



BRAKEMOTORS

Fail-safe positive, stop and hold brake motors. Brakes are spring set. Load is stopped automatically when power is turned off. LEESON brake motors feature a power off manual release for convenience, and for use in case of a power failure. The manual release resets automatically.

The brake is pre-connected to the motor on 145T and smaller for ease and safety of installation in the field – the motor may be operated on either rated voltage without reconnecting the brake. For vertical applications, please contact factory.



LEESON brakemotors come in a wide variety of configurations. This is only a small selection of those available. Please call your local distributor for availability of other configurations.

TOTALLY ENCLOSED FAN COOLED

575 Volts • NEMA C Face W/Base (except as noted)

HP	RPM 60 Hz	NEMA Frame	Brake Rating* (ft-lbs)	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	F.L. Amps 575V	% F.L. Eff.	"C" Dim. (in.)
1/3	1725	56C	3	110708●	\$825	A	28	.52	72.0	13.56
1/2	1725	56C	3	110709●	849	A	34	.8	75.0	14.06
3/4	1725	56C	6	110710●	938	A	37	.96	76.0	14.06
1	1725	56C	6	110818	1002	A	40	1.4	78.0	16.06
1½	1725	145TC	10	G121171	1158	A	53	1.8	84.0	17.00
2	1740	145TC	10	121172	1180	A	53	2.2	84.0	18.00
3	1740	182TC*	15	G151321BRK	1836	C	120	3.8	87.5	...
5	1740	184TC*	25	G151323BRK	1981	C	129	5.5	87.5	...
7½	1740	213TC	35	G150207BRK	2405	C	...	7.2	89.8	...
10	1740	215TC	50	G150212BRK	2877	C	...	9.6	89.7	...

Motors in this column have 1.15 Service Factor.
Brakes are sized to have 1.20 Service Factor.

*180 frame brakes have manual release under fan cowl.

TOTALLY ENCLOSED FAN COOLED

208-230/460V • NEMA C Face W/Base (except as noted)

NEMA Frame	Brake Rating* (ft-lbs)	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	F.L. Amps 230 V	% F.L. Eff.	"C" Dim. (in.)
56C	3	110669●	\$825	A	35	1.3	72.0	13.56
56C	3	110670●	849	A	36	2.0	75.0	14.06
56C	6	110671●	938	A	41	2.4	76.0	14.56
56C	6	110679	1002	A	43	3.4	78.0	16.06
145TC	10	G121051	1158	A	53	4.6	84.0	17.00
145TC	10	G121052	1180	A	53	4.6	84.0	18.00
182TC*	15	G151320BRK	1836	C	120	8.8	87.5	...
184TC*	25	G151322BRK	1981	C	129	13.4	87.5	...
213TC	35	G150157BRK	2405	C	...	18.4	89.8	...
215TC	50	G150140BRK	2877	C	...	24.0	89.7	...

Motors in this column have 1.15 Service Factor.
Brakes are sized to have 1.20 Service Factor.

**ACROSS CANADA
LEESON IS YOUR
STOCK SOURCE FOR:**



**BRAKES
CLUTCHES
PARTS**



TOTALLY ENCLOSED FAN COOLED

SINGLE PHASE • NEMA C Face W/Base • 115/208-230 Volts

HP	RPM 60 Hz	NEMA Frame	Brake Rating* (ft-lbs)	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	F.L. Amps 230V	C" Dim. (in.)
1/3	1725	56CFC	3	114165●	\$908	A	28	2.9	14.06
1/2	1725	56CFC	3	111950	926	A	33	4.4	15.06
3/4	1725	56CFC	6	114167	1033	A	45	4.4	15.06
1	1725	56CFC	6	111951	1098	A	43	5.4	15.56

Single phase brake motors have NEMA Service Factors—See page 149 for details.

- These motors are totally enclosed, non ventilated.
- † Class F insulated.
- ⊖ Brake coil is preconnected at the factory. If desired, brakes can be operated independent of power to the motor by changing connections in the conduit box. Three phase motors have 230 volt single phase coils. Single phase motors have 115/230 volt single phase coils.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalogue numbers in blue are NEW items.



BRAKEKITS™ AND COUPLER BRAKES



LEESON BRAKEKITS™

Kit of components to convert 56 through 256T frame stock TEFC motors to fail-safe brakemotors.

Kit mounts on fan end of motor. Kits for 56-184T steel frame motors include totally enclosed Stearns AC brake, replacement cast fan cover, shaft extension, fan and hardware. Kits for 213T-256T cast iron frame motors **do not include brake**, but are designed for Stearns 87,000 series brake.

Two 1/2" NPT holes with 18" leads are provided for connections. The BRAKEKIT™ adds 5 1/8" to the overall length of 56 and 143-5T frame, and 5 7/8" to the overall length of 182-184T frame.

BRAKEKITS™

Brake Rating (ft-lbs)	Mounts to NEMA Frame	Max. HP @ 1725rpm	Cat. No.	Cat. No.	Cat. No.	List Price	Disc. Sym.	App. Wt. (lbs.)
			115-208/230 V Brake Coil Voltage	208-230/460 V Brake Coil Voltage	575 V Brake Coil Voltage			
3	48/S56	1	—	175615	—	\$525	A	10
3	56/143-5T	1	175659	175139	175177	525	A	10
6	56/143-5T	2	175660	175140	175178	587	A	10
10	56/143-5T	3	175662	175141	175179	671	A	10
15	182-4T	3	—	175696	175698	1253	A	12
25	182-4T	5	—	175697	175699	1423	A	12

- 56/143-5T frame Brakekits cannot be used on S56 frame motors.
- Use the 182-4T frame Brakekits on motors having catalogue numbers with a "G" prefix or that are 131454 or higher.
- 182-4T frame Brakekits can also be used on single-phase 4-pole (1725RPM) motors, but can only be connected for 208-230V. All brake coils are single phase.
- 182-4T frame Brakekits cannot be used with single or three-phase 2-pole (3450RPM) motors.
- Brakes must be externally connected when used with controls such as vector and inverter drives.

BRAKE SELECTION

In this table, brake torque ratings are no less than 140% of the motor full load torque. Match HP & frame size of motor with appropriately rated BRAKEKIT™.

Motor HP	Brakemotor RPM Torque Rating of Brake (Lb-Ft)		
	3450	1725	1140
1/3	3	3	3
1/2	3	3	3
3/4	3	6	6
1	3	6	6
1 1/2	6	10	10
2	6	10	15
3	10	15	25
5	15	25	35
7.5	25	35	50
10	25	50	75
15	35	75	105
20	50	105	—

BRAKE ADAPTER KITS™

Brake Rating (ft-lbs)	Mounts to NEMA Frame	Max. HP @ 1725rpm	Cat. No. 115-208/230 V Single Phase	List Price	Disc. Sym.	App. Wt. (lbs.)
6-105	182-4T	7.25	LCBA180	\$175	A	29
6-105	213-5T	10	175710	202	C	30
6-105	254-6T	20	175711	286	C	40

- Brake Adapter Kits include adapter casting/fan guard, brake fan, adapter shaft and hardware needed to mount a Stearns® 87,000 series brake (sold separately).
- Shaded frame sizes are for use with cast iron motors.



BRAKEKITS™ FOR WASHGUARD™ MOTORS

Kit of components including a Stearns NEMA 4X brake to convert 56 thru 145T frame stock TEFC only motors to fail-safe brakemotors. Food safe white epoxy finish. BISSC Certified. Adds 5 1/8" to the overall length of 56 thru 145T WASHGUARD™ TEFC motors.



WASHGUARD™ Brakekits™ have the same convenient assembly method as general purpose models.

WASHGUARD™ BRAKEKITS™

Brake Rating (ft-lbs)	Mounts to NEMA Frame	Max. HP @ 1725rpm	Cat. No. 208-230/460 V Brake Coil Voltage	Cat. No. 575V Brake Coil Voltage	List Price	Disc. Sym.	App. Wt. (lbs.)
3	56/143-5T	1	175616	175616-5	\$894	A	24
6	56/143-5T	2	175617	175617-5	943	A	36
10	56/143-5T	3	175618	175618-5	1025	A	43



SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalogue numbers in blue are NEW items.

DOUBLE C-FACE COUPLER BRAKES

A new and expanded line of Coupler Brakes designed for applications where mounting the brake between the motor and driven load is the preferred, or most convenient, location. They are an excellent problem solver for applications where a brake needs to be added to existing equipment – without replacing the motor.

Rugged cast aluminum or cast iron construction Stearns brakes are well suited to most industrial applications. Coupler brakes are designed to be C-face connected on both ends – these brakes are not suited for overhung loads to be applied to the output shaft.

A wide range of voltages and brake torque ratings in both NEMA 2 and NEMA 4X enclosures are available from stock. NEMA 2 brakes are best suited for use with standard ODP and TEFC motors. NEMA 4X brakes are designed for use with LEESON WASHGUARD™ motors.

GENERAL PURPOSE COUPLER BRAKES

Mounts directly to the face and shaft of NEMA 56 through 215T-frame C-face motors to create a fail-safe brakemotor.

The 6 ft.lb. brake mounts to NEMA 56C or 143-5TC motors using an optional adaptor sleeve, which is included with the brake. Output shaft can be either 56C or 143-5TC depending on the location of the provided adaptor sleeve. A 1/2 NPT threaded lead exit hole is provided for power connections.



Stearns®

GENERAL PURPOSE (NEMA 2) COUPLER BRAKES

For Both Single and Three Phase Motors

Cat. No. 115/208-230V Single Phase	Cat. No. 208-230/460V Three Phase	Cat. No. 575V Three Phase	Brake Rating (ft.-lbs)	Max. HP @ 1725 rpm	Mounts to NEMA Frame	Coupler Brake Output Shaft and Face	Add to Motor "C" Dim.	List Price	Disc. Sym.	App. Wt. (lbs.)
175563	175564	175565	3	1	56C	5/8", 56C	4.91	\$520	A	13
175569	175570	175571	6	2	56C/143-5TC	5/8" or 7/8", 56C	4.91	584	A	14
175575	175576	175577	10	3	143-5TC	7/8", 143-5TC	4.91	586	A	15
—	175581	—	15	3	143-5TC	7/8", 143-5TC	4.91	592	A	16
—	175583	—	15	3	182-4TC	1 1/8", 182-4TC	8.38	1995	A	58
—	175585	—	25	5	182-4TC	1 1/8", 182-4TC	8.38	2085	A	58
—	175587	—	35	7 1/2	213-5TC	1 3/8", 213-5TC	8.88	2290	A	60
—	175589	—	50	10	213-5TC	1 3/8", 213-5TC	8.88	2528	A	62

WASHGUARD™ COUPLER BRAKES

Solid die-cast aluminum Stearns NEMA 4X coupler brake converts any TEFC or TENV 56C thru 215TC motor to a fail-safe brakemotor by mounting between the C-face motor and driven equipment. Food safe white epoxy finish. BISSC Certified. Adds 5" to the overall length of 56C thru 145TC WASHGUARD™ TEFC or TENV motors. Includes all mounting components.



WASHGUARD™ (NEMA 4X) COUPLER BRAKES

For Both Single and Three Phase Motors

Cat. No. 115/208-230V Single Phase	Cat. No. 208-230/460V Three Phase	Cat. No. 575V Three Phase	Brake Rating (ft.-lbs)	Max. HP @ 1725 rpm	Mounts to NEMA Frame	Coupler Brake Output Shaft and Face	Add to Motor "C" Dim.	List Price	Disc. Sym.	App. Wt. (lbs.)
175566	175567	175568	3	1	56C	5/8", 56C	4.94	\$646	A	13
175572	175573	175574	6	2	56C/143-5TC	5/8" or 7/8", 56C	4.94	695	A	14
175578	175579	175580	10	3	143-5TC	7/8", 143-5TC	4.94	742	A	15
—	175582	—	15	3	143-5TC	7/8", 143-5TC	4.94	863	A	16
—	175584	—	15	3	182-4TC	1 1/8", 182-4TC	8.38	2340	A	58
—	175586	—	25	5	182-4TC	1 1/8", 182-4TC	8.38	2392	A	58
—	175588	—	35	7 1/2	213-5TC	1 3/8", 213-5TC	8.88	2479	A	60
—	175590	—	50	10	213-5TC	1 3/8", 213-5TC	8.88	2762	A	62

Catalog numbers in blue are NEW items.



SUPER-MOD™ CLUTCH/BRAKES
ELECTRONIC CLUTCH/BRAKE MODULES



TENV/IP54 ENCLOSURES

These clutches and brakes are designed to deliver 96% better thermal capacity than the nearest TENV competitor.* Greater thermal capacity means faster heat dissipation, cooler operating temperatures and therefore enhanced operating efficiency and longer operating life.

For even better performance, include an optional Tor-ac® rectifier for 115 or 230 VAC input. Tor-ac rectifiers connect directly to the AC power source for switching on the AC-side. This eliminates contact arcing - further improving the life while providing mechanical response times equal to DC-side switching.

Contact LEESON for pricing.

SM-1020 C Face Clutch-Brake Module



The 1020 Module mounts directly to a C face motor and can then mount to a C face gear reducer. It can also be direct coupled or used to connect driven equipment by belt or chain. Both the clutch and brake elements are power-on for activation. External dimension are identical with most competitive brands making field replacement an exact "drop-in". No component assembly required.

Super-Mod™ 1020 C Face Clutch/Brake Module (Foot/Base Optional)

Catalogue Number ^②	Part Number ^①	Variables for Options Voltages & Hub Size
SM-50-1020	2-35-0561-01- [A][□][□]	Standard Unit <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - Hub Size Table Voltage Table Options - Features Table <i>Note: See ordering information in tables for complete part number.</i>
SM-50-1020B	2-35-0561-01- [B][□][□]	
SM-100-1020	2-35-0561-02- [A][□][□]	
SM-100-1020B	2-35-0561-02- [B][□][□]	
SM-180-1020	2-35-1401-02- [A][□][□]	
SM-180-1020B	2-35-1401-02- [B][□][□]	
SM-210-1020	2-35-1800-03- [A][□][R]	
SM-210-1020B	2-35-1800-03- [B][□][R]	
SM-250-1020	2-35-2100-04- [A][□][U]	
SM-250-1020B	2-35-2100-04- [B][□][U]	

① Example of a complete number.



Options - Features Table		Hub Size Table	
Character	Description	Character	Hub Size
A	Basic unit	L	5/8
B	Basic unit plus base	O	7/8
		R	1 1/8
		U	1 3/8

Voltage Table		
Character	Voltage	List Adder
C	12 Vdc	
E	24-28 Vdc	None
J	90-100 Vdc	
N	115 Vac	\$92.60
P	230 Vac	110.00

SM-1040 C Face Clutch Module



The 1040 Module can be mounted directly to a C face motor with the output shaft mounted into a C face gear reducer or coupled/ connected to the driven equipment by belt or chain. External dimensions are identical with most competitive brands making field replacements an exact "drop-in". No component assembly required.

Super-Mod™ 1040 C Face Clutch Only Module (Foot/Base Optional)

Catalogue Number ^②	Part Number ^①	Variables for Options Voltages & Hub Size
SM-50-1040	2-36-0561-01- [A][□][□]	Standard Unit <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - Hub Size Table Voltage Table Options - Features Table <i>Note: See ordering information in tables for complete part number.</i>
SM-50-1040B	2-36-0561-01- [B][□][□]	
SM-100-1040	2-36-0561-02- [A][□][□]	
SM-100-1040B	2-36-0561-02- [B][□][□]	
SM-180-1040	2-36-1401-02- [A][□][□]	
SM-180-1040B	2-36-1401-02- [B][□][□]	
SM-210-1040	2-36-1800-03- [A][□][R]	
SM-210-1040B	2-36-1800-03- [B][□][R]	
SM-250-1040	2-36-2100-04- [A][□][U]	
SM-250-1040	2-36-2100-04- [B][□][U]	

Options - Features Table		Hub Size Table	
Character	Description	Character	Hub Size
A	Basic unit	L	5/8
B	Basic unit plus base	O	7/8
		R	1 1/8
		U	1 3/8

Voltage Table		
Character	Voltage	List Adder
C	12 Vdc	
E	24-28 Vdc	None
J	90-100 Vdc	
N	115 Vac	\$92.60
P	230 Vac	110.00

SM-20 C Face Brake Module, w/Output Shaft



The 20 Module mounts directly to a C face motor and can then mount to a C face reducer. It can also be direct coupled or used to connect driven equipment by belt or chain. It is a power-on brake. External dimensions are identical with most competitive brands making field replacements an exact "drop-in". No component assembly required.

Super-Mod™ 20 C Face Brake Only Module (with output shaft)

Catalogue Number ^②	Part Number ^①	Variables for Options Voltages & Hub Size
SM-50-20	2-37-0561-01- [□][□][□]	Standard Unit <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - Hub Size Table Voltage Table Options - Features Table <i>Note: See ordering information in tables for complete part number.</i>
SM-100-20	2-37-0561-02- [□][□][□]	
SM-180-20	2-37-1401-02- [□][□][□]	
SM-210-20	2-37-1801-03- [□][□][R]	
SM-250-20	2-37-2101-04- [□][□][U]	
SM-250-20	2-37-2101-04- [□][□][U]	

Options - Features Table		Hub Size Table	
Character	Description	Character	Hub Size
A	Basic unit	L	5/8
C	Basic unit plus clutch input adapter	O	7/8
		R	1 1/8
		U	1 3/8

Voltage Table		
Character	Voltage	List Adder
C	12 Vdc	
E	24-28 Vdc	None
J	90-100 Vdc	
N	115 Vac	\$92.60
P	230 Vac	110.00

CALL FACTORY FOR MULTIPLIER

② Torque		210-250 Frame Units	
SM-50	16 lb-ft	Units available in 210-250 frames are for open splash proof/IP21 application. They are available in the six configurations with torque sizes of 75 and 145 lb-ft.	
SM-100	35 lb-ft		
SM-180	35 lb-ft		

Washdown Duty is also available. Contact your local distributor.

SUPER-MOD CONVERSION KITS

BASE KITS

Option (Series)	Part No.	List Price	Option (Series)	Part No.	List Price
SM-50/100	5-78-1101-01	\$56.60	SM-50/100	5-78-6101-31	\$291.60
SM-180	5-78-1101-02	79.90	SM-180	5-78-6101-32	291.60
SM-210	5-78-0001-30	120.50	SM-210	5-78-0000-23	549.00
			SM-250	5-78-0000-24	692.20

INPUT ADAPTER KITS

TOR-AC® Solid-State Rectifier (single channel)

Option (Series)	Voltage	Cat. No.	Part No.	List Price
All	115VAC - 90VDC	SBC-100-1	4-1-20194-01	\$92.60
All	230VAC - 90VDC	SBC-200-1	4-1-20290-01	110.00

LARGEST ASSORTMENT OF STEARNS BRAKES & PARTS IN CANADA

IN STOCK!

LEESON also supplies:

- ✓ **MILL CLUTCHES**
- ✓ **MARINE/MARITIME BRAKES**
- ✓ **HAZARDOUS LOCATION BRAKES**
- ✓ **ELECTROMAGNETIC CLUTCHES**
- ✓ **WASHDOWN BRAKES**
- ✓ **COUPLER BRAKES**
- ✓ **REPLACEMENT PARTS FOR ABOVE**

STEARNS manufactures one of the most comprehensive lines of standard and special AC/DC industrial brakes and clutches on the market today. STEARNS was the first company to develop self-adjusting brakes, as well as the originator of brakes for hazardous locations and the first known clutch.

LEESON relies on STEARNS components for its brakemotors because of their simplicity, craftsmanship and reliability.

LEESON Canada is the largest distributor of STEARNS products in the country today. STEARNS components are warehoused across Canada in all LEESON branches and LEESON personnel are equipped to help you with any technical questions you may have about brake or clutch products.

For more information on price and delivery ask your local rep or call (905) 670-4770.

**FOR OFF-THE-SHELF BRAKES,
LOOK TO THE BRAKE EXPERT... LEESON CANADA**