

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TTFNA16070

Catalog No: E207-P

25 HP General Purpose Motor, 3 phase, 1800 RPM, 230/460 V, 284T Frame, TEFC
General Purpose Motors



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RegalRexnord

Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	62.0/31.0 A	Speed	1774 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.251 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	26.66 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308	Outline Drawing	B-SS311111-1275

4

3

Uncontrolled Copy

2

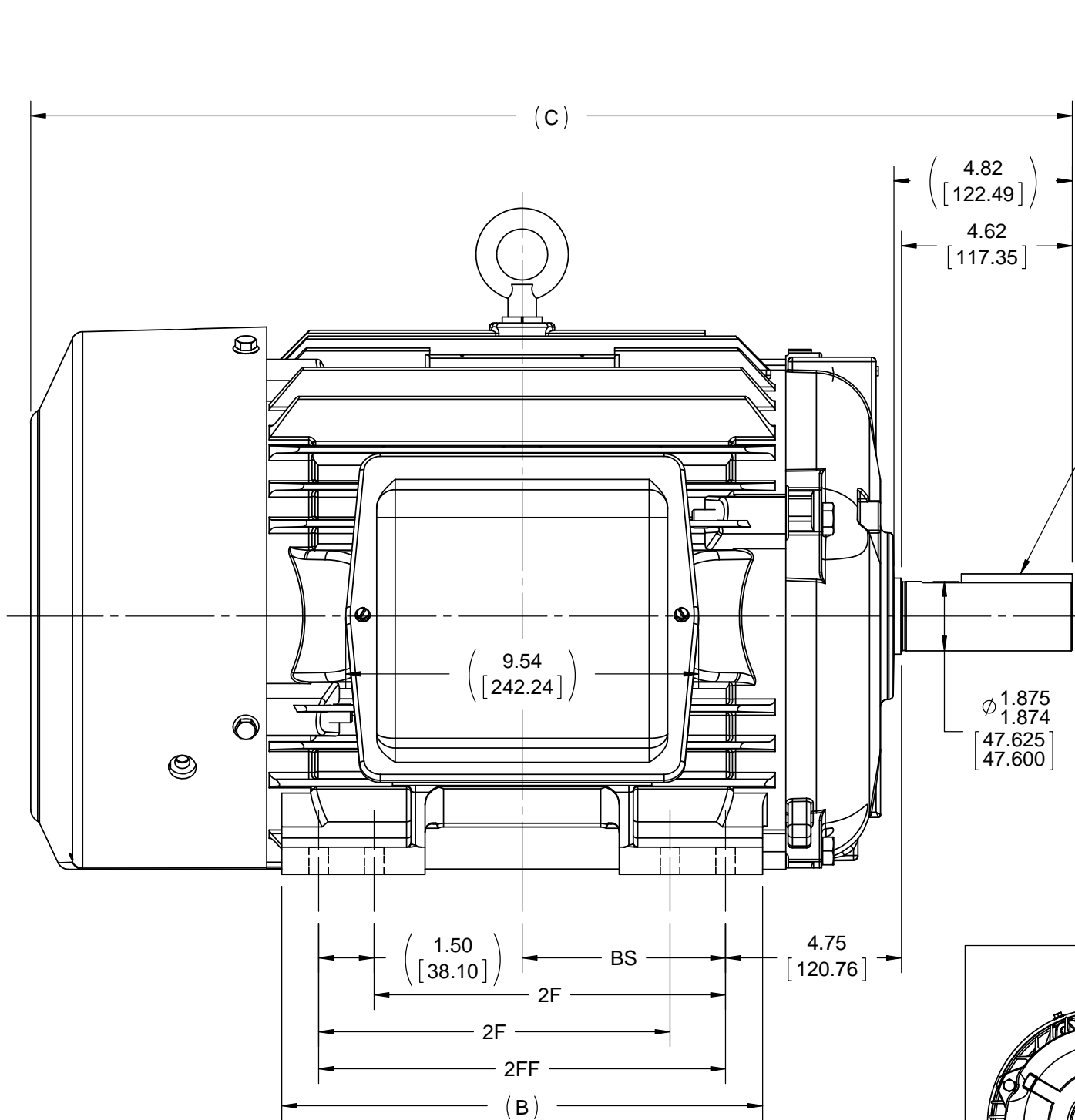
1

B

B

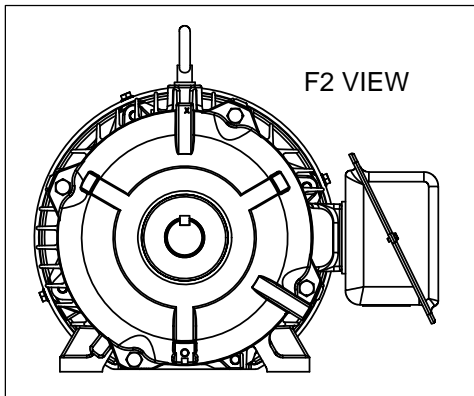
A

A



.500x.500x3.25
[12.700x12.700x82.55]
KEY

Ø1.875
1.874
[47.625]
[47.600]



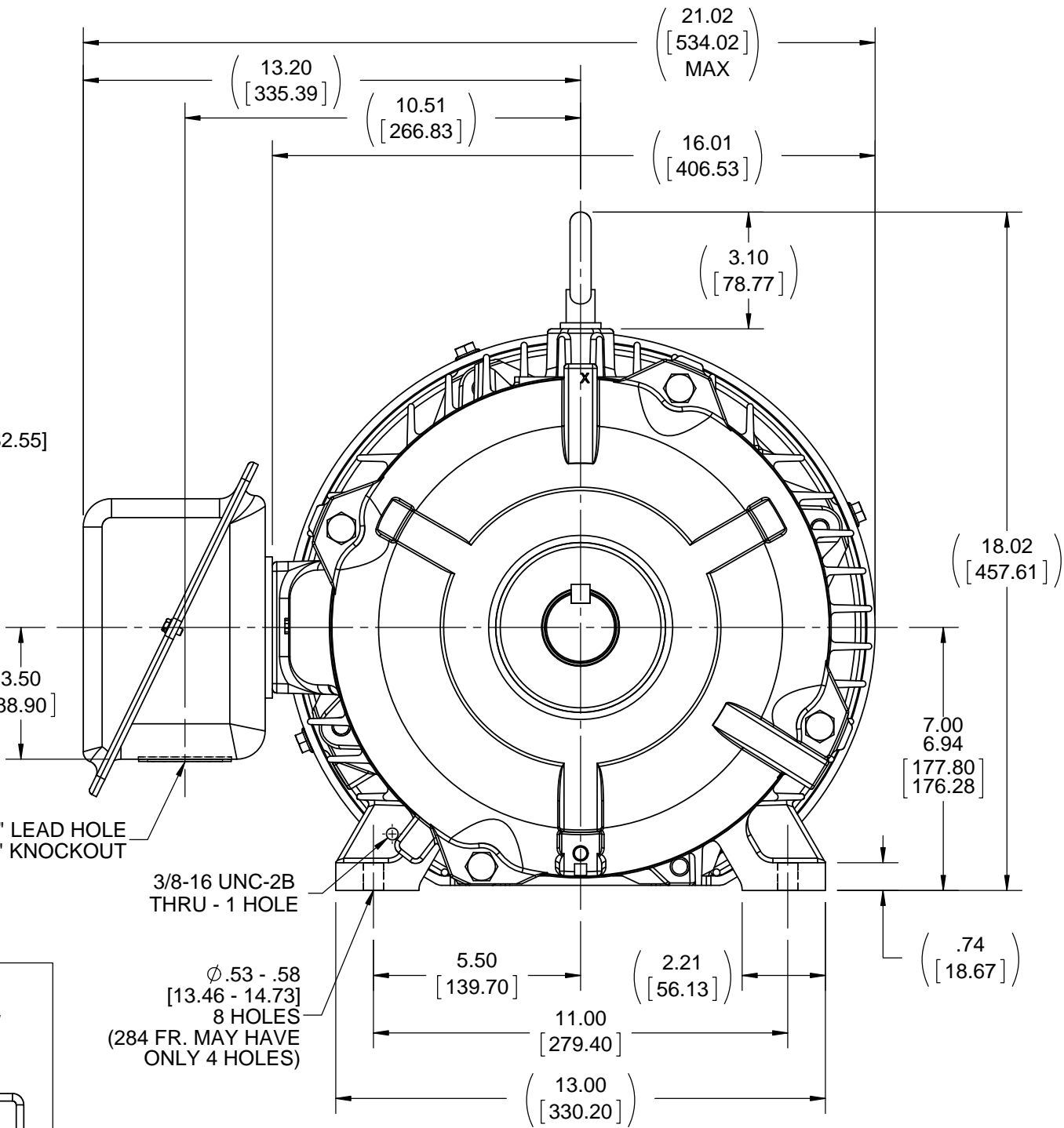
F2 VIEW

3.50
[88.90]

Ø2.00" LEAD HOLE
Ø2.50" KNOCKOUT

3/8-16 UNC-2B
THRU - 1 HOLE

Ø.53 - .58
[13.46 - 14.73]
8 HOLES
(284 FR. MAY HAVE
ONLY 4 HOLES)



- NOTES:
1. CONDUIT BOX CAN BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.

DASH	FRAME	B	C	2F	2FF	BS
1275	284T	12.50 [317.50]	26.66 [677.16]	---	9.50 [241.30]	4.75 [120.65]
1425	284/ 286T	13.00 [330.20]	28.16 [715.26]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION D	REVISION BY M GERTSCHEN	DATE 12-05-2016
ECO ECO-0113979	APPROVED BY T VUE	DATE 12-05-2016
ECO DESCRIPTION ADDED F2 VIEW		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY CAV	DATE 01-31-2001
APPROVED BY DD	DATE 01-31-2001
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 280T FR. - TEFC - 12.50 LAM.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS311111
SHEET 1 OF 1	



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		DRAWN RM	11/20/1990
					DEC.	INCHES		
5	CHG TO REGAL LOGO	SL 09/10/2015	AB				CHK	ML 11/21/1990
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD	SAS 04/24/2003
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE	1=1
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
					±7'30"		PREV	
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					DIST WP		A	EE7308 5

CERTIFICATION DATA SHEET

Model#: 284TTFNA16070 AA
CONN. DIAGRAM: A-EE7308
OUTLINE: B-SS311111-1275

WINDING#: K2844120 NONE 6
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1774	284T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	62/31	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 75	1/2 LOAD PF: 65	92.4	SQ CAGE INV RATED	27 / 13.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	362 / 181	140 LB-FT 189	215 LB-FT 291	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	4.2 LB-FT^2	175 LB-FT^2	25 SEC.	2	475 LBS.

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6311	6210	POLYREX EM	T	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: NONE

ENCODER: NONE
 NONE NONE
 NONE NONE PPR

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

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DATE: 06/21/2017 10:43:08 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



284TTFNA16070

Submittal

Data @ 460 V

Motor Load Data

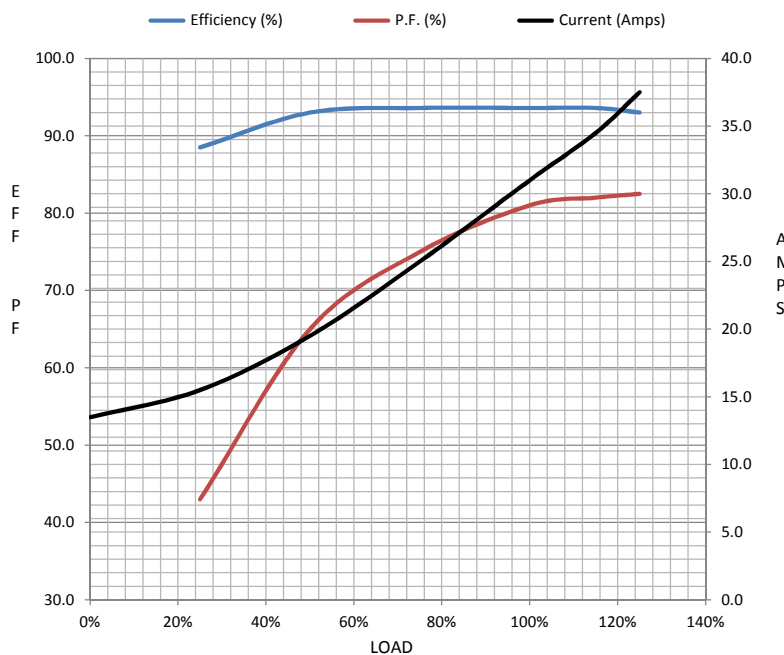
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	13.5	15.5	19.5	25.0	31.0	34.5	37.5	181	
Torque (ft-lb)	0.00	18.5	37.0	55.5	74.0	85.5	93.0	140	
RPM	1800	1795	1785	1780	1774	1,765	1760	0	
Efficiency (%)		88.5	93.0	93.6	93.6	93.6	93.0		
P.F. (%)	5.5	43.0	65.0	75.0	81.0	82.0	82.5	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1774	1800
Current (Amps)	181	165	125	31.0	13.5
Torque (ft-lb)	140	130	215	74.0	0.00

Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	4.2 Lb-Ft²			
Ref Wdg	K2844120 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS311111-1275			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1500	0.1540	0.8520	1.0660	20.0640



Speed -Torque Curve

