marathon®

General Purpose Motors

Model No: 180LTFC6538
Catalog No: R343A

General Purpose Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1800 RPM, 180L Frame, TEFC

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Product Information Packet: Model No: 180LTFC6538, Catalog No: R343A General Purpose Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1800 RPM, 180L Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**30 & 25 Hp**
Output KW	**22.4 & 18.7 kW**	Voltage	**230/460 & 200/400 V**
Speed	**1770 & 1480 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**180L**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**94.1 & 93 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**70/35 & 69/34.5 A**
Power Factor	**85**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**H**	Drive End Bearing Size	**6311**
Opp Drive End Bearing Size	**6211**	UL	**No**
CSA	**N**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**

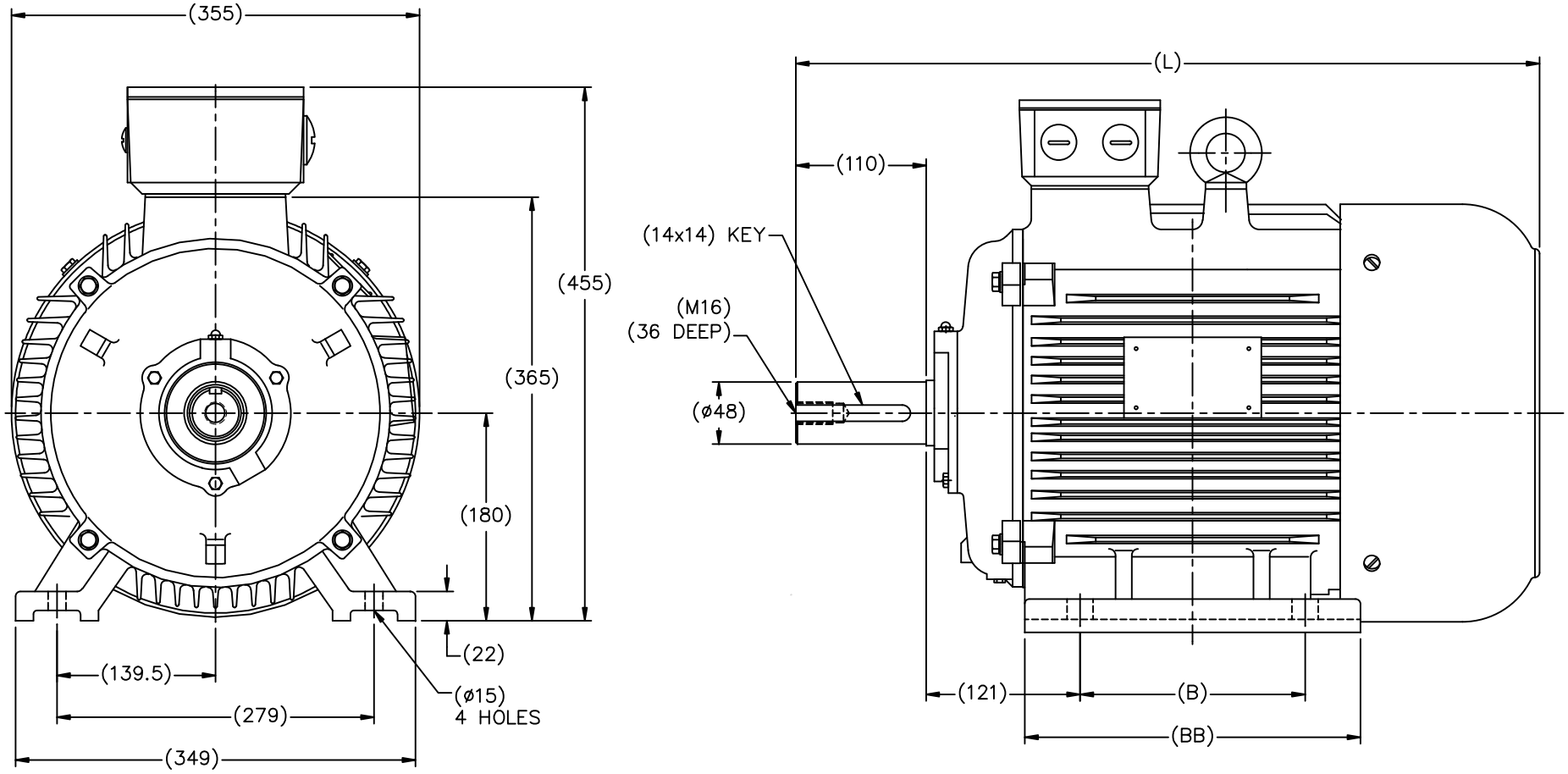
Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start & Wye Start Delta Run Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.052 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**IEC**	Overall Length	**26.77 in**
Shaft Diameter	**1 8/9 in**	Shaft Extension	**4.31 in**
Assembly/Box Mounting	**F3**	Inverter Load	**Constant 20:1**

Drawings

Connection Drawing	**004172.03ME**	Outline Drawing	**B-SS622257**

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(DIMENSIONS ARE IN MILLIMETERS)

Cat.No		FRAME	B	BB	L
193324.60	193322.60	DF180M	241	311	680
193325.60	193320.60	DF180L	279	349	718

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	METRIC
.X	±2.5
.XX	±.76
.XXX	±.127
.XXXX	±.0127
ANG	±7'30"

REGAL-BELOIT CORPORATION

DRAWN HLB 12-06-2010
CHK DJK 12-17-2010
APPD SB 12-13-2010
SCALE 1=18
REF
FMF HEBEI
PREV

TITLE OUTLINE
DF180M,L-4,6

MAT'L.
FINISH
CAD FILE SS622257
RFP 12-22-2010
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Data Sheet

Date: 20-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

180LTFC6538

Submittal

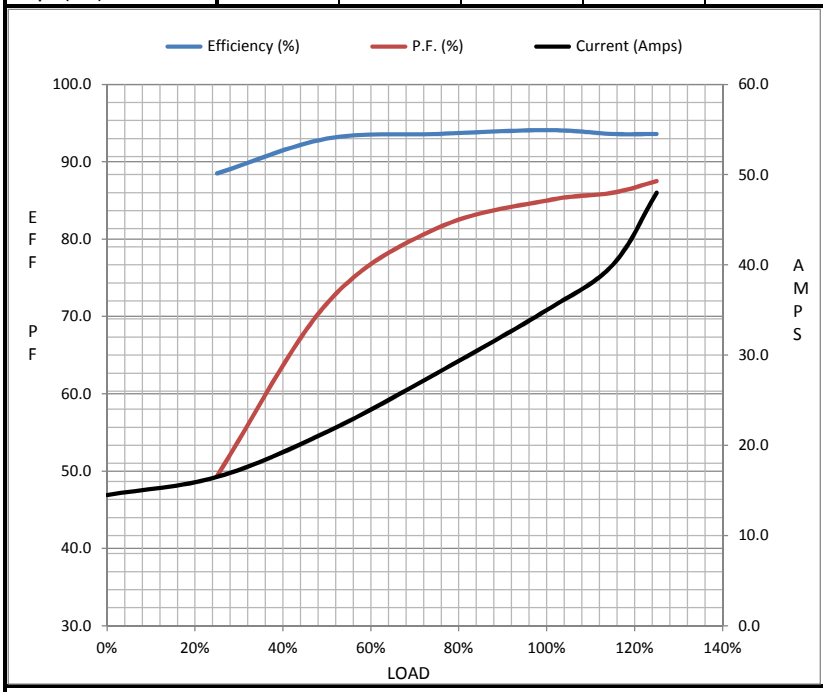
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.5	16.5	21.5	28.0	35.0	40.0	48.0	240	
Torque (ft-lb)	0.00	21.9	44.1	66.4	89.0	103	112	172	
RPM	1800	1792	1783	1775	1770	1,767	1762	0	
Efficiency (%)		88.5	93.0	93.6	94.1	93.6	93.6		
P.F. (%)	5.7	49.4	71.7	81.4	85.0	86.0	87.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1770	1800
Current (Amps)	240	215	150	35.0	14.5
Torque (ft-lb)	172	155	247	89.0	0.00



Information Block

HP	30.0
Sync. RPM	1800
Frame	286
Enclosure	TEFC
Construction	TFC
Voltage	230/460#200/40(V
Frequency	60 Hz
Design	A
LR Code letter	H
Service Factor	1.15
Temp Rise @ FL	46 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	4.7 Lb-Ft²
Ref Wdg	T14504006 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	CONSTANT 20:1
Outline Dwg	B-SS622257
Conn. Diag	004172.03ME

Additional Specifications:

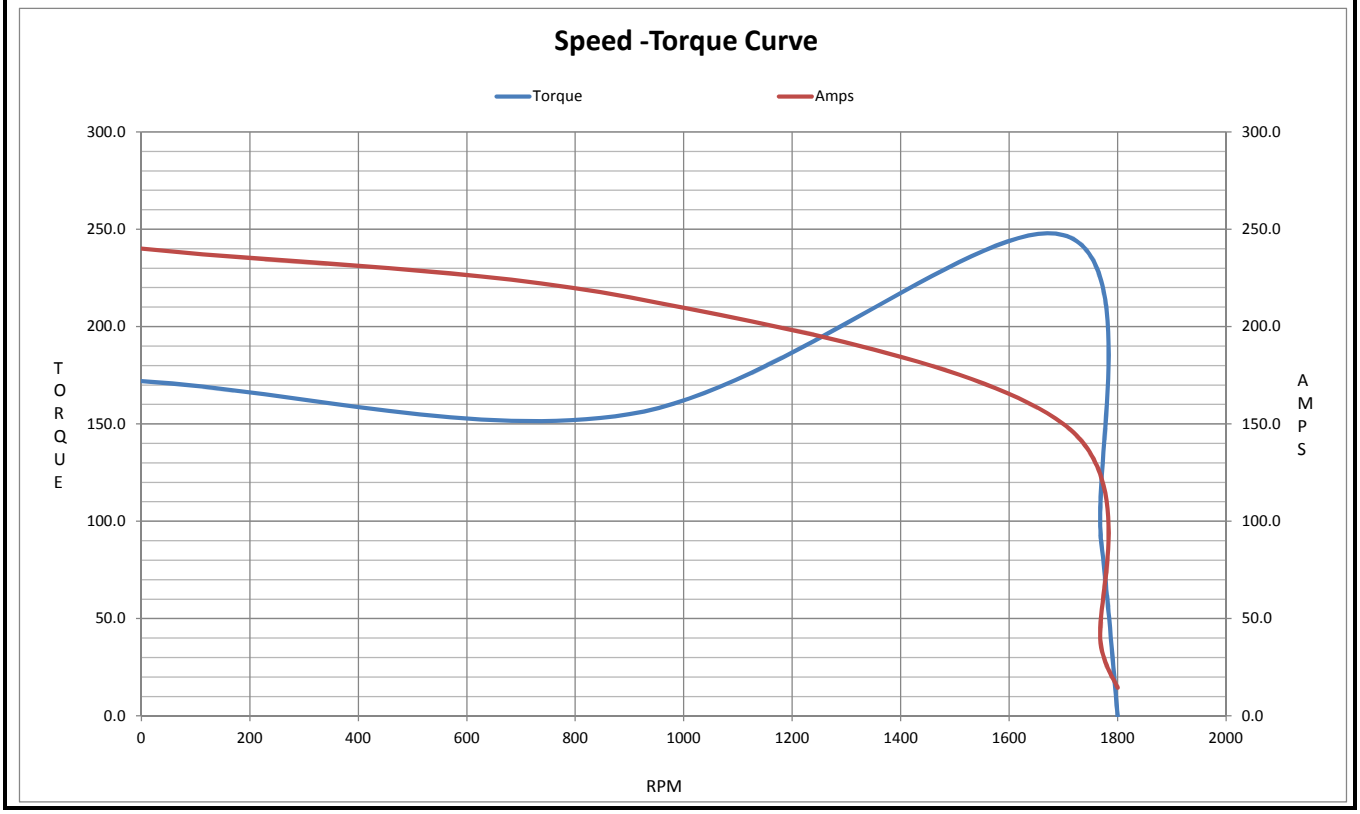
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365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000

Speed -Torque Curve



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CERTIFICATION DATA SHEET

Model#:	180LTFC6538 AA	**WINDING#:**	T14504006 NONE 1
CONN. DIAGRAM:	004172.03ME	**ASSEMBLY:**	F3
OUTLINE:	B-SS622257		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	1800	1770&1480	180L	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/400	70/35&69/34.5	PWS & YDRUN OR INV	CONTINUOUS	F2	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&93	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85&83	**3/4 LOAD PF: 81.4**	**1/2 LOAD PF: 71.7**	93	SQ CAGE INV RATED	29 / 14.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	480 / 240	172 LB-FT 193	247 LB-FT 278	46

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	4.7 LB-FT^2	- LB-FT^2	20 SEC.	2	432 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6311	BALL 6211	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

*
NOTES
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