

# Series 81,000 and 82,000

## Mounting Face NEMA 324 and 326TC, TSC, UC or USC, NEMA 364 and 365TC, TSC, UC or USC

### NEMA 404 and 405 TC, TSC, UC or USC

#### 81,000 Series Specifications

Nominal Static Torque	No. of Friction Discs	Coil Size	Maximum Solenoid Cycle Rate <sup>①</sup>	Thermal Capacity <sup>②</sup>	Inertia (Wk <sup>2</sup> )
			cycles/min	hp-sec/min (watts)	lb-ft <sup>2</sup> (kgm <sup>2</sup> x 10 <sup>-3</sup> )
125 (169)	2	9	15	30 (373)	.192 (8.06)
175 (237)	2	9	15	30 (373)	.192 (8.06)
230 (312)	3	9	15	30 (373)	.280 (11.76)

#### 82,000 Series Specifications

Nominal Static Torque	No. of Friction Discs	Coil Size		Maximum Solenoid Cycle Rate <sup>①</sup>		Thermal Capacity <sup>②</sup>	Inertia (Wk <sup>2</sup> )
		AC	DC	cycles/min			
				AC	DC		
125 (169)	2	9	9	15	15	50 (621)	.490 (20.58)
175 (237)	2	9	9	15	15	50 (621)	.490 (20.58)
230 (312)	3	9	9	15	15	50 (621)	.704 (29.57)
330 (447)	3	K9	9	13	15	50 (621)	.704 (29.57)
440 (597)	4	K9	9	13	15	50 (621)	.918 (38.56)

① Maximum solenoid cycle rate is based on ambient temperature of 72°F (22°C) with 50% duty cycle. Does not relate to brake cycle rate (see Thermal Capacity).

② Thermal capacity rating is based on ambient temperature of 72°F (22°C) stop time of one second or less, with no heat absorbed from motor. Refer to "Selection Procedure" Section. Derate thermal capacity by 25% for vertical mounting.

#### Current Ratings (amperes)

Coil Size	Frequency	Voltage	Current	
			Inrush	Holding
9	60 Hz	115	44.0	1.6
		200	25.4	.9
		230	22.0	.8
		400	12.7	.5
		460	11.4	.4
		575	8.8	.3
	50 Hz	110	32.1	1.2
		220	16.0	.6
		380	11.1	.4
	DC	24	56.4	.7
		95	14.9	.2
		115	11.4	.1
230		5.9	.07	
K9	60 Hz	115	50.0	2.2
		200	28.0	1.3
		230	25.0	1.1
		400	14.0	.6
		460	12.5	.6
		575	10.0	.5
	50 Hz	110	36.0	1.6
		220	24.0	.9
		380	12.5	.6
	DC	—	—	—
		—	—	—
		—	—	—

#### Ordering and Identification Information

The following example and tables provide information for selecting the appropriate three-letter suffix when ordering a Stearns Brake.

Example of a complete part number, Series 81,000:

1-081-011-02-NLF — Lead wire position (internal and external, left and right)  
 — 460 Vac  
 — 2-1/8 bore and 1/2 x 1/4 keyway

Example of a complete part number, Series 82,000:

1-082-012-02-NLF — Lead wire position (internal and external, left and right)  
 — 460 Vac  
 — 2-1/8 bore and 1/2 x 1/4 keyway

#### 81,000 Series Hub Selection

Character	Bore (in.)	Keyway** (in. x in.)
A	1 1/8	1/4 X 1/8
B*	1 1/4	1/4 X 1/8
C	1 3/8	5/16 X 5/32
D	1 1/2	3/8 X 3/16
E*	1 9/16	3/8 X 3/16
F	1 5/8	3/8 X 3/16
G*	1 11/16	3/8 X 3/16
H	1 3/4	3/8 X 3/16
I*	1 13/16	1/2 x 1/4
J	1 7/8	1/2 x 1/4
K*	1 15/16	1/2 x 1/4
L*	2	1/2 x 1/4
M*	2 1/16	1/2 x 1/4
N	2 1/8	1/2 x 1/4
O*	2 3/16	1/2 x 1/4
P*	2 1/4	1/2 x 1/4
Q*	2 5/16	5/8 x 5/16
R	2 3/8	5/8 x 5/16
S*	2 7/16	5/8 x 5/16
T	2 1/2	5/8 x 5/16
W	1 1/8	pilot bore

Maximum allowable bore 2.500 in. (76.200 mm) (maximum shaft length not to exceed end of hub)

\*These bores are non-standard.

\*\*Keyseats made to ANSI B17.1 standard.

#### 82,000 Series Hub Selection

Character	Bore (in.)	Keyway** (in. x in.)
A	1 1/8	1/4 X 1/8
B*	1 1/4	1/4 X 1/8
C	1 3/8	5/16 X 5/32
D	1 1/2	3/8 X 3/16
E*	1 9/16	3/8 X 3/16
F	1 5/8	3/8 X 3/16
G*	1 11/16	3/8 X 3/16
H	1 3/4	3/8 X 3/16
I*	1 13/16	1/2 x 1/4
J	1 7/8	1/2 x 1/4
K*	1 15/16	1/2 x 1/4
L*	2	1/2 x 1/4
M*	2 1/16	1/2 x 1/4
N	2 1/8	1/2 x 1/4
O*	2 3/16	1/2 x 1/4
P*	2 1/4	1/2 x 1/4
Q*	2 5/16	5/8 x 5/16
R	2 3/8	5/8 x 5/16
S*	2 7/16	5/8 x 5/16
T	2 1/2	5/8 x 5/16
U*	2 5/8	5/8 x 5/16
V*	2 3/4	5/8 x 5/16
W	1 1/8	pilot bore
X	2 7/8	3/4 x 3/8
Y*	2 15/16	3/4 x 3/8
Z*	3	3/4 x 3/8

Maximum allowable bore 3.000 in. (76.200 mm) (maximum shaft length not to exceed end of hub)

\*These bores are non-standard.

\*\*Keyseats made to ANSI B17.1 standard.

#### Standard AC Voltage Ratings

Character	Voltage	Hz
B	115	60
D	110	50
E	200	60
F	230	60
	190	50
H	220	50
L	460	60
	380	50
M	415	50
N	575	60
O	110/220	50
P	115/230	60
Q	230/460	60
	190/380	50
R	200/400	60

#### Direct Current

Character	Voltage
U	24
V	36
W	48
X	95
Y	115
Z	230

Consult factory if other DC voltage is needed.

Modifications are available- see SAB Modification Section



