

**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.)
182T-184T	Open	175101	\$131	C	12
182T-184T*	Open / Enclosed	175694 Δ	131	B	12
182T-184T	Enclosed	175658 ★	131	C	12
213T-215T	Open	175114	194	C	14
	Enclosed	175115 ★	194	C	14
254T-256T	Open	175116	324	C	25
	Enclosed	175192	324	C	25
284T-286T	Open	175118	388	C	42
	Enclosed	175119	388	C	42
324T-326T	Open	175120 ★	517	C	57
	Enclosed	175121	517	C	57
364T-365T	Open	175955	564	C	72
	Enclosed	175657	564	C	72
404T-405T	Open	175956	627	C	90
	Enclosed	175957	627	C	90

*Rolled steel frame only.

NEMA D FLANGE KIT WATTSAYER® MOTORS

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

Frame	Enclosure	D Flange Kit Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
182T-184T	Enclosed	175843 *①	\$131	C	14
182T-184T	Enclosed	175396 ②	131	C	14
213T-215T	Enclosed	175959	194	C	14
324T-326T	Open	175455	517	C	57

*Locked bearing

RODENT SCREEN KITS

Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
182T-184T*	Open	175872	\$65	C	1
213T-215T*	Open	175871	116	C	1
254T-256T	Open	175873	166	C	2
284T-286T	Open	175874	166	C	3
324T	Open	175894	391	C	5
326T	Open	175875	391	C	4

*Rolled steel frame only.

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.

* 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 WATTSAYER® 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.

**CHEMICAL SERVICE/
SEVERE DUTY CONVERSION KITS**

Cast iron fan covers for 150 Series and 170 Series 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	\$105	C	10
213T-215T	---	175050	155	C	12
254T-256T	---	175051	207	C	18
284T-286T	160	175052	363	C	22
324T-326T	180	175053	377	C	29
364T-365T	200	175054	564	C	39
404T-405T	225	175055	615	C	49
444T-445T	250	175056	697	C	59
447T-449T	280	175891	697	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	\$26	A	2
48-S56	175298 ◆	26	A	2
56 143T-145T	175004	29	A	2
182T-184T*	175030	35	B	3
182T-184T	175961 ▼	35	C	3
213T-215T*	175846	51	B	12
213T-215T*	175305 *	51	B	12
213T-215T	175962 ▼	51	C	4
254T-256T	175963 ▼	67	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	\$51	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	\$46	A	2
182T-184T	175025 175695 Δ	89	B	3

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in blue are NEW items.

**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	\$27	A	2
48	Open / Enclosed	175969 ○	27	A	2
S56	Open	175000	27	A	2
	Enclosed	175180	27	A	2
	Open / Enclosed	175297 ●	27	A	2
56	Open	175075	32	A	2
	Enclosed	175076	32	A	2
	Severe Duty	175078	50	A	5
(see note 2)	Enclosed	M064076 ▲	28	A	2
143T-145T	Open	175181	32	B	2
	Enclosed	175077	32	B	2
182T-184T	Open / Enclosed	175691 Δ	39	B	2
182T-184T Special*†	Open / Enclosed	175294 †	39	B	5
S213T	Open / Enclosed	175693 Δ	75	B	2
213T-215T (1750 RPM)	Open	175009	75	B	19
	Open	175845 □	75	B	19
	Enclosed	175010	75	B	15
	Enclosed	175844 □	75	B	15
213T-215T (3450 RPM)	ODP	175303 ★	70	B	15
	Enclosed	175304 ★	70	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	\$16
182JP-184JP	175933	ODP	18
213JP-215JP	175305 ★	ODP	51

- 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 65.
- 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.

**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.)
182T-184T	Enclosed	175655 ★	\$83	C	12
213T-215T	Open	175066	83	C	15
	Enclosed	175068 ★	83	C	15
254T-256T	Open	175067	129	C	25
	Enclosed	175069 ✓✓	124	C	25
	Enclosed	175191	129	C	25
284T-286T	Open	175058	179	C	42
	Enclosed	175061	179	C	42
324T-326T	Open	175059 ★	232	C	57
	Enclosed	175062	232	C	57
364T-365T	Open	175060	389	C	75
	Enclosed	175063	389	C	75
404T-405T	Enclosed	175199	511	C	60
444T-445T->	Enclosed	175664	559	C	115
447T-449T	Enclosed	175958	618	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 X①	\$83	C	12
182T-184T	Enclosed	175394 ②	83	C	12
213T-215T	Enclosed	175869 *	83	C	14
324T-326T	Open	175454	232	C	57

*Locked bearing

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in blue are NEW items.

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 150 & 170 Series Cast Iron TEFC Motors only.

Blower Motor Voltage	Blower Motor Phase	NEMA Frame	Catalog Number	List Price	Disc. Sym.	CFM	App. Wgt. (lbs.)
115	1	182-4T	175674	\$456	C	260	10
115	1	213-5T	175675	476	C	260	11
115	1	254-6T	175676	511	C	260	17
115	1	284-6T	175677	614	C	500	24
115	1	324-6T	175678	656	C	500	28

For use with Rolled Steel TEFC Motors only.

Blower Motor Voltage	Blower Motor Phase	NEMA Frame	Catalog Number	List Price	Disc. Sym.	CFM	App. Wgt. (lbs.)
115	1	56-145T	175876	\$407	A	115	4
115	1	182-4T	175895	456	B	115	4
115	1	213-5T	175896	476	B	235	5

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 150 & 170 Series Cast Iron TEFC Motors only.

For NEMA Frame	Encoder Kit Catalog Number	List Price	Disc. Sym.
182-4T	175684	\$709	C
213-5T	175685	709	C
254-6T	175686	1145	C
284-6T	175687	1145	C

For use with Rolled Steel/TEFC Motors only.

For NEMA Frame	Encoder Kit Catalog Number	List Price	Disc. Sym.
56-145T	175960	\$571	A
182-4T	175897	829	B
213-5T	175898	829	B

TERMINAL BLOCK KITS

Terminal block kits for 150 and 170 Series Cast Iron motors. Designed for easy installation kit includes mounting bracket, terminal block, studs and mounting hardware.



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

NEMA Frame	IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
180/210T	100/112/132	175668	\$18	C	2
250/280T	160/180	175667	20	C	3
320/360T	200/225	175666	30	C	4
400/440T	250/280	175665	48	C	5

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.



NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
56-140T	175669	\$37	A	2
	175892*	37	A	2
182-4T	175649	45	A	2
213-5T	175847	56	C	11

* Use with motors built after 4/15/00.

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.



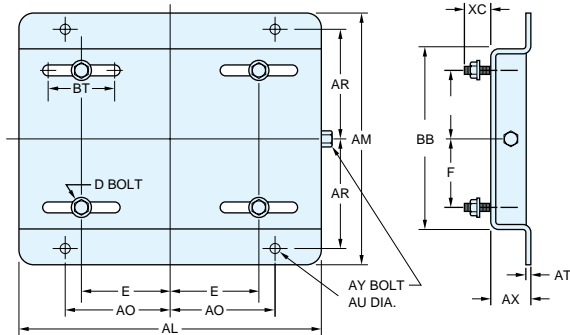
Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)
175026	\$50	A	2

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

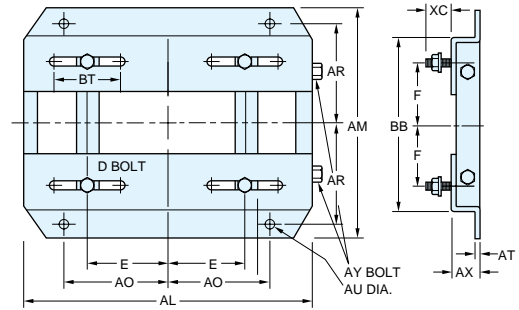
ADJUSTABLE MOTOR BASES—NEMA 48-447T FRAMES

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	\$38	A	10	6 1/4	1 1/8	4 1/4	2 1/8	1 3/8	3 1/2	2 3/4	3/8	3	.078	7/8	5/16 x 1	3/8 x 4	2
56	175033	38	A	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	.078	7/8	5/16 x 1	3/8 x 4	3
143T	175034	46	B	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	.119	1 3/16	5/15 x 1	3/8 x 4	5
145T	175035	46	B	10 1/2	8 1/2	1 1/8	6 1/2	2 3/4	2 1/2	3 3/4	3 3/8	3/8	3	.119	1 3/16	5/15 x 1	3/8 x 4	6
182T	175036	59	B	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	.134	1 1/2	3/8 x 1 3/4	1/2 x 5	9
184T	175037	59	B	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	.134	1 1/2	3/8 x 1 3/4	1/2 x 5	9
213T	175038	73	C	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	.164	1 1/2	3/8 x 1 3/4	1/2 x 5	13
215T	175039	73	C	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	.164	1 1/2	3/8 x 1 3/4	1/2 x 5	15
254T	175040	112	C	17 3/4	15 1/8	2	10 3/4	5	4 1/8	6 1/4	6 5/8	5/8	4	3/16	1 7/16	1/2 x 1 3/4	5/8 x 6	17
256T	175041	112	C	17 3/4	16 7/8	2	12 1/2	5	5	6 1/4	7 1/2	5/8	4	3/16	1 7/16	1/2 x 1 3/4	5/8 x 6	18
284T	175042	123	C	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	3/16	1 11/16	1/2 x 2	5/8 x 6	21
286T	175043	123	C	19 3/4	18 3/8	2	14	5 1/2	5 1/2	7	8 1/4	5/8	4 1/2	3/16	1 11/16	1/2 x 2	5/8 x 6	22
324T	175044	163	C	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	3/16	2 3/16	5/8 x 2 1/2	3/4 x 9	31
326T	175045	163	C	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	3/16	2 3/16	5/8 x 2 1/2	3/4 x 9	32
364T	175046	213	C	25 1/2	20 1/2	2 1/2	15 1/2	7	5 5/8	9	9 1/8	3/4	6	1/4	2 1/16	5/8 x 2 1/2	3/4 x 9	44
365T	175047	213	C	25 1/2	21 1/2	2 1/2	16 1/2	7	6 1/8	9	9 5/8	3/4	6	1/4	2 1/16	5/8 x 2 1/2	3/4 x 9	45
404T	175048	385	C	28 3/4	22 3/8	3	16 1/2	8	6 1/8	10	9 7/8	7/8	7	1/4	2 1/2	3/4 x 3	3/4 x 11	60
405T	175049	385	C	28 3/4	23 7/8	3	18	8	6 7/8	10	10 5/8	7/8	7	1/4	2 1/2	3/4 x 3	3/4 x 11	61
444T	175088	476	C	31 1/4	24 5/8	3	19 1/4	9	7 1/4	11	11	7/8	7 1/2	1/4	2 1/2	3/4 x 3	3/4 x 11	68
445T	175089	476	C	31 1/4	26 5/8	3	21 1/4	9	8 1/4	11	12	7/8	7 1/2	1/4	2 1/2	3/4 x 3	3/4 x 11	73
447T	175090	525	C	31 1/4	30 1/8	3	24 3/4	9	10	11	13 3/4	7/8	7 1/2	5/16	3	3/4 x 3 1/2	3/4 x 11	92
449T	175302	525	C	31 1/4	35 1/8	3	29 3/4	9	12 1/2	11	16 1/4	7/8	7 1/2	5/16	3	3/4 x 3 1/2	3/4 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	\$39	B	2	1	2 1/4	7 1/2	5/16-18
182T/184T	213/215	175092	58	B	3	3/4	1 3/4	9 1/2	3/8-16
213T/215T	254U/256U	175093	67	C	5	1	2 7/16	12 3/4	3/8-16
254T/256T	284U/286U	175094	94	C	8	3/4	2 3/4	14 1/4	1/2-13
284T/286T	324U/326U	175095	125	C	10	1	3 1/4	15 3/4	1/2-13
324T/326T	364U/365U	175097	159	C	13	1	3 11/16	16 1/2	5/8-11
364T/365T	404U/405U	175098	213	C	22	1	4 1/4	18 5/8	5/8-11
404T/405T	444U/445U	175127	273	C	24	1	4 1/4	21 5/8	3/4-10

Motor Accessories