










SERIES 6 AC DRIVE SELECTION CHART

	MD60	MD65	SP600	SP600 Nema 4	LiquiFlo 2.0	GV6000
						
Main Attributes	Microdrive is ready to operate out of the box	Microdrive; SVC with process logic functionality	Built-in braking circuit; Network connectivity; SVC	NEMA 4X/12 washdown drive; SVC ; built-in braking	Liquid-cooled heatsink for a compact high HP design	All Purpose drive; V/Hz, SVC & Closed Loop Vector
HP Range	0.25 to 5	0.5 to 15	0.5 to 200	0.5 to 50	200 to 1000	0.5 to 200
Voltage Range	115/230 1-phase 230/460 3-phase	115/230 1-phase 230/460/600 3-phase	230 1-phase 230/460/600 3-phase	230 1-phase 230/460/600 3-phase	Input 340 V AC @ 50 or 60 Hz	230/460/600 1 or 3- Phase
Enclosure Selection	IP30/NEMA 1 option kit	IP30/NEMA 1 option kit	NEMA 1; NEMA 1 Flange IP20	NEMA 4X/12; IP66	NEMA 1	NEMA 1
Speed Control	V/Hz	V/Hz or SVC	V/Hz or SVC	V/Hz or SVC	V/Hz or SVC	V/Hz, SVC or Closed Loop Vector
Speed Regulation	+/- 2%	+/- 1%	+/- 0.5%	+/- 0.5%	+/- 0.5%	0.001%
Speed Range	40:1	60:1	80:1	80:1	80:1	120:1
Comm Options	Serial Modbus DF1	DeviceNet, EtherNet, Profibus, Serial Modbus DF1	DeviceNet, ControlNet, Profibus, Ethernet IP, Interbus-S, Modbus	DeviceNet, ControlNet, Profibus, Ethernet IP, Interbus-S, Modbus	DeviceNet, ControlNet, Profibus, Ethernet IP, Interbus-S, Modbus	DeviceNet, ControlNet, Interbus-S, EtherNet IP, Profibus, Modbus
Operator Interface	Embedded LED display and keypad with manual speed pot	Embedded LED display and keypad with manual speed pot	Local backlit graphical LCD; Remote hand-held graphical LCD; Remote NEMA 4 graphical LCD	Local backlit graphical LCD; Remote hand-held graphical LCD; Remote NEMA 4 graphical LCD	Local backlit graphical LCD; Remote hand-held graphical LCD; Remote NEMA 4 graphical LCD	Local backlit graphical LCD; Remote hand-held graphical LCD; Remote NEMA 4 graphical LCD
Differentiating Feature	Lowest Cost	Analog Output; Comm op- tions; Process logic	Available with Internal Braking Circuitry	NEMA 4X/12	IEEE 519 & CE Harmonic Limit Compliant; Fully Re- generative	High Performance
Power Matched Motors	E-Master, XE, Calibre, Sabre	E-Master, XE, Calibre, Sabre, XEVS	E-Master, XE, Calibre, Sabre, XEVS	E-Master, XE, Calibre, Sabre, XEVS	E-Master, XE, VS-Master, RPM-AC	XEVS, VS Master, RPM-AC

DC DRIVE SELECTION CHART

	DC2	DC3	FlexPak 3000
			
Main Attributes	Enhanced operating features	Lowest cost single phase DC family. Plate and enclosed	Digital DC Drive; user friendly OIM; Quick Start configuration
HP Range	0.25 to 2	0.125 to 2	1.5 to 600
Voltage Range	115/230 1-phase	115/230 1-phase	230/460 3-phase
Enclosure Selection	Chassis, NEMA 4X, NEMA 12	Chassis, NEMA 1, NEMA 4X, NEMA 12	Chassis, NEMA 1 (with kit); IP00, IP20
Speed Control	Arm., volt, fdbk, tach	Arm. or Tach	Tach
Speed Reg	2 % or 1%	1% or 0.1%	up to 0.1%
Speed Range	20:1 or 30:1	60:1	200:1
Comm Options	No	No	DeviceNet, ControlNet, Profibus DP, AutoMax, Interbus-S
Operator Interface	Local analog controls on enclosed models; analog and discrete control removable	Local analog controls on enclosed models; analog and discrete control removable	Local LCD OIM with multi-line /language; remote mounting kit for standard OIM; CS300 PC software option
Differentiating Feature	OEM feature/benefits	Lowest cost	Input fuses, inverting fault breaker; optional blower starter kit; compact footprint
Power Matched Motors	RPM-XL	RPM-XL	RPM-III

MD60 And MD65 AC Drives

For applications from 0.25 to 5 HP, the MD60 is a simple Volts per Herz AC Microdrive that can be panel mounted as well as wall or machine mounted.



For applications from 0.5 to 15 HP, the MD65 is a simple Sensorless Vector Microdrive that can be panel mounted as well as wall or machine mounted.



PRODUCT FEATURES

- IP20 enclosure as standard, modifiable to NEMA 1 (IP30)
- Integral keypad and display including single turn speed potentiometer
- Heavy Duty rated provides 150% Overload for 1 minute and 200% for 3 seconds
- Built-in braking transistor allows connection to remote braking resistor for enhanced performance needs
- Options and Accessories including Remote Keypads, Dynamic Braking and Communication Cards are available. See 2006 V*S Drives and Motor Catalog for details

100 - 115 V, 50/60 Hz, 1 Phase Input (230 V, 3-Phase Output)

HP	MD60 Model Number	Frame Size	Output Current	List	MD65 Model Number	Frame Size	Output Current	List
0.25	6MDVN-1P5101	A	1.5A	\$407	-	-	-	-
0.5	6MDVN-2P3101	A	2.3A	424	6MDVN-2P3102	B	2.3A	\$530
1	6MDVN-4P5101	B	4.5A	497	6MDVN-5P0102	B	5.0A	611
1.5	6MDVN-6P0101	B	6.0A	610	6MDVN-6P0102	B	6.0A	763

200 - 240 V, 50/60 Hz, 1-Phase Input (230 V, 3-Phase Output), with Integral EMC Filter

HP	MD60 Model Number	Frame Size	Output Current	List	MD65 Model Number	Frame Size	Output Current	List
0.25	6MDAN-1P5111	A	1.5A	\$345	-	-	-	-
0.5	6MDAN-2P3111	A	2.3A	373	6MDAN-2P3112	B	2.3A	\$435
1	6MDAN-4P5111	A	4.5A	463	6MDAN-5P0112	B	5.0A	520
2	6MDAN-8P0111	B	8.0A	593	6MDAN-8P0112	B	8.0A	667
3	-	-	-	-	6MDAN-012112	C	12.0A	785

200 - 240 V, 50/60 Hz, 1-Phase Input (230 V, 3-Phase Output)

HP	MD60 Model Number	Frame Size	Output Current	List	MD65 Model Number	Frame Size	Output Current	List
0.25	6MDAN-1P5101	A	1.5A	\$311	-	-	-	-
0.5	6MDAN-2P3101	A	2.3A	339	6MDAN-2P3102	B	2.3A	\$417
1	6MDAN-4P5101	A	4.5A	424	6MDAN-5P0102	B	4.5A	491
2	6MDAN-8P0101	B	8.0A	554	6MDAN-8P0102	B	8.0A	643
3	-	-	-	-	6MDAN-012102	C	12.0A	763

200 - 240 V, 50/60 Hz, 3-Phase

HP	MD60 Model Number	Frame Size	Output Current	List	MD65 Model Number	Frame Size	Output Current	List
0.25	6MDBN-1P5101	A	1.5A	\$311	-	-	-	-
0.5	6MDBN-2P3101	A	2.3A	339	6MDBN-2P3102	B	2.3A	\$543
1	6MDBN-4P5101	A	4.5A	401	6MDBN-5P0102	B	4.5A	611
2	6MDBN-8P0101	A	8.0A	509	6MDBN-8P0102	B	8.0A	774
3	6MDBN-012101	B	12.0A	633	6MDBN-012102	B	12.0A	859
5	6MDBN-017101	B	17.5A	701	6MDBN-017102	B	17.5A	1,056
7.5	-	-	-	-	6MDBN-024102	C	24.0A	1,554
10	-	-	-	-	6MDBN-033102	C	33.0A	1,802

380 - 460 V, 50/60 Hz, 3-Phase

HP	MD60 Model Number	Frame Size	Output Current	List	MD65 Model Number	Frame Size	Output Current	List
0.5	6MDDN-1P4101	A	1.4A	\$463	6MDDN-1P4102	B	1.4A	\$650
1	6MDDN-2P3101	A	2.3A	531	6MDDN-2P3102	B	2.3A	700
2	6MDDN-4P0101	A	4.0A	622	6MDDN-4P0102	B	4.0A	809
3	6MDDN-6P0101	B	6.0A	746	6MDDN-6P0102	B	6.0A	967
5	6MDDN-8P7101	B	8.7A	904	6MDDN-010102	B	10.0A	1,165
7.5	-	-	-	-	6MDDN-012102	C	12.0A	1,554
10	-	-	-	-	6MDDN-017102	C	17.0A	1,774
15	-	-	-	-	6MDDN-024102	C	24.0A	2,148

600 V, 50/60 Hz, 3-Phase

HP	MD60 Model Number	Frame Size	Output Current	List	MD65 Model Number	Frame Size	Output Current	List
1	-	-	-	-	6MDEN-1P7102	B	1.7A	\$791
2	-	-	-	-	6MDEN-3P0102	B	3.0A	898
3	-	-	-	-	6MDEN-4P2102	B	4.2A	1,052
5	-	-	-	-	6MDEN-6P6102	B	6.6A	1,243
7.5	-	-	-	-	6MDEN-9P9102	C	9.9A	1,622
10	-	-	-	-	6MDEN-012102	C	12.2A	1,837
15	-	-	-	-	6MDEN-019102	C	19.0A	2,261

A full-featured, sensorless vector, industrial AC drive suitable for panel, machine, flange and washdown mounted installations



PRODUCT FEATURES

- NEMA 1 (modifiable to IP20), NEMA 1 Flange, and NEMA 4X/12 standard enclosures
- Removable LCD display with ICON based menu navigation
- Dual rated for variable torque and constant torque applications
- Braking transistor internal to enclosure (standard through 50HP)
- Options and accessories include remote NEMA 4X/12 keypad, communications modules, and dynamic braking resistors
- See V*S Motors and Drives Catalog for details

NEMA 1/IP20 Enclosures: 200 - 240 VAC, 50/60 Hz Input, Ratings 0.5 to 25 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 240 V			List	
				110% OL	150% OL	Continuous	1 Min.	3 Sec.		
				VT Applications	CT Applications					
6SP201	-2P2CTNN	A	•		0.5	0.33	2.2	2.4	3.3	\$889
	-4P2CTNN	A	•		1	0.75	4.2	4.8	6.4	978
	-6P8CTNN	B	•		2	1.5	6.8	9	12	1,066
	-9P6CTNN	B	•		3	2	9.6	10.6	14.4	1,179
	-015CTAN	C	•	•	5	3	15.3	17.4	23.2	1,414
	-022CTAN	D	•	•	7.5	5	22	24.2	33	1,732
	-028CTAN	D	•	•	10	7.5	28	33	44	2,122
	-042CTAN	D	•	•	15	10	42	46.2	63	2,673
	-054CTAN	E	•	•	20	15	54	63	84	3,349
-070CTAN	E	•	•	25	20	70	81	108	4,108	

NEMA 4X/12 Washdown/Dustproof/IP66 Enclosures: 200 - 240 VAC, 50/60 Hz Input, Ratings 0.5 to 25 HP

NEMA 4X/12/IP66 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 240 V			List	
				110% OL	150% OL	Continuous	1 Min.	3 Sec.		
				VT Application	CT Application					
6SP24X	-2P2CTNN	B4	•		0.5	0.33	2.2	2.4	3.3	\$1,060
	-4P2CTNN	B4	•		1	0.75	4.2	4.8	6.4	1,165
	-6P8CTNN	B4	•		2	1.5	6.8	9	12	1,270
	-9P6CTNN	B4	•		3	2	9.6	10.6	14.4	1,395
	-015CTAN	D4	•	•	5	3	15.3	17.4	23.2	1,695
	-022CTAN	D4	•	•	7.5	5	22	24.2	33	2,050
	-028CTAN	D4	•	•	10	7.5	28	33	44	2,820
	-042CTAN	D4	•	•	15	10	42	46.2	63	3,422
	-054CTAN	E4	•	•	20	15	54	63	84	4,285
-070CTAN	E4	•	•	25	20	70	81	108	5,273	

LiquiFlo 2.0 Standard Drives (No Options): 460 - 480VAC, 50/60 Hz Input, Ratings 405 to 1215 Amps

Base Drive Model Number	Drive Amps @ 480V Continuous	List
180264-A03-600	405	\$41,085
180264-A06-600	608	59,955
180580-A07-600	810	83,622
180580-A09-600	1215	98,650

A full-featured, sensorless vector, industrial AC drive suitable for panel, machine, flange and washdown mounted installations



PRODUCT FEATURES

- NEMA 1 (modifiable to IP20), NEMA 1 Flange, and NEMA 4X/12 standard enclosures
- Removable LCD display with ICON based menu navigation
- Dual rated for variable torque and constant torque applications
- Braking transistor internal to enclosure (standard through 50HP)
- Options and accessories include remote NEMA 4X/12 keypad, communications modules, and dynamic braking resistors
- See V*S Motors and Drives Catalog for details

NEMA 1/IP20 Enclosures: 380 - 480 VAC, 50/60 Hz Input, Ratings 0.5 to 50 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 480 V			List	
				110% OL	150% OL	Continuous	1 Min.	3 Sec.		
				VT Applications	CT Applications					
6SP401	-1P1CTNN	A	•		0.5	0.33	1.1	1.2	1.6	\$1,108
	-2P1CTNN	A	•		1	0.75	2.1	2.4	3.2	1,160
	-3P4CTNN	A	•		2	1.5	3.4	4.5	6	1,217
	-005CTNN	B	•		3	2	5	5.5	7.5	1,321
	-008CTNN	B	•		5	3	8	8.8	12	1,513
	-011CTAN	C	•	•	7.5	5	11	12.1	16.5	1,896
	-014CTAN	C	•	•	10	7.5	14	16.5	22	2,007
	-022CTAN	D	•	•	15	10	22	24.2	33	2,584
	-027CTAN	D	•	•	20	15	27	33	44	3,099
	-034CTAN	D	•	•	25	20	34	40.5	54	3,848
	-040CTAN	D	•	•	30	25	40	51	68	4,784
-052CTAN	E	•	•	40	30	52	60	80	5,720	
-065CTAN	E	•	•	50	40	65	78	104	7,176	

NEMA 1/IP20 Enclosures: 380 - 480 VAC, 50/60 Hz Input, Ratings 20 to 200 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 480 V			List	
				110% OL	150% OL	Continuous	1 Min.	3 Sec.		
				VT Applications	CT Applications					
6SB401	-027CTANA	2	•	•	20	15	27	33	44	\$3,411
	-034CTANA	2	•	•	25	20	34	40.5	54	4,165
	-040CTANA	3	•	•	30	25	40	51	68	5,096
	-052CTANA	3	•	•	40	30	52	60	80	6,084
	-065CTANA	3	•	•	50	40	65	78	104	7,628
	-077CNANA	4	•	•	60	50	77	97.5	130	8,388
	-096CNANA	5	•	•	75	60	96	106	144	9,386
	-125CNANA	5	•	•	100	75	125	138	163	11,367
	-156CNANA	6	•	•	125	100	156	172	234	12,641
	-180CNANA	6	•	•	150	125	180	198	270	13,692
-248CNANA	6	•	•	200	150	248	273	372	19,068	

NEMA 4X/12 Washdown/Dustproof/IP66 Enclosures: 380 - 480 VAC, 50/60 Hz Input, Ratings 0.5 to 50 HP

NEMA 4X/12/IP66 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 480 V			List	
				110% OL	150% OL	Continuous	1 Min.	3 Sec.		
				VT Applications	CT Applications					
6SP44X	-1P1CTNN	B4	•		0.5	0.33	1.1	1.2	1.6	\$1,415
	-2P1CTNN	B4	•		1	0.75	2.1	2.4	3.2	1,480
	-3P4CTNN	B4	•		2	1.5	3.4	4.5	6	1,665
	-005CTNN	B4	•		3	2	5	5.5	7.5	1,945
	-008CTNN	B4	•		5	3	8	8.8	12	2,225
	-011CTAN	D4	•	•	7.5	5	11	12.1	16.5	2,735
	-014CTAN	D4	•	•	10	7.5	14	16.5	22	2,955
	-022CTAN	D4	•	•	15	10	22	24.2	33	3,795
	-027CTAN	D4	•	•	20	15	27	33	44	4,545
	-034CTAN	D4	•	•	25	20	34	40.5	54	5,616
	-040CTAN	D4	•	•	30	25	40	51	68	6,968
	-052CTAN	E4	•	•	40	30	52	60	80	8,668
	-065CTAN	E4	•	•	50	40	65	78	104	10,182

A full-featured, sensorless vector, industrial AC drive suitable for panel, machine, flange and washdown mounted installations



PRODUCT FEATURES

- NEMA 1 (modifiable to IP20), NEMA 1 Flange, and NEMA 4X/12 standard enclosures
- Removable LCD display with ICON based menu navigation
- Dual rated for variable torque and constant torque applications
- Braking transistor internal to enclosure (standard through 50HP)
- Options and accessories include remote NEMA 4X/12 keypad, communications modules, and dynamic braking resistors
- See V*S Motors and Drives Catalog for details

NEMA 1/IP20 Enclosures: 575 VAC, 50/60 Hz Input, Ratings 0.5 to 50 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 575 V			List
				110% OL	150% OL	Continuous	1 Min.	3 Sec.	
				VT Applications	CT Applications				
6SP501	-0P9CTNN	A	•	0.5	0.33	0.9	1	1.4	\$1,414
	-1P7CTNN	A	•	1	0.75	1.7	2	2.6	1,435
	-2P7CTNN	B	•	2	1.5	2.7	3.6	4.8	1,544
	-3P9CTNN	B	•	3	2	3.9	4.3	5.8	1,596
	-6P1CTNN	B	•	5	3	6.1	6.7	9.1	1,685
	-9P0CTNN	C	•	7.5	5	9	9.9	13.5	1,903
	-011CTNN	C	•	10	7.5	11	13.5	18	2,246
	-017CTNN	D	•	15	10	17	18.8	25.5	2,787
	-022CTNN	D	•	20	15	22	25.5	34	3,328
	-027CTNN	D	•	25	20	27	33	44	4,207
	-032CTNN	D	•	30	25	32	40.5	54	5,268
-041CTNN	E	•	40	30	41	48	64	6,214	
98145.451	98145.451	98145.451		50	40	52	61.5	82	7,748

NEMA 1/IP20 Enclosures: 575 VAC, 50/60 Hz Input, Rating 20 to 150 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 575 V			List
				110% OL	150% OL	Continuous	1 Min.	3 Sec.	
				VT Applications	CT Applications				
6SB501	-022CTNNA	2	•	20	15	22	25.5	34	\$3,744
	-027CTNNA	2	•	25	20	27	33	44	4,570
	-032CTNNA	3	•	30	25	32	40.5	54	5,631
	-041CTNNA	3	•	40	30	41	48	64	6,630
	-052CTNNA	3	•	50	40	52	61.5	82	8,252
	-062CNNA	4	•	60	50	62	78	104	9,583
	-077CNNA	5	•	75	60	77	85	116	11,029
	-099CNNA	5	•	100	75	99	109	126	13,104
	-125CNNA	6	•	125	100	125	138	188	14,617
	-144CNNA	6	•	150	125	144	158	216	16,005

NEMA 4X/12 Washdown/Dustproof/IP66 Enclosures: 575 VAC, 50/60 Hz Input, Ratings 0.5 to 50 HP

NEMA 4X/12/IP66 Model Number	Frame Size	With Brake	With Filter	Horsepower Rating		Drive Amps @ 575 V			List
				110% OL	150% OL	Continuous	1 Min.	3 Sec.	
				VT Applications	CT Applications				
6SP54X	-0P9CTNN	B4	•	0.5	0.33	0.9	1	1.4	\$1,645
	-1P7CTNN	B4	•	1	0.75	1.7	2	2.6	1,665
	-2P7CTNN	B4	•	2	1.5	2.7	3.6	4.8	1,945
	-3P9CTNN	B4	•	3	2	3.9	4.3	5.8	2,235
	-6P1CTNN	B4	•	5	3	6.1	6.7	9.1	2,445
	-9P0CTNN	D4	•	7.5	5	9	9.9	13.5	2,755
	-011CTNN	D4	•	10	7.5	11	13.5	18	3,255
	-017CTNN	D4	•	15	10	17	18.8	25.5	4,035
	-022CTNN	D4	•	20	15	22	25.5	34	4,815
	-027CTNN	D4	•	25	20	27	33	44	5,834
	-032CTNN	D4	•	30	25	32	40.5	54	7,374
	-041CTNN	E4	•	40	30	41	48	64	8,746
	-052CTNN	E4	•	50	40	52	61.5	82	10,972

The multi-purpose, high-performance, industrial AC drive that solves virtually all stand-alone or coordinated system drive applications with a common platform



PRODUCT FEATURES

- NEMA 1 (modifiable to IP20) zero stacking enclosure
- Removable LCD display with TAB based menu navigation
- Dual rated for variable torque and constant torque applications
- Braking transistor internal to enclosure (standard through 60HP)
- Options and accessories include remote NEMA 4X/12 keypad, communications modules, and dynamic braking resistors
- See V*S Motors and Drives Catalog for details

NEMA 1/IP20 Enclosures: 200 - 240 VAC, 50/60 Hz Input, Ratings 0.5 to 100 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	Horsepower Rating		Drive Amps @ 240 V			List	
			110% OL	150% OL	Continuous	1 Min.	3 Sec.		
			VT Applications	CT Applications					
6V21	-2P2TA	0	•	0.5	0.33	2.2	2.4	3.3	\$1,846
	-4P2TA	0	•	1	0.5	4.2	4.8	6.4	1,846
	-6P8TA	1	•	2	1	6.8	9	12	1,893
	-9P6TA	1	•	3	2	9.6	10.6	14.4	1,919
	-015TA	1	•	5	3	15.3	16.8	23	1,960
	-022TA	1	•	7.5	5	22	24.2	33	2,241
	-028TA	2	•	10	7.5	28	33	44	2,610
	-042TA	3	•	15	10	42	46.2	63	3,120
	-052TA	3	•	20	15	52	63	80	3,787
	-070TA	4	•	25	20	70	78	105	4,956
	-080TA	4	•	30	25	80	105	140	5,751
	-104NA	5		40	30	104	115	175	7,961
	-130NA	5		50	40	130	143	175	8,544
	-154NA	6		60	50	154	169	231	10,530
-192NA	6		75	60	192	211	288	13,286	
-260NA	6		100	75	260	286	390	18,673	

NEMA 1/IP20 Enclosures: 380 - 480 VAC, 50/60 Hz Input, Ratings 0.5 to 200 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	Horsepower Rating		Drive Amps @ 480 V			List	
			110% OL	150% OL	Continuous	1 Min.	3 Sec.		
			VT Applications	CT Applications					
6V41	-1P1TA	0	•	0.5	0.33	1.1	1.2	1.6	\$1,711
	-2P1TA	0	•	1	0.5	2.1	2.4	3.2	1,711
	-3P4TA	0	•	2	1	3.4	4.5	6	1,711
	-5P0TA	0	•	3	2	5	5.5	7.5	1,711
	-8P0TA	0	•	5	3	8	8.8	12	1,877
	-011TA	0	•	7.5	5	11	12.1	16.5	2,205
	-014TA	1	•	10	7.5	14	16.5	22	2,449
	-022TA	1	•	15	10	22	24.2	33	3,000
	-027TA	2	•	20	15	27	33	44	3,536
	-034TA	2	•	25	20	34	40.5	54	4,290
	-040TA	3	•	30	25	40	51	68	5,221
	-052TA	3	•	40	30	52	60	80	6,209
	-065TA	3	•	50	40	65	78	104	7,753
	-077TA	4	•	60	50	77	85	116	8,923
	-096NA	5		75	60	96	106	144	9,511
	-125NA	5		100	75	125	138	163	11,492
	-156NA	6		125	100	156	172	234	12,766
	-180NA	6		150	125	180	198	270	14,087
-248NA	6		200	150	248	273	372	19,193	

The multi-purpose, high-performance, industrial AC drive that solves virtually all stand-alone or coordinated system drive applications with a common platform



PRODUCT FEATURES

- NEMA 1 (modifiable to IP20) zero stacking enclosure
- Removable LCD display with TAB based menu navigation
- Dual rated for variable torque and constant torque applications
- Braking transistor internal to enclosure (standard through 60HP)
- Options and accessories include remote NEMA 4X/12 keypad, communications modules, and dynamic braking resistors
- See V*S Motors and Drives Catalog for details

NEMA 1/IP20 Enclosures: 575 VAC, 50/60 Hz Input, Ratings 0.5 to 150 HP

NEMA 1/IP20 Model Number	Frame Size	With Brake	Horsepower Rating		Drive Amps @ 575 V			List	
			110% OL	150% OL	Continuous	1 Min.	3 Sec.		
			VT Applications	CT Applications					
6V51	-1P7TA	0	•	1	0.5	1.7	2	2.6	\$1,945
	-2P7TA	0	•	2	1	2.7	3.6	4.8	1,945
	-3P9TA	0	•	3	2	3.9	4.3	5.9	1,945
	-6P1TA	0	•	5	3	6.1	6.7	9.2	2,064
	-9P0TA	0	•	7.5	5	9	9.9	13.5	2,387
	-011TA	1	•	10	7.5	11	13.5	18	2,751
	-017TA	1	•	15	10	17	18.7	25.5	3,292
	-022TA	2	•	20	15	22	25.5	34	3,817
	-027TA	2	•	25	20	27	33	44	4,644
	-032TA	3	•	30	25	32	40.5	54	5,704
	-041TA	3	•	40	30	41	48	64	6,703
	-052TA	3	•	50	40	52	61.5	82	8,325
	-062TA	4	•	60	50	62	78	104	10,067
	-077NA	5		75	60	77	85	116	11,102
	-099NA	5		100	75	99	109	126	13,177
-125NA	6		125	100	125	138	188	14,690	
-144NA	6		150	125	144	158	216	16,078	

Single Phase DC Drives

DC2 DC Drive: A flexible, reliable and affordable drive for 1/4 through 2 HP DC Applications

DC2 drives combine application flexibility, compact size and reliability into an affordable adjustable speed package that delivers the performance you need for a wide range of industrial applications.



PRICING

1/4-1 HP @ 115 VAC 90 VDC ARMATURE, 50 VDC FIELD

1/2-2 HP @ 230 VAC 180 VDC ARMATURE, 100 VDC FIELD

Regulator Type	Open Chassis	List	Plate Controller	List	With OIM	List	Without OIM	List	With OIM	List
Basic Regulator	DC2-40U	\$330	DC2-50U	\$275	DC2-70U	\$375	DC2-80U	\$375	DC2-90U	\$395
Basic with Run/Jog	DC2-40U	330	DC2-50U	275	N/A		DC2-80U	375	DC2-99U	450
Basic and Reversing	N/A		N/A		DC2-71U	485	N/A		DC2-91U	510
Basic Instrument Interface	DC2-42U	405	DC2-52U	300	DC2-72U	460	DC2-82U	460	DC2-92U	510
Basic and Reversing with Run/Jog	N/A		N/A		N/A		N/A		DC2-98U	550
Torque Regulator	DC2-43U	370	N/A		N/A		N/A		N/A	
Torque Regulator & Inst. Interface	N/A		DC2-54U	300	DC2-74U	520	N/A		N/A	
Heat Sink Kit for DC2-50 Series	N/A		HS1-50	100	N/A		N/A		N/A	

DC3 DC Drive: Fractional to 2 HP DC Drives for Both Non-Regenerative and Regenerative Applications

The Reliance Electric DC3 family of drives provides cost-effective variable speed control and operates on both 115 and 230 VAC, single-phase power. These drives offer both users and machinery-builders the right drive at the right price.



PRICING

1/8 - 1.0 HP @ 115 VAC, 1-Ph, 50/60 Hz: 90 VDC Armature, 50/100 VDC Field

1/4 - 2.0 HP @ 230 VAC, 1-Ph, 50/60 Hz: 180 VDC armature 50/100 VDC Field

DC3N Plate Model: For Operation of Permanent Magnet DC Motors Only

DC3N Chassis Model - "Non-Isolated" Controller Selection

HP - Rating 115 VAC Input	DC Armature Voltage	Armature Current	HP - Rating 230 VAC Input	DC Armature Voltage	Armature Current	Enclosure	Model Number	List
1/8 to 1/2	90	2.7 to 5.0	1/2 to 1.0	180	1.4 to 5.0	Plate	DC3N-12D-00-010-AN	\$70
1/2 to 1.0	90	* 5.0 to 10	1.0 to 2.0	180	* 5.0 to 9.2	Plate		

* Requires addition of Heatsink Kit Option: DC3N-HS-00 List Price: \$24.00

DC3N Enclosed Model - "Non-Isolated" Controller Selection

HP - Rating 115 VAC Input	DC Armature Voltage	Armature Current	HP - Rating 230 VAC Input	DC Armature Voltage	Armature Current	Enclosure	Model Number	List
1/8 to 1/2	90	2.7 to 5.0	1/2 to 1.0	180	1.4 to 5.0	NEMA 1	DC3N-12D-01-010-AN	\$150
1/2 to 1.0	90	** 5.0 to 10	1.0 to 2.0	180	** 5.0 to 9.2	NEMA 1		
1/8 to 1/2	90	2.7 to 5.0	1/2 to 1.0	180	1.4 to 5.0	NEMA 4X/12	DC3N-12D-4X-010-AN	220
1/2 to 1.0	90	5.0 to 10	1.0 to 2.0	180	5.0 to 9.2	NEMA 4X/12		

** Requires addition of Heatsink Kit Option: DC3N-HS-01 List Price: \$30.00

DC3N Enhanced Models: For Operation of Permanent Magnet & Shunt Wound DC Motors

DC3N Enhanced Enclosed Model - "Non-Isolated" Controller Selection

HP - Rating 115 VAC Input	DC Armature Voltage	Armature Current	HP - Rating 230 VAC Input	DC Armature Voltage	Armature Current	Enclosure	Model Number	List
1/4 to 1.0	50/100 (1)	2.7 to 10	1/2 to 2.0	100/200 (2)	2.5 to 9.2	Plate	DC3N-12D-00-010-AI	\$175
1/4 to 1.0	50/100 (1)	2.7 to 10	1/2 to 2.0	100/200 (2)	2.5 to 9.2	NEMA 4X/12	DC3N-12D-4X-010-AI	350

DC3R Models: For Operation of Permanent Magnet & Shunt Wound DC Motors

DC3R Model - "Non-Isolated" Controller Selection

HP - Rating 115 VAC Input	DC Armature Voltage	Armature Current	HP - Rating 230 VAC Input	DC Armature Voltage	Armature Current	Enclosure	Model Number	List
1/4 to 1/2	90 (1)	2.7 to 5.0	1/2 to 1.0	180 (2)	2.5 to 5.0	Plate	DC3R-12D-00-010-AN	\$210
1/2 to 1.0	90 (1)	*** 5.0 to 10	1.0 to 2.0	180 (2)	*** 5.0 to 9.2	Plate		
HP - Rating 115 VAC Input	DC Armature Voltage	Armature Current	HP - Rating 230 VAC Input	DC Armature Voltage	Armature Current	Enclosure	Model Number	List
1/4 to 1/2	90 (1)	4.2 to 7.5	1/2 to 1.0	180 (2)	3.8 to 6.7	Plate	DC3R-12D-00-010-AI	\$270
1/2 to 1.0	90 (1)	7.5 to 12.1	1.0 to 2.0	180 (2)	6.7 to 11.7	Plate		

*** Requires addition of Heatsink Kit Option: DC3R-HS-00

DC3R Model - "Non-Isolated" Controller Selection

HP - Rating 115 VAC Input	DC Armature Voltage	Armature Current	HP - Rating 230 VAC Input	DC Armature Voltage	Armature Current	Enclosure	Model Number	List
1/4 to 1.0	90 (1)	4.2 to 12.1	1/2 to 2.0	180 (2)	3.8 to 11.7	NEMA 4X/12	DC3R-12D-4X-010-AN	\$375

(1) Includes 50/100 VDC Field Supply

(2) Includes 100/200 VDC Field Supply

Flexpak 3000 three-phase DC drive for regenerative and non-regenerative applications from 1-1/2 - 600 HP

The FlexPak 3000 digital DC drive features a unique ergonomic user interface that makes for easy application, installation, start-up, operation, maintenance and service. The use of the latest in digital, micro-integrated semiconductor and circuit technology combines simplicity, flexibility and reliability in a compact package.



PRODUCT FEATURES

- **Simple:** All control, signal and power field wiring is readily accessible through supplied terminal boards to streamline installation. Setup and operation is coordinated with a large graphics display and keypad using plain text. Diagnostic and status information as well as help text are displayed and entered in one of five languages that are easily selected through the keypad. A “Quick-Start” menu combines with self tuning of the speed and current loops to ensure straightforward drive setup and startup.
- **Flexible:** While most applications are handled through standard drive software, many standard hardware kits and options are available, allowing the drive's capability to be expanded with ease. The FlexPak 3000 is easily modified for input line voltages and frequencies used in many countries and can display setup, operating, status and diagnostic information in five different languages.
- **Reliable:** The FlexPak 3000 uses the latest in high-density power semiconductor devices, surface-mount and sub micron ASIC technology. A power interface board circuit provides noise suppression and firing circuits. It connects to the digital regulator with only a single ribbon cable.
- **Compact:** Extensive use of molded parts allows for a high density power module without compromising the accessibility of options and circuits. The packaging is compact yet allows for easy field wiring, mounting, modification or service. The basic chassis design can be easily converted to a NEMA 1 enclosure using available NEMA 1 conversion kits or floor mount NEMA 1 enclosures for high HP drives.

PRICING

Chassis Drive, Non-Regenerative and Regenerative

230 VAC, 50/60 HZ, 1-1/2 HP - 150 HP

240 VDC Armature, 150 VDC Field

HP Rating	Full Load RMS AC Line Current	Full Load Rated DC Armature Current	Rated Field Current	Non-Regenerative Drive Model Number	List	Regenerative Drive Model Number	List
1-1/2	10	7	10	1FN2042	\$3,870	1FR2042	\$4,380
2	11	9	10	2FN2042	3,870	2FR2042	4,380
3	13	12	10	3FN2042	3,870	3FR2042	4,380
5	19	20	10	5FN2042	3,890	5FR2042	4,395
7-1/2	26	29	10	7FN2042	4,040	7FR2042	4,550
10	33	38	10	10FN2042	4,070	10FR2042	4,580
15	48	55	10	15FN2042	4,385	15FR2042	4,895
20	63	73	15	20FN2042	4,815	20FR2042	5,425
25	80	93	15	25FN2042	5,025	25FR2042	5,635
30	94	110	15	30FN2042	5,090	30FR2042	5,700
40	125	146	15	40FN2042	6,120	40FR2042	6,935
50	154	180	15	50FN2042	6,835	50FR2042	7,650
60	186	218	15	60FN2042	7,140	60FR2042	7,955
75	226	265	15	75FN2042	7,750	75FR2042	8,570
100	307	360	15	(1)	12,035	(1)	19,100
125	370	434	15	(1)	12,545	(1)	19,360
150	443	521	15	(1)	12,545	(1)	20,300

(1) 230 VAC model number does not exist for this HP rating. Use a 460 VAC drive at twice the HP rating and reconnect control power transformer for 230 VAC operation at start-up.

Three Phase DC Drives

Flexpak 3000 three-phase DC drive for regenerative and non-regenerative applications from 1-1/2 - 600 HP

PRICING

Chassis Drive

**460 VAC, 50/60 Hz, Non-Regenerative and Regenerative; 3 HP-600 HP
500 VDC Armature; 300 VDC Field**

HP Rating	Full Load RMS AC Line Current	Full Load Rated DC Armature Current	Rated Field Current	Non-Regenerative Drive Model Number	List	Regenerative Drive Model Number	List
3	10	6	10	3FN4042	\$3,870	3FR4042	\$4,380
5	12	10	10	5FN4042	3,870	5FR4042	4,380
7.5	15	14	10	7FN4042	3,870	7FR4042	4,380
10	18	19	10	10FN4042	3,885	10FR4042	4,395
15	24	27	10	15FN4042	4,040	15FR4042	4,550
20	31	35	10	20FN4042	4,070	20FR4042	4,580
25	39	45	10	25FN4042	4,335	25FR4042	4,845
30	45	52	10	30FN4042	4,385	30FR4042	4,895
40	63	73	15	40FN4042	4,815	40FR4042	5,425
50	74	86	15	50FN4042	5,025	50FR4042	5,635
60	86	100	15	60FN4042	5,090	60FR4042	5,700
75	110	129	15	75FN4042	6,120	75FR4042	6,935
100	143	167	15	100FN4042	6,835	100FR4042	7,650
125	177	207	15	125FN4042	7,140	125FR4042	7,955
150	213	250	15	150FN4042	7,750	150FR4042	8,570
200	281	330	15	200FN4042	12,035	200FB4042	19,100
250	351	412	15	250FN4042	12,545	250FB4042	19,360
300	421	495	15	300FN4042	12,545	300FB4042	20,300
400	567	667 (2)	15	400FN4041	19,025	400FR4041	30,090
500	680	800	15	500FN4041	19,280	500FR4041	30,600
600	816	960	15	600FN4041	19,890	600FR4041	31,110

(2) DC Armature Current for 400 HP Regenerative FlexPak 3000 DC Drive is 640 Amps