

IronHorse™ Rolled Steel AC Motors

56C Frame TEFC Motors – Single-phase – 0.33 to 2 hp

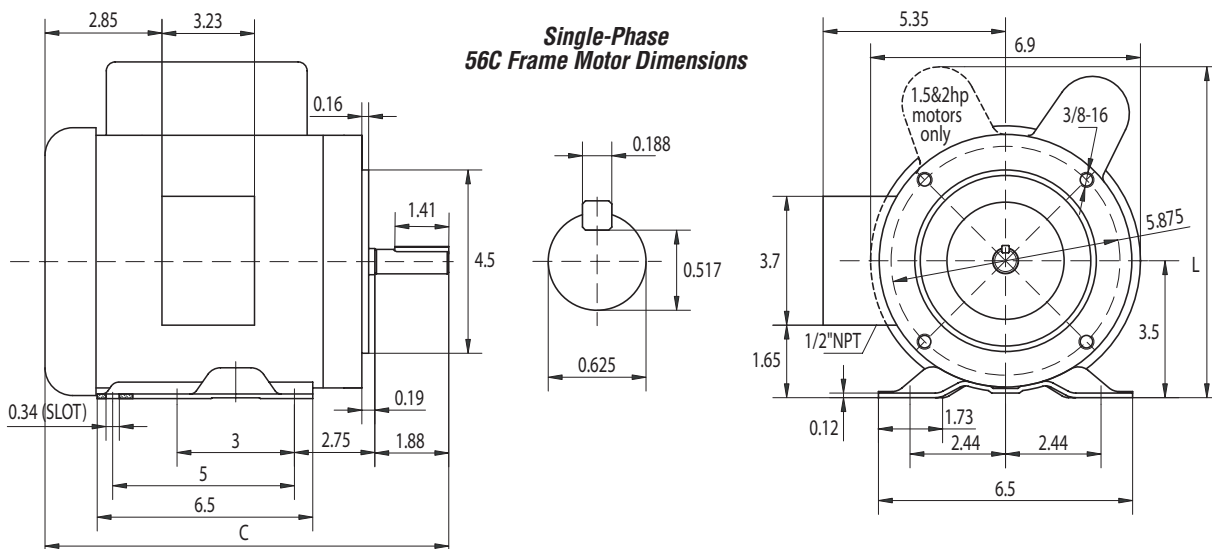


Motor Specifications – Single Phase 56C Frame Motors										
Part Number	HP	Base RPM	Phase	Voltage	Housing	NEMA Frame	Service Factor	F.L. Amps @ 115V/230V	Approx Weight (lb)	
MTR-P33-1AB18	1/3	1800	1	115/208-230	TEFC rolled steel frame w / cast aluminum end bell	56C flange mount	1.15	6.6 / 3.3	26	
MTR-P50-1AB18	1/2							8.8 / 4.4	28	
MTR-P75-1AB18	3/4							11.0 / 5.5	32	
MTR-001-1AB18	1							13.6 / 6.8	38	
MTR-1P5-1AB18	1-1/2							15.2 / 7.6	45	
MTR-002-1AB18	2							20.0 / 10.0	51	

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

Performance Data – Single Phase 56C Frame Motors (230V data except as indicated)												
Part Number	HP	NEMA Design	FL RPM	Current @ 115V/230V (Amps)			Torque (lb-ft)			FL Efficiency (%)	FL Power Factor	Rotor Inertia (lb-ft ²)
				230V No Load	Full Load	Locked Rotor	Full Load	Locked Rotor	Break-down			
MTR-P33-1AB18	1/3	B	1725	2.2	6.6 / 3.3	31 / 18	1.02	3.06	2.81	56.0	0.62	0.075
MTR-P50-1AB18	1/2			2.93	8.8 / 4.4	37 / 21	1.52	4.56	4.18	57.0	0.63	0.080
MTR-P75-1AB18	3/4			3.67	11.0 / 5.5	55 / 32	2.29	6.30	5.73	65.0	0.65	0.095
MTR-001-1AB18	1			4.53	13.6 / 6.8	75 / 43	3.04	8.36	7.60	68.0	0.66	0.120
MTR-1P5-1AB18	1-1/2			5.07	15.2 / 7.6	120 / 65	4.57	11.43	10.28	71.0	0.75	0.142
MTR-002-1AB18	2			6.67	20.0 / 10.0	150 / 86	6.09	15.23	13.70	73.0	0.77	0.182

56C Frame TEFC Motors – Single-Phase – 0.33 to 2 hp – Dimensions



C = 12.4"; all except 1, 1.5 & 2 hp motors
 C = 13"; 1 hp MTR-001-1AB18
 C = 13.8"; 1.5hp MTR-1P5-1AB18
 C = 14.6"; 2hp MTR-002-1AB18

UNITS = INCHES

MTR-xxx-1AB18 IronHorse Motors

L = 8.19"; all except 1.5 & 2 hp motors
 L = 8.5"; 1.5 & 2 hp motors

IronHorse™ AC Motor Capacitors/Switches

56C Frame TEFC Motors – Single-phase – 0.33 to 2 hp – Motor Accessories

Start Capacitors

Single-phase motors use capacitors to provide starting torque when power is first applied to the motor. AutomationDirect offers *spare/replacement* starting capacitors for our single-phase IronHorse™ motors.

Centrifugal Switches

The start capacitors are no longer needed once the motors begin turning, so they are then taken out of the circuit by a centrifugal switch. We also offer *spare/replacement* switches for our motors. One switch model is used for the entire line of single-phase IronHorse™ motors.

Run Capacitors

In addition to the start capacitors and centrifugal switches, IronHorse 1-1/2 and 2 hp single-phase motors also have run capacitors which allow the motors to develop higher running torque, greater efficiency, and improved power factor. We offer *spare/replacement* run capacitors for single-phase IronHorse™ motors.



Start Capacitor

Run Capacitor



Centrifugal Switch

Single Phase Motor Accessories							
Part Number	Price	Accessory Type	Capacitance (µF)	Rated Voltage	Applicable Motor Number	Motor HP	Motor Phase
MTA-CAP-01	<-->	start capacitor	200	125	MTR-P33-1AB18	1/3	1
MTA-CAP-02	<-->		250	125	MTR-P50-1AB18 MTR-P75-1AB18	1/2 3/4	1
MTA-CAP-03	<-->		300	125	MTR-001-1AB18	1	1
MTA-CAP-04	<-->		250	165	MTR-1P5-1AB18	1-1/2	1
MTA-CAP-05	<-->		200	165	MTR-002-1AB18	2	1
MTA-CAP-06	<-->	run capacitor	40	450	MTR-1P5-1AB18	1-1/2	1
MTA-CAP-07	<-->		40	450	MTR-002-1AB18	2	1
MTA-CSW-01	<-->	centrifugal switch	N/A	250	all IronHorse single Ø	all	1

These accessories are spare/replacement components for single-phase IronHorse™ motors.

STABLE AC Motor Slide Bases

Mounting Slide Bases for 56 to 449T NEMA Motors

Features

- Allows adjustment of motor mounting position
- 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
- Bases are provided with washers

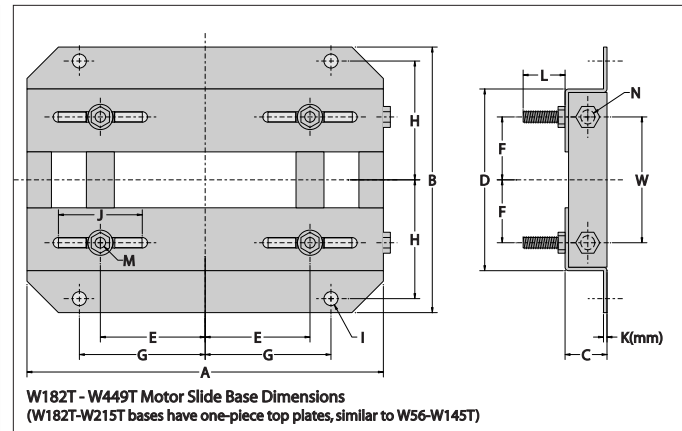
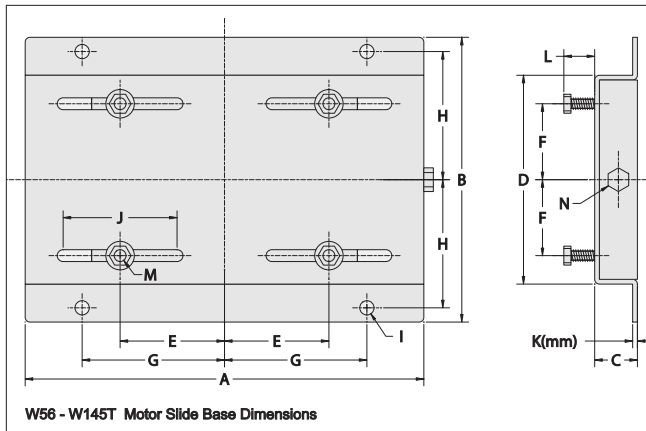


Motor Slide Bases										
Part Number	Price	Fits Frame Type	Shipping Weight (lb)	IronHorse Motor	Marathon microMAX Motor	Marathon Black Max 230/460V	Marathon Black Max 575V	Marathon Blue Max Motor	Marathon Blue Chip XRI 230/460V	Marathon Blue Chip XRI 575V
MTA-BASE-W56	<--->	56	3.5	MTR-xxx-1AB18 MTR-xxx-3BD18	Y500 Y360 Y364	Y592(-A772) Y534(-A772) Y535(-A772)	Y555(-A772) Y556(-A772)	-	-	-
MTA-BASE-W143T	<--->	143T	5.0	MTC-001-3BD18	-	Y536(-A772)	-	-	-	-
MTA-BASE-W145T	<--->	145T	5.6	MTC-1P5-3BD18 MTC-002-3BD18	Y368	Y537(-A772) Y538(-A772) Y551(-A772)	Y557(-A772)	-	-	-
MTA-BASE-W182T	<--->	182T	10	MTC-003-3BD18	Y999	Y541(-A772)	Y558(-A772)	-	-	-
MTA-BASE-W184T	<--->	184T	10	MTC-005-3BD18	Y372	Y540(-A772) Y543(-A772)	Y559(-A772)	-	-	-
MTA-BASE-W213T	<--->	213T	15	MTC-7P5-3BD18	Y994	Y542(-A772) Y545(-A772)	Y560(-A772)	-	-	-
MTA-BASE-W215T	<--->	215T	16	MTC-010-3BD18	Y996	Y544(-A772) Y547(-A772)	Y561(-A772)	-	-	-
MTA-BASE-W254T	<--->	254T	20	MTC-15-3BD18	-	Y546(-A772) Y549(-A772)	Y562(-A772)	-	E205	E307
MTA-BASE-W256T	<--->	256T	21	MTC-20-3BD18	-	Y548(-A772) Y552(-A772)	Y563(-A772)	-	E206	E308
MTA-BASE-W284T	<--->	284T	23	MTC-25-3BD18	-	Y553(-A772)	Y567(-A772)	-	E207	E309
MTA-BASE-W286T	<--->	286T	24	MTC-30-3BD18	-	Y393(-A772)	Y394(-A772)	-	E208	E310
MTA-BASE-W324T	<--->	324T	33	MTC-40-3BD18	-	-	-	Y571(-A774) Y513(-A775)	E209	E311
MTA-BASE-W326T	<--->	326T	35	MTC-50-3BD18	-	-	-	Y572(-A774) Y514(-A775)	E210	E312
MTA-BASE-W364T	<--->	364T	46	MTC-60-3BD18	-	-	-	Y573(-A774) Y515(-A775)	E211	E313
MTA-BASE-W365T	<--->	365T	47	MTC-75-3BD18	-	-	-	Y574(-A774) Y516(-A775)	E212	E315
MTA-BASE-W404T	<--->	404T	64	-	-	-	-	-	-	-
MTA-BASE-W405T	<--->	405T	65	MTC-100-3BD18	-	-	-	Y575(-A774) Y517(-A775)	E213	E314
MTA-BASE-W444T	<--->	444T	69	MTC-125-3BD18	-	-	-	-	-	-
MTA-BASE-W445T	<--->	445T	70	MTC-150-3BD18	-	-	-	-	-	-
MTA-BASE-W447T	<--->	445/7T 447T	92	MTC-200-3BD18	-	-	-	-	-	-
MTA-BASE-W449T	<--->	449T	98	MTC-250-3D18 MTC-300-3D18	-	-	-	-	-	-

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STABLE AC 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

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