

PRODUCT INFORMATION PACKET



Model No: 825108.00
Catalog No: 825108.00
Explosion Proof Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,
405TS Frame, EPFC



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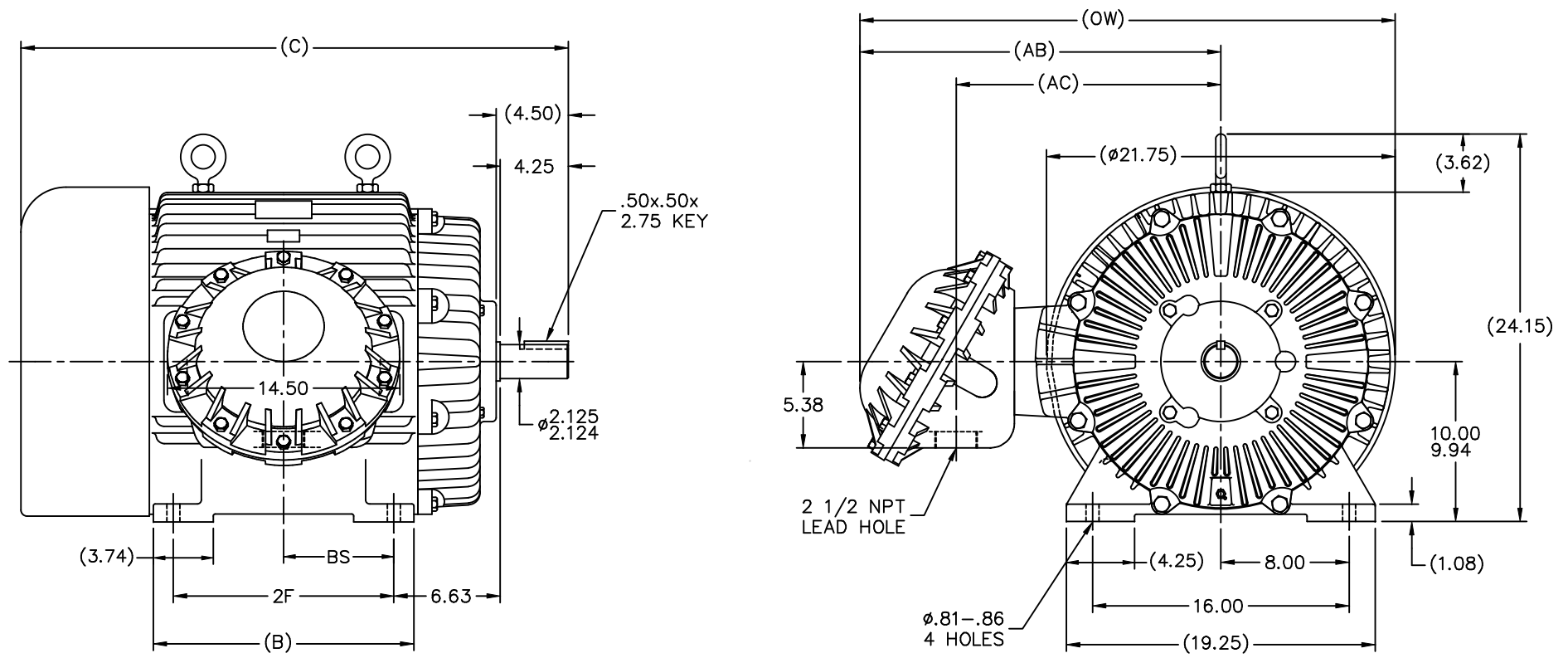


Nameplate Specifications

Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 190/380 V
Speed	3565 & 2965 rpm	Service Factor	1.15 & 1.15
Frame	405TS	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	95 & 95 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	216/108 & 195/97.5 A	Power Factor	91.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR D CL II GR F&G T3B

Technical Specifications


Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.051 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	34.12 in
Frame Length	16.75 in	Shaft Diameter	2.125 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7308AD-LE	Outline Drawing	B-SS518935LE-1675



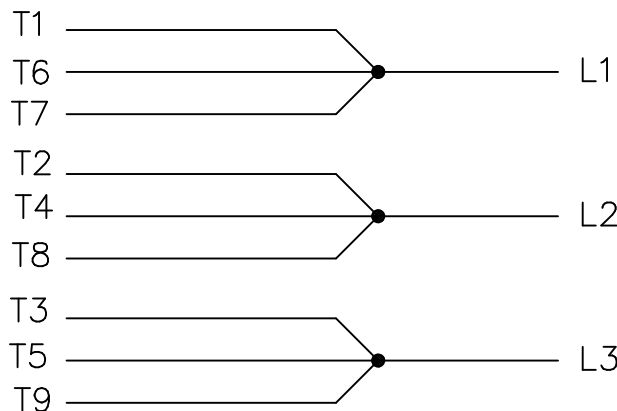
- NOTES:
 1. BOX CAN BE ROTATED IN 90° STEPS
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

CONDUIT BOX DIMENSIONS			
FRAME	AB	AC	OW
404	21.50	15.50	32.38
405	22.50	16.50	33.38

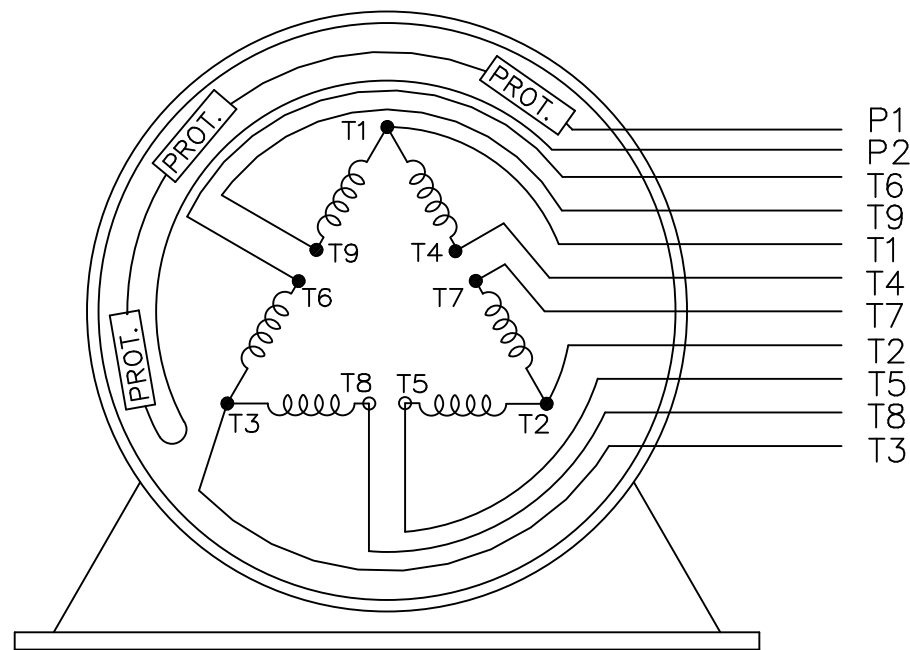
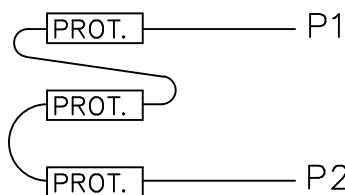
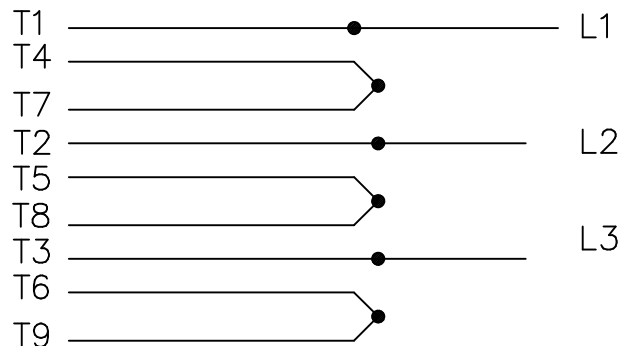
DASH	FRAME	B	C	2F	BS
1525	404TS	14.75	32.62	12.25	6.12
1675	405TS	16.25	34.12	13.75	6.88

		TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN KL 05-05-2003	
		DEC.	INCHES			CHK GFH 05-05-2003	
		.X	±.1			APPD JES 05-05-2003	
		.XX	±.03			SCALE 5-32	
		.XXX	±.005	TITLE OUTLINE	REF		
		.XXXX	±.0005	400TS FR. - EPFC	FMF		
1	NEW DRAWING	MU46325	KL 05-05-2003	CHK ANG ±7'30"	FINISH	PREV	
NO. REVISION		BY & DATE		RFP	CAD FILE SS518935LE	SIZE	DRAWING NO. PAGE OF REV.
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				DIST WA	B	SS518935LE	1

LOW VOLTAGE




HIGH VOLTAGE



VIEW OF TERMINAL END

WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN NJS 05-15-2002					
				DEC.	INCHES		CHK	ML	05-20-2002			
				.X	±.1		APPD	TB	05-20-2002			
				.XX	±.02	TITLE CONNECTION DIAGRAM 3Ø - WITH PROTECTORS	SCALE					
2	HIGH VOLT. SCHEMATIC WAS L1, L3, & L3	CN 32724	DRS 06-12-2004	ML	.XXX ±.005		MAT'L. FINISH	REF				
1	NEW DRAWING	CN 35132	NJS 05-20-2002	TB	.XXXX ±.0005	FINISH		FMF				
NO.	REVISION		BY & DATE	CHK	ANG		±7'30"	PREV				
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE ee7308ad_le			SIZE	DRAWING NO.	PAGE	OF	REV.
				DIST	WA-LB			A	EE7308AD-LE			2



CERTIFICATION DATA SHEET

1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810

CATALOG #: 825108.00

CONN. DIAGRAM: A-EE7308AD-LE

OUTLINE: B-SS518935LE-1675

MOUNTING: F1 ONLY

WINDING #: T405247 1

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75.0&56.0	3600	3565&2965	405TS	EPFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	216/108&195/97.5	LINE OR INVERTER	CONTINUOUS	F1	1.15/1.15	40

FULL LOAD EFF:	95&95	3/4 LOAD EFF:	95	1/2 LOAD EFF:	94.5	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	91.5&91.5	3/4 LOAD PF:	90.5	1/2 LOAD PF:	86	94.5	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B,D. TORQUE	F.L. RISE°C
147 LB-FT	1450 / 725	230 LB-FT 156 %	410 LB-FT 279 %	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	16.5 LB-FT^2	65 LB-FT^2	15 SEC.	2	1300 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	EXP PROOF CL I GR D CL II GR F&G T3B	FALSE	NONE	BLUE - LEESON (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6313						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

*
N
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E

INVERTER TORQUE: CONSTANT 10:1
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

Data Sheet

Date: 1/22/2018

825108.00



Data @ **460 V**

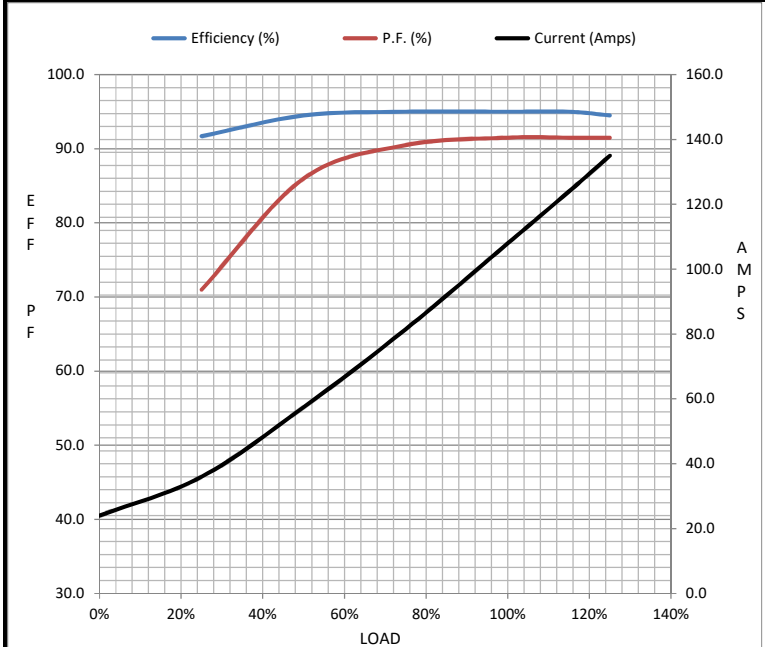
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	24.0	36.0	57.5	81.5	108	124	135	725
Torque (ft-lb)	0.00	36.5	73.5	110	147	170	185	230
RPM	3600	3592	3582	3572	3565	3,560	3555	0
Efficiency (%)		91.7	94.5	95.0	95.0	95.0	94.5	
P.F. (%)	7.5	71.0	86.0	90.5	91.5	91.5	91.5	31.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3415	3565	3600
Current (Amps)	725	650	425	108	24.0
Torque (ft-lb)	230	200	410	147	0.00

Information Block				
HP	100.0			
Sync. RPM	3600			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	16.5 Lb-Ft ²			
Ref Wdg	T405247 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS518935LE-1675			
Conn. Diag	A-EE7308AD-LE			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0390	0.0240	0.2690	0.2040	10.8200



Speed - Torque Curve

