

Product Information Packet

November 9, 2016

Data shown is for the current revision model #. Ensure your nameplate model # matches.

Model Number:	5KS256XAE6422A
Catalog Number:	V863
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG1
Outline Drawing:	4002B5825PNP5323

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KS256XAE6422A	Estimated Weight:	350 Lbs
Outline Drawing:	4002B5825PNP5323	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG1	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	841
Design Code:	25BD1163A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L256VP10	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93 %
Output Power:	20HP 14.8KW	Guaranteed Efficiency:	92.4
RPM:	1775	3/4 Load Efficiency:	93.7
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	6.2
Amps - FL:	23.8	Power Factor:	84.5
Service Factor:	1.15	Bearing - DE:	7309
Alt Service Factor:	--	Bearing - ODE:	6309-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

VERTICAL-841
 PREMIUM EFFICIENT MOTOR
 DE BRG 45BT03XP3 ODE BRG 45BC03JP3
 SEVERE DUTY
 EXCEPTION TO IEEE-STD-841-2009:THRUST BRG ON DE
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:
 1.0 SF VAR TORQUE RANGE 0-60 HZ
 MAX EXPOSED INTERNAL AND EXTERNAL SURFACE
 TEMPERATURES UNDER USUAL SERVICE CONDITIONS
 AT 1.00 S.F. DO NOT EXCEED 200 DEG C
 STAMP NP249A5499AP AS BELOW:
 MODEL:5KS256XAE6422A S/N: XXX
 EX NA IIC T3 GC CSA.09.2216219
 CLASS I, ZONE 2, AEX NA IIC T3
 CLASS I, DIV 2, GROUPS A, B, C, D T3
 -25C <= TAMB <= 40C

Additional Information:

4P - VP EXTN
 C/BOX 137 CU IN-1.25 NPT
 PAINTED FRAME ID & SHAFT,
 FAN COVER INSIDE & ODE E/S OUTSIDE
 ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX
 INPRO SEAL BOTH ENDS
 E/SHLD GROUND STUD MTD ON DE C/BOX SIDE
 SHAFT RUNOUT LIMIT .001" TIR

RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &
CENTER OF GRAVITY 10.75 INCHES
SOLID SHAFT HIGH THRUST
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS, RABBETS,
AND PLUG THREADS
OIL RESISTANT SLEEVING ON LEADS
BEARING LIFE 26280 HOURS AT 1743 LB THRUST
UTD REPLACEMENT FOR 5KS256XAE6422

Performance Characteristics

1st Winding 1st Connection

Design: 25BD1163A

Marks:

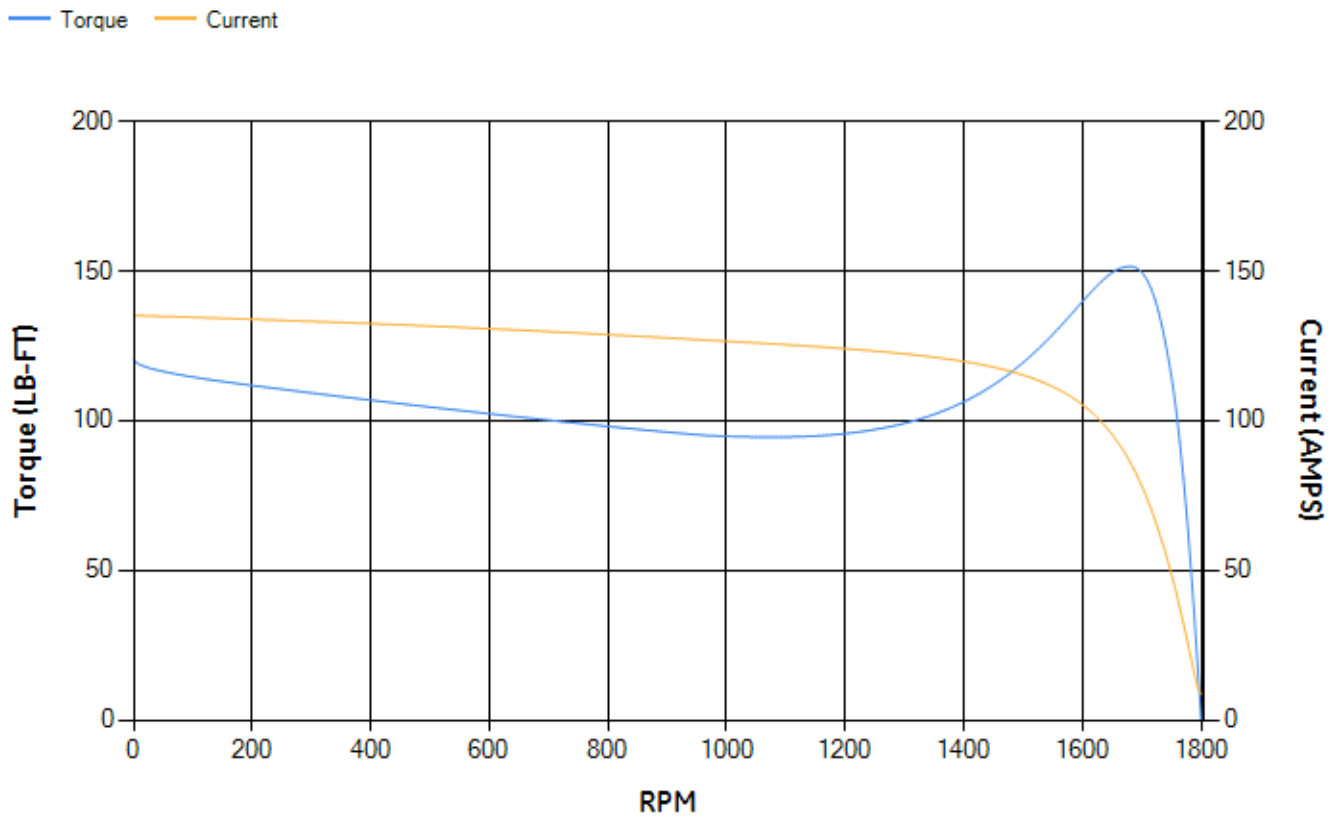
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.13	92.56	93.31	93.72	93.6	91.02	0.00
% PF	86.1	85.75	84.73	80.95	71.89	49.85	4.4
AMPS	29.5	27.12	23.68	18.5	13.91	10.31	8.62

TORQ(FL)#FT	59.21	TORQ(LR)%FL	203.53	TORQ(BD)%FL	254.91
AMPS(LR)	135.12	PF AT START	0.45		

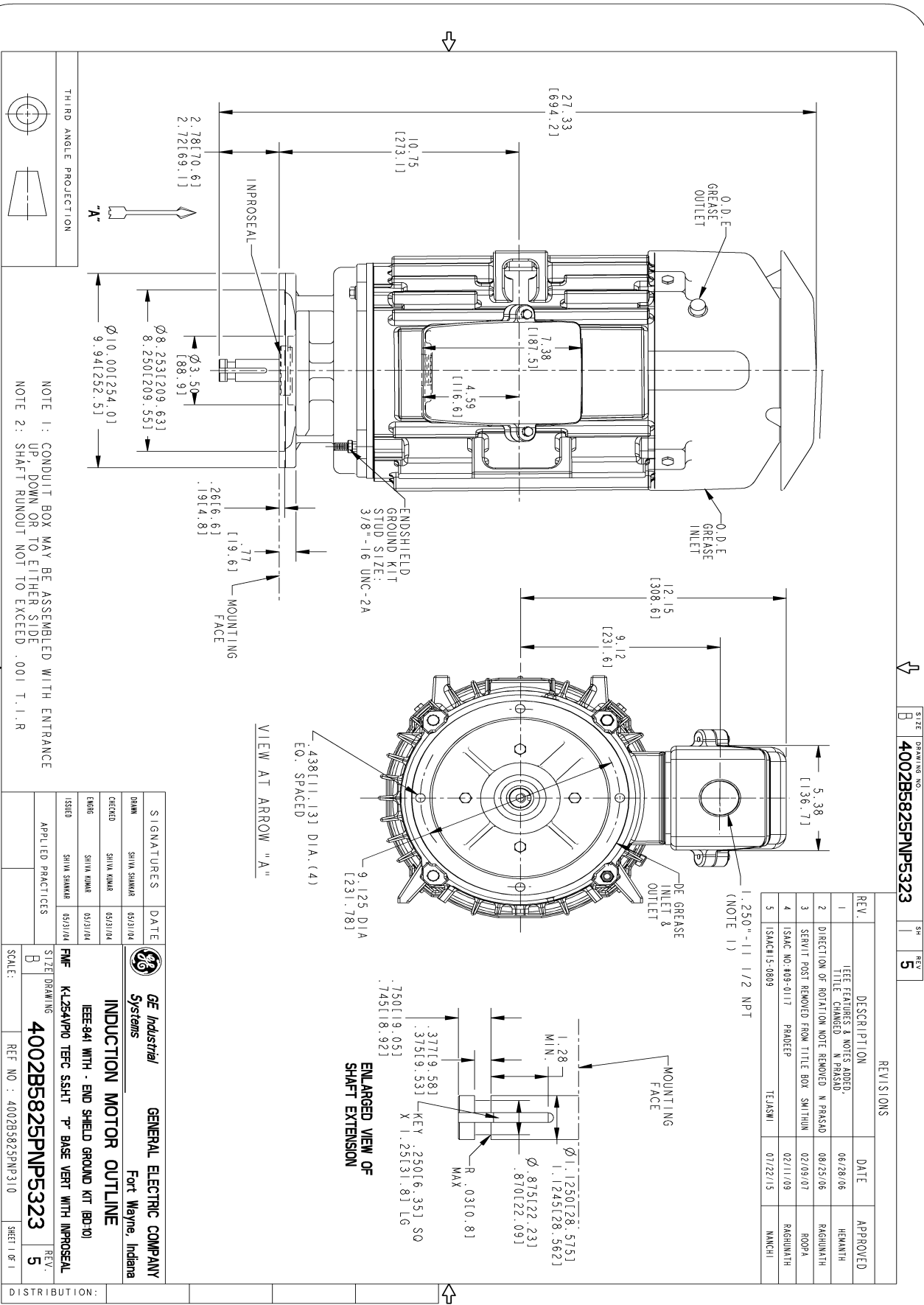
This motor is capable of two cold or one hot start with a maximum connected load inertia of 653 Lb-Ft Sq (27.49 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 43 seconds. Safe stall time at 100% voltage is 98 seconds cold, 62 seconds hot. Rotor inertia is 3.04 Lb-Ft Sq (0.13 Kg-meter Sq).

Open Circuit A-C:	0.483	Short Circuit D-C:	0.014
Short Circuit A-C:	0.024	X/R Ratio:	5.127
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



Marks:



SIZE DRAWING NO. 4002B5825PMP5323

REV.	DESCRIPTION	DATE	APPROVED
1	IEEE FEATURES & NOTES ADDED. TITLE CHANGED. N. PRASAD	06/28/06	HEMANTH
2	DIRECTION OF ROTATION NOTE REMOVED. N. PRASAD	08/25/06	RAGHUNATH
3	SERVIT POST REMOVED FROM TITLE BOX. SMITHUN	02/09/07	ROOPA
4	ISAC NO. 409-0117. PRADIEP	02/11/09	RAGHUNATH
5	ISACH 15-0809	07/22/15	NANCHI

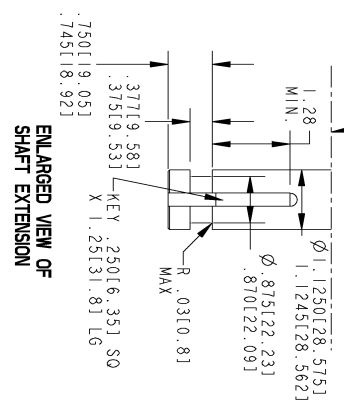
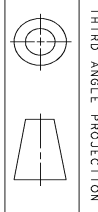
SIGNATURES	DATE
DRMAN SHIVA SHANKAR	03/31/04
DESIGNED SHIVA KUMAR	03/31/04
ENGRG SHIVA KUMAR	03/31/04
ISSUED SHIVA SHANKAR	03/31/04

APPLIED PRACTICES	SCALE: B
SIZE DRAWING	REF NO.: 4002B5825PMP310
REV. 5	SHEET 1 OF 1

GE Industrial Systems
GENERAL ELECTRIC COMPANY
 Fort Wayne, Indiana

INDUCTION MOTOR OUTLINE
 IEEE-941 WITH - END SHIELD GROUND KIT (BD-10)
 FIVE KVA/50HP TERC SSHT "P" BASE VERT WITH IMPROSEAL

NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP/DOWN OR TO EITHER SIDE
 NOTE 2: SHAFT RUNOUT NOT TO EXCEED .001 T.I.R

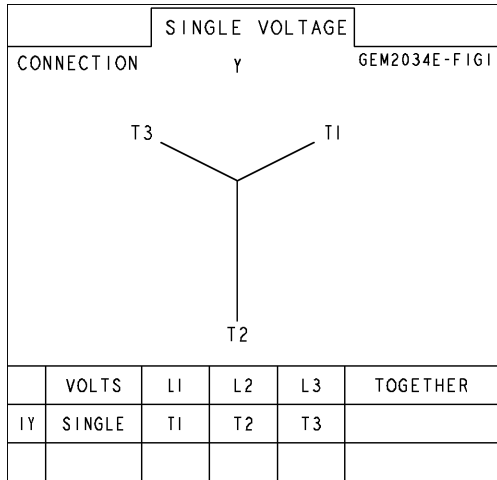


VIEW AT ARROW "A"
 EQ. SPACED
 4.38(111.131) DIA. (4)
 9.125 DIA (231.781)

DISTRIBUTION:

Marks:

Connection Diagram
GEM2034E-FIG1



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6129PJ1	4004D5283SK1
Bearing		
Slinger/Inproseal		

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6700G02
Fan Cover	

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728PA-G04

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	