Output Current	Model Number	List Price	Dimensions (in) H x W x D	Approx. Weight (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
						Model Number	List Price
0.5	3	WDGP004-1	\$703.15	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$113.36
1	5	WDGP008-1	\$731.46	5 x 2.8 x 5.1	1.68	WDGPCBOX-2	\$125.05
2	7	WDGP015-1	\$848.27	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$135.56

230 Volt, Three-Phase In / 230 Volt, Three-Phase Out

Constant Torque 150% Overload		Variable Torque 120% Overload		Model Number	List Price	Dimensions (in) H x W x D	Approx. Weight (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
HP	Output Current	HP	Output Current					Model Number	List Price
0.5	3	—	—	WDGP004-2	\$685.45	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$113.36
1	5	—	—	WDGP008-2	\$710.23	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$113.36
2	7	—	—	WDGP015-2	\$836.47	5 x 3.9 x 5.1	2.47	WDGPCBOX-2	\$125.05
3	11	—	—	WDGP022-2	\$906.07	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$135.56
5	17	—	—	WDGP037-2	\$1,163.27	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$135.56
7.5	24	10	30	WDGP055-2	\$2,074.05	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$146.08
10	32	15	44	WDGP075-2	\$2,450.40	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$146.08
15	45	20	50	WDGP110-2	\$3,139.39	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$157.77
20	64	25	73	WDGP150-2	\$3,627.83	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$157.77
25	76	30	85	WDGP185-2	\$4,031.31	16.1 x 10.2 x 8.2	29.32	WDGPCBOX-6	\$168.29
30	90	40	120	WDGP220-2	\$4,721.48	16.1 x 10.2 x 8.2	29.32	WDGPCBOX-6	\$168.29

480 Volt, Three-Phase In / 480 Volt, Three-Phase Out

Constant Torque 150% Overload		Variable Torque 120% Overload		Model Number	List Price	Dimensions (in) H x W x D	Approx. Weight (lbs.)	Conduit Connection Box NEMA 1 Enclosure	
HP	Output Current	HP	Output Current					Model Number	List Price
0.5	1.8	—	—	WDGP004-4	\$869.50	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$113.36
1	3.4	—	—	WDGP008-4	\$911.97	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$113.36
2	4.8	—	—	WDGP015-4	\$1,051.18	5 x 3.9 x 5.1	2.47	WDGPCBOX-2	\$125.05
3	7.2	—	—	WDGP022-4	\$1,315.46	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$135.56
5	9.2	—	—	WDGP037-4	\$1,474.73	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$135.56
7.5	12	10	15	WDGP055-4	\$2,053.99	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$146.08
10	16	15	22	WDGP075-4	\$2,512.93	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$146.08
15	23	20	29	WDGP110-4	\$3,141.76	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$157.77
20	32	25	37	WDGP150-4	\$3,629.01	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$157.77
25	38	30	43	WDGP185-4	\$4,031.31	16.1 x 10.2 x 8.2	22.05	WDGPCBOX-6	\$168.29
30	45	40	57	WDGP220-4	\$4,817.04	16.1 x 10.2 x 8.2	22.05	WDGPCBOX-6	\$168.29

Additional Product Notes

All WDGP drives can be used for single-phase input / three-phase output. Consult factory to size appropriately.

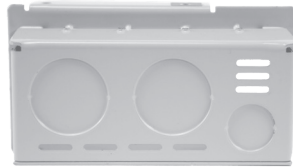
Section 2: Variable Frequency Drives - Chassis

WDGP Accessories

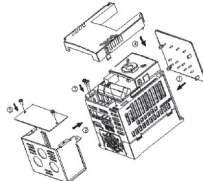
Optional accessories for the WorldDrive General Purpose VFD to help finish out projects, provide additional NEMA 1 protection or panel mount the WDGP.

WDGP Conduit Box

The WDGP Conduit Box provides NEMA 1 protection to the terminals of the WDGP.



Conduit Box



Conduit Box
(Drive sold separately)



WDGP 230V Single-Phase In/Three-Phase Out

Conduit Connection Box NEMA 1 Enclosure	List Price	Ordering Notes
WDGPCBOX-1	\$113.36	Use with WDGP004-1
WDGPCBOX-2	\$125.05	Use with WDGP008-1
WDGPCBOX-3	\$135.56	Use with WDGP015-1

WDGP 230V Three-Phase In/Three-Phase Out

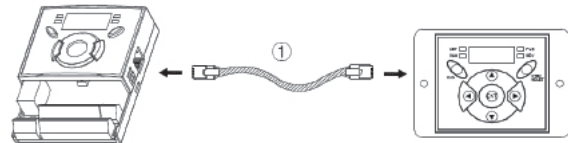
WDGPCBOX-1	\$113.36	Use with WDGP004-2
WDGPCBOX-1	\$113.36	Use with WDGP008-2
WDGPCBOX-2	\$125.05	Use with WDGP015-2
WDGPCBOX-3	\$135.56	Use with WDGP022-2
WDGPCBOX-3	\$135.56	Use with WDGP037-2
WDGPCBOX-4	\$146.08	Use with WDGP055-2
WDGPCBOX-4	\$146.08	Use with WDGP075-2
WDGPCBOX-5	\$157.77	Use with WDGP110-2
WDGPCBOX-5	\$157.77	Use with WDGP150-2
WDGPCBOX-6	\$168.29	Use with WDGP185-2
WDGPCBOX-6	\$168.29	Use with WDGP220-2

WDGP 480V Three-Phase In/Three-Phase Out

WDGPCBOX-1	\$113.36	Use with WDGP004-4
WDGPCBOX-1	\$113.36	Use with WDGP008-4
WDGPCBOX-2	\$125.05	Use with WDGP015-4
WDGPCBOX-3	\$135.56	Use with WDGP022-4
WDGPCBOX-3	\$135.56	Use with WDGP037-4
WDGPCBOX-4	\$146.08	Use with WDGP055-4
WDGPCBOX-4	\$146.08	Use with WDGP075-4
WDGPCBOX-5	\$157.77	Use with WDGP110-4
WDGPCBOX-5	\$157.77	Use with WDGP150-4
WDGPCBOX-6	\$168.29	Use with WDGP185-4
WDGPCBOX-6	\$168.29	Use with WDGP220-4

WDGP Remote Cable with Keypad

The WDGP Remote Cable with Keypad allows you to panel mount the keypad and cable to the drive. Ideal for enclosed systems, or where drive placement is not ideal for operator control.



Model	List Price	Description
WDGPCABLE-2	\$170.63	Remote Cable with Keypad For use with WDGP Drives. Includes 2M ¹ cable and remote Keypad
KROP1-22MM	\$1,650.13	3x22mm Operator Station: 1 Potentiometer, 1 Start Pushbutton, Stop Pushbutton, NEMA 4

¹M = Meters

Additional Product Notes

WorldDrive GP accessories are not compatible with WDFC, WD4X or N700E Drives.

Section 2: Variable Frequency Drives - Chassis

WD4X NEMA 4X Series Variable Frequency Drive Chassis

Built to withstand the most demanding conditions nature can throw its way, the WorldDrive 4X variable frequency drive comes standard with V/F, Slip Compensation and Sensorless Vector control, all in an IP66 / NEMA 4X enclosure. Ratings from .5HP to 30HP are available for your requirements along with an intuitive on-board keypad interface allowing for fast and easy parameterization in all of your IP66 / NEMA 4X applications. UL, cUL Listed and CE Certified.

Product Specifications

- V/F, Slip Compensation control, Sensorless Vector Control
- 150% overload for 60 sec
- 200-230V, Single-phase, 0.5-2HP
- 200-230V, Three-phase, 1-20HP
- 380-480V, Three-phase, 1-30HP
- Input voltage range: 200-230V Single / Three Phase (-15%, +10%)
- Input voltage range: 380-480V Three Phase (-15%, +10%)
- Output Frequency: 0-400Hz Sensorless: 0-300Hz
- Carrier Frequency: 1-15kHz
- Protection degree: NEMA 4X / IP66
- Conformal Coated printed circuit boards
- Built-in: Modbus-RTU
- UL, cUL, CE Certified



UL Three Phase		UL Single Phase Variable Torque Normal Duty			Additional Data		Model	List Price	Dimensions H x W x D (in)	Approx. Weight (lbs)
Constant Torque 150% Overload		Single Phase Input		Three Phase Output	Built-in EMC Filter	Built-in DC Reactor				
HP	Amps	HP	Amps	Amps						
230 Volt										
0.5	2.5	---	2.2	1.5	NO	NO	WD4X004-2	\$1,215.17	10.1 x 7.1 x 6.9	7.9
1	5	0.5	4.9	2.8			WD4X008-2	\$1,226.97	10.1 x 7.1 x 6.9	7.9
2	8	1	8.4	4.6			WD4X015-2	\$1,446.41	10.2 x 8.7 x 7.9	11.5
3	11	1.5	11.8	6.1			WD4X022-2	\$1,508.94	10.2 x 8.7 x 7.9	11.7
5	16	2	17.5	8.8			WD4X037-2	\$1,866.42	10.2 x 8.7 x 7.9	12.3
7.5	24	3	25.8	13			WD4X055-2	\$2,570.74	10.2 x 8.7 x 7.9	19.8
10	32	5	34.9	18			WD4X075-2	\$2,816.13	12.9 x 9.8 x 8.9	19.8
15	46	7.5	50.8	26			WD4X110-2	\$3,372.99	15.7 x 10.2 x 9.7	21.2
20	60	10	66.7	33			WD4X150-2	\$3,777.66	18.1 x 11.8 x 9.8	26.7

460 Volt										
0.5	1.3	---	1.1	0.8	NO	NO	WD4X004-4	\$1,381.52	9.1 x 6.3 x 7.1	8
1	2.5	0.5	2.4	1.5			WD4X008-4	\$1,400.40	9.1 x 6.3 x 7.1	8
2	4.0	0.75	4.2	2.3			WD4X015-4	\$1,471.18	9.1 x 6.3 x 7.1	8
3	5.5	1	5.9	3.1			WD4X022-4	\$1,714.22	9.1 x 6.3 x 7.1	8
5	8.0	2	8.7	4.8			WD4X037-4	\$2,786.64	9.1 x 6.3 x 7.1	8
7.5	12.0	3	12.9	7.1			WD4X055-4	\$3,070.97	9.1 x 6.3 x 7.1	8
10	16.0	5	17.5	9.5			WD4X075-4	\$3,355.29	9.1 x 6.3 x 7.1	8
15	24.0	7.5	26.5	15.0			WD4X110-4	\$3,527.54	11.4 x 7.1 x 8.1	11
20	30.0	10	33.4	18.0			WD4X150-4	\$4,182.33	11.4 x 7.1 x 8.1	11
25	39.0	10	43.6	23.0			WD4X185-4	\$4,249.57	13.8 x 8.7 x 8.8	17
30	45.0	15	50.7	27.0			WD4X220-4	\$4,507.94	13.8 x 8.7 x 8.8	17

Remote Keypads & Cables

Model	List Price	Description
KROP1-22MM	\$1,650.13	3x22mm Operator Station: 1 Potentiometer, 1 Start Pushbutton, Stop

¹M = Meters

Additional Product Notes

For the WD4X, no additional options apply.

All WD4X drives can be used for single-phase input / three-phase output. Consult factory to size appropriately.

Section 2: Variable Frequency Drives - Chassis



WDFC Series Flex Control Variable Frequency Drive Chassis and Accessories

The WDFC gives you the flexibility to do more with more applications from conveyors to pumps and most everything in between, with industry leading on-board feature sets suitable for almost anything you can throw its way. The WorldDrive Flex Control variable frequency drive is built with V/F, Slip Compensation and Sensorless Vector control and has a commanding footprint in 11 frame sizes: .5HP - 800HP. UL, cUL Listed and CE Certified.



Product Specifications

- V/F, Sensorless Vector Control, Slip Compensation
- 150% overload for 60 sec, CT
- 120% overload for 60 sec, VT
- 240V, Single-phase, 0.5-10HP
- 240V, Three-phase, 1-25 HP VT / 0.5-20 HP CT
- 480V, Three-phase, 1-800 HP VT / 0.5-650 HP CT
- Input voltage range: 200-240V Single / Three Phase (-15%, +10%)
- Input voltage range: 380-480V Three Phase (-15%, +10%)
- Output Frequency: 0-400Hz
- Sensorless: 0-120Hz
- Carrier Frequency: Normal Duty: 1-15kHz
- Protection degree: NEMA 1 / IP20
- Conformal Coated printed circuit boards
- Built-in: Modbus-RTU
- UL, cUL, CE Certified

UL Three Phase				UL Single Phase Variable Torque Normal Duty			Additional Data		Model	List Price	Dimensions H x W x D (in)	Approx. Weight (lbs)
Constant Torque 150% Overload		Variable Torque 120% Overload		Single Phase Input		Three Phase Output	Built-in EMC Filter	Built-in DC Reactor				
HP	Amps	HP	Amps	HP	Amps	Amps						
230 Volt												
0.5	2.5	1	5	0.5	4.9	2.9	NO	NO	WDFC0008-2	\$1,096.02	9.1 x 6.3 x 7.1	8
1	5.0	2	8	1	8.4	4.4			WDFC0015-2	\$1,290.68	9.1 x 6.3 x 7.1	8
2	8.0	3	12	1.5	12.9	6.4			WDFC0022-2	\$1,579.73	9.1 x 6.3 x 7.1	8
3	11.0	5	16	2	17.5	8.4			WDFC0037-2	\$1,659.95	9.1 x 6.3 x 7.1	8
5	17.0	7.5	22	3	23.7	11			WDFC0055-2	\$2,312.37	9.1 x 6.3 x 7.1	8
7.5	24.0	10	30	5	32.7	16			WDFC0075-2	\$2,593.15	9.1 x 6.3 x 7.1	8
10	32.0	15	42	5	46.4	23			WDFC0110-2	\$3,378.89	9.1 x 6.3 x 7.1	8
15	46.0	20	56	7.5	62.3	30			WDFC0150-2	\$4,060.81	11.4 x 7.1 x 8.1	11
20	60.0	25	69	10	77.2	37			WDFC0185-2	\$4,948.00	13.8 x 8.7 x 8.8	16

460 Volt												
0.5	1.3	1	2.5	0.5	2.4	1.6	YES	NO	WDFC0008-4	\$1,197.48	9.1 x 6.3 x 7.1	8
1	2.5	2	4	1	4.2	2.4			WDFC0015-4	\$1,281.24	9.1 x 6.3 x 7.1	8
2	4.0	3	6	1.5	6.5	3.5			WDFC0022-4	\$1,415.74	9.1 x 6.3 x 7.1	8
3	5.5	5	8	2	8.7	4.6			WDFC0037-4	\$1,513.66	9.1 x 6.3 x 7.1	8
5	8.0	7.5	12	3	12.2	6.8			WDFC0055-4	\$1,844.00	9.1 x 6.3 x 7.1	8
7.5	12.0	10	16	5	17.5	9.2			WDFC0075-4	\$2,512.93	9.1 x 6.3 x 7.1	8
10	15.0	15	24	7.5	26.5	14			WDFC0110-4	\$2,896.37	9.1 x 6.3 x 7.1	8
15	22.0	20	30	10	33.4	17			WDFC0150-4	\$3,715.13	11.4 x 7.1 x 8.1	11
20	28.0	25	38	10	42.5	22			WDFC0185-4	\$4,793.45	11.4 x 7.1 x 8.1	11
25	35.0	30	45	15	50.7	26			WDFC0220-4	\$5,458.84	13.8 x 8.7 x 8.8	17
30	41.0	40	61	20	69.1	36			WDFC0300-4	\$6,570.20	13.8 x 8.7 x 8.8	17
40	55.0	50	75	25	69.3	39	NO	YES	WDFC0370-4	\$8,650.15	17.7 x 10.8 x 11.2	58
50	67.0	60	91	30	84.6	47			WDFC0450-4	\$10,200.38	20.1 x 12.8 x 11.2	95
60	81.0	75	107	40	100.1	55			WDFC0550-4	\$10,997.91	20.1 x 12.8 x 11.2	95
75	106.0	100	142	50	133.6	73			WDFC0750-4	\$13,010.61	21.7 x 12.8 x 12.2	95
100	136.0	125	169	60	160.0	86			WDFC0900-4	\$15,793.71	21.7 x 12.8 x 12.2	95
125	169.0	150 *	223	60	215.1	86			WDFC1100-4	\$20,608.39	27.8 x 11.8 x 15.2	123
150	195.0	200 *	264	75	254.6	101	NO	YES	WDFC1320-4	\$24,668.02	27.8 x 11.8 x 15.2	123
200	255.0	250 *	325	100	315.3	137			WDFC1600-4	\$27,610.39	27.8 x 15.0 x 15.6	165
250	303.0	300 *	370	125	358.9	157			WDFC1850-4	\$50,563.01	27.8 x 15.0 x 15.6	165
250	345.0	350 *	432	150	419.1	181			WDFC2200-4	\$53,321.34	36.3 x 17.3 x 17.3	265
300	375.0	400 *	481	150	469.3	195			WDFC2500-4	\$68,636.06	36.3 x 17.3 x 17.3	265
400	478.0	500 *	613	150	598.1	218			WDFC3150-4	\$74,198.73	39.4 x 23.6 x 19.7	409
450	541.0	550 *	683	200	666.4	245			WDFC3550-4	\$82,421.79	39.4 x 23.6 x 19.7	409
500	591.0	650 *	770	250	751.3	308			WDFC4000-4	\$95,906.68	39.4 x 23.6 x 19.7	409
650	740.0	800 *	962	350	938.6	414			WDFC5000-4	\$109,758.47	41.5 x 30.6 x 19.7	585

Additional Product Notes

* Variable Torque: 110% Overload

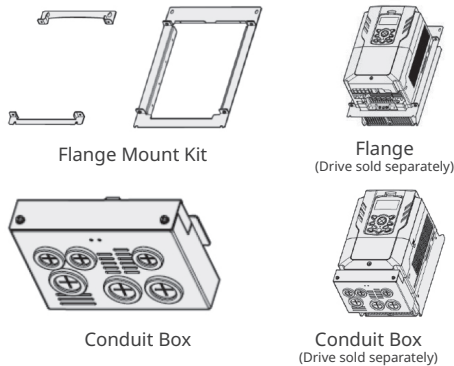
All WDFC drives can be used for single-phase input / three-phase output. Consult factory to size appropriately.

Section 2: Variable Frequency Drives - Chassis

WDFC Accessories

Optional accessories for the WorldDrive Flex Control VFD to help finish out projects, provide additional NEMA 1 protection or panel mount the WDFC.

Flange Mount Kits, Conduit Boxes



Flange Mount Kit (Heat sink out back)		Ordering Notes	Conduit Connection Box NEMA 1 Enclosure	
Model Number	List Price		Model Number	List Price
WDFCFM-1	\$196.33	Use with WDFC0008-2	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0015-2	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0022-2	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0037-2	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0055-2	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0075-2	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0110-2	WDFCCBOX-1	\$136.73
WDFCFM-2	\$215.03	Use with WDFC0150-2	WDFCCBOX-2	\$150.75
WDFCFM-3	\$237.24	Use with WDFC0185-2	WDFCCBOX-3	\$162.45
WDFCFM-1	\$196.33	Use with WDFC0008-4	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0015-4	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0022-4	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0037-4	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0055-4	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0075-4	WDFCCBOX-1	\$136.73
WDFCFM-1	\$196.33	Use with WDFC0110-4	WDFCCBOX-1	\$136.73
WDFCFM-2	\$215.03	Use with WDFC0150-4	WDFCCBOX-2	\$150.75
WDFCFM-2	\$215.03	Use with WDFC0185-4	WDFCCBOX-2	\$150.75
WDFCFM-3	\$237.24	Use with WDFC0220-4	WDFCCBOX-3	\$162.45
WDFCFM-3	\$237.24	Use with WDFC0300-4	WDFCCBOX-3	\$162.45
WDFCFM-4	\$260.61	Use with WDFC0370-4	WDFCCBOX-4	\$176.47
WDFCFM-5	\$286.32	Use with WDFC0450-4	WDFCCBOX-5	\$190.49
WDFCFM-5	\$286.32	Use with WDFC0550-4	WDFCCBOX-5	\$190.49
WDFCFM-6	\$315.54	Use with WDFC0750-4	WDFCCBOX-6	\$202.17
WDFCFM-6	\$315.54	Use with WDFC0900-4	WDFCCBOX-6	\$202.17
WDFCFM-7	\$913.89	Use with WDFC1100-4	WDFCCBOX-7	\$537.58
WDFCFM-7	\$913.89	Use with WDFC1320-4	WDFCCBOX-7	\$537.58
WDFCFM-8	\$923.24	Use with WDFC1600-4	WDFCCBOX-8	\$721.05
WDFCFM-8	\$923.24	Use with WDFC1850-4	WDFCCBOX-8	\$721.05
WDFCFM-9	\$1,084.51	Use with WDFC2200-4	WDFCCBOX-9	\$730.40
WDFCFM-9	\$1,084.51	Use with WDFC2500-4	WDFCCBOX-9	\$730.40
WDFCFM-10	\$1,176.83	Use with WDFC3150-4	WDFCCBOX-10	\$1,161.64
WDFCFM-10	\$1,176.83	Use with WDFC3550-4	WDFCCBOX-10	\$1,161.64
WDFCFM-10	\$1,176.83	Use with WDFC4000-4	WDFCCBOX-10	\$1,161.64
WDFCFM-11	\$1,357.98	Use with WDFC5000-4	WDFCCBOX-11	\$1,315.91

Additional Product Notes

WorldDrive FC accessories are not compatible with WDGP, WD4X or N700E drives.

WDFC Option Cards

Model	List Price	Description
WDFCETH1	\$744.60	Dual port Communication Card Ethernet IP or Modbus TCP/IP
WDFCEXIO	\$361.73	Expansion IO Card 2 Digital Inputs, 3 Relay Outputs 1 Analog Input & Output (voltage or current)

WDFC NEMA 1 & 4X Keypad Mount



The WDFCCABLELCD provides a convenient method to panel mount the LCD keypad when deployed in NEMA 1 applications.



The WDFC4XMOUNT provides NEMA 4X protection for the keypad when mounted in a remote configuration.

Model	List Price	Description
WDFCCABLELCD-1	\$195.17	NEMA 1 Bezel and Cable Kit (2 Meter) For use with WDFC drives
WDFCCABLELCD-2	\$195.17	NEMA 1 Bezel and Cable Kit (3 Meter) For use with WDFC drives
WDFC4XMOUNT	\$704.70	NEMA 4X Mount for use with WDFC drives
WDFCCABLEDVP	\$195.17	Cable for DrivePro PC Connection for WDFC DrivePro software available for free from: www.worldwideelectric.com
KROP1-22MM	\$1,650.13	3x22mm NEMA 4 Operator Station: 1 Potentiometer 1 Start Pushbutton 1 Stop Pushbutton

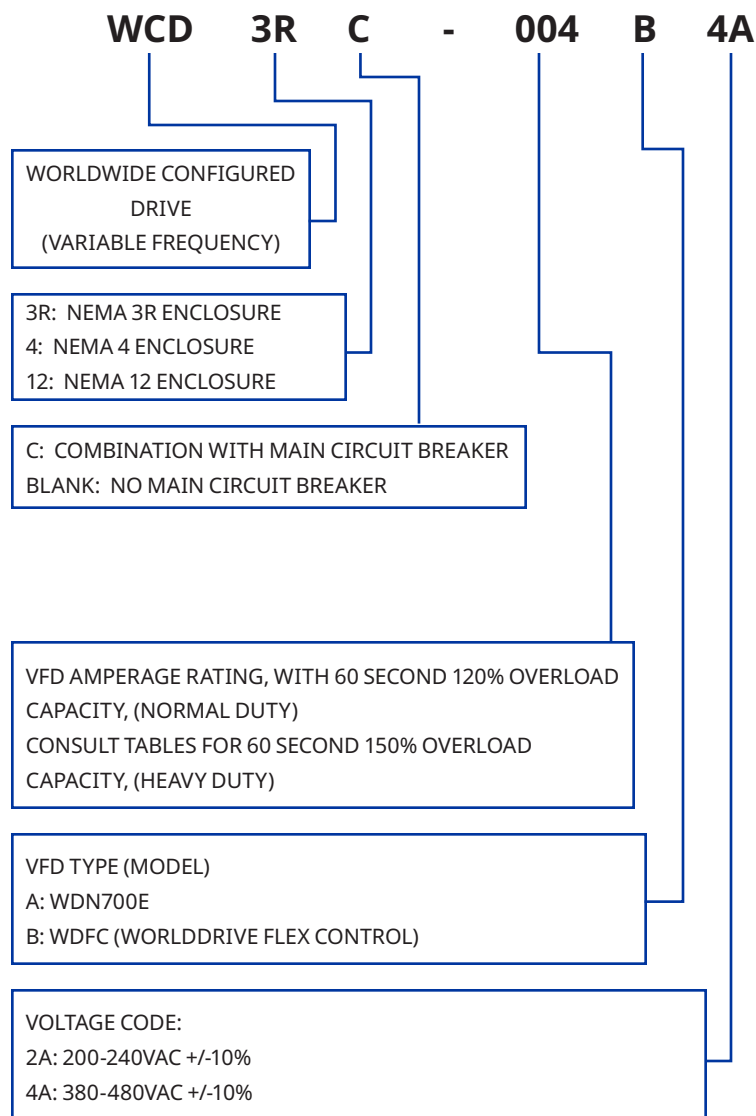


WCD Series Stock NEMA 3R Panel

Featuring the WoldDrive Flex Control Drive (WDFC)

The flexibility to do more. The WCD Series Stock Panel features a NEMA 3R enclosure, a circuit breaker disconnect, and the WorldDrive Flex Control Drive (WDFC) which is recognized for its flexibility and industry-leading on-board feature set. This standard package is available with five output options and includes an On-Off-Auto selector switch, a speed potentiometer, and an LCD keypad. The WCD Series Panels are UL compliant, assembled, tested, and readied for operation prior to shipment.

WorldWide Configured Drive Selection Guide



+ OPTIONS

A	EMI/RFI Filter	Consult Factory
D2	RVSS Bypass	Consult Factory
G2	Output Sinewave Filter	Consult Factory
H	On-Off-Auto Selector Switch	\$343.92
I	Speed Potentiometer	\$625.51
J	Start/Stop Pushbuttons	\$655.56
J2	40mm ESTOP Pushbutton	\$487.49
K	Hand-Off-Auto Selector Switch	\$343.92
L	Surge Suppression	\$1,124.13
M	Installed SID1 Text Keypad	\$2,631.13
M3	WDFC LCD Keypad	\$776.87
M4	WDFC LCD Keypad with 4X cover	\$1,011.72
M7	Installed SID7 Operator Interface	\$6,872.78
N	Panel Space Heater, 150W	\$874.82
N2	Panel Space Heater, 50W	\$422.94
O	Green Run Pilot Light	\$343.92
P	Amber Fault Pilot Light and Reset Pushbutton	\$673.37
Q	White Drive Ready Pilot Light	\$312.75
R	Lockable, solid control door cover	\$1,061.80
R1	4X Clear HMI door cover 10"H x 8"W	\$605.47
S	Lockable, window control door cover	\$1,246.56
T	24/7 timer	\$819.17
U	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD WDFC Ethernet IP or Ethernet TCP/IP	\$1,549.78
X60	WCD WDFC Modbus to Ethernet IP Gateway	\$1,433.33
X65	Cellular based Netbiter	Consult Factory
X66	Ethernet based Netbiter	Consult Factory
X67	Ethernet/Cellular based Netbiter	Consult Factory

Additional Product Notes

See Page 18 for additional priced options

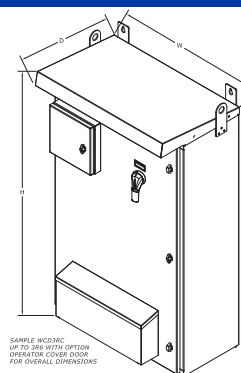
Section 3: Enclosed Variable Frequency Drive Panels

WCD Series - Configurable NEMA 3R Enclosed Panels for WDFC

WCD Worldwide Configured Drive Systems are UL compliant, assembled, tested and readied for operation prior to shipment, with base packages ready for quick delivery.

Product Specifications

- Door mounted keypad or pilot devices not included with base model
- 2HP through 800HP with Worldwide Electric WDFC Flex Control VFD
- 60 Second Overload ratings: 120% Normal Duty, 150% Heavy Duty
- NEMA 3R Enclosure, hooded roof, filtered forced air cooled & thermostat
- Heavy duty mounting ears and lifting strap, galvanized back panel
- Concealed hinges and lockable door latches
- UL489 Main Circuit Breaker, with lockable disconnect mechanism
- 3% Input Reactors Standard
- Control panel transformer with CB protection
- Options available



Voltage	Constant Torque		Variable Torque		Enclosure H x W x D (in)	Model Number	List Price
	Heavy Duty HP	Current	Normal Duty HP	Current			
230	0.5	2.5	1	5	32 x 25 x 17	WCD3RC-005B2A	\$8,994.15
230	1	5	2	8	32 x 25 x 17	WCD3RC-008B2A	\$9,204.51
230	2	8	3	12	32 x 25 x 17	WCD3RC-012B2A	\$9,633.02
230	3	11	5	16	32 x 25 x 17	WCD3RC-016B2A	\$9,783.27
230	5	17	7.5	22	32 x 25 x 17	WCD3RC-022B2A	\$10,533.43
230	7.5	24	10	30	32 x 25 x 17	WCD3RC-030B2A	\$10,917.42
230	10	32	15	42	32 x 25 x 17	WCD3RC-042B2A	\$11,834.53
230	15	46	20	56	40 x 25 x 19	WCD3RC-056B2A	\$13,373.81
* 230	20	60	25	69	40 x 25 x 19	WCD3RC-069B2A	\$15,153.50
460	3	6	5	8	32 x 25 x 17	WCD3RC-008B4A	\$9,157.76
460	5	8	7.5	12	32 x 25 x 17	WCD3RC-012B4A	\$10,299.70
460	7.5	12	10	16	32 x 25 x 17	WCD3RC-016B4A	\$11,222.38
460	10	15	15	24	32 x 25 x 17	WCD3RC-024B4A	\$12,145.06
460	15	22	20	30	40 x 25 x 19	WCD3RC-030B4A	\$13,068.85
460	20	28	25	38	40 x 25 x 19	WCD3RC-038B4A	\$13,993.75
460	25	35	30	45	40 x 25 x 19	WCD3RC-045B4A	\$15,845.78
460	30	41	40	61	40 x 25 x 19	WCD3RC-061B4A	\$18,451.31
460	40	55	50	75	50 x 31 x 21	WCD3RC-075B4A	\$20,502.57
460	50	67	60	91	50 x 31 x 21	WCD3RC-091B4A	\$24,098.68
* 460	60	81	75	107	50 x 31 x 21	WCD3RC-107B4A	\$27,045.90
460	75	106	100	142	56 x 37 x 23	WCD3RC-142B4A	\$33,548.05
* 460	100	136	125	169	56 x 37 x 23	WCD3RC-169B4A	\$38,261.60
460	125	169	150	223	63 x 37 x 25	WCD3RC-223B4A	\$46,029.23
* 460	150	195	200	264	63 x 37 x 25	WCD3RC-264B4A	\$52,720.58
460	200	255	250	325	68 x 38 x 25	WCD3RC-325B4A	\$65,412.12
* 460	250	303	300	370	68 x 38 x 25	WCD3RC-370B4A	\$70,106.76
460	250	345	350	432	88 x 40 x 31	WCD3RC-432B4A	\$75,252.16
460	300	375	400	481	88 x 40 x 31	WCD3RC-481B4A	\$85,758.88
460	400	478	500	613	88 x 65 x 31	WCD3RC-613B4A	\$101,494.47
460	450	541	550	683	88 x 65 x 31	WCD3RC-683B4A	\$115,777.60
460	500	591	650	770	88 x 78 x 31	WCD3RC-770B4A	\$136,031.97
460	650	740	800	960	88 x 78 x 31	WCD3RC-960B4A	\$166,814.21

* Stock Panels Available for immediate delivery

Model Number	List Price
WCD3RC-069B2A+HIM3RU	\$18,436.85
WCD3RC-107B4A+HIM3RU	\$30,329.25
WCD3RC-169B4A+HIM3RU	\$41,544.95

Model Number	List Price
WCD3RC-264B4A+HIM3RU	\$56,003.93
WCD3RC-370B4A+HIM3RU	\$73,390.11

Additional Product Notes

Option format: WCD3RC-008B-4A-HI
Consult factory for additional options pricing.

The total list price adder for - HIM3RU Option package is \$3,283.35

WCD3RC Options		
Option Code	Option Description	List Price
A	EMI/RFI Filter	Consult Factory
D2	RVSS Bypass	Consult Factory
G2	Output Sinewave Filter	Consult Factory
H	On-Off-Auto Selector Switch	\$343.92
I	Speed Potentiometer	\$625.51
J	Start/Stop Pushbuttons	\$655.56
J2	40mm ESTOP Pushbutton	\$487.49
K	Hand-Off-Auto Selector Switch	\$343.92
L	Surge Suppression	\$1,124.13
M	Installed SID1 Text Keypad	\$2,631.13
M3	WDFC LCD Keypad	\$776.87
M4	WDFC LCD Keypad with 4X cover	\$1,011.72
M7	Installed SID7 Operator Interface	\$6,872.78
N	Panel Space Heater, 150W	\$874.82
N2	Panel Space Heater, 50W	\$422.94
O	Green Run Pilot Light	\$343.92
P	Amber Fault Pilot Light and Reset Pushbutton	\$673.37
Q	White Drive Ready Pilot Light	\$312.75
R	Lockable, solid control door cover	\$1,061.80
R1	4X Clear HMI door cover 10"H x 8"W	\$605.47
S	Lockable, window control door cover	\$1,246.56
T	24/7 timer	\$819.17
U	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD WDFC Ethernet IP or Ethernet TCP/IP	\$1,549.78
X60	WCD WDFC Modbus to Ethernet IP Gateway	\$1,433.33
X65	Cellular based Netbiter	Consult Factory
X66	Ethernet based Netbiter	Consult Factory
X67	Ethernet/Cellular based Netbiter	Consult Factory

Section 3: Enclosed Variable Frequency Drive Panels

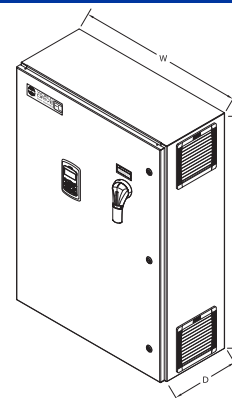


WCD Series - Configurable NEMA 12 Enclosed Panels for WDFC

WCD Worldwide Configured Drive Systems are UL compliant, assembled, tested and readied for operation prior to shipment, with base packages ready for quick delivery.

Product Specifications

- Base panel includes door mounted VFD keypad
- 3HP through 250HP with Worldwide Electric WDFC Flex Control VFD
- 60 Second Overload ratings: 120% Normal Duty, 150% Heavy Duty
- NEMA 12 Enclosure, positive pressure filtered forced air cooled with dual control thermostat
- Galvanized back panel
- UL489 Main Circuit Breaker, with lockable disconnect mechanism
- Control transformer with CB protection
- Options available



Volts	Constant Torque		Variable Torque		Enclosure H x W x D (in)	Model Number	List Price
	Heavy Duty		Normal Duty				
	HP	Amps	HP	Amps			
230	2	8	3	12	30 x 20 x 10	WCD12C-012B2A	\$9,484.99
230	3	11	5	16	30 x 20 x 10	WCD12C-016B2A	\$9,530.62
230	5	17	7.5	22	30 x 20 x 10	WCD12C-022B2A	\$10,968.62
230	7.5	24	10	30	30 x 20 x 10	WCD12C-030B2A	\$11,275.80
230	10	32	15	42	30 x 20 x 10	WCD12C-042B2A	\$11,953.62
230	15	46	20	56	36 x 24 x 12	WCD12C-056B2A	\$13,157.89
230	20	60	25	69	36 x 24 x 12	WCD12C-069B2A	\$14,438.95
460	2	4	3	6	30 x 20 x 10	WCD12C-006B4A	\$8,351.95
460	3	5.5	5	8	30 x 20 x 10	WCD12C-008B4A	\$8,402.04
460	5	8	7.5	12	30 x 20 x 10	WCD12C-012B4A	\$8,623.52
460	7.5	12	10	16	30 x 20 x 10	WCD12C-016B4A	\$9,847.82
460	10	15	15	24	30 x 20 x 10	WCD12C-024B4A	\$10,350.90
460	15	22	20	30	36 x 24 x 12	WCD12C-030B4A	\$10,909.63
460	20	28	25	38	36 x 24 x 12	WCD12C-038B4A	\$12,562.43
460	25	35	30	45	36 x 24 x 12	WCD12C-045B4A	\$13,309.25
460	30	41	40	61	36 x 24 x 12	WCD12C-061B4A	\$14,516.86
460	40	55	50	75	42 x 30 x 16	WCD12C-075B4A	\$17,087.89
460	50	67	60	91	42 x 30 x 16	WCD12C-091B4A	\$18,315.53
460	60	81	75	107	42 x 30 x 16	WCD12C-107B4A	\$20,321.15
460	75	106	100	142	48 x 30 x 16	WCD12C-142B4A	\$23,408.62
460	100	136	125	169	48 x 30 x 16	WCD12C-169B4A	\$25,587.87
460	125	169	150	223	48 x 36 x 20	WCD12C-223B4A	\$30,705.44
460	150	195	200	264	48 x 36 x 20	WCD12C-264B4A	\$32,259.19
460	200	255	250	325	60 x 36 x 20	WCD12C-325B4A	\$39,429.14
460	250	303	300	370	60 x 36 x 20	WCD12C-370B4A	\$55,938.27

Additional Product Notes

Option format: WCD12C-012B-2A-HI

Consult Factory for additional options pricing.

For ratings higher than shown in the table above - consult factory.

WCD12C Options		
Option Code	Option Description	List Price
A	EMI/RFI Filter	Consult Factory
D2	RVSS Bypass	Consult Factory
G2	Output Sinewave Filter	Consult Factory
H	On-Off-Auto Selector Switch	\$343.92
I	Speed Potentiometer	\$625.51
J	Start/Stop Pushbuttons	\$655.56
J2	40mm ESTOP Pushbutton	\$487.49
K	Hand-Off-Auto Selector Switch	\$343.92
L	Surge Suppression	\$1,124.13
M	Installed SID1 Text Keypad	\$2,631.13
M3	WDFC LCD Keypad	\$776.87
M4	WDFC LCD Keypad with 4X cover	\$1,011.72
M7	Installed SID7 Operator Interface	\$6,872.78
N	Panel Space Heater, 150W	\$874.82
N2	Panel Space Heater, 50W	\$422.94
O	Green Run Pilot Light	\$343.92
P	Amber Fault Pilot Light and Reset Pushbutton	\$673.37
Q	White Drive Ready Pilot Light	\$312.75
R	Lockable, solid control door cover	\$1,061.80
R1	4X Clear HMI door cover 10"H x 8"W	\$605.47
S	Lockable, window control door cover	\$1,246.56
T	24/7 timer	\$819.17
U	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD WDFC Ethernet IP or Ethernet TCP/IP	\$1,549.78
X60	WCD WDFC Modbus to Ethernet IP Gateway	\$1,433.33
X65	Cellular based Netbiter	Consult Factory
X66	Ethernet based Netbiter	Consult Factory
X67	Ethernet/Cellular based Netbiter	Consult Factory

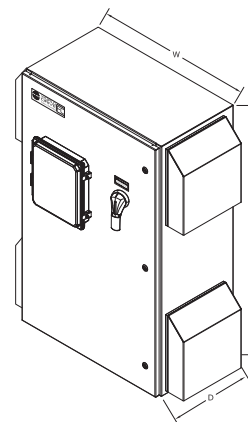
Section 3: Enclosed Variable Frequency Drive Panels

WCD Series - Configurable NEMA 4 Enclosed Panels for WDFC

WCD Worldwide Configured Drive Systems are UL compliant, assembled, tested and readied for operation prior to shipment, with base packages ready for quick delivery.

Product Specifications

- Base panel includes VFD keypad installed behind a NEMA 4 clear control door cover
- 3HP through 250HP with Worldwide Electric WDFC Flex Control VFD
- 60 Second Overload ratings: 120% Normal Duty, 150% Heavy Duty
- UL489 Main Circuit Breaker, with lockable disconnect mechanism
- NEMA 4 Enclosure, positive pressure filtered forced air cooled with dual control thermostat, with NEMA 3R/4 Rain Hoods with direct spray barrier ensuring a proper NEMA rating seal to the enclosure, galvanized back panel
- Control transformer with CB protection
- Options available



Volts	Constant Torque		Variable Torque		Enclosure H x W x D (in)	Model Number	List Price
	Heavy Duty		Normal Duty				
	HP	Amps	HP	Amps			
230	2	8	3	12	30 x 20 x 10	WCD4C-012B2A	\$10,380.95
230	3	11	5	16	30 x 20 x 10	WCD4C-016B2A	\$10,431.04
230	5	17	7.5	22	30 x 20 x 10	WCD4C-022B2A	\$12,395.48
230	7.5	24	10	30	30 x 20 x 10	WCD4C-030B2A	\$12,670.39
230	10	32	15	42	30 x 20 x 10	WCD4C-042B2A	\$13,276.98
230	15	46	20	56	36 x 24 x 12	WCD4C-056B2A	\$14,492.37
230	20	60	25	69	36 x 24 x 12	WCD4C-069B2A	\$15,639.88
460	2	4	3	6	30 x 20 x 10	WCD4C-006B4A	\$9,564.01
460	3	5.5	5	8	30 x 20 x 10	WCD4C-008B4A	\$9,614.09
460	5	8	7.5	12	30 x 20 x 10	WCD4C-012B4A	\$12,574.67
460	7.5	12	10	16	30 x 20 x 10	WCD4C-016B4A	\$12,986.48
460	10	15	15	24	30 x 20 x 10	WCD4C-024B4A	\$13,484.00
460	15	22	20	30	36 x 24 x 12	WCD4C-030B4A	\$14,181.85
460	20	28	25	38	36 x 24 x 12	WCD4C-038B4A	\$14,770.62
460	25	35	30	45	36 x 24 x 12	WCD4C-045B4A	\$15,518.56
460	30	41	40	61	36 x 24 x 12	WCD4C-061B4A	\$16,725.05
460	40	55	50	75	48 x 30 x 16	WCD4C-075B4A	\$19,625.53
460	50	67	60	91	48 x 30 x 16	WCD4C-091B4A	\$20,854.28
460	60	81	75	107	48 x 30 x 16	WCD4C-107B4A	\$22,861.02
460	75	106	100	142	48 x 30 x 16	WCD4C-142B4A	\$25,946.26
460	100	136	125	169	48 x 30 x 16	WCD4C-169B4A	\$28,125.51

WCD4C Options

Option Code	Option Description	List Price
A	EMI/RFI Filter	Consult Factory
D2	RVSS Bypass	Consult Factory
G2	Output Sinewave Filter	Consult Factory
H	On-Off-Auto Selector Switch	\$343.92
I	Speed Potentiometer	\$625.51
J	Start/Stop Pushbuttons	\$655.56
J2	40mm ESTOP Pushbutton	\$487.49
K	Hand-Off-Auto Selector Switch	\$343.92
L	Surge Suppression	\$1,124.13
M	Installed SID1 Text Keypad	\$2,631.13
M3	WDFC LCD Keypad	\$776.87
M4	WDFC LCD Keypad with 4X cover	\$1,011.72
M7	Installed SID7 Operator Interface	\$6,872.78
N	Panel Space Heater, 150W	\$874.82
N2	Panel Space Heater, 50W	\$422.94
O	Green Run Pilot Light	\$343.92
P	Amber Fault Pilot Light and Reset Pushbutton	\$673.37
Q	White Drive Ready Pilot Light	\$312.75
R	Lockable, solid control door cover	\$1,061.80
R1	4X Clear HMI door cover 10"H x 8"W	\$605.47
S	Lockable, window control door cover	\$1,246.56
T	24/7 timer	\$819.17
U	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD WDFC Ethernet IP or Modbus TCP/IP	\$1,549.78
X60	WCD WDFC Modbus to Ethernet IP Gateway	\$1,433.33
X65	Cellular based Netbiter	Consult Factory
X66	Ethernet based Netbiter	Consult Factory
X67	Ethernet/Cellular based Netbiter	Consult Factory

Additional Product Notes

Option format: WCD4C-012B-2A-HI

Consult Factory for additional options pricing.

For ratings higher than shown in the table above - consult factory.

Section 3: Enclosed Variable Frequency Drive Panels



WCD Series - Configurable Enclosed Panel Options for WorldDrive WDFC

The WCD Series of Enclosed Drives offer the broadest range of size and configurations in the industry. Simple optional adder codes allow the user to customize as required for the most demanding of applications.

Options	Option Adder Codes / List Prices (Add codes at end of base model number in alpha order)						
	3% Line Reactor (Standard in 3R and SDA)	5% Line Reactor Upgrade	IEEE Passive Harmonic Filter	2 Contactor Bypass	3 Contactor Bypass	Output Reactor	DV / DT Filter
480 V Model Number	B ⁽¹⁾	B2 ⁽¹⁾	C ⁽¹⁾	D ⁽¹⁾	E ⁽¹⁾	F ⁽¹⁾	G ⁽¹⁾
WCD##C-008B4A	\$963.86	\$1,102.98	\$5,374.68	\$1,805.29	\$2,042.36	\$963.86	\$1,856.48
WCD##C-012B4A	\$963.86	\$1,102.98	\$5,374.68	\$1,806.40	\$2,043.47	\$963.86	\$1,915.47
WCD##C-016B4A	\$1,032.86	\$1,205.38	\$5,538.29	\$2,238.24	\$2,488.67	\$1,032.86	\$1,932.17
WCD##C-024B4A	\$1,224.30	\$1,410.17	\$5,679.64	\$2,368.46	\$2,695.69	\$1,224.30	\$2,301.68
WCD##C-030B4A	\$1,307.78	\$1,499.21	\$6,927.31	\$3,521.53	\$3,911.08	\$1,307.78	\$2,583.27
WCD##C-038B4A	\$1,397.93	\$1,671.73	\$7,659.67	\$3,804.23	\$4,219.38	\$1,397.93	\$2,671.20
WCD##C-045B4A	\$1,459.14	\$1,732.94	\$8,847.24	\$4,217.16	\$4,769.21	\$1,459.14	\$2,788.07
WCD##C-061B4A	\$1,720.70	\$2,029.00	\$10,911.85	\$5,403.62	\$6,015.77	\$1,720.70	\$2,858.18
WCD##C-075B4A	\$1,951.09	\$2,416.32	\$11,434.96	\$5,947.87	\$6,745.89	\$1,951.09	\$3,877.69
WCD##C-091B4A	\$2,098.01	\$2,591.06	\$12,369.88	\$6,115.94	\$6,984.08	\$2,098.01	\$4,527.68
WCD##C-107B4A	\$2,530.96	\$3,024.02	\$13,920.29	\$6,965.15	\$8,100.41	\$2,530.96	\$4,592.24
WCD##C-142B4A	\$2,860.41	\$3,400.22	\$16,718.37	\$7,372.51	\$8,853.92	\$2,860.41	\$5,347.97
WCD##C-169B4A	\$3,343.45	\$3,895.50	\$18,421.26	\$8,300.75	\$10,269.65	\$3,343.45	\$5,845.48
WCD##C-223B4A	\$3,705.18	\$4,318.44	\$27,390.93	\$9,088.76	\$11,611.93	\$3,705.18	\$6,290.68
WCD##C-264B4A	\$4,572.20	\$5,403.62	\$29,024.81	\$9,874.54	\$12,754.98	\$4,572.20	\$6,572.27
WCD##C-325B4A	\$4,996.26	\$5,864.40	\$31,704.92	\$16,445.69	\$20,739.64	\$4,996.26	\$7,198.88
WCD3RC-370B4A	\$5,192.15	\$6,112.60	\$39,765.26	\$16,929.84	\$22,804.26	\$5,192.15	\$8,124.90
WCD3RC-481B4A	\$6,143.76	\$7,073.12	\$54,632.72	\$18,909.87	\$23,525.48	\$6,143.76	\$9,846.71
WCD3RC-613B4A	\$8,019.17	\$9,594.06	\$65,648.08	\$26,375.87	\$38,028.98	\$8,019.17	\$13,744.44
WCD3RC-683B4A	\$12,011.50	\$13,718.84	\$65,648.08	\$26,375.87	\$38,028.98	\$12,011.50	\$16,641.58

Option Code	Option Description	List Price
A ⁽²⁾	EMI/RFI Filter	Consult Factory
D2 ⁽²⁾	RVSS Bypass	Consult Factory
G2 ⁽²⁾	Output Sinewave Filter	Consult Factory
H ⁽²⁾	On-Off-Auto Selector Switch	\$343.92
I ⁽²⁾	Speed Potentiometer	\$625.51
J ⁽²⁾	Start/Stop Pushbuttons	\$655.56
J2 ⁽²⁾	40mm ESTOP Pushbutton	\$487.49
K ⁽²⁾	Hand-Off-Auto Selector Switch	\$343.92
L ⁽²⁾	Surge Suppression	\$1,124.13
M ⁽²⁾	Installed SID1 Text Keypad	\$2,631.13
M3 ⁽²⁾	WDFC LCD Keypad	\$549.82
M4 ⁽²⁾	WDFC LCD Keypad with 4X cover	\$1,011.72
M7 ⁽²⁾	Installed SID7 Operator Interface	\$6,872.78
N ⁽²⁾	Panel Space Heater, 150W	\$874.82
N2 ⁽²⁾	Panel Space Heater, 50W	\$422.94

Option Code	Option Description	List Price
O ⁽²⁾	Green Run Pilot Light	\$343.92
P ⁽²⁾	Amber Fault Pilot Light and Reset Pushbutton	\$673.37
Q ⁽²⁾	White Drive Ready Pilot Light	\$312.75
R ⁽²⁾	Lockable, solid control door cover	\$1,061.80
R1 ⁽²⁾	4X Clear HMI door cover 10"H x 8"W	\$605.47
S ⁽²⁾	Lockable, window control door cover	\$1,246.56
T ⁽²⁾	24/7 timer	\$819.17
U ⁽²⁾	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD WDFC Ethernet IP or Modbus TCP/IP	\$1,549.78
X60	WCD WDFC Modbus to Ethernet IP Gateway	\$1,433.33
X65	Cellular based Netbiter	Consult Factory
X66	Ethernet based Netbiter	Consult Factory
X67	Ethernet/Cellular based Netbiter	Consult Factory
X68	WDFC-Expanded Input, Output card: 2-DI, 3-RO, 1-AI, 1-AO	\$398.52

Additional Product Notes

For 008B4A through 325B4A, ## is the enclosure style (3R, 4, 12).

For Enclosure type 4 and 12 above 325B4A, consult factory. For all enclosure types above size 683B4A, consult factory

-(1) Options B, B2, C, D, E, F, G may result in enclosure dimensional changes

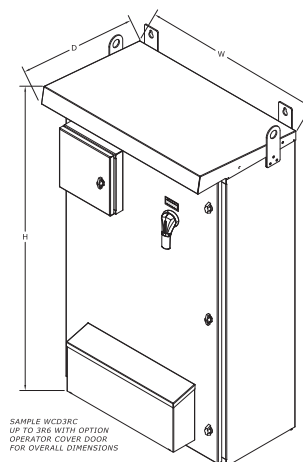
Section 3: Enclosed Variable Frequency Drive Panels

WCD Series - Configurable NEMA 3R Enclosed Panels for WDN700E

The WCD Series of Enclosed Drives offer the broadest range of size and configurations in the industry. Simple optional adder codes allow the user to customize as required for the most demanding of applications.

Product Specifications

- 3HP through 550HP (WDN700E N700E VFD)
- Three-phase or single-phase input
- CT and VT ratings
- Heavy duty NEMA 3R Enclosure
- Hooded (sloped roof), ventilated and filtered
- Heavy duty mounting ears and lifting straps
- Bottom-to-top ventilation (heat-shedding design)
- Forced-air filtered fans (positive pressure design)
- Galvanized back panel
- Heater package option available
- Concealed hinges
- Lockable disconnect on main CB
- 3% line reactors
- Control transformer with CB protection
- Dual control thermostat



Voltage	Constant Torque		Variable Torque		Enclosure H x W x D (in)	Model Number	List Price
	Heavy Duty		Normal Duty				
	HP	Current	HP	Current			
230	3	11.0	-	-	32 x 25 x 17	WCD3RC-011A2A	\$8,574.55
230	5	17.0	-	-	32 x 25 x 17	WCD3RC-017A2A	\$8,732.60
230	7.5	24	10	30	32 x 25 x 17	WCD3RC-030A2A	\$9,890.12
230	10	32	15	44	32 x 25 x 17	WCD3RC-040A2A	\$10,421.02
230	15	45	20	50	32 x 25 x 17	WCD3RC-050A2A	\$11,141.13
230	20	64	25	73	40 x 25 x 19	WCD3RC-073A2A	\$12,545.74
230	25	76	30	85	40 x 25 x 19	WCD3RC-085A2A	\$13,059.94
230	30	90	40	90	40 x 25 x 19	WCD3RC-090A2A	\$14,182.96
230	40	114	50	140	50 x 31 x 21	WCD3RC-150A2A	\$18,153.03
230	50	140	60	170	56 x 37 x 23	WCD3RC-170A2A	\$19,950.53
230	60	170	75	205	56 x 37 x 23	WCD3RC-205A2A	\$22,951.17
230	75	211	100	261	63 x 37 x 25	WCD3RC-261A2A	\$25,373.06
230	100	251	125	310	63 x 37 x 25	WCD3RC-310A2A	\$31,949.78
460	3	7.2	-	-	32 x 25 x 17	WCD3RC-007A4A	\$8,904.00
460	5	9.2	-	-	32 x 25 x 17	WCD3RC-009A4A	\$9,157.76
460	7.5	12	10	15	32 x 25 x 17	WCD3RC-015A4A	\$10,939.68
460	10	16	15	22	32 x 25 x 17	WCD3RC-022A4A	\$11,222.38
460	15	23	20	29	32 x 25 x 17	WCD3RC-029A4A	\$12,324.25
460	20	32	25	37	40 x 25 x 19	WCD3RC-037A4A	\$13,068.85
460	25	38	30	43	40 x 25 x 19	WCD3RC-043A4A	\$13,993.75
460	30	45	40	57	40 x 25 x 19	WCD3RC-057A4A	\$15,845.78
460	40	58	50	70	50 x 31 x 21	WCD3RC-070A4A	\$18,451.31
460	50	75	60	85	50 x 31 x 21	WCD3RC-085A4A	\$20,502.57
460	60	90	75	105	50 x 31 x 21	WCD3RC-105A4A	\$25,387.53
460	75	110	100	135	50 x 31 x 21	WCD3RC-135A4A	\$27,045.90
460	100	149	125	160	56 x 37 x 23	WCD3RC-160A4A	\$33,548.05
460	125	176	150	195	56 x 37 x 23	WCD3RC-195A4A	\$38,261.60
460	150	217	200	230	63 x 37 x 25	WCD3RC-230A4A	\$46,029.23
460	200	260	250	285	63 x 37 x 25	WCD3RC-285A4A	\$52,720.58
460	250	300	300	370	68 x 38 x 25	WCD3RC-370A4A	\$70,106.76
460	300	415	350	450	68 x 38 x 25	WCD3RC-450A4A	\$75,252.16
460	400	525	450	600	88 x 65 x 31	WCD3RC-600A4A	\$101,494.47
460	500	656	550	680	88 x 65 x 31	WCD3RC-680A4A	\$115,777.60

Additional Product Notes

Consult factory for single phase input ratings

Section 3: Enclosed Variable Frequency Drive Panels



WCD Series - Configurable Enclosed Panel Options for WDN700E

The WCD Series of Enclosed Drives offer the broadest range of size and configurations in the industry. Simple optional adder codes allow the user to customize as required for the most demanding of applications.

Options	Option Adder Codes / List Prices (Add codes at end of base model number in alpha order)						
	3% Line Reactor (Standard in 3R and SDA)	5% Line Reactor	IEEE Passive Harmonic Filter	2 Contactor Bypass	3 Contactor Bypass	Output Reactor	DV / DT Filter
480 V Model Number	B ⁽¹⁾	B2 ⁽¹⁾	C ⁽¹⁾	D ⁽¹⁾	E ⁽¹⁾	F ⁽¹⁾	G ⁽¹⁾
WCD3RC-007A4A	\$963.86	\$1,102.98	\$5,374.68	\$1,805.29	\$2,042.36	\$963.86	\$1,856.48
WCD3RC-009A4A	\$963.86	\$1,102.98	\$5,374.68	\$1,806.40	\$2,043.47	\$963.86	\$1,915.47
WCD3RC-015A4A	\$1,032.86	\$1,205.38	\$5,538.29	\$2,238.24	\$2,488.67	\$1,032.86	\$1,932.17
WCD3RC-022A4A	\$1,224.30	\$1,410.17	\$5,679.64	\$2,368.46	\$2,695.69	\$1,224.30	\$2,301.68
WCD3RC-029A4A	\$1,307.78	\$1,499.21	\$6,927.31	\$3,521.53	\$3,911.08	\$1,307.78	\$2,583.27
WCD3RC-037A4A	\$1,397.93	\$1,671.73	\$7,659.67	\$3,804.23	\$4,219.38	\$1,397.93	\$2,671.20
WCD3RC-043A4A	\$1,459.14	\$1,732.94	\$8,847.24	\$4,217.16	\$4,769.21	\$1,459.14	\$2,788.07
WCD3RC-057A4A	\$1,720.70	\$2,029.00	\$10,911.85	\$5,403.62	\$6,015.77	\$1,720.70	\$2,858.18
WCD3RC-070A4A	\$1,951.09	\$2,416.32	\$11,434.96	\$5,947.87	\$6,745.89	\$1,951.09	\$3,877.69
WCD3RC-085A4A	\$2,098.01	\$2,591.06	\$12,369.88	\$6,115.94	\$6,984.08	\$2,098.01	\$4,527.68
WCD3RC-105A4A	\$2,530.96	\$3,024.02	\$13,920.29	\$6,965.15	\$8,100.41	\$2,530.96	\$4,592.24
WCD3RC-135A4A	\$2,860.41	\$3,400.22	\$16,718.37	\$7,372.51	\$8,853.92	\$2,860.41	\$5,347.97
WCD3RC-160A4A	\$3,343.45	\$3,895.50	\$18,421.26	\$8,300.75	\$10,269.65	\$3,343.45	\$5,845.48
WCD3RC-195A4A	\$3,705.18	\$4,318.44	\$27,390.93	\$9,088.76	\$11,611.93	\$3,705.18	\$6,290.68
WCD3RC-230A4A	\$4,572.20	\$5,403.62	\$29,024.81	\$9,874.54	\$12,754.98	\$4,572.20	\$6,572.27
WCD3RC-285A4A	\$4,996.26	\$5,864.40	\$31,704.92	\$16,445.69	\$20,739.64	\$4,996.26	\$7,198.88
WCD3RC-370A4A	\$5,192.15	\$6,112.60	\$39,765.26	\$16,929.84	\$22,804.26	\$5,192.15	\$8,124.90
WCD3RC-450A4A	\$6,143.76	\$7,073.12	\$54,632.72	\$18,909.87	\$23,525.48	\$6,143.76	\$9,846.71
WCD3RC-600A4A	\$8,019.17	\$9,594.06	\$65,648.08	\$26,375.87	\$38,028.98	\$8,019.17	\$13,744.44
WCD3RC-680A4A	\$12,011.50	\$13,718.84	\$65,648.08	\$26,375.87	\$38,028.98	\$12,011.50	\$16,641.58

Option Code	Option Description	List Price
A ⁽²⁾	EMI/RFI Filter	Consult Factory
D2 ⁽²⁾	RVSS Bypass	Consult Factory
G2 ⁽²⁾	Output Sinewave Filter	Consult Factory
H ⁽²⁾	On-Off-Auto Selector Switch	\$343.92
I ⁽²⁾	Speed Potentiometer	\$625.51
J ⁽²⁾	Start/Stop Pushbuttons	\$655.56
J2 ⁽²⁾	40mm ESTOP Pushbutton	\$487.49
K ⁽²⁾	Hand-Off-Auto Selector Switch	\$343.92
L ⁽²⁾	Surge Suppression	\$1,124.13
M ⁽²⁾	Installed SID1 Text Keypad	\$2,631.13
M2 ⁽²⁾	N700E LCD Door Mounted Keypad	\$776.87
M7 ⁽²⁾	Installed SID7 Operator Interface	\$6,872.78
N ⁽²⁾	Panel Space Heater, 150W	\$874.82
N2 ⁽²⁾	Panel Space Heater, 50W	\$422.94

Option Code	Option Description	List Price
O ⁽²⁾	Green Run Pilot Light	\$343.92
P ⁽²⁾	Amber Fault Pilot Light and Reset Pushbutton	\$673.37
Q ⁽²⁾	White Drive Ready Pilot Light	\$312.75
R ⁽²⁾	Lockable, solid control door cover	\$1,061.80
R1 ⁽²⁾	4X Clear HMI door cover 10"H x 8"W	\$605.47
S ⁽²⁾	Lockable, window control door cover	\$1,246.56
T ⁽²⁾	24/7 timer	\$819.17
U ⁽²⁾	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD N700E Ethernet IP or Ethernet TCP/IP	\$1,549.78
X60	WCD N700E Modbus to Ethernet IP Gateway	\$1,433.33
X65	Cellular based Netbiter	Consult Factory
X66	Ethernet based Netbiter	Consult Factory
X67	Ethernet/Cellular based Netbiter	Consult Factory

Additional Product Notes

For 770B4A & 960B4A, consult factory.

- (1) Options B, B2, C, D, E, F, G may result in enclosure dimensional changes

- (2) All other options are common - no dimensional changes

The total list price adder for - HIM3RU to HIM2RU Option package is \$3,283.35

Section 3: Enclosed Variable Frequency Drive Panels



WCD3RC-PDA Series - Positive Displacement Pump Panel NEMA 3R Enclosed Drive

The WorldDrive Positive Displacement (PD) Package is built for the demanding pumping applications, such as in oil & gas fields, salt water disposal, tough irrigation duties or controlling jet pumps.

- Ultimate Control - The WorldDrive Flex Control Variable Frequency Drive comes with PD application specific firmware, seven “Murphy Switch” inputs and optional I/O module for full skid protection and control, and all operational parameters can be configured using the intuitive, built-in keypad.
- Power For Your Applications - We offer a full range of units, including 240 Vac 0.5-10 hp in single-phase, 240 Vac 1-25 hp in three-phase, or 480 Vac 1-800 hp in three-phase input.
- Control Options - A full range of options are available, such as, door mounted keypad or pilot devices that are pre-installed and wired for ease of access.
- Packed Solutions - All WorldDrive PD packages are UL compliant, assembled, tested, and readied for operation prior to shipment.

Product Specifications

- Hooded roof, direct spray and weather protection
- Heavy duty mounting and lifting ears
- Lockable control door cover for security
- Rodent screen protection
- 3% impedance line reactor
- NO/NC selectable “Murphy Switch” inputs (x7)
- Main circuit breaker with lockable disconnect
- Control panel transformer with CB protection
- Bottom to top ventilation (heat-shedding design)
- Thermostat-controlled, forced-air filtered Fans (positive pressure design)
- Full panel surge protection
- Galvanized back panel



Featuring the World Drive Flex Control Variable Frequency Drive



Voltage	Constant Torque		Variable Torque		Dimensions ¹ H x W x D (in)	Enclosure Frame	Model Number	List Price
	Heavy Duty		Normal Duty					
	HP	Current	HP	Current				
230	0.5	2.5	1	5	30 x 24 x 17	3R1	WCD3RCPDA-005B2A+HIM3RU	\$13,047.50
230	1	5	2	8	30 x 24 x 17	3R1	WCD3RCPDA-008B2A+HIM3RU	\$13,257.86
230	2	8	3	12	30 x 24 x 17	3R1	WCD3RCPDA-012B2A+HIM3RU	\$13,686.37
230	3	11	5	16	30 x 24 x 17	3R1	WCD3RCPDA-016B2A+HIM3RU	\$13,836.62
230	5	17	7.5	22	30 x 24 x 17	3R1	WCD3RCPDA-022B2A+HIM3RU	\$14,586.78
230	7.5	24	10	30	30 x 24 x 17	3R1	WCD3RCPDA-030B2A+HIM3RU	\$14,970.77
230	10	32	15	42	30 x 24 x 17	3R1	WCD3RCPDA-042B2A+HIM3RU	\$15,887.88
230	15	46	20	56	38 x 24 x 19	3R2	WCD3RCPDA-056B2A+HIM3RU	\$17,427.16
230	20	60	25	69	38 x 24 x 19	3R2	WCD3RCPDA-069B2A+HIM3RU	\$19,206.85
460	3	5.5	5	8	30 x 24 x 17	3R1	WCD3RCPDA-008B4A+HIM3RU	\$13,211.11
460	5	8	7.5	12	30 x 24 x 17	3R1	WCD3RCPDA-012B4A+HIM3RU	\$14,353.05
460	7.5	12	10	16	30 x 24 x 17	3R1	WCD3RCPDA-016B4A+HIM3RU	\$15,275.73
460	10	15	15	24	30 x 24 x 17	3R1	WCD3RCPDA-024B4A+HIM3RU	\$16,198.41
460	15	22	20	30	38 x 24 x 19	3R2	WCD3RCPDA-030B4A+HIM3RU	\$17,122.20
460	20	28	25	38	38 x 24 x 19	3R2	WCD3RCPDA-038B4A+HIM3RU	\$18,047.10
460	25	35	30	45	38 x 24 x 19	3R2	WCD3RCPDA-045B4A+HIM3RU	\$19,899.13
460	30	41	40	61	38 x 24 x 19	3R2	WCD3RCPDA-061B4A+HIM3RU	\$22,504.66
460	40	55	50	75	48 x 30 x 21	3R3	WCD3RCPDA-075B4A+HIM3RU	\$24,555.92
460	50	67	60	91	48 x 30 x 21	3R3	WCD3RCPDA-091B4A+HIM3RU	\$28,152.03
460	60	81	75	107	48 x 30 x 21	3R3	WCD3RCPDA-107B4A+HIM3RU	\$31,099.25
460	75	106	100	142	54 x 36 x 23	3R4	WCD3RCPDA-142B4A+HIM3RU	\$37,601.40
460	100	136	125	169	54 x 36 x 23	3R4	WCD3RCPDA-169B4A+HIM3RU	\$42,314.95
460	125	169	150	223	61 X 36 X 25	3R5B	WCD3RCPDA-223B4A+HIM3RU	\$50,082.58
460	150	195	200	264	61 X 36 X 25	3R5B	WCD3RCPDA-264B4A+HIM3RU	\$56,773.93
460	200	255	250	325	66 X 36 X 25	3R6F	WCD3RCPDA-325B4A+HIM3RU	\$69,465.47
460	250	303	300	370	66 X 36 X 25	3R6F	WCD3RCPDA-370B4A+HIM3RU	\$74,160.11
460	250	345	350	432	88 X 40 X 31	3R7F	WCD3RCPDA-432B4A+HIM3RU	\$79,305.51
460	300	375	400	481	88 X 40 X 31	3R7F	WCD3RCPDA-481B4A+HIM3RU	\$89,812.23
460	400	478	500	613	88 X 65 X 31	3R8F	WCD3RCPDA-613B4A+HIM3RU	\$105,547.82
460	450	541	550	683	88 X 65 X 31	3R8F	WCD3RCPDA-683B4A+HIM3RU	\$119,830.95
460	500	591	650	770	88 X 65 X 31	3R8FB	WCD3RCPDA-770B4A+HIM3RU	\$140,085.32
460	650	740	800	960	88 X 65 X 31	3R8FB	WCD3RCPDA-960B4A+HIM3RU	\$170,867.56

(1) Includes overall with hoods and vents

VFD Accessories — HMI and Multi-function Keypads

SID1 and SID7 multifunctional keypads are ready to run, giving you direct control over any parameter on any drive. Multifunctional keypads allow for simple start up, settings are quickly applied on a single screen, and real time data is available in easily understood terminology.

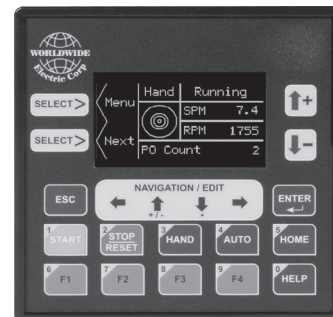
The SID1 provides a simple design with a rugged keypad providing access to all the information you need, displayed on a crystal clear monochrome backlit LCD screen.

The SID7 displays controls and information on a 7" TFT color touchscreen. Pump status, POC conditions, and trip/alarm items are always visible on the SID7, no matter which view a user is currently operating.

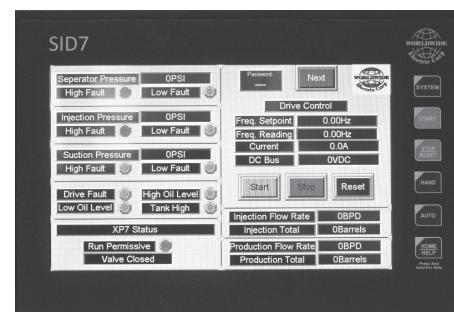
All SID Multi-function Keypads must be programmed by the factory.

Product Specifications

- Data Logging Screen:
 - Number of strokes
 - Number of faults
 - Number of pump-offs
- Drive Monitoring Screens:
 - Torque (%)
 - Motor voltage
 - Motor current
 - DC bus voltage
 - PJ parameters
- Drive Alarm History Time of Event:
 - Reference
 - Current
 - DC bus voltage
 - Motor voltage
 - Frequency



SID1: HE-XE102-86



SID7: HE-XW1E2-86



WORLD
START **iQ**

WORLD
START **e**

WORLD
START **hD**
HEAVY DUTY

WORLD
START **nC**
NON-COMBINATION

Solid State Reduced Voltage Starters, Chassis and Enclosed Products

WorldWide Electric's WORLDSTART iQ Softstarter helps to enhance productivity of your operation by reducing wear and tear on your power transmission equipment. The WORLDSTART iQ does not just start and stop your motor with precision and efficiency, it also helps lower peak inrush levels and lowers mechanical shock delivered to system components.

WSIQ Series Chassis Soft Starters and Accessories

WorldWide Electric's WORLDSTART IQ Softstarter helps to enhance productivity of your operation by reducing wear and tear on your power transmission equipment. The WORLDSTART IQ doesn't just start and stop your motor with precision and efficiency; it also helps you minimize energy costs and improve operational effectiveness.

Product Specifications

- True three-phase starter
- Constant current and current ramp start
- Advanced adaptive control starting / stopping
- Kickstart starting
- Coast-to-stop and ramp-to-stop
- DC brake
- Soft brake
- Jog (forward and reverse)
- Inside delta control (6-wire)
- Soft trip
- 120/230VAC control power
- Run-rated internal bypass



WORLDSTART IQ Soft Starters, 525V-Rated With Run-Rated Internal Bypass			Standard Duty 350%, 30 seconds, 4 starts/hour				Heavy Duty 450%, 30 seconds, 4 starts/hour			
Model Number	List Price	Dimensions H x W x D (in)	HP				HP			
			Amps	208V	230V	460V	Amps	208V	230V	460V
WSIQ-0024BP	\$2,307.65	13.2 x 6.0 x 9.1	17	5	5	10	14	3	3	10
WSIQ-0042BP	\$2,361.92	13.2 x 6.0 x 9.1	28	7.5	10	20	22	7.5	7.5	15
WSIQ-0052BP	\$2,527.09	13.2 x 6.0 x 9.1	35	10	10	25	28	10	10	20
WSIQ-0064BP	\$3,172.43	13.2 x 6.0 x 9.1	52	15	15	30	40	10	10	25
WSIQ-0069BP	\$3,393.05	13.2 x 6.0 x 9.1	59	15	20	40	46	15	15	30
WSIQ-0105BP	\$3,626.64	13.2 x 6.0 x 9.1	77	25	25	50	52	15	15	40
WSIQ-0115BP	\$3,860.24	13.2 x 6.0 x 9.1	81	25	25	60	65	20	20	50
WSIQ-0135BP	\$4,834.73	13.2 x 6.0 x 9.1	99	30	30	75	77	25	25	60
WSIQ-0184BP	\$5,851.71	19.5 x 8.5 x 9.6	124	40	40	75	96	30	30	60
WSIQ-0200BP	\$6,401.49	19.5 x 8.5 x 9.6	131	40	40	100	104	30	40	75
WSIQ-0229BP	\$7,129.41	19.5 x 8.5 x 9.6	156	50	50	125	124	40	40	100
WSIQ-0250BP	\$8,049.64	19.5 x 8.5 x 9.6	195	60	60	150	156	50	60	125
WSIQ-0352BP	\$9,341.49	20.6 x 8.5 x 9.6	240	75	75	150	180	60	60	150
WSIQ-0397BP	\$9,519.65	20.6 x 8.5 x 9.6	261	75	75	200	203	60	75	150
WSIQ-0410BP	\$11,209.09	20.6 x 8.5 x 9.6	377	125	125	300	302	100	100	250
WSIQ-0550BP	\$14,012.25	20.6 x 8.5 x 9.6	414	150	150	350	321	100	125	250
WSIQ-0580BP	\$15,742.98	20.6 x 8.5 x 9.6	477	150	150	400	361	125	150	300
WSIQ-0835BP	\$20,482.72	24.3 x 17.6 x 12.3	515	NA	200	450	414	NA	150	350
WSIQ-0940BP	\$23,675.73	24.3 x 17.6 x 12.4	590	NA	200	500	480	NA	200	400
WSIQ-1070BP	\$25,949.89	24.3 x 17.6 x 12.5	797	NA	300	600	620	NA	250	500
WSIQ-1230BP	\$29,946.89	24.3 x 17.6 x 12.6	985	NA	400	800	768	NA	300	600
WSIQ-1250BP	\$38,094.04	24.3 x 17.6 x 12.7	1180	NA	500	900	904	NA	350	700
WORLDSTART IQ Soft Starters 525V-Rated Without Internal Bypass Contactor										
WSIQ-0735C	\$12,098.20	24.3 x 17.6 x 12.3	515	NA	200	450	429	NA	150	350
WSIQ-0830C	\$13,767.45	24.3 x 17.6 x 12.4	634	NA	250	500	493	NA	200	400
WSIQ-1025C	\$15,421.38	24.3 x 17.6 x 12.5	882	NA	350	700	686	NA	250	500
WSIQ-1170C	\$22,205.57	24.3 x 17.6 x 12.6	1100	NA	450	900	864	NA	350	700
WSIQ-1220C	\$28,247.02	24.3 x 17.6 x 12.7	1320	NA	500	1100	1030	NA	450	800

WSiQ Series Chassis Soft Starters and Accessories - Continued

WORLDSTART iQ Soft Starters, 690V-Rated With Run-Rated Internal Bypass			600 VAC, 3 Phase 4 Start per hour			
Model Number	List Price	Dimensions H x W x D (in)	Normal Duty 350%, 30 sec		Heavy Duty 450%, 30 sec	
			HP	AMPS	HP	AMPS
WSIQ-0024BP-6	\$2,349.46	13.2 x 6.9 x 9.1	15	17	10	14
WSIQ-0042BP-6	\$2,416.35	13.2 x 6.9 x 9.1	25	28	20	22
WSIQ-0052BP-6	\$2,575.21	13.2 x 6.9 x 9.1	30	35	25	28
WSIQ-0064BP-6	\$3,235.73	13.2 x 6.9 x 9.1	40	52	30	40
WSIQ-0069BP-6	\$3,469.84	13.2 x 6.9 x 9.1	50	59	40	46
WSIQ-0105BP-6	\$4,096.92	13.2 x 6.9 x 9.1	60	77	50	52
WSIQ-0115BP-6	\$4,364.47	13.2 x 6.9 x 9.1	75	81	60	65
WSIQ-0135BP-6	\$5,459.77	13.2 x 6.9 x 9.1	100	99	75	77
WSIQ-0184BP-6	\$6,438.01	19.5 x 8.5 x 9.6	100	124	75	96
WSIQ-0200BP-6	\$7,040.01	19.5 x 8.5 x 9.6	125	131	100	104
WSIQ-0229BP-6	\$7,842.67	19.5 x 8.5 x 9.6	150	156	100	124
WSIQ-0250BP-6	\$8,787.47	19.5 x 8.5 x 9.6	200	195	150	156
WSIQ-0352BP-6	\$10,075.07	20.6 x 8.5 x 9.6	200	240	150	180
WSIQ-0397BP-6	\$10,284.10	20.6 x 8.5 x 9.6	250	261	200	203
WSIQ-0410BP-6	\$11,990.05	20.6 x 8.5 x 9.6	350	377	300	302
WSIQ-0550BP-6	\$14,700.44	20.6 x 8.5 x 9.6	450	414	300	321
WSIQ-0580BP-6	\$16,522.68	20.6 x 8.5 x 9.6	500	477	350	361
WSIQ-0835BP-6	\$20,534.68	17.6 x 24.3 x 12.3	500	515	450	414
WSIQ-0940BP-6	\$23,735.09	17.6 x 24.3 x 12.3	600	590	500	480
WSIQ-1070BP-6	\$26,016.72	17.6 x 24.3 x 12.3	800	797	600	620
WSIQ-1230BP-6	\$30,013.40	17.6 x 24.3 x 12.3	1000	985	800	768
WSIQ-1250BP-6	\$37,999.11	17.6 x 24.3 x 12.3	1100	1180	900	904
WORLDSTART iQ Soft Starters, 690V-Rated Without Internal Bypass Contactor						
WSIQ-0735C-6	\$12,127.86	17.6 x 24.3 x 12.3	500	551	450	429
WSIQ-0830C-6	\$13,804.63	17.6 x 24.3 x 12.3	600	634	500	493
WSIQ-1025C-6	\$15,466.09	17.6 x 24.3 x 12.3	900	882	700	686
WSIQ-1170C-6	\$22,272.70	17.6 x 24.3 x 12.3	1100	1100	900	864
WSIQ-1220C-6	\$28,290.69	17.6 x 24.3 x 12.3	1300	1320	1000	1030

WSiQ Accessories

Model Number	Description	List Price
WSIQ-KPKIT	WSIQ-Remote Keypad Card & Keypad	\$1,161.06
WSIQ-KPCARD	WSIQ-Remote Keypad Card	\$611.21
WSIQ-KP	WSIQ-Remote Keypad	\$747.94
WSIQ-COM-DN	WSIQ-DeviceNet Interface,	\$952.45
WSIQ-COM-ETHIP	WSIQ-Ethernet IP Interface	\$2,517.28
WSIQ-COM-MB	WSIQ-ModBus RTU Interface	\$733.91
WSIQ-COM-MB2	WSIQ-ModBus RTU Interface + Ground Fault	\$733.91
WSIQ-COM-TCPIP	WSIQ-Modbus TCP/IP Interface	\$2,271.86
WSIQ-COM-PNET	WSIQ-Profinet Interface	\$2,517.28
WSIQ-COM-PB	WSIQ-Profibus Interface	\$1,210.72
WSIQ-COM-PUMPCRD	WSIQ-Smart Control Card Pump Application	\$917.39
WSIQ-FGKIT-184-580BP	Fingerguard Kit, 0184BP-0580PB, IP20	\$747.94

WSE Efficient Chassis Soft Start Controller and Accessories

Introducing the World Start Efficient (WSE) reduced voltage chassis starter. This cost-effective WSE Soft Starter is suited to applications and equipment that start un-loaded, such as controlling pumps, fans, and motors.

The WSE features an intuitive parameter setup, multiple feature sets, an integrated "At Speed bypass," and 2-wire or 3-wire Start/Stop control, all in a compact footprint. A remote keypad and IP20 terminal protection guards are available as options. Emergency full-voltage bypass is not part of this system.

Operationally the "At Speed / Run Bypass" mode takes over the motor load control from the SCR units after the motor is at full speed. This feature reduces panel heat during RUN mode and allows a more compact design.



WORLD
START **e**

Product Specifications

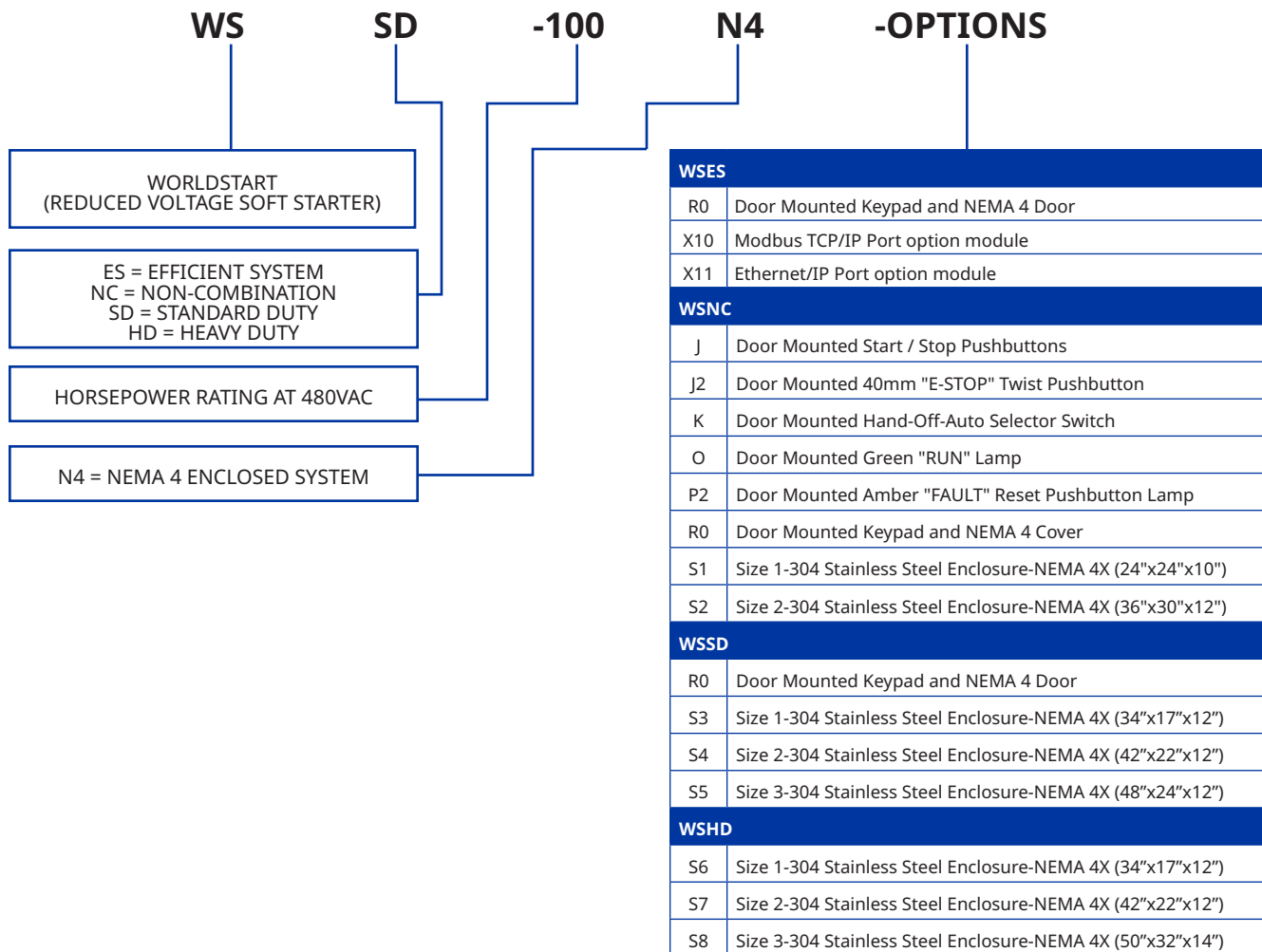
- Standard pump and fan applications
- Other applications that start unloaded
- Constant current and current Ramp Start modes
- Voltage Ramp Soft Stop up to 20-seconds
- Coast to stop (Select No Soft Stop)
- 10-75 hp, Three-phase, 230 V
- 20-150 hp, Three-phase, 480 V
- 250% to 450% adjustable current limit
- Input voltage range:
 - 200-230 V Three-Phase (-15%, +10%)
 - 380-480 V Three-Phase (-15%, +10%)
- Control voltage 110-240 Vac (-15%, +10%)
- Configuration dials on front of SSRV unit
- Protection: motor overload, phase loss, current imbalance, excess start time, bypass overload
- Two-phase control of three-phase power
- 450% maximum starting current setting
- Oversize SSRV to motor as needed
- Chassis provides status feedback LEDs
- Programmable output relay for Run or Fault
- Optional Remote Operator Keypad
- Optional Modbus or Ethernet cards

WSE with 575 Vac-Rate Internal Bypass			Standard Duty at 40 0C 350%, 30 seconds, 4 starts/hour					
Model Number	List Price	Dimensions H x W x D (in)	Horsepower				Max. Amps	
			208V	230V	460V	575V	40°C	50°C
WSE-015BP	\$2,068.28	8.0 x 3.9 x 6.5	7.5	10	20	30	34	32
WSE-030BP	\$2,745.35	8.0 x 3.9 x 6.5	15	20	40	50	60	55
WSE-045BP	\$3,199.81	8.5 x 5.7 x 7.6	25	30	60	75	85	78
WSE-055BP	\$3,542.98	8.5 x 5.7 x 7.6	30	30	75	100	100	100
WSE-075BP	\$4,887.82	9.5 x 8.0 x 8.4	40	50	100	125	140	133
WSE-090BP	\$5,954.42	9.5 x 8.0 x 8.4	50	60	125	150	170	157
WSE-110BP	\$6,622.21	9.5 x 8.0 x 8.4	60	75	150	200	200	186

¹ Given weights and dimensions are approximate

WSE Accessories		
Accessory Code	List Price	Description
WSE-FINGERKIT	\$445.19	Finger Guard Kit, fits 075-110BP kw ratings
WSE-REMOTEOP-KIT	\$1,270.65	Remote keypad operator & interface kit
WSE-ModbusTCP	\$2,300.15	Modbus TCP/IP port option module
WSE-Ethernet/IP	\$2,541.30	Ethernet/IP port option module

WorldWide Configured Soft Starter Selection Guide



WSES Series Efficient System Combination Soft Starters - NEMA 4 Enclosure

The World Start Efficient System (WSES) combines a reduced-voltage chassis starter, ancillary components, and controls to provide a single, cost-effective system suitable for operating equipment with basic performance requirements, such as pumps, fans, or motors.

The WSES features an intuitive parameter setup and multiple feature sets. Operationally the "At Speed / Run Bypass" mode takes over the motor load control from the SCR units after the motor is at full speed. This feature reduces panel heat during RUN mode. Emergency full-voltage bypass is not part of this system.

The secure lockable panel, with padlock disconnect, protects the ancillary components: terminal block, panel surge protection with the main circuit breaker, pilot devices, and other options, and provides a maintenance-friendly yet compact design.

Product Specifications

- NEMA 4 enclosure
- Standard pump and fan applications
- Constant current and current ramp soft start selectable modes
- Voltage ramp soft stop
- Coast to stop
- 250% to 450% adjustable current limit
- 10-75 hp, 230 V, three-phase,
- 10-150 hp, 480 V, three-phase,
- Input voltage range:
 - 200-230 V three-phase (-15%, +10%)
 - 380-480 V three-phase (-15%, +10%)
- Control voltage 110-240 Vac (-15%, +10%)
- Configuration dials on front of chassis unit
- Door mounted Start / Stop pushbuttons
- Programmable output on chassis unit
- Motor protection: motor overload, motor thermistor input, current imbalance, excess start time and more
- Two-phase control of three-phase power
- Chassis provides status feedback LEDs
- Optional remote operator keypad
- Optional Modbus or Ethernet cards
- Assembled per UL508A

WORLD START e



Panel Controls



Panel Interior View

WSES with 575 Vac-Rated Internal Bypass					Standard Duty at 40 °C 350%, 30 seconds, 4 starts/hour					
WSES Part Number	List Price	Dimension H x W x D	Weight (lbs)	Max Duty Amps	Horsepower				Max. Amps	
					208V	230V	460V	575V	40°C	50°C
WSES-025N4	\$6,682.50	24"x24"x12"	100	34	7.5	10	20	30	34	32
WSES-040N4	\$7,093.67	24"x24"x12"	100	60	15	20	40	50	60	55
WSES-060N4	\$8,043.61	24"x24"x12"	107	85	25	30	60	75	85	78
WSES-075N4	\$8,861.50	24"x24"x12"	107	100	30	30	75	100	100	100
WSES-100N4	\$11,239.56	30"x24"x12"	125	140	40	50	100	125	140	133
WSES-125N4	\$11,627.94	30"x24"x12"	125	170	50	60	125	150	170	157
WSES-150N4	\$11,916.83	30"x24"x12"	125	200	60	75	150	200	200	186

¹ Given weights and dimensions are approximate

WSES Options		
Option Code	List Price	Option Description
R0	\$1,491.33	Door Mounted keypad and NEMA 4 Door
X10	\$1,377.78	Modbus TCP/IP port option module
X11	\$1,522.22	Ethernet/IP Port option module

WSNC Series Non-Combination Soft Starters - NEMA 4 Enclosure

WorldWide Electric's WorldStart Non-combination (WSNC) controls system package is an economical system for applications with an existing service disconnect already in place. It combines the proven WorldStart IQ (WSIQ) soft starter and grounding bar in a NEMA 4 enclosure. The WSIQ provides basic and advanced programming features. The WSSD is pre-wired to UL 508A and assembled in an UL listed facility.



Product Specifications

- NEMA 4 enclosure
- Programmable timer and schedules
- Advanced adaptive control for starting / stopping
- Kickstart starting
- Coast-to-stop and ramp-to-stop options
- DC brake
- Soft brake
- Jog (forward and reverse)
- Inside delta control (6-wire)
- Soft trip
- 2 and 3 wire start design comes standard
- Door Mounted Pilot Device features motor run lamp, off/local/remote switch, fault lamp and reset push button, start push button, and stop push button



Model Number	List Price	HP ⁽¹⁾		Dimensions (L x W x H)	Enclosure Size
		460V	230V		
WSNC-020N4	\$5,591.71	20	10	24"x24"x10"	Size 1
WSNC-030N4	\$6,712.50	30	15		
WSNC-040N4	\$6,816.01	40	20		
WSNC-050N4	\$6,932.88	50	25		
WSNC-060N4	\$8,482.17	60	30		
WSNC-075N4	\$9,252.37	75	40	36"x30"x12"	Size 2
WSNC-100N4	\$10,303.04	100	50		
WSNC-125N4	\$11,974.77	125	60		
WSNC-150N4	\$12,285.29	150	75		
WSNC-200N4	\$12,671.51	200	100		
WSNC-250N4	\$13,581.94	250	125		
WSNC-300N4	\$14,521.31	300	150		
WSNC-350N4	\$18,402.34	350	150	60"x36"x16"	Size 3
WSNC-400N4	\$20,108.57	400	200		
WSNC-450N4	\$26,496.08	450	---		
WSNC-500N4	\$28,129.96	500	---		
WSNC-600N4	\$32,429.48	600	---		

¹ Given weights and dimensions are approximate

Additional Product Notes

(1) For 208V ratings, consult factory.

Units 450HP and Larger are ANSI 61 Gray.

For Heavy Duty 450%, 30 second ratings, consult factory.

WSNC Additional Options		
Option Code	Option Description	List Price
J	Door Mounted Start / Stop Pushbuttons	\$655.56
J2	Door Mounted 40mm "E-STOP" Twist Pushbutton	\$397.34
K	Door Mounted Hand-Off-Auto Selector Switch	\$343.92
O	Door Mounted Green "RUN" Lamp	\$343.92
P2	Door Mounted Amber "FAULT" Reset Pushbutton Lamp	\$409.58
R0	Door Mounted Keypad and NEMA 4 Cover	\$1,335.60
S1	Size 1-304 Stainless Steel Enclosure-NEMA 4X (24"x24"x10")	Consult Factory
S2	Size 2-304 Stainless Steel Enclosure-NEMA 4X (36"x30"x12")	Consult Factory

WSSD Series Standard Duty Combination Soft Starters - NEMA 4 Enclosure

WorldWide Electric's WORLDSTART Standard Duty (sD) Combination Soft Starter Package comes complete with circuit breaker disconnect, 120 volt control and basic door operation, all in one package for soft start applications. Finished starter duty rated for 350% starting, with integral bypass - 3-wire in/out.

Product Specifications

- NEMA 4 enclosure
- Programmable timer and schedules
- Advanced adaptive control for starting / stopping
- Kickstart starting
- Coast-to-stop and ramp-to-stop options
- DC brake
- Soft brake
- Jog (forward and reverse)
- Inside delta control (6-wire)
- Soft trip
- 2 and 3 wire start design comes standard
- Door Mounted Pilot Device features motor run lamp, off/local/remote switch, fault lamp and reset push button, start push button, and stop push button.



Includes the
WorldStart iQ Soft
Starter



Model Number	List Price	HP ⁽¹⁾		Dimensions (L x W x H)	Enclosure Size
		460V	230V		
WSSD-020N4	\$8,928.49	20	10	34"x17"x12"	Size 1
WSSD-025N4	\$9,252.37	25	10		
WSSD-030N4	\$9,518.38	30	15		
WSSD-040N4	\$9,674.20	40	20		
WSSD-050N4	\$9,823.34	50	25		
WSSD-060N4	\$11,432.74	60	30	42"x22"x12"	Size 2
WSSD-075N4	\$12,498.99	75	40		
WSSD-100N4	\$13,834.59	100	50		
WSSD-125N4	\$15,512.99	125	60		
WSSD-150N4	\$17,728.98	150	75		
WSSD-200N4	\$19,621.08	200	100	48"x24"x12"	Size 3
WSSD-250N4	\$21,623.36	250	125		
WSSD-300N4	\$23,605.62	300	150		

¹ Given weights and dimensions are approximate

WSSD Options		
Option Code	Option Description	List Price
R0	Door Mounted Keypad and NEMA 4 Door	\$1,335.60
S3	Size 1-304 Stainless Steel Enclosure-NEMA 4X (34"x17"x12")	Consult Factory
S4	Size 2-304 Stainless Steel Enclosure-NEMA 4X (42"x22"x12")	Consult Factory
S5	Size 3-304 Stainless Steel Enclosure-NEMA 4X (48"x24"x12")	Consult Factory

Additional Product Notes

(1) For 208V ratings, consult factory.

For Heavy Duty 450%, 30 second ratings, consult factory.

WSHD Series Heavy Duty Combination Soft Starters - NEMA 4 Enclosure

WorldWide Electric's WORLDSTART Heavy Duty (hD) Engineered Soft Starter Package is built for the toughest applications. Oversized capacity for your rock crusher, PD pump or any hard-starting piece of equipment.

Product Specifications

- NEMA 4 enclosure
- Programmable timer and schedules
- Advanced adaptive control for starting / stopping
- Kickstart starting
- Coast-to-stop and ramp-to-stop options
- DC brake
- Soft brake
- Jog (forward and reverse)
- Inside delta control (6-wire)
- Soft trip
- 2 and 3 wire start design comes standard
- Door Mounted Pilot Device features motor run lamp, off/local/remote switch, fault lamp and reset push button, start push button, and stop push button.



**WORLD
START hD**
HEAVY DUTY

Includes the
WorldStart iQ Soft
Starter



Model Number	List Price	HP ⁽¹⁾		Dimensions (L x W x H)	Enclosure Size
		460V	230V		
WSHD-020N4	\$10,893.82	20	10	34" x 17" x 12"	Size 1
WSHD-025N4	\$11,061.56	25	10		
WSHD-030N4	\$11,176.64	30	15		
WSHD-040N4	\$11,290.50	40	15		
WSHD-050N4	\$11,568.41	50	20		
WSHD-060N4	\$15,284.16	60	25	42"x22"x12"	Size 2
WSHD-075N4	\$15,509.43	75	40		
WSHD-100N4	\$18,457.55	100	40		
WSHD-125N4	\$19,722.25	125	60	50"x23"x14"	Size 3
WSHD-150N4	\$22,780.55	150	60		
WSHD-200N4	\$25,602.57	200	---		
WSHD-250N4	\$28,123.39	250	---	72"x40"x18"	Size 4
WSHD-300N4	\$30,908.68	300	---		
WSHD-400N4 ⁽²⁾	\$45,682.31	400	---		
WSHD-450N4 ⁽²⁾	\$50,457.08	450	---		
WSHD-500N4 ⁽²⁾	\$53,601.08	500	---		

¹ Given weights and dimensions are approximate

WSHD Options		
Option Code	Option Description	List Price
S6	Size 1-304 Stainless Steel Enclosure-NEMA 4X (34"x17"x12")	Consult Factory
S7	Size 2-304 Stainless Steel Enclosure-NEMA 4X (42"x22"x12")	Consult Factory
S8	Size 3-304 Stainless Steel Enclosure-NEMA 4X (50"x32"x14")	Consult Factory

Additional Product Notes

(1) Consult Factory for 208V ratings.

(2) On 400, 450 and 500 HP Ratings - No Emergency Bypass - ANSI 61 Gray Finish

WSPD Series - Positive Displacement Pump Panel

The WorldStart Positive Displacement (PD) control package is built for the demanding pumping applications, such as in oil & gas fields, salt water disposal, tough irrigation duties or controlling jet pumps.

Product Specifications

- NEMA 4 enclosure
- True three-phase starter
- Advanced adaptive control for starting/stopping
- Current Limit and Voltage Ramp start modes
- Kick Start torque boost available
- Coast-to-stop and ramp-to-stop options
- Panel surge protection
- Motor run lamp
- Soft trip
- Prewired per UL508A

Model Number	List Price	HP ⁽¹⁾		Dimensions (L x W x H)	Enclosure Size
		460V	230V		
WSPD-020N4	\$12,828.53	20	10	34" x 17" x 12"	Size 1
WSPD-025N4	\$13,675.71	25	10		
WSPD-030N4	\$13,731.92	30	15		
WSPD-040N4	\$14,195.90	40	15		
WSPD-050N4	\$14,829.49	50	20		
WSPD-060N4	\$18,414.49	60	25	42"x22"x12"	Size 2
WSPD-075N4	\$19,157.76	75	40		
WSPD-100N4	\$20,149.29	100	40		
WSPD-125N4	\$21,945.96	125	60	50"x23"x14"	Size 3
WSPD-150N4	\$24,473.99	150	60		
WSPD-200N4	\$28,374.10	200	---		
WSPD-250N4	\$30,381.91	250	---	72"x40"x18"	Size 4
WSPD-300N4	\$33,195.33	300	---		
WSPD-400N4	\$48,824.86	400	---		
WSPD-450N4	\$53,647.86	450	---	72"x40"x18"	Size 4
WSPD-500N4	\$57,049.17	500	---		

¹ Given weights and dimensions are approximate



Includes the
WorldStart IQ
Soft Starter



SIEMENS 3RW52 Series Chassis Soft Starters

SIRIUS 3RW52 General Performance Soft Starters are the ideal solution for standard applications. With 3-phase motor control, they cover the performance range from 7.5HP to 400HP (at 460VAC).

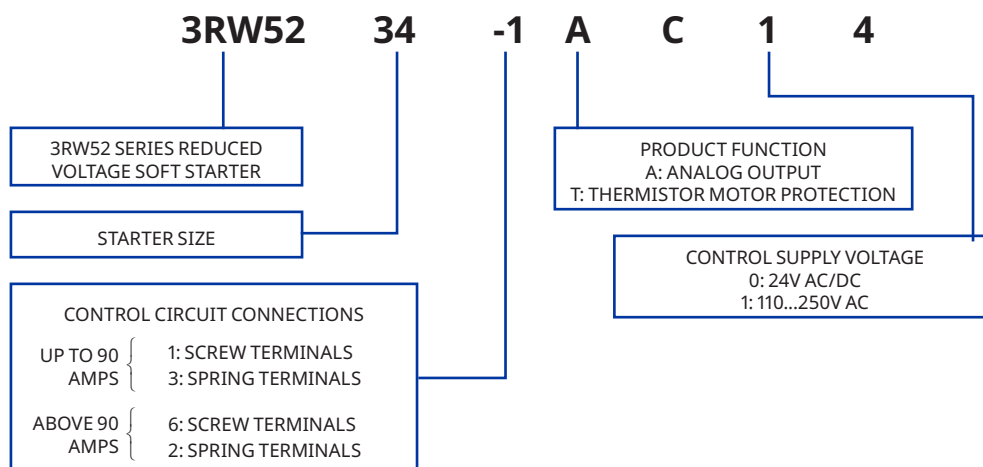
Product Specifications

- Hybrid switching devices and three-phase motor control
- Minimum power loss and optimum/symmetrical motor control
- Efficient configuration and maximum flexibility in automation engineering
- Soft Torque
- Reduced mechanical loading and optimum pump stop
- Parameterization using potentiometers
- Simple and fast commissioning
- Wide range for control supply and main voltage
- Low variance, high system availability even with weak supply networks



Normal Starting Class 10E						
HP			Max FLA	Dimensions (inches) H x W x D	Model Number ⁽¹⁾	List Price
200 V	230 V	460 V				
2	3	7.5	11.5	10.83 x 6.69 x 5.98	3RW5213-**-C*4	\$2,002.09
3	5	10	15.9	10.83 x 6.69 x 5.98	3RW5214-**-C*4	\$2,209.73
5	8	15	22.3	10.83 x 6.69 x 5.98	3RW5215-**-C*4	\$2,450.40
7.5	10	20	28.4	10.83 x 6.69 x 5.98	3RW5216-**-C*4	\$2,726.47
10	10	20	33.5	10.83 x 6.69 x 5.98	3RW5217-**-C*4	\$3,037.94
10	10	30	41.6	12.05 x 7.28 x 7.99	3RW5224-**-C*4	\$3,452.04
15	20	40	55.5	12.05 x 7.28 x 7.99	3RW5225-**-C*4	\$3,866.14
20	25	50	68.0	12.05 x 7.28 x 7.99	3RW5226-**-C*4	\$4,246.03
25	30	60	82.5	12.05 x 7.28 x 7.99	3RW5227-**-C*4	\$4,660.13
30	30	75	101	12.05 x 7.28 x 7.99	3RW5234-**-C*4	\$5,281.87
40	40	100	128	12.05 x 7.28 x 7.99	3RW5235-**-C*4	\$6,283.51
50	50	100	153	12.05 x 7.28 x 7.99	3RW5236-**-C*4	\$7,285.15
60	60	150	186	15.47 x 8.27 x 7.99	3RW5243-**-C*4	\$8,493.24
60	75	150	220	15.47 x 8.27 x 7.99	3RW5244-**-C*4	\$9,908.98
75	100	200	279	15.47 x 8.27 x 7.99	3RW5245-**-C*4	\$11,738.81
100	125	250	328	15.47 x 8.27 x 7.99	3RW5246-**-C*4	\$13,740.90
150	150	350	416	15.47 x 8.27 x 7.99	3RW5247-**-C*4	\$16,158.27
150	200	400	504	15.47 x 8.27 x 7.99	3RW5248-**-C*4	\$18,194.57

⁽¹⁾ Model Number Selection



Additional Product Notes

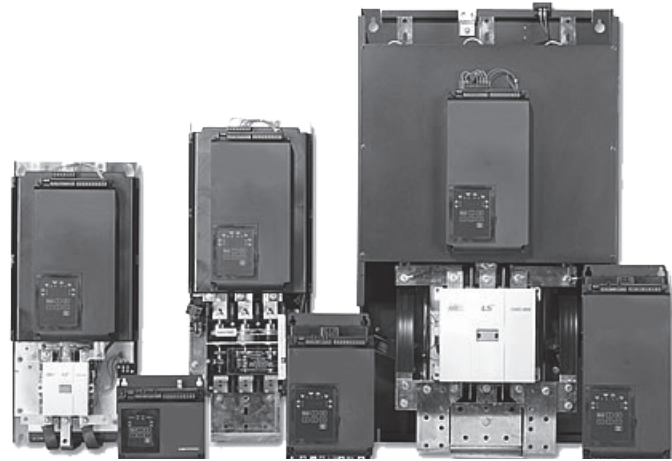
A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

WWE2-BP Chassis Soft Starters

With multiple ramp profiles, the WWE2-BP series offers accel, decel and advanced motor protection that make this soft starter adaptable to a wide variety of AC motor applications doing away for the need for add-on modules or costly auxiliary devices.

Product Specifications

- 5HP through 700HP
- Overload rated 350% for 60 seconds
- Line start full voltage bypass
- Soft start - soft stop
- Completely programmable
- 2 or 3 wire control
- Dual ramps
- 120 V control
- Jog function



HP			Max FLA	Dimensions (inches) H x W x D	Model Number	List Price
200 V	230 V	460 V				
5	5	10	18	8.9 x 8.0 x 6.7	WWE2-18-BP	\$5,244.13
7.5	7.5	20	28	8.9 x 8.0 x 6.7	WWE2-28-BP	\$5,244.13
10	10	25	39	8.9 x 8.0 x 6.7	WWE2-39-BP	\$5,485.98
10	15	30	48	8.9 x 8.0 x 6.7	WWE2-48-BP	\$5,485.98
15	20	40	62	14.0 x 8.0 x 6.7	WWE2-62-BP	\$5,834.02
20	25	50	78	14.0 x 8.0 x 6.7	WWE2-78-BP	\$6,078.23
25	30	60	92	14.0 x 8.0 x 6.7	WWE2-92-BP	\$7,207.28
30	40	75	112	14.0 x 8.0 x 6.7	WWE2-112-BP	\$7,863.24
40	50	100	150	19.0 x 8.0 x 6.7	WWE2-150-BP	\$9,434.70
50	60	125	160	19.0 x 8.0 x 6.7	WWE2-160-BP	\$9,907.79
60	75	150	210	28.1 x 12.5 x 9.1	WWE2-210-BP	\$11,762.41
75	100	200	275	28.1 x 12.5 x 9.1	WWE2-275-BP	\$12,845.44
125	125	300	361	28.1 x 12.5 x 9.1	WWE2-361-BP	\$14,321.35
150	150	350	450	28.1 x 12.5 x 9.1	WWE2-450-BP	\$16,065.06
150	200	450	550	29.5 x 12.5 x 9.1	WWE2-550-BP	\$23,448.13
200	250	500	600	29.5 x 12.5 x 9.1	WWE2-600-BP	\$25,263.81
300	350	700	900	44.3 x 25.5 x 11.9	WWE2-900-BP	\$37,895.71



General Purpose Motor Starters and Controls

WWSXL Series General Purpose Three-Phase Motor Starters and Accessories

The WWSXL series 3 phase general purpose starters provide compact load control for application-specific use. These starters are available up to 25HP @ 230VAC and 50HP @480VAC.

Product Specifications

- NEMA 1 enclosure
- Knockouts for field kits
- Large enclosure for wire bends
- Field kits for local start / stop
- Field kits for Hand-Off-Auto operation
- 24 VAC and 208 VAC control coil available
- Reset pushbutton supplied standard
- UL Listed



HP Rating	Main Voltage	Overload Current Setting	Motor FLA	Auxiliary Contacts	Dimensions (Inches) H x W x D	With Main Voltage Coil		With 120 Volt Coil	
						Model Number	List Price	Model Number	List Price
230 Volt - Three Phase									
1	230	3.5-5	4.2	1 NO	11x6.41x5.03	WWSXL1-230	\$275.00	WWSXL1-230-120C	\$275.00
1.5	230	5.5-8	6	1 NO	11x6.41x5.03	WWSXL1.5-230	\$275.00	WWSXL1.5-230-120C	\$275.00
2	230	5.5-8	6.8	1 NO	11x6.41x5.03	WWSXL2-230	\$275.00	WWSXL2-230-120C	\$275.00
3	230	9-12.5	9.6	1 NO	11x6.41x5.03	WWSXL3-230	\$290.00	WWSXL3-230-120C	\$290.00
5	230	11-16	15.2	1 NO	11x6.41x5.03	WWSXL5-230	\$290.00	WWSXL5-230-120C	\$290.00
7.5	230	20-25	22	1 NO + 1 NC	11x6.41x5.03	WWSXL7.5-230	\$330.00	WWSXL7.5-230-120C	\$330.00
10	230	23-28	28	1 NO + 1 NC	11x6.41x5.03	WWSXL10-230	\$400.00	WWSXL10-230-120C	\$400.00
15	230	36-45	40	1 NO + 1 NC	13.53x7.97x6.38	WWSXL15-230	\$650.00	WWSXL15-230-120C	\$650.00
20	230	47-57	54	1 NO + 1 NC	13.53x7.97x6.38	WWSXL20-230	\$800.00	WWSXL20-230-120C	\$800.00
25	230	62-73	68	1 NO + 1 NC	13.53x7.97x6.38	WWSXL25-230	\$950.00	WWSXL25-230-120C	\$950.00
460 Volt - Three Phase									
1	480	1.4-2	2.1	1 NO	11x6.41x5.03	WWSXL1-480	\$275.00	WWSXL1-480-120C	\$275.00
1.5	480	2.2-3.2	3.4	1 NO	11x6.41x5.03	WWSXL1.5-480	\$275.00	WWSXL1.5-480-120C	\$275.00
2	480	3.5-5	4.8	1 NO	11x6.41x5.03	WWSXL2-480	\$275.00	WWSXL2-480-120C	\$275.00
3	480	5.5-8	7	1 NO	11x6.41x5.03	WWSXL3-480	\$275.00	WWSXL3-480-120C	\$275.00
5	480	7-10	9	1 NO	11x6.41x5.03	WWSXL5-480	\$290.00	WWSXL5-480-120C	\$290.00
7.5	480	9-12.5	12	1 NO	11x6.41x5.03	WWSXL7.5-480	\$290.00	WWSXL7.5-480-120C	\$290.00
10	480	11-16	16	1 NO	11x6.41x5.03	WWSXL10-480	\$320.00	WWSXL10-480-120C	\$320.00
15	480	20-25	25	1 NO + 1 NC	11x6.41x5.03	WWSXL15-480	\$320.00	WWSXL15-480-120C	\$320.00
20	480	23-28	32	1 NO + 1 NC	11x6.41x5.03	WWSXL20-480	\$425.00	WWSXL20-480-120C	\$425.00
25	480	34-40	38	1 NO + 1 NC	13.53x7.97x6.38	WWSXL25-480	\$550.00	WWSXL25-480-120C	\$550.00
30	480	36-45	40	1 NO + 1 NC	13.53x7.97x6.38	WWSXL30-480	\$650.00	WWSXL30-480-120C	\$650.00
40	480	47-57	50	1 NO + 1 NC	13.53x7.97x6.38	WWSXL40-480	\$850.00	WWSXL40-480-120C	\$850.00
50	480	54-65	65	1 NO + 1 NC	13.53x7.97x6.38	WWSXL50-480	\$1,000.00	WWSXL50-480-120C	\$1,000.00

WWSXL Series General Purpose Single Phase Motor Starters and Accessories

The WWSXL series 1 phase general purpose starters provide compact load control for application-specific use. These starters are available up to 10HP @ 230VAC.

Product Specifications

- NEMA 1 enclosure
- Knockouts for field kits
- Large enclosure for wire bends
- Field kits for local start / stop
- Field kits for Hand-Off-Auto operation
- 24 VAC and 208 VAC control coil available
- Reset pushbutton supplied standard
- UL Listed



HP Rating	Main Voltage	Overload Current Setting	Motor FLA	Auxiliary Contacts	Dimensions (Inches) H x W x D	With Main Voltage Coil		With 120 Volt Coil	
						Model Number	List Price	Model Number	List Price
230 Volt - Single Phase									
0.5	230	4.5-6.3	4.9	1 NO	11x6.41x5.03	WWSXL0.5-2301P	\$275.00	WWSXL0.5-2301P-120C	\$275.00
0.75	230	5.5-8	6.9	1 NO	11x6.41x5.03	WWSXL0.75-2301P	\$275.00	WWSXL0.75-2301P-120C	\$275.00
1	230	7-10	8	1 NO	11x6.41x5.03	WWSXL1-2301P	\$275.00	WWSXL1-2301P-120C	\$275.00
1.5	230	9-12.5	10	1 NO	11x6.41x5.03	WWSXL1.5-2301P	\$275.00	WWSXL1.5-2301P-120C	\$275.00
2	230	11-16	12	1 NO	11x6.41x5.03	WWSXL2-2301P	\$275.00	WWSXL2-2301P-120C	\$275.00
3	230	14-20	17	1 NO + 1 NC	11x6.41x5.03	WWSXL3-2301P	\$300.00	WWSXL3-2301P-120C	\$300.00
5	230	27-32	28	1 NO + 1 NC	11x6.41x5.03	WWSXL5-2301P	\$400.00	WWSXL5-2301P-120C	\$400.00
7.5	230	36-45	40	1 NO + 1 NC	13.53x7.97x6.38	WWSXL7.5-2301P	\$650.00	WWSXL7.5-2301P-120C	\$650.00
10	230	47-57	50	1 NO + 1 NC	13.53x7.97x6.38	WWSXL10-2301P	\$700.00	WWSXL10-2301P-120C	\$700.00

WWSXL Series General Purpose Motor Starter Accessories, Kits and Parts

Description	Model Number	List Price
Start/Stop Pushbutton Kit	49SDPB5	\$114.59
Hand-Off-Auto Switch Kit	49SDSBJ	\$114.59
Replacement Reset Button	49MBRS	\$53.00
AUX 1 NO, 1 NC	3RH2911-1DA11	\$86.99



Replacement Coils for WWSXL Starters

Main Voltage		Coil	List Price
230	480		
1HP - 5HP	1HP - 10HP	No Replacement Coil -Purchase Contactor from page 48	—
7.5 - 10HP	15 - 25HP	3RT2926-5A**1	\$183.50
15 - 25HP	30 - 50HP	3RT2934-5A**1	\$301.10

Coil Table **	
60 Hz Voltage	Letter
24	C2
120	K6
240	P6
480	V6
600	T6

Replace the (**) with the code from the coil table.

Section 5: General Purpose Controls

SIEMENS Class 14 NEMA Rated Motor Starters with ESP200 Solid State Overload Relay

SIEMENS Across The Line Motor Starters are available in NEMA Sizes 00 through 5. In addition to the usual NEMA Starter Sizes, SIEMENS offers three exclusive Half Sizes: 1 3/4, 2 1/2 and 3 1/2. These integral sizes offer the same rugged, industrial construction as our NEMA Sizes and ensure efficient operating performance.

Product Specifications

- Open, NEMA 1, NEMA 12 Enclosures
- Door mounted reset PB standard
- Knockouts for field kits
- Control terminals for field ease
- Large enclosure for wire bends
- Field kits for local start / stop
- Field kits for Hand-Off-Auto operation
- Reset pushbutton supplied standard
- N.O. holding contact



14CUD32A*
Open



14EUE32B*
NEMA 1

HP				NEMA Size	Overload Amp Range	Enclosure					
						Open		NEMA 1		NEMA 12 / 3R	
200V	230V	460V	575V			Model Number	List Price	Model Number	List Price	Model Number	List Price
1⁄6	1⁄6	1⁄3	1⁄2	00	0.25-1	14BUA32A*	\$775.69	14BUA32B*	\$794.88	Use Size 0	---
1⁄2	3⁄4	1 1⁄2	2	00	0.75-3.4	14BUB32A*	\$775.69	14BUB32B*	\$794.88	Use Size 0	---
1 1⁄2	1 1⁄2	2	—	00	3-12	14BUC32A*	\$775.69	14BUC32B*	\$794.88	Use Size 0	---
1⁄6	1⁄6	1⁄3	1⁄2	0	0.25-1	14CUA32A*	\$903.12	14CUA32B*	\$952.65	14CUA320*	\$1,239.48
1⁄2	3⁄4	1 1⁄2	2	0	0.75-3.4	14CUB32A*	\$903.12	14CUB32B*	\$952.65	14CUB320*	\$1,239.48
2	2	5	5	0	3-12	14CUC32A*	\$903.12	14CUC32B*	\$952.65	14CUC320*	\$1,239.48
3	3	—	—	0	5.5-22	14CUD32A*	\$903.12	14CUD32B*	\$952.65	14CUD320*	\$1,239.48
1⁄6	1⁄6	1⁄3	1⁄2	1	0.25-1	14DUA32A*	\$1,020.76	14DUA32B*	\$1,075.58	14DUA320*	\$1,358.27
1⁄2	3⁄4	1 1⁄2	2	1	0.75-3.4	14DUB32A*	\$1,020.76	14DUB32B*	\$1,075.58	14DUB320*	\$1,358.27
2	2	5	5	1	3-12	14DUC32A*	\$1,020.76	14DUC32B*	\$1,075.58	14DUC320*	\$1,358.27
3	3	10	10	1	5.5-22	14DUD32A*	\$1,020.76	14DUD32B*	\$1,075.58	14DUD320*	\$1,358.27
7 1⁄2	7 1⁄2	—	—	1	10-40	14DUE32A*	\$1,020.76	14DUE32B*	\$1,075.58	14DUE320*	\$1,358.27
10	10	15	15	1 3⁄4	10-40	14EUE32A*	\$1,385.36	14EUE32B*	\$1,425.92	14EUE320*	\$1,710.70
10	15	25	25	2	13-52	14FUF32A*	\$1,770.84	14FUF32B*	\$2,018.02	14FUF320*	\$2,530.21
15	20	30	30	2 1⁄2	25-100	14GUG32A*	\$2,306.93	14GUG32B*	\$2,651.03	14GUG320*	\$3,214.44
25	30	50	50	3	25-100	14HUG32A*	\$2,825.08	14HUG32B*	\$3,286.17	14HUG320*	\$3,898.74
30	40	75	75	3 1⁄2	50-200	14IUH32A*	\$5,321.05	14IUH32B*	\$5,141.00	14IUH320*	\$8,367.03
40	50	100	100	4	50-200	14JUH32A*	\$6,016.49	14JUH32B*	\$7,285.28	14JUH320*	\$9,301.18
75	100	200	200	5	55-250	14LPU32A*	\$14,635.21	14LPU32B*	\$18,170.82	14LPU320*	\$23,686.52

Coil Table *	
60 Hz Voltage	Letter
24 Separate Control	J
120 Separate Control	F
110-120/220-240	A
200-208	D
220-240	G
277	L
220-240/440-480	C
440-480	H
550-600	E

Replace the (*) with the code from the coil table.

Additional Product Notes

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Section 5: General Purpose Controls

SIEMENS 3RE48 NEMA Rated Pump Controller

Pump controllers monitor flow and/or level variables and control a pump accordingly to maintain the desired levels. Pump control can include simply turning a pump on and off or more advanced controls for pump speed, output pressure, etc. Installation is easy. Panels are factory wired to provide flexible control and protect against short circuits and overloads. Ample space is provided for field modifications and installation of accessories.

Product Specifications

- NEMA starter sizes 1 – 4
- Fusible disconnect and motor circuit protector
- cULus certified
- UL Listed as Service entrance equipment (US only)
- High fault interrupting ratings up to 100kA at 600V
- UL Listed for 40 deg C max. ambient temperature



Max HP Rating				Solid State Overload					
200 Volts	230 Volts	460 Volts	575 Volts	NEMA Size	Overload Relay Amp Range	Disc. Amp Rating	Fuse Clip Amp/Volts	Model Number	List Price
Fusible Disconnect									
—	—	1	1	1	0.75-3.4	30	30A / 600V	3RE4801-0GH*6-4BA0	\$2,125.30
—	—	5	5	1	3-12	30	30A / 600V	3RE4801-0GH*6-4CA0	\$2,125.30
—	—	10	10	1	5.5-22	30	30A / 600V	3RE4801-0GH*6-4DA0	\$2,125.30
—	—	10	10	1	5.5-22	60	60A / 600V	3RE4801-0GK*6-4DA0	\$2,157.10
—	—	25	25	2	13-52	60	60A / 600V	3RE4802-0GK*6-4FA0	\$2,866.24
—	—	25	25	2	13-52	100	100A / 600V	3RE4802-0GM*6-4FA0	\$3,045.38
—	—	50	50	3	25-100	100	100A / 600V	3RE4803-0GM*6-4GA0	\$4,110.68
—	—	50	50	3	25-100	200	200A / 600V	3RE4803-0GP*6-4GA0	\$5,358.30
—	—	100	100	4	50-200	200	200A / 600V	3RE4804-0GP*6-4HA0	\$6,241.28
2	2	—	—	1	3-12	30	30A / 250V	3RE4801-0GG*6-4CA0	\$2,094.56
3	3	—	—	1	5.5-22	30	30A / 250V	3RE4801-0GG*6-4DA0	\$2,094.56
7.5	7.5	—	—	1	10-40	30	30A / 250V	3RE4801-0GG*6-4EA0	\$2,094.56
7.5	7.5	—	—	1	10-40	60	60A / 250V	3RE4801-0GJ*6-4EA0	\$2,125.30
10	15	—	—	2	13-52	60	60A / 250V	3RE4802-0GJ*6-4FA0	\$2,816.42
10	15	—	—	2	13-52	100	100A / 250V	3RE4802-0GL*6-4FA0	\$3,014.64
20	30	—	—	3	25-100	100	100A / 250V	3RE4803-0GL*6 - 4GA0	\$3,997.26
25	30	—	—	3	25-100	200	200A / 250V	3RE4803-0GN*6-4GA0	\$5,266.08
45	50	—	—	4	50-200	200	200A / 250V	3RE4804-0GN*6-4HA0	\$6,178.74

Max HP Rating				Solid State Overload				
200 Volts	230 Volts	460 Volts	575 Volts	NEMA Size	Overload Relay Amp Range	MCP Amp Rating	Model Number	List Price
Motor Circuit Protector								
0.5	0.5	1	1	1	0.75-3.4	3	3RE4811-0GG*6-4BA0	\$2,674.38
2	2	5	5	1	3-12	10	3RE4811-0GH*6-4CA0	\$2,674.38
3	3	10	10	1	5.5-22	25	3RE4811-0GJ*6-4DA0	\$2,674.38
7.5	7.5	10	—	1	10-40	30	3RE4811-0GK*6-4EA0	\$2,674.38
10	15	25	25	2	13-52	50	3RE4812-0GM*6-4FA0	\$3,315.68
25	25	50	50	3	25-100	100	3RE4813-0GN*6-4GA0	\$4,360.84
40	50	100	100	4	50-200	150	3RE4814-0GQ*6-4HA0	\$7,564.16

Coil Table *	
Nominal Voltage	Code
110/120 VAC 50/60 Hz	3
208 VAC 50/60 Hz	4
220/240 VAC 50/60 Hz	5
480 VAC 60 Hz	7
600 VAC 60 Hz	8

Notes:
208 - 600V coils will be wired for incoming voltage.
120V coils will be wired as separate source or control transformer secondary (if ordered).

Replace the (*) with the code from the coil table.

Additional Product Notes

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

SIEMENS Class 18 NEMA Rated Combination Starter, MCP Type with Solid State Overload Relay

Pre-wired combination starters eliminate the cost of wiring between separate disconnect and starter. Factory testing assures field performance. Combination starters also provide a more compact and attractive installation than separate units.

Product Specifications

- SIEMENS type ETI breaker
- Short circuit protection
- Industrial type disconnect handle
- Wide range of enclosure types available
- Solid state ESP200 overload relay
- Flexibility with field modifications
- Easy to install
- Fusible disconnect available - consult factory
- UL Listed and CSA Certified



HP				NEMA Size	Breaker Size	Overload Amp Range	Frame Size	Enclosure			
								NEMA 1		NEMA 12 NEMA 3/3R	
200 Volts	230 Volts	460 Volts	575 Volts					Model Number	List Price	Model Number	List Price
½	½	1	1	0	3	0.75-3.4	A	18CUB92B*	\$2,551.88	18CUB92N*	\$3,015.99
2	2	5	5	0	10	3-12	A1	18CUC92B*	\$2,551.88	18CUC92N*	\$3,015.99
3	3	—	—	0	25	5.5-22	A1	18CUD92B*	\$2,551.88	18CUD92N*	\$3,015.99
½	½	1	1	1	3	0.75-3.4	A	18DUB92B*	\$2,648.05	18DUB92N*	\$3,113.88
2	2	5	5	1	10	3-12	A1	18DUC92B*	\$2,648.05	18DUC92N*	\$3,113.88
3	3	7 ½	10	1	25	5.5-22	A1	18DUD92B*	\$2,648.05	18DUD92N*	\$3,113.88
7 ½	7 ½	10	—	1	30	10-40	A1	18DUE92B*	\$2,648.05	18DUE92N*	\$3,113.88
—	—	15	15	1.75	40	10-40	A1	18EUE92B*	\$2,936.67	18EUE92N*	\$3,404.17
10	15	25	25	2	50	13-52	B	18FUF92B*	\$3,716.40	18FUF92N*	\$4,374.62
15	20	30	30	2.5	100	25-100	B	18GUG92B*	\$4,931.58	18GUG92N*	\$5,788.94
25	30	50	50	3	100	25-100	B	18HUG92B*	\$5,360.25	18HUG92N*	\$6,209.20
30	40	75	75	3.5	125	50-200	B	18IUH92B*	\$10,882.53	18IUH92N*	\$13,245.36
40	50	100	100	4	150	50-200	B	18JUH92B*	\$11,657.19	18JUH92N*	\$14,020.04
50	75	150	200	5	250	55-250	—	18LPT92B*	\$26,919.42	18LPT92N*	\$31,177.58
75	100	200	—	5	400	55-250	—	18LPU92B*	\$26,919.42	18LPU92N*	\$31,177.58

Coil Table *	
60 Hz Voltage	Letter
24 Separate Control	J
120 Separate Control	F
110-120/220-240	A
200-208	D
220-240	G
277	L
220-240/440-480	C
440-480	H
550-600	E

Additional Product Notes

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

SIEMENS Class 18 NEMA Rated Combination Starter, MCP Type with Solid State Overload Relay

Pre-wired combination starters eliminate the cost of wiring between separate disconnect and starter. Factory testing assures field performance. Combination starters also provide a more compact and attractive installation than separate units.

Product Specifications

- SIEMENS type ETI breaker
 - Short circuit protection
- Industrial type disconnect handle
- Wide range of enclosure types available
- Solid state ESP200 overload relay
- Flexibility with field modifications
- Easy to install
- Fusible disconnect available - consult factory
- UL Listed and CSA Certified



HP				NEMA Size	Breaker Size	Overload Amp Range	Frame Size	Enclosure			
								NEMA 4/4X 304 Stainless Steel		NEMA 4X Fiberglass	
200 Volts	230 Volts	460 Volts	575 Volts					Model Number	List Price	Model Number	List Price
1/2	1/2	1	1	0	3	0.75-3.4	A	18CUB92W*	\$4,411.75	18CUB92F*	\$4,855.62
2	2	5	5	0	10	3-12	A1	18CUC92W*	\$4,411.75	18CUC92F*	\$4,855.62
3	3	—	—	0	25	5.5-22	A1	18CUD92W*	\$4,411.75	18CUD92F*	\$4,855.62
1/2	1/2	1	1	1	3	0.75-3.4	A	18DUB92W*	\$4,506.25	18DUB92F*	\$4,960.26
2	2	5	5	1	10	3-12	A1	18DUC92W*	\$4,506.25	18DUC92F*	\$4,960.26
3	3	7 1/2	10	1	25	5.5-22	A1	18DUD92W*	\$4,506.25	18DUD92F*	\$4,960.26
7 1/2	7 1/2	10	—	1	30	10-40	A1	18DUE92W*	\$4,506.25	18DUE92F*	\$4,960.26
—	—	15	15	1.75	40	10-40	A1	18EUE92W*	\$4,801.63	18EUE92F*	\$5,277.56
10	15	25	25	2	50	13-52	B	18FUF92W*	\$6,580.49	18FUF92F*	\$7,242.09
15	20	30	30	2.5	100	25-100	B	18GUG92W*	\$9,934.02	18GUG92F*	\$10,923.02
25	30	50	50	3	100	25-100	B	18HUG92W*	\$10,359.34	18HUG92F*	\$11,393.92
30	40	75	75	3.5	125	50-200	B	18IUH92W*	\$17,275.68	18IUH92F*	\$19,002.24
40	50	100	100	4	150	50-200	B	18JUH92W*	\$18,050.36	18JUH92F*	\$19,854.55
50	75	150	200	5	250	55-250	—	18LPT92E*	\$43,231.41	—	—
75	100	200	—	5	400	55-250	—	18LPU92E*	\$44,559.64	—	—

Coil Table *	
60 Hz Voltage	Letter
24 Separate Control	J
120 Separate Control	F
110-120/220-240	A
200-208	D
220-240	G
277	L
220-240/440-480	C
440-480	H
550-600	E

Additional Product Notes

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Section 5: General Purpose Controls

SIEMENS ESP200 Solid State Electronic Overload Relays

Self-powered ESP200 overload relays provide accuracy unmatched in the market. With repeat accuracy of greater than 99%, trips can be set to the most specific conditions, resulting in both longer motor life and cost savings. The ESP200 overload relay is so simple to configure. No software or manuals are required.

Product Specifications

- Selectable Trip Classes: 5, 10, 20 and 30
- Manual, automatic, and remote reset
- Phase loss protection - trips in less than 3 seconds
- Phase unbalance protection - trips based on trip class selected (minimize temperature rise of the motor on an asymmetrical three-phase system)
- Thermal memory (prevents restarting the motor when it is hot)
- Ground fault protection - trips 60% of motor current
- Ambient insensitive (prevents nuisance tripping)
- FLA dial with wide range - 4:1 ratio
- One NO and one NC contacts standard
- Self protected in short circuit condition
- Visible trip indicator
- Touch-safe terminals
- Removable terminals



Full Load Amp Range	Frame Size	New Model Number	Old Model Number	List Price
Three-Phase				
0.25-1	A	3UB81134AB2	48ATA3S00	\$388.63
0.75-3.4	A	3UB81134BB2	48ATB3S00	\$394.56
3-12	A1	3UB81234CW2	48ATC3S00	\$394.56
5.5-22	A1	3UB81234DW2	48ATD3S00	\$394.56
10-40	A1	3UB81234EW2	48ATE3S00	\$394.56
13-52	B	3UB81334FW2	48BTF3S00	\$560.26
25-100	B	3UB81334GW2	48BTG3S00	\$652.98
50-200	B	3UB81334HW2	48BTH3S00	\$885.78
100-300	A1 ⁽¹⁾	3UB81234JW2	48ATJ3S00	\$461.64
133-400	A1 ⁽²⁾	3UB81234KW2	48ATK3S00	\$461.64
200-600	A1 ⁽³⁾	3UB81234LW2	48ATL3S00	\$461.64
250-750	A1 ⁽⁴⁾	3UB81234MW2	48ATM3S00	\$461.64
400-1220	A1 ⁽⁵⁾	3UB81234NW2	48ATN3S00	\$461.64

Current Transformers

Current Ratio	New Model Number	Old Model Number	List Price	Dimensions (Inches)
1 per phase with 24" leads				
300:5	2RL301	97CT005	\$322.92	1.05 Window x 2.46 OD x 1.05 W
400:5	5RL401	97CT006	\$322.92	1.56 Window x 3.58 OD x 1.10 W
600:5	5RL601	97CT008	\$322.92	1.56 Window x 3.58 OD x 1.10 W
750:5	5RL751	97CT009	\$322.92	1.56 Window x 3.58 OD x 1.10 W
1200:5	5RL122	97CT012	\$322.92	1.56 Window x 3.58 OD x 1.10 W



Additional Product Notes

Frame Size A, direct couples to contactor with terminal connections
 Frame Size A1 up to 40A and B, direct couples to contactor with feed-through openings
 Frame Size A1 above 100A, stand alone with feed-through openings

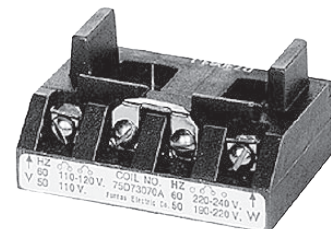
- (1) Requires use of 300:5 current transformers - (3) 2RL301
- (2) Requires use of 400:5 current transformers - (3) 5RL401
- (3) Requires use of 600:5 current transformers - (3) 5RL601
- (4) Requires use of 750:5 current transformers - (3) 5RL751
- (5) Requires use of 1200:5 current transformers - (3) 5RL122

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

SIEMENS Replacement Coils for NEMA Starters

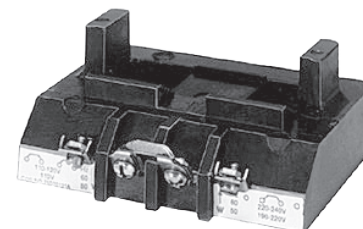
Size 00 - 2.5, 3, 3.5 Replacement

Size	Volts		Model Number	List Price
	60 Hz	50 Hz		
00 - 2.5	24	24	75D73070J	\$303.31
	120	110	75D73070F	\$303.31
	110-120 / 220-240	110 / 190-200	75D73070A	\$303.31
	208	—	75D73070D	\$303.31
	220-240	190-220	75D73070G	\$303.31
	277	240	75D73070L	\$514.28
	220-240 / 440-480	190-220 / 380-440	75D73070C	\$303.31
	440-480	380-440	75D73070H	\$303.31
	575-600	550	75D73070E	\$383.74
3, 3.5	24	24	75D73251J	\$560.43
	120	110	75D73251F	\$560.43
	110-120 / 220-240	110 / 190-200	75D73251A	\$560.43
	208	—	75D73251D	\$560.43
	220-240	190-220	75D73251G	\$560.43
	277	240	75D73251L	\$560.43
	220-240 / 440-480	190-220 / 380-440	75D73251C	\$560.43
	440-480	380-440	75D73251H	\$560.43
	575-600	550	75D73251E	\$560.43



Size 4 Replacement Coils

Size	Volts		Model Number	List Price
	60 Hz	50 Hz		
4	24	24	75D70131J	\$779.91
	120	110	75D70131F	\$779.91
	110-120 / 220-240	110 / 190-200	75D70131A	\$779.91
	208	—	75D70131D	\$986.70
	220-240	190-220	75D70131G	\$986.70
	277	240	75D70131L	\$779.91
	220-240 / 440-480	190-220 / 380-440	75D70131C	\$779.91
	440-480	380-440	75D70131H	\$1,007.84
	575-600	550	75D70131E	\$779.91



Size 5, 6 Replacement Coils

Size	Volts		Model Number	List Price
	60 Hz	50 Hz		
5	23-26	23-26	3RT1965-5AB31	\$640.82
	110-127	110-127	3RT1965-5AF31	\$820.47
	200-220	200-220	3RT1965-5AM31	\$640.82
	220-240	220-240	3RT1965-5AP31	\$640.82
	240-277	240-277	3RT1965-5AU31	\$640.82
	380-420	380-420	3RT1965-5AV31	\$640.82
	440-480	440-480	3RT1965-5AR31	\$654.62
	575-600	575-600	3RT1965-5AT31	\$640.82
6	23-26	23-26	3RT1975-5AB31	\$827.26
	110-127	110-127	3RT1975-5AF31	\$827.26
	200-220	200-220	3RT1975-5AM31	\$827.26
	220-240	200-240	3RT1975-5AP31	\$827.26
	240-277	240-277	3RT1975-5AU31	\$827.26
	380-420	380-420	3RT1975-5AV31	\$827.26
	440-480	440-480	3RT1975-5AR31	\$842.10
	575-600	575-600	3RT1975-5AT31	\$827.26



Additional Product Notes

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Field Modification Kits for NEMA Starters



Push Buttons and Selector Switches					
Class	Enclosure	Size	Description	Model Number	List Price
14	1	00-4 (20-100A)	Start, Stop Push Buttons	49SDPB5	\$114.59
			Hand-Off-Auto Selector Switch	49SDSB1	\$114.59
			Off-On Selector Switch	49SDSB4	\$114.59
		5-8 (200-400A)	Start, Stop Push Buttons	49SAP05	\$119.30
			Hand-Off-Auto Selector Switch	49SAS01	\$109.13
			Keyed Hand-Off-Auto (key removable in all positions)	49SAS09	\$207.97
			Off-On Selector Switch	49SAS04	\$109.13
			Start, Stop Push Buttons	49SAP05	\$119.30
	12, 4/4X	00-8 (20-400A)	Hand-Off-Auto Selector Switch	49SAS01	\$109.13
			Keyed Hand-Off-Auto (key removable in all positions)	49SAS09	\$207.97
			Off-On Selector Switch	49SAS04	\$109.13



Starter / Contactor Auxiliary Contact Kits				
Class	Size	Description	Model Number	List Price
14, 17, 18, 87	00-4	1 NO	49AB10	\$136.48
		1 NC	49AB01	\$136.48
		1 NC Early Break	49AB01EB	\$136.48
		1 NC Late Break	49AB01LB	\$136.48
		1 NC Extra Late Break	49AB01XLB	\$136.48
		1 NO Extra Late Make	49AB10XLM	\$136.48
		1 NO & 1 NC	49AB11	\$266.80
		2 NO	49AB20	\$266.80
		4 NO	49AB40	\$528.68
		3 NO & 1 NC	49AB31	\$528.68
		2 NO & 2 NC	49AB22	\$528.68
3RE48	1-3	1 NO & 1 NC Laterally Mounted	3RH2921-1DA11	\$94.66
	4		3RH1921-1JA11	\$128.42
	1-3	2 NO Laterally Mounted	3RH2921-1 DA20	\$94.66
	4		---	---
	1-3	2 NC Laterally Mounted	3RH2921-1DA02	\$94.66
	4		---	---
14, 17, 18, 87	5-6	2 NO	3RH1921-1EA20	\$128.42
		1 NO & 1 NC	3RH1921-1DA11	\$128.42
		2 NC	3RH1921-1EA02	\$128.42
14, 17, 18	7-8	1 NO & 1 NC (Inside L or R)	49CAL18-11	\$89.36

Pilot Lights							
Class	Enclosure	Size	Lens Color (Lamp Type)	Legend(s)	Voltage	Model Number	List Price
14	1 (w/ lift-off cover)	00-4 (20-100A)	Red, Green, Amber (LED Lamp)	ON, RUN, OFF ^① , OLR, TRIPPED	24 to 240V AC/DC	49SDLBU	\$228.43
3RE48 14 17	1 (w/ hinged cover) 3/3R, 4, 4X, 12	00-8 (20-400A)	Red (Transformer Type Incandescent Lamp) ^②	ON	(Refer to voltage table)	49SPL0BR*	\$204.37
				OFF ^②	(Refer to voltage table)	49SPL0AR*	\$311.64
			Green (Transformer Type Incandescent Lamp)	ON	(Refer to voltage table)	49SPL0BG*	\$224.77
				OFF ^②	(Refer to voltage table)	49SPL0AG*	\$284.61
3RE48 87	3/3R	1-6	Red (LED Lamp)	ON	24 to 240V AC/DC	49SFL0BRU	\$188.31
				OFF ^①		49SFL0ARU	\$188.31
			Green (LED Lamp)	ON		49SFL0BGU	\$188.31
				OFF ^①		49SFL0AGU	\$188.31

Voltage Table *	
Voltage	Letter (*)
24 VAC (Full Voltage)	J
120 VAC	F
240 VAC	G
480 VAC	H
600 VAC	E

^① To use as an OFF indicator, the contactor must have a normally closed (NC) auxiliary contact available for the circuit. Order separately as needed.

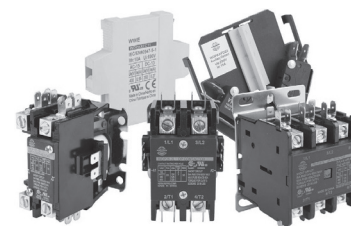
^② Includes a normally closed (NC) auxiliary contact for NEMA controller sizes 0-4.

WDP Series Definite Purpose AC Contactors

The WDP series Definite Purpose Contactors provide compact load control for application-specific use. These contactors are available 2,3 and 4 pole configurations.

Product Specifications

- Rated current from 25-60A
- 1-, 2-, and 3-pole configurations at 25A, 30A, and 40A
- 3-pole configurations at 50A and 60A
- Enclosed coil standard for all 3-pole frame sizes
- Open coil standard for all 1- and 2-pole frame sizes
- Industry standard mounting plate provides easily accessible mounting holes
- Connection terminal box lug connections each with quick connect/disconnect terminals
- Coil is class B 266°F (130°C) insulation system with a wide range of voltages and 50/60 Hz ratings
- Temperature range -40 to 158 °F (-40 to 70 °C)
- UL 508 Recognized, File No. E330834
- CSA file No. 266851



Horsepower (HP)					Resistive Loads @ 600VAC (A)	Locked Rotor Amps (A)			FLA (A) 600VAC Max ⁽¹⁾	Poles	Coil Voltage (VAC)	Model Number	List Price			
Single Phase		Three Phase				240/ 277V	480V	600V								
120V	240/277V	240/277V	480V	600V												
1	2	-	-	-	35	150	125	100	25	1NO+Shunt	120	WDP25-1L-120	\$22.69			
									25		230	WDP25-1L-230	\$22.69			
2	3								25	2NO	120	WDP25-2L-120	\$26.26			
									25		230	WDP25-2L-230	\$26.26			
2	5								10	15	20	25	3NO	120	WDP25-3L-120	\$49.15
												25		230	WDP25-3L-230	\$49.15
1	2	-	-	-	40	200	150	120	30	1NO+Shunt	120	WDP30-1L-120	\$24.08			
									30		230	WDP30-1L-230	\$24.08			
									30	2NO	24	WDP30-1L-24	\$24.08			
2	3								30		120	WDP30-2L-120	\$28.92			
									30		230	WDP30-2L-230	\$28.92			
									30		24	WDP30-2L-24	\$28.92			
2	5	10	15	20	30	3NO	120	WDP30-3L-120	\$51.95							
					30		230	WDP30-3L-230	\$51.95							
					30		24	WDP30-3L-24	\$51.95							
					30		480	WDP30-3L-480	\$51.95							
2	3	-	-	-	50	240	200	160	40	1NO+Shunt	120	WDP40-1L-120	\$25.81			
									40		230	WDP40-1L-230	\$25.81			
									40	2NO	120	WDP40-2L-120	\$38.55			
									40		230	WDP40-2L-230	\$38.55			
3	7.5								10	20	25	40	3NO	120	WDP40-3L-120	\$59.83
												40		230	WDP40-3L-230	\$59.83
					40	24	WDP40-3L-24	\$59.83								
					40	480	WDP40-3L-480	\$59.83								
7.5	10	15	25	25	65	300	250	200	50	3NO	120	WDP50-3L-120	\$89.40			
									50		230	WDP50-3L-230	\$89.40			
									50		24	WDP50-3L-24	\$89.40			
7.5	10	25	30	30	75	360	300	240	60		120	WDP60-3L-120	\$159.17			
									60		230	WDP60-3L-230	\$159.17			
									60		24	WDP60-3L-24	\$159.17			

WDP Series DP Contactors Auxiliary Contacts Specifications & Selection

Current Ratings												For Use With	Mounting	Contact Arrangement	Wiring	Model Number	List Price	
Break (A)				Make (A)				Continuous (A)	120 VAC on Lamp Load (A)	125 VDC (A)	250 VDC (A)							125 or 250 VAC
120VAC	240VAC	480VAC	600VAC	120VAC	240VAC	480VAC	600VAC	120-600										
3	1.5	0.75	0.6	30	15	7.5	6	5	4	1/2	1/4	10A, 1/3HP	WDP25-60 (3 Pole Only)	Side mounted ⁽²⁾	1NO + 1NC	#6-32 screw terminal, wire range #14-22 AWG	WDPAXFC11	\$39.88
														1NO + 1NC	0.250 Quick Connection	WDPAXFC11Q	\$39.88	
												15A, 1/3HP	WDP25-40 (3 Pole Only)	One switch per side	1NO + 1NC	0.250 Quick Connection	WDPAXFD11	\$39.88
														Two switches per side	2NO + 2NC	0.250 Quick Connection	WDPAXFD22	\$49.84

Additional Product Notes

(1) Full load amperage applies at 240/277, 480, and 600V

(2) Maximum of two may be mounted per contactor

UL file #E330834, Standard UL 60947-1

SIEMENS IEC Contactors

SIRIUS has long been synonymous world-wide for industrial controls and was a trendsetter in this field from the very beginning. The SIRIUS modular system with its components for the switching, starting, protection and monitoring of motors and industrial systems stands for the fast, flexible and space-saving construction of control cabinets.

Product Specifications

- Four point AC coil can be wired on top, bottom or diagonally
- Direct mount 3RU21 overload relays to create starters
- Contactors are available with cage clamps on both main and auxiliary terminal connections
- Screw terminal type connection
- Easy access plug-in AC/DC coil system
- Integrated varistor surge suppressor
- Snap-on auxiliary contacts, surge suppressors and timers
- Front and side mounted auxiliary contacts



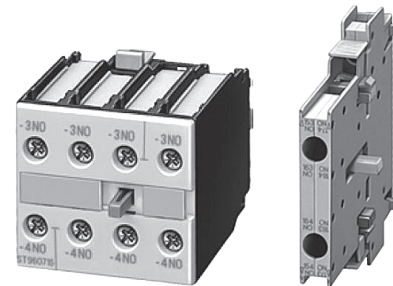
Enclosed Amp Ratings		Single-Phase HP Ratings			Three-Phase HP Ratings				Auxiliary Contacts		Replace "***" in model number Model Code at bottom of this table	
AC3	AC1	115 V	208 V	230 V	208 V	230 V	460 V	575 V	NO	NC	Model Number	List Price
IEC Contactors - Frame Size S00												
7	18	1/4	1/2	3/4	1.5	2	3	5	1	0	3RT2015-1A**1	\$194.09
									0	1	3RT2015-1A**2	\$194.09
9	22	1/3	1	1	2	3	5	7.5	1	0	3RT2016-1A**1	\$208.26
									0	1	3RT2016-1A**2	\$208.26
12	22	1/2	1.5	2	3	3	7.5	10	1	0	3RT2017-1A**1	\$256.11
									0	1	3RT2017-1A**2	\$256.11
16	22	1	2	2	3	5	10	10	1	0	3RT2018-1A**1	\$325.54
									0	1	3RT2018-1A**2	\$325.54
IEC Contactors - Frame Size S0												
9	40	1	1	1	2	3	5	7.5	1	1	3RT2023-1A**0	\$202.07
12	40	1	2	2	3	3	7.5	10	1	1	3RT2024-1A**0	\$238.90
16	40	1	2	3	5	5	10	15	1	1	3RT2025-1A**0	\$316.88
25	40	2	3	3	7.5	7.5	15	20	1	1	3RT2026-1A**0	\$421.41
32	50	2	5	5	10	10	20	25	1	1	3RT2027-1A**0	\$612.10
38	50	3	5	5	10	10	25	25	1	1	3RT2028-1A**0	\$682.50
IEC Contactors - Frame Size S2												
40	60	3	5	7.5	10	15	30	40	1	1	3RT2035-1A**0	\$643.18
50	70	3	7.5	10	15	15	40	50	1	1	3RT2036-1A**0	\$696.79
65	80	5	10	10	20	20	50	50	1	1	3RT2037-1A**0	\$983.00
65	90	5	10	15	20	25	50	60	1	1	3RT2038-1A**0	\$1,114.80
IEC Contactors - Frame Size S3												
80	120	7.5	15	15	25	30	60	75	1	1	3RT2045-1A**0	\$1,854.25
95	120	10	15	20	30	30	75	100	1	1	3RT2046-1A**0	\$2,511.20
96	125	10	10	20	30	40	75	100	1	1	3RT2047-1A**0	\$2,693.44
AC Coil Table Frame Size S00-S3												
Coil Selection			Model Code			C2	K6	P6	U6	V6	T6	† For frame size S00, use code BO
			60 Hz Voltage			24	120	240	277	480	600	
			50 Hz Voltage			24	110	220	---	---	---	

Enclosed Amp Ratings		Single-Phase HP Ratings			Three-Phase HP Ratings				Auxiliary Contacts		Replace "***" in model number Model Code at bottom of this table	
AC3	AC1	115 V	208 V	230 V	208 V	230 V	460 V	575 V	NO	NC	Model Number	List Price
IEC Contactors - SIRIUS 3RT10: 3-Pole AC/DC Coil: Frame Size S6												
115	160	—	—	—	40	50	100	125	2	2	3RT1054-6A**6	\$1,680.44
150	185	—	—	—	50	60	125	150	2	2	3RT1055-6A**6	\$2,422.08
185	215	—	—	—	60	75	150	200	2	2	3RT1056-6A**6	\$3,226.58
IEC Contactors - SIRIUS 3RT10: 3-Pole AC/DC Coil: Frame Size S10												
225	275	—	—	—	75	75	150	200	2	2	3RT1064-6A**6	\$3,465.20
265	330	—	—	—	75	100	200	250	2	2	3RT1065-6A**6	\$3,862.46
300	330	—	—	—	100	125	250	300	2	2	3RT1066-6A**6	\$5,244.24
IEC Contactors - SIRIUS 3RT10: 3-Pole AC/DC Coil: Frame Size S12												
400	430	—	—	—	125	150	300	400	2	2	3RT1075-6A**6	\$6,233.09
500	610	—	—	—	150	200	400	500	2	2	3RT1076-6A**6	\$8,920.94
AC Coil Table Frame Size S6-S12 UC Conventional Coil												
Coil Selection		Model Code			B3	F3	M3	P3	U3	R3	S3	T3
		Volts AC/DC			23-26	110-127	200-220	220-240	240-277	440-480	500-550	575-600

SIEMENS IEC Contact Blocks, IEC Overload Relays, and Replacement Coils

Product Specifications

- Not compatible with previous generation 3RT1*** series contactors (Frame Size S00 - S0)
- Other auxiliary block combinations available



Frame Size	NO	NC	Model Number	List Price
Top Mount				
S00 - S3	2	2	3RH2911-1FA22	\$97.32
S6 - S12	2	2	3RH1921-1FA22	\$129.31
Side Mount				
S00	1	1	3RH2911-1DA11	\$86.99
S0 - S3	1	1	3RH2921-1DA11	\$94.66
S6 - S12	1	1	3RH1921-1DA11	\$128.42

SIEMENS IEC Thermal Overload Relays

SIRIUS overload relays with screw-type, spring-loaded or ring cable lug connections reliably protect loads as well as other switching and protective devices in the respective load feeder against overload, phase asymmetry and phase failure.

Product Specifications

- Thermal Class 10
- 1NO, 1NC contacts
- Manual / automatic reset
- Test function
- Direct mount



Contactor Frame Size	Setting Range Amp	Screw Terminal Model Number	List Price
Frame S00	0.11 - 0.16	3RU2116-0AB0	\$172.45
	0.14 - 0.2	3RU2116-0BB0	\$172.45
	0.18 - 0.25	3RU2116-0CB0	\$172.45
	0.22 - 0.32	3RU2116-0DB0	\$172.45
	0.28 - 0.4	3RU2116-0EB0	\$172.45
	0.35 - 0.5	3RU2116-0FB0	\$172.45
	0.45 - 0.63	3RU2116-0GB0	\$172.45
	0.55 - 0.8	3RU2116-0HB0	\$172.45
	0.7 - 1.0	3RU2116-0JB0	\$172.45
	0.9 - 1.25	3RU2116-0KB0	\$172.45
	1.1 - 1.6	3RU2116-1AB0	\$172.45
	1.4 - 2	3RU2116-1BB0	\$172.45
	1.8 - 2.5	3RU2116-1CB0	\$172.45
	2.2 - 3.2	3RU2116-1DB0	\$172.45
	2.8 - 4	3RU2116-1EB0	\$172.45
	3.5 - 5	3RU2116-1FB0	\$155.89
	4.5 - 6.3	3RU2116-1GB0	\$172.45
	5.5 - 8	3RU2116-1HB0	\$172.45
	7 - 10	3RU2116-1JB0	\$172.45
	9 - 12.5	3RU2116-1KB0	\$172.45
	11 - 16	3RU2116-4AB0	\$172.45

Contactor Frame Size	Setting Range Amp	Screw Terminal Model Number	List Price
Frame S0	1.8 - 2.5	3RU2126-1CB0	\$204.09
	2.2 - 3.2	3RU2126-1DB0	\$204.09
	2.8 - 4	3RU2126-1EB0	\$204.09
	3.5 - 5	3RU2126-1FB0	\$204.09
	4.5 - 6.3	3RU2126-1GB0	\$204.09
	5.5 - 8	3RU2126-1HB0	\$204.09
	7 - 10	3RU2126-1JB0	\$204.09
	9 - 12.5	3RU2126-1KB0	\$204.09
	11 - 16	3RU2126-4AB0	\$204.09
	14 - 20	3RU2126-4BB0	\$204.09
	17 - 22	3RU2126-4CB0	\$204.09
	20 - 25	3RU2126-4DB0	\$204.09
	23 - 28	3RU2126-4NB0	\$314.65
	27 - 32	3RU2126-4EB0	\$314.65
	30 - 36	3RU2126-4PB0	\$314.65
	34 - 40	3RU2126-4FB0	\$314.65

Contactor Frame Size	Setting Range Amp	Screw Terminal Model Number	List Price
Frame S2	22 - 32	3RU2136-4EB0	\$353.08
	28 - 40	3RU2136-4FB0	\$353.08
	36 - 45	3RU2136-4GB0	\$400.73
	40 - 50	3RU2136-4HB0	\$480.93
	47 - 57	3RU2136-4QB0	\$480.93
	54 - 65	3RU2136-4JB0	\$480.93
	62 - 73	3RU2136-4KB0	\$480.93
	70 - 80	3RU2136-4RB0	\$553.83
Frame S3	28 - 40	3RU2146-4FB0	\$770.33
	36 - 50	3RU2146-4HB0	\$833.45
	70 - 90	3RU2146-4LB0	\$997.57
	80 - 100	3RU2146-4MB0	\$1,294.38

Replacement Coils for 3RT Contactors

Size	Coil	List Price
S00	No Replacement Coil -Purchase Contactor	
S0	3RT2926-5A**1	\$183.50
S2	3RT2934-5A**1	\$301.10
S3	3RT2944-5A**1	\$373.24
S6 - S12	Consult Factory	

Coil Table *	
60 Hz Voltage	Letter
24 Separate Control	C2
120 Separate Control	K6
240	P6
480	V6
600	T6

Additional Product Notes

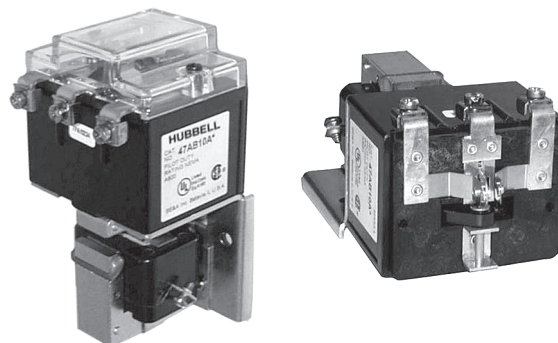
A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Replace the (*) with the code from the coil table.

HUBBELL Alternator Relays

Product Specifications

- » Single pole double throw heavy duty 10 amp silver cadmium oxide contacts enclosed in a transparent dust cover
- » The circuit is never closed or opened while current is conducted to prolong control life
- » No load transfer
- » Front wired
- » Industrial & rugged design



Volts 60 Hz	Open Type		NEMA 1 Enclosure	
	Model Number	List Price	Model Number	List Price
24	47AB10AJ	\$1,322.80	47AB10BJ	\$1,745.19
120	47AB10AF	\$1,322.80	47AB10BF	\$1,745.19
200	47AB10AD	\$1,322.80	47AB10BD	\$1,745.19
240	47AB10AG	\$1,322.80	47AB10BG	\$1,745.19
480	47AB10AH	\$1,322.80	47AB10BH	\$1,745.19

Electrical Ratings For Alternator Relays		
Volts	Make	Break
120	60	6
240	30	3
480	15	1.5

HUBBELL Drum Controllers

Product Specifications

- Start, stop and adjust the speed and/or rotating direction of reversible AC and DC motors
- Variety of handle styles are available as field modifications
- Magnetic chuck switches available
- NEMA 1 enclosure
- Easy terminal access
- Heavy duty contacts



Type / Purpose	Max. HP						Enclosure	
	Single-Phase AC			Three-Phase AC		DC	NEMA 1	
	120 Volts	240 Volts	480 Volts	240 Volts	480-600 Volts	120-240 Volts	Model Number	List Price
Reversing / Maintaining	1.5	2	—	2	2	1/4	58R44†	\$1,512.79

Additional Product Notes

- » OSHA regulations and local installation codes may require guarding of handles. Consult all requirements prior to selecting a drum switch or handle.
- » Guarded handles prevent unintentional operation.
- †Switch is shipped in a maintained configuration, customer adjustable to momentary.

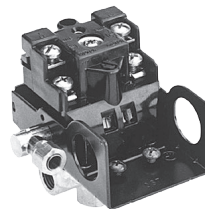
HUBBELL Pressure Switches

Cut-In (PSI)	Cut-Out (PSI)	Model Number	List Price
Pressure Switches - Air (69J Series)			
80	100	69JF6	\$77.00
80	100	69JF6L	\$84.67
80	100	69JF6LY	\$91.43
80	100	69JF6LY2C	\$103.73
80	100	69JF6Y	\$89.75
95	125	69JF7	\$77.00
95	125	69JF7L	\$84.67
95	125	69JF7LY	\$91.43
95	125	69JF7LY2A	\$97.04
95	125	69JF7LY2C	\$103.73
95	125	69JF7Y	\$89.75
95	125	69JF7Y2C	\$100.87
115	150	69JF8	\$77.00
115	150	69JF8LY	\$91.43
115	150	69JF8LY2C	\$103.73
115	150	69JF8Y	\$89.75
140	175	69JF9	\$77.00
140	175	69JF92C	\$82.45
140	175	69JF9LY	\$91.43
140	175	69JF9LY2C	\$103.73
140	175	69JF9Y	\$89.75
80	100	69JG6	\$87.85
80	100	69JG6L	\$95.53
80	100	69JG6LY	\$102.14
80	100	69JG6Y	\$98.97
95	125	69JG7	\$87.85
95	125	69JG7LY	\$102.14
95	125	69JG7LY2C	\$114.84
95	125	69JG7Y	\$98.97
115	150	69JG8	\$87.85
115	150	69JG8LY	\$102.14
115	150	69JG8LY2C	\$114.84
115	150	69JG8Y	\$98.97
140	175	69JG9	\$87.85
140	175	69JG9LY	\$102.14
140	175	69JG9LY2C	\$114.84
140	175	69JG9Y	\$98.97
140	175	69JG9Y2C	\$110.08
Heavy Duty Pressure Switches - Air (69H Series)			
115	150	69HA1	\$367.29
115	150	69HA12S	\$778.43
115	150	69HA1G	\$383.16
140	175	69HA1Z140-175	\$383.16
115	150	69HAU1	\$372.35
140	175	69HAU12AZ140-175	\$372.35
140	175	69HAU1Z140-175	\$372.35
100	125	69HAU2	\$372.35
30	40	69HA3	\$383.16
30	40	69HAU3	\$389.19
115	150	69HB1	\$389.19
115	150	69HBU1	\$393.31
100	125	69HB2	\$389.19
100	125	69HBU2	\$393.31
30	40	69HBU3	\$393.31

Cut-In (PSI)	Cut-Out (PSI)	Model Number	List Price
Spare Unloader Valves			
—	—	69DCA	\$33.56
—	—	69DJA	\$33.56
Pressure Switches - Water (69ES Series)			
30	50	69ES1	\$95.62
20	40	69ES1Z20-40	\$97.27
40	60	69ES1Z40-60	\$97.27
30	50	69ES2	\$106.47
30	50	69ES2B	\$109.55
Pressure Switches - Water (69W Series)			
30	50	69WA4	\$104.11
30	50	69WA4B	\$105.85
30	50	69WA4G	\$105.85
20	40	69WA4GZ20-40	\$115.99
40	60	69WA4GZ40-60	\$115.99
30	50	69WA4L	\$102.58
20	40	69WA4LZ20-40	\$117.64
20	40	69WA4Z20-40	\$105.92
40	60	69WA4Z40-60	\$122.68
3	7	69WB2	\$102.58
5	10	69WB3	\$127.69
30	50	69WB5	\$107.61
3	20	69WC7	\$117.64
20	40	69WEC	\$132.71
30	50	69WECZ30-50	\$162.86
20	40	69WFC	\$162.86
20	100	69WH6	\$112.63
7	3	69WR2	\$154.48
10	5	69WR3	\$154.48
50	30	69WR5	\$119.59
100	75	69WR6	\$119.59
125	95	69WR7	\$113.83

69J Series - Air, Standard Duty

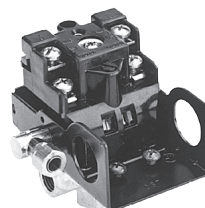
- 1/4" female NPT with pulsation orifice
- 69J rotatable unloader
- Additional options available, see suffix chart



Suffix	Description
L	Auto-off disconnect lever
Y	Unloader valve
2A	1/4" male NPT
2C	Four-port manifold (4 x 1/4" female)

69H Series - Air, Heavy Duty

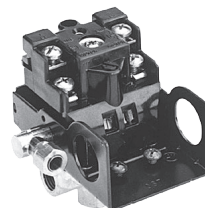
- 3/8" female NPT with pulsation orifice
- Additional options available, see suffix chart



Suffix	Description
U	Unloader valve
2A	1/4" male NPT
2S	1/4" female NPT

69ES Series - Water, 30-50 PSI

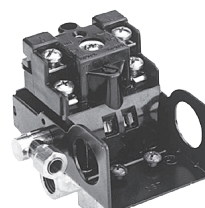
- 1/4" female NPT pipe fitting
- Additional options available, see suffix chart



Suffix	Description
B	Pulsation orifice

69W Series - Water, 30-50 PSI

- 1/4" female NPT pipe fitting
- Additional options available, see suffix chart



Suffix	Description
B	Pulsation orifice
L	Auto-off disconnect lever

WorldWide Electric Pressure Switches

Product Specifications

- UL and CSA Listed
- Single 1/4" Female NPT Port
- Normally Closed

		Standard Duty Single-phase ratings 120V: 1.5 HP/20A 240V: 2 HP/12A		Heavy Duty Single-phase ratings 120V: 2 HP/25A 240V: 3 HP/26A	
Factory Setting	Differential	Model Number	List Price	Model Number	List Price
1-Port Manifold					
80-100 PSI	20-35 PSI	WPAL80/100	\$39.71	WPAH80/100	\$42.47
95-125 PSI	30-40 PSI	WPAL95/125	\$39.71	WPAH95/125	\$42.47
115-150 PSI	35-55 PSI	WPAL115/150	\$39.71	WPAH115/150	\$42.47
140-175 PSI	40-55 PSI	WPAL140/175	\$44.81	WPAH140/175	\$47.57
4-Port Manifold					
80-100 PSI	20-35 PSI	WPAL480/100	\$52.40	WPAH480/100	\$55.16
95-125 PSI	30-40 PSI	WPAL495/125	\$52.40	WPAH495/125	\$55.16
115-150 PSI	35-55 PSI	WPAL4115/150	\$52.40	WPAH4115/150	\$55.16
140-175 PSI	40-55 PSI	WPAL4140/175	\$57.92	WPAH4140/175	\$60.26

Optional Adders		
Suffix	Description	List Price
L	Disconnect lever	\$1.38
U	Unloader valve	\$4.14
M	1/4" NPT male	\$2.77



WorldWide Electric Pressure Switches High Pressure - Air

Product Specifications

- Up to 250 PSI
- Normally Closed
- 120 V - Single-Phase: 2 HP - 24 A
- 240 V - Single-Phase: 3 HP - 20 A



Factory Setting	Model Number	List Price	Connection
High Pressure Air NEMA 1			
115-150 PSI	WPHL115/150	\$194.02	3/8" NPT Female
140-175 PSI	WPHL140/175	\$194.02	3/8" NPT Female
140-175 PSI	WPHL140/175MQ	\$199.53	1/4" NPT Male
High Pressure Air NEMA 1 - With Unloader Valve			
115-150 PSI	WPHL115/150U	\$198.16	3/8" NPT Female
140-175 PSI	WPHL140/175U	\$198.16	3/8" NPT Female
100-125 PSI	WPHL100/125U	\$207.80	3/8" NPT Female
30-40 PSI	WPHL30/40U	\$235.38	3/8" NPT Female

WorldWide Electric Pressure Switches High Pressure - Water

Product Specifications

- Up to 50 PSI
- Normally Closed
- 120 V - Single-Phase: 2 HP - 24 A
- 240 V - Single-Phase: 3 HP - 20 A



Factory Setting	Model Number	List Price	Connection
High Pressure Air NEMA 1			
30-50 PSI	WPWL30/50	\$56.26	No Disconnect
30-50 PSI	WPWL30/50L	\$57.64	Disconnect Lever

SIEMENS Class 52 Pilot Devices: 30mm Water & Oil Tight and Corrosion Resistant Product Line Overview

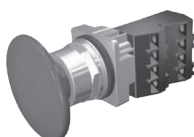
WorldWide Electric carries a complete line of pilot and signaling devices, from push-button operators to transformer pilot lights. Please contact us for more information on these devices.

Pushbutton Operators



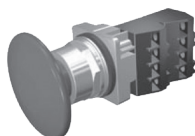
- Neoprene actuator seals prevent oil, dust and other contaminants from penetrating the contact blocks
- Neoprene gasket to seal operator mounting hole
- Chrome plated lock nut

Mushroom-Head Pushbutton Operators



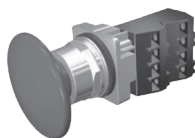
- Identical base construction to the pushbutton base
- High-impact, Molded actuator for long life and durability
- Available in either 1 5/8 Inch or 2 1/2 inch diameter head

Contact Blocks



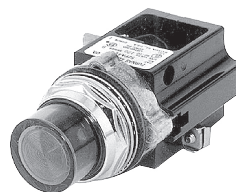
- Double break bifurcated silver contacts, with gold flashing as standard provides improved contact fidelity
- Heavy duty rated, NEMA A600
- Suitable for applications down to 5V/1mA solid state outputs
- Molded bodies and pushers resist arcing and tracking
- Stainless steel springs resist corrosion and provide strong contact pressure
- Captive mounting screw speed panel assembly

Push-Pull Operators



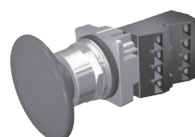
- One unit to combine two or three functions
- Maintained operator has two positions: PULL to start and PUSH to stop
- Momentary operator with three positions provides spring return from both pull and push positions
- Also available with a pilot light

Transformer Type Pilot Lights



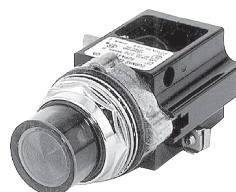
- Available with a 120, 240, 480 or 600 volt primary (50/60 Hz) and a separate secondary winding which supplies reduced voltage to a miniature bayonet base 6 volt lamp
- Suitable for applications where vibration is present and long bulb life is desirable

Full Voltage Type Pilot Lights



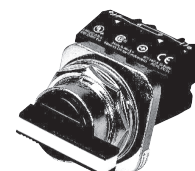
- Available for 6, 12, 24, 120 and 240 volt AC and DC applications
- The 240 volt pilot light is supplied with a 120 volt lamp and a voltage dropping resistor

LED-Type Pilot Lights



- LEDs (Light Emitting Diodes) can be used in pilot lights instead of incandescent bulbs because of their long life (up to 10 years)
- Resistance to vibration and ambient sensitivity

Selector Operators



- Positive action indexing
- Short or long lever available
- Molded black lever designed to accept color inserts, standard white provided
- Operator is equipped with a cam to actuate plungers of contact blocks assembled behind the operator
- Two, three and four position operators are available with seven different cams

Volts	Make	Break
120	60	6
240	30	3
480	15	1.5
600	12	1.2
VA	7200	720

Electrical Ratings

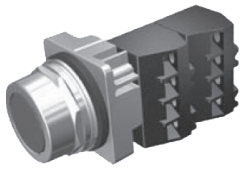
- NEMA AC Ratings 50/60 Hz
- NEMA A600 10 Continuous Amps

Additional Product Notes

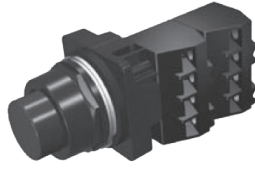
A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Section 5: General Purpose Controls

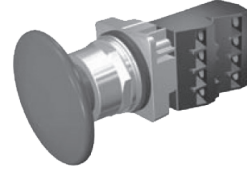
SIEMENS Class 52 Pilot Devices: 30mm Water and Oil Tight and Corrosion Resistant Momentary Push Button - Non-Illuminated



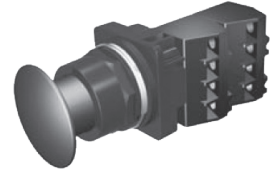
Flush Head



Extended Head



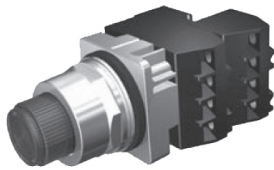
Large Mushroom Head 2-1/2"



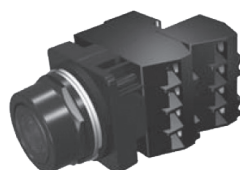
Small Mushroom Head 1-3/4"

Head Style	Contacts	Color	Model Number	List Price
Flush	---	Black	52PM8A1	\$59.35
		Red	52PM8A2	\$59.35
		Green	52PM8A3	\$59.35
		Yellow	52PM8A4	\$59.35
Extended	---	Black	52PM8B1	\$59.35
		Red	52PM8B2	\$59.35
		Green	52PM8B3	\$59.35
Mushroom Head Plastic 1-3/4"	---	Red	52PM9W2	\$131.61
Mushroom Head Plastic 2-1/2"	---	Red	52PM9V2	\$131.61

SIEMENS Class 52 Pilot Devices: 30mm Water & Oil Tight and Corrosion Resistant Push Button and Push-to-Test - Illuminated



Extended Lens

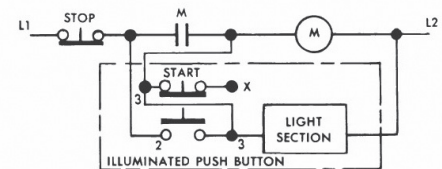


Flush Lens

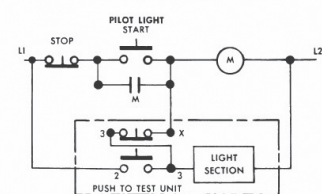
Type	Lamp Type	Voltage	Color	Contacts	Model Number	List Price
Full Voltage (AC/DC)	LED	24V	Red	1 NO - 1 NC	52PT6D2AB	\$294.74
			Green	1 NO - 1 NC	52PT6D3AB	\$294.74
			Blue	1 NO - 1 NC	52PT6D5AB	\$294.74
			Amber	1 NO - 1 NC	52PT6D9AB	\$294.74
			White	1 NO - 1 NC	52PT6DBAB	\$294.74
Full Voltage (AC/DC)	LED	120V	Red	1 NO - 1 NC	52PT6E2AB	\$294.74
			Green	1 NO - 1 NC	52PT6E3AB	\$294.74
Transformer (AC)	LED	120V	Red	1 NO - 1 NC	52PT6G2AB	\$325.18
			Green	1 NO - 1 NC	52PT6G3AB	\$325.18
			Amber	1 NO - 1 NC	52PT6G9AB	\$325.24
			White	1 NO - 1 NC	52PT6GBAB	\$325.24

Wiring Diagrams

Illuminated Push Button



Push to Test



Section 5: General Purpose Controls

SIEMENS Class 52 Pilot Devices: 30mm Water and Oil Tight and Corrosion Resistant Contact Blocks



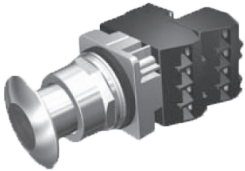
52BAK



52BAJ

Contact Blocks			
Finger-Safe Contact Blocks With Gold Flashing	Notes	Model Number	List Price
1 NO		52BAK ⁽²⁾	\$36.08
1 NC		52BAJ ⁽²⁾	\$36.08
1 NO - 1 NC		52BJK ⁽²⁾	\$66.72
1 NO Early Make	Closes Before 52BAK	52BAH	\$33.33
1 NC Late Break	Opens After 52BAJ	52BAE ⁽²⁾	\$33.33
1 NO - 1 NC	Reed Switch: UL listed for Class 1, Division 2; .25A Max, 200V AC, 10 Watt Max .5A Max, 200V DC, 10 Watt Max	52BAR ⁽¹⁾	\$134.66
1 NC Extra Late Break		52BAU ⁽²⁾	\$38.15

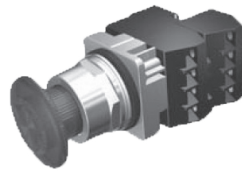
SIEMENS Class 52 Pilot Devices: 30mm Water and Oil Tight and Corrosion Resistant 2 & 3 Position Push-Pull Mushroom Head Devices - Non-Illuminated



Mushroom Head Metal 1-3/4"



Mushroom Head Plastic 2-1/2"



Mushroom Head Plastic 1-3/4"

Contacts	Color	Metal 1-3/4"		Plastic 1-3/4"		Plastic 2-1/2"	
		Model Number	List Price	Model Number	List Price	Model Number	List Price
2 Position - Maintained							
----	Red	52PP2A2	\$233.76	52PP2W2	\$193.11	52PP2V2	\$195.20
3 Position - Momentary In - Momentary Out							
----	Red	52PP3A2	\$233.76	52PP3W2	\$182.96	52PP3V2	\$182.96
3 Position - Maintained In - Momentary Out							
----	Red	52PP7A2	\$233.76	52PP7W2	\$182.96	52PP7V2	\$182.96

Additional Product Notes

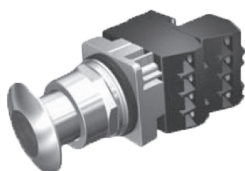
(1) Hermetically sealed

(2) Positive opening according to IEC 60947-5-1, Appendix K

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Section 5: General Purpose Controls

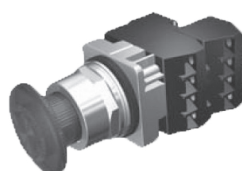
SIEMENS Class 52: 30mm Water & Oil Tight and Corrosion Resistant 2 & 3 Position Push-Pull Mushroom Head Devices - Illuminated



Mushroom Head Metal 1-3/4"



Mushroom Head Plastic 2-1/2"



Mushroom Head Plastic 1-3/4"

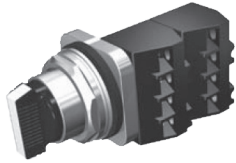
Type	Lamp Type	Voltage	Color	Contacts	Metal 1-3/4"		Plastic 1-3/4"	
					Model Number	List Price	Model Number	List Price
2 Position - Maintained								
Full Voltage (AC/DC)	LED	24V	Red	1 NO - 1 NC	52PP2D2AB†	\$353.71	52PP2DRAB†	\$333.38
			Green	1 NO - 1 NC	52PP2D3AB	\$353.71	52PP2DSAB	\$333.38
Full Voltage (AC/DC)	Incandescent	120V	Red	1 NO - 1 NC	52PP2E2A†	\$321.19	52PP2ERA†	\$296.79
Transformer (AC)	LED	120V	Red	1 NO - 1 NC	52PP2G2AB†	\$398.42	52PP2GRAB†	\$359.81
			Green	1 NO - 1 NC	52PP2G3AB	\$398.42	52PP2GSAB	\$359.81
3 Position - Momentary In - Momentary Out								
Full Voltage (AC/DC)	LED	24V	Green	1 NO - 1 NCELB	52PP3D3UB	\$384.21	52PP3DRUB	\$355.75
Full Voltage (AC/DC)	Incandescent	120V	Red	1 NO - 1 NCELB	52PP3E2	\$268.32	52PP3ER	\$245.97
Transformer (AC)	LED	120V	Red	1 NO - 1 NCELB	52PP3G2UB	\$396.40	52PP3GRUB	\$376.07
			Green	1 NO - 1 NCELB	52PP3G3UB	\$396.40	52PP3GSUB	\$376.07
3 Position - Maintained In - Momentary Out								
Full Voltage (AC/DC)	LED	24V	Green	1 NO - 1 NCELB	52PP7D3UB	\$384.21	52PP7DSUB	\$355.75
Transformer (AC)	LED	120V	Red	1 NO - 1 NCELB	52PP7G2UB	\$420.78	52PP7GRUB	\$408.60
			Green	1 NO - 1 NCELB	52PP7G3UB	\$420.78	52PP7GSUB	\$408.60

Additional Product Notes

† EMERGENCY-STOP control devices according to IEC 60947-5-5

Section 5: General Purpose Controls

SIEMENS Class 52 Pilot Devices: 30mm Water and Oil Tight and Corrosion Resistant *Selector Switches*



Short Lever



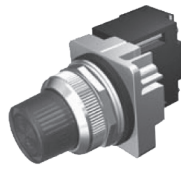
Long Lever

Contact Type	M = Maintained S = Spring Return	Short Lever		Long Lever	
		Model Number	List Price	Model Number	List Price
2 Position - Operator					
No Contacts	M M	52SA2AAB	\$81.96	52SB2AAB	\$81.96
No Contacts	M<---S	52SA2ACB	\$128.07	52SB2ACB	\$126.53
3 Position - Operator					
No Contacts	M M M	52SA2CAB	\$81.96	52SB2CAB	\$81.96
No Contacts	M M M	52SA2BAB	\$81.96	52SB2BAB	\$81.96
No Contacts	S-->M M	52SA2BBB	\$128.07	52SB2BBB	\$130.08
No Contacts	M M<---S	52SA2BCB	\$126.53	52SB2BCB	\$126.53
No Contacts	S-->M<---S	52SA2BDB	\$126.53	52SB2BDB	\$126.53

SIEMENS Class 52 Pilot Devices: 30mm Water and Oil Tight and Corrosion Resistant *Indicator Lights*



Plastic Lens

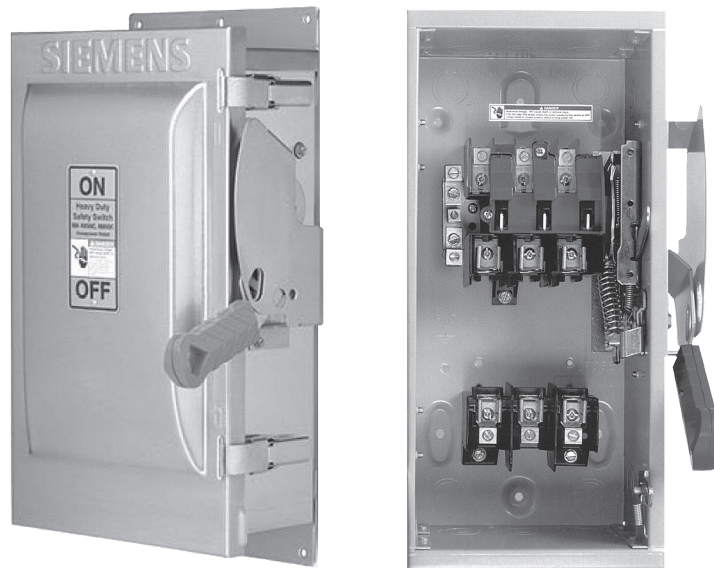


Glass Lens

Type	Lamp Type	Voltage	Color	Plastic Lens		Glass Lens	
				Model Number	List Price	Model Number	List Price
Full Voltage (AC/DC)	LED	120V	Red	52PL4E2XB	\$223.62	52PL5E2XB	\$254.08
			Green	52PL4E3XB	\$223.62	52PL5E3XB	\$254.08
			Amber	52PL4E9XB	\$223.62	52PL5E9XB	\$254.08
			Clear	52PL4EAXB	\$225.65	52PL5EAXB	\$254.08
			White	52PL4EBXB	\$225.65	52PL5EBXB	\$254.08
Full Voltage (AC/DC)	Incandescent	120V	Red	52PL4E2	\$187.02	52PL5E2	\$205.30
			Green	52PL4E3	\$187.02	52PL5E3	\$205.30
			Amber	52PL4E9	\$187.02	52PL5E9	\$205.30
			No Lens	52PL4EN	\$172.78	52PL5EN	\$182.96
Transformer (AC)	LED	120V	Red	52PL4G2XB	\$252.07	52PL5G2XB	\$304.92
			Green	52PL4G3XB	\$252.07	52PL5G3XB	\$304.92
			Amber	52PL4G9XB	\$252.07	52PL5G9XB	\$304.92
			White	52PL4GBXB	\$274.44	52PL5GBXB	\$304.92
Transformer (AC)	Incandescent	120V	Red	52PL4G2	\$213.44	52PL5G2	\$256.13
			Green	52PL4G3	\$213.44	52PL5G3	\$256.13
			Amber	52PL4G9	\$213.44	52PL5G9	\$256.13
			White	52PL4GB	\$213.44	52PL5GB	\$256.13

Additional Product Notes

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.



SIEMENS Disconnect Switches

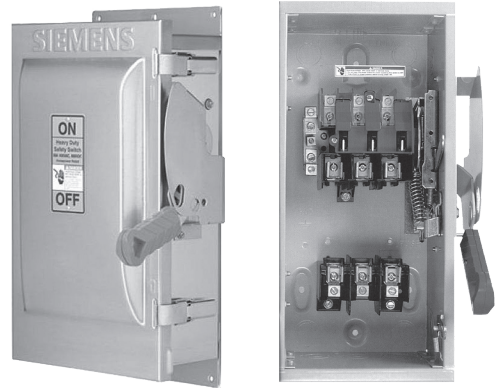
SIEMENS VBII safety switches are built to last. Everything about the VBII safety switch has been designed for the engineer installer. Featuring rolled metal edges and corners to minimize cuts, nicks, and scrapes to the installer's hands and conductors and generous wiring gutters that meet or exceed UL and NEC wire bending space requirements. The enclosure is more rigid and resilient and all parts are replaceable for easier service. Our quick-make quick-break switching action coupled with our double break visible blade design ensures reliable operation in both general duty and heavy duty applications.

SIEMENS VBII Safety Switches - General Duty - 240 Volt

SIEMENS VBII safety switches are built to last. Everything about the VBII safety switch has been designed for the engineer installer. Featuring rolled metal edges and corners to minimize cuts, nicks, and scrapes to the installer's hands and conductors and generous wiring gutters that meet or exceed UL and NEC wire bending space requirements. The enclosure is more rigid and resilient and all parts are replaceable for easier service. Our quick-make quick-break switching action coupled with our double break visible blade design ensures reliable operation in both general duty and heavy duty applications.

Product Specifications

- Highly visible easy grip handle
- Visible blade construction
- Door opens greater than 180°
- Quick-make, quick-break mechanism
- 200% optional neutrals (200-600 Amps)
- Positive two and three point mounting
- Padlock style cover latch and handle
- Generous wiring gutter
- Front removable lugs easily convert to copper body or compression type
- Lugs suitable for copper or Aluminum at 60°C or 75°C
- Replacement parts



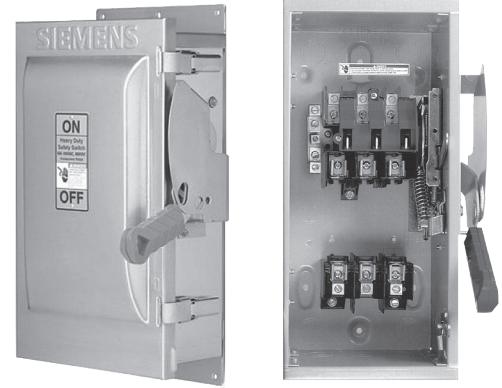
General Duty								
Amp Rating	NEMA 1 Indoor		NEMA 3R Outdoor		Horsepower Rating 240V AC			
	Model Number	List Price	Model Number	List Price	Single-Phase, 2-Wire		Three-Phase, 3-Wire	
					Std.	Max.	Std.	Max.
240 Volt Fusible - 2-Pole, 2-Fuse, Solid Neutral								
30	GF221NA	\$103.15	GF221NRA	\$161.63	1.5	3	3	7.5
60	GF222NA	\$171.39	GF222NRA	\$258.80	3	10	7.5	15
100	GF223N	\$355.68	GF223NR	\$400.40	7.5	15	15	30
200	GF224N	\$700.15	GF224NR	\$1,067.80	15	—	25	60
400	GF225NA	\$2,140.25	GF225NRA	\$2,739.33	15	—	50	125
600	GF226NA	\$4,218.40	GR226NRA	\$4,895.85	15	—	75	200
240 Volt Fusible - 3-Pole, 3 Fuse, Solid Neutral								
30	GF321NA	\$156.63	GF321NRA	\$232.82	1.5	3	3	7.5
60	GF322NA	\$54.77	GF322NRA	\$353.43	3	10	7.5	15
100	GF323N	\$472.84	GF323NR	\$693.91	7.5	15	15	30
200	GF324N	\$1,067.80	GF324NR	\$1,277.89	15	—	25	60
400	GF325NA	\$2,721.84	GF325NRA	\$3,275.07	15	—	50	125
600	GF326NA	\$4,724.37	GF326NRA	\$6,911.57	15	—	75	200
240 Volt Non Fusible - 3-Pole, 3-Wire, No Neutral - Also Used For 2-Pole Applications								
30	GNF321A	\$128.56	GNF321RA	\$218.81	—	3	7.5	—
60	GNF322A	\$165.33	GNF322RA	\$322.31	—	10	15	—
100	GNF323	\$400.40	GNF323R	\$657.14	—	15	30	—
200	GNF324	\$736.02	GNF324R	\$1,240.73	—	15	60	—
400	GNF325A	\$1,756.13	—	—	—	15	125	—
600	GNF326A	\$3,356.01	—	—	—	15	200	—

SIEMENS VBII Safety Switches - Heavy Duty - 600 Volt

SIEMENS VBII safety switches are built to last. Everything about the VBII safety switch has been designed for the engineer installer. Featuring rolled metal edges and corners to minimize cuts, nicks, and scrapes to the installer's hands and conductors and generous wiring gutters that meet or exceed UL and NEC wire bending space requirements. The enclosure is more rigid and resilient and all parts are replaceable for easier service. Our quick-make quick-break switching action coupled with our double break visible blade design ensures reliable operation in both general duty and heavy duty applications.

Product Specifications

- Highly visible easy grip handle
- Visible blade construction
- Door opens greater than 180°
- Quick-make, quick-break mechanism
- 200% optional neutrals (200-600 Amps)
- Positive two and three point mounting
- Padlock style cover latch and handle
- Generous wiring gutter
- Front removable lugs easily convert to copper body or compression type
- Lugs suitable for copper or Aluminum at 60°C or 75°C
- Replacement parts



Heavy Duty - 600 Volt										
Amp Rating	NEMA 1 Indoor		NEMA 3R Outdoor		NEMA 12 Industrial		Horsepower Rating			
	Model Number	List Price	Model Number	List Price	Model Number	List Price	480VAC Single-Phase, 2-Wire		600VAC Three-Phase, 3-Wire	
							Std.	Max.	Std.	Max.
600 Volt Fusible - 3-Pole, 3-Fuse, No Neutral - Also Used For 2-Pole Applications										
30	HF361	\$460.38	HF361R	\$795.64	HF361J	\$888.13	5	15	7.5	20
60	HF362	\$547.62	HF362R	\$932.66	HF362J	\$1,014.88	15	30	15	50
100	HF363	\$1,070.02	HF363R	\$1,469.51	HF363J	\$1,598.90	25	60	30	75
200	HF364	\$1,544.52	HF364R	\$2,163.82	HF364J	\$2,218.04	50	125	60	150
400	HF365A	\$4,127.86	HF365RA	\$5,224.00	HF365JA	\$5,302.37	100	250	125	350
600	HF366A	\$7,163.79	HF366RA	\$10,350.95	HF366JA	\$23,904.06	150	400	200	500
800	HF367	\$11,415.36	HF367R	\$13,839.63	HF367J	\$13,518.81	200	500	250	500
1200	HF368	\$16,054.01	HF368R	\$19,913.55	HF368J	\$17,336.20	200	500	250	500
600 Volt Non-Fusible - 3-Pole, 3-Wire										
30	HNF361	\$249.13	HNF361R	\$441.46	HNF361J	\$596.49	—	20	—	30
60	HNF362	\$441.46	HNF362R	\$771.88	HNF362J	\$839.01	—	50	—	60
100	HNF363	\$713.22	HNF363R	\$1,099.74	HNF363J	\$1,200.04	—	75	—	100
200	HNF364	\$1,110.51	HNF364R	\$1,433.22	HNF364J	\$1,499.08	—	125	—	150
400	HNF365A	\$2,586.67	HNF365RA	\$3,635.23	HNF365JA	\$3,398.52	—	250	—	350
600	HNF366A	\$4,373.05	HNF366RA	\$6,514.92	HNF366JA	\$6,669.33	—	400	—	500
800	HNF367	\$9,244.44	HNF367R	\$10,940.73	HNF367J	\$11,031.78	—	500	—	500
1200	HNF368	\$12,555.46	HNF368R	\$14,294.97	HNF368J	\$14,491.56	—	500	—	500

Additional Product Notes

600V available in NEMA 4X stainless - consult factory.

A Siemens small order handling fee of \$25 will be applied to orders for Siemens products totaling less than \$800.

Terms and Conditions of Sale

1. **WARRANTY** – WORLDWIDE ELECTRIC CORPORATION (“SELLER”) MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IN RESPECT TO THE PRODUCT AND THERE IS NO WARRANTY EXPRESS OR IMPLIED EXCEPT THAT THE PRODUCT SHALL BE OF THE KIND AND QUALITY DESCRIBED IN THE SPECIFICATIONS.
2. **DELIVERY** – Unless otherwise stated, delivery will be made f.o.b. point of shipment. Shipping dates are approximate and are based on the prompt receipt of all necessary information from the purchaser.
3. **LOSS, DAMAGE OR DELAY** – Seller shall not be liable for loss, damage, detention, or delay resulting from causes beyond its reasonable control or from fire, strike or other concerted action of workmen, act or omission of any Governmental authority or of the Purchaser, insurrection or riot, embargo, car shortage, wreck or delay in transportation, or inability to obtain necessary labor, materials, or manufacturing facilities from usual sources. In the event of delay due to any such cause, the date of delivery will be postponed by such length of time as may be reasonably necessary to compensate for the delay.
4. **RISK OF LOSS** – Risk of loss of the product, or any part of the same, shall pass to the Purchaser upon delivery of such product or part.
5. **PAYMENTS** – If, in the judgment of Seller, the financial condition of the Purchaser at any time prior to shipment, does not support the terms of payment specified, Seller may require full or partial payment in advance. Pro-rata payments shall become due as shipments are made. If shipments are delayed by the Purchaser, payments shall become due from date when Seller is prepared to make shipment. If manufacture is delayed by the Purchaser, payment shall be made based on the contract price and percent of completion. Products held for Purchaser shall be at the risk and expense of the Purchaser.
6. **PAYMENT BY CREDIT CARD** – If Seller accepts payment by credit card, Purchaser agrees to pay the issuer of the credit card the total amount shown on this invoice upon presentation of a bill, without offset or deduction.
7. **PRICES** – Prices are those in effect at time of shipment. In the event of a published increase or reduction in prices by Seller, the new price will become effective immediately on the unshipped portion of the order, unless stated at the time of the change. In no case, however, will a reduction in price be retroactive to shipments made prior to the date of the price change. Purchaser's order will be entered promptly upon acceptance by Seller and will not thereafter be subject to Cancellation nor to Deferment of Deliveries without Seller's written consent, except upon terms which take into proper account the work already done and commitments made by Seller. Prices include the Seller's standard packing for domestic shipments.
8. **LIMITATION OF LIABILITY** – In no event shall Seller be liable for any special, indirect, incidental, consequential or punitive damages, including but not limited to damages for lost profits or business opportunities or damage to reputation. Seller's maximum liability for any breach of contract or sale, or any other claim related to the product sold hereunder, shall be limited to the price of the product, or portion thereof, on which such liability is based.
9. **GOVERNING LAW/JURISDICTION/VENUE** – This sale shall be governed by and construed in accordance with the laws of the State of New York, without regard to its conflicts of laws principles, and shall be deemed entered into at Seller's principal place of business in New York. By purchasing Seller's product, Purchaser expressly consents, for any litigation arising out of or related to the sale, to the exclusive jurisdiction and venue of the courts of competent jurisdiction located in Monroe County, New York (i.e., the U.S. District Court, Western District of New York, and the New York State Supreme Court, County of Monroe) and waives the right and hereby agrees not to assert, by way of motion, defense or otherwise in any proceeding brought in either of such courts, any claim that it is not subject to the personal jurisdiction of such court, that such proceeding is brought in an inconvenient forum, or that the venue of such proceeding is improper.
10. **TERMINATION** – Any order or contract may be terminated by the Purchaser only upon payment of reasonable charges based upon expenses already incurred and commitments made by Seller.
11. **RETURN OF GOODS** – No product or part shall be returned to the Seller without written authorization and shipping instructions first having been obtained from the Seller. Returns may be subject to freight charge and/or restocking charge, as circumstances dictate.
12. **REPAIR POLICY** – Positively no allowance will be made for repairs if made by others without Seller's written consent.
13. **NO ASSIGNMENT** – Purchaser's obligations are not transferable or assignable by operation of law, change of control or ownership, or otherwise, without prior written consent of Seller.

Technical Support

WorldWide Electric is committed to providing complimentary technical support for the products that we sell to our valued customers. Our team of highly-qualified technical support associates will assist you with basic programming, troubleshooting, and emergency breakdown support during normal business hours on Monday through Friday from 8AM-7PM EST. In addition, after hours emergency breakdown support is available on weekdays from 7PM-8AM EST and on weekends and holidays. To address after hours emergencies, our dispatcher will forward your contact information to a technical support associate who will return your call within an hour. Due to licensing requirements, WorldWide Electric cannot assist with your field wiring.

Hours

Monday through Friday from 8AM - 7PM EST

After Hours Emergency Breakdown Support

Monday through Friday 7PM - 8AM EST, weekends, and holidays

Phone

844-WWE-SERV (993-7378)

After-Hours Shipping Service

WorldWide Electric provides an after-hours service number (1-800-808-2131) for the express purpose of supporting emergency product shipments. For a fee of \$400.00, our sales team will coordinate the opening of a closed warehouse after-hours. The purpose of this service is to coordinate emergency product shipments to end users experiencing emergency plant shutdowns. Our service team members assist in product selection, warehouse opening, and scheduling of transportation services to support our customers.

Please refrain from using this after-hours call service to seek general product information or answers to general technical questions. Our team is happy to answer these types of questions during normal business hours from 8AM EST to 7PM EST.

Hours

Available 24/7, including weekends and holidays

Phone

800-808-2131

Motor Control Service, Startup, and Other Fees

Activity	Description	Rate / Fee
Inspection Fee	Fee will be credited if warrantable defect is found. Final fee based per project.	\$200 Per Hour
In-House	Non-Warranty equipment sent to WWE for repair/service.	\$100 Per Hour
Field Service-Domestic (Four (4) Hour Minimum)	Monday-Friday: 7:00 am - 6:00 pm (Four (4) Hour Minimum)	\$150 Per Hour
Field Programming-Domestic (Four (4) Hour Minimum)	Monday-Friday: 7:00 am - 6:00 pm (Four (4) Hour Minimum)	\$225 Per Hour
International Rates (Four (4) Hour Minimum)	Monday-Friday: 7:00 am - 6:00 pm (Four (4) Hour Minimum)	1.5 x Base Rate Domestic
Overtime-Standard Applicable to both Domestic/International rates	Monday-Friday: Prior to 7:00 am or beyond 6:00 pm Saturday: Not to exceed 8 hours Total time not to exceed 8 hours/day	1.5 x Base Rate Domestic/International
Overtime-Premium Applicable to both Domestic/International rates	Sunday/Holiday: All hours worked Monday-Saturday: Overtime in excess of 8 hours	2 x Base Rate Domestic/International
Travel / Living Expenses	Billed at cost plus fee and include, but are not limited to: Airfare, car rental, lodging, meals, etc.	7% Processing/Handling
Auto Travel	Covers round trip use of company or personal cars.	\$0.85 Per Mile
Travel Time	Billed for service technician travel time	50% Applicable Rate

Notes

- Travel Time:** Travel time is invoiced based on actual hours traveled. Any travel time in excess of 8 hours (portal to portal) or after business hours will be billed at 1.5 times normal travel rate.
- Scheduling Service:** Customers shall notify WWE as early as possible (two (2) week minimum) to schedule field service. Any notice shorter than Two (2) weeks may be subject to a \$500 emergency fee. Time is subject to availability.
- Purchase Order:** A purchase order from the customer for the estimated amount of service from WWE's Service Department must be received and confirmed before travel is booked.
- Payment:** Net 30 days from date of invoice.
- International Air Travel:** All international air travel will be billed at the minimum business class rates.
- Transportation:** When language, local driving customs, remote job site locations or other safety considerations make driving hazardous, the customer will be responsible for providing secure transportation to and from the job site.
- Standby Time:** Any time up to eight (8) hours per day during which WWE's Service Engineer is available for work, but is not working because of circumstances beyond WWE's control. Each hour of standby time will be billed at the applicable rate. WWE's Service Engineer need not be present at the job site to accrue standby time.
- Cancellation / Postponement:** Any field service canceled or postponed within ten (10) business days of scheduled service shall be billed for an eight (8) hour day at the normal field service rate. Any expenses incurred by WWE due to cancellation or postponement (airfare and lodging cancellation/change fees, visas, work permits, miscellaneous items acquired, etc.) shall be billed at actual cost plus 10%.

Other Fees

- Siemens Small Order Handling Fee:** Per the manufacturer's policy, a \$25 Small Order Handling Fee will be applied to orders for Siemens products totaling less than \$800.

Warranty Policy

WorldWide Electric Corporation (The Company) warrants its products to be free from defects in materials or workmanship to the original purchaser for a period of:

PRODUCT WARRANTIES	
HUBBELL PRODUCTS	
HUBBELL - Pressure Switches	One (1) year from date of sale (invoice) with ARC code
HUBBELL - Alternator Relays	One (1) year from date of sale (invoice)
HUBBELL - Drum Controls	One (1) year from date of sale (invoice)
WDN700E PRODUCTS	
WDN700E - Variable Frequency Drives	Two (2) years from date of sale (invoice)
SIEMENS PRODUCTS	
SIEMENS - NEMA and IEC Controls	One (1) year from date of sale (invoice)
WORLDWIDE ELECTRIC (WWE) PRODUCTS	
WWE - Soft Starters	Two (2) years from date of sale (invoice)
WWE - Variable Frequency Drives (VFD)	Two (2) years from date of sale (invoice)
WWE - Starters, Contactors, Pressure Switches	One (1) year from date of sale (invoice)

For this warranty to be effective, this product must be installed, used and maintained by the original purchaser in accordance with good industry standards. The warranty does not cover normal wear, tear and erosion from use, misuse, abuse or corrosion.

In the event of failure, it shall be the responsibility of the original purchaser to notify The Company either in writing or by telephone to make arrangements for the correction of the problem. The purchaser shall be responsible for transportation charges connected with the return, exchange or repair of parts. Returns found defective upon inspection by our warranty department or authorized warranty service agent will be replaced free of charge.

The Company shall not be liable for any labor cost connected with the replacement of the equipment, the replacement of the parts or adjustments to the equipment by the purchaser or their contractor without The Company's prior written approval.

The Company, as the exclusive remedy under this warranty, shall, at it's option, repair or replace defective items or, if agreed upon, refund the purchase price less reasonable allowance for depreciation in exchange for the product.

THE COMPANY MAKES NO OTHER WARRANTIES AND ALL IMPLIED OR EXPRESSED WARRANTIES AND REPRESENTATIONS, EXCEPT THAT OF TITLE, ARE DISCLAIMED. ALL IMPLIED WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR USE BUT NOT LIMITED TO JUST THOSE THAT ARE DISCLAIMED. LIABILITY FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES AND LOSSES UNDER ANY AND ALL WARRANTIES WHETHER IN CONTRACT, TORT OR OTHERWISE, ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.

All qualified returns will be subject to a 20% restocking fee (\$75 minimum).

All special order / special build products are non-cancellable and non-returnable.

Return Policy

1. All WorldWide Electric products (electric motors, motor controls and gearing products) that are purchased as normal stock items may be returned, with freight to be paid, back to the closest WorldWide Electric warehouse by the customer.
2. Any returned products must be new, undamaged and in original cartons/packaging. Final credit will not be issued until WorldWide Electric has verified the products/shipping cartons as such.
3. All RGA requests must be made within 90 days of original purchase.
4. If the returned products were ordered incorrectly by the customer, 20% will be levied as a restocking charge which carries a minimum \$75 charge.
5. If the customer places an order equal to or greater than the goods being returned, then the restocking charge will be 10% (minimum \$75 charge).
6. If the product being returned was originally shipped to the customer prepaid and allowed, the original freight charge will be deducted from the return credit.
7. If the returned products are not in original condition (as well as the packaging), there will be additional fees applied to repair and/or replace those parts/products.

Freight Terms, Programs and Services

Freight terms are as follows on all orders shipped from any of our warehouses. All products can be assorted from all three divisions; motors, controls and gearing.

FedEx / UPS may be utilized for shipments under 100 lbs. and billed on a prepaid and add basis (excluding cast iron motors and gear reducer products). Customers may always choose to have their shipment sent freight collect.

DISCOUNT CODE: MC1 / MC1A	
\$5,000 +	Truck - Prepaid and Allowed
\$1,000 - \$4,999	Truck - 10% of Invoice - Prepaid and Add
\$0 - \$999	Truck - \$100 Minimum - Prepaid and Add
DISCOUNT CODE: MC2	
\$2000 + Assorted	Prepaid and Allowed

Orders may be picked up from any of our warehouses as a will call. We would prefer a one-hour advance notification for orders to be picked up. However, allowances will be made for special rush and urgent situations.

ADDITIONAL FREIGHT SERVICES	
Delivery Appointment	\$65.00
Liftgate Delivery	\$200.00
Residential Delivery	\$125.00
Expedited Delivery	Please Call For Quote



WORLDWIDE
ELECTRIC CORPORATION

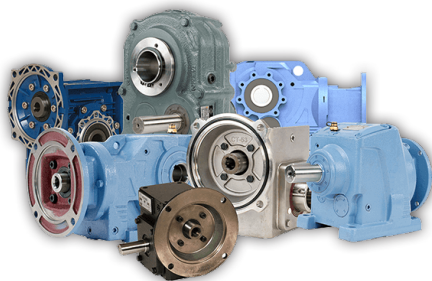
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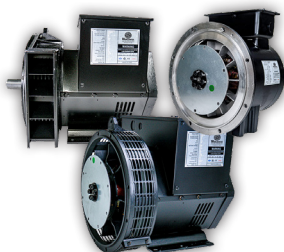
Electric Motors

- Definite Purpose Motors
- General Purpose Motors
- Fractional HP Motors
- Farm Duty Motors
- Severe Duty Motors
- Marine-Duty Motors
- Pump Motors
- Explosion Proof Motors
- IEC Motors
- Motor Accessories



Gear Reducers

- Helical Bevel Gear Reducers
- Helical Inline Gear Reducers
- Parallel Shaft Helical Gear Reducers
- Shaft Mount Reducers
- Worm Gear Reducers
- Accessories and Kits



Generators

- Single Bearing
- Double Bearing
- Pancake

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2023-2024

Motor Control Products Catalog

Document No: MC-CAT-08.2023



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†While most products are in stock in one of our distribution centers, certain conditions may lead to temporary stock shortages.

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