



WEG Rolled Steel General Purpose 3-phase Brake Motors

56/256 Frame TEFC Brake Motors – 1/4HP to 20HP

Standard Features

- 208-230/460 Voltage, as noted
- Spring set, solenoid actuated AC Brake – 208-230/460V
- Rated Output: 1/4 - 20 HP
- 1800 RPM
- Manual release brake lever
- Class F insulation
- Constant and variable torque speed ratings for inverter duty, as noted
- Frame Sizes: NEMA 56 to 256
- C-face footed, rigid, or footless mount
- Enclosure: TEFC, IP55
- Aluminum endshields
- Internal bolts, giving a clean surface to the motor
- Double shielded ball bearings on frames 56 to 215
- Mounting orientation:
 - C-face – horizontal or vertical
 - Rigid base – horizontal only

Advanced Features

- New ventilation system improves thermal performance
- Robust foot design suitable for tougher applications
- Oversized diagonally split aluminum terminal box exceeds IP55 requirements
- Terminal box rotatable in 90° increments for flexibility during installation
- Color coded leads as standard for easy wiring
- Bearing cap as standard on flanged motors
- Motor frame painting system 500 hours salt spray resistant

Applications

- Conveyors
- Door Operators
- Packaging Equipment
- Unit Handling



00118ET3EBM56CFL-S



00158ET3EBM145TC-S

Motor Specifications – 3-phase

Part Number	Price	HP	Base RPM	Volts	Encl.	NEMA Frame	Service Factor*	NEMA Design	Weight (lb)	Drawing Links
Rigid Base with C-face										
00118ET3EBM56C-S	\$;005ypv:	1	1800	208-230/460 VAC	TEFC	56C	1.15	B	50	PDF
00158ET3EBM145TC-S	\$;005ypx:	1 1/2				143/5TC			51	PDF
00218ET3EBM145TC-S	\$;005ypy:	2				182TC			54	PDF
00318ET3EBM182TC-S	\$;00655q:	3				184TC	104		PDF	
00518ET3EBM184TC-S	\$;00655s:	5				213TC	101		PDF	
00718ET3EBM213TC-S	\$;00655t:	7 1/2				215TC	157		PDF	
01018ET3EBM215TC-S	\$;00655u:	10					171		PDF	
Rigid Base										
.3318ES3EBMW56-S	\$05ypq:	1/3	1800	208-230/460 VAC	TEFC	56	1.15	-	26	PDF
.5018ES3EBMW56-S	\$05yps:	1/2							26	PDF
.7518ES3EBMW56-S	\$;05ypt:	3/4							30	PDF
00118ET3EBM56-S	\$;005ypu:	1				254T 256T	1.15 1.00-1.00	B	48	PDF
01518ET3EBM254T-S	\$;00655o:	15							259	PDF
02018ET3EBM256T-S	\$;00655p:	20							289	PDF
C-face										
.2518ES3EBMW56CFL-S	\$05ypz:	1/4	1800	208-230/460 VAC	TEFC	56C	1.15	-	24	PDF
.3318ES3EBMW56CFL-S	\$;05ypj:	1/3							25	PDF
.5018ES3EBMW56CFL-S	\$;05ypj:	1/2							28	PDF
.7518ES3EBMW56CFL-S	\$;005yp_:	3/4							30	PDF
00118ET3EBM56CFL-S	\$;005yp#:	1							46	PDF
00158ET3EBM56CFL-S	\$;005yp!:	1 1/2							49	PDF
00218ET3EBM56CFL-S	\$;00655v:	2				184TC 215TC	1.15 1.15-1.15	B	53	PDF
00518ET3EBMR184TC-S	\$;00655x:	5							99	PDF
01018ET3EBMR215TC-S	\$;00655v:	10							168	PDF

Frame 143/5C: Motor dimensions will match either 143C or 145C frame

*Note: 1.15 SF (1.0 SF with VFD)



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Performance Data – 3-phase

Part Number	HP	F.L. RPM	Volts	Current			Torque			Torque Speed Rating		F.L. Effic. %	F.L. Power Factor	Moment of Inertia (joules)			
				No Load Current	Full Load Amps	Locked Rotor Amps (460V)	Full Load (lb-ft)	Locked Rotor	Breakdown	Constant	Variable						
								% of F.L. Torque									
Rigid Base with C-face																	
00118ET3EBM56C-S	1	1765	208–230/460 VAC	1.53-1.78/0.89	3.25-2.94/1.47	8.6	4.04	280	300	5:1	1000:1	85.5	0.75	0.00519			
00158ET3EBM145TC-S	1 1/2	1750		1.87-2.17/1.08	4.47-4.04/2.02	8.2	6.11	270		4:1		86.5	0.79	0.00431			
00218ET3EBM145TC-S	2	1745		2.41-2.8/1.4	6.02-5.44/2.72		8.16						0.80	0.00539			
00318ET3EBM182TC-S	3	1765		3.45-4.00/2.00	8.43-7.62/3.81	8.8	12.10	220					89.5	0.81	0.0169		
00518ET3EBM184TC-S	5	1750		5.94-6.89/3.44	14.4-13.0/6.49	7	20.30							0.80	0.013		
00718ET3EBM213TC-S	7 1/2	1770		7.60-8.81/4.41	20.1-18.4/9.18	7.3	30.20	260						91.7	0.82	0.0395	
01018ET3EBM215TC-S	10	1760		9.56-11.1/5.54	27.0-24.4/12.2	7	40.40	250							0.84	0.04505	
Rigid Base																	
.3318ES3EBMW56-S	1/3	1730	208–230/460 VAC	0.919-1.07/0.533	1.46-1.32/0.659	5.4	1.36	230	270		10:1			1000:1	68.0	0.70	0.00134
.5018ES3EBMW56-S	1/2			1.2-1.4/0.698	1.98-1.79/0.896	6	2.06	260	280	300		4:1			72.0	0.72	0.00168
.7518ES3EBMW56-S	3/4			1.54-1.78/0.892	2.7-2.44/1.22	6.5	3.09	270	290						75.5	0.75	0.00202
00118ET3EBM56-S	1			1765	1.53-1.78/0.89	3.25-2.94/1.47	8.6	4.04	280	300	5:1		85.5		0.75	0.00519	
01518ET3EBM254T-S	15			1770	14.9-17.3/8.65	40.3-36.4/18.2	6.5	60.30	250		92.4		0.82		0.0904		
02018ET3EBM256T-S	20			1765	19.2-22.2/11.1	54.6-49.4/24.7	6.7	80.60	270						93.0	0.1113	
C-face																	
.2518ES3EBMW56CFL-S	1/4	1735	208–230/460 VAC	0.716-0.83/0.415	1.11-1.01/0.503	5.3	1.03	240	290	10:1	1000:1	66.0	0.68	0.00118			
.3318ES3EBMW56CFL-S	1/3	1730		0.919-1.07/0.533	1.46-1.32/0.659	5.4	1.36	230	270			300	4:1	68.0	0.70	0.00134	
.5018ES3EBMW56CFL-S	1/2			1.2-1.4/0.698	1.98-1.79/0.896	6	2.06	260	280					72.0	0.72	0.00168	
.7518ES3EBMW56CFL-S	3/4			1.54-1.78/0.892	2.7-2.44/1.22	6.5	3.09	270	290					75.5	0.75	0.00202	
00118ET3EBM56CFL-S	1			1765	1.53-1.78/0.89	3.25-2.94/1.47	8.6	4.04	280	300		5:1		85.5	0.79	0.00519	
00158ET3EBM56CFL-S	1 1/2			1750	1.87-2.17/1.08	4.47-4.04/2.02	8.2	6.11	270			86.5		0.80	0.00464		
00218ET3EBM56CFL-S	2			1745	2.41-2.80/1.40	6.02-5.44/2.72		8.16							0.0055		
00518ET3EBMR184TC-S	5			1750	5.94-6.89/3.44	14.4-13.0/6.49	7	20.30	220						89.5	0.013	
01018ET3EBMR215TC-S	10			1760	9.56-11.1/5.54	27.0-24.4/12.2		40.40	250						91.7	0.04505	



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Brake Performance Data – 3-phase					
Part Number	HP	Brake Voltage	Brake Torque (lb-ft)	Brake Manual Release	
Rigid Base with C-face					
<u>00118ET3EBM56C-S</u>	1	208-230/460 VAC	5.9	Yes	
<u>00158ET3EBM145TC-S</u>	1 1/2		10.3		
<u>00218ET3EBM145TC-S</u>	2				
<u>00318ET3EBM182TC-S</u>	3				15.0
<u>00518ET3EBM184TC-S</u>	5				25.0
<u>00718ET3EBM213TC-S</u>	7 1/2				35.0
<u>01018ET3EBM215TC-S</u>	10				50.0
Rigid Base					
<u>.3318ES3EBMW56-S</u>	1/3	208-230/460 VAC	3.0	Yes	
<u>.5018ES3EBMW56-S</u>	1/2		5.9		
<u>.7518ES3EBMW56-S</u>	3/4				
<u>00118ET3EBM56-S</u>	1				75.0
<u>01518ET3EBM254T-S</u>	15				105.0
<u>02018ET3EBM256T-S</u>	20				
C-face					
<u>.2518ES3EBMW56CFL-S</u>	1/4	208-230/460 VAC	3.0	Yes	
<u>.3318ES3EBMW56CFL-S</u>	1/3		5.9		
<u>.5018ES3EBMW56CFL-S</u>	1/2				
<u>.7518ES3EBMW56CFL-S</u>	3/4				
<u>00118ET3EBM56CFL-S</u>	1				10.3
<u>00158ET3EBM56CFL-S</u>	1 1/2				10.0
<u>00218ET3EBM56CFL-S</u>	2				25.0
<u>00518ET3EBMR184TC-S</u>	5				50.0
<u>01018ET3EBMR215TC-S</u>	10				



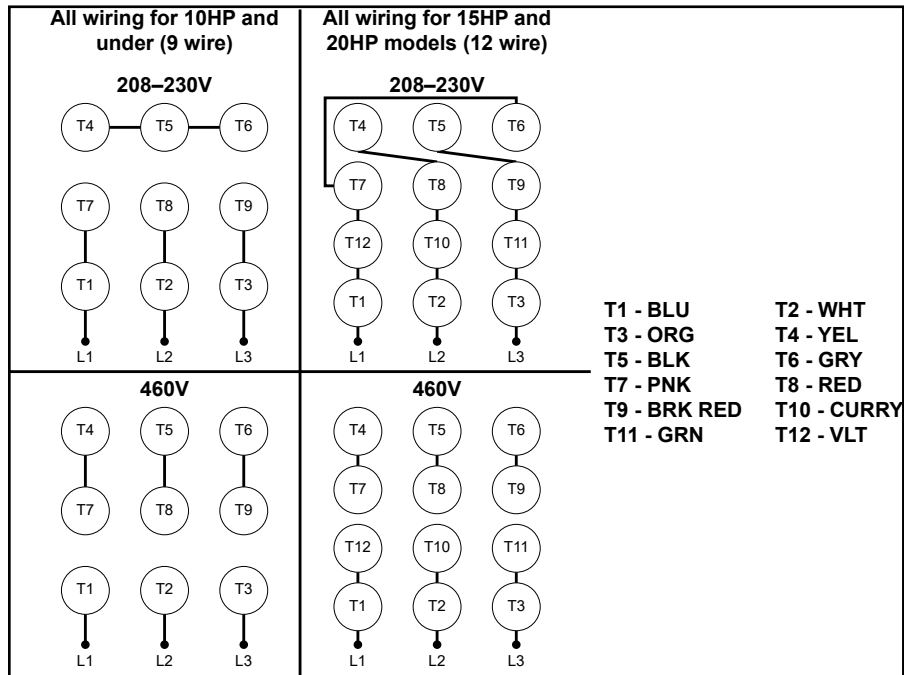
WEG Rolled Steel General Purpose 3-phase Brake Motors

Alternate Performance Data (50Hz) – 3-phase						
Part Number	F.L. RPM (380-415)	Volts	Current			F.L. Power Factor
			No Load Current	Full Load Amps	Locked Rotor Amps (380-415)	
C-face						
<u>.2518ES3EBMW56CFL-S</u>	1410-1430	190-220/380-415 VAC	0.812-0.907/0.406-0.481	1.11-1.07/0.554-0.567	4.4-4.7	0.76-0.69
<u>.3318ES3EBMW56CFL-S</u>	1400-1420		1.04-1.18/0.519-0.625	1.46-1.4/0.73-0.744	4.1-4.4	0.8-0.73
<u>.5018ES3EBMW56CFL-S</u>			1.36-1.57/0.682-0.83	2.04-1.98/1.02-1.05	4.7-5.1	0.81-0.73
<u>.7518ES3EBMW56CFL-S</u>	1395-1415		1.73-2.09/0.866-1.11	2.84-2.68/1.42-1.42	5.0-5.5	0.83-0.76
<u>00118ET3EBM56CFL-S</u>	1450-1460		1.76-1.86/0.879-0.988	3.4-3.06/1.7-1.62	6.5-7.5	0.81-0.77
<u>00158ET3EBM56CFL-S</u>	1420-1435		2.13-2.37/1.07-1.26	4.82-4.28/2.41-2.27	6.1-7.2	0.84-0.80
<u>00218ET3EBM56CFL-S</u>	1415-1435		2.75-3.09/1.37-1.64	6.50-5.79/3.25-3.07	6.0-7.1	0.85-0.81
<u>00518ET3EBMR184TC-S</u>	1425-1440		6.74-7.85/3.37-4.16	15.8-14.1/7.88-7.47	5.8-6.8	0.84-0.80
<u>01018ET3EBMR215TC-S</u>	1465-1470		10.9-12.1/5.46-6.43	22.4-20.6/11.2-10.9	7.6-8.7	0.83-0.78
Rigid Base with C-face						
<u>00118ET3EBM56C-S</u>	1450-1460	190-220/380-415 VAC	1.76-1.86/0.879-0.988	3.4-3.06/1.7-1.62	6.5-7.5	0.81-0.77
<u>00158ET3EBM145TC-S</u>	1420-1435		2.13-2.37/1.07-1.26	4.82-4.28/2.41-2.27	6.1-7.2	0.84-0.8
<u>00218ET3EBM145TC-S</u>	1415-1435		2.75-3.09/1.37-1.64	6.5-5.79/3.25-3.07	6.0-7.1	0.85-0.81
<u>00318ET3EBM182TC-S</u>	1455-1465		3.95-4.22/1.97-2.24	9.08-8.15/4.54-4.32	6.7-8.0	
<u>00518ET3EBM184TC-S</u>	1425-1440		6.74-7.85/3.37-4.16	15.8-14.1/7.88-7.47	5.8-6.8	0.84-0.80
<u>00718ET3EBM213TC-S</u>	1455-1465		8.65-9.60/4.33-5.09	22.0-19.4/11.0-10.3	6.2-7.3	0.86-0.83
<u>01018ET3EBM215TC-S</u>	1465-1470		10.9-12.1/5.46-6.43	22.4-20.6/11.2-10.9	7.6-8.7	0.83-0.78
Rigid Base						
<u>.3318ES3EBMW56-S</u>	1400-1420	190-220/380-415 VAC	1.04-1.18/0.519-0.625	1.46-1.4/0.73-0.744	4.1-4.4	0.8-0.73
<u>.5018ES3EBMW56-S</u>			1.36-1.57/0.682-0.83	2.04-1.98/1.02-1.05	4.7-5.1	0.81-0.73
<u>.7518ES3EBMW56-S</u>	1395-1415		1.73-2.09/0.866-1.11	2.84-2.68/1.42-1.42	5.0-5.5	0.83-0.76
<u>00118ET3EBM56-S</u>	1450-1460		1.76-1.86/0.879-0.988	3.4-3.06/1.7-1.62	6.5-7.5	0.81-0.77
<u>01518ET3EBM254T-S</u>	1455-1465		17.1-18.6/8.53-9.86	43.8-38.9/21.9-20.6	5.5-6.5	0.85-0.82
<u>02018ET3EBM256T-S</u>	1470-1475		21.9-24.1/10.9-12.8	44.4-40.7/22.2-21.6	7.4-8.5	0.82-0.77



WEG Rolled Steel General Purpose 3-phase Brake Motors

Motor Wiring



NOTE: Interchange any 2 line wires to reverse rotation

Brake Wiring

Low Voltage (208-230V)

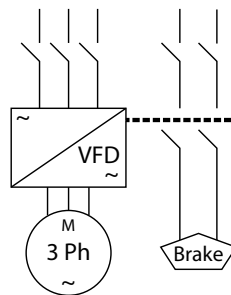
- Join B1 & B3 to Line1
- Join B2 & B4 to Line2

High Voltage (460V)

- B1 to Line1
- B2 to Line2
- B3 & B4: Wire nut together



NOTE: Brake must be wired separately when the motor is VFD operated. Brake requires full line voltage, 208-230 or 460V



Motor and brake connection for VFD