

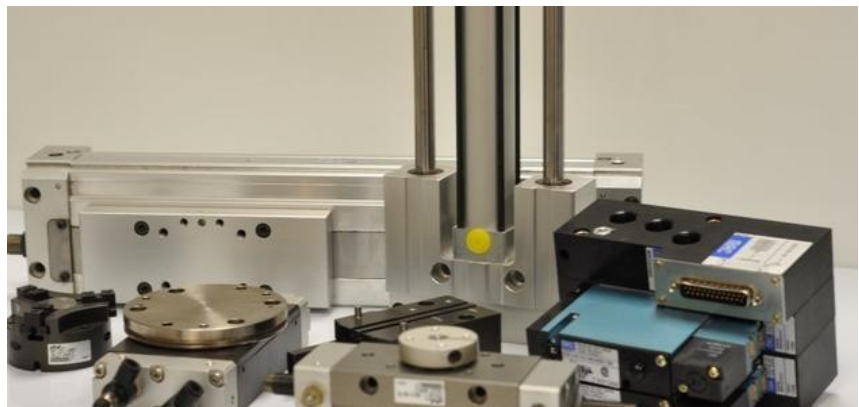


**PNEUMATIC AUTOMATION,
MOTION & ELECTRICAL
CONTROL PRODUCT
GUIDE**



2010

Version 3.0



Motors & Drives

VFD



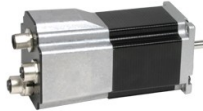
Servo Drive Controller



Servo Motors



Stepper Motor and Controls



AC/DC Motors



DC Drives



























Motors & Drives

Yaskawa A1000 Drives

The A1000 is a full featured drive, providing outstanding quality, performance, flexibility, and environmental friendliness through 1000HP. Enjoy network communications, feedback, and expandable I/O to control anything from simple fans and pumps to complex machines. For new installations or retrofits, the A1000 provides single robust solution, regardless of your application.



Motors & Drives

Part Number	Voltage	Normal Duty HP		Heavy Duty HP		Price
		Amps	HP	Amps	HP	
2A0004FAA 	200-240V 3-Phase	3.5	3/4	3.2	3/4	\$893.00
2A0006FAA 	200-240V 3-Phase	3.0	1	5.0	1	\$941.00
2A0008FAA 	200-240V 3-Phase	8.0	2	6.9	2	\$985.00
2A0010FAA 	200-240V 3-Phase	9.6	3	8.0	2	\$1136
2A0012FAA 	200-240V 3-Phase	12.0	3	11.0	3	\$1375
2A0018FAA 	200-240V 3-Phase	17.5	5	14.0	3	\$1614
2A0021FAA 	200-240V 3-Phase	21.0	7.5	17.5	5	\$2010
2A0030FAA 	200-240V 3-Phase	30.0	10	25.0	7.5	\$2478
2A0040FAA 	200-240V 3-Phase	40.0	15	33.0	10	\$3127
2A0056FAA 	200-240V 3-Phase	56.0	20	47.0	15	\$3910
2A0069FAA 	200-240V 3-Phase	69.0	25	60.0	20	\$4709
2A0081FAA 	200-240V 3-Phase	81.0	30	75.0	25	\$5720
2A0110FAA 	200-240V 3-Phase	110	40	85.0	30	\$7100
2A0138FAA 	200-240V 3-Phase	138	50	115	40	\$8505
2A0169FAA 	200-240V 3-Phase	169	60	145	50	\$10,177
4A0002FAA 	380-480V 3-Phase	2.1	1	1.8	3/4	\$1095.00
4A0004FAA 	380-480V 3-Phase	4.1	2	3.4	1 & 2	\$1125.00
4A0005FAA 	380-480V 3-Phase	5.4	3	4.8	3	\$1230.00
4A0007FAA 	380-480V 3-Phase	6.9	4	5.5	3	\$1331.00
4A0009FAA 	380-480V 3-Phase	8.8	5	7.2	5	\$1431.00
4A0011FAA 	380-480V 3-Phase	11.1	7.5	9.2	5	\$1835.00
4A0018FAA 	380-480V 3-Phase	17.5	10	14.8	7.5 & 10	\$1919.00
4A0023FAA 	380-480V 3-Phase	23.0	15	18.0	10	\$2502.00
4A0031FAA 	380-480V 3-Phase	31.0	20	24.0	15	\$3045.00
4A0038FAA	380-480V 3-Phase	38.0	25	31.0	20	\$4015.00
4A0044FAA	380-480V 3-Phase	44.0	30	39.0	25 & 30	\$4965.00
4A0058FAA	380-480V 3-Phase	58.0	40	45.0	30	\$6255.00
4A0072FAA	380-480V 3-Phase	72.0	50	60.0	40	\$7340.00
4A0088FAA	380-480V 3-Phase	88.0	60	75.0	50 & 60	\$8185.00

VFD—Variable Frequency Drives

Yaskawa V1000 Drives

The V1000 is a world-class compact current vector drive that defines a new world standard. Demands efficient production and better maintainability are on the rise, spurred by global competition. Yaskawa pays off the promise of being in control with products that make businesses move. The optimum balance of energy input, product output, maintenance risk, and long life is reached with Yaskawa. The V1000 provides a world of power in the palm of your hand.



Part Number	Voltage	Normal Duty HP		Heavy Duty HP		Price
		Amps	HP	Amps	HP	
BA001FAA	200-240V 1-Phase	1.2	1/8 & 1/4	0.8	1/8	\$366.00
BA002FAA	200-240V 1-Phase	1.9	1/4	1.6	1/4	\$401.00
BA003FAA	200-240V 1-Phase	3.3	1/2 & 3/4	3.0	1/2	\$458.00
BA006FAA	200-240V 1-Phase	6.0	1	5.0	3/4 & 1	\$555.00
BA0010FAA	200-240V 1-Phase	9.6	2 & 3	8.0	2	\$608.00
BA0012FAA	200-240V 1-Phase	12.0	3	11.0	3	\$794.00
BA0018FAA	200-240V 1-Phase	17.5	5	17.5	5	\$948.00
2A001FAA	200-240V 3-Phase	1.2	1/8 & 1/4	0.8	1/8	\$335.00
2A002FAA	200-240V 3-Phase	1.9	1/4	1.6	1/4	\$353.00
2A004FAA	200-240V 3-Phase	3.5	1/2 & 3/4	3.0	1/2	\$391.00
2A006FAA	200-240V 3-Phase	6.0	1	5.0	3/4 & 1	\$449.00
2A0010FAA	200-240V 3-Phase	9.6	2 & 3	8.0	2	\$518.00
2A0012FAA	200-240V 3-Phase	12.0	3	11.0	3	\$598.00
2A0020FAA	200-240V 3-Phase	19.6	5	17.5	5	\$805.00
2A0030FAA	200-240V 3-Phase	30.0	7.5 & 10	25.0	7.5	\$1058.00
2A0040FAA	200-240V 3-Phase	40.0	10	33.0	10	\$1294.00
2A0056FAA	200-240V 3-Phase	56.0	20	47.0	15	\$1668.00
2A0069FAA	200-240V 3-Phase	69.0	25	60.0	20	\$1898.00
4A0001FAA	380-480V 3-Phase	1.2	1/2	1.2	1/2	\$506.00
4A0002FAA	380-480V 3-Phase	2.1	3/4 & 1	1.8	3/4	\$523.00
4A0004FAA	380-480V 3-Phase	4.1	2	3.4	1 & 2	\$569.00
4A0005FAA	380-480V 3-Phase	5.4	3	4.8	3	\$675.00
4A0007FAA	380-480V 3-Phase	6.9	4	5.5	3	\$748.00
4A0009FAA	380-480V 3-Phase	8.8	5	7.2	4	\$815.00
4A00011FAA	380-480V 3-Phase	11.1	7.5	9.2	5	\$837.00
4A00018FAA	380-480V 3-Phase	17.5	10	14.8	7.5 & 10	\$1093.00
4A00023FAA	380-480V 3-Phase	23.0	15	18.0	10	\$1323.00
4A00031FAA	380-480V 3-Phase	31.0	20	24.0	15	\$1754.00
4A00038FAA	380-480V 3-Phase	38.0	25	31.0	20	\$2128.00

Motors & Drives











Servo Drive Controller

Copley Controls: OEM Applications




Features 120-240 VAC Digital Drive for Brushless/Brush Motors

Motors & Drives



Appearance	Part Number	Description	Price
	XTL-230-18	Copley Controller 100/240 VDC 6-18 AMP	\$797.00
	XTL-230-36	Copley Controller 100/240 VDC 12-36 AMP	\$839.00
	XTL-230-40	Copley Controller 100/240 VDC 20-40 AMP	\$889.00
	SER-CK	Programming Cable 9 PIN FEMALE/RJ-11	\$20.00
	XTL-NK	CAN OPEN NETWORK CABLES	\$32.00
	XTL-CK	CONNECTOR KIT, J1-J4,J7,J8	\$58.00
	CME2	Programming Software	\$15.00
	HTA-XTL-I/O	I/O CABLE(TO BE BUILT) INCLUDES: CABLE, ALTECH BREAKOUT BOARD, CONNETORS, (ALTECH 5742.2) (HIGH DENSITY D-SUB 2 POS MALE), (HD D-SUB, 25 POS FEMALE)(28 CONDUCTOR CBL)	\$225.00
	HTA-XTL-CA	CUSTOM MADE FOR MCG MOTORS (STD LENGTH 11FT) Motor Power & Feedback	\$420.97
	XTL-HS	HEAT SINK	\$60.00

JVL Integrated Servo Motors




	Part Number	Description	Price
	MAC095-A1	95W IP42 12-48VDC Servo Motor	\$1311.11
	MAC140-A1	140W IP42 12-48VDC Servo Motor	\$1311.11
	PSU00-PD1	Power Supply (50 VDC)	\$550.00

Servo Motors




Sanyo Denki

Standard Servo Drives




Motors & Drives

Appearance	Part Number	Description	Price
	 HTA-SANYO-R15	15A Drive with Regen Register	
	 HTA-SANYO-R30	30A with Regen Register	
Accessories	 AL-0049-0833-01	PC Interface Cable	\$103.00









Indexing Servo Drives

Appearance	Part Number	Description	Price
	 HTA-SANYO-I15	15A	
	 HTA-SANYO-I30	30A	
Accessories	 AL-0049-0833-01	PC Interface Cable	\$103.00

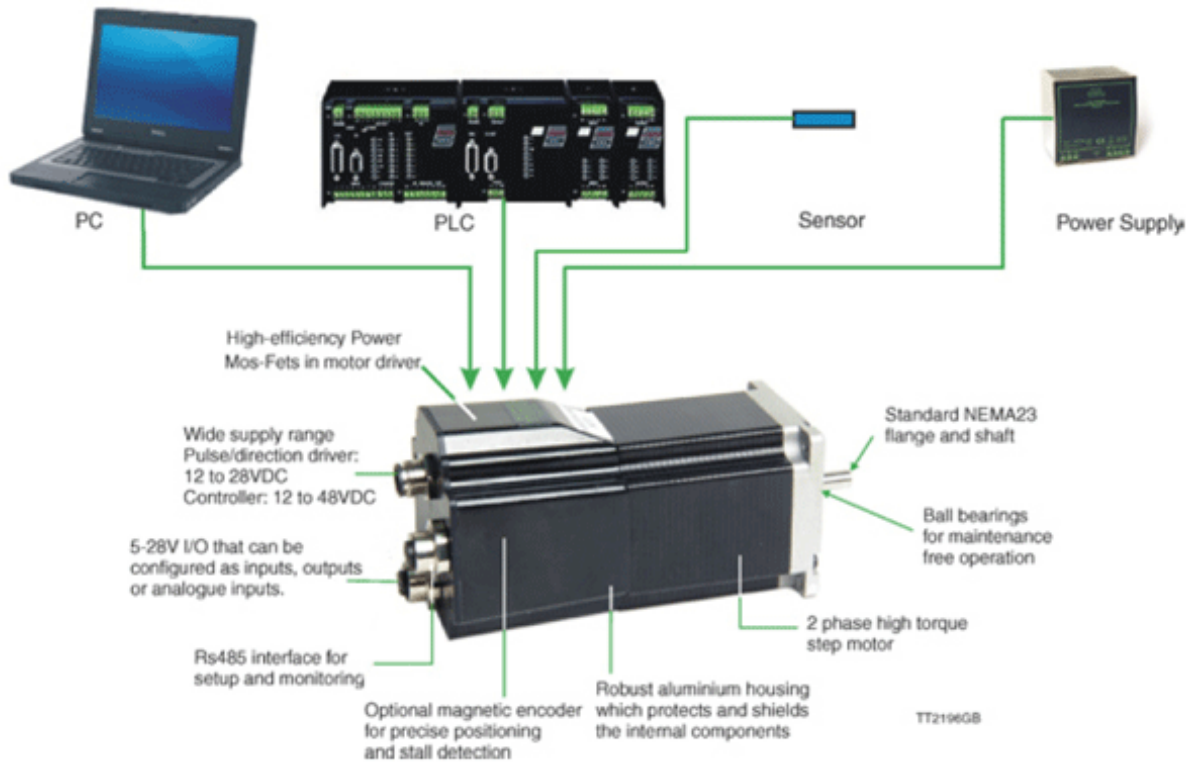
Ethercat Servo Drives

Appearance	Part Number	Description	Price
	 HTA-SANYO-E15	15A Drive with Regen Register 10 ft motor and encoder cables	
	 HTA-SANYO-E30	30A with Regen Register 10 ft motor and encoder cables	
Accessories	 AL-00689703-01	PC Interface Cable	\$137.00

Standard Servo Drives

Appearance	Part Number	Description	Price
	 R2AA04010FXP00ME01	100W R2 Series Motor, 40mm ² , 17 bit encoder lock connectors	\$557.00
	 R2AA04010FCP00ME01	100W R2 Series Motor, 40mm ² , 17 bit encoder lock connectors with power off break	\$711.00
	 R2AA06020FXP00ME01	200W R2 Series Motor, 60mm ² , 17 bit encoder lock connectors	\$584.00
	 R2AA06040FXP00ME01	400W R2 Series Motor, 60mm ² , 17 bit encoder lock connectors	\$613.00
	 R2AA06040FCP00ME01	400W R2 Series Motor, 60mm ² , 17 bit encoder lock connectors with power off break	\$747.00
	 R2AA08075FXP00ME01	750W R2 Series Motor, 80mm ² , 17 bit encoder lock connectors	\$724.00
	 R2AA08075FCP00ME01	750W R2 Series Motor, 80mm ² , 17 bit encoder lock connectors with power off break	\$844.00
Accessories	 MEXTBRK10FT	Brake Cable	\$62.00








JVL Integrated Stepper Package



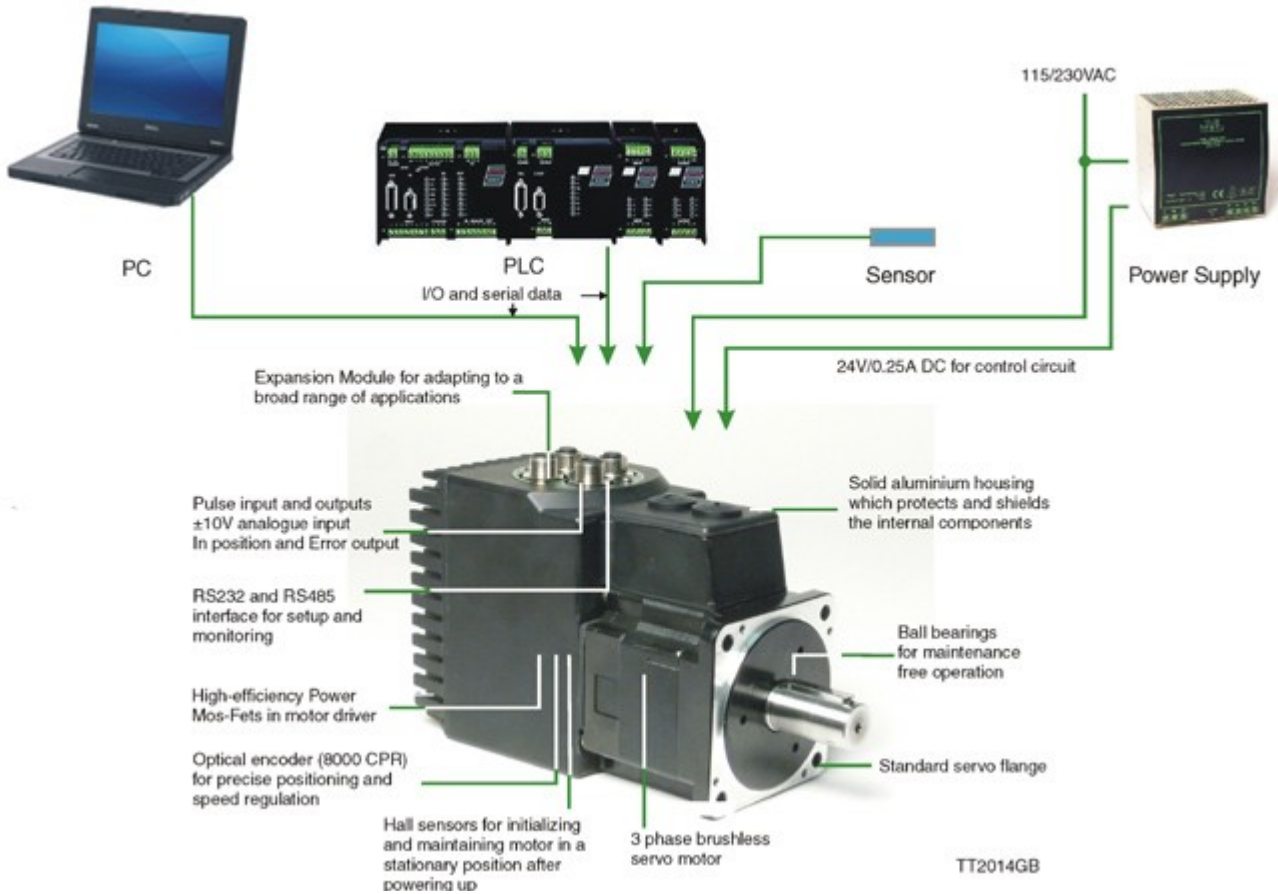
System Overview

Requires: 1 Motor, 1 power cable, 2 I/O cables, and either 1 communication cable to connect to a PLC or 1 programming cable to connect to a PC for setup and programming

Recommend getting both cables and MACTALK to program the motor from PC

Appearance	Part Number	Description	Price
	 MIS234A3M5N075	Integrated Stepper Motor and controller Nema23 frame 10mm shaft Max speed = 1000 RPM Rated Torque = 2.9 Nm Inertia = 0.96 kgcm ² Length = 154.0 mm Weight = 1.8 kg 12 to 48VDC power RS485 communication 8 inputs (5–28 VDC configurable as inputs, outputs or analog inputs) SMC75 driver and controller for	\$913.62
	 WI1000-M12F5T05N	Power Cable M12 5 pin Female	\$42.52
	 WI1000-M12 M8T05N	I/O Cable M12 8 pin Male	\$52.78
	 WI1000-M12M5T05N	Communication cable RS485 M12 5 pin Male	\$42.52
	 USB-RS485-M12M5T05	Programming Cable to connect M12 5 pin on motor to a PC USB port	\$240.38
	 MACTALK-OEMCD	JVL PC Programming Software	\$127.52




JVL Integrated Servo Package 400/800






Motors & Drives






System Overview

Requires: 1 Motor, 1 Power supply, 1 Power cable, 1 Programming Cable, 1 Copy of MAC TALK
Expansion Modules Optional





Appearance	Part Number	Description	Price
	MAC800-D2	Motor 750W 2,4Nm/3000RPM IP55 2000 CPR	\$2612.68
	MAC400-D2-CAGM	Motor 400W 1,27Nm/3000RPM IP55, 2048 CPR	\$2144.85
	MAC00-B4	General Purpose Module M12 Connector	\$284.83
	MAC00-R4	Programming Module	\$552.12
	RS232-M12-1-5-5	RS232 communication Module	\$101.50
	RS232-9-1	Prog cable for basic MAC motor, serial to RS232 converter	\$74.79
	PSU24-075	24VDC Power Supply	\$195.56
	WP0303	MAC400 115VAC power cable	\$288.89
	MAC TALK	PC Software for Motor Programming	\$498.33
	MAC REGIO	Advanced PC Software for Motor Programming	No Charge

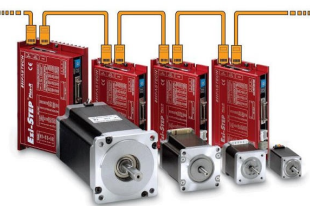
Cool Muscle

Appearance	Part Number	Description	Price
	CM1-C-11L30	NEMA 11, 18W Integrated Servo, Max Speed 3000RPM, Continuous Torque 0.055Nm, Peak Torque 0.8Nm	\$495.00
	CM1- C-1763-A-RBST2	NEMA 17, 18W Integrated Servo, Max Speed 3000RPM, Continuous Torque 0.385Nm, Peak Torque 0.54Nm	\$465.00
	CM1-C-23L20-A-RBST2	NEMA 23, 30W Integrated Servo, Max Speed 2000RPM, Continuous Torque 0.87Nm, Peak Torque 1.25Nm	\$495.00

Appearance	Part Number	Description	Price
	CM1C1-1000S	1m Power and IO Flying Lead (Only work with NEMA)	\$31.25
	CM1US1- 1800	USB Communication Cable (Only work with NEMA)	\$65.00
	CM1USS-1800	USB Communication Cable	\$65.00
	CM1M9-2F-4000	4m M9 Flying Lead	\$20.00
	CM1M9-8F-4000	4m M9 Flying Lead ISO Cable	\$25.00

Fastech

Appearance	Part Number	Description	Price
	Ezi Servo—Plus R	Integrated Controller, Closed Loop System, High Resolution, Fast Response	
	Ezsi Step—Plus R	Integrated Controller, Position Table, Micro Stepping, Sensorless Stall Detection, Software Damping.	
	Ezi Actuator - HG Series	The HBG Series features a compact, hollow output table that enables larger inertia discs and arms to be installed directly. High legibility , High Accuracy and Best Output	
	Ezi Actuator—MC Series	The MC Series features a compact, and miniaturized linear cylinder that enables high precision of various	





































Baldor AC Motors

Features

- Ball Bearings
- Heavy Gauge Steel Frame

Variable torque applications motors and constant torque applications where speed is not less than 80% per long periods

Appearance	Part Number	Voltage VAC	RPM	HP	Frame	Enclosure	Price
	 CM3538	230/480	1800	0.5	56C	TEFC	\$350
	 M3565	230/480	1800	0.75	56C	TEFC	\$593
	 EM3546T	230/480	1800	1	143T	TEFC	\$594
	 EM3584T	230/480	1800	1.5	145T	TEFC	\$797
	 EM3587T	230/480	1800	2	145T	TEFC	\$835
	 CEM3661T	230/480	1800	3	182TC	TEFC	\$1,032
	 VM3665T-9	230/480	1800	5	184TC	TEFC	\$860
	 CEM3770T	230/480	1800	7.5	213TC	TEFC	\$1,433
	 VEM3774T	230/480	1800	10	215TC	TEFC	\$1,569
	 CEM2333T	230/480	1800	15	254TC	TEFC	\$2,457
	 CM2334T	230/480	1800	20	256TC	TEFC	\$2,437
	 CEM4103T	230/480	1800	25	284TC	TEFC	\$3,797
	 VM4104T	230/480	1800	30	286TC	TEFC	\$2,936
	 CEM4110T	230/480	1800	40	324TC	TEFC	\$5,575
	 CM4115T	230/480	1800	50	326TC	TEFC	\$4,655
	 CM4314T	230/480	1800	60	364TC	TEFC	\$6,802
	 CM4316T	230/480	1800	75	365TC	TEFC	\$8,196
	 CEM4400T	230/480	1800	100	405TC	TEFC	\$10,185

Marathon Blackmax AC Motors

Features

- 1000:1 Constant Torque
- MAX GUARD Class F Insulation System

Constant torque with long periods running at lower than 80% of nominal speed
Total Enclose, Non-Ventilated

Motors & Drives



Appearance	Part Number	Voltage VAC	RPM	HP	Frame	Enclosure	Price
	Y534	230/480	1800	0.5	56C	TENV	\$319
	Y535	230/480	1800	1	56C	TENV	\$381
	Y538	230/480	1800	1.5	145TC	TENV	\$475
	Y551	230/480	1800	2	145TC	TENV	\$656
	Y541	230/480	1800	3	182TC	TENV	\$813
	Y543	230/480	1800	5	184TC	TENV	\$971
	Y545	230/480	1800	7.5	213TC	TENV	\$1,275
	Y547	230/480	1800	10	215TC	TENV	\$1,525
	Y549	230/480	1800	15	254TC	TENV	\$1,815
	Y552	230/480	1800	20	256TC	TENV	\$2,186
	Y553	230/480	1800	25	284TC	TENV	\$2,882
	Y393	230/480	1800	30	286TC	TENV	\$3,250

Marathon Blue Series TEBC AC Motors

Features

- 2000:1 Constant Torque
- MAX GUARD Class H Insulation System

Constant torque with long periods running at lower than 50% of nominal speed use Marathon blue series TEBC motors



Appearance	Part Number	Voltage VAC	RPM	HP	Frame	Enclosure	Price
	Y596	230/480	1800	10	215TC	TEFC	\$1,531
	Y597	230/480	1800	15	254TC	TEFC	\$1,844
	Y598	230/480	1800	20	256TC	TEFC	\$2,040
	Y511	230/480	1800	25	284TC	TEBC	\$3,561
	Y512	230/480	1800	30	286TC	TEBC	\$4,745
	Y513	230/480	1800	40	324TC	TEBC	\$5,522
	Y514	230/480	1800	50	326TC	TEBC	\$6,210
	Y515	230/480	1800	60	364TC	TEBC	\$6,600
	Y516	230/480	1800	75	365TC	TEBC	\$7,890
	Y517	230/480	1800	100	405TC	TEBC	\$11,014
	Y518	230/480	1800	125	444T	TEBC	\$13,890
	Y519	230/480	1800	150	445T	TEBC	\$15,765

DC Drives

Dart Controls

Features

- DC Adjustable-Speed and Reversing/Cycling Controls
- Adjustable min./max. speed and IR compensation
- Built-in transient and surge suppression

Appearance	Part Number	Description	Horsepower	Input	Output	Price
	125DV-C	Non-Reversible, Open Chassis	1/8-1/2 HP	120VAC	0-90VDC	\$109
	125DV-C	Non-Reversible, Open Chassis	1/8-1 HP	240VAC	0-180VDC	\$109
	125DV-E	Non-Reversible, Enclosed, for use on conveyors and small machines	1/8-1/2 HP	120VAC	0-90VDC	\$199
	125DV-E	Non-Reversible, Enclosed, for use on conveyors and small machines	1/8-1 HP	240VAC	0-180VDC	\$199
	130HC100	Reversible, OPEN CHASSIS INSIDE PANEL	1/8-1 HP	120VAC	0-90VDC	\$249
	132HC200	Reversible, OPEN CHASSIS INSIDE PANEL	1/8-2 HP	240VAC	0-180VDC	\$249
	253G-200C	CHASSIS	1/8-2 HP	240VAC	0-180VDC	189
	253G-200C	CHASSIS	1/8-1 HP	120VAC	0-90VDC	\$189
	253G-200E	NEMA 1 ENCLOSURE	1/8-2 HP	240VAC	0-180VDC	\$259
	253G-200E	NEMA 1 ENCLOSURE	1/8-1 HP	120VAC	0-90VDC	\$259

Motors & Drives

DC Motors

Baldor DC Motors

Features

- Double Sealed Ball Bearings
 - NEMA C-face with removable base
 - Tach adaptable
 - Class F Insulation
- Conveyors, mixers, packaging machinery and other applications requiring variable speed and constant torque.

Appearance	Part Number	Armature Voltage	RPM	HP	Amps	Frame	Enclosure	Price
	CDP3330	90 VDC	1800	0.5	4.8	56C	TENV	\$690
	CDP3445	90 VDC	1800	1	10	56C	TEFC	\$1019
	CDP3455	180 VDC	1800	1	5	56C	TEFC	\$1019
	CDP3575	180 VDC	1800	1.5	7.6	56C	TEFC	\$1879
	CDP3585	180 VDC	1800	2	9.6	56C	TEFC	\$2242