

PRODUCT INFORMATION PACKET



Model No: 825408.00

Catalog No: 825408.00

Explosion Proof Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,
254T Frame, EPFC



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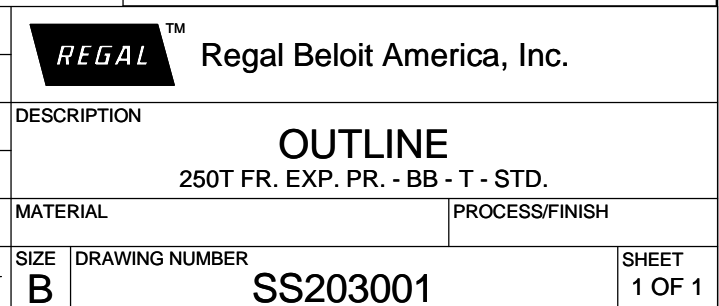


Nameplate Specifications

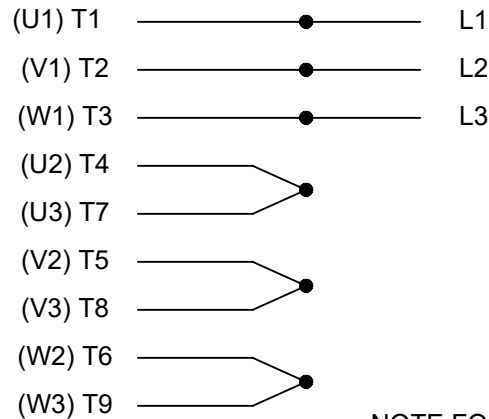
Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	1175 & 975 rpm	Service Factor	1.15 & 1.0
Frame	254T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91 & 89.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	19.8/9.9 & 17/8.5 A	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	No	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	1.319 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	23.52 in
Frame Length	10.51 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1 Only
Inverter Load	CONSTANT 10:1		
Outline Drawing	B-SS203001-1050	Connection Drawing	A-EE7308T

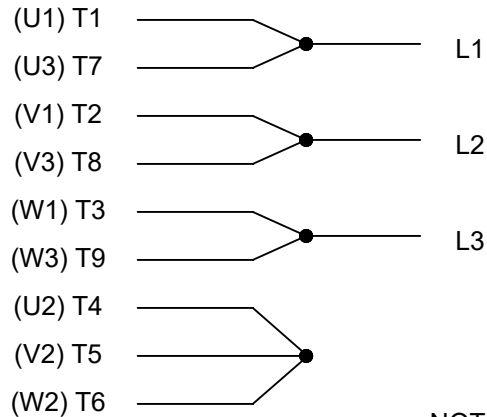


HIGH VOLTAGE

THREE PHASE
DUAL VOLTAGE MOTOR

NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

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DRAWN BY SMC	DATE 05-13-1992
APPROVED BY TB	DATE 05-13-1992
REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR	
MATERIAL	PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7308T
SHEET 1 OF 1	



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-277-8810

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T

CAT #: 825408.00

OUTLINE: B-SS203001-1050

WINDING: 254653

NONE 6

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1200	1175	254T	TEFC	TFN	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	19.8/9.9&17/8.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	90.2	GTD EFF	ELECT. TYPE
F.L. PF	78.0	3/4 LD PF	72.5	1/2 LD PF	61.0	90.2	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
33.5 LB-FT	63.5	72.0 LB-FT 215%	103 LB-FT 307%	40

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
56 dBA	65 dBA		2.50 LB-FT²	170 LB-FT²	20 SEC.	2	350 LB.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	UM SEVERE	OF CL I GR C&D CL II GR	NO	NONE	WATTS AVER

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL						
6309 6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.737	0.673	2.903	3.153	53.487	0.080	ODE

* N O T E S *			INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE ENCODER: NONE NONE NONE NONE PPR
DATE: 8/29/2018			BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE HZ: UL: NONE

Data Sheet

Date: 8/29/2018

825408.00



Data @ 460 V

Motor Load Data

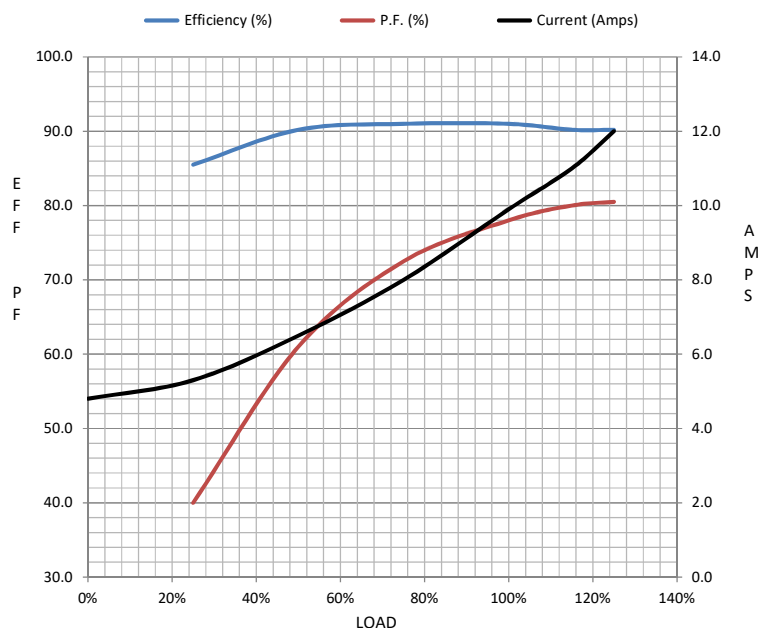
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.8	5.3	6.5	8.0	9.9	11.0	12.0	63.5	
Torque (ft-lb)	0.00	8.0	16.5	25.0	33.5	38.5	42.0	72.0	
RPM	1200	1195	1190	1180	1175	1,170	1165	0	
Efficiency (%)		85.5	90.2	91.0	91.0	90.2	90.2		
P.F. (%)	7.0	40.0	61.0	72.5	78.0	80.0	80.5	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1065	1175	1200
Current (Amps)	63.5	59.0	39.5	9.9	4.8
Torque (ft-lb)	72.0	69.0	103	33.5	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	40	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	2.50	Lb-Ft²		
Ref Wdg	254653	NONE		
Sound Pressure @ 1M	56	dBA		
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS203001-1050			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7370	0.6730	2.9030	3.1530	53.4870



Speed - Torque Curve

