

microMAX™ AC Inverter-Duty Motors

1000:1 Constant Torque (TENV), 20:1 Constant Torque (TEFC)

Features



marathon
Motors

- Constant torque operation from 0 to base speed (TENV ratings)
- Constant torque operation from 1/20 speed to base speed (TEFC ratings)
- Constant horsepower to twice base speed (RPM)
- Class H insulation with CR200 (corona-resistant) magnet wire
- Continuous duty at 40°C ambient
- C-Face with rigid base, except C-Face with removable rigid base as noted
- Service Factor: 1.0
- Utilizes double shielded ball bearings
- Exxon Polyrex® EM bearing grease
- Eliminates brush and commutator maintenance
- Electrically reversible
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty (through Marathon Electric)

Applications

- Replaces 90 volt and 180 volt PMDC motors (when used with AC variable frequency drives)
- Typical uses include: machine tools, conveyors, packaging machines, batching machines, printing equipment, pumps and fans.

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.		

Prices & Specifications

Motor Specifications – microMAX												
Part Number *	Price	HP	Base RPM	Volts	Encl.	NEMA Frame	Model No.	F.L. Amps	Weight (lb) *	Footnotes		
Y500	\$170.00	1/4	1800	230	TENV	56C	56H17T2011	1.0	17	Q		
Y502	\$198.00	1/3					56H17T2013A	1.2	17	Q		
Y360	\$227.00	1/2					230/460	TEFC	56H17T2017	1.8 / 0.9	25	–
Y362	\$293.00	3/4							56H17F2017A	2.8 / 1.4	25	–
Y364	\$309.00	1							56H17F2021	3.2 / 1.6	28	–
Y366	\$409.00	1-1/2		230/460	TENV	145TC	145THTR5329AA	4.8 / 2.4	45	6		
Y368	\$503.00	2					145THFR5329	5.8 / 2.9	45	6		
Y1999 †	\$619.00	3					TEFC	182TC	182THFW7729AA	8.4 / 4.2	64	6
Y1372 †	\$701.00	5						184TC	184THFW7726AA	13.0 / 6.5	92	6
Y994	\$887.00	7-1/2						213TC	213THFW7726	21.4 / 10.7	125	6
Y996	\$1,138.00	10	215TC	215THFW7726	27.6 / 13.8	135		6				
* Refer to the Motor Shipping Schedule table for shipping information. Certain heavy and oversized items can be shipped only via LTL. Check our web site for current shipping method constraints by part number.												
† Detailed information on the previous versions of these motors (Y999 & Y372) can be found at www.AutomationDirect.com/Retired-Products .												
Footnotes: Q = "Quick Connect" terminal board (1/4-in female spade lug) 6 = Bolt-on, removable base for footless mounting option												
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 .												

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Performance Data

Performance Data (460 Volt except as indicated) – microMAX													
Part Number	HP	NEMA Design	F.L. RPM	Min. 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)
Y500	1/4 (230V)	B	1725	1.8	1.0 (230V)	0.7 (230V)	0.75	3.7	3520	5400	72.0	65.0	0.040
Y502	1/3 (230V)	A	1725	0	1.2 (230V)	0.9 (230V)	1.0	4.5	3450	5400	74.0	67.0	0.045
Y360	1/2	B	1725	1.8	0.9	0.5	1.5	6.8	3520	5400	80.0	72.0	0.075
Y362	3/4	A	1725	90	1.4	1.0	2.3	9.5	3520	4000	75.5	70.5	0.055
Y364	1	B	1725	90	1.6	0.9	3.0	12.0	3520	4000	78.5	77.5	0.090
Y366	1-1/2	A	1755	0	2.4	1.6	4.5	29.0	3500	5400	85.5	69.0	0.140
Y368	2	B	1740	90	2.9	1.6	6.0	29.0	3530	4000	82.5	77.0	0.140
Y1999	3	A	1765	90	4.2	2.2	8.9	33.8	3530	4000	87.5	76.4	0.38
Y1372	5		1760	90	6.5	2.8	15	48.6	3520	4000	87.5	81.6	0.357
Y994	7-1/2		1770	90	10.7	6.2	22.3	80.0	3565	4000	89.5	72.5	0.75
Y996	10	B	1770	90	13.8	7.8	30.0	110	3570	4000	91.0	74.0	1.00

* Maximum Constant HP RPM is for direct-coupled loads.

Dimensions (units = inches)

See our website: www.AutomationDirect.com for complete engineering drawings.

Figure 1 – Y500, Y502

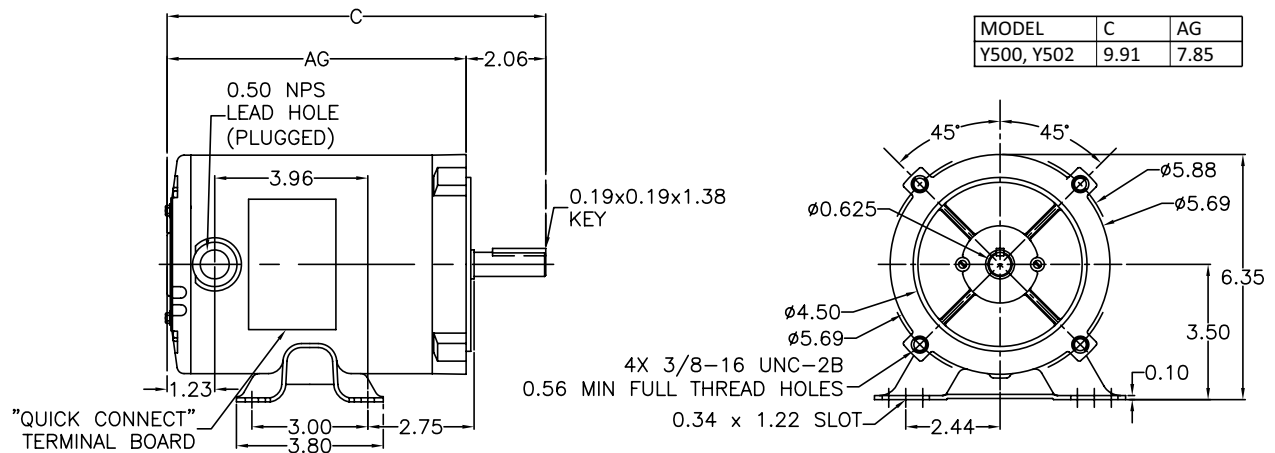
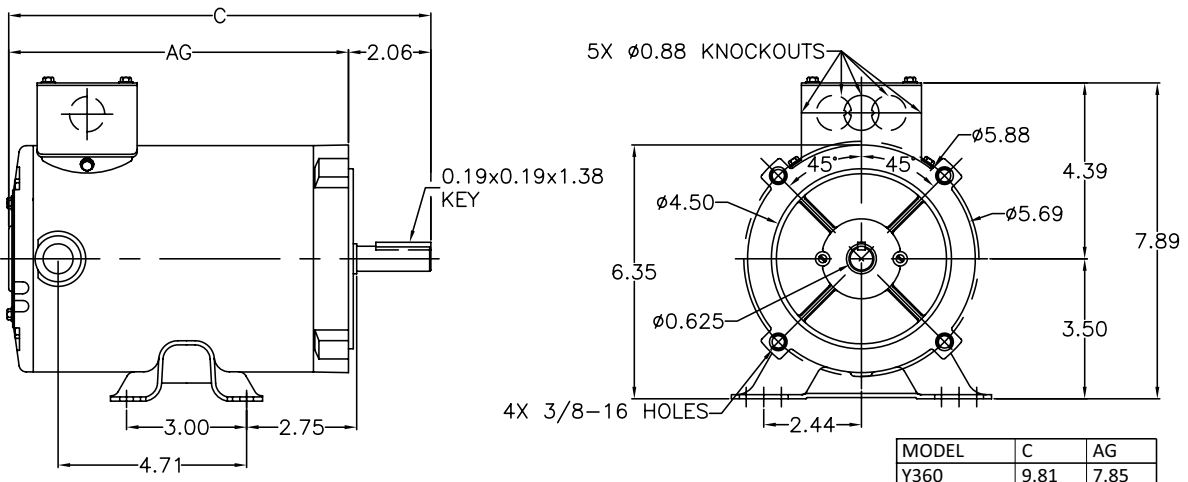


Figure 2 – Y360



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Dimensions (units = inches)

See our website: www.AutomationDirect.com for complete engineering drawings.

Figure 3 – Y362, Y364

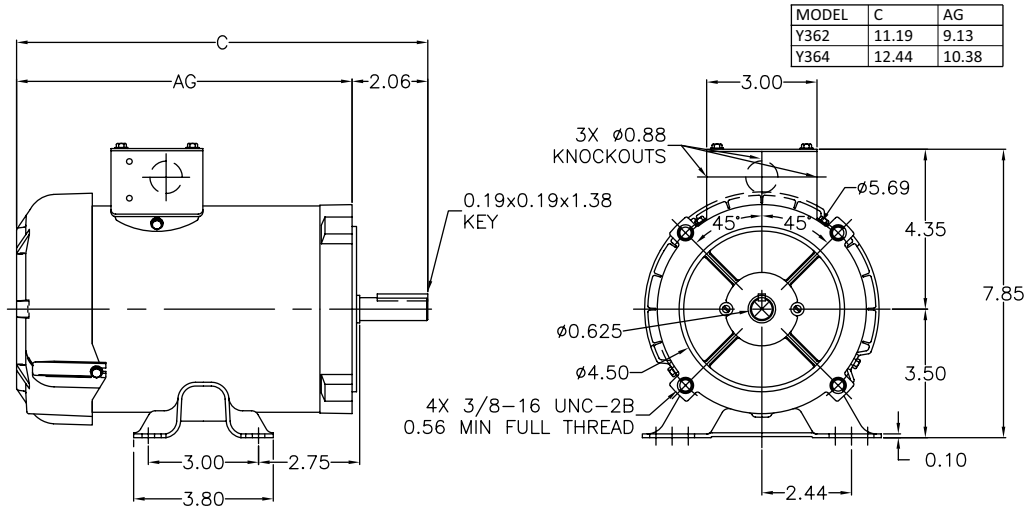


Figure 4 – Y366

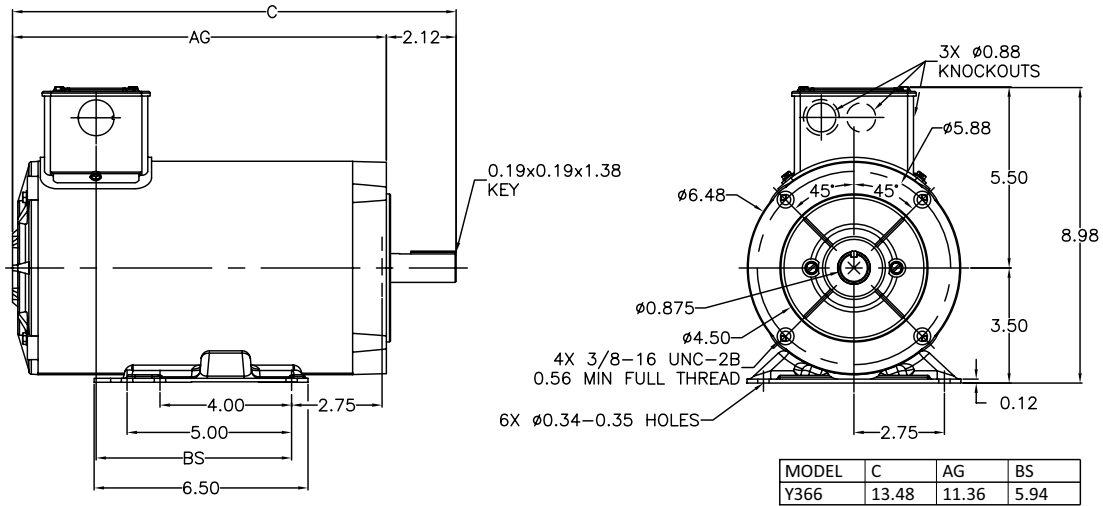
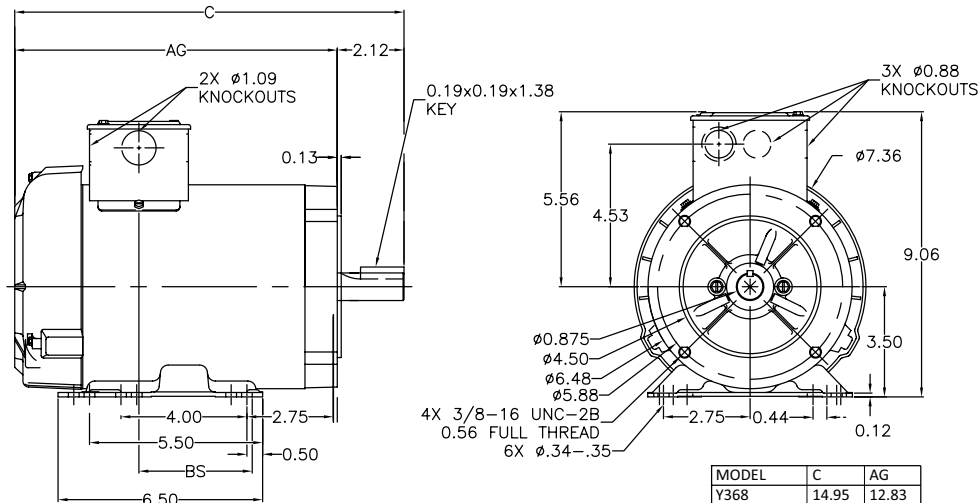


Figure 5 – Y368



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Dimensions (units = inches)

See our website: www.AutomationDirect.com for complete engineering drawings.

Figure 6 – Y1999

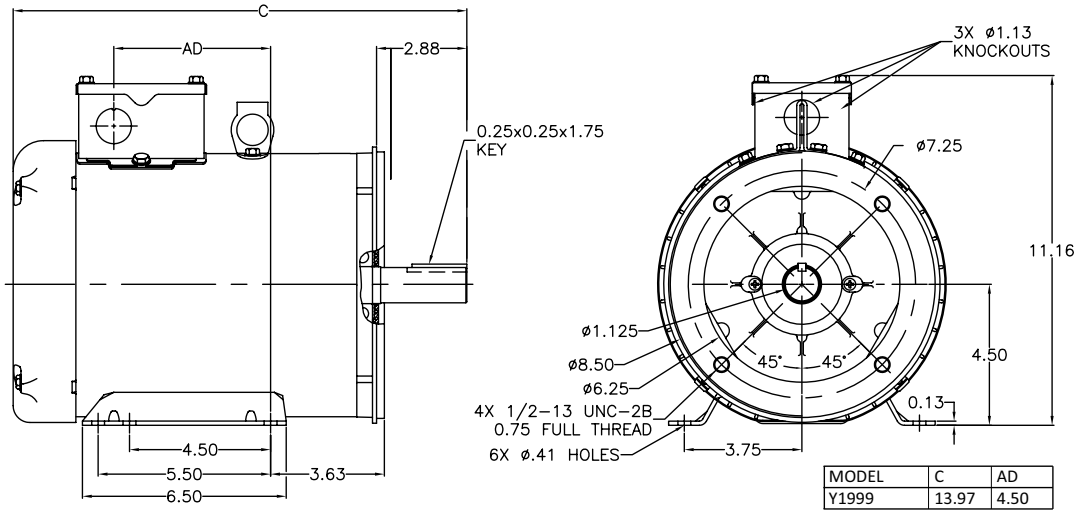


Figure 7 – Y1372

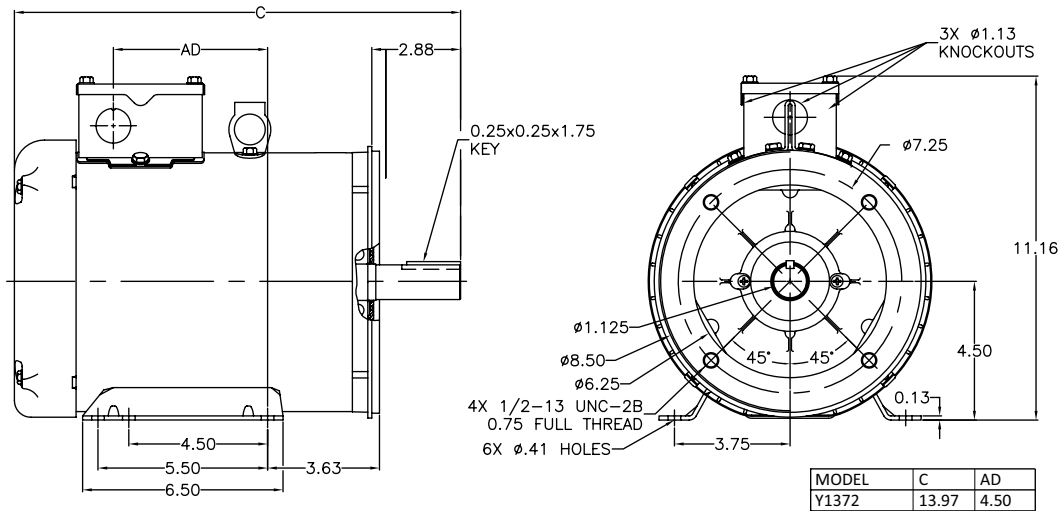
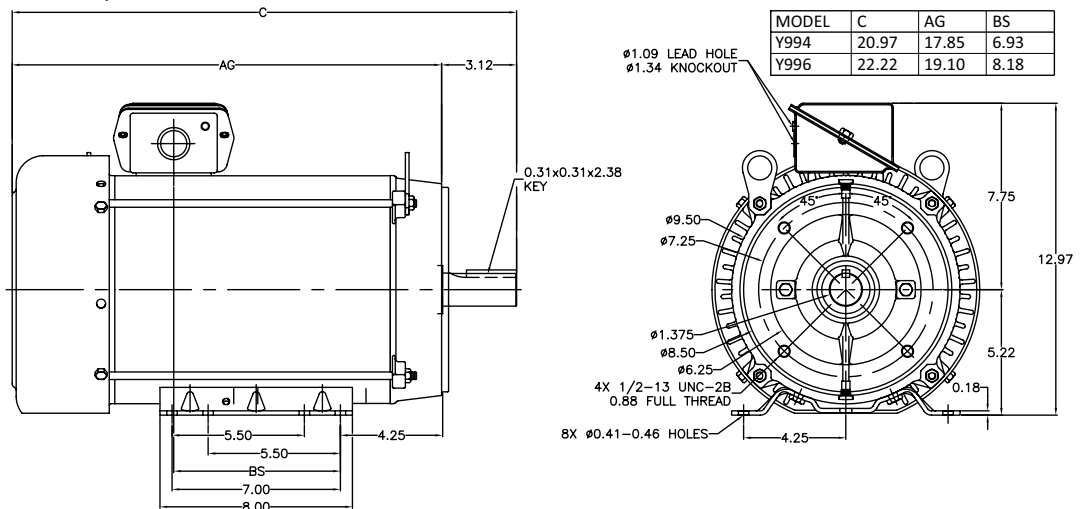


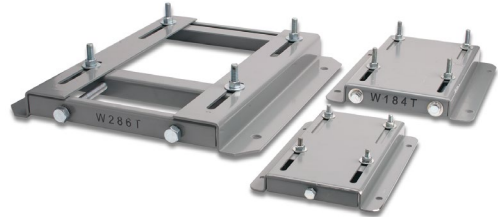
Figure 8 – Y996, Y994



STABLE™ Motor Slide Bases

Mounting Slide Bases for 56 to 449T NEMA Motors Features

- Allows adjustment of motor mounting position
- Slide direction is perpendicular to motor shaft
- Double adjusting screws for frames 182T-449T
- Manufactured to precise dimensional standards
- Dimensionally interchangeable with existing major makes
- Heavy-duty steel construction
- Painted with oven-baked primer for better adhesion of customer's paint
- All "D" bolts (motor mounting bolts) are fixed to the exact motor foot pattern
- All "D" bolts are welded into position to prevent spinning and dropping from slots
- Nuts and washers are provided for securing the motor to the slide base

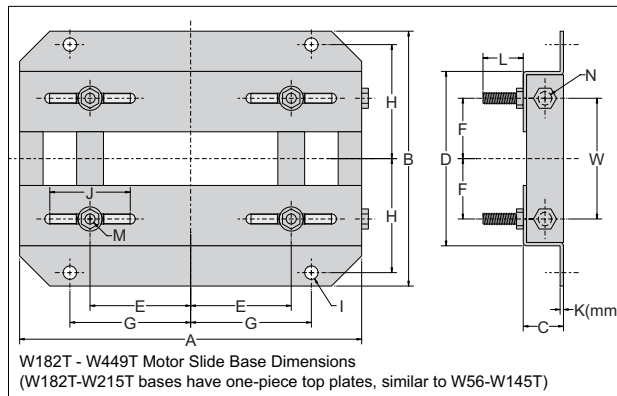
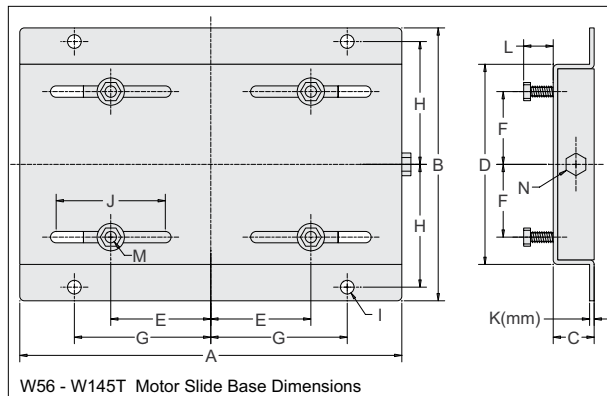


STABLE Motor Slide Bases												
Part Number	Price	Fits Frame Type	Product Weight (lb)	Fits Motor								
				IronHorse	Marathon					NEMA Premium XRI	Blue Chip XRI 230/460V	Blue Chip XRI 575V
					micro-MAX	MAX+	Black Max 230/460V	Black Max 575V	Blue Max			
MTA-BASE-W56*	\$9.75	56*	2.8	MTPM-P3x-1x18 MTPM-P5x-1x18 MTPM-P7x-1x18 MTPM-0xx-1x18 MTPM-1xx-1x18 MTR(2)(P)-xxx-xxxx*	Y500 Y502 Y360 Y362 Y364	Y280 Y281 Y282	Y592(-A772) Y534(-A772) Y535(-A772)	Y555(-A772) Y556(-A772)	-	E2000	-	-
MTA-BASE-W143T	\$18.00	143T/TC	4.6	MTC(P)-001-3BD18(C)(CK) MTC(P)-1P5-3BD36	-	-	Y536(-A772)	-	-	E2001A E2003	-	-
MTA-BASE-W145T	\$18.00	145T/TC	5.1	MTC(P)-001-3BD12 MTC(P)-1P5-3BD18(C)(CK) MTC(P)-002-3BD18(C)(CK) MTC(P)-002-3BD36	Y366 Y368	Y284 Y285	Y537(-A772) Y538(-A772) Y551(-A772)	Y557(-A772)	-	E2002 E2004A E2006 E2007A	-	-
MTA-BASE-W182T	\$24.00	182T/TC	9.2	MTC(P)-1P5-3BD12 MTC(P)-003-3BD18(C)(CK) MTC(P)-003-3BD36 MTF-002-1C18-182	Y1999	Y286A	Y541A(-A772)	Y558A(-A772)	-	E2005 E2009 E2010	-	-
MTA-BASE-W184T	\$24.00	184T/TC	10	MTC(P)-002-3BD12 MTC(P)-005-3BD18(C)(CK) MTC(P)-005-3BD36 MTF-00x-1C18	Y1372	Y287A	Y540(-A772) Y543A(-A772)	Y559A(-A772)	-	E2008 E2012 E2013	-	-
MTA-BASE-W213T	\$35.00	213T/TC	13	MTC(P)-003-3BD12 MTC(P)-7P5-3BD18(C)(CK) MTC(P)-7P5-3BD36	Y994	-	Y542(-A772) Y545(-A772)	Y560(-A772)	-	E2011 E2015 E2016A	-	-
MTA-BASE-W215T	\$35.00	215T/TC	15	MTC(P)-005-3BD12 MTC(P)-010-3BD18(C)(CK) MTC(P)-010-3BD36	Y996	-	Y544(-A772) Y547(-A772)	Y561(-A772)	-	E2014 E2018 E2019A	-	-
MTA-BASE-W254T	\$49.00	254T/TC	18	MTC(P)-7P5-3BD12 MTC(P)-015-3BD18(C)(CK) MTCP-015-3BD36	-	-	Y546(-A772) Y549(-A772)	Y562(-A772)	-	-	E205	E307
MTA-BASE-W256T	\$49.00	256T/TC	19	MTC(P)-010-3BD12 MTC(P)-020-3BD18(C)(CK) MTCP-20-3BD36	-	-	Y548(-A772) Y552(-A772)	Y563(-A772)	-	-	E206	E308
MTA-BASE-W284T	\$54.00	284T/TC	20	MTCP-015-3BD12 MTC(P)-025-3BD18(C)(CK)	-	-	Y553(-A772)	-	-	-	E207	E309
MTA-BASE-W286T	\$54.00	286T/TC	21	MTCP-20-3BD12 MTC(P)-030-3BD18(C)(CK)	-	-	Y393(-A772)	-	-	-	E208	E310
MTA-BASE-W324T	\$81.00	324T/TC	30	MTC(P)-040-3BD18(C)(CK)	-	-	-	-	Y571(-A774) Y513(-A775)	-	E209	E311
MTA-BASE-W326T	\$81.00	326T/TC	31	MTC(P)-050-3BD18(C)(CK)	-	-	-	-	Y572(-A774) Y514(-A775)	-	E210	E312
MTA-BASE-W364T	\$110.00	364T/TC	43	MTC(P)-060-3BD18(C)(CK)	-	-	-	-	Y573(-A774) Y515(-A775)	-	E211	E313
MTA-BASE-W365T	\$110.00	365T/TC	43	MTC(P)-075-3BD18(C)(CK)	-	-	-	-	Y574(-A774) Y516(-A775)	-	E212	E315
MTA-BASE-W404T	\$136.00	404T/TC	58	-	-	-	-	-	-	-	-	-
MTA-BASE-W405T	\$136.00	405T/TC	60	MTC(P)-100-3BD18(C)(CK)	-	-	-	-	Y575(-A774) Y517(-A775)	-	E213	E314
MTA-BASE-W444T	\$157.00	444T	63	MTC(P)-125-3BD18	-	-	-	-	-	-	-	-
MTA-BASE-W445T	\$157.00	445T	65	MTC(P)-150-3BD18	-	-	-	-	-	-	-	-
MTA-BASE-W447T	\$207.00	447T	89	MTC(P)-200-3BD18	-	-	-	-	-	-	-	-
MTA-BASE-W449T	\$207.00	449T	94	MTC-250-3D18 MTC-300-3D18	-	-	-	-	-	-	-	-

* IronHorse MTR2 56HC motors have double-punched bases to fit on slide base MTA-BASE-W56.

STABLE Motor Slide Bases

Dimensions – Mounting Slide Bases for NEMA Motors



Dimensions [inches, except as noted] - STABLE Motor Slide Bases															
MTA-BASE-Wxxxx	A	B	C	D	E	F	G	H	I	J	K(mm)	L	M	N	W
56	10-5/8	6-1/2	1-1/8	4-1/2	2-7/16	1-1/2	3-13/16	2-7/8	3/8	3	2 mm	7/8	5/16 x 1	3/8 x 4	n/a
143T	10-1/2	7-1/2	1-1/8	5-1/2	2-3/4	2	3-3/4	3-3/8	3/8	3	3 mm	13/16	5/16 x 1	3/8 x 4	n/a
145T	10-1/2	8-1/2	1-1/8	6-1/2	2-3/4	2-1/2	3-3/4	3-7/8	3/8	3	3 mm	13/16	5/16 x 1	3/8 x 4	n/a
182T	12-3/4	9-1/2	1-1/2	6-1/2	3-3/4	2-1/4	4-1/2	4-1/4	1/2	3	3.5 mm	1-1/2	3/8 x 1-3/4	1/2 x 6	4-1/2
184T	12-3/4	10-1/2	1-1/2	7-1/2	3-3/4	2-3/4	4-1/2	4-3/4	1/2	3	3.5 mm	1-1/2	3/8 x 1-3/4	1/2 x 6	5-1/2
213T	15	11	1-3/4	7-1/2	4-1/4	2-3/4	5-1/4	4-3/4	1/2	3-1/2	3.8 mm	1-1/2	3/8 x 1-3/4	1/2 x 6	5-1/2
215T	15	12-1/2	1-3/4	9	4-1/4	3-1/2	5-1/4	5-1/2	1/2	3-1/2	3.8 mm	1-1/2	3/8 x 1-3/4	1/2 x 6	7
254T	17-3/4	15-1/8	2	10-3/4	5	4-1/8	6-1/4	6-5/8	5/8	4	4.6 mm	1-7/16	1/2 x 1-3/4	5/8 x 6	5-5/16
256T	17-3/4	16-7/8	2	12-1/2	5	5	6-1/4	7-1/2	5/8	4	4.6 mm	1-7/16	1/2 x 1-3/4	5/8 x 6	7
284T	19-3/4	16-7/8	2	12-1/2	5-1/2	4-3/4	7	7-1/2	5/8	4-1/2	4.6 mm	1-11/16	1/2 x 2	5/8 x 6	7
286T	19-3/4	18-3/8	2	14	5-1/2	5-1/2	7	8-1/4	5/8	4-1/2	4.6 mm	1-11/16	1/2 x 2	5/8 x 6	8
324T	22-3/4	19-1/4	2-1/2	14	6-1/4	5-1/4	8	8-1/2	3/4	5-1/4	4.6 mm	2-3/16	5/8 x 2-1/2	3/4 x 9	7
326T	22-3/4	20-3/4	2-1/2	15-1/2	6-1/4	6	8	9-1/4	3/4	5-1/4	4.6 mm	2-3/16	5/8 x 2-1/2	3/4 x 9	8-1/2
364T	25-1/2	20-1/2	2-1/2	15-1/2	7	5-5/8	9	9-1/8	3/4	6	5.8 mm	2-1/16	5/8 x 2-1/2	3/4 x 9	7-3/4
365T	25-1/2	21-1/2	2-1/2	16-1/2	7	6-1/8	9	9-5/8	3/4	6	5.8 mm	2-1/16	5/8 x 2-1/2	3/4 x 9	8-3/4
404T	28-3/4	22-3/8	3	16-1/2	8	6-1/8	10	9-7/8	7/8	7	5.8 mm	2-1/2	3/4 x 3	3/4 x 11	8-3/4
405T	28-3/4	23-7/8	3	18	8	6-7/8	10	10-5/8	7/8	7	5.8 mm	2-1/2	3/4 x 3	3/4 x 11	10-1/4
444T	31-1/4	24-5/8	3	19-1/4	9	7-1/4	11	11	7/8	7-1/2	5.8 mm	2-1/2	3/4 x 3	3/4 x 11	11
445T	31-1/4	26-5/8	3	21-1/4	9	8-1/4	11	12	7/8	7-1/2	5.8 mm	2-1/2	3/4 x 3	3/4 x 11	13
447T	31-1/4	30-1/8	3	24-3/4	9	10	11	13-3/4	7/8	7-1/2	8 mm	3	3/4 x 3-1/2	3/4 x 11	16-1/2
449T	31-1/4	35-1/8	3	29-3/4	9	12-1/2	11	16-1/4	7/8	7-1/2	8 mm	3	3/4 x 3-1/2	3/4 x 11	21-1/2