

Product Information Packet

May 6, 2017

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

Model Number:	5KS404DAJ6020B
Catalog Number:	V4521
Instruction Manual:	GEK-95353
Connection Diagram:	GEM2034E-FIG19
Outline Drawing:	148CB40VMHKCCLA0001

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KS404DAJ6020B	Estimated Weight:	1160 Lbs
Outline Drawing:	148CB40VMHKCCLA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG19	Enclosure:	WPI
Instruction Book:	GEK-95353	Encl Construction:	OPEN
Design Code:	40BD1118AB	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L404TP16	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	95.4 %
Output Power:	100HP 74KW	Guaranteed Efficiency:	94.5
RPM:	1785	3/4 Load Efficiency:	--
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	33.3
Amps - FL:	121.0	Power Factor:	82.0
Service Factor:	1.15	Bearing - DE:	6215C3
Alt Service Factor:	--	Bearing - ODE:	235A2532AA01

Enclosure is Weather Protected One

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 100W
 ROT CCW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
 VAR TORQUE RANGE 5-60 HZ
 UPPER BRG LUBE OIL: 6 QTS
 0 DEG C TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)
 -15 DEG C TO 0 DEG C : ISO 32 SYNTHETIC
 SUITABLE FOR 75 HP, 380V, 50 HZ WITH
 110.0 AMPS AND 1490 RPM AT 1.0 SF

Additional Information:

4P, VERT HOLLOW SHAFT HIGH THRUST (2D)
 700 CU IN - 3.00" NPT
 OIL RESISTANT SLEEVING ON LEADS
 115V HTR LDS TO MAIN CONDUIT BOX
 GROUND PAD
 SHAFT GROUNDING RING MOUNTED ON LOWER END BRG CAP
 BEARING LIFE 8760 HRS AT 14609 LB THRUST
 PART WINDING START
 CG:18.50 IN FROM P-BASE FACE, STAT DEF:0.0033 IN
 RCF:3240 CPM AT C/BOX SIDE, 3360 CPM AT
 90 DEG FROM C/ BOX SIDE
 NON-REVERSE BALL CARRIER
 COUPLING NOT INCLUDED IN BOM, WILL BE
 ORDERED SEPERATELY
 SPECIAL BALANCE



Performance Characteristics

1st Winding 1st Connection

Design: 40BD1118AB

Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.41	94.54	94.84	94.46	93.43	89.37	0.00
% PF	83.22	82.93	81.94	78.11	68.96	47.58	5.45
AMPS	148.9	137.29	120.44	95.13	72.63	55.03	46.47

TORQ(FL)#FT 294.02
AMPS(LR) 581.69

TORQ(LR)%FL 138.49
PF AT START 0.29

TORQ(BD)%FL 223.1

This motor is capable of two cold or one hot start with a maximum connected load inertia of 3062 Lb-Ft Sq (128.91 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 62 seconds. Safe stall time at 100% voltage is 106 seconds cold, 75 seconds hot. Rotor inertia is 22.56 Lb-Ft Sq (0.95 Kg-meter Sq).

Open Circuit A-C: 0.83

Short Circuit D-C: 0.037

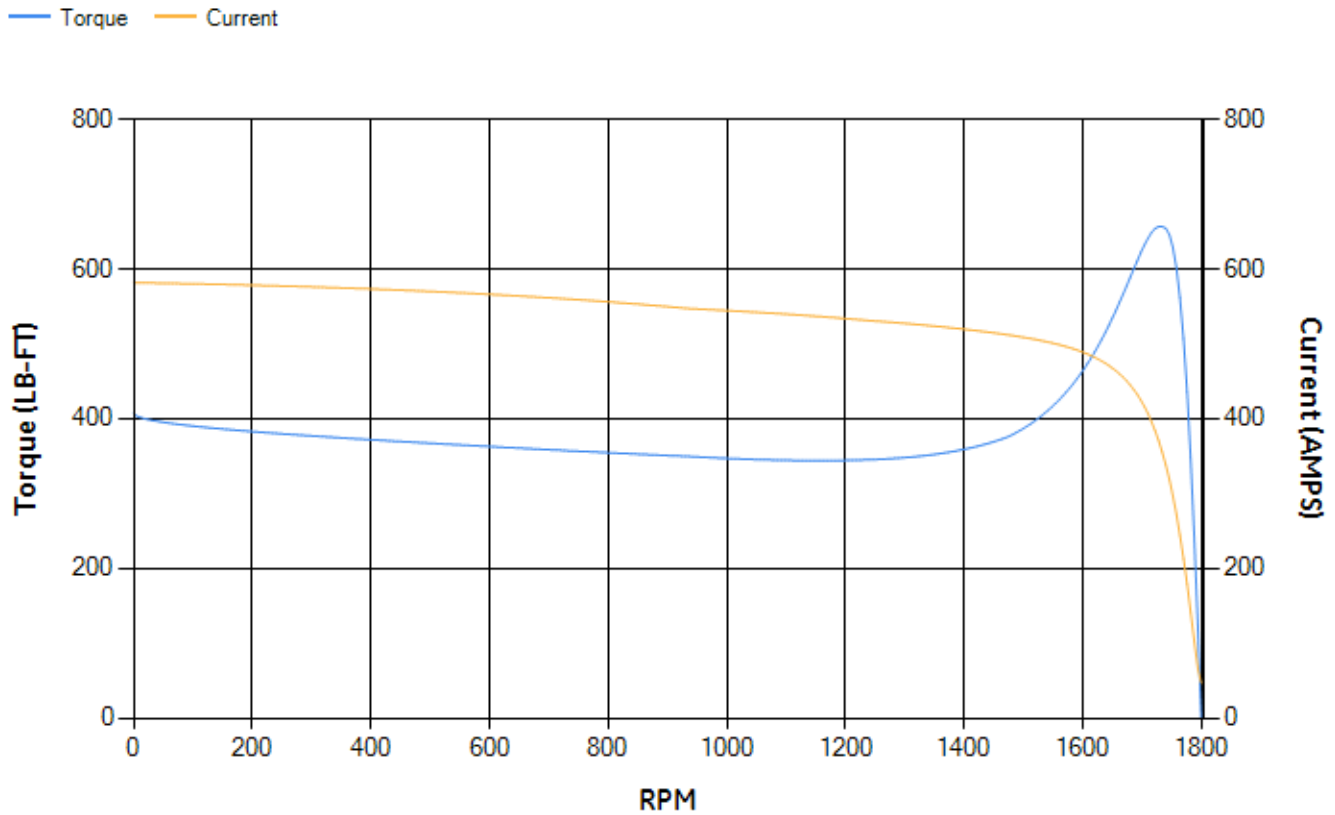
Short Circuit A-C: 0.056

X/R Ratio: 13.789

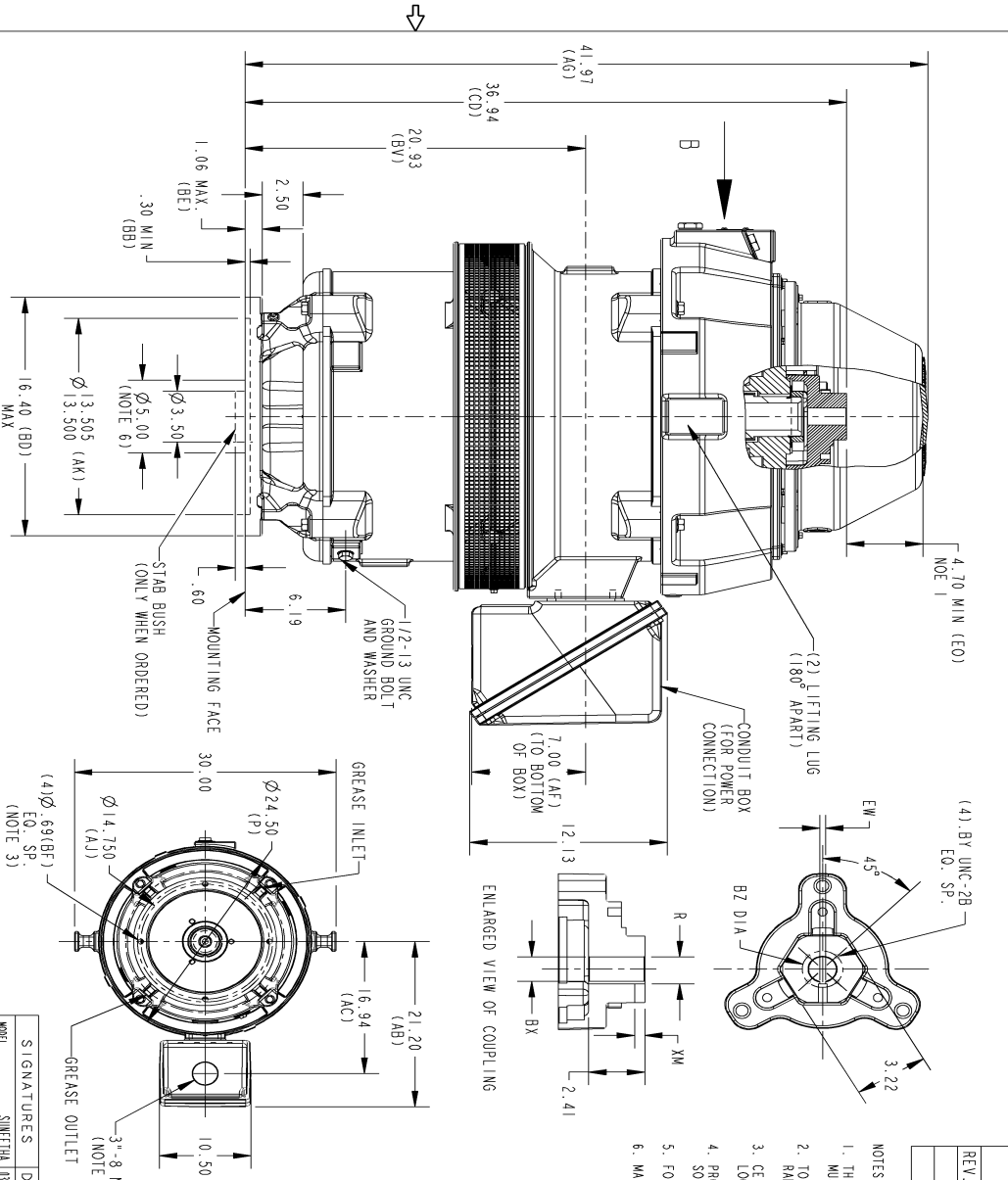
Stator Slots: 72

Rotor Slots: 58

Speed Torque Current Curve (First Connection, First Speed)



Marks:



VIEW "A"

VIEW "B"

DIMENSIONS IN INCHES
NEMA TYPE P BASE

COUPLING DIMENSIONS

BX	BY	BZ	KEY WAY		
			EW	R	XM
1.688-1.689	2.500	.375	1.869/1.859	.562	.562
1.502-1.501	2.125	.315	1.679/1.669	.562	.562
1.439-1.438	2.125	.315	1.615/1.605	.562	.562
1.252-1.251	1/4-20	1.750	.375	1.425/1.415	.562
1.252-1.251	1.750	.250	1.377/1.367	.438	.438
1.189-1.188	1.750	.250	1.314/1.304	.438	.438

GENERAL DIMENSIONS

SIGNATURES	DATE	DESCRIPTION
DESIGN		SINCEHA 03/11/2016
DETAIL		SINCEHA 03/11/2016
CHECKED		PLAGIU 03/11/2016
ENGR		PLAGIU 03/11/2016
MG		
QUALITY		
ISSUED		
SOLD MODEL: 148CB40VMHKCCLA0001		

GE Motors
GENERAL ELECTRIC COMPANY

TITLE
OUTLINE, WPI

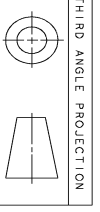
NEMA 404-405 HOLLOW SHAFT, HIGH THRUST
1650 BD, 700 CU. IN C/BOX GROUND PAD

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
B	SIZE DRAWTNG		
O	148CB40VMHKCCLA0001		

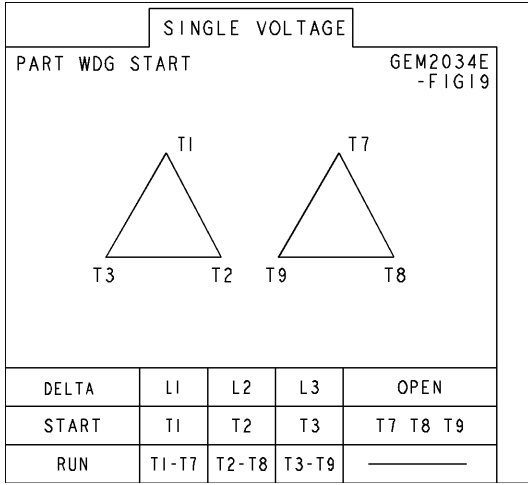
SCALE: 0.140 REF. No.: SHEET 1 OF 1

SIZE DRAWTNG NO. B 148CB40VMHKCCLA0001 0



Marks:

Connection Diagram
GEM2034E-FIG19



Heater Connection
3027JE-1C



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7306AC1	115E7310LA1
Bearing	235A2513AL01	235A2532AA01
Slinger/Inproseal	235A2300HW1	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	161C1054AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	