

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 145TTFR16065

Catalog No: GT5504

1.50 HP Close-Coupled Pump Motor, 3 phase, 1800 RPM, 575 V, 145JPV Frame, TEFC
JP Motors



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REGAL

Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	60 Hz	Voltage	575 V
Current	1.9 A	Speed	1755 rpm
Service Factor	1.15	Phase	3
Efficiency	86.5 %	Power Factor	71
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	P
Frame	145JPV	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	Y	IP Code	43

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	7.9 Ohms	Mounting	Round
Motor Orientation	Horizontal Or Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	JP	Overall Length	20.35 in
Frame Length	9.06 in	Shaft Diameter	0.875 in
Shaft Extension	7.31 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	A-EE7300	Outline Drawing	B-100659-906

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NOTE:
CONDUIT BOX CAN BE ROTATED 180°.



DASH NO.	"C"	"AG"	"BV"
656	17.90[454.66]	10.59[268.98]	5.82[147.82]
706	18.40[467.36]	11.09[281.68]	6.32[160.52]
756	18.90[480.06]	11.59[294.38]	6.82[173.22]
806	19.40[492.76]	12.09[307.08]	7.32[185.92]
856	19.90[505.46]	12.59[319.78]	7.82[198.62]
906	20.40[518.16]	13.09[332.48]	8.32[211.32]
956	20.90[530.86]	13.59[345.18]	8.82[224.02]

DRAWING REVISION B	REVISION BY A. KEETHA	DATE 01-29-2014
ECO ECO-0143026	APPROVED BY PST	DATE 04/11/2014
ECO DESCRIPTION OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30'
.XX	±0.02	[±0.51]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°
 CORNER FILLETS: R.02 [.51]
 MACHINED SURFACES: .200 / 5.
 INCH / mm
 mm SHOWN IN [BRACKETS]

DRAWN BY RM DATE 10-23-1992 APPROVED BY MS DATE 10-27-1992 REFERENCE 100659 THIRD ANGLE 	 Regal Beloit America, Inc.		SHEET 1 OF 1
	DESCRIPTION OUTLINE		
	140 FRAME-10-BB-CFACE-TEFC		
	MATERIAL 100659	PROCESS/FINISH	
SIZE C	DRAWING NUMBER 100659		

THREE PHASE - SINGLE VOLTAGE MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED



IF MOTOR HAS 6 LEADS



A-9806 DECAL

OPTIONAL CORD CONNECTION



VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION



Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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CERTIFICATION DATA SHEET

Model#: 145TTFR16065 AA **WINDING#:** ZT4256 FR 4
CONN. DIAGRAM: A-EE7300 **ASSEMBLY:** F1 ONLY
OUTLINE: B-100659-906

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2	1.12	1800	1755	145JPV	TEFC	P	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	1.85	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 86.5	3/4 LOAD EFF: 85.5	1/2 LOAD EFF: 82.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 71	3/4 LOAD PF: 62.5	1/2 LOAD PF: 49	84	SQ CAGE INV RATED	1.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	19.2	21.2 LB-FT 471	26 LB-FT 578	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.14 LB-FT^2	10 LB-FT^2	20 SEC.	2	50 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL OR SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	JP	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
BALL	BALL						
6206	6203						

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

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2:1		
INV. HP SPEED RANGE: NONE		
ENCODER: NONE		
NONE	NONE	
NONE	NONE	PPR
BRAKE: NONE NONE		
NONE	P/N	NONE
NONE	NONE	
- FT-LB	NONE V	NONE Hz

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DATE: 06/23/2017 07:26:53 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

14STFR16065

Customer:

Attention:

Submitted by:

FAREEDA DUDEKULA



Submital

Data @ 575 V

Submitted by:

FAREEDA DUDEKULA

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.20	1.24	1.40	1.60	1.84	2.00	2.12	19.2
Torque (ft-lb)	0.00	1.10	2.20	3.5	4.5	5.2	5.7	21.2
RPM	1800	1790	1780	1765	1755	1,750	1745	0
P.F. (%)	7.5	74.0	82.5	85.5	86.5	86.5	85.5	
		30.5	49.0	62.5	71.0	75.0	77.0	69.5

Motor Speed Data

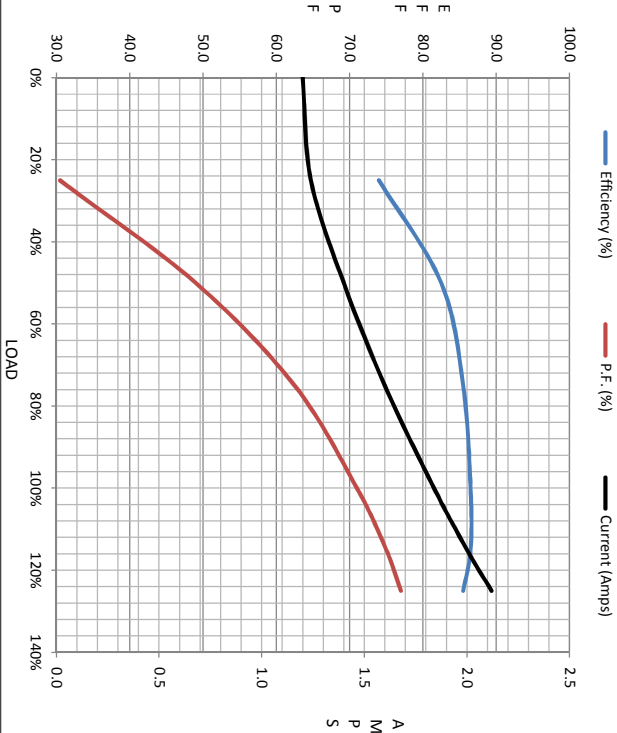
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	130	1190	1755	1800
Current (Amps)	19.2	18.6	12.8	1.84	1.20
Torque (ft-lb)	21.2	20.2	26.0	4.5	0.00

Information Block

Current (Amps)		19.2	18.6	12.8	1.84	1.20
Torque (ft-lb)		21.2	20.2	26.0	4.5	0.00

HP	1.5		
Sync. RPM	1800		
Frame	145		
Enclosure	TEFC		
Construction	TFR		
Voltage	575 V		
Frequency	60 Hz		
Design	A		
LR Code letter	P		
Service Factor	1.15		
Temp Rise @ FL	35 ° C		
Duty	CONT		
Ambient	40 ° C		
Elevation	1,000 feet		
Rotor/Shaft wk²	0.14 Lb-Fe²		
Ref Wdg	Z14256 FR		
Sound Pressure @ 1M	62 dBA		
VFD Rating	CONSTANT 2:1		
Outline Dwg	B-100659-906		
Conn. Diag	A-EE/300		
Additional Specifications:			
0			
0			
EQUIV CKT (OHMS / PHASE)			
R1	R2	X1	X2
7.5600	5.9060	11.1330	11.1920

Efficiency (%)		P-F. (%)		Current (Amps)				
	20%	40%	60%	80%	100%	120%	140%	
	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0
	0.0	0.5	1.0	1.5	2.0	2.5		



Speed -Torque Curve

