

PRODUCT INFORMATION PACKET

Model No: 145TTFR16074

Catalog No: GT5104

1.50 HP Close-Coupled Pump Motor, 3 phase, 1800 RPM, 230/460 V, 145JMV Frame, TEFC
JM Motors



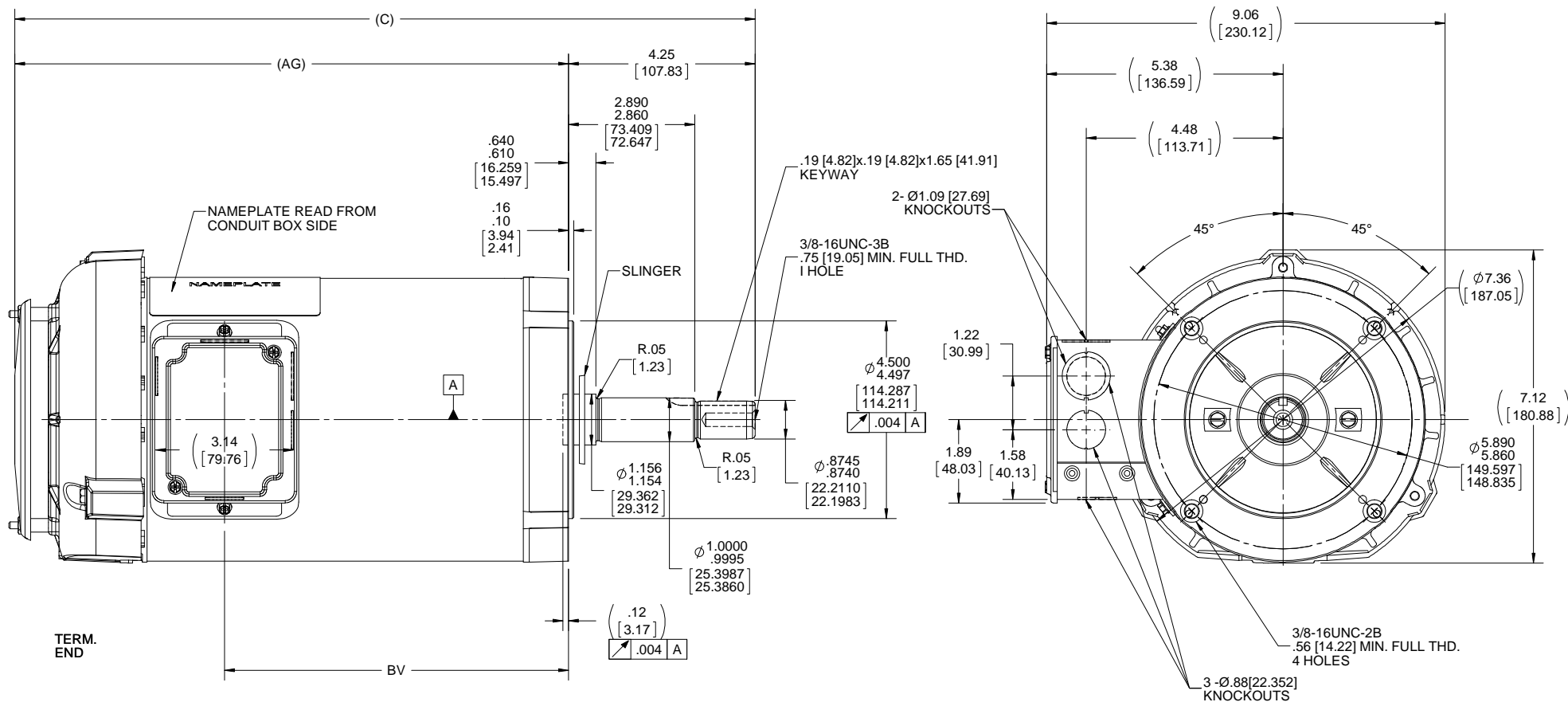
Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	60 Hz	Voltage	230/460 V
Current	4.6/2.3 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	145JMV	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	JM	Overall Length	17.29 in
Frame Length	9.06 in	Shaft Diameter	0.875 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	B-100522-906	Connection Drawing	A-EE7308

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TERM. END

NOTES:
1.CONDUIT BOX CAN BE ROTATED IN 180° STEPS.

DASH	C	AG	BV
656	14.84 [376.94]	10.59 [268.99]	5.82 [147.83]
706	15.34 [389.64]	11.09 [281.69]	6.32 [160.53]
756	15.84 [402.94]	11.59 [294.39]	6.82 [173.23]
806	16.34 [415.04]	12.09 [307.09]	7.32 [185.93]
856	16.84 [427.74]	12.59 [319.79]	7.82 [198.63]
906	17.34 [440.44]	13.09 [332.49]	8.32 [211.33]

DRAWING REVISION E	REVISION BY H. ADIKE	DATE 01-29-2018
ECO ECO-0143026	APPROVED BY PST	DATE 2-5-2018
ECO DESCRIPTION OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	+0.1	[+2.5]
.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] X 45°		
CORNER FILLETS: R.02 [51]		
MACHINED SURFACES: 200 \sqrt INCH \sqrt mm 5.1		
mm SHOWN IN [BRACKETS]		

DRAWN BY RM
DATE 09-12-1991
APPROVED BY MS
DATE 09-19-1991
REFERENCE 100522
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 140 FR. -BB - TEFC - C'FACE	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 100522
SHEET 1 OF 1	

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.		REVISION		BY & DATE		CHK		ANG		FINISH		PREV	
5	CHG TO REGAL LOGO	SL	09/10/2015	AB									
4	REVISED IEC NOTATIONS	MSG	11/15/2011	CMN	.X	±.1							
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG	5/10/2010	MJS	.XX	±.02							
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH	04/24/2003	DRS	.XXX	±.005							
1	REDRAWN	RM	11/20/1990		.XXXX	±.0005							
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REGAL™ Regal Beloit America, Inc.

TOLERANCES UNLESS SPECIFIED

DEC. INCHES

DRAWN RM 11/20/1990
CHK ML 11/21/1990
APPD SAS 04/24/2003

TITLE CONNECTION DIAGRAM
3Ø - DUAL VOLTAGE MOTOR

SCALE 1=1
REF
FMF
PREV

CERTIFICATION DATA SHEET

Model#: 145TTFR16074 AA WINDING#: ZT4256 FR 3
 CONN. DIAGRAM: A-EE7308 ASSEMBLY: F1 ONLY
 OUTLINE: B-100522-906

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2&1	1.12&.75	1800	1755&1470	145JMV	TEFC	P	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	4.6/2.3&4.2/2.1	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.0	40	3300

FULL LOAD EFF: 86.5&85	3/4 LOAD EFF: 85.5	1/2 LOAD EFF: 82.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 71&64	3/4 LOAD PF: 62.5	1/2 LOAD PF: 49	84	SQ CAGE INV RATED	3 / 1.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	48 / 24	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						
BALL	BALL	POLYREX EM	JM	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6206	6203						

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

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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

DATE: 06/23/2017 07:32:57 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

148TFR16074



Submission
Data @ 460 V

Date: 6/29/2017

Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.50	1.55	1.75	2.00	2.30	2.50	2.65	24.0
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	1750	1745	0
Efficiency (%)		74.0	82.5	85.5	86.5	86.5	85.5	
P.F. (%)	7.5	30.5	49.0	62.5	71.0	75.0	77.0	69.5

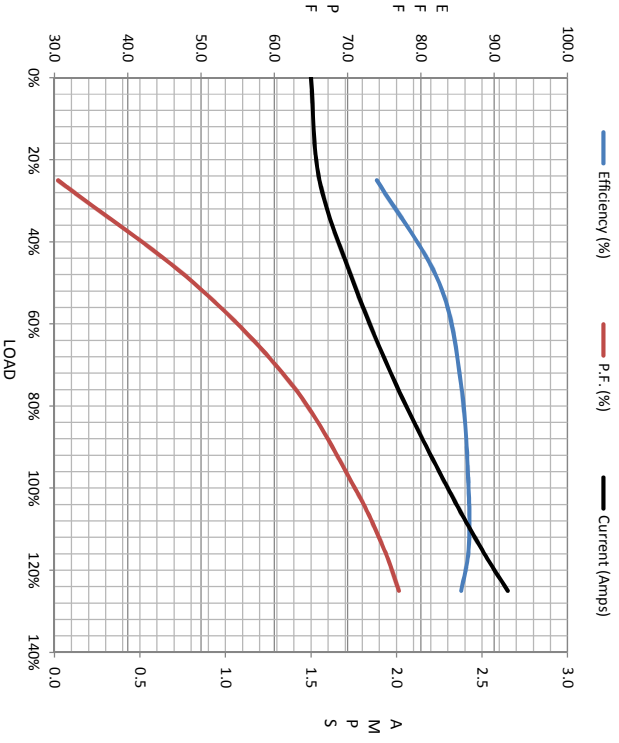
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	130	1190	1755	1800
Current (Amps)	24.0	23.3	16.0	2.30	1.50
Torque (ft-lb)	21.2	20.2	25.0	4.5	0.00

Information Block

HP	1.5
Sync. RPM	1800
Frame	145
Enclosure	TEFC
Construction	TFR
Voltage	30/460#190/38 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 wkt	0.14 Lb-Fe
Rel Wdg	Z14256 FR
Sound Pressure @ 1M	62 dBA
VFD Rating	CONSTANT 2:1
Outline Dwg	B-100522-906
Conn. Diag	A-EE7308
Additional Specifications:	
0	

EQUIV CKT (OHMS/ PHASE)				
R1	R2	X1	X2	Xm
4.8380	3.7800	7.1250	7.1630	189.6050



Speed -Torque Curve

