

DRIVES & CONTROLS











# Motor Control Products Catalog

2022-2023

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

At WorldWide Electric, we know quality products at the right price alongside superior customer service are the keys to YOUR success. These are the principles that drive us every day for YOU, our most valued customer. From VFD solutions to across the line motor starters, WorldWide Electric has the right products and control packages for every need, giving you the flexibility to do more. Products and control packages for more applications from conveyors to pumps and most everything in between, we invite you to judge for yourself. We are WorldWide.

**WORLDWIDE FAMILY OF BRANDS** 









### Application Questionnaire for Drive & Soft Starters



Completed by:		_ Date:			
Customer Name:		Contact:Phone#:			
Address:					
City:	State:	Project:			
<b>1. Application Type:</b> Fan, Blower, Centrifugal	Pump? [ ] Yes = Variable [ ] No = Constant	TQ / Normal Duty TQ / Heavy Duty			
[] Axial Fan	[] Centrifugal Pump	[] Centrifuge	[] Conveyor / Screw Auger		
[ ] Cooling Tower Fan	[] Rock Crusher	[] PDP Pump	[] Mixer		
[] Other:					
[] Speed control tolerand [] High starting torque: ( [] Shock load (rock crush [] Gearbox between mod [] Other:	or & load (5:1 or 35:1 - prov	ressure):vide ratio):	Phase		
Volts: Ful Running Amps - Normal: [] VFD / inverter rated m [] NOT VFD / inverter rat	RPM: [] N   Load Amps*:	Service Factor: Amps - Heaviest Load vith 1600-volt insulation	: ion rating n rating		
•	s are to be controlled by a s se page. Please provide tota	3			

worldwideelectric.com 1-800-808-2131

### 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 cal	ole [] VFD / Inverter rated cable
6. Speed Adjustments & Duty Cy	cle:
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	<b>process signal?</b> [ ] Yes [ ] No
If yes, specify signal type quantity	of signals: 4-20mA 0-10vDC
Examples: Operator Potentiomete	r, PLC signal, Pressure or Temperature feedback signal
8. Installation Environment: [ ] In	ndoor [ ] Outdoor
Required drive enclosure: [] Chass	sis [ ] NEMA 1 – clean room
[] NEMA 12 indoor dusty [] NEMA	3R outdoor [] NEMA 4 indoor or outdoor dusty
[] NEMA 4X corrosive [] NEMA 7 c	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 o	f these protection devices?
[] Input Line Reactor [] Output Re	eactor [ ] Motor dv/dt filter
[ ] Drive isolation transformer [ ] B	roadband harmonic filter (IEEE519 Harmonic Concerns)
10. Serial Communication Requi	rements:
[] Modbus [] Ethernet [] Other	
11. Other application details:	

worldwideelectric.com 1-800-808-2131

### **Table Of Contents**



Section 1 - REMOTE MONITORING AND CONTROL	PAGE
Remote Operating Module	2
Section 2 -VARIABLE FREQUENCY DRIVES - CHASSIS	3
The World Drive Product Family Comparison	4
WDN700E Series High Performance Variable Frequency Drive Chassis and Accessories	5-8
WDGP Series General Purpose Variable Frequency Drive Chassis and Accessories	9, 10
WD4X NEMA 4X Series Variable Frequency Drive Chassis	11
WDFC Series Flex Control Variable Frequency Drive Chassis and Accessories	12,13
Section 3 - ENCLOSED VARIABLE FREQUENCY DRIVE PANELS	14
WorldWide Configured Drive Selection Guide	15
WCD Series – Configurable NEMA 3R Enclosed Panels for WDFC	16
WCD Series - Configurable NEMA 12 Enclosed Panels for WDFC	17
WCD Series - Configurable NEMA 4 Enclosed Panels for WDFC	18
WCD Series - Configurable Enclosed Panel Options for WorldDrive WDFC	19
WCD Series - Configurable NEMA 3R Enclosed Panels for WDN700E	20
WCD Series - Configurable Enclosed Panel Options for WDN700E	21
WWESDA Series - Standard Duty NEMA 12 Enclosed Panels for WDN700E	22
WWEPPB Series - Positive Displacement Pump Panel NEMA 3R Enclosed Drive	23
WCD Series - Configurable Enclosed Panel Options for WDN700E	24
SECTION 4 - SOLID STATE REDUCED VOLTAGE STARTERS, CHASSIS AND ENCLOSED	25
WSiQ Series Chassis Soft Starters and Accessories	26-27
WSE Efficient Chassis Soft Start Controllers and Accessories	28
WorldWide Configured Soft Starter Selection Guide	29
WSES Series Efficient System Combination Soft Starters	30
WSNC Series Non-Combination Soft Starters	31
WSSD Series Standard Duty Combination Soft Starters	32
WSHD Series Heavy Duty Combination Soft Starters	33
WWE PD Series Positive Displacement Soft Starters - NEMA 4 Enclosure	34

SIEMENS 3RW52 Series Chassis Soft Starters	35
WWE2-BP Chassis Soft Starters	36
SECTION 5 - GENERAL PURPOSE CONTROL	37
WWSXL Series General Purpose Motor Starters and Accessories	38, 39
SIEMENS Class 14 NEMA Rated Motor Starters with ESP200 Solid State Overload Relay	40
SIEMENS 3RE48 NEMA Rated Pump Controller	41
SIEMENS Class 18 NEMA Rated Combination Starter, MCP Type with Solid State Overload Relay	44,43
SIEMENS ESP200 Solid State Electronic Overload Relays	44
SIEMENS Replacement Coils for NEMA Starters	45
Field Modification Kits for NEMA Starters	46
WDP Series Definite Purpose AC Contactors	47
SIEMENS IEC Contactors	48
SIEMENS IEC Contact Blocks, IEC Overload Relays, and Replacement Coils	49
HUBBELL Alternator Relays	50
HUBBELL Drum Controllers	50
HUBBELL Pressure Switches	51
WorldWide Electric Pressure Switches	52
SIEMENS Class 52 Pilot Devices	53-57
SECTION 6 - DISCONNECT SWITCHES	58
SIEMENS VBII Safety Switches - General Duty - 240 Volt	59
SIEMENS VBII Safety Switches - Heavy Duty - 600 Volt	60
SECTION 7 - ADDITIONAL INFORMATION	
Terms and Conditions of Sale	61
Technical Support	62
After Hours Shipping Service	63
Motor Controls Service, Startup, and Other Fees	64
Warranty Policy	65
Freight Terms, Programs and Services	66



### **Remote Operating Module: ROM1**

Remote Operating Module offers simple remote monitoring and control of our VFDs and Soft Starts. The ROM1 is extremely simple to setup and operate. Equipped with 4G cellular connectivity and data collection capabilities, the ROM1 provides exclusive access to our cloud-based platform, allowing for 24/7 monitoring. View system statuses in real-time or through automatically generated reports, and get notified of critical issues via email and text alerts.

#### **Product Specifications**

- » Cloud-based monitoring platform
  - > Real-time system status with Alerts
  - > Location tracking
  - > "Last-Gasp" Battery for Loss-of-Power Alert
  - > Automated reports
- Configurable Inputs and Output
  - > Start/Stop Control
  - > PID Control/Logic Table/VFD or Soft Starter Control
- » Ease of use
  - > Simple to Set Up
  - > Easy-to-Use App
  - > Over-the-Air Software Updates
  - > Unlimited Tech Support
  - > Renewable 3-Year Plan



Worldwide Electric Remote Operating Module				
ROM Device Model	Price			
ROM1	\$1,495.00			

Connectivity - Fully Included					
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

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















### 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 any other application the WorldDrive from WorldWide Electric is the VFD for you.

### **Section 2: Variable Frequency Drives - Chassis**



### **The World Drive Product Family Comparison**

	WDGP Series	WD4X Series	WDFC Series	WD N700E Series
Voltages / Hp	240 Single Phase 1/2-2 Hp	240 Single Phase 1/2-2 Hp	240 Single Phase 1/2-10 Hp	240 Single Phase 1/2-3 Hp VT
	240 Three Phase 1-40 Hp VT 240 Three Phase 1-30 Hp CT	240 Three Phase 1-20 Hp	240 Three Phase 1-25 HP VT 240 Three Phase 1/2-20 HP CT	240 Three Phase 1/2-125 Hp VT 240 Three Phase 1/2-100 Hp CT
	480 Three Phase 1-40 Hp VT 480 Three Phase 1-30 Hp CT	480 Three Phase 1/2-30 Hp	480 Three Phase 1-800 HP VT 480 Three Phase 1/2-650 HP CT	480 Three Phase 1/2-550 Hp VT 480V Three-phase 1/2-500 Hp CT
Motor Control Mode	V-F 0-400 Hz Sensorless Vector 0-300 Hz Slip Compensation	V-F 0-400 Hz Sensorless Vector 0-300 Hz Slip Compensation IM Sensorless Vector PM Sensorless Vector	V-F 0-400 Hz Sensorless Vector 0-120 Hz Slip Compensation IM Sensorless Vector PM Sensorless Vector	Variable TQ V-F 0.01-400 Hz Constant TQ Sensorless Vector 0.5-300 Hz
Operation Mode	PID Multi-Step Frequency 2-Wire 3-Wire Energy Savings	PID Multi-Step Frequency 2-Wire 3-Wire Torque Control Energy Save Fire Mode	PID 2-Wire 3-Wire Multiple Motor Control Damper Control Pump Clean & Pipe Break Fire Mode	PID 2-Wire 3-Wire
Enclosure Rating	IP 20, UL Type 1 with Conduit Box Option	NEMA 4X, IP66 Indoor	IP20, UL Type 1 with Conduit Box Option, Plenum Rated	UL Type 1 with Conduit Box Option
Communications	Built-in Modbus RTU	Built-in Modbus RTU	Built-in Modbus RTU, Metasys-N2 and BACnet Optional: EtherNet/IP	Built-in Modbus RTU Optional: Modbus/TCP, ProfibusDP, DeviceNet, Ethernet, and EtherNet/IP
Braking Circuit Resistors are external devices that are purchased separately	Built-in	Built-in	Built-in up to 40 Hp External brake module required for larger VFD's	Built-in regenerative braking 30Hp and below
Current Ratings	150% Overload for 60 seconds	150% Overload for 60 seconds	150% Overload for 60 seconds CT 120% Overload for 60 seconds VT	Heavy Duty 150%, 60 seconds Normal Duty 120%, 60 seconds
Digital Inputs	8	5	7	6
Pulse Train Input	0	1	1	0
Digital Outputs	1-NO 1-NC	1-NO 1-NC	5	3 Relays
Open Collector Output	1	1	1	0
Analog Inputs	2 0-10 V, 0-20 mA	2 0-10 V, 4-20 mA	2 10 V, -10+10 V, 0-20 mA	2 2 - 0-10V, 4-20mA
Analog Outputs	1 0-10 V	1 0-10 V, 0-20 mA	2 0-10 V, 0-20 mA	2 2 - 0-10 V, 4-20mA
Safety Digital Input	0	2	0	0
24VDC power supply	150mA	150mA	100mA	35mA
Real Time Clock	No	No	Yes	No
Required Circuit Protection	Circuit Breaker or Fuse	Circuit Breaker or Fuse	Circuit Breaker or Fuse	Circuit Breaker or Fuse
Software	Drive Pro	Drive Pro	Drive Pro	None
Options	NEMA 1 Conduit Box NEMA 1 Remote Keypad	None	NEMA 1 Conduit Box NEMA 1 & 4X Remote Keypad Mount Flange Mount Kit Ethernet/IP IO Expansion Card	NEMA 1 Conduit Box Advanced Keypad NEMA 1 Remote Keypad Mount Communication Cards: Modbus/TCP, ProfibusDP, DeviceNet, Ethernet, Ethernet/IP, EtherCAT & BACnet/IP

### **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								
НР	Output Current	Model Number <sup>1</sup>	List Price	Dimensions (in)	Approx. Weight	Conduit Con NEMA 1 E	nection Box Enclosure		
				HxWxD	(lbs.)	Model Number	List Price		
0.5	3	N700E-004SF	\$829.19	5.04 x 2.67 x 5.04	2.6	Standard	_		
1	5	N700E-007SF	\$862.58	5.04 x 2.67 x 5.04	2.6	Standard	_		
2	7	N700E-015SF	\$1,001.70	5.04 x 4.25 x 5.6	3.3	Standard	_		
3	11	N700E-022SF	\$1,084.06	5.04 x 4.25 x 5.6	3.3	Standard	_		

	230 Volt, Three-Phase In / 230 Volt, Three-Phase Out								
	nt Torque Overload		e Torque Overload			Dimensions (in)	Approx. Weight	Conduit Connection Box NEMA 1 Enclosure	
НР	Output Current	НР	Output Current	Model Number¹	List Price	HxWxD	(lbs.)	Model Number	List Price
0.5	3	_	_	N700E-004LF	\$806.93	5.04 x 2.67 x 5.04	2.6	Standard	_
1	5	_	_	N700E-007LF	\$836.98	5.04 x 2.67 x 5.04	2.6	Standard	_
2	7	_	_	N700E-015LF	\$986.12	5.04 x 2.67 x 5.04	2.6	Standard	_
3	11	_	_	N700E-022LF	\$1,067.37	5.04 x 4.25 x 5.6	3.3	Standard	_
5	17	_	_	N700E-037LF	\$1,372.33	5.04 x 5.42 x 5.78	4.4	Standard	_
7.5	24	10	30	N700E-055LFC	\$2,446.37	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$146.63
10	32	15	44	N700E-075LFC	\$2,889.35	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$146.63
15	45	20	50	N700E-110LFC	\$3,702.95	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$146.63
20	64	25	73	N700E-150LFC	\$4,278.37	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$166.48
25	76	30	85	N700E-185LFC	\$4,754.74	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$166.48
30	90	40	90	N700E-220LFC	\$5,567.23	15.4 x 9.85 x 7.4	22	CBOX-15-22	\$166.48
40	114	50	140	N700E-300LF*	\$9,155.54	21.7 x 10.7 x 10.5	55	CBOX-30LF	\$544.64
50	140	60	170	N700E-370LF*	\$10,779.41	25.6 x 11.7x x 10.5	78	CBOX-37-45LF	\$564.48
60	170	75	205	N700E-450LF*	\$12,979.81	25.6 x 11.7x x 10.5	78	CBOX-37-45LF	\$564.48
75	211	100	261	N700E-550LF*	\$15,593.13	30.0 x 13.7 x 10.9	105	CBOX-55-75LF	\$653.78
100	251	125	310	N700E-750LF*	\$20,424.66	30.0 x 13.7 x 10.9	105	CBOX-55-75LF	\$653.78

### **Remote Keypads & Cables**

Model Number	Description	List Price
N700E-LCD-KIT-HF	LCD Keypad, for use with N700-055HFC to N700E- 3500HFC	\$464.15
ROP7	LED Remote Keypad Unit, for use with any N700E VFD except N700E-300LF to N700E-750LF	\$237.04
NOP1-1A	Cable, 1.5 Meter	\$50.72
NOP1-3A	Cable, 3 Meter	\$80.48
KROP1-22MM	3 x 22mm Operator Station	\$1,556.73

N700E Communication Option Description						
Model Number		List Price				
N700E-ETH-C	N700E drive: Ethernet IP or Ethernet TCIP	\$2,222.22				

#### **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.

<sup>&</sup>lt;sup>1</sup> Catalog Numbers without the letter "C" at the end do not support communications cards.

\* These models do not accept the use of the ROP7and 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.



### 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

- » 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%)





	460 Volt, Three-Phase In / 460 Volt, Three-Phase Out										
	nt Torque Overload	Variable Torque 120% Overload		Model Number¹	List Price	Dimensions (in)	Approx. Weight	Conduit Con NEMA 1 E			
НР	Output Current	НР	Output Current	Model Number	LIST PITCE	HxWxD	(lbs.)	Model Number	List Price		
0.5	1.8	_	_	N700E-004HF	\$1,025.07	5.04 x 4.25 x 5.6	2.6	Standard	_		
1	3.4	_	_	N700E-007HF	\$1,075.16	5.04 x 4.25 x 5.6	2.6	Standard	_		
2	4.8	_	_	N700E-015HF	\$1,241.00	5.04 x 4.25 x 5.6	3.3	Standard	_		
3	7.2	_	_	N700E-022HF	\$1,550.41	5.04 x 4.25 x 5.6	3.3	Standard	_		
5	9.2	_	_	N700E-037HF	\$1,739.62	5.04 x 5.42 x 5.78	4.4	Standard	_		
7.5	12	10	15	N700E-055HFC	\$2,423.00	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$146.63		
10	16	15	22	N700E-075HFC	\$2,963.92	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$146.63		
15	23	20	29	N700E-110HFC	\$3,702.95	10.82 x 8.26 x 6.61	9.3	CBOX-5.5-11	\$146.63		
20	32	25	37	N700E-150HFC	\$4,278.37	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$166.48		
25	38	30	43	N700E-185HFC	\$4,754.74	15.4 x 9.85 x 7.4	16	CBOX-15-22	\$166.48		
30	45	40	57	N700E-220HFC	\$5,680.75	15.4 x 9.85 x 7.4	17	CBOX-15-22	\$166.48		
40	58	50	70	N700E-300HFC	\$8,170.53	20.86 x 12.28 x 10.63	48	CBOX-30-37	\$300.98		
50	75	60	85	N700E-370HFC	\$9,623.00	20.86 x 12.28 x 10.63	48	CBOX-30-37	\$300.98		
60	90	75	105	N700E-450HFC	\$11,643.09	21.57 x 13.46 x 11.02	60	CBOX-45-55	\$403.52		
75	110	100	135	N700E-550HFC	\$13,177.92	21.57 x 13.46 x 11.02	66	CBOX-45-55	\$403.52		
100	149	125	160	N700E-750HFC	\$17,251.50	27.48 x 15.6 x 11.02	110	CBOX-75-90	\$448.72		
125	176	150	195	N700E-900HFC	\$21,734.66	27.48 x 15.6 x 11.02	110	CBOX-75-90	\$448.72		
150	217	200	230	N700E-1100HFC	\$23,803.73	29.13 x 18.89 x 11.81	132	CBOX-110-132	\$737.57		
200	260	250	285	N700E-1320HFC	\$27,441.02	29.13 x 18.89 x 11.81	132	CBOX-110-132	\$737.57		
250	300	300	370	N700E-1600HFC	\$47,211.23	36.22 x 19.92 x 15.35	242	CBOX-160-220	\$1,080.45		
300	415	350	450	N700E-2200HFC	\$48,466.70	36.22 x 19.92 x 15.35	242	CBOX-160-220	\$1,080.45		
400	525	450	600	N700E-2800HFC	\$64,006.40	40.15 x 31.73 x 15.55	375	CBOX-280-350	\$1,573.27		
500	656	550	680	N700E-3500HFC	\$72,073.43	40.15 x 31.73 x 15.55	375	CBOX-280-350	\$1,573.27		

<sup>&</sup>lt;sup>1</sup> 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 N700-055HFC to N700E- 3500HFC	\$464.15
ROP7	LED Remote Keypad Unit, for use with any N700E VFD except N700E-300LF to N700E-750LF	\$237.04
NOP1-1A	Cable, 1.5 Meter	\$50.72
NOP1-3A	Cable, 3 Meter	\$80.48
KROP1-22MM	3 x 22mm Operator Station	\$1,556.73

N700E Communication Option Description						
Model Number List Price						
N700E-ETH-C N700E drive: Ethernet IP or Ethernet TCIP \$2,222.22						

#### **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.



### WDN700E Series High Performance Variable Frequency Drive - Specifications

	Specific	cation	า		Desci	ription		
Control Method				Sensorless Vector PWI				
Output Frequer	cy 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 Characterist	ic			Base frequency: 0~40 Torque pattern selecti	0 Hz free set on available (constant torqu	e / reduced to	orque)	
Overload Capac	ity			150%: 60 seconds (hea 120%: 60 seconds (no	J			
Acceleration / D	eceleration <sup>-</sup>	Time			ear / curve selection availab eleration setting available	le)		
DC Braking				Performs between min Level and time setting	nimum frequency and estab available	lished braking	g frequency	
	Frequency S	Setting	Standard Operator External Signal	Set via volume up / do 1 W, 1~2 kΩ variable ro	esistor		2500)	
			3		dance 10 kΩ), 4~20 mA (inp		•	
T	Forward Rev	verse	Standard Operator	Run key / Stop key (ch	ange forward / reverse by fu	inction comm	and)	
Input	Start/Stop		External Signal	Forward run / stop, re	verse run / stop set by term	nal assignme	nt (1a, 1b selection available)	
	Intelligent I	nput Te	rminal	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 <sup>nd</sup> Acc/Dec) SET (2 <sup>nd</sup> Motor Constants Setting)	
	Intelligent 0	Output T	Terminal	RUN (Run Signal) OL (Overload Advance			verload Advanced Notice Signal) output Deviation of PID Signal)	
Output	Frequency N	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 Outp	ut Conta	act	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 Auto Torque Boost Trip History Monitor Software Lock S-shape Accel. / Decel. Frequency Conversion Display USP 2nd Control			nermal Level Control Boost Monitor ck el. / Decel. Conversion Display	
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			o It	
		Ambier	nt Temperature	-10~50°C (over 40°C: s	et carrier frequency below 2	2.0 kHz)		
		Storage	e Temperature	-20~60°C (while transp	oorting: short time)			
Environmental	Conditions	Ambier	nt Humidity	Below 90% RH (non-co	ondensing)			
		Vibratio	on	5.9 m/s2 (0.6 G). 10~55	5 Hz (JIS C0911 test method	ology)		
		Locatio	n	Less than 1,000 m abo	ove sea level, Indoor (no cori	osive gas, no	flammable gas, no oil-drop, no dust)	
Options				Remote Operator Remote Operator Cab Regenerative Braking				

### **Section 2: Variable Frequency Drives - Chassis**



### **Accessories for WDN700E** — **Braking Resistors**

VFD Model	Dy	namic Braking R	Braki	Braking Modules				
Number	Model Number	Ohms	Kilo-Watts	Quantity Required	List Price (Each)	Model Number	Quantity Required	List Price (Each)
230 Volt, Single-Ph	ase	'			'			'
N700E-004SF	RB-00P3-50	50	0.3	1	\$66.15	Built-In	_	_
N700E-007SF	RB-00P3-50	50	0.3	1	\$66.15	Built-In	_	_
N700E-015SF	RB-00P3-50	50	0.3	1	\$66.15	Built-In	_	_
N700E-022SF	RB-00P6-35	35	0.6	1	\$159.86	Built-In	_	_
230 Volt, Three-Pha	250							
N700E-004LF	RB-00P3-50	50	0.3	1	\$66.15	Built-In		
N700E-004EF	RB-00P3-50	50	0.3	1	\$66.15	Built-In	_	
N700E-007EF	RB-00P3-50	50	0.3	1	\$66.15	Built-In	_	_
N700E-013EF	RB-00P6-35	35	0.6	1	\$159.86	Built-In		_
N700E-022EF	RB-01P2-35	35	1.2	1	\$206.17	Built-In		_
N700E-055LFC	RB-01P2-17	17	1.2	1	\$171.99	Built-In	_	_
N700E-075LFC	RB-01P2-17	17	1.2	1	\$171.99	Built-In	_	_
N700E-075EFC	RB-01P2-17	17	1.2	1	\$171.99	Built-In	_	_
N700E-110EFC	RB-04P5-8.7	8.7	4.5	1	\$1,213.85	Built-In		_
N700E-185LFC	RB-05P6-6	6	5.6	1	\$1,469.63	Built-In	_	_
N700E-183EFC	RB-06P6-6	6	5.6	1	\$1,469.03	Built-In	_	_
N700E-300LF	RB-09P0-HD-3.5	3.5	9	1	\$2,403.45	BRD-K3-370L	1	\$2,020.88
N700E-300EF	RB-11P2-HD-3.5	3.5	11.2	1	\$2,767.28	BRD-K3-370L	1	\$2,020.88
N700E-370EF	RB-13P5-HD-2.4	2.4	13.5	1	\$3,102.44	BRD-K3-550L	1	\$2,020.00
N700E-450LF	RB-16P5-HD-2.4	2.4	16.5	1	\$3,766.14	BRD-K3-550L	1	\$2,277.77
N700E-750LF	Consult Factory		-	_	-	—	_	Ψ2,277.77 —
								l
460 Volt, Three-Pha	ase	l						
N700E-004HF	RB-00P6-100	100	0.6	1	\$206.17	Built-In	_	_
N700E-007HF	RB-00P6-100	100	0.6	1	\$206.17	Built-In	_	_
N700E-015HF	RB-00P6-100	100	0.6	1	\$206.17	Built-In	_	_
N700E-022HF	RB-00P6-100	100	0.6	1	\$206.17	Built-In	_	_
N700E-037HF	RB-00P6-100	100	0.6	1	\$206.17	Built-In	_	_
N700E-055HFC	RB-01P8-HD-70	70	1.8	1	\$324.14	Built-In	_	_
N700E-075HFC	RB-02P4-HD-50	50	2.4	1	\$737.57	Built-In	_	_
N700E-110HFC	RB-03P3-HD-50	50	3.3	1	\$737.57	Built-In	_	_
N700E-150HFC	RB-04P5-HD-30	30	4.5	1	\$1,302.05	Built-In	_	_
N700E-185HFC	RB-05P6-HD-20	20	5.6	1	\$1,572.17	Built-In	_	_
N700E-220HFC	RB-06P6-HD-20	20	6.6	1	\$1,664.78	Built-In	_	_
N700E-300HFC	RB-09P0-HD-12	12	9	1	\$2,492.75	BRD-VZ3-370H	1	\$2,020.88
N700E-370HFC	RB-11P2-HD-12	12	11.2	1	\$2,869.81	BRD-VZ3-370H	1	\$2,020.88
N700E-450HFC	RB-13P5-HD-8	8	13.5	1	\$3,218.20	BRD-VZ3-550H	1	\$2,277.77
N700E-550HFC	RB-16P5-HD-6	8	16.5	1	\$3,908.36	BRD-VZ3-550H	1	\$2,277.77
N700E-750HFC	RB-22P5-HD-6	6	22.5	1	\$4,781.54	BRD-VZ3-750H	1	\$2,618.44
N700E-900HFC	RB-22P5-HD-6	6	22.5	2	\$4,781.54	BRD-VZ3-550H	2	\$2,277.77
N700E-1100HFC	RB-22P5-HD-6	6	22.5	2	\$4,781.54	BRD-VZ3-750H	2	\$2,618.44
N700E-1320HFC	RB-22P5-HD-6	6	22.5	2	\$4,781.54	BRD-VZ3-750H	2	\$2,618.44
N700E-1600HFC	RB-45P0-3	3	45	2	\$9,692.08	FBU100-160-4	1	\$9,851.94
N700E-2200HFC	RB-45P0-3	3	45	2	\$9,692.08	FBU100-220-4	1	\$13,177.08

FBU100-160-4

FBU100-220-4

\$9,851.94 consult factory

\$9,692.08

consult factory

#### **Additional Product Notes**

N700E-2800HFC

N700E-3500HFC

Shown above are values for typical heavy duty applications.

RB-45P0-3

RB-67P5-3

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

45

67.5

### **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											
НР	Output Current	utput Current   Model Number	output Current Model Number List Price Dimensions (in)	Approx. Weight	Conduit Connection Box NEMA 1 Enclosure							
	·			HxWxD	(lbs.)	Model Number List Price						
0.5	3	WDGP004-1	\$663.35	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$106.94					
1	5	WDGP008-1	\$690.06	5 x 2.8 x 5.1	1.68	WDGPCBOX-2	\$117.97					
2	7	WDGP015-1	\$800.25	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$127.89					

	230 Volt, Three-Phase In / 230 Volt, Three-Phase Out											
Constant Torque 150% Overload		Variable Torque 120% Overload		Model Number	List Price	Dimensions (in)	Approx. Weight		Conduit Connection Box NEMA 1 Enclosure			
НР	Output Current	НР	Output Current	Model Number	LIST Price	HxWxD	(W x D (lbs.)	Model Number	List Price			
0.5	3		_	WDGP004-2	\$646.65	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$106.94			
1	5		_	WDGP008-2	\$670.03	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$106.94			
2	7		_	WDGP015-2	\$789.12	5 x 3.9 x 5.1	2.47	WDGPCBOX-2	\$117.97			
3	11	_	_	WDGP022-2	\$854.78	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$127.89			
5	17	_	_	WDGP037-2	\$1,097.42	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$127.89			
7.5	24	10	30	WDGP055-2	\$1,956.65	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$137.81			
10	32	15	44	WDGP075-2	\$2,311.70	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$137.81			
15	45	20	50	WDGP110-2	\$2,961.69	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$148.84			
20	64	25	73	WDGP150-2	\$3,422.48	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$148.84			
25	76	30	85	WDGP185-2	\$3,803.12	16.1 x 10.2 x 8.2	29.32	WDGPCBOX-6	\$158.76			
30	90	40	120	WDGP220-2	\$4,454.23	16.1 x 10.2 x 8.2	29.32	WDGPCBOX-6	\$158.76			

	480 Volt, Three-Phase In / 480 Volt, Three-Phase Out												
Constant Torque 150% Overload		Variable Torque 120% Overload		Model Number	Liet Duice	Dimensions (in)	Approx. Weight	Conduit Connection Box NEMA 1 Enclosure					
НР	Output Current	НР	Output Current	Model Number	List Price	HxWxD	(lbs.)	Model Number	List Price				
0.5	1.8	_	_	WDGP004-4	\$820.28	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$106.94				
1	3.4	_	_	WDGP008-4	\$860.35	5 x 2.8 x 5.1	1.68	WDGPCBOX-1	\$106.94				
2	4.8	_	_	WDGP015-4	\$991.68	5 x 3.9 x 5.1	2.47	WDGPCBOX-2	\$117.97				
3	7.2		_	WDGP022-4	\$1,241.00	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$127.89				
5	9.2		_	WDGP037-4	\$1,391.25	5 x 5.5 x 6.1	4.17	WDGPCBOX-3	\$127.89				
7.5	12	10	15	WDGP055-4	\$1,937.73	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$137.81				
10	16	15	22	WDGP075-4	\$2,370.69	8.7 x 7 x 6.7	8.07	WDGPCBOX-4	\$137.81				
15	23	20	29	WDGP110-4	\$2,963.92	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$148.84				
20	32	25	37	WDGP150-4	\$3,423.59	12.6 x 9.3 x 7.5	19.84	WDGPCBOX-5	\$148.84				
25	38	30	43	WDGP185-4	\$3,803.12	16.1 x 10.2 x 8.2	22.05	WDGPCBOX-6	\$158.76				
30	45	40	57	WDGP220-4	\$4,544.38	16.1 x 10.2 x 8.2	22.05	WDGPCBOX-6	\$158.76				

#### **Additional Product Notes**

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



### **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 separate)



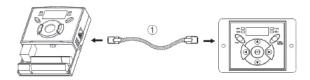


WDGP 230V Single-Phase In/Three-Phase Out								
Conduit Connection Box NEMA 1 Enclosure	List Price	Ordering Notes						
WDGPCBOX-1	\$106.94	Use with WDGP004-1						
WDGPCBOX-2	\$117.97	Use with WDGP008-1						
WDGPCBOX-3	\$127.89	Use with WDGP015-1						

WDGP 230V Three	e-Phase In	Three-Phase Out
WDGPCBOX-1	\$106.94	Use with WDGP004-2
WDGPCBOX-1	\$106.94	Use with WDGP008-2
WDGPCBOX-2	\$117.97	Use with WDGP015-2
WDGPCBOX-3	\$127.89	Use with WDGP022-2
WDGPCBOX-3	\$127.89	Use with WDGP037-2
WDGPCBOX-4	\$137.81	Use with WDGP055-2
WDGPCBOX-4	\$137.81	Use with WDGP075-2
WDGPCBOX-5	\$148.84	Use with WDGP110-2
WDGPCBOX-5	\$148.84	Use with WDGP150-2
WDGPCBOX-6	\$158.76	Use with WDGP185-2
WDGPCBOX-6	\$158.76	Use with WDGP220-2
WDGP 480V Three	Dhaga In	Three Phase Out
WDGF 400V IIII et	:-Pnase In	inree-Phase Out
WDGPCBOX-1	\$106.94	Use with WDGP004-4
WDGPCBOX-1	\$106.94	Use with WDGP004-4
WDGPCBOX-1 WDGPCBOX-1	\$106.94 \$106.94	Use with WDGP004-4 Use with WDGP008-4
WDGPCBOX-1 WDGPCBOX-1 WDGPCBOX-2	\$106.94 \$106.94 \$117.97	Use with WDGP004-4 Use with WDGP008-4 Use with WDGP015-4
WDGPCBOX-1 WDGPCBOX-2 WDGPCBOX-3	\$106.94 \$106.94 \$117.97 \$127.89	Use with WDGP004-4 Use with WDGP008-4 Use with WDGP015-4 Use with WDGP022-4
WDGPCBOX-1 WDGPCBOX-1 WDGPCBOX-2 WDGPCBOX-3 WDGPCBOX-3	\$106.94 \$106.94 \$117.97 \$127.89 \$127.89	Use with WDGP004-4 Use with WDGP008-4 Use with WDGP015-4 Use with WDGP022-4 Use with WDGP037-4
WDGPCBOX-1 WDGPCBOX-2 WDGPCBOX-3 WDGPCBOX-3 WDGPCBOX-4	\$106.94 \$106.94 \$117.97 \$127.89 \$127.89 \$137.81	Use with WDGP004-4 Use with WDGP008-4 Use with WDGP015-4 Use with WDGP022-4 Use with WDGP037-4 Use with WDGP055-4
WDGPCBOX-1 WDGPCBOX-2 WDGPCBOX-3 WDGPCBOX-3 WDGPCBOX-4 WDGPCBOX-4	\$106.94 \$106.94 \$117.97 \$127.89 \$127.89 \$137.81 \$137.81	Use with WDGP004-4 Use with WDGP008-4 Use with WDGP015-4 Use with WDGP022-4 Use with WDGP037-4 Use with WDGP055-4 Use with WDGP075-4
WDGPCBOX-1 WDGPCBOX-2 WDGPCBOX-3 WDGPCBOX-3 WDGPCBOX-4 WDGPCBOX-4 WDGPCBOX-5	\$106.94 \$106.94 \$117.97 \$127.89 \$127.89 \$137.81 \$137.81 \$148.84	Use with WDGP004-4 Use with WDGP008-4 Use with WDGP015-4 Use with WDGP022-4 Use with WDGP037-4 Use with WDGP055-4 Use with WDGP075-4 Use with WDGP110-4

### **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	\$160.97	Remote Cable with Keypad For use with WDGP Drives. Includes 2M¹ cable and remote Keypad
KROP1-22MM	\$1,556.73	3x22mm Operator Station: 1 Potentiometer, 1 Start Pushbutton, Stop Pushbutton, NEMA 4

<sup>1</sup>M = Meters

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





	230 Volt												
UL Thre	UL Three Phase		JL Single Phas e Torque Norr		Additional Data					Approx.			
	nt Torque Overload	Single Phase Input		Three Phase Output	Built-in EMC Filter	Built-in DC Reactor	Model	List Price	Dimensions HxWxD(in)	Weight (lbs)			
HP	Amps	HP	Amps	Amps	ENIC FILLEI	DC Reactor							
0.5	2.5		2.2	1.5			WD4X004-2	\$1,146.39	10.1 x 7.1 x 6.9	7.9			
1	5	0.5	4.9	2.8			WD4X008-2	\$1,157.52	10.1 x 7.1 x 6.9	7.9			
2	8	1	8.4	4.6			WD4X015-2	\$1,364.54	10.2 x 8.7 x 7.9	11.5			
3	11	1.5	11.8	6.1			WD4X022-2	\$1,423.53	10.2 x 8.7 x 7.9	11.7			
5	16	2	17.5	8.8	NO	NO	WD4X037-2	\$1,760.77	10.2 x 8.7 x 7.9	12.3			
7.5	24	3	25.8	13			WD4X055-2	\$2,425.23	10.2 x 8.7 x 7.9	19.8			
10	32	5	34.9	18			WD4X075-2	\$2,656.73	12.9 x 9.8 x 8.9	19.8			
15	46	7.5	50.8	26			WD4X110-2	\$3,182.07	15.7 x 10.2 x 9.7	21.2			
20	60	10	66.7	33			WD4X150-2	\$3,563.83	18.1 x 11.8 x 9.8	26.7			
					460 Vo	lt							
0.5	1.3		1.1	0.8			WD4X004-4	\$1,303.32	9.1 x 6.3 x 7.1	8			
1	2.5	0.5	2.4	1.5			WD4X008-4	\$1,321.13	9.1 x 6.3 x 7.1	8			
2	4.0	0.75	4.2	2.3			WD4X015-4	\$1,387.91	9.1 x 6.3 x 7.1	8			
3	5.5	1	5.9	3.1			WD4X022-4	\$1,617.19	9.1 x 6.3 x 7.1	8			
5	8.0	2	8.7	4.8			WD4X037-4	\$2,628.91	9.1 x 6.3 x 7.1	8			
7.5	12.0	3	12.9	7.1	NO	NO	WD4X055-4	\$2,897.14	9.1 x 6.3 x 7.1	8			
10	16.0	5	17.5	9.5			WD4X075-4	\$3,165.37	9.1 x 6.3 x 7.1	8			
15	24.0	7.5	26.5	15.0			WD4X110-4	\$3,327.87	11.4 x 7.1 x 8.1	11			
20	30.0	10	33.4	18.0			WD4X150-4	\$3,945.59	11.4 x 7.1 x 8.1	11			
25	39.0	10	43.6	23.0			WD4X185-4	\$4,009.03	13.8 x 8.7 x 8.8	17			
30	45.0	15	50.7	27.0			WD4X220-4	\$4,252.77	13.8 x 8.7 x 8.8	17			

### **Remote Keypads & Cables**

Model	List Price	Description
KROP1-22MM	\$1,556.73	3x22mm Operator Station: 1 Potentiometer, 1 Start Pushbutton, Stop

<sup>1</sup>M = 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.



### 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





	230 Volt											
	UL Three Phase				UL Single le Torque	Phase Normal Duty	Additio	nal Data			<b>Di</b> mensions	Approx.
	Constant Torque Variable Torque 150% Overload 120% Overload			3	Phase put	Three Phase Output	Built-in EMC Filter	Built-in DC Reactor	Model	List Price	Dimensions HxWxD(in)	Weight (lbs)
HP	Amps	HP	Amps	HP	Amps	Amps	LIVICTITICS	De Redetoi				
0.5	2.5	1	5	0.5	4.9	2.9			WDFC0008-2	\$1,033.98	9.1 x 6.3 x 7.1	8
1	5.0	2	8	1	8.4	4.4			WDFC0015-2	\$1,217.62	9.1 x 6.3 x 7.1	8
2	8.0	3	12	1.5	12.9	6.4			WDFC0022-2	\$1,490.31	9.1 x 6.3 x 7.1	8
3	11.0	5	16	2	17.5	8.4			WDFC0037-2	\$1,565.99	9.1 x 6.3 x 7.1	8
5	17.0	7.5	22	3	23.7	11	NO	NO	WDFC0055-2	\$2,181.48	9.1 x 6.3 x 7.1	8
7.5	24.0	10	30	5	32.7	16			WDFC0075-2	\$2,446.37	9.1 x 6.3 x 7.1	8
10	32.0	15	42	5	46.4	23			WDFC0110-2	\$3,187.63	9.1 x 6.3 x 7.1	8
15	46.0	20	56	7.5	62.3	30			WDFC0150-2	\$3,830.95	11.4 x 7.1 x 8.1	11
20	60.0	25	69	10	77.2	37			WDFC0185-2	\$4,667.92	13.8 x 8.7 x 8.8	16
							460 Vo	olt				
0.5	1.3	1	2.5	0.5	2.4	1.6			WDFC0008-4	\$1,129.70	9.1 x 6.3 x 7.1	8
1	2.5	2	4	1	4.2	2.4			WDFC0015-4	\$1,208.72	9.1 x 6.3 x 7.1	8
2	4.0	3	6	1.5	6.5	3.5		NO	WDFC0022-4	\$1,335.60	9.1 x 6.3 x 7.1	8
3	5.5	5	8	2	8.7	4.6			WDFC0037-4	\$1,427.98	9.1 x 6.3 x 7.1	8
5	8.0	7.5	12	3	12.2	6.8			WDFC0055-4	\$1,739.62	9.1 x 6.3 x 7.1	8
7.5	12.0	10	16	5	17.5	9.2	YES		WDFC0075-4	\$2,370.69	9.1 x 6.3 x 7.1	8
10	15.0	15	24	7.5	26.5	14			WDFC0110-4	\$2,732.42	9.1 x 6.3 x 7.1	8
15	22.0	20	30	10	33.4	17			WDFC0150-4	\$3,504.84	11.4 x 7.1 x 8.1	11
20	28.0	25	38	10	42.5	22			WDFC0185-4	\$4,522.12	11.4 x 7.1 x 8.1	11
25	35.0	30	45	15	50.7	26			WDFC0220-4	\$5,149.85	13.8 x 8.7 x 8.8	17
30	41.0	40	61	20	69.1	36			WDFC0300-4	\$6,198.30	13.8 x 8.7 x 8.8	17
40	55.0	50	75	25	69.3	39			WDFC0370-4	\$8,160.52	17.7 x 10.8 x 11.2	58
50	67.0	60	91	30	84.6	47			WDFC0450-4	\$9,623.00	20.1 x 12.8 x 11.2	95
60	81.0	75	107	40	100.1	55		\/F6	WDFC0550-4	\$10,375.39	20.1 x 12.8 x 11.2	95
75	106.0	100	142	50	133.6	73	NO	YES	WDFC0750-4	\$12,274.16	21.7 x 12.8 x 12.2	95
100	136.0	125	169	60	160.0	86			WDFC0900-4	\$14,899.73	21.7 x 12.8 x 12.2	95
125	169.0	150 *	223	60	215.1	86			WDFC1100-4	\$19,441.88	27.8 x 11.8 x 15.2	123
150	195.0	200 *	264	75	254.6	101			WDFC1320-4	\$23,271.72	27.8 x 11.8 x 15.2	123
200	255.0	250 *	325	100	315.3	137			WDFC1600-4	\$26,047.54	27.8 x 15.0 x 15.6	165
250	303.0	300 *	370	125	358.9	157			WDFC1850-4	\$47,700.95	27.8 x 15.0 x 15.6	165
250	345.0	350 *	432	150	419.1	181			WDFC2200-4	\$50,303.15	36.3 x 17.3 x 17.3	265
300	375.0	400 *	481	150	469.3	195	NO	YES	WDFC2500-4	\$64,751.00	36.3 x 17.3 x 17.3	265
400	478.0	500 *	613	150	598.1	218			WDFC3150-4	\$69,998.80	39.4 x 23.6 x 19.7	409
450	541.0	550 *	683	200	666.4	245			WDFC3550-4	\$77,756.41	39.4 x 23.6 x 19.7	409
500	591.0	650 *	770	250	751.3	308			WDFC4000-4	\$90,478.00	39.4 x 23.6 x 19.7	409
650	740.0	800 *	962	350	938.6	414			WDFC5000-4	\$103,545.73	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.

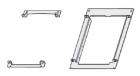
### **Section 2: Variable Frequency Drives - Chassis**



### **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



Flange (Drive sold separately)



Conduit Box



Conduit Box





### **WDFC Remote Cable with Keypad**



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

Model	List Price	Description
WDFCCABLELCD-1	\$184.12	NEMA 1 Bezel and Cable Kit (2M¹ ) For use with WDFC drives
WDFCCABLELCD-2	\$184.12	NEMA 1 Bezel and Cable Kit (3M¹ ) For use with WDFC drives
KROP1-22MM	\$1,556.73	3x22mm Operator Station: 1 Potentiometer, 1 Start Pushbutton, Stop Pushbutton, NEMA 4

<sup>1</sup>M = Meters

### **WDFC NEMA 4X Keypad Mount**



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

NEMA 4X Mount	List Price	Ordering Notes		
WDFC4XMOUNT	\$664.81	For use with WDFC drives		
Cable for DrivePro (PC Connection)	List Price	Ordering Notes		
		For use with WDFC		
WDFCCABLEDVP	\$184.12	DrivePro software available for free from wwec.co/DVDP		

#### Flange Mount Kit **Conduit Connection Box** (Heat sink out back) **NEMA 1 Enclosure Ordering Notes** List List **Model Number Model Number Price Price** WDFCFM-1 \$185.22 Use with WDFC0008-2 WDFCCBOX-1 \$128.99 WDFCFM-1 \$185.22 Use with WDFC0015-2 WDFCCBOX-1 \$128.99 WDFCFM-1 \$185.22 Use with WDFC0022-2 WDFCCBOX-1 \$128.99 WDFCFM-1 \$185.22 Use with WDFC0037-2 WDFCCBOX-1 \$128.99 WDFCFM-1 \$185.22 Use with WDFC0055-2 WDFCCBOX-1 \$128.99 WDFCFM-1 \$185.22 Use with WDFC0075-2 WDFCCBOX-1 WDFCFM-1 \$185.22 Use with WDFC0110-2 WDFCCBOX-1 \$128.99 WDFCFM-2 \$202.86 Use with WDFC0150-2 WDFCCBOX-2 \$142.22 WDFCFM-3 \$223.81 Use with WDFC0185-2 WDFCCBOX-3 \$153.25 WDFCFM-1 \$185.22 Use with WDFC0008-4 WDFCCBOX-1 \$185.22 Use with WDFC0015-4 WDFCCBOX-1 \$128.99 WDFCFM-1 \$185.22 Use with WDFC0022-4 WDFCCBOX-1 \$185.22 Use with WDFC0037-4 WDFCCBOX-1 \$128.99 \$185.22 Use with WDFC0055-4 WDFCCBOX-1 \$185.22 Use with WDFC0075-4 WDFCCBOX-1 \$128.99 \$185.22 Use with WDFC0110-4 WDFCCBOX-1 WDFCFM-2 \$202.86 Use with WDFC0150-4 WDFCCBOX-2 \$142.22 \$202.86 WDFCCBOX-2 \$142.22 Use with WDFC0185-4 WDFCFM-3 \$223.81 Use with WDFC0220-4 WDFCCBOX-3 \$153.25 \$223.81 Use with WDFC0300-4 WDFCCBOX-3 WDFCFM-4 \$245.86 Use with WDFC0370-4 WDFCCBOX-4 \$166.48 WDFCFM-5 \$270.11 Use with WDFC0450-4 WDFCCBOX-5 \$179.71 WDFCFM-5 \$270.11 Use with WDFC0550-4 WDFCCBOX-5 \$179.71 WDFCFM-6 \$297.68 Use with WDFC0750-4 WDFCCBOX-6 \$190.73 WDFCFM-6 \$297.68 Use with WDFC0900-4 WDFCCBOX-6 \$190.73 WDFCFM-7 \$862.16 Use with WDFC1100-4 WDFCCBOX-7 \$507.15 WDFCFM-7 \$862 16 Use with WDFC1320-4 WDFCCBOX-7 \$507.15 WDFCFM-8 \$870.98 Use with WDFC1600-4 WDFCCBOX-8 \$680.24 WDFCFM-8 \$870.98 Use with WDFC1850-4 WDFCCBOX-8 \$680.24 WDFCFM-9 \$1,023.12 Use with WDFC2200-4 WDFCCROX-9 \$689.06 WDFCFM-9 \$1.023.12 Use with WDFC2500-4 WDFCCBOX-9 \$689.06 WDFCFM-10 \$1,110,22 Use with WDFC3150-4 WDFCCBOX-10 \$1,095.89 WDFCFM-10 \$1,110.22 Use with WDFC3550-4 WDFCCBOX-10 \$1.095.89 WDFCFM-10 \$1,110.22 Use with WDFC4000-4 WDFCCBOX-10 \$1.095.89 WDFCFM-11 \$1,281.11 Use with WDFC5000-4 WDFCCBOX-11 \$1,241,42

#### **Additional Product Notes**

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







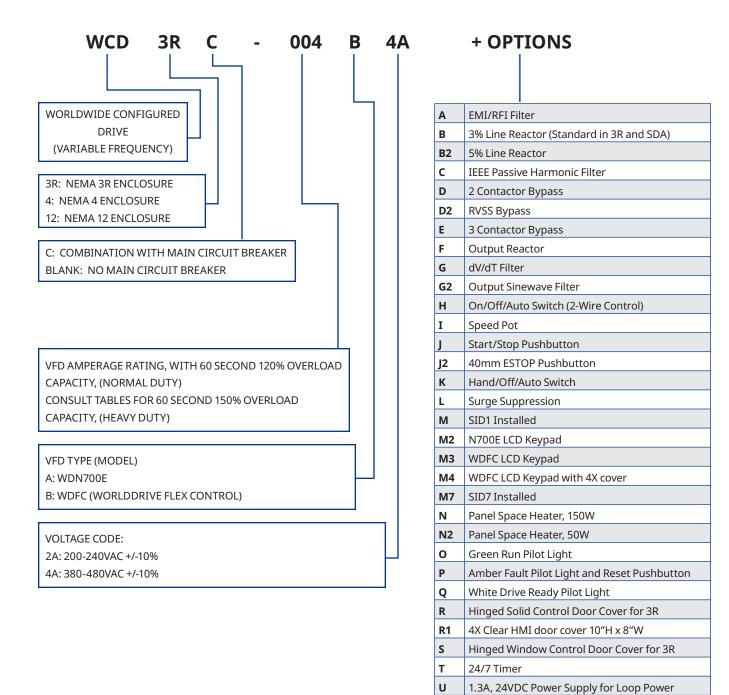
### WCD Series Stock NEMA 3R Panel

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**



Additional Product Notes

See Page 18 for additional priced options

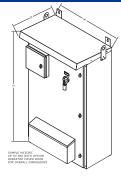


### WCD Series - Configurable NEMA 3R Enclosed Panels for WDFC

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



		Consta	nt Torque	Variable	Torque			
	Voltage	Heav	y Duty	Norma	al duty	Enclosure H x W x D (in)	Model Number	List Price
		HP	Current	HP	Current	,		11100
	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 31x 21	WCD3RC-075B4A	\$20,502.57
	460	50	67	60	91	50 x 31x 21	WCD3RC-091B4A	\$24,098.68
*	460	60	81	75	107	50 x 31x 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
	400	030	740	000	900	00 X /0 X 31	WCD3RC-900B4A	φ100,014.21

#### \* 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
	\$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

OPERATOR COURT COOR OF THE CO								
	WCD3RC Options							
Option Code	Option Description	List Price						
Α	EMI/RFI Filter	consult factory						
D2	D2 RVSS Bypass							
G2	Output Sinewave Filter	consult factory						
Н	On-Off-Auto Selector Switch	\$343.92						
I	Speed Potentiometer	\$625.51						
J	Start/Stop Pushbuttons	\$655.56						
J2	40mm ESTOP Pushbutton	\$487.49						
К	Hand-Off-Auto Selector Switch	\$343.92						
L	Surge Suppression	\$1,124.13						
М	Installed SID1 Text Keypad	\$2,631.13						
М3	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						
0	Green Run Pilot Light	\$343.92						
Р	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						
Т	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 N700E drive: Ethernet IP or Ethernet TCIP	\$2,272.22						
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						



### 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



	Constant Torque		Variable Torque		Enclosure		
Volts	Heavy Duty		Normal Duty		HxWxD(in)	Model Number	List Price
	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	30 x 20 x 10	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

	WCD43C Outline	
	WCD12C Options	
Option Code	Option Description	List Price
Α	EMI/RFI Filter	consult factory
D2	RVSS Bypass	consult factory
G2	Output Sinewave Filter	consult factory
н	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
М	Installed SID1 Text Keypad	\$2,631.13
М3	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
0	Green Run Pilot Light	\$343.92
Р	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
Т	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 N700E drive: Ethernet IP or Ethernet TCIP	\$2,272.22
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**

Option format: WCD12C-012B-2A-HI Consult Factory for additional options pricing. For ratings higher than shown in the table above - consult factory.

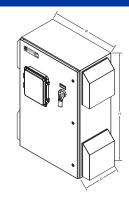


### WCD Series - Configurable NEMA 4 Enclosed Panels for WDFC

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



	Constant Torque		Variable Torque		Enclosure			
Volts	Heavy Duty		Normal Duty		HxWxD(in)	Model Number	List Price	
	НР	Amps	НР	Amps				
230	2	8	3	12	36 x 24 x 12	WCD4C-012B2A	\$10,380.95	
230	3	11	5	16	36 x 24 x 12	WCD4C-016B2A	\$10,431.04	
230	5	17	7.5	22	36 x 24 x 12	WCD4C-022B2A	\$12,395.48	
230	7.5	24	10	30	36 x 24 x 12	WCD4C-030B2A	\$12,670.39	
230	10	32	15	42	36 x 24 x 12	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	36 x 24 x 12	WCD4C-006B4A	\$9,564.01	
460	3	5.5	5	8	36 x 24 x 12	WCD4C-008B4A	\$9,614.09	
460	5	8	7.5	12	36 x 24 x 12	WCD4C-012B4A	\$12,574.67	
460	7.5	12	10	16	36 x 24 x 12	WCD4C-016B4A	\$12,986.48	
460	10	15	15	24	36 x 24 x 12	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							
Α	EMI/RFI Filter	consult factory							
D2	RVSS Bypass	consult factory							
G2	Output Sinewave Filter	consult factory							
Н	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							
М	Installed SID1 Text Keypad	\$2,631.13							
М3	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							
0	Green Run Pilot Light	\$343.92							
Р	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							
Т	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 N700E drive: Ethernet IP or Ethernet TCIP	\$2,272.22							
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**

Option format: WCD4C-012B-2A-HI Consult Factory for additional options pricing. For ratings higher than shown in the table above - consult factory.



### 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				Adder Codes / List of base model num	: Prices ber in alpha order)		
480 V Model	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
Number	B (1)	B2 <sup>(1)</sup>	C (1)	<b>D</b> (1)	Eω	FΦ	<b>G</b> <sup>(1)</sup>
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
<b>A</b> <sup>(2)</sup>	EMI/RFI Filter	consult factory
D2 (2)	RVSS Bypass	consult factory
<b>G2</b> <sup>(2)</sup>	Output Sinewave Filter	consult factory
H (2)	On-Off-Auto Selector Switch	\$343.92
I (2)	Speed Potentiometer	\$625.51
<b>J</b> <sup>(2)</sup>	Start/Stop Pushbuttons	\$655.56
J2 <sup>(2)</sup>	40mm ESTOP Pushbutton	\$487.49
K (2)	Hand-Off-Auto Selector Switch	\$343.92
L (2)	Surge Suppression	\$1,124.13
M <sup>(2)</sup>	Installed SID1 Text Keypad	\$2,631.13
M3 <sup>(2)</sup>	WDFC LCD Keypad	\$549.82
M4 <sup>(2)</sup>	WDFC LCD Keypad with 4X cover	\$1,011.72
M7 <sup>(2)</sup>	Installed SID7 Operator Interface	\$6,872.78
N <sup>(2)</sup>	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
<b>Q</b> <sup>(2)</sup>	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
<b>T</b> (2)	24/7 timer	\$819.17
U <sup>(2)</sup>	1.3A, 24VDC Power Supply for Loop Power	\$475.25
X50	ROM1 Remote Operating Module	\$4,985.00
X55	WCD N700E drive: Ethernet IP or Ethernet TCIP	\$2,272.22
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
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



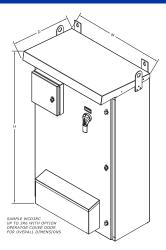
### WCD Series - Configurable NEMA 3R Enclosed Panels for WDN700E

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



	Constan	t Torque	Variable	e Torque			
Voltage	Heavy	Heavy Duty		al Duty	Enclosure H x W x D (in)	Model Number	List Price
	HP	Current	НР	Current	T T X W X D (III)		Price
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



### 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				n Adder Codes / List of base model num			
480 V Model	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
Number	B <sup>(1)</sup>	B2 <sup>(1)</sup>	C <sup>(1)</sup>	<b>D</b> <sup>(1)</sup>	E (1)	F <sup>(1)</sup>	<b>G</b> <sup>(1)</sup>
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 Code	Option Description	List Price
A (2)	EMI/RFI Filter	consult factory
D2 (2)	RVSS Bypass	consult factory
G2 <sup>(2)</sup>	Output Sinewave Filter	consult factory
H (2)	On-Off-Auto Selector Switch	\$343.92
<b>I</b> (2)	Speed Potentiometer	\$625.51
J <sup>(2)</sup>	Start/Stop Pushbuttons	\$655.56
J2 <sup>(2)</sup>	40mm ESTOP Pushbutton	\$487.49
K (2)	Hand-Off-Auto Selector Switch	\$343.92
L (2)	Surge Suppression	\$1,124.13
M <sup>(2)</sup>	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 <sup>(2)</sup>	Panel Space Heater, 50W	\$422.94

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
<b>T</b> (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 drive: Ethernet IP or Ethernet TCIP	\$2,272.22
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
X68	WDFC-Expanded Input, Output card: 2-DI, 3-RO, 1-AI, 1-AO	\$398.52

**Option Description** 

#### **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

**List Price** 



### **WWESDA Series - Standard Duty NEMA 12 Enclosed Panels for WDN700E**

The WWESDA Series of Standard Duty Drive Packages provides the user with feature sets that allow for quick and easy configuration.

#### **Product Specifications**

- » 3HP through 550HP (WDN700E N700E VFD)
- » Three-phase or single-phase input
- » CT and VT ratings
- » Standard duty NEMA 12 indoor rated enclosure
- » Forced-air filtered fans (positive pressure design)
- » Padlock disconnect on main CB
- » 3% line reactors
- » Control transformer with CB protection
- » Dual control thermostat
- » SID1 (Smart Interface Device) with extended functions



Voltage <sup>(1)</sup>	Constant Torque Heavy Duty		Variable Torque Normal Duty		Dimensions (in.)	Model	List
voitage	HP	Current	НР	Current	HxWxD	Number	Price
460	3	7.2	-	-	20 x 16 x 8	WWESDA-DRV12-003-4	\$10,360.92
460	5	9.2	-	-	20 x 16 x 8	WWESDA-DRV12-005-4	\$10,561.26
460	7.5	12	10	15	30 x 20 x 10	WWESDA-DRV12-007-4	\$12,765.00
460	10	16	15	22	30 x 20 x 10	WWESDA-DRV12-010-4	\$13,283.66
460	15	23	20	29	30 x 20 x 10	WWESDA-DRV12-015-4	\$14,126.20
460	20	32	25	37	36 x 24 x 12	WWESDA-DRV12-020-4	\$15,033.29
460	25	38	30	43	36 x 24 x 12	WWESDA-DRV12-025-4	\$15,810.17
460	30	45	40	57	36 x 24 x 12	WWESDA-DRV12-030-4	\$16,717.26
460	40	58	50	70	42 x 30 x 16	WWESDA-DRV12-040-4	\$20,346.75
460	50	75	60	85	42 x 30 x 16	WWESDA-DRV12-050-4	\$22,808.71
460	60	90	75	105	42 x 30 x 16	WWESDA-DRV12-060-4	\$25,529.99
460	75	110	100	135	42 x 30 x 16	WWESDA-DRV12-075-4	\$27,733.73
460	100	149	125	160	48 x 30 x 16	WWESDA-DRV12-100-4	\$33,047.20
460	125	176	150	195	48 x 30 x 16	WWESDA-DRV12-125-4	\$37,194.23
460	150	217	200	230	60 x 36 x 16	WWESDA-DRV12-150-4	\$44,192.78
460	200	260	250	285	60 x 36 x 16	WWESDA-DRV12-200-4	\$47,951.38
460	250	300	300	370	84 x 39.5 x 24	WWESDA-DRV12-250-4	\$70,501.87
460	300	415	350	450	84 x 39.5 x 24	WWESDA-DRV12-300-4	\$74,389.58
460	400	525	450	600	Consult Factory	WWESDA-DRV12-400-4	\$106,595.35
460	500	656	550	680	Consult Factory	WWESDA-DRV12-500-4	\$116,962.94

#### **Additional Product Notes**

- (1) Also available in three-phase, 230-volt; consult factory.



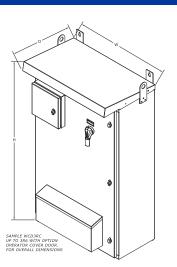
### **WWEPPB Series Positive Displacement Pump Panel NEMA 3R Enclosed Drive**

WorldWide Electric's Positive Displacement Pump Drive packages are designed and built to handle the incredibly harsh environments found in the petroleum industry, with a NEMA 3R enclosure, galvanized steel rear panel, sloped roof, and full positive pressure filtered ventilation. The WorldWide Positive Displacement Pump Drive package is easy to install with heavy duty mounting ears and lifting straps.

#### **Product Specifications**

- » 3HP through 500HP
- » Three-phase or single-phase input
- » CT and VT ratings
- » Heavy duty NEMA 3R Enclosure
- » Hooded (sloped roof), ventilated, 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
- » Lockable main door and control cover door
- » Padlock disconnect on main CB
- » 3% line reactors
- » Control transformer with CB protection
- » Dual control thermostat
- » Door heat strip for keypad

- » Full panel surge protection
- » Door mounted keypad
- » Optional: SID1 (Smart Interface Device) with extended functions
- » Start / Stop / Reset pushbuttons
- » Run / Fault pilot lights
- » Hand-Off-Auto selector
- » Emergency stop
- » Murphy switch input ready (7)
- » NO / NC selectable inputs
- » Configurable analog and discrete I/O
- » Pre-charge pump timer



	Constan	t Torque	Variable	e Torque	Enclosure		
Voltage	Heavy	/ Duty	Norma	al Duty	Eliciosure	Model	List Price
	HP	Amps	HP	Amps	HxWxD(in)		
480	3	7.2	-	-	32 x 25 x 17	WWEPPB-DRV3R-003-4	\$23,975.13
480	5	9.2	-	-	32 x 25 x 17	WWEPPB-DRV3R-005-4	\$24,558.35
480	7.5	12	10	15	32 x 25 x 17	WWEPPB-DRV3R-007-4	\$25,465.44
480	10	16	15	22	32 x 25 x 17	WWEPPB-DRV3R-010-4	\$25,854.99
480	15	23	20	29	32 x 25 x 17	WWEPPB-DRV3R-015-4	\$26,891.19
480	20	32	25	37	40 x 25 x 19	WWEPPB-DRV3R-020-4	\$27,433.22
480	25	38	30	43	40 x 25 x 19	WWEPPB-DRV3R-025-4	\$27,986.39
480	30	45	40	57	40 x 25 x 19	WWEPPB-DRV3R-030-4	\$28,473.88
480	40	58	50	70	50 x 31 x 21	WWEPPB-DRV3R-040-4	\$32,189.07
480	50	75	60	85	50 x 31 x 21	WWEPPB-DRV3R-050-4	\$34,184.68
480	60	90	75	105	50 x 31 x 21	WWEPPB-DRV3R-060-4	\$37,484.73
480	75	110	100	135	50 x 31 x 21	WWEPPB-DRV3R-075-4	\$41,378.00
480	100	149	125	160	56 x 37 x 23	WWEPPB-DRV3R-100-4	\$46,446.60
480	125	176	150	195	56 x 37 x 23	WWEPPB-DRV3R-125-4	\$50,552.46
480	150	217	200	230	63 x 37 x 25	WWEPPB-DRV3R-150-4	\$54,263.20
480	200	260	250	285	63 x 37 x 25	WWEPPB-DRV3R-200-4	\$66,557.40
480	250	300	300	370	68 x 38 x 25	WWEPPB-DRV3R-250-4	\$87,533.00
480	300	415	350	450	68 x 38 x 25	WWEPPB-DRV3R-300-4	\$91,153.59
480	350	475	400	500	88 x 65 x 31	WWEPPB-DRV3R-350-4	\$120,202.89
480	400	525	450	600	88 x 65 x 31	WWEPPB-DRV3R-400-4	\$143,329.91
480	500	656	550	680	88 x 65 x 31	WWEPPB-DRV3R-500-4	\$162,769.57



### 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.

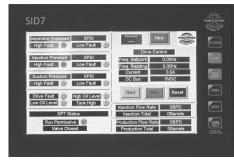
#### **Product Specifications**

- » 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



















## Solid State Reduced Voltage Starts, 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 you minimize energy costs and improve operational effectiveness.



### **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			350	Standard Duty 350%, 30 seconds, 4 starts/hour			Heavy Duty 450%, 30 seconds, 4 starts/hour			
		Dimensions	НР				Н	IP		
Model Number	List Price	H x W x D (in)	Amps	208V	230V	460V	Amps	208V	230V	460V
WSIQ-0024BP	\$2,177.03	13.2 x 6.0 x 9.1	17	5	5	10	14	3	3	10
WSIQ-0042BP	\$2,228.23	13.2 x 6.0 x 9.1	28	7.5	10	20	22	7.5	7.5	15
WSIQ-0052BP	\$2,384.05	13.2 x 6.0 x 9.1	35	10	10	25	28	10	10	20
WSIQ-0064BP	\$2,992.86	13.2 x 6.0 x 9.1	52	15	15	30	40	10	10	25
WSIQ-0069BP	\$3,200.99	13.2 x 6.0 x 9.1	59	15	20	40	46	15	15	30
WSIQ-0105BP	\$3,421.36	13.2 x 6.0 x 9.1	77	25	25	50	52	15	15	40
WSIQ-0115BP	\$3,641.74	13.2 x 6.0 x 9.1	81	25	25	60	65	20	20	50
WSIQ-0135BP	\$4,561.07	13.2 x 6.0 x 9.1	99	30	30	75	77	25	25	60
WSIQ-0184BP	\$5,520.48	19.5 x 8.5 x 9.6	124	40	40	75	96	30	30	60
WSIQ-0200BP	\$6,039.14	19.5 x 8.5 x 9.6	131	40	40	100	104	30	40	75
WSIQ-0229BP	\$6,725.86	19.5 x 8.5 x 9.6	156	50	50	125	124	40	40	100
WSIQ-0250BP	\$7,594.00	19.5 x 8.5 x 9.6	195	60	60	150	156	50	60	125
WSIQ-0352BP	\$8,812.73	20.6 x 8.5 x 9.6	240	75	75	150	180	60	60	150
WSIQ-0397BP	\$8,980.80	20.6 x 8.5 x 9.6	261	75	75	200	203	60	75	150
WSIQ-0410BP	\$10,574.61	20.6 x 8.5 x 9.6	377	125	125	300	302	100	100	250
WSIQ-0550BP	\$13,219.10	20.6 x 8.5 x 9.6	414	150	150	350	321	100	125	250
WSIQ-0580BP	\$14,851.87	20.6 x 8.5 x 9.6	477	150	150	400	361	125	150	300
WSIQ-0835BP	\$19,323.32	24.3 x 17.6 x 12.3	515	NA	200	450	414	NA	150	350
WSIQ-0940BP	\$22,335.59	24.3 x 17.6 x 12.4	590	NA	200	500	480	NA	200	400
WSIQ-1070BP	\$24,481.03	24.3 x 17.6 x 12.5	797	NA	300	600	620	NA	250	500
WSIQ-1230BP	\$28,251.78	24.3 x 17.6 x 12.6	985	NA	400	800	768	NA	300	600
WSIQ-1250BP	\$35,937.77	24.3 x 17.6 x 12.7	1180	NA	500	900	904	NA	350	700
WORLDSTART IQ S	oft Starters 525\	V-Rated Without Inte	rnal Bypas	s Contactor						
WSIQ-0735C	\$11,413.40	24.3 x 17.6 x 12.3	515	NA	200	450	429	NA	150	350
WSIQ-0830C	\$12,988.16	24.3 x 17.6 x 12.4	634	NA	250	500	493	NA	200	400
WSIQ-1025C	\$14,548.48	24.3 x 17.6 x 12.5	882	NA	350	700	686	NA	250	500
WSIQ-1170C	\$20,948.65	24.3 x 17.6 x 12.6	1100	NA	450	900	864	NA	350	700
WSIQ-1220C	\$26,648.13	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					
		Dimensions	Normal Du	uty 350%, 30 sec	Heavy Duty	450%, 30 sec		
Model Number	List Price	H x W x D (in)	НР	AMPS	HP	AMPS		
WSIQ-0024BP-6	\$2,216.47	13.2 x 6.9 x 9.1	15	17	10	14		
WSIQ-0042BP-6	\$2,279.57	13.2 x 6.9 x 9.1	25	28	20	22		
WSIQ-0052BP-6	\$2,429.44	13.2 x 6.9 x 9.1	30	35	25	28		
WSIQ-0064BP-6	\$3,052.57	13.2 x 6.9 x 9.1	40	52	30	40		
WSIQ-0069BP-6	\$3,273.43	13.2 x 6.9 x 9.1	50	59	40	46		
WSIQ-0105BP-6	\$3,865.02	13.2 x 6.9 x 9.1	60	77	50	52		
WSIQ-0115BP-6	\$4,117.43	13.2 x 6.9 x 9.1	75	81	60	65		
WSIQ-0135BP-6	\$5,150.73	13.2 x 6.9 x 9.1	100	99	75	77		
WSIQ-0184BP-6	\$6,073.60	19.5 x 8.5 x 9.6	100	124	75	96		
WSIQ-0200BP-6	\$6,641.52	19.5 x 8.5 x 9.6	125	131	100	104		
WSIQ-0229BP-6	\$7,398.75	19.5 x 8.5 x 9.6	150	156	100	124		
WSIQ-0250BP-6	\$8,290.07	19.5 x 8.5 x 9.6	200	195	150	156		
WSIQ-0352BP-6	\$9,504.79	20.6 x 8.5 x 9.6	200	240	150	180		
WSIQ-0397BP-6	\$9,701.98	20.6 x 8.5 x 9.6	250	261	200	203		
WSIQ-0410BP-6	\$11,311.37	20.6 x 8.5 x 9.6	350	377	300	302		
WSIQ-0550BP-6	\$13,868.34	20.6 x 8.5 x 9.6	450	414	300	321		
WSIQ-0580BP-6	\$15,587.44	20.6 x 8.5 x 9.6	500	477	350	361		
WSIQ-0835BP-6	\$19,372.34	17.6 x 24.3 x 12.3	500	515	450	414		
WSIQ-0940BP-6	\$22,391.59	17.6 x 24.3 x 12.3	600	590	500	480		
WSIQ-1070BP-6	\$24,544.07	17.6 x 24.3 x 12.3	800	797	600	620		
WSIQ-1230BP-6	\$28,314.53	17.6 x 24.3 x 12.3	1000	985	800	768		
WSIQ-1250BP-6	\$35,848.22	17.6 x 24.3 x 12.3	1100	1180	900	904		
WORLDSTART iQ S	Soft Starters, 69	0V-Rated Without Int	ernal Bypass Cont	actor				
WSIQ-0735C-6	\$11,441.38	17.6 x 24.3 x 12.3	500	551	450	429		
WSIQ-0830C-6	\$13,023.24	17.6 x 24.3 x 12.3	600	634	500	493		
WSIQ-1025C-6	\$14,590.65	17.6 x 24.3 x 12.3	900	882	700	686		
WSIQ-1170C-6	\$21,011.98	17.6 x 24.3 x 12.3	1100	1100	900	864		
WSIQ-1220C-6	\$26,689.33	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	\$1,095.34			
WSIQ-KPCARD	WSIQ-Remote Keypad Card	\$576.61			
WSIQ-KP	WSIQ-Remote Keypad	\$705.60			
WSIQ-COM-DN	WSIQ-DeviceNet Interface,	\$898.54			
WSIQ-COM-ETHIP	WSIQ-Ethernet IP Interface	\$2,374.79			
WSIQ-COM-MB	WSIQ-ModBus RTU Interface	\$692.37			
WSIQ-COM-MB2	WSIQ-ModBus RTU Interface + Ground Fault	\$692.37			
WSIQ-COM-TCPIP	WSIQ-Modbus TCP Interface	\$2,143.26			
WSIQ-COM-PNET	WSIQ-Profinet Interface	\$2,374.79			
WSIQ-COM-PB	WSIQ-Profibus Interface	\$1,142.19			
WSIQ-COM-PUMPCRD	WSIQ-Smart Control Card Pump Application	\$865.46			
WSIQ-FGKIT-184-580BP	Fingerguard Kit, 0184BP-0580PB, IP20	\$705.60			



### **WSE Efficient Chassis Soft Start Controller and Accessories**

Introducing the NEW WSE World Start Efficient (WSE) reduced voltage chassis starter. This cost effective WSE soft starter is suited for common Pump, Fan, and other applications that start un-loaded. This starter features intuitive parameter setup, multiple feature sets, integrated "At Speed bypass," in a compact footprint. Available options include Remote Keypad and IP20 terminal protection guards.

WSE supports 2-wire or 3-wire Start/Stop control. "At Speed / Run bypass" takes over motor load control, from the SCR units after motor is at full speed, to reduce panel heat during RUN mode to save panel space. Emergency full-voltage bypass is not part of this system.







#### **Product Features**

- » Standard Pump and Fan Applications
- » Other applications that start unloaded
- » Constant current & Current ramp Start modes
- » Voltage ramp soft stop up to 20-seconds
- » Coast to Stop (Select No soft stop)
- » 250% to 450% adjustable current limit
- » 230V, Three-phase, 5-60 HP
- 480V, Three-phase, 10-150 HP
- » Input voltage range: 200-230V Three Phase (-15%, +10%), 380-480V Three-Phase (-15%, +10%)

- » Control voltage 110-240vAC (-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 3-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

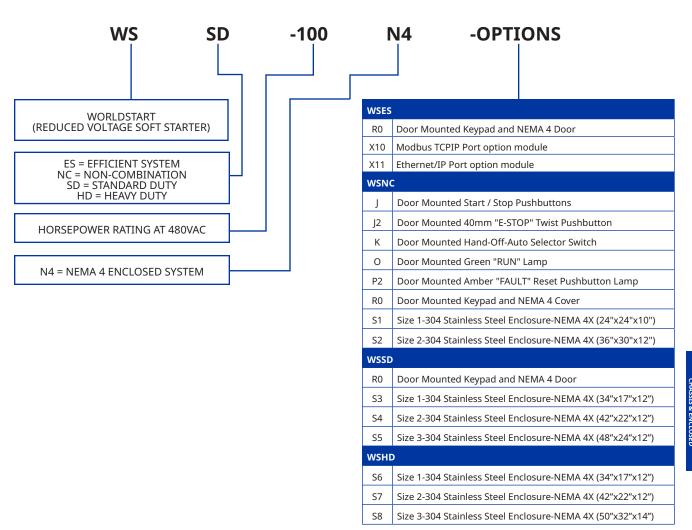
WORLDSTART WSE Soft Starters With 575v-Rated Internal Bypass			Standard Duty 350%, 30 seconds, 4 starts/hour			
		Dimensions	НР		HP	,
Model Number	List Price	H x W x D (in)	Amps	208V	230V	460V
WSE-015BP	\$1,951.21	8.0 x 3.9 x 6.5	32	10	25	30
WSE-030BP	\$2,589.95	8.0 x 3.9 x 6.5	55	20	40	50
WSE-045BP	\$3,018.69	8.5 x 5.7 x 7.6	79	25	60	75
WSE-055BP	\$3,342.43	8.5 x 5.7 x 7.6	100	30	75	100
WSE-075BP	\$4,611.15	9.5 x 8.0 x 8.4	133	40	100	125
WSE-090BP	\$5,617.38	9.5 x 8.0 x 8.4	157	50	125	150
WSE-110BP	\$6,247.37	9.5 x 8.0 x 8.4	186	60	150	200

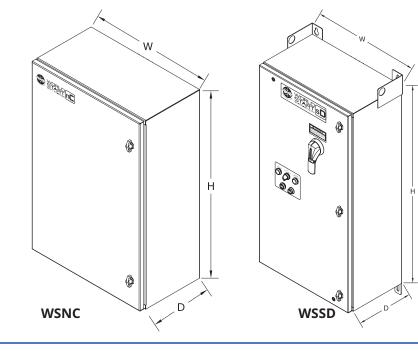
<sup>&</sup>lt;sup>1</sup> Given weights and dimensions are approximate

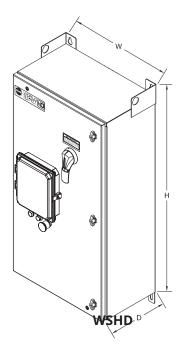
WSE Accessories					
Accessory Code	List Price	Description			
WSE-FINGERKIT	\$419.99	Finger Guard Kit, fits 075-110BP kw ratings			
WSE-REMOTEOP-KIT	\$1,198.73	Remote Keypad operator & interface kit			
WSE-Modbus TCP	\$2,169.95	ModbusTCP Port option module			
WSE-Ethernet/IP	\$2,397.45	Ethernet/IP Port option module			



### **WorldWide Configured Soft Starter Selection Guide**









### **WSES Series Efficient System Combination Soft Starters**

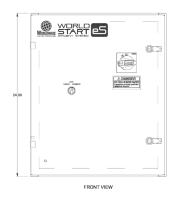
Introducing the NEW WSE World Start Efficient System (WSES) reduced voltage starter control panel. The WSES control panel is the right choice for general PUMP and FAN applications requiring basic performance requirements. This panel is designed with user friendly parameter setup, key feature sets, integrated "At Speed bypass," in a small footprint. Door mounted pilot devices and available options.

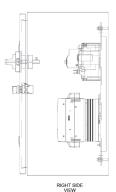
Panel includes terminal block connections, panel surge protection with a main circuit breaker. Secure panel design has a lockable main door and padlock disconnect. "At Speed / Run bypass" takes over motor load control, from the SCR units after motor is at full speed, to reduce panel heat during RUN mode and saves space compared to traditional designs. Emergency full-voltage bypass is not part of this system.

#### **Product Specifications**

- » Standard Pump and Fan Applications
- » Constant current & Current ramp soft start selectable modes
- » Voltage ramp soft stop
- » Coast to Stop
- » 250% to 450% adjustable current limit
- » 230V, Three-phase, 5-60 HP
- » 480V, Three-phase, 10-150 HP
- » Input voltage range: 200-230V Three Phase (-15%, +10%), 380-480V Three-Phase (-15%, +10%)
- » Control voltage 110-240vAC (-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 3-phase power » Chassis provides status feedback LEDs
- » Optional remote operator keypad
- » Optional Modbus or Ethernet Cards
- » Assembled per UL508A







WSES Part Number	List Price	Dimension	Weight	Max Duty	Standard Duty		uty Standard Duty	
W3L3 Fart Warriser	Listrice	HxWXD	(lbs)	Amps	230V	460V	575V	
WSES-025N4	\$6,682.50	24"x24"x12"	100	34	10	25	30	
WSES-040N4	\$7,093.67	24"x24"x12"	100	60	20	40	50	
WSES-060N4	\$8,043.61	24"x24"x12"	107	85	25	60	75	
WSES-075N4	\$8,861.50	24"x24"x12"	107	100	30	75	100	
WSES-100N4	\$11,239.56	30"x24"x12"	125	140	40	100	125	
WSES-125N4	\$11,627.94	30"x24"x12"	125	170	50	125	150	
WSES-150N4	\$11,916.83	30"x24"x12"	125	200	60	150	200	

<sup>1</sup> 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 TCPIP Port option module				
X11	\$1,522.22	Ethernet/IP Port option module				

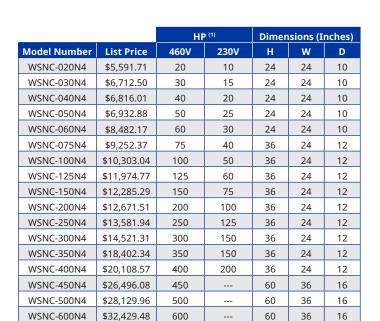


#### **WSNC Series Non-Combination Soft Starters**

WorldWide Electric's WORLDSTART Non-Combination (nC) Softstarter Package is for the customer that has an existing service disconnect in place. Easy installation with 3-phase in and 3-phase out, self-powered and prewired 120 volt control with additional bus space for customer use. The WORLDSTART Non-Combination (nC) Softstarter Package comes complete with power grounding bar and lugs, product manual and drawing.

#### **Product Specifications**

- » True 3-Phase Starter with Internal Bypass
- » Rated at 350% FLA for 30 Seconds
- » White Finish Inside and Outside
- » UL489 Protected CPT Line and Load
- » 230/460 V CPT for 120 VAC Control
- » 120 V Bus & Large Insulated Grounding Bar
- » Prewired per UL508A
- » NEMA 4 Rated







	WSNC 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				
0	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				
<b>S1</b>	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				

**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.



### **WSSD Series Standard Duty Combination Soft Starters**

Dimensions (Inches)

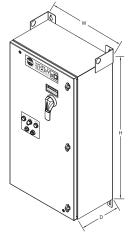
WorldWide Electric's WORLDSTART Standard Duty (sD) Combination Soft Starter Package comes complete with circuit breaker disconnect, 120 volt control and basic door operation, all in one package for soft start applications. Finished starter duty rated for 350% starting, with integral bypass - 3-wire in/out.



#### **Product Specifications**

- » True 3-Phase Starter
- » NEMA 4 Enclosure
- » White Finish Inside and Outside
- » Rated at 350% FLA for 30 Seconds
- » Same Technical Specifications as the WORLDSTART iQ Soft Starter
- » 2 and 3-Wire Start Design Standard
- » Door Mounted Operators:
  - > Motor Run Lamp
  - > Hand/Off/Auto Switch
  - > Fault Lamp and Reset Pushbutton
  - > Start Pushbutton
  - Stop Pushbutton
- » Run Rated Bypass
- » Programmable Timer and Schedulers





		III III		Difficus (Tricile		iiches)
<b>Model Number</b>	List Price	460V	230V	Н	w	D
WSSD-020N4	\$8,928.49	20	10	34	17	12
WSSD-025N4	\$9,252.37	25	10	34	17	12
WSSD-030N4	\$9,518.38	30	15	34	17	12
WSSD-040N4	\$9,674.20	40	20	34	17	12
WSSD-050N4	\$9,823.34	50	25	34	17	12
WSSD-060N4	\$11,432.74	60	30	34	17	12
WSSD-075N4	\$12,498.99	75	40	42	22	12
WSSD-100N4	\$13,834.59	100	50	42	22	12
WSSD-125N4	\$15,512.99	125	60	42	22	12
WSSD-150N4	\$17,728.98	150	75	42	22	12
WSSD-200N4	\$19,621.08	200	100	48	24	12
WSSD-250N4	\$21,623.36	250	125	48	24	12
WSSD-300N4	\$23,605.62	300	150	48	24	12

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		
<b>S4</b>	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		



# **WSHD Series Heavy Duty Combination Soft Starters**

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.

#### WORLD START HEAVY DUTY

#### **Product Specifications**

- » True 3-Phase Starter
- » Rated at 450% FLA for 30 Seconds
- » 2 and 3-Wire Start Design Standard
- » NEMA 4 Enclosure
- » White Finish Inside and Outside
- » Same Technical Specifications as the WORLDSTART iQ Soft Starter
- » Door Control:
  - > Complete Keypad for Display and Programming
  - > Start / Stop Pushbutton
  - > Motor Run Lamp
  - > E-Stop and Lamp
  - > Power On Lamp
  - Fault Lamp and Reset Pushbutton
  - > External Interlock Lamp (2)
  - > Across-Line / RVSS Selector Switch (2)
  - > Local-Off-Remote Selector Switch
- » Emergency Bypass Starter with Full Motor Overload Protection (2)

	w
	) H
.0	D

		HF	(1)	Dimer	nsions (I	nches)
Model Number	List Price	460V	230V	н	w	D
WSHD-020N4	\$9,903.47	20	10	34	17	12
WSHD-025N4	\$10,055.96	25	10	34	17	12
WSHD-030N4	\$10,160.58	30	15	34	17	12
WSHD-040N4	\$10,264.09	40	15	34	17	12
WSHD-050N4	\$10,516.74	50	20	34	17	12
WSHD-060N4	\$13,894.69	60	25	34	17	12
WSHD-075N4	\$14,099.48	75	40	42	22	12
WSHD-100N4	\$16,779.59	100	40	42	22	12
WSHD-125N4	\$17,929.32	125	60	42	22	12
WSHD-150N4	\$20,709.59	150	60	42	22	12
WSHD-200N4	\$23,275.06	200		50	32	14
WSHD-250N4	\$25,566.72	250		50	32	14
WSHD-300N4	\$28,098.80	300		50	32	14
WSHD-400N4 (2)	\$41,529.37	400		72	40	18
WSHD-450N4 (2)	\$45,870.07	450		72	40	18
WSHD-500N4 (2)	\$48,728.25	500		72	40	18

	WSHD Options										
Option Code											
S6	Size 1-304 Stainless Steel Enclosure-NEMA 4X (34"x17"x12")	Consult Factory									
<b>S7</b>	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



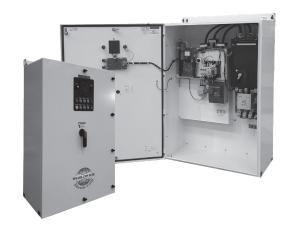
# WWE PD Series Positive Displacement Soft Starters - NEMA 4 Enclosure

WorldWide Electric's PD Soft Starter package is designed specifically for the demanding start-up, control and protection needed for Saltwater Disposal and Jet Pump applications. This package provides full skid control and protection of your motor and positive displacement piston pump.

#### **Product Specifications**

- » Designed for PD Pumping Applications
  - > 20 600 HP
  - > Fully rated bypass contactor
  - > Ready for Murphy Switch field inputs
  - > NO/NC selectable Murphy inputs
  - Motor saver technology using SCR system overload
- » Designed for Harsh Environments
- > NEMA 4 outdoor rated enclosure
- > Designed for Safety and Protection
- Service entrance rated meeting NEC requirements
- > Overrated to 500% for 60 seconds
- » Full panel surge protection with main circuit breaker

- » Designed for Security
  - > Lockable main door
  - > Concealed hinges
  - > Padlock disconnect on main CB
- > Keypad Designed for Easy Operation
- > Start / Stop pushbutton
- → Help
- Manual / Auto
- » Designed with multiple protection inputs and outputs
  - External fault lights for high / low oil pressure levels, vibration trip and more.



	RP .	Max FLA	Dimensions (inches)	Model Number	List Price
230 V	V 460 V		HxWxD	Wodel Namber	List Frice
10	20	27	37 x 15 x 12	WWEPDASSRV12-20	\$13,595.30
_	25	40	37 x 15 x 12	WWEPDASSRV12-25	\$14,286.47
15	30	45	37 x 15 x 12	WWEPDASSRV12-30	\$14,601.45
20	40	55	37 x 15 x 12	WWEPDASSRV12-40	\$14,916.43
25	50	68	37 x 15 x 12	WWEPDASSRV12-50	\$15,230.29
30	60	96	37 x 15 x 12	WWEPDASSRV12-60	\$16,659.38
40	75	112	37 x 15 x 12	WWEPDASSRV12-75	\$20,200.95
50	100	130	48 x 33 x 16	WWEPDASSRV12-100	\$22,911.11
60	125	156	48 x 33 x 16	WWEPDASSRV12-125	\$24,215.54
75	150	210	48 x 33 x 16	WWEPDASSRV12-150	\$26,822.19
100	200	248	48 x 33 x 16	WWEPDASSRV12-200	\$29,044.85
125	250	320	48 x 33 x 16	WWEPDASSRV12-250	\$33,710.54
150	300	400	48 x 33 x 16	WWEPDASSRV12-300	\$39,217.67
200	200 400		48 x 33 x 16	WWEPDASSRV12-400	\$44,722.57
250	500	600	48 x 33 x 16	WWEPDASSRV12-500	\$60,148.75
300	600	800	87 x 31 x 24	WWEPDASSRV12-600	\$61,492.14



## **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).

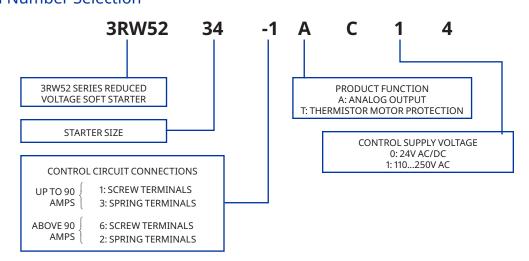
#### **Product Specifications**

- » 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										
200 V	HP 230 V	460 V	Max FLA	Dimensions (inches)	Model Number (1)	List Price					
200 V	250 V	7.5	11.5	10.83 x 6.69 x 5.98	3RW5213-ooCo4	\$1,888.76					
3	5	10	15.9	10.83 x 6.69 x 5.98	3RW5214-ooCo4	\$2.084.65					
5	8	15	22.3	10.83 x 6.69 x 5.98	3RW5215-ooCo4	\$2,311.70					
7.5	10	20	28.4	10.83 x 6.69 x 5.98	3RW5216-ooCo4	\$2,572.14					
10	10	20	33.5	10.83 x 6.69 x 5.98	3RW5217-ooCo4	\$2,865.98					
10	10	30	41.6	12.05 x 7.28 x 7.99	3RW5224-ooCo4	\$3,256.64					
15	20	40	55.5	12.05 x 7.28 x 7.99	3RW5225-ooCo4	\$3,647.30					
20	25	50	68.0	12.05 x 7.28 x 7.99	3RW5226-ooCo4	\$4,005.69					
25	30	60	82.5	12.05 x 7.28 x 7.99	3RW5227-ooCo4	\$4,396.35					
30	30	75	101	12.05 x 7.28 x 7.99	3RW5234-ooCo4	\$4,982.90					
40	40	100	128	12.05 x 7.28 x 7.99	3RW5235-ooCo4	\$5,927.84					
50	50	100	153	12.05 x 7.28 x 7.99	3RW5236-ooCo4	\$6,872.78					
60	60	150	186	15.47 x 8.27 x 7.99	3RW5243-ooCo4	\$8,012.49					
60	75	150	220	15.47 x 8.27 x 7.99	3RW5244-ooCo4	\$9,348.09					
75	100	200	279	15.47 x 8.27 x 7.99	3RW5245-ooCo4	\$11,074.35					
100	125	250	328	15.47 x 8.27 x 7.99	3RW5246-ooCo4	\$12,963.11					
150	150	350	416	15.47 x 8.27 x 7.99	3RW5247-ooCo4	\$15,243.65					
150	200	400	504	15.47 x 8.27 x 7.99	3RW5248-ooCo4	\$17,164.69					

#### (1) Model Number Selection



#### **Additional Product Notes**

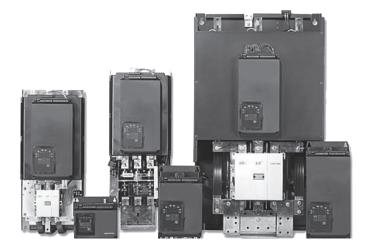


# **WWE2-BP Chassis Soft Starters**

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 Dimensions (inches)				Marial Nicoshau	Lint Buins
200 V	230 V	460 V	Max FLA	HxWxD	Model Number	List Price
5	5	10	18	8.9 x 8.0 x 6.7	WWE2-18-BP	\$4,947.29
7.5	7.5	20	28	8.9 x 8.0 x 6.7	WWE2-28-BP	\$4,947.29
10	10	25	39	8.9 x 8.0 x 6.7	WWE2-39-BP	\$5,175.45
10	15	30	48	8.9 x 8.0 x 6.7	WWE2-48-BP	\$5,175.45
15	20	40	62	14.0 x 8.0 x 6.7	WWE2-62-BP	\$5,503.79
20	25	50	78	14.0 x 8.0 x 6.7	WWE2-78-BP	\$5,734.18
25	30	60	92	14.0 x 8.0 x 6.7	WWE2-92-BP	\$6,799.32
30	40	75	112	14.0 x 8.0 x 6.7	WWE2-112-BP	\$7,418.15
40	50	100	150	19.0 x 8.0 x 6.7	WWE2-150-BP	\$8,900.66
50	60	125	160	19.0 x 8.0 x 6.7	WWE2-160-BP	\$9,346.97
60	75	150	210	28.1 x 12.5 x 9.1	WWE2-210-BP	\$11,096.61
75	100	200	275	28.1 x 12.5 x 9.1	WWE2-275-BP	\$12,118.34
125	125	300	361	28.1 x 12.5 x 9.1	WWE2-361-BP	\$13,510.71
150	150	350	450	28.1 x 12.5 x 9.1	WWE2-450-BP	\$15,155.72
150	200	450	550	29.5 x 12.5 x 9.1	WWE2-550-BP	\$22,120.88
200	250	500	600	29.5 x 12.5 x 9.1	WWE2-600-BP	\$23,833.78
300	350	700	900	44.3 x 25.5 x 11.9	WWE2-900-BP	\$35,750.67





# **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



НР	Main	Overload	Motor	Auxiliary	Dimensions	With Main Vo	ltage Coil	With 120 Volt	Coil	
Rating	Volt- age	Current Setting	FLA	Contacts	(Inches) H x W x D	Model Number	List Price	Model Number	List Price	
230 Volt	30 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 I	hase								
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	

# **Section 5: General Purpose Controls**



# **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



НР	Main	Overload	Motor	Auxiliary	Dimensions	With Main Volta	ge Coil	With 120 Volt Co	il
Rating	Volt- age	Current Setting	FLA	Contacts	(Inches) H x W x D	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	\$100.00
Hand-Off-Auto Switch Kit	49SDSBJ	\$120.00
Replacement Reset Button	49MBRS	\$50.00
AUX 1 NO, 1 NC	3RH2911-1DA11	\$30.00





# **Replacement Coils for WWSXL Starters**

Main Voltage			
230	480	Coil	List Price
1HP - 5HP	1HP - 10HP	No Replacement Coil -Purchase Contactor from page 48	_
7.5 - 10HP	15 - 25HP	3RT2926-5A**1	\$173.11
15 - 25HP	30 - 50HP	3RT2934-5A**1	\$284.06

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.



# 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					Overload	erload Enclosure					
	пР			NEMA Size	Amp	Ор	en	NEW	IA 1	NEMA <sup>*</sup>	12 / 3R
200V	230V	460V	575V	Size	Range	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*	\$731.78	14BUA32B*	\$749.89	Use Size 0	
1/2	3/4	1 ½	2	00	0.75-3.4	14BUB32A*	\$731.78	14BUB32B*	\$749.89	Use Size 0	
1 ½	1 ½	2	_	00	3-12	14BUC32A*	\$847.85	14BUC32B*	\$749.89	Use Size 0	
1/6	1/6	1/3	1/2	0	0.25-1	14CUA32A*	\$847.85	14CUA32B*	\$898.73	14CUA320*	\$1,169.32
1/2	3/4	1 ½	2	0	0.75-3.4	14CUB32A*	\$852.00	14CUB32B*	\$898.73	14CUB320*	\$1,169.32
2	2	5	5	0	3-12	14CUC32A*	\$852.00	14CUC32B*	\$898.73	14CUC320*	\$1,169.32
3	3	_	_	0	5.5-22	14CUD32A*	\$753.53	14CUD32B*	\$898.73	14CUD320*	\$1,169.32
1/6	1/6	1/3	1/2	1	0.25-1	14DUA32A*	\$962.98	14DUA32B*	\$1,014.70	14DUA320*	\$1,281.39
1/2	3/4	1 ½	2	1	0.75-3.4	14DUB32A*	\$962.98	14DUB32B*	\$1,014.70	14DUB320*	\$1,281.39
2	2	5	5	1	3-12	14DUC32A*	\$962.98	14DUC32B*	\$1,014.70	14DUC320*	\$1,281.39
3	3	10	10	1	5.5-22	14DUD32A*	\$962.98	14DUD32B*	\$1,014.70	14DUD320*	\$1,281.39
7 ½	7 ½	_	_	1	10-40	14DUE32A*	\$962.98	14DUE32B*	\$1,014.70	14DUE320*	\$1,281.39
10	10	15	15	1 ¾	10-40	14EUE32A*	\$1,306.94	14EUE32B*	\$1,345.21	14EUE320*	\$1,613.87
10	15	25	25	2	13-52	14FUF32A*	\$1,670.60	14FUF32B*	\$1,903.79	14FUF320*	\$2,386.99
15	20	30	30	2 ½	25-100	14GUG32A*	\$2,176.35	14GUG32B*	\$2,500.97	14GUG320*	\$3,032.49
25	30	50	50	3	25-100	14HUG32A*	\$2,665.17	14HUG32B*	\$3,100.16	14HUG320*	\$3,678.06
30	40	75	75	3 ½	50-200	14IUH32A*	\$5,019.86	14IUH32B*	\$5,983.81	14IUH320*	\$7,893.42
40	50	100	100	4	50-200	14JUH32A*	\$5,675.93	14JUH32B*	\$6,872.91	14JUH320*	\$8,774.70
75	100	200	200	5	55-250	14LPU32A*	\$13,806.80	14LPU32B*	\$17,142.28	14LPU320*	\$22,345.77

Coil Table *							
60 Hz Voltage	Letter						
24 Separate Control	J						
120 Separate Control	F						
110-120/220-240	А						
200-208	D						
220-240	G						
277	L						
220-240/440-480	С						
440-480	Н						
550-600	Е						

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

#### **Additional Product Notes**

# **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 Model Amp/Volts Number		List Price
usible Disc	onnect								
	_	1	1	1	0.75-3.4	30	30A / 600V	3RE4801-0GH*6-4BA0	\$2,005.00
	_	5	5	1	3-12	30	30A / 600V	3RE4801-0GH*6-4CA0	\$2,005.00
	_	10	10	1	5.5-22	30	30A / 600V	3RE4801-0GH*6-4DA0	\$2,005.00
_	_	10	10	1	5.5-22	60	60A / 600V	3RE4801-0GK*6-4DA0	\$2,035.00
_	_	25	25	2	13-52	60	60A / 600V	3RE4802-0GK*6-4FA0	\$2,704.00
_	_	25	25	2	13-52	100	100A / 600V	3RE4802-0GM*6-4FA0	\$2,873.00
_	_	50	50	3	25-100	100	100A / 600V	3RE4803-0GM*6-4GA0	\$3,878.00
_	_	50	50	3	25-100	200	200A / 600V	3RE4803-0GP*6-4GA0	\$5,055.00
_	_	100	100	4	50-200	200	200A / 600V	3RE4804-0GP*6-4HA0	\$5,888.00
2	2	_	_	1	3-12	30	30A / 250V	3RE4801-0GG*6-4CA0	\$1,976.00
3	3	_	_	1	5.5-22	30	30A / 250V	3RE4801-0GG*6-4DA0	\$1,976.00
7.5	7.5	_	_	1	10-40	30	30A / 250V	3RE4801-0GG*6-4EA0	\$1,976.00
7.5	7.5	_	_	1	10-40	60	60A / 250V	3RE4801-0GJ*6-4EA0	\$2,005.00
10	15	_	_	2	13-52	60	60A / 250V	3RE4802-0GJ*6-4FA0	\$2,657.00
10	15	_	_	2	13-52	100	100A / 250V	3RE4802-0GL*6-4FA0	\$2,844.00
20	30	_	_	3	25-100	100	100A / 250V	3RE4803-0GL*6 - 4GA0	\$3,771.00
25	30	_	_	3	25-100	200	200A / 250V	3RE4803-0GN*6-4GA0	\$4,968.00
45	50	_	_	4	50-200	200	200A / 250V	3RE4804-0GN*6-4HA0	\$5,829.00

	Max HP I	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	
<b>Motor Circui</b>	t Protector								
0.5	0.5	1	1	1	0.75-34	3	3RE4811 - 0GG•6 - 4BA0	\$2,523.00	
2	2	5	5	1	3-12	10	3RE4811 - 0GH•6 - 4CA0	\$2,523.00	
3	3	10	10	1	5.5-22	25	3RE4811 - 0GJ•6 - 4DA0	\$2,523.00	
7.5	7.5	10	_	1	10-40	30	3RE4811 - 0GK•6 - 4EA0	\$2,523.00	
10	15	25	25	2	13-52	50	3RE4812 - 0GM•6 - 4FA0	\$3,128.00	
25	25	50	50	3	25-100	100	3RE4813 - 0GN•6 - 4GA0	\$4,114.00	
40	50	100	100	4	50-200	150	3RE4814 - 0GQ•6 - 4HA0	\$7,136.00	

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.

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).



# 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



							Enclo	sure			
	НР			NEMA Size	Breaker Size	Overload Amp	- Frame			NEMA 12 NEMA 3/3R	
200 Volts	230 Volts	460 Volts	575 Volts	3120	3120	Range	Size	Model Number	List Price	Model Number	List Price
1/2	1/2	1	1	0	3	0.75-3.4	А	18CUB92B*	\$2,407.43	18CUB92N*	\$2,845.27
2	2	5	5	0	10	3-12	A1	18CUC92B*	\$2,407.43	18CUC92N*	\$2,845.27
3	3	_	_	0	25	5.5-22	A1	18CUD92B*	\$2,407.43	18CUD92N*	\$2,845.27
1/2	1/2	1	1	1	3	0.75-3.4	А	18DUB92B*	\$2,498.16	18DUB92N*	\$2,937.62
2	2	5	5	1	10	3-12	A1	18DUC92B*	\$2,498.16	18DUC92N*	\$2,937.62
3	3	7 ½	10	1	25	5.5-22	A1	18DUD92B*	\$2,498.16	18DUD92N*	\$2,937.62
7 ½	7 ½	10	_	1	30	10-40	A1	18DUE92B*	\$2,498.16	18DUE92N*	\$2,937.62
_	_	15	15	1.75	40	10-40	A1	18EUE92B*	\$2,770.44	18EUE92N*	\$3,211.48
10	15	25	25	2	50	13-52	В	18FUF92B*	\$3,506.04	18FUF92N*	\$4,127.00
15	20	30	30	2.5	100	25-100	В	18GUG92B*	\$4,652.43	18GUG92N*	\$5,461.26
25	30	50	50	3	100	25-100	В	18HUG92B*	\$5,056.84	18HUG92N*	\$5,857.74
30	40	75	75	3.5	125	50-200	В	18IUH92B*	\$10,266.54	18IUH92N*	\$12,495.62
40	50	100	100	4	150	50-200	В	18JUH92B*	\$10,997.35	18JUH92N*	\$13,226.45
50	75	150	200	5	250	55-250	_	18LPT92B*	\$25,395.68	18LPT92N*	\$29,412.81
75	100	200	_	5	400	55-250	_	18LPU92B*	\$25,395.68	18LPU92N*	\$29,412.81

Coil Table *								
60 Hz Voltage	Letter							
24 Separate Control	J							
120 Separate Control	F							
110-120/220-240	Α							
200-208	D							
220-240	G							
277	L							
220-240/440-480	С							
440-480	Н							
550-600	Е							

#### **Additional Product Notes**

# **Section 5: General Purpose Controls**



# 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



								Enclosure			
	НР		НР		NEMA Breaker Overload Size Size Amp	Frame Size	NEMA 4/4X 304 Stainless Steel		NEMA 4X Fiberglass		
200 Volts	230 Volts	460 Volts	575 Volts	3126	3126	Range	3126	Model Number	List Price	Model Number	List Price
1/2	1/2	1	1	0	3	0.75-3.4	Α	18CUB92W*	\$4,162.03	18CUB92F*	\$4,580.77
2	2	5	5	0	10	3-12	A1	18CUC92W*	\$4,162.03	18CUC92F*	\$4,580.77
3	3	_	_	0	25	5.5-22	A1	18CUD92W*	\$4,162.03	18CUD92F*	\$4,580.77
1/2	1/2	1	1	1	3	0.75-3.4	Α	18DUB92W*	\$4,251.18	18DUB92F*	\$4,679.49
2	2	5	5	1	10	3-12	A1	18DUC92W*	\$4,251.18	18DUC92F*	\$4,679.49
3	3	7 1/2	10	1	25	5.5-22	A1	18DUD92W*	\$4,251.18	18DUD92F*	\$4,679.49
7 1/2	7 1/2	10	_	1	30	10-40	A1	18DUE92W*	\$4,251.18	18DUE92F*	\$4,679.49
_	_	15	15	1.75	40	10-40	A1	18EUE92W*	\$4,529.84	18EUE92F*	\$4,978.83
10	15	25	25	2	50	13-52	В	18FUF92W*	\$6,208.01	18FUF92F*	\$6,832.16
15	20	30	30	2.5	100	25-100	В	18GUG92W*	\$9,371.72	18GUG92F*	\$10,304.74
25	30	50	50	3	100	25-100	В	18HUG92W*	\$9,772.96	18HUG92F*	\$10,748.98
30	40	75	75	3.5	125	50-200	В	18IUH92W*	\$16,297.81	18IUH92F*	\$17,926.64
40	50	100	100	4	150	50-200	В	18JUH92W*	\$17,028.64	18JUH92F*	\$18,730.71
50	75	150	200	5	250	55-250	_	18LPT92E*	\$40,784.35	_	_
75	100	200	_	5	400	55-250	_	18LPU92E*	\$42,037.40	_	_

Coil Table *							
60 Hz Voltage	Letter						
24 Separate Control	J						
120 Separate Control	F						
110-120/220-240	А						
200-208	D						
220-240	G						
277	L						
220-240/440-480	С						
440-480	Н						
550-600	Е						

#### **Additional Product Notes**



# **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	Α	3UB81134AB2	48ATA3S00	\$366.63
0.75-3.4	Α	3UB81134BB2	48ATB3S00	\$372.23
3-12	A1	3UB81234CW2	48ATC3S00	\$372.23
5.5-22	A1	3UB81234DW2	48ATD3S00	\$372.23
10-40	A1	3UB81234EW2	48ATE3S00	\$372.23
13-52	В	3UB81334FW2	48BTF3S00	\$528.55
25-100	В	3UB81334GW2	48BTG3S00	\$616.02
50-200	В	3UB81334HW2	48BTH3S00	\$835.64
100-300	A1 (1)	3UB81234JW2	48ATJ3S00	\$435.51
133-400	A1 (2)	3UB81234KW2	48ATK3S00	\$435.51
200-600	A1 (3)	3UB81234LW2	48ATL3S00	\$435.51
250-750	A1 (4)	3UB81234MW2	48ATM3S00	\$435.51
400-1220	A1 (5)	3UB81234NW2	48ATN3S00	\$435.51

## **Current Transformers**

Current Ratio	New Model Number	Old Model Number	List Price	Dimensions (Inches)
1 per pha	se with 24" leads			
300:5	2RL301	97CT005	\$304.64	1.05 Window x 2.46 OD x 1.05 W
400:5	5RL401	97CT006	\$304.64	1.56 Window x 3.58 OD x 1.10 W
600:5	5RL601	97CT008	\$304.64	1.56 Window x 3.58 OD x 1.10 W
750:5	5RL751	97CT009	\$304.64	1.56 Window x 3.58 OD x 1.10 W
1200:5	5RL122	97CT012	\$304.64	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



# SIEMENS Replacement Coils for NEMA Starters

Size 00 - 2.5, 3, 3.5 Replacement

size 00 - 2.5, 5, 5.5 Replacement								
Size	Vo	lts	Model Number	List Price				
3126	60 Hz	50 Hz	Model Nulliber	LIST PTICE				
	24	24	75D73070J	\$286.14				
	120	110	75D73070F	\$286.14				
	110-120 / 220-240	110 / 190-200	75D73070A	\$286.14				
	208	_	75D73070D	\$286.14				
00 - 2.5	220-240	190-220	75D73070G	\$286.14				
	277	240	75D73070L	\$485.17				
	220-240 / 440-480	190-220 / 380-440	75D73070C	\$286.14				
	440-480	380-440	75D73070H	\$286.14				
	575-600	550	75D73070E	\$362.02				
	24	24	75D73251J	\$528.71				
	120	110	75D73251F	\$528.71				
	110-120 / 220-240	110 / 190-200	75D73251A	\$528.71				
	208	_	75D73251D	\$528.71				
3, 3.5	220-240	190-220	75D73251G	\$528.71				
	277	240	75D73251L	\$528.71				
	220-240 / 440-480	190-220 / 380-440	75D73251C	\$528.71				
	440-480	380-440	75D73251H	\$528.71				
	575-600	550	75D73251E	\$528.71				



Size 4 Replacement Coils

	Vo	lts		
Size	60 Hz	50 Hz	Model Number	List Price
	24	24	75D70131J	\$735.76
	120	110	75D70131F	\$735.76
	110-120 / 220-240	110 / 190-200	75D70131A	\$735.76
	208	_	75D70131D	\$930.85
4	220-240	190-220	75D70131G	\$930.85
	277	240	75D70131L	\$735.76
	220-240 / 440-480	190-220 / 380-440	75D70131C	\$735.76
	440-480	380-440	75D70131H	\$950.79
	575-600	550	75D70131E	\$735.76



Size 5, 6 Replacement Coils

et	V	olts o	Mar del Nicordo co	Line Britan
Size	60 Hz	50 Hz	Model Number	List Price
	23-26	23-26	3RT1965-5AB31	\$604.55
	110-127	110-127	3RT1965-5AF31	\$774.03
	200-220	200-220	3RT1965-5AM31	\$604.55
5	220-240	220-240	3RT1965-5AP31	\$604.55
5	240-277	240-277	3RT1965-5AU31	\$604.55
	380-420	380-420	3RT1965-5AV31	\$604.55
	440-480	440-480	3RT1965-5AR31	\$617.57
	575-600	575-600	3RT1965-5AT31	\$604.55
	23-26	23-26	3RT1975-5AB31	\$780.43
	110-127	110-127	3RT1975-5AF31	\$780.43
	200-220	200-220	3RT1975-5AM31	\$780.43
6	220-240	200-240	3RT1975-5AP31	\$780.43
0	240-277	240-277	3RT1975-5AU31	\$780.43
	380-420	380-420	3RT1975-5AV31	\$780.43
	440-480	440-480	3RT1975-5AR31	\$794.43
	575-600	575-600	3RT1975-5AT31	\$780.43



#### **Additional Product Notes**



# **Field Modification Kits for NEMA Starters**









Push Butto	Push Buttons and Selector Switches									
Class	Enclosure	Size	Description	Model Number	List Price					
		00.4	Start, Stop Push Buttons	49SDPB5	\$108.10					
		00-4 (20-100A)	Hand-Off-Auto Selector Switch	49SDSBJ	\$108.10					
			Off-On Selector Switch	49SDSB4	\$108.10					
	1		Start, Stop Push Buttons	49SAP05	\$112.55					
	'	5-8 (200-400A)	Hand-Off-Auto Selector Switch	49SAS01	\$102.95					
14			Keyed Hand-Off-Auto (key removable in all positions)	49SAS09	\$196.20					
			Off-On Selector Switch	49SAS04	\$102.95					
			Start, Stop Push Buttons	49SAP05	\$112.55					
		00-8 (20-400A)	Hand-Off-Auto Selector Switch	49SAS01	\$102.95					
	12, 4/4X		Keyed Hand-Off-Auto (key removable in all positions)	49SAS09	\$196.20					
			Off-On Selector Switch	49SAS04	\$102.95					















Starter / Contact	or Auxiliary Conta	act Kits		
Class	Size	Description	Model Number	List Price
		1 NO	49AB10	\$128.75
		1 NC	49AB01	\$128.75
		1 NC Early Break	49AB01EB	\$128.75
		1 NC Late Break	49AB01LB	\$128.75
		1 NC Extra Late Break	49AB01XLB	\$128.75
14, 17, 18, 87	00-4	1 NO Extra Late Make	49AB10XLM	\$128.75
		1 NO & 1 NC	49AB11	\$251.70
		2 NO	49AB20	\$251.70
		4 NO	49AB40	\$498.75
		3 NO & 1 NC	49AB31	\$498.75
		2 NO & 2 NC	49AB22	\$498.75
	1-3	1 NO 9 1 NO 1 startly Manager	3RH2921-1DA11	\$89.30
	4	1 NO & 1 NC Laterally Mounted	3RH1921-1JA11	\$121.15
255.40	1-3		3RH2921-1 DA20	\$89.30
3RE48	4	2 NO Laterally Mounted		
	1-3	2 NG Laterallia Marchael	3RH2921-1DA02	\$89.30
	4	2 NC Laterally Mounted		
		2 NO	3RH1921-1EA20	\$121.15
14, 17, 18, 87	5-6	1 NO & 1 NC	3RH1921-1DA11	\$121.15
		2 NC	3RH1921-1EA02	\$121.15
14, 17, 18	7-8	1 NO & 1 NC (Inside L or R)	49CAL18-11	\$84.30

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 <sup>®</sup> , OLR, TRIPPED	24 to 240V AC/DC	49SDLBU	\$215.50
			Red (Transformer Type	ON	(Refer to voltage table)	49SPL0BR*	\$192.80
3RE48	1	00-8	Incandescent Lamp)®	OFF®	(Refer to voltage table)	49SPL0AR*	\$294.00
14 17	(w/ hinged cover) 3/3R, 4, 4X, 12	(20-400A)	Green (Transformer Type	ON	(Refer to voltage table)	49SPL0BG*	\$212.05
17	3/3/1, 1, 1/1, 12		Incandescent Lamp)	OFF <sup>®</sup>	(Refer to voltage table)	49SPL0AG*	\$268.50
			Red	ON		49SFL0BRU	\$177.65
3RE48	2/20	1.6	(LED Lamp)	OFF <sup>®</sup>	24+- 240\/ AC/DC	49SFL0ARU	\$177.65
87	3/3R	1-6	Green	ON	24 to 240V AC/DC	49SFL0BGU	\$177.65
			(LED Lamp)	OFF <sup>®</sup>		49SFL0AGU	\$177.65

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

46

<sup>&</sup>lt;sup>®</sup> To use as an OFF indicator, the contactor must have a normally closed (NC) auxiliary contact available for the circuit. Order separately as needed.

 $<sup>^{\</sup>scriptsize \textcircled{\tiny 0}}$  Includes a normally closed (NC) auxiliary contact for NEMA controller sizes 0-4.

# **Section 5: General Purpose Controls**



# **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



	Ho	rsepower (	HP)		Resistive	Locked	Rotor A	mps (A)	FLA (A)		Coil		
	Phase		hree Phas		Loads @ 600VAC (A)	240/ 277V	480V	600V	FLA (A) 600VAC Max <sup>(1)</sup>	Poles	Voltage (VAC)	Model Number	List Price
120V	240/277V	240/277V	480V	600V		2// V			25		120	WDP25-1L-120	\$21.41
1	2								25	1NO+Shunt	230	WDP25-1L-120 WDP25-1L-230	\$21.41
		-	-	-					25			WDP25-1L-230 WDP25-2L-120	\$21.41
2	3				35	150	125	100	25	2NO	120 230	WDP25-2L-120 WDP25-2L-230	\$24.77 \$24.77
					+				25		120	WDP25-2L-230 WDP25-3L-120	\$46.37
2	5	10	15	20					25	3NO	230	WDP25-3L-120 WDP25-3L-230	\$46.37 \$46.37
									30				
1	2								30	1NO+Shunt	120 230	WDP30-1L-120 WDP30-1L-230	\$22.72 \$22.72
1	2									INO+Snunt			
		-	-	-					30		24	WDP30-1L-24	\$22.72
2	2								30	2010	120	WDP30-2L-120	\$27.28
2	3				40	200	150	120	30	2NO	230	WDP30-2L-230	\$27.28
					1						24	WDP30-2L-24	\$27.28
									30	_	120	WDP30-3L-120	\$49.01
2	5	10	15	20					30	3NO	230	WDP30-3L-230	\$49.01
									30	_	24	WDP30-3L-24	\$49.01
									40		480 120	WDP30-3L-480	\$49.01
										1NO+Shunt		WDP40-1L-120	\$24.35
2	3	-	-	-					40		230	WDP40-1L-230	\$24.35
									40	2NO	120	WDP40-2L-120	\$36.37
					50	240	200	160	40		230 120	WDP40-2L-230 WDP40-3L-120	\$36.37 \$56.44
									40		230		\$56.44 \$56.44
3	7.5	10	20	25					40	3NO	230	WDP40-3L-230 WDP40-3L-24	\$56.44 \$56.44
									40		480		
									50			WDP50.3L-480	\$56.44
7.5	10	15	25	25	65	200	250	200			120	WDP50-3L-120	\$84.34
7.5	10	15	25	25	65	300	250	200	50 50		230 24	WDP50-3L-230 WDP50-3L-24	\$84.34 \$84.34
									60	3NO			
7.5	10	25	30	30	75	360	300	240	60		120 230	WDP60-3L-120 WDP60-3L-230	\$150.16
7.5	10	25	30	30	/5	360	300	240		-			\$150.16
									60		24	WDP60-3L-24	\$150.16

	WDP Series DP Contactors Auxiliary Contacts Specifications & Selection																	
	Current Ratings																	
	Brea	k (A)			Mak	e (A)		Continuous (A)	120 VAC on Lamp	125 VDC	250 VDC	125 or 250	For Use With	Mounting	Contact Arrangement	Wiring	Model Number	List Price
120VAC	240VAC	480VAC	600VAC	120VAC	240VAC	480VAC	600VAC	120-600										
												10A,	WDP25-60	Side	1NO + 1NC	#6-32 screw terminal, wire range #14-22 AWG	WDPAXFC11	\$37.62
	1.5	0.75	0.6	20	15	7.5		_	_	1/2	1,4	1/3HP	(3 Pole Only)	mounted <sup>(2)</sup>	1NO + 1NC	0.250 Quick Connection	WDPAXFC11Q	\$37.62
3	1.5	0.75	0.6	30	15	/.5	6	5	4	1/2	1/4	15A,	WDP25-40	One switch per side	1NO + 1NC	0.250 Quick Connection	WDPAXFD11	\$37.62
												1/3HP	(3 Pole Only)	Two switches per side	2NO + 2NC	0.250 Quick Connection	WDPAXFD22	\$47.02

#### **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

	osed Ratings		Single-Phas HP Ratings				-Phase atings			iliary tacts		"**" in mod de at bottom	lel number of this table
AC3	AC1	115 V	208 V	230 V	208 V	230 V	460 V	575 V	NO	NC	Model N	lumber	List Price
IEC Contac	tors - Fram	e Size S00											
7	10	1/4	1 /2	3/4	1.5	2	3	5	1	0	3RT201	5-1A**1	\$183.10
/	18	1/4	1/2	3/4	1.5	2	3	5	0	1	3RT201	5-1A**2	\$183.10
9	22	1/3	1	1	2	3	5	7.5	1	0	3RT201	5-1A**1	\$196.47
9	22	1/3	ı	ı	2	3	Э	7.5	0	1	3RT201	5-1A**2	\$196.47
12	22	1/2	4 -	2	_	_	7.5	10	1	0	3RT201	7-1A**1	\$241.61
12	22	1/2	1.5	2	3	3	7.5	10	0	1	3RT201	7-1A**2	\$241.61
16	22	1	2	2	3	5	10	10	1	0	3RT201	3-1A**1	\$307.11
16	22	ı	2	2	3	5	10	10	0	1	3RT201	3-1A**2	\$307.11
IEC Contac	tors - Fram	e Size SO											
9	40	1	1	1	2	3	5	7.5	1	1	3RT202	3-1A**0	\$190.63
12	40	1	2	2	3	3	7.5	10	1	1	3RT202	4-1A**0	\$225.38
16	40	1	2	3	5	5	10	15	1	1	3RT202	5-1A**0	\$298.94
25	40	2	3	3	7.5	7.5	15	20	1	1	3RT202	5-1A**0	\$397.56
32	50	2	5	5	10	10	20	25	1	1	3RT202	7-1A**0	\$577.45
38	50	3	5	5	10	10	25	25	1	1	3RT202	3-1A**0	\$643.87
IEC Contac	tors - Fram	e Size S2											
40	60	3	5	7.5	10	15	30	40	1	1	3RT203	5-1A**0	\$606.77
50	70	3	7.5	10	15	15	40	50	1	1	3RT203	5-1A**0	\$657.35
65	80	5	10	10	20	20	50	50	1	1	3RT203	7-1A**0	\$927.36
65	90	5	10	15	20	25	50	60	1	1	3RT203	3-1A**0	\$1,051.70
IEC Contac	tors - Fram	e Size S3											
80	120	7.5	15	15	25	30	60	75	1	1	3RT204	5-1A**0	\$1,749.29
95	120	10	15	20	30	30	75	100	1	1	3RT204	5-1A**0	\$2,369.06
96	125	10	10	20	30	40	75	100	1	1	3RT204	7-1A**0	\$2,540.98
AC Coil Tak	ole Frame S	ize S00-S3											
				Model Code	е	C2	K6	P6	U6	V6	T6	# Fau fua	: 500
C	oil Selectio	n	6	0 Hz Voltag	e	24	120	240	277	480	600	T For fran	ne size S00,
			5	0 Hz Voltag	e	24	110	220				use cou	

Encl Amp R	osed atings		ingle-Phase HP Ratings				-Phase atings		Auxiliary Contacts		Replace "**" in model numl Model Code at bottom of this		
AC3	AC1	115 V	208 V	230 V	208 V	230 V	460 V	575 V	NO	NC	Model N	lumber	List Price
IEC Contac	tors - SIRIU	S 3RT10: 3-F	ole AC/DC (	Coil: Frame	Size S6								
115	160	_	_	_	40	50	100	125	2	2	3RT1054	4-6A**6	\$1,585.32
150	185	_	_	_	50	60	125	150	2	2	3RT105	5-6A**6	\$2,284.98
185	215	_	_	_	60	75	150	200	2	2	3RT1056	5-6A**6	\$3,043.94
<b>IEC Contac</b>	tors - SIRIU	S 3RT10: 3-F	ole AC/DC (	Coil: Frame	Size S10								
225	275	_	_	_	75	75	150	200	2	2	3RT1064	4-6A**6	\$3,269.06
265	330	_	_	_	75	100	200	250	2	2	3RT106	5-6A**6	\$3,643.83
300	330	_	_	_	100	125	250	300	2	2	3RT106	5-6A**6	\$4,947.40
<b>IEC Contac</b>	tors - SIRIU	S 3RT10: 3-F	ole AC/DC (	Coil: Frame	Size S12								
400	430	_	_	_	125	150	300	400	2	2	3RT107	5-6A**6	\$5,880.27
500	610	_	_	_	150	200	400	500	2	2	3RT1076	5-6A**6	\$8,415.98
<b>AC Coil Tab</b>	le Frame Si	ze S6-S12 U	C Conventio	nal Coil									
	Model Code				В3	F3	М3	Р3	U3	R3	S3	Т3	
C	Coil Selection		١	Volts AC/DO	:	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	\$91.81
S6 - S12	2	2	3RH1921-1FA22	\$121.99
Side Mount				
S00	1	1	3RH2911-1DA11	\$82.07
S0 - S3	1	1	3RH2921-1DA11	\$83.24
S6 - S12	1	1	3RH1921-1DA11	\$108.06



# **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
- » Test function
- » 1NO, 1NC contacts
- » Direct mount
- » Manual / automatic reset

Contactor Frame Size	Setting Range Amp	Screw Terminal Model Number	List Price
	0.11 - 0.16	3RU2116-0AB0	\$162.69
	0.14 - 0.2	3RU2116-0BB0	\$162.69
	0.18 - 0.25	3RU2116-0CB0	\$162.69
	0.22 - 0.32	3RU2116-0DB0	\$162.69
	0.28 - 0.4	3RU2116-0EB0	\$162.69
	0.35 - 0.5	3RU2116-0FB0	\$162.69
	0.45 -0.63	3RU2116-0GB0	\$162.69
	0.55 - 0.8	3RU2116-0HB0	\$162.69
	0.7 - 1.0	3RU2116-0JB0	\$162.69
_	0.9 - 1.25	3RU2116-0KB0	\$162.69
Frame S00	1.1 - 1.6	3RU2116-1AB0	\$162.69
300	1.4 - 2	3RU2116-1BB0	\$162.69
	1.8 - 2.5	3RU2116-1CB0	\$162.69
	2.2 - 3.2	3RU2116-1DB0	\$162.69
	2.8 - 4	3RU2116-1EB0	\$162.69
	3.5 - 5	3RU2116-1FB0	\$147.07
	4.5 - 6.3	3RU2116-1GB0	\$162.69
	5.5 - 8	3RU2116-1HB0	\$162.69
	7 - 10	3RU2116-1JB0	\$162.69
	9 - 12.5	3RU2116-1KB0	\$162.69
	11 - 16	3RU2116-4AB0	\$162.69

Contactor Frame Size	Setting Range Amp	Screw Terminal Model Number	List Price
	1.8 - 2.5	3RU2126-1CB0	\$192.54
	2.2 - 3.2	3RU2126-1DB0	\$192.54
	2.8 - 4	3RU2126-1EB0	\$192.54
	3.5 - 5	3RU2126-1FB0	\$192.54
	4.5 - 6.3	3RU2126-1GB0	\$192.54
	5.5 - 8	3RU2126-1HB0	\$192.54
	7 - 10	3RU2126-1JB0	\$192.54
Frame	9 - 12.5	3RU2126-1KB0	\$192.54
S0	11 - 16	3RU2126-4AB0	\$192.54
	14 - 20	3RU2126-4BB0	\$192.54
	17 - 22	3RU2126-4CB0	\$192.54
	20 - 25	3RU2126-4DB0	\$192.54
	23 - 28	3RU2126-4NB0	\$296.84
	27 - 32	3RU2126-4EB0	\$296.84
	30 - 36	3RU2126-4PB0	\$296.84
	34 - 40	3RU2126-4FB0	\$296.84

Contactor Frame Size	Setting Range Amp	Screw Terminal Model Number	List Price
	22 - 32	3RU2136-4EB0	\$333.09
	28 - 40	3RU2136-4FB0	\$333.09
	36 - 45	3RU2136-4GB0	\$378.05
Frame	40 - 50	3RU2136-4HB0	\$453.71
S2	47 - 57	3RU2136-4QB0	\$453.71
	54 - 65	3RU2136-4JB0	\$453.71
	62 - 73	3RU2136-4KB0	\$453.71
	70 - 80	3RU2136-4RB0	\$522.48
	28 - 40	3RU2146-4FB0	\$726.73
Frame	36 - 50	3RU2146-4HB0	\$786.27
S3	70 - 90	3RU2146-4LB0	\$941.10
	80 -100	3RU2146-4MB0	\$1,221.11

# Replacement Coils for 3RT Contractors

Size	Coil	List Price
S00	No Replacement Coil -Purchase Contactor	
S0	3RT2926-5A**1	\$173.11
S2	3RT2934-5A**1	\$284.06
S3	3RT2944-5A**1	\$352.11
S6 - S12	Consult Factory	

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

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

#### **Additional Product Notes**



# **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

Volta	Open Type		NEMA 1 Enclosure	
Volts 60 Hz	Model Number	List Price	Model Number	List Price
24	47AB10AJ	\$1,209.63	47AB10BJ	\$1,596.51
120	47AB10AF	\$1,209.63	47AB10BF	\$1,596.51
200	47AB10AD	\$1,209.63	47AB10BD	\$1,596.51
240	47AB10AG	\$1,209.63	47AB10BG	\$1,596.51
480	47AB10AH	\$1,209.63	47AB10BH	\$1,596.51





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



	Max. HP					Enclosure		
Type / Purpose	Si	ngle-Phase A	ıC .	Three-P	hase AC	DC	ľ	NEMA 1
Type / Fai pose	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 <sup>†</sup>	\$1,383.65

#### **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
		- Air (69J Series)	
80	100	69JF6	\$68.58
80	100	69JF6L	\$75.61
80	100	69 F6LY	\$81.80
80	100	69JF6LY2C	
80	100		\$93.07
95	125	69JF6Y 69JF7	\$80.26 \$68.58
95	125	69JF7L	\$75.61
95	125	69JF7LY	\$81.80
95	125	69JF7LY2A	\$86.94
95	125	69JF7LY2C	\$93.07
95		·	\$80.26
95	125 125	69JF7Y	
		69JF7Y2C	\$90.45
115	150	69JF8	\$68.58
115	150	69JF8LY	\$81.80
115	150	69JF8LY2C	\$93.07
115	150	69JF8Y	\$80.26
140	175	69JF9	\$68.58
140	175	69JF92C	\$73.57
140	175	69JF9LY	\$81.80
140	175	69JF9LY2C	\$93.07
140	175	69JF9Y	\$80.26
80	100	69JG6	\$78.52
80	100	69JG6L	\$85.55
80	100	69JG6LY	\$91.61
80	100	69JG6Y	\$88.71
95	125	69JG7	\$78.52
95	125	69JG7LY	\$91.61
95	125	69JG7LY2C	\$103.24
95	125	69JG7Y	\$88.71
115	150	69JG8	\$78.52
115	150	69JG8LY	\$91.61
115	150	69JG8LY2C	\$103.24
115	150	69JG8Y	\$88.71
140	175	69JG9	\$78.52
140	175	69JG9LY	\$91.61
140	175	69JG9LY2C	\$103.24
140	175	69JG9Y	\$88.71
140	175	69JG9Y2C	\$98.88
		re Switches - Air (69H	
115	150	69HA1	\$334.47
115	150	69HA12S	\$711.04
115	150	69HA1G	\$349.00
140	175	69HA1Z140-175	\$349.00
115	150	69HAU1	\$339.10
140	175	69HAU12AZ140-175	\$339.10
140	175	69HAU1Z140-175	\$339.10
100	125	69HAU2	\$339.10
30	40	69HA3	\$349.00
30	40	69HAU3 \$354.	
115	150	69HB1	\$354.52
115	150	69HBU1	\$358.30
100	125	69HB2	\$354.52
100	125	69HBU2	\$358.30
30	40	69HBU3	\$358.30

Cut-In (PSI)	Cut-Out (PSI)	Model Number	List Price
Spare Un	loader Val	ves	
_	_	69DCA	\$28.80
_	_	69DJA	\$28.80

30	witches -		Price
		Water (69ES Series)	
	50	69ES1	\$85.64
20	40	69ES1Z20-40	\$87.15
40	60	69ES1Z40-60	\$87.15
30	50	69ES2	\$95.57
30	50	69ES2B	\$98.40
Pressure S	witches -	Water (69W Series)	
30	50	69WA4	\$93.42
30	50	69WA4B	\$95.01
30	50	69WA4G	\$95.01
20	40	69WA4GZ20-40	\$104.29
40	60	69WA4GZ40-60	\$104.29
30	50	69WA4L	\$92.01
20	40	69WA4LZ20-40	\$105.81
20	40	69WA4Z20-40	\$95.07
40	60	69WA4Z40-60	\$110.43
3	7	69WB2	\$92.01
5	10	69WB3	\$115.01
30	50	69WB5	\$96.62
3	20	69WC7	\$105.81
20	40	69WEC	\$119.61
30	50	69WECZ30-50	\$147.22
20	40	69WFC	\$147.22
20	100	69WH6	\$101.21
7	3	69WR2	\$139.55
10	5	69WR3	\$139.55
50	30	69WR5	\$107.59
100	75	69WR6	\$107.59
125	95	69WR7	\$102.32

### 69J Series - Air, Standard Duty

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



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

#### 69W Series - Water, 30-50 PSI

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



Suffix	Description
В	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		
<b>Factory Setting</b>	Differential	Model Number	List Price	Model Number	List Price
1-Port Manifold					
80-100 PSI	20-35 PSI	WPAL80/100	\$37.46	WPAH80/100	\$40.07
95-125 PSI	30-40 PSI	WPAL95/125	\$37.46	WPAH95/125	\$40.07
115-150 PSI	35-55 PSI	WPAL115/150	\$37.46	WPAH115/150	\$40.07
140-175 PSI	40-55 PSI	WPAL140/175	\$42.27	WPAH140/175	\$44.88
4-Port Manifold					
80-100 PSI	20-35 PSI	WPAL480/100	\$49.43	WPAH480/100	\$52.04
95-125 PSI	30-40 PSI	WPAL495/125	\$49.43	WPAH495/125	\$52.04
115-150 PSI	35-55 PSI	WPAL4115/150	\$49.43	WPAH4115/150	\$52.04
140-175 PSI	40-55 PSI	WPAL4140/175	\$54.64	WPAH4140/175	\$56.85

Optional Adders					
Suffix	Description	List Price			
L	Disconnect lever	\$1.30			
U	Unloader valve	\$3.91			
М	1/4" NPT male	\$2.61			







# 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	\$183.04	3/8" NPT Female
140-175 PSI	WPHL140/175	\$183.04	3/8" NPT Female
140-175 PSI	WPHL140/175MQ	\$188.24	1/4" NPT Male
High Pressure	Air NEMA 1 - With Unl	oader Valve	
115-150 PSI	WPHL115/150U	\$186.94	3/8" NPT Female
140-175 PSI	WPHL140/175U	\$186.94	3/8" NPT Female
100-125 PSI	WPHL100/125U	\$196.04	3/8" NPT Female
30-40 PSI	WPHL30/40U	\$222.06	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 A240 V Single-Phase: 3 HP 20 A





Factory Setting	Model Number	List Price	Connection			
High Pressure Air NEMA 1						
30-50 PSI	WPWL30/50	\$53.08	No Disconnect			
30-50 PSI	WPWL30/50L	\$54.38	Disconnect Lever			

52

## **Section 5: General Purpose Controls**



# 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**



# 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
		Black	52PM8A1	\$55.99
Florele		Red	52PM8A2	\$55.99
Flush		Green	52PM8A3	\$55.99
		Yellow	52PM8A4	\$55.99
		Black	52PM8B1	\$55.99
Extended		Red	52PM8B2	\$55.99
		Green	52PM8B3	\$55.99
Mushroom Head Plastic 1-3/4"		Red	52PM9W2	\$124.16
Mushroom Head Plastic 2-1/2"		Red	52PM9V2	\$124.16

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



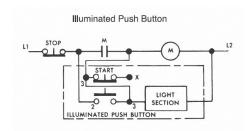


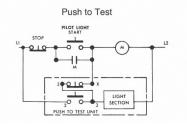
Extended Lens

Flush Lens

Туре	Lamp Type	Voltage	Color	Contacts	Model Number	List Price
			Red	1 NO - 1 NC	52PT6D2AB	\$278.06
			Green	1 NO - 1 NC	52PT6D3AB	\$278.06
Full Voltage (AC/DC)	LED	24V	Blue	1 NO - 1 NC	52PT6D5AB	\$278.06
(AC/DC)			Amber	1 NO - 1 NC	52PT6D9AB	\$278.06
			White	1 NO - 1 NC	52PT6DBAB	\$278.06
Full Voltage	LED	120V	Red	1 NO - 1 NC	52PT6E2AB	\$278.06
(AC/DC)	LED		Green	1 NO - 1 NC	52PT6E3AB	\$278.06
		120V	Red	1 NO - 1 NC	52PT6G2AB	\$306.77
Transformer (AC)	LED		Green	1 NO - 1 NC	52PT6G3AB	\$306.77
	LED		Amber	1 NO - 1 NC	52PT6G9AB	\$306.83
			White	1 NO - 1 NC	52PT6GBAB	\$306.83

#### Wiring Diagrams





54

# **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 <sup>(2)</sup>	\$34.04				
1 NC		52BAJ <sup>(2)</sup>	\$34.04				
1 NO - 1 NC		52BJK <sup>(2)</sup>	\$62.94				
1 NO Early Make	Closes Before 52BAK	52BAH	\$31.44				
1 NC Late Break	Opens After 52BAJ	52BAE <sup>(2)</sup>	\$31.44				
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 <sup>(1)</sup>	\$127.04				
1 NC Extra Late Break		52BAU <sup>(2)</sup>	\$35.99				

# 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	Calan	Metal 1-3/4"		Plastic 1-3/4"		Plastic 2-1/2"		
	Color	Model Number	List Price	Model Number	List Price	Model Number	List Price	
2 Position - Maintained								
	Red	52PP2A2	\$220.53	52PP2W2	\$182.18	52PP2V2	\$184.15	
3 Position - Momen	ntary In - Momentary	/ Out						
	Red	52PP3A2	\$220.53	52PP3W2	\$172.60	52PP3V2	\$172.60	
3 Position - Maintained In - Momentary Out								
	Red	52PP7A2	\$220.53	52PP7W2	\$172.60	52PP7V2	\$172.60	

#### **Additional Product Notes**

(1) Hermetically sealed

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



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







Mushroom Head Plastic 2-1/2"



Mushroom Head Plastic 1-3/4"

	Lamp				Metal 1-:		Plastic	1-3/4"
Type	Type	Voltage	Color	Contacts	Model Number	List Price	Model Number	List Price
2 Position - Maintain	ed							
Full Voltage (AC/DC)	LED	24V	Red	1 NO - 1 NC	52PP2D2AB <sup>†</sup>	\$333.69	52PP2DRAB <sup>†</sup>	\$314.51
Full Voltage (AC/DC)	LED	24V	Green	1 NO - 1 NC	52PP2D3AB	\$333.69	52PP2DSAB	\$314.51
Full Voltage (AC/DC)	Incandescent	120V	Red	1 NO - 1 NC	52PP2E2A <sup>†</sup>	\$303.01	52PP2ERA <sup>†</sup>	\$279.99
T(AC)	150	1201	Red	1 NO - 1 NC	52PP2G2AB <sup>†</sup>	\$375.87	52PP2GRAB <sup>†</sup>	\$339.44
Transformer (AC)	LED	120V	Green	1 NO - 1 NC	52PP2G3AB	\$375.87	52PP2GSAB	\$339.44
3 Position - Momenta	ary In - Momentar	y Out						
Full Voltage (AC/DC)	LED	24V	Green	1 NO - 1 NCELB	52PP3D3UB	\$362.46	52PP3DRUB	\$335.61
Full Voltage (AC/DC)	Incandescent	120V	Red	1 NO - 1 NCELB	52PP3E2	\$253.13	52PP3ER	\$232.05
Transformer (AC)	LED	4201/	Red	1 NO - 1 NCELB	52PP3G2UB	\$373.96	52PP3GRUB	\$354.78
Transformer (AC)	LED	120V	Green	1 NO - 1 NCELB	52PP3G3UB	\$373.96	52PP3GSUB	\$354.78
3 Position - Maintained In - Momentary Out								
Full Voltage (AC/DC)	LED	24V	Green	1 NO - 1 NCELB	52PP7D3UB	\$362.46	52PP7DSUB	\$335.61
Transformer (AC)	LED	120V	Red	1 NO - 1 NCELB	52PP7G2UB	\$396.96	52PP7GRUB	\$385.47
iransionner (AC)	LED	1200	Green	1 NO - 1 NCELB	52PP7G3UB	\$396.96	52PP7GSUB	\$385.47

† 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	Contact M = Maintained		Lever	Long Lever			
Туре	S = Spring Return	Model Number	List Price	Model Number	List Price		
2 Position - Operator							
No Contacts	M M	52SA2AAB	\$77.32	52SB2AAB	\$77.32		
No Contacts	M <s< td=""><td>52SA2ACB</td><td>\$120.82</td><td>52SB2ACB</td><td>\$119.37</td></s<>	52SA2ACB	\$120.82	52SB2ACB	\$119.37		
3 Position - Operator							
No Contacts	M M M	52SA2CAB	\$77.32	52SB2CAB	\$77.32		
No Contacts	M M M	52SA2BAB	\$77.32	52SB2BAB	\$77.32		
No Contacts	S>M M	52SA2BBB	\$120.82	52SB2BBB	\$122.72		
No Contacts	M M <s< td=""><td>52SA2BCB</td><td>\$119.37</td><td>52SB2BCB</td><td>\$119.37</td></s<>	52SA2BCB	\$119.37	52SB2BCB	\$119.37		
No Contacts	S>M <s< td=""><td>52SA2BDB</td><td>\$119.37</td><td>52SB2BDB</td><td>\$119.37</td></s<>	52SA2BDB	\$119.37	52SB2BDB	\$119.37		

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





Plastic Lens

Glass Lens

Lamp				Plastic	c Lens	Glass Lens	
Туре	Туре	Voltage	Color	Model Number	List Price	Model Number	List Price
	LED	120V	Red	52PL4E2XB	\$210.96	52PL5E2XB	\$239.70
			Green	52PL4E3XB	\$210.96	52PL5E3XB	\$239.70
Full Voltage (AC/DC)			Amber	52PL4E9XB	\$210.96	52PL5E9XB	\$239.70
(ACIDC)			Clear	52PL4EAXB	\$212.88	52PL5EAXB	\$239.70
			White	52PL4EBXB	\$212.88	52PL5EBXB	\$239.70
	Incandescent	120V	Red	52PL4E2	\$176.43	52PL5E2	\$193.68
Full Voltage			Green	52PL4E3	\$176.43	52PL5E3	\$193.68
(AC/DC)			Amber	52PL4E9	\$176.43	52PL5E9	\$193.68
			No Lens	52PL4EN	\$163.00	52PL5EN	\$172.60
	LED	120V	Red	52PL4G2XB	\$237.80	52PL5G2XB	\$287.66
Transformer			Green	52PL4G3XB	\$237.80	52PL5G3XB	\$287.66
(AC)			Amber	52PL4G9XB	\$237.80	52PL5G9XB	\$287.66
			White	52PL4GBXB	\$258.91	52PL5GBXB	\$287.66
Transformer	Incandescent	120V -	Red	52PL4G2	\$201.36	52PL5G2	\$241.63
			Green	52PL4G3	\$201.36	52PL5G3	\$241.63
(AC)			Amber	52PL4G9	\$201.36	52PL5G9	\$241.63
			White	52PL4GB	\$201.36	52PL5GB	\$241.63

#### **Additional Product Notes**







# **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										
	NEMA 1	NEMA 1 Indoor		NEMA 3R Outdoor		Horsepower Rating 240V AC				
Amp Rating	Model	Model List Model List	Single-Ph	ase, 2-Wire	Three-Phase, 3-Wire					
	Number	Price	Number	Price	Std.	Max.	Std.	Max.		
240 Volt Fusible -	2-Pole, 2-Fuse, Solid N	Neutral								
30	GF221NA	\$95.87	GF221NRA	\$152.48	1.5	3	3	7.5		
60	GF222NA	\$158.54	GF222NRA	\$244.15	3	10	7.5	15		
100	GF223N	\$327.03	GF223NR	\$358.50	7.5	15	15	30		
200	GF224N	\$660.52	GF224NR	\$937.01	15	_	25	60		
400	GF225NA	\$2,019.10	GF225NRA	\$2,584.27	15	_	50	125		
600	GF226NA	\$3,979.62	GR226NRA	\$4,618.73	15	_	75	200		
	3-Pole, 3 Fuse, Solid N									
30	GF321NA	\$152.48	GF321NRA	\$228.17	1.5	3	3	7.5		
60	GF322NA	\$250.79	GF322NRA	\$338.10	3	10	7.5	15		
100	GF323N	\$435.30	GF323NR	\$626.42	7.5	15	15	30		
200	GF324N	\$937.01	GF324NR	\$1,155.14	15	_	25	60		
400	GF325NA	\$2,891.57	GF325NRA	\$2,891.57	15	_	50	125		
600	GF326NA	\$4,456.95	GF326NRA	\$5,971.41	15	_	75	200		
240 Volt Non Fus	240 Volt Non Fusible - 3-Pole, 3-Wire, No Neutral - Also Used For 2-Pole Applications									
30	GNF321A	\$125.42	GNF321RA	\$214.92	_	3	7.5	_		
60	GNF322A	\$152.48	GNF322RA	\$332.55	_	10	15	_		
100	GNF323	\$358.43	GNF323R	\$626.42	_	15	30	_		
200	GNF324	\$645.75	GNF324R	\$1,141.33	_	15	60	_		
400	GNF325A	\$1,656.73	_	_	_	15	125	_		
600	GNF326A	\$3,166.05	_	_	_	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





				He	avy Duty - 600	Volt				
	NEMA 1 Indoor NEMA 3R		Outdoor NEMA 12 Industrial		Horsepower Rating					
Amp Rating	Model	List Price	Model Number	List Price	Model Number	List Price	480VAC Single-Phase, 2-Wire 600VAC Three-Phas			-Phase, 3-Wire
	Number						Std.	Max.	Std.	Max.
00 Volt Fusibl	e - 3-Pole, 3-Fuse,	No Neutral - Also	Used For 2-Pole A	pplications						
30	HF361	\$415.43	HF361R	\$718.70	HF361J	\$764.02	5	15	7.5	20
60	HF362	\$494.40	HF362R	\$842.98	HF362J	\$873.40	15	30	15	50
100	HF363	\$967.86	HF363R	\$1,329.69	HF363J	\$1,377.73	25	60	30	75
200	HF364	\$1,384.38	HF364R	\$1,847.87	HF364J	\$1,911.92	50	125	60	150
400	HF365A	\$3,695.97	HF365RA	\$4,454.21	HF365JA	\$4,631.99	100	250	125	350
600	HF366A	\$6,415.15	HF366RA	\$8,828.06	HF366JA	\$9,052.89	150	400	200	500
800	HF367	\$10,769.21	HF367R	\$13,056.25	HF367J	\$12,753.59	200	500	250	500
1200	HF368	\$13,600.19	HF368R	\$16,064.77	HF368J	\$16,354.91	200	500	250	500
00 Volt Non-F	usible - 3-Pole, 3-	Wire								
30	HNF361	\$217.93	HNF361R	\$397.76	HNF361J	\$512.67	_	20	_	30
60	HNF362	\$397.76	HNF362R	\$697.69	HNF362J	\$722.03	_	50	_	60
100	HNF363	\$644.14	HNF363R	\$994.91	HNF363J	\$1,033.02	_	75	_	100
200	HNF364	\$955.22	HNF364R	\$1,174.25	HNF364J	\$1,239.12	_	125	_	150
400	HNF365A	\$2,315.43	HNF365RA	\$3,097.87	HNF365JA	\$3,206.15	_	250	_	350
600	HNF366A	\$4,125.52	HNF366RA	\$6,146.15	HNF366JA	\$6,291.82	_	400	_	500
800	HNF367	\$7,830.11	HNF367R	\$10,321.44	HNF367J	\$10,407.34	_	500	_	500
1200	HNF368	\$10,635.48	HNF368R	\$13,485.82	HNF368J	\$13,671.28	_	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.

# **Section 7: Additional Information**



## 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

# **Section 7: Additional Information**



# 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**

- **1. 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.
- 2. **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.
- **3. 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.
- 4. Payment: Net 30 days from date of invoice.
- 5. International Air Travel: All international air travel will be billed at the minimum business class rates.
- **6. 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.
- **7. 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.
- **8.** 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

**1. 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) warranties 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 CONTACT, 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.



# 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			

## **Notes**





## **Notes**





# **ADDITIONAL PRODUCTS FROM WORLDWIDE**

Call 1-800-808-2131 and request additional catalogs today!

#### **WorldWide Electric Motors**

- Fractional Motors
  - General Purpose
  - Jet Pump
  - Stainless Steel / Washdown Duty
  - Permanent Magnet DC
- Integral Motors
  - Farm Duty
  - Stainless Steel
  - Open Drip Proof (ODP)
  - Premium Efficient Severe Duty
  - Explosion Proof
  - Advanced Design Rock Crusher
  - Oil Well and Close Coupled Pump
  - Vertical Hollow Shaft
  - Louis Allis IEEE 45 Marine-Duty



#### **Hyundai Electric Motors**

- □ Crown Triton<sup>™</sup> Series
  - Premium Efficiency
  - Severe Duty Large Frame
  - IEEE-841



#### WorldWide Gear Reducers

- Shaft Mount Reducers
  - The Original
  - The Ultimate
  - The Eliminator
- Worm Gear Reducers
  - Cast Iron
  - Aluminum
  - Stainless Steel
- Helical Inline Reducers
  - WINL Line
- Helical-Bevel Reducers
  - KHN Line
  - KAN Line











#### **ATHLON Classic Plus Generators**

- Single Bearing
- Double Bearing
- Pancake

#### **WORLDWIDE FAMILY OF BRANDS**









# 2022-2023 Motor Control Products Catalog

Document No: MC-CAT-01.2022



# INCREDIBLE PRICING. 24/7 ONLINE ORDERING.

(OH, AND IT'S IN STOCK TOO!)

Call us today at **(800) 808-2131** or browse our complete product lines at **worldwideelectric.com**.

#### worldwideelectric.com

WorldWide Electric Corporation 3540 Winton Place Rochester, NY 14623

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