

**NEMA D FLANGE KITS
STEEL AND CAST IRON
FRAME MOTORS**

Includes parts to convert a rigid base mounted motor to NEMA D face with base.

Shaded frame indicates cast iron motor kits for 150 and 170 series motors.

NOTE: The D Flange Kits can *only* be used on rigid base motors. They will not fit NEMA C face motors.



Frame	Enclosure	D Flange Kit Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
143T-145T	Enclosed	163115	\$ 110	C	6
182T-184T*	Open / Enclosed	175694 △	216	B	12
182T-184T	Open	175101 ★	206	C	13
182T-184T	Enclosed	175658 ★	229	C	12
213T-215T	Open	175114	337	C	14
	Enclosed	175115 ★	337	C	14
254T-256T	Open	175116	432	C	25
	Enclosed	175192	432	C	25
284T-286T	Open	175118	517	C	42
		175119	517		
324T-326T	Open	175120 ★	662	C	57
	Enclosed	175121	662	C	57
364T-365T	Open	175955	781	C	72
	Enclosed	175657	781	C	72
404T-405T	Open	175956	1085	C	90
	Enclosed	175957	1085	C	90
444T-445T	Open	175607	1256	C	106
	Enclosed	175608 ◇	1256	C	106

*Rolled steel frame only.

NEMA D FLANGE KIT WATTSaver® MOTORS

Special conversion kit for use exclusively on WATTSaver® cast iron frame motors.

Frame	Enclosure	D Flange Kit Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
182T-184T	Enclosed	175843 *①	\$229	C	14
182T-184T	Enclosed	175396 ②	229	C	14
213T-215T	Enclosed	175959	337	C	14
324T-326T	Open	175455	897	C	57
364T-365T	Open	175602 ③	977	C	72
	Enclosed	175604 ③	977	C	72

*Locked bearing

RODENT SCREEN KITS

Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
182T-184T*	Open	175872	\$106	C	1
213T-215T*	Open	175871	190	C	1
254T-256T	Open	175873	272	C	2
284T-286T	Open	175874	272	C	3
324T	Open	175894	640	C	5
326T	Open	175875	640	C	4

*Rolled steel frame only.

△ Use this kit for 182-4T and S213T motors with catalog numbers 131454 and higher, or with a G prefix. Both open and enclosed motors in this series use the same kits as ventilation is in the frame of the motor.

- * For use with 213T-215T 3450 RPM motors only.
- ◆ For use with motors having "P" suffix on date code.
- ▼ For use with motors having catalog numbers 15XXXX, G15XXXX, or 17XXXX.
- ★ Not for use with WATTSaver® motors.
- ① For use with motors having date codes earlier than May 2003.
- ② For use with motors having date codes May 2003 and later.
- ◇ For use with 1140 and 1750 RPM motors only.
- ③ WATTSaver® II design, having oversized frame body.

**CHEMICAL SERVICE/
SEVERE DUTY CONVERSION KITS**

Cast iron fan covers for cast iron motors. Designed to easily convert TEFC motors to all cast iron construction. All these motors have inert, corrosion resistant fiber filled thermoplastic fan as standard. Kit includes one cast iron fan cover.



NEMA Frame	IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wt. (lbs.)
182T-184T	---	175663	\$172	C	10
213T-215T	---	175050	252	C	12
254T-256T	160	175051	338	C	18
284T-286T	180	175052	592	C	22
324T-326T	200	175053	617	C	29
364T-365T	225	175054	922	C	39
404T-405T	250	175055	1005	C	49
444T-445T	280	175056	1138	C	59
447T-449T	---	175891	1138	C	112

**DRIP-COVER KITS
FOR DRIP-PROOF MOTORS**

Each kit includes one drip-cover. Designed to protect drip-proof motors from rain, snow and ice when mounted outdoors in a vertical position.



Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
48-S56	175003	\$43	A	2
48-S56	175298 ◆	43	A	2
56				
143T-145T	175004	48	A	2
182T-184T*	175614	61	B	3
182T-184T	175961 ▼	56	C	3
213T-215T*	175846	86	B	12
213T-215T*	175305 *	86	B	12
213T-215T	175962 ▼	86	C	4
254T-256T	175963 ▼	109	C	7

*Rolled steel frame only.

**DRIP-COVER KIT
FOR TEFC MOTORS**

For use with 1750 RPM steel frame motors only.

Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
213T-215T	175849	\$86	B	12

TEXTILE "LINT-PROOF" KITS

Needed parts to convert one TEFC motor to lint-proof construction.

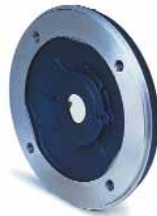
Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
56-143T-145T	175024	\$75	A	2
182T-184T	175695 △	145	B	3

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

**NEMA C FACE KITS
STEEL FRAME MOTORS**

Includes parts to convert a rigid base mounted motor to NEMA C face with base.

The C Face Kits *cannot* be used as replacements on a factory-produced C face motor.



For motors with Catalog Numbers 092000-140999

Frame	Enclosure	C Face Kit Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
42	Open / Enclosed	175661	\$44	A	2
48	Open / Enclosed	175969 ○ 175646 ④	44	A	2
S56	Open	175000	44	A	2
	Enclosed	175180	44	A	2
	Open / Enclosed	175297 ▶	44	A	2
	Open / Enclosed	175647 ④	44	A	2
56 (see note 2)	Open	175075	53	A	2
	Enclosed	175076	53	A	2
	Enclosed	M064076 ▲	47	A	2
143T-145T	Open	175181	53	B	2
	Enclosed	175077	53	B	2
182T-184T	Open / Enclosed	175691 Δ	65	B	2
182T-184T Special+	Open / Enclosed	175294	65	B	5
S213T	Open / Enclosed	175693 Δ	122	B	2
213T-215T (1750,1140, & 850 RPM)	Open	175845 □	122	B	19
	Enclosed	175844 □	122	B	15
213T-215T (3450 RPM)	ODP	175303 ★	115	B	15
	Enclosed	175304 ★	115	B	15

- NOTE:** 1) When changing a rigid mount motor to C Face for 140T-256T frames, a non-NEMA BA dimension results.
2) Some larger HP 56-frame motors have larger shaft-end bearings and require a 143T-145T C Face kit. Contact LEESON.

JP PUMP DRIP COVER KITS

Frame	Catalog Number	Enclosure	List Price
56-145JP	175932	ODP or TEFC	\$26
182JP-184JP	175933	ODP	30
213JP-215JP	175305 ★	ODP	86

- Use these kits for new-design 213T and 215T motors that have external thru-bolts.
- Δ Use this kit for 182-4T and S213T motors with catalog numbers 131454 and higher, or with a G prefix.
Both open and enclosed motors in this series use the same kits as ventilation is in the frame of the motor.
- Not TS Frame.
- ✓ For older cast iron motors with date code C93 or earlier.
- ▶ For use with motors having "P" suffix on date code.
- ★ When ordering, specify if motor has .00 or .60 suffix for correct kit.
- + Converts a 182T-184T frame motor to the C-face dimensions of a 143T-145T or 182U184U frame motor –
AJ = 5 7/8", AK = 4 1/2". Does not change the shaft extension or BA dimension to match the other frame sizes.
- ★ For use with 3450 RPM, 213T-215T (213JP-215JP) motors only.
- ▲ For use with Industry-Ag motors only, see page 69.
- For use with AC motors having "P" suffix on date code. Results in non-NEMA shaft and BA dim.
- ✳ Not for use with WATTS AVER® motors.
- ① For use with motors having date codes earlier than May 2003.
- ② For use with motors having date codes May 2003 and later.
- ③ WATTS AVER® II design, having oversized frame body.
- ④ For motors manufactured after January 1, 2007, having a "B" suffix letter after the motor's date code.

**NEMA C FACE KITS
CAST IRON MOTORS**

Includes parts to convert a rigid base mounted motor to NEMA C face with base.

The C Face Kits *cannot* be used as replacements on a factory-produced C face motor.



For 150 Series and 170 Series Cast Iron Motors Only

Frame	Enclosure	C Face Kit Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
143T-145T	Enclosed	163116	\$ 110	C	6
182T-184T	Enclosed	175655 ✳	145	C	12
213T-215T	Open	175066	145	C	15
	Enclosed	175068 ✳	145	C	15
254T-256T	Open	175067	223	C	25
	Enclosed	175069 ✓/✓	214	C	25
	Enclosed	175191	223	C	25
284T-286T	Open	175058	310	C	42
	Enclosed	175061	310	C	42
324T-326T	Open	175059 ✳	402	C	57
	Enclosed	175062	402	C	57
364T-365T	Open	175060	673	C	75
	Enclosed	175063	673	C	49
404T-405T	Open	175605	885	C	60
	Enclosed	175199	885	C	60
444T-445T→	Open	175606	967	C	115
	Enclosed	175664	967	C	115
447T-449T	Enclosed	175958	1070	C	112

NOTE: When changing a rigid mount motor to C Face for 140T-256T frames, a non-NEMA BA dimension results.

NEMA C FACE KITS WATTS AVER® MOTORS

Special conversion kits for use exclusively on WATTS AVER® cast iron frame motors.

Frame	Enclosure	C Face Kit Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
182T-184T	Enclosed	175842 ✳①	\$ 136	C	12
182T-184T	Enclosed	175394 ②	145	C	12
213T-215T	Enclosed	175869 *	145	C	14
324T-326T	Open	175454	402	C	57
364T-365T	Open	175601 ③	673	C	75
	Enclosed	175603 ③	673	C	75

*Locked bearing

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

BLOWER FAN KITS

These kits are used for converting 150 and 170 Series Cast Iron TEFC motors to Totally Enclosed Blower Cooled motors. Cooling per MG1.6 (IC46) The kits are designed for inverter and vector drive applications where continuous cooling is required regardless of motor shaft speed. The kit is mounted on the back of the motor after removing the fan guard and fan. Modifying the shaft is not required.



For use with Rolled Steel TEFC Motors only.

Blower Motor Voltage	Phase	NEMA Frame	Catalog Number	List Price	Disc. Sym.	CFM	App. Wgt. (lbs.)
115	1	56-145T	175876	\$664	A	115	4
115	1	56-145T	175775 Ⓢ	664	A	115	4
115	1	182-4T	175895	744	B	115	4
115	1	213-5T	175896	777	B	235	5

Ⓢ For 56/145T motors having face mounted (plastic) fan guards.

ENCODER KITS

These kits include the parts and encoder for field assembly of slim-line, through-shaft encoder designed to slip over the motor's fan end shaft. Blower kit sold separately.



Output is 1024 pulses per revolution, quadrature, 5 to 28 VDC line driver output. Short-circuit protection is standard. Inputs are over voltage and reverse voltage protected. Electrical noise immunity exceeds international standards. Encoders are isolated from shaft currents using hard anodized sleeves and non metallic anti-rotation hardware. Designed for long-life in industrial environments using an all-metal, shock resistant code disk. The encoder is protected by the motor's fan cover after mounting. Using a blower fan kit is suggested for proper motor cooling.

For use with Rolled Steel/TEFC Motors only.

For NEMA Frame	Encoder Kit Catalog Number	List Price	Disc. Sym.
56-145T	175960	\$ 934	A
182-4T	175897	1353	B
213-5T	175898	1353	B

TERMINAL BLOCK KITS

Terminal block kits for 150 and 170 Series NEMA Frame Cast Iron motors. Can also be used for replacement on 193 Series Cast Iron and 192 Series aluminum IEC metric motors.



DIE CAST ALUMINUM CONDUIT BOX CONVERSION KIT

56/140-frame kit (pictured) includes die cast aluminum conduit box, cover, gaskets, grounding screw, mounting hardware and adapter plate for mounting box on existing holes in motor. 180 and 210-frame kits include all parts required to replace the conduit box including the die cast conduit box, plug, cover, gaskets and mounting hardware. No adapter plate is required because these kits mount on existing holes. All conduit boxes have 1/2-NPT tapped lead exit holes on two adjacent sides with one hole plugged. Note: the kit will not work with larger HP single-phase 210-frame motors.



EXPLOSION-PROOF CONDUIT BOX

UL and CSA listed for Class I, Group C & D, and Class II, Groups E, F & G locations. Has grounding screw and all hardware provided. Mounts to motor by 3/4"-14NPT opening at rear of box. For NEMA 56 & 143-5T frame motors only. Box number 175755 has a 1" NPT thread.



For use with 150 & 170 Series Cast Iron TEFC Motors only.

Blower Motor Voltage	Phase	NEMA Frame	Catalog Number	List Price	Disc. Sym.	CFM	App. Wgt. (lbs.)
115	1	182-4T	175674	\$744	C	260	10
115	1	213-5T	175675	777	C	260	11
115	1	254-6T	175676	835	C	260	17
115	1	284-6T	175677	1004	C	500	24
115	1	324-6T	175678	1069	C	500	28
230/460	3	360T	175879	2221	C	500	35
230/460	3	400T	175880	2464	C	500	45
230/460	3	440T	175558 Ⓢ	2819	C	500	55

Ⓢ For 444T/445T motors

For use with 150 & 170 Series Cast Iron TEFC Motors only.

For NEMA Frame	Encoder Kit Catalog Number	List Price	Disc. Sym.
182-4T	175684	\$1157	C
213-5T	175685	1157	C
254-6T	175686	1869	C
284-6T	175687	1869	C
320T	175641	1906	C
360T	175642	1906	C
400T	175643	1906	C
440T (2 pole)	175644	1906	C
440T (4/6 pole)	175645	1906	C

NEMA Frame	IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
—	63-90L	175881 *	\$ 14	A	1
180/210T	100/112/132	175668	30	C	2
250/280T	160/180	175667	32	C	3
320/360T	200/225	175666	50	C	4
400/440T	250/280	175665	78	C	5

* Replacement terminal board for aluminum frame IEC motors.

NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
56-140T	175892	\$ 62	A	2
182-4T	175649	74	A	2
213-5T	175847	91	C	11

Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
175026	\$ 83	A	2
175755 (1)	83	A	2

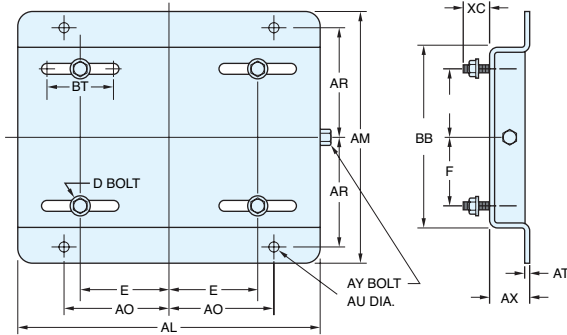
(1) For motors having a letter P after the date code.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

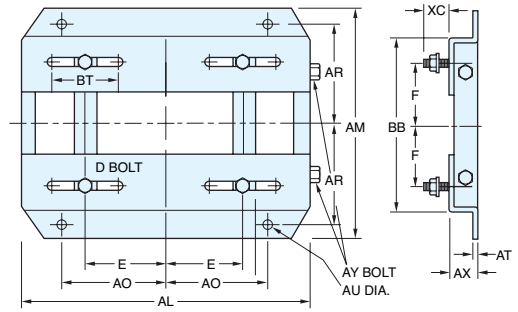
ADJUSTABLE MOTOR BASES—NEMA 48-447T FRAMES

Heavy gauge steel mounting bases simplify the installation of motors and make the tensioning, maintenance and replacement of belts a simple efficient task. Fabricated from sheet or steel plate, then primed and finished in a gray rust and corrosion resistant oven-baked finish. Gussets and

reinforcing channels on larger units and continuous seam welding on all units give these bases strength and durability for a long life. A single (215T frame and smaller) or double (NEMA 254T frame and larger) zinc plated adjusting screw is provided. Motor mounting bolts are included.



NEMA 48 thru 215T



NEMA 254T thru 447T

Frame	Catalog Number	List Price	Disc. Sym.	AL	AM	AX	BB	E	F	AO	AR	AU**	BT	AT	XC	D* Bolt	AY Bolt	App. Wgt. (lbs.)
48	175032	\$ 64	A	10	6¼	1⅞	4¼	2⅞	1⅜	3½	2¾	¾	3	.078	7/8	5/16 x 1	¾ x 4	2
56	175033	64	A	10⅝	6½	1⅞	4½	27/16	1½	319/16	27/8	¾	3	.078	7/8	5/16 x 1	¾ x 4	3
143T	175034	75	B	10½	7½	1⅞	5½	2¾	2	3¾	3⅝	¾	3	.119	19/16	5/15 x 1	¾ x 4	5
145T	175035	75	B	10½	8½	1⅞	6½	2¾	2½	3¾	37/8	¾	3	.119	19/16	5/15 x 1	¾ x 4	6
182T	175036	97	B	12¾	9½	1½	6½	3¾	2¼	4½	4¼	½	3	.134	1½	¾ x 1¾	½ x 5	9
184T	175037	97	B	12¾	10½	1½	7½	3¾	2¾	4½	4¾	½	3	.134	1½	¾ x 1¾	½ x 5	9
213T	175038	120	C	15	11	1¾	7½	4¼	2¾	5¼	4¾	½	3½	.164	1½	¾ x 1¾	½ x 5	13
215T	175039	120	C	15	12½	1¾	9	4¼	3½	5¼	5½	½	3½	.164	1½	¾ x 1¾	½ x 5	15
254T	175040	184	C	17¾	15½	2	10¾	5	4½	6¼	6⅝	⅝	4	¾/16	17/16	½ x 1¾	⅝ x 6	17
256T	175041	184	C	17¾	16⅞	2	12½	5	5	6¼	7½	⅝	4	¾/16	17/16	½ x 1¾	⅝ x 6	18
284T	175042	200	C	19¾	16⅞	2	12½	5½	4¾	7	7½	⅝	4½	¾/16	11¼/16	½ x 2	⅝ x 6	21
286T	175043	200	C	19¾	18⅝	2	14	5½	5½	7	8¼	⅝	4½	¾/16	11¼/16	½ x 2	⅝ x 6	22
324T	175044	265	C	22¾	19¼	2½	14	6¼	5¼	8	8½	¾	5¼	¾/16	23/16	⅝ x 2½	¾ x 9	31
326T	175045	265	C	22¾	20¾	2½	15½	6¼	6	8	9¼	¾	5¼	¾/16	23/16	⅝ x 2½	¾ x 9	32
364T	175046	349	C	25½	20½	2½	15½	7	5⅝	9	9½	¾	6	¼	2¼/16	⅝ x 2½	¾ x 9	44
365T	175047	349	C	25½	21½	2½	16½	7	6½	9	9⅝	¾	6	¼	2¼/16	⅝ x 2½	¾ x 9	45
404T	175048	628	C	28¾	22¾	3	16½	8	6½	10	9⅞	7/8	7	¼	2½	¾ x 3	¾ x 11	60
405T	175049	628	C	28¾	23⅞	3	18	8	6⅞	10	10⅝	7/8	7	¼	2½	¾ x 3	¾ x 11	61
444T	175088	777	C	31¼	24⅝	3	19¼	9	7¼	11	11	7/8	7½	¼	2½	¾ x 3	¾ x 11	68
445T	175089	777	C	31¼	26⅝	3	21¼	9	8¼	11	12	7/8	7½	¼	2½	¾ x 3	¾ x 11	73
447T	175090	858	C	31¼	30⅞	3	24¾	9	10	11	13¾	7/8	7½	5/16	3	¾ x 3½	¾ x 11	92
449T	175302	858	C	31¼	35⅞	3	29¾	9	12½	11	16¼	7/8	7½	5/16	3	¾ x 3½	¾ x 11	95

* Motor mounting bolt diameter and length, four supplied with each base.
** Base mounting bolts, four required—not supplied with base.

NOTE: These bases are not suitable for vertical mounting. All dimensions in inches.

TRANSITION BASES

Transition bases compensate for the difference in mounting dimensions and shaft height of a rigid base NEMA T frame to the next higher NEMA U frame. This makes it possible, for example, to replace a 10 HP NEMA 254U frame motor with a 10 HP NEMA 215T frame motor without modifying the basic installation. Made of the same high-quality materials and

construction as the adjustable motor bases above. They are for horizontal mountings, shimming may be needed for direct coupled loads. Thread size listed is for mounting transition base to the "T" frame motor. Dimensions listed are for one piece—two are supplied, one for each side of the motor's foot.



Converts T Frame	To U Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Height (Inches)	Width (Inches)	Length (Inches)	Thread
143T/145T	182/184	175091	\$ 65	B	2	1	2¼	7½	5/16-18
182T/184T	213/215	175092	94	B	3	¾	1¾	9½	¾-16
213T/215T	254U/256U	175093	109	C	5	1	27/16	12¾	¾-16
254T/256T	284U/286U	175094	155	C	8	¾	2¾	14¼	1½-13
284T/286T	324U/326U	175095	206	C	10	1	3¼	15¾	1½-13
324T/326T	364U/365U	175097	261	C	13	1	31¼/16	16½	⅝-11
364T/365T	404U/405U	175098	349	C	22	1	4¼	18⅝	⅝-11
404T/405T	444U/445U	175127	447	C	24	1	4¼	21⅝	¾-10

Motor Accessories