

Black Max[®] Vector Duty Motors

*** 230/460V and 575V Motors Available ***



Features

- Class F MAX GUARD[®] insulation system
- Constant torque operation from 0 to base speed on vector drive
- Constant horsepower operation to twice base RPM
- Continuous duty at 40° C ambient
- Optimized for operation with IGBT inverter (NEMA Design A)
- Class F N/C thermostats (one per phase)
- Utilizes double shielded ball bearings
- Exxon Polyrex[®] EM bearing grease
- C-Face with rigid base, except C-Face with removable rigid base as noted
- F1 standard conduit box location, field reversible to F2 (except as noted)
- Available with optional encoder installed on opposite drive end
- Electrically reversible
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty (through Marathon Electric)

Applications

- Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required.
- Typical uses include: material handling, machine tools, conveyors, crane and hoist, metal processing, test stands, pumps, compressors, textile processing, and other industrial machinery installed in dusty or dirty environments.

Black Max® Vector Duty Motors

Motor Shipping Schedule *		
Same or one day *	Up to 7 days	Up to 10 days

Color indicates shipping lead time in business days. Check stock status online.
** Certain heavy and oversized items can be shipped only via LTL.*
Check our web site for current shipping method constraints by part number.

230/460V Motor Specifications										
Part Number *	Price	HP	Base RPM	Volts	Enclosure	NEMA Frame	Model No.	F.L. Amps	Weight (lb) *	Footnotes
Y592	\$284.00	1/4	1800	230/460	TENV	56C	56H17T2001	1.2 / 0.6	19	T, S, 13
Y534	\$355.00	1/2	1800	230/460	TENV	56C	56H17T5301	1.6 / 0.8	28	T, S, 6, 13
Y535	\$424.00	1	1800	230/460	TENV	56C	56H17T5302	3.0 / 1.5	41	T, S, 6, 13
Y536	\$434.00	1	1800	230/460	TENV	143TC	143THTR5326	3.0 / 1.5	43	T, S, 6, 13
Y537	\$503.00	1	1200	230/460	TENV	145TC	145THTR5376	3.8 / 1.9	49	T, S, 6, 13
Y538	\$527.00	1-1/2	1800	230/460	TENV	145TC	145THTR5326	4.8 / 2.4	50	T, S, 6, 13
Y551	\$729.00	2	1800	230/460	TENV	145TC	145THTN6046	6.0 / 3.0	72	T, CI
Y540	\$1,041.00	2	1200	230/460	TENV	184TC	184THTL7776	6.6 / 3.3	88	T, AL
Y541A	\$918.00	3	1800	230/460	TENV	182TC	182THTY7726	8.2 / 4.1	110	T, AL
Y542	\$1,282.00	3	1200	230/460	TENV	213TC	213THTL7776	9.4 / 4.7	118	T, AL
Y543A	\$1,099.00	5	1800	230/460	TENV	184TC	184THTY7726	13.4 / 6.7	125	T, AL
Y544	\$1,560.00	5	1200	230/460	TENV	215TC	215THTL7776	15.4 / 7.7	138	T, AL
Y545	\$1,415.00	7-1/2	1800	230/460	TENV	213TC	213THTL7726	21.0 / 10.5	146	T, AL
Y546	\$2,098.00	7-1/2	1200	230/460	TENV	254TC	254THTL5776	22.0 / 11.0	209	T, AL
Y547	\$1,692.00	10	1800	230/460	TENV	215TC	215THTL7726	27.0 / 13.5	159	T, AL
Y548	\$2,375.00	10	1200	230/460	TENV	256TC	256THTL5776	28 / 14	203	T, AL
Y549	\$2,013.00	15	1800	230/460	TENV	254TC	254THTL5726	40 / 20	250	T, AL, I
Y552	\$2,940.00	20	1800	230/460	TENV	256TC	256THTNA7026	52 / 26	300	T, I, CI
Y553	\$3,197.00	25	1800	230/460	TENV	284TC	284THTNA7026	62 / 31	495	T, I, CI
Y393	\$3,197.00	30	1800	230/460	TENV	286TC	286THTNA7026	74 / 37	575	T, I, CI

*** Refer to the Motor Shipping Schedule table for shipping information.**

Footnotes: 6 Bolt-on, removable base for footless mounting option 13 F1 Mounting Only, cannot modify to F2 AL Aluminum Frame Construction	Footnotes (continued): CI Cast Iron Frame Construction I Intermittent duty from 90-120 Hz operation S Steel Frame Construction	Footnotes (continued): T Thermostat overload
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Note: Please review the AutomationDirect Terms & Conditions for warranty and service on his product.
Warranty service can be arranged through numerous Marathon Electric service centers. See list of service centers on our Web site at www.AutomationDirect.com.

Black Max® Vector Duty Motors

Motor Shipping Schedule		
Same or one day	Up to 7 days	Up to 10 days

Color indicates shipping lead time in business days. Check stock status online.

575V Motor Specifications										
Part Number	Price	HP	Base RPM	Volts	Enclosure	NEMA Frame	Model No.	F.L. Amps	Weight (lb)	Footnotes
Y555	\$355.00	1/2	1800	575	TENV	56C	56H17T5311	0.64	28	T, S, 6, 13
Y556	\$424.00	1	1800	575	TENV	56C	56H17T5312	1.2	41	T, S, 6, 13
Y557	\$729.00	2	1800	575	TENV	145TC	145THTN6060	2.4	72	T, CI
Y558A	\$902.00	3	1800	575	TENV	182TC	182THTY7736	3.3	110	T, AL
Y559A	\$1,077.00	5	1800	575	TENV	184TC	184THTY7736	5.4	125	T, AL
Y560	\$1,415.00	7-1/2	1800	575	TENV	213TC	213HTL7736	8.4	146	T, AL
Y561	\$1,692.00	10	1800	575	TENV	215TC	215HTL7736	10.8	159	T, AL
Y562	\$2,013.00	15	1800	575	TENV	254TC	254HTL5736	16.0	250	T, AL, I
Y563	\$2,940.00	20	1800	575	TENV	256TC	256HTNA7036	20.8	300	T, CI, I

Footnotes:
 6 Bolt-on, removable base for footless mounting option
 13 F1 Mounting Only, cannot modify to F2
 AL Aluminum Frame Construction

Footnotes (continued):
 CI Cast Iron Frame Construction
 I Intermittent duty from 90-120 Hz operation
 S Steel Frame Construction

Footnotes (continued):
 T Thermostat overload

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Motor with Shaft-Mounted Encoder*

A Dynapar Model HS35 shaft-mounted encoder can be supplied pre-installed on the motors as shown in the price table below. The encoder requires a 5–26 VDC power source, provides a count of 1024 pulses per revolution (PPR) differential line driver output, and includes a 10-pin mating connector.

* If connecting the motor to a GS3 DURApulse AC drive, a GS3-FB Feedback Card is required for the drive.

Motor Accessories		
Part Number	Price	Description *
A772	\$856.00	Encoder kit, replacement, for Black Max encoder motors. Dynapar HS35 encoder, 5–26 VDC input, Line Driver output, 1024 pulses per revolution, 5/8-in bore.

* Replacement/spare encoder kit for Black Max Yxxx-A772 motors; can also be field installed on Black Max Yxxx motors without encoders.

Motor with Pre-installed Shaft-Mounted Encoder								
230/460V Motors						575V Motors		
Part Number	Price	HP	Part Number	Price	HP	Part Number	Price	HP
Y592-A772	\$1,257.00	1/4	Y544-A772	\$2,553.00	5	Y557-A772	\$1,708.00	2
Y534-A772	\$1,329.00	1/2	Y545-A772	\$2,405.00	7-1/2	Y558A-A772	\$1,857.00	3
Y535-A772	\$1,399.00	1	Y546-A772	\$3,098.00	7-1/2	Y559A-A772	\$2,033.00	5
Y536-A772	\$1,410.00	1	Y547-A772	\$2,686.00	10	Y560-A772	\$2,405.00	7-1/2
Y537-A772	\$1,480.00	1	Y548-A772	\$3,380.00	10	Y561-A772	\$2,646.00	10
Y538-A772	\$1,505.00	1-1/2	Y549-A772	\$2,969.00	15	Y562-A772	\$2,969.00	15
Y551-A772	\$1,708.00	2	Y552-A772	\$3,895.00	20	Y563-A772	\$3,895.00	20
Y540-A772	\$2,026.00	2	Y553-A772	\$4,152.00	25			
Y541A-A772	\$1,885.00	3	Y393-A772	\$4,561.00	30			
Y542-A772	\$2,271.00	3	Y555-A772	\$1,329.00	1/2			
Y543A-A772	\$2,063.00	5	Y556-A772	\$1,399.00	1			

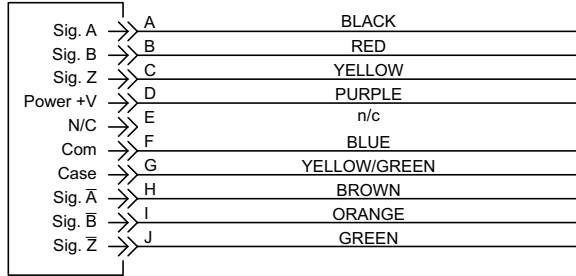
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Encoder Connector Pinout

Note: A mating connector is supplied with the encoder.
 Prewired cables TRDA-25CBL-VWD-xx (10, 20, & 30 ft) and replacement MS connectors TRDA-25CON-VWD are available from AutomationDirect.

Dynapar HS35 Encoder PIN TRDA-25CBL-VWD-xx Cable Wire Color



Cable TRDA-25CBL-VWD-xx is available separately from AutomationDirect.

Connections to equipment determined by customer.

Motor Performance Data (460 Volt) *

Part Number	HP	F.L. rpm	F.L. Amps @460V	N.L. Amps @460V	F.L. Torque (lb-ft)	B.D. Torque (lb-ft)	Max. C hp rpm *	Max. Safe rpm	F.L. Effic. (%)	F.L. Power Factor	Rotor Inertia (lb-ft ²)	Ohms/Ph - Equiv. Wye Circuit (460 VAC) (at rated operating temp. in 40° C ambient)				
												R1	R2	X1	X2	XM
Y592	1/4	1755	0.6	0.45	0.75	4.5	3540	5400	70.0	58.0	0.045	26.300	23.000	30.240	14.700	572.000
Y534	1/2	1735	0.8	0.52	1.5	5.8	3510	5400	80.0	72.0	0.056	22.307	17.028	24.123	18.163	532.976
Y535	1	1750	1.5	1.0	3.0	15.0	3505	5400	84.0	75.0	0.110	8.378	5.623	10.707	9.912	278.036
Y536	1	1750	1.5	1.0	3.0	15.0	3505	5400	84.0	75.0	0.110	8.378	5.623	10.707	9.912	278.036
Y537	1	1145	1.9	1.3	4.5	16.0	2260	5400	80.0	62.5	0.140	10.302	8.372	13.793	15.325	193.835
Y538	1-1/2	1755	2.4	1.6	4.5	29.0	3518	5400	85.5	69.0	0.140	4.257	3.538	5.998	5.884	161.009
Y551	2	1750	3.0	1.7	6.0	28.5	3525	5400	85.5	78.0	0.130	3.834	2.897	5.950	5.637	154.800
Y540	2	1160	3.3	2.1	9.0	34.0	2315	5400	82.5	67.5	0.380	3.948	3.436	7.725	12.113	116.900
Y541A	3	1755	4.1	2.3	9.0	49.3	3515	5400	87.5	78.5	0.420	1.578	1.802	2.838	2.091	94.13
Y542	3	1158	4.7	3.0	13.6	49.0	2300	4200	82.5	72.5	0.600	2.469	2.318	6.508	4.125	83.910
Y543A	5	1760	6.7	3.2	14.9	61.5	3520	5400	89.5	79	0.520	1.428	1.05	2.09	3.379	63.334
Y544	5	1165	7.7	4.8	22.5	87.0	2320	4200	84.0	71.0	0.900	1.130	1.250	3.709	2.573	51.972
Y545	7-1/2	1765	10.5	5.5	22.3	95.5	3525	4200	90.2	76.0	0.850	0.699	0.567	1.765	2.260	38.178
Y546	7-1/2	1170	11.0	6.0	34.0	118.0	2325	4200	87.5	73.0	1.200	0.510	0.680	2.846	3.247	42.714
Y547	10	1774	13.5	7.4	29.5	125.0	3540	4200	90.2	76.0	1.300	0.369	0.334	1.423	2.281	34.932
Y548	10	1160	14	7.0	45.5	135.0	2320	4200	89.5	75.5	1.500	0.534	0.693	2.258	2.323	30.530
Y549	15	1765	20	11.0	45.0	170.0	3550	4200	92.4	76.0	1.600	0.134	0.316	1.047	1.569	22.151
Y552	20	1768	26	13.5	59.5	290.0	3560	5400	93.6	80.0	3.100	0.234	0.213	0.746	0.689	18.204
Y553	25	1770	31	14.0	74.2	330.0	3530	3600	93.6	75.0	4.400	0.143	0.160	0.724	0.678	13.965
Y393	30	1772	37	23.5	89.0	375.0	3560	3600	94.5	74.0	5.500	0.113	0.123	0.543	0.557	11.200

* Maximum Constant hp rpm is for direct coupled loads.

Black Max® Vector Duty Motors

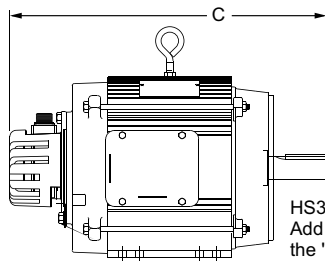
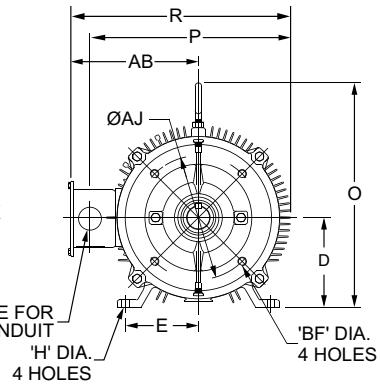
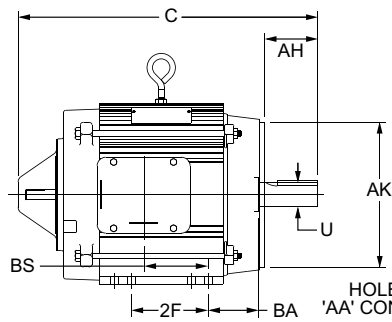
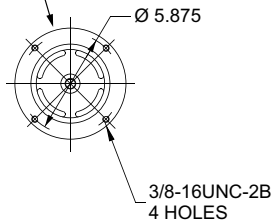
Motor Performance Data (575 Volt) *																
Part Number	HP	F.L. rpm	F.L. Amps @575V	N.L. Amps @575V	F.L. Torque (lb-ft)	B.D. Torque (lb-ft)	Max. C hp rpm*	Max. Safe rpm	F.L. Effic. (%)	F.L. Power Factor	Rotor Inertia (lb-ft ²)	Ohms/Ph - Equiv. Wye Circuit (575 VAC) (at rated operating temp. in 40° C ambient)				
												R1	R2	X1	X2	XM
Y555	1/2	1735	0.8	0.8	1.52	5.8	3510	5400	80.0	72	0.056	22.307	17.028	24.123	18.163	532.976
Y556	1	1750	1.6	0.8	3.0	15.0	3505	5400	84.0	75	0.11	8.378	5.623	10.707	9.912	278.036
Y557	2	1750	2.4	1.6	6.0	28.5	3525	5400	85.5	78	0.13	3.834	2.897	5.950	5.637	154.780
Y558A	3	1755	3.3	1.8	9.0	49.3	3515	5400	87.5	78.5	0.42	1.578	1.802	2.838	2.091	94.13
Y559A	5	1760	5.4	2.6	14.9	61.5	3520	5400	89.5	79	0.52	1.4288	1.0489	2.092	3.379	63.3339
Y560	7-1/2	1765	8.0	4.8	22.3	95.5	3525	4200	90.2	76	0.9	0.699	0.567	1.765	2.260	38.178
Y561	10	1774	11.2	5.6	29.6	125.0	3540	4200	90.2	76	1.3	0.284	0.284	1.420	2.272	34.932
Y562	15	1765	16.0	8.8	44.6	170.0	3550	4200	92.4	76	1.6	0.314	0.316	1.047	1.569	22.151
Y563	20	1770	20.8	11.2	59.5	290.0	3560	3600	93.6	77	3.5	0.220	0.192	0.675	0.684	18.204

* Maximum Constant hp rpm is for direct coupled loads.

Black Max[®] Vector Duty Motors

Motor Dimensions

N/A for NEMA frames 56C, 143TC, 145TC, which have the same C-face on both ends



Note: Thermostat protector leads are brought out in the motor conduit box and marked as P1/P2.

Black Max Vector Duty Motors Dimensions [Inches]																					
Part #		NEMA Frame	Frame Construct	C	D	E	2F	H	O	P	R	U	AA	AB	AH	AJ	AK Max	BA	BF	BS	Key
230/460V	575V																				
Y592	-	56C	Rolled Steel	11.88	3.50	2.44	3.00	0.34	6.35	5.69	7.21	.625	None	4.37	2.06	5.875	4.500	2.75	3/8-16	2.84	.19x.19x1.38
Y534	Y555	56C	Rolled Steel	13.48	3.50	2.44	3.00	0.35	6.71	6.42	8.77	.625	None	5.56	2.06	5.875	4.500	2.75	3/8-16	3.75	.19x.19x1.38
Y535	Y556	56C	Rolled Steel	14.98	3.50	2.44	3.00	0.35	6.71	6.42	8.77	.625	None	5.56	2.06	5.875	4.500	2.75	3/8-16	5.25	.19x.19x1.38
Y536	-	143TC	Rolled Steel	15.04	3.50	2.75	4.00	0.35	6.71	6.42	8.46	.875	None	5.25	2.12	5.875	4.500	2.75	3/8-16	4.93	.19x.19x1.38
Y537	-	145TC	Rolled Steel	16.04	3.50	2.75	5.00	0.35	6.71	6.42	8.46	.875	None	5.25	2.12	5.875	4.500	2.75	3/8-16	5.93	.19x.19x1.38
Y538	-	145TC	Rolled Steel	16.04	3.50	2.75	5.00	0.35	6.71	6.42	8.46	.875	None	5.25	2.12	5.875	4.500	2.75	3/8-16	5.93	.19x.19x1.38
Y551	Y557	145TC	Cast Iron	14.68	3.50	2.75	5.00	0.37	7.45	7.98	11.03	.875	None	7.04	2.12	5.875	4.500	2.62	3/8-16	3.81	.19x.19x1.38
Y541A	-	182TC	Aluminum	16.19	4.50	3.75	4.50	0.43	10.44	10.13	11.40	1.1250	1.13	6.49	2.62	7.25	8.500	3.50	1/2-13	3.0	.25x.25x1.75
-	Y558A	182TC	Aluminum	16.19	4.50	3.75	4.50	0.43	10.44	10.13	11.40	1.1250	1.13	6.49	2.62	7.25	8.500	3.50	1/2-13	3.00	.25x.25x1.75
Y540	-	184TC	Aluminum	16.94	4.50	3.75	5.50	0.44	11.22	9.74	12.07	1.125	1.09	7.19	2.62	7.25	8.500	3.50	1/2-13	2.75	.25x.25x1.75
Y543A	-	184TC	Aluminum	17.69	4.50	3.75	5.50	0.43	10.44	10.13	11.40	1.1250	1.13	6.49	2.62	7.25	8.500	3.50	1/2-13	3.75	.25x.25x1.75
-	Y559A	184TC	Aluminum	17.69	4.50	3.75	5.50	0.43	10.44	10.13	11.40	1.1250	1.13	6.49	2.62	7.25	8.500	3.50	1/2-13	3.75	.25x.25x1.75
Y542	-	213TC	Aluminum	19.04	5.22	4.25	5.50	0.47	12.47	10.75	12.78	1.375	1.34	7.39	3.12	7.25	8.500	4.25	1/2-13	4.05	.31x.31x2.38
Y545	Y560	213TC	Aluminum	20.54	5.22	4.25	5.50	0.47	12.47	10.75	12.78	1.375	1.34	7.39	3.12	7.25	8.500	4.23	1/2-13	5.55	.31x.31x2.38
Y544	-	215TC	Aluminum	20.54	5.22	4.25	7.00	0.47	12.47	10.75	12.78	1.375	1.34	7.39	3.12	7.25	8.500	4.23	1/2-13	5.55	.31x.31x2.38
Y547	Y561	215TC	Aluminum	23.04	5.22	4.25	7.00	0.47	12.47	10.75	12.78	1.375	1.34	7.39	3.12	7.25	8.500	4.25	1/2-13	8.05	.31x.31x2.38
Y546	-	254TC	Aluminum	25.37	6.22	5.00	8.25	0.56	13.46	10.75	13.75	1.625	1.75 & 2.0	8.38	3.75	7.25	8.500	4.25	1/2-13	8.85	.38x.38x2.88
Y549	Y562	254TC	Aluminum	26.87	6.22	5.00	8.25	0.56	13.46	N/A	13.54	1.625	1.75 & 2.0	8.17	3.75	7.25	8.500	4.75	1/2-13	10.40	.38x.38x2.88
Y548	-	256TC	Aluminum	26.87	6.22	5.00	10.00	0.56	13.46	N/A	13.54	1.625	1.75 & 2.0	8.17	3.75	7.25	8.500	4.75	1/2-13	10.40	.38x.38x2.88
Y552	Y563	256TC	Cast Iron	27.13	6.22	5.00	10.00	0.56	16.49	14.32	17.84	1.625	1.25	10.68	3.79	7.25	8.500	4.75	1/2-13	4.75	.38x.38x2.88
Y553	-	284TC	Cast Iron	27.08	7.00	5.50	9.50	0.56	15.57	15.89	21.26	1.875	2.00	13.31	4.38	9.0	10.500	4.75	1/2-13	4.75	.50x.50x3.25
Y393	-	286TC	Cast Iron	28.58	7.00	5.50	11.00	0.56	15.57	15.89	21.26	1.875	2.00	13.31	4.38	9.0	10.500	4.75	1/2-13	5.50	.50x.50x3.25

Note: Dimensions are for reference only. For complete dimensional information, refer to Marathon Electric at www.marathonelectric.com.

Blue Max[®] 2000 Vector Duty Motors



marathon
Motors

Features

- Class H MAX GUARD[®] insulation system
- Constant torque operation from 0 to base speed on vector drive, including TEFC (on V/Hz drives, TEFC motors are limited to 20:1 constant torque)
- Constant horsepower operation to 1.5 times base RPM
- Continuous duty at 40°C ambient
- Optimized for operation with IGBT inverter (NEMA Design A)
- C-Face foot mount through 100 HP (NEMA frame type TC motors)
- Class F N/C thermostats (one per phase)
- Cast iron frame and brackets
- Utilizes double shielded ball bearings with Exxon Polyrex[®] EM grease
- “Class B” temperature rise on blower-cooled motors
- F1 standard conduit box location, field reversible to F2
- Available with optional encoder installed on opposite drive end
- Electrically reversible
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty (through Marathon Electric)

Applications

Designed for inverter or vector applications. Typical uses include: material handling, machine tools, conveyors, crane and hoist, metal processing, test stands, pumps, compressors, textile processing, and other industrial machinery installed in dusty or dirty environments where cast iron construction is required.

Motor Shipping Schedule

Same or one day *	Up to 7 days	Up to 10 days
<i>Color indicates shipping lead time in business days. Check stock status online.</i>		
<i>* Certain heavy and oversized items can be shipped only via LTL. Check our web site for current shipping method constraints by part number.</i>		

Motor Specifications

Part Number *	Price	HP	Base RPM	Volts	Encl.	NEMA Frame	Model No.	F.L. Amps	Weight (lb) *
Y571	\$4,183.00	40	1800	230/460	TEFC	324T	324THFA8028	100 / 50.0	540
Y513	\$5,217.00	40	1800	230/460	TEBC	324TC	324THFA8038	100 / 50.0	620
Y572	\$5,175.00	50	1800	230/460	TEFC	326T	326THFS8028	121 / 60.5	540
Y514	\$5,979.00	50	1800	230/460	TEBC	326TC	326THFA8038	120 / 60.0	640
Y573	\$6,671.00	60	1800	230/460	TEFC	364T	364THFS8036	147 / 73.5	965
Y515	\$7,321.00	60	1800	230/460	TEBC	364TC	364THFS8046	147 / 73.5	1062
Y574	\$7,560.00	75	1800	230/460	TEFC	365T	365THFS8036	184 / 92.0	1006
Y516	\$8,752.00	75	1800	230/460	TEBC	365TC	365THFS8046	180 / 90.0	1106
Y575	\$10,225.00	100	1800	230/460	TEFC	405T	405THFS8036	230 / 115	1308
Y517	\$12,216.00	100	1800	230/460	TEBC	405TC	405THFS8046	230 / 115	1429

* Refer to the Motor Shipping Schedule table for shipping information

Note: Please review the AutomationDirect Terms & Conditions for warranty and service on this product.

Warranty service can be arranged through Marathon Electric service centers. See list of service centers on our Web site at www.AutomationDirect.com.

Performance Data (460 Volt)

Part Number	HP	F.L. RPM	F.L. Amps @460V	N.L. Amps @460V	F.L. Torque (lb-ft)	B.D. Torque (lb-ft)	Max. CHP RPM*	Max. Safe RPM	F.L. Effic.	F.L. Power Factor	Rotor Inertia (lb-ft ²)	Ohms/Ph - Equiv. Wye Circuit (460 VAC) (at rated operating temp. in 40° C ambient)				
												R1	R2	X1	X2	XM
Y571	40	1770	50.0	20.0	118.0	320.0	2642	3600	91.7	81.5	5.000	0.082	0.077	0.435	0.592	10.280
Y513	40	1770	50.0	20.0	118.0	320.0	2642	3600	91.7	81.5	5.000	0.082	0.077	0.435	0.592	10.280
Y572	50	1780	60.5	26.5	148.0	400.0	2675	3600	92.4	81.0	10.000	0.063	0.046	0.424	0.596	10.000
Y514	50	1765	60.0	25.0	149.0	525.0	3525	3600	93.0	83.5	5.500	0.088	0.092	0.437	0.358	9.662
Y573	60	1782	73.5	28.0	177.0	525.0	2665	2700	91.7	83.0	14.500	0.063	0.042	0.338	0.455	8.850
Y515	60	1782	74.0	28.0	177.0	525.0	2665	2700	91.7	83.0	14.500	0.063	0.042	0.338	0.455	8.850
Y574	75	1780	92.0	40.0	221.0	740.0	2665	2700	94.1	82.0	16.500	0.047	0.031	0.267	0.313	6.275
Y516	75	1780	90.0	33.0	222.0	645.0	2685	2700	93.0	84.0	16.000	0.054	0.038	0.299	0.420	8.203
Y575	100	1785	115.0	38.0	295.0	900.0	2675	2700	94.5	86.5	27.500	0.034	0.021	0.236	0.219	6.820
Y517	100	1785	115.0	38.0	295.0	900.0	2675	2700	94.5	86.5	27.500	0.034	0.021	0.236	0.219	6.816

* Maximum Constant HP RPM is for direct coupled loads.

Blue Max[®] 2000 Vector Duty Motors

Blower Motor Performance Data (for TEBC Blower Cooled Motors)										
Blower Fits Motor Type				Blower Motor Characteristics						
Part Number	Model No.	NEMA Frame	Encl.	HP (60/50Hz)	RPM (60/50Hz)	Volts	Hz	F.L. Amps	Sound Pressure	Watts
Y513	324THFPA8038	324TC	TEBC	1 / 0.75	1735 / 1460	230/460 – 190/380	60 / 50	3.0 / 1.5	40	850
Y513-A775										850
Y514	326THFPA8038	326TC								851
Y514-A775										852
Y515	364THFS8046	364TC						853		
Y515-A775								854		
Y516	365THFS8046	365TC						3.7 / 1.85	68	855
Y516-A775										856
Y517	405THFS8046	405TC								857
Y517-A775										858

Encoder shaft-mounted to motor*

A Dynapar Model HS35/HSD38 shaft-mounted encoder can be supplied pre-installed on the selected motor, either TEFC or TEBC type, as shown in the table below. The encoder requires a 5–26 VDC power source**, provides a count of 1024 pulses per revolution (PPR) differential line driver output, and includes a 10-pin connector. A mating connector is supplied with TEFC (totally enclosed fan cooled) motor encoders; the customer is responsible for supplying the wiring cable and determining the connections to the equipment being used in the application. The encoder adds 1 inch to the TEFC motor's "C" dimension as shown in the dimensional diagram.

The TEBC (totally enclosed blower cooled) motor encoders have the mating connector pre-wired, installed and ending in a pigtail located inside a conduit box mounted on the motor. (See Figure 2 under the motor dimensional information on the next page.) The customer is responsible for determining the connections to the equipment being used in their application.

* **If connecting the motor to a DURApulse AC drive, a GS3-FB Feedback Card is required for the drive.**

** **When used with a GS3-FB equipped DURApulse AC drive, the GS3-FB will supply power to the encoder.**

Motor Shipping Schedule

Same or one day *	Up to 7 days	Up to 10 days
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Color indicates shipping lead time in business days. Check stock status online.
* Certain heavy and oversized items can be shipped only via LTL.
Check our web site for current shipping method constraints by part number.

Motor Accessories

Part Number	Price	Description *
A774	\$837.00	Encoder kit, replacement, for Blue Max TEFC encoder motors. Dynapar HS35 encoder, 5–26 VDC input, Line Driver output, 1024 pulses per revolution, 1-in bore.
A775	\$837.00	Encoder kit, replacement, for Blue Max TEBC encoder motors. Dynapar HSD38 encoder, 5–26 VDC input, Line Driver output, 1024 pulses per revolution, 1-in bore.

* **Replacement/spare encoder kit for Blue Max Y5xx-A774 and Y5xx-A775 motors; can also be field installed on Blue Max Y5xx motors; select appropriate encoder kit per motor fan type (TEFC or TEBC).**

Motor with Pre-installed Shaft-Mounted Encoder

Part Number	Price	HP	Part Number	Price	HP
Y571-A774	\$5,190.00	40 (TEFC)	Y574-A774	\$8,496.00	75 (TEFC)
Y513-A775	\$6,308.00	40 (TEBC)	Y516-A775	\$9,843.00	75 (TEBC)
Y572-A774	\$6,111.00	50 (TEFC)	Y575-A774	\$11,317.00	100 (TEFC)
Y514-A775	\$7,071.00	50 (TEBC)	Y517-A775	\$13,307.00	100 (TEBC)
Y573-A774	\$7,606.00	60 (TEFC)			
Y515-A775	\$8,412.00	60 (TEBC)			

Note: Please review the AutomationDirect Terms & Conditions for warranty and service on this product. Warranty service can be arranged through numerous Marathon Electric service centers. See list of service centers on our Web site at www.AutomationDirect.com.

Encoder Connector Pinout

Note: A mating connector is supplied loose for the customer's wiring on encoder equipped TEFC motors and a mating connector pre-wired to a cable and pigtailed in a conduit box on encoder equipped TEBC motors.

Prewired cables TRDA-25CBL-VWD-xx (10, 20, & 30 ft) and replacement MS connectors TRDA-25CON-VWD are available from AutomationDirect.

Dynapar HS35/HSD38 Encoder

