

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 405TTFC6685

Catalog No: E1244

XRI[®]-SD Severe Duty Motor, 75 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 405T Frame, TEFC

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RegalRexnord



Nameplate Specifications

Output HP	75 Hp	Output KW	56.0 kW
Frequency	60 Hz	Voltage	460 V
Current	89.0 A	Speed	1188 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	83.5
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	NU316	Opp Drive End Bearing Size	6314
UL	Listed	CSA	Y
CE	Y	IP Code	55
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.0904 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Roller
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	2.875 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	EE7300	Outline Drawing	SS557665

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	4			3				2		1	
B	C	E	2E	2F	2FF	BA	BS	MOUNTING			
16.85	38.88	8.00	16.00	12.25	13.75	6.62	6.87	F1 OR F2			



DRAWING REVISION C	REVISION BY VS	REV DATE/© DATE 25-11-2020
ECO ECO-0195088	APPROVED BY GNK	DATE 25-11-2020
ECO DESCRIPTION DRAWING UPDATED		
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DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 12/24/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 404/405T FR-SD & IEEE841
DATE 12/24/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS557665
	SHEET 1 OF 1

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS



VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION

L1	WHITE
L2	RED
L3	BLACK

A-9806 DECAL

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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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

Data Sheet

Date: 9/30/2022
 Customer: _____
 Attention: _____
 Submitted by: _____



405TTFCD6685

Submittal

Data @ 460 V

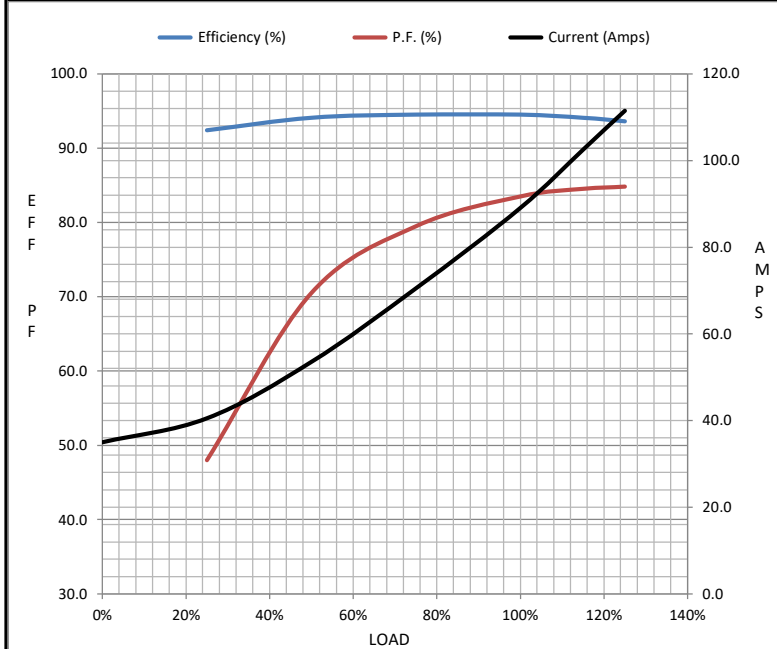
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	35.0	40.5	53.5	70.5	89.0	103	112	545
Torque (ft-lb)	0.00	82.5	165	248	332	382	416	690
RPM	1200	1196	1195	1192	1188	1,188	1185	0
Efficiency (%)		92.4	94.1	94.5	94.5	94.1	93.6	
P.F. (%)	4.5	48.0	70.5	79.5	83.5	84.5	84.8	37.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	545	435	305	89.0	35.0
Torque (ft-lb)	690	545	875	332	0.00

Information Block				
HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	53.0 Lb-Ft ²			
Ref Wdg	HA32506005 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg				
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0570	0.0280	0.2460	0.4420	7.5600



Speed - Torque Curve

