



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

May 7, 2021

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

Model Number:	5KS145SAA221D2
Catalog Number:	M492
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG3
Outline Drawing:	4002B5814PAP5425

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: 5KS145SAA221D2
Outline Drawing: 4002B5814PAP5425
Connection Diagram: GEM2034E-FIG3
Instruction Book: GEI-56128
Design Code: 14BD1130A
Type: KS
Frame: 145T
Phases: 3
Poles: 4
Output Power: 1.5HP 1.1KW
RPM: 1730
Voltage: 230/460
Hertz: 60
Amps - FL: 4.2/2.1
Service Factor: 1.15
Alt Service Factor: --

Estimated Weight: 50 Lbs
Time Rating: CONT
Enclosure: TEFC
Encl Construction: 841
Ambient Max(°C): 40
Alt Ambient Max(°C): --
Insulation Class: H
NEMA Design: B
Nominal Efficiency: 86.5 %
Guaranteed Efficiency: 85.5 %
3/4 Load Efficiency: --
KVA Code: M
Max KVAR: 0.8
Power Factor: 76.5
Bearing - DE: 6205ZC3
Bearing - ODE: 6205ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

DE BRG 25BC02JP30 ODE BRG 25BC02JP30
 EXCEPTION TO IEEE-STD-841-2009: DUAL VOLTAGE
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS145SAA221D2 S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C GC
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 200C AT 1.15SF ON SINE-WAVE PWR
 OR 200C VT OR 200C CT OR 200C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0 - 60 HZ, CT 3-60 HZ, CHP 60-90 HZ.



Additional Information:

4P - T EXTN
STANDARD FLOOR MOUNT
C/BOX 30 CU IN-0.75 NPT
F1 CONDUIT BOX MOUNTING
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX
GROUND SCREW ON FRAME
SHAFT RUNOUT LIMIT .001" TIR
OIL RESISTANT SLEEVING ON LEADS



Performance Characteristics

1st Winding 1st Connection

Design: 14BD1130A

Marks:

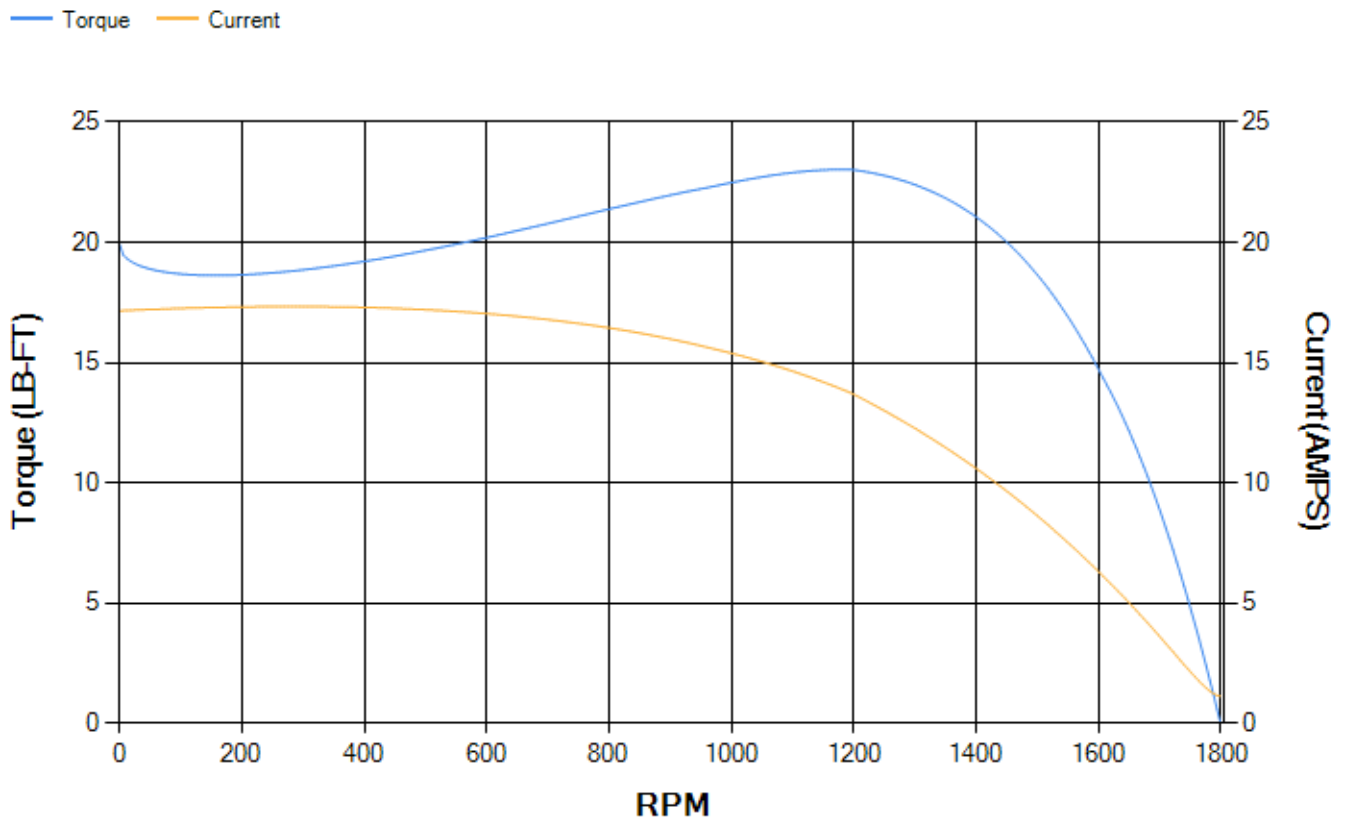
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	86.29	86.68	87.29	87.09	85.37	78.04	0.00
% PF	81.49	79.78	78.04	68.48	55.42	35.07	7.62
AMPS	2.5	2.33	2.05	1.77	1.48	1.28	1.11

TORQ(FL)#FT	4.51	TORQ(LR)%FL	441.58	TORQ(BD)%FL	492.3
AMPS(LR)	17.16	PF AT START	0.66		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 112 Lb-Ft Sq (4.72 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 36 seconds. Safe stall time at 100% voltage is 71 seconds cold, 61 seconds hot. Rotor inertia is 0.11 Lb-Ft Sq (0 Kg-meter Sq).

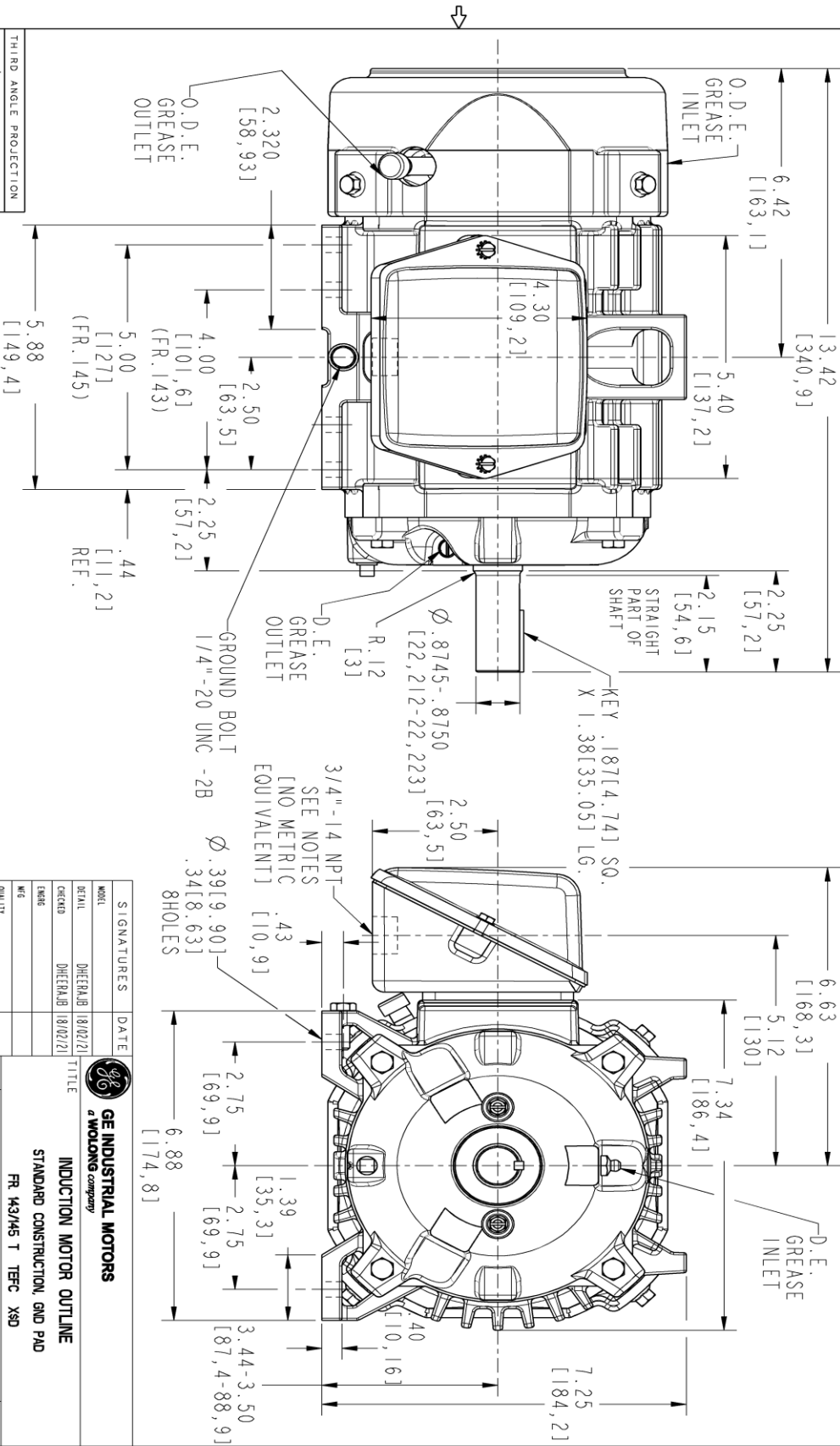
Open Circuit A-C:	0.141	Short Circuit D-C:	0.005
Short Circuit A-C:	0.005	X/R Ratio:	1.925
Stator Slots:	36	Rotor Slots:	48

Speed Torque Current Curve (First Connection, First Speed)



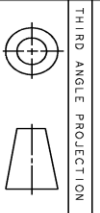
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NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.
 NOTE 2: FI ASSEMBLY AS SHOWN.
 NOTE 3: ALL DIMENSIONS ARE IN INCHES AND BRACKETED DIMENSIONS ARE IN METRIC [mm].



PROPRIETARY INFORMATION
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REV.	DESCRIPTION	DATE	APPROVED



THIRD ANGLE PROJECTION

SIGNATURES	DATE

MODEL	DHEERABJ [18/02/21]	TITLE	INDUCTION MOTOR OUTLINE
DETAIL	DHEERABJ [18/02/21]		STANDARD CONSTRUCTION, GND PAD
ENGR			FR 143/145 T TERC XSD
QC			
QUALITY			
ISSUED	DHEERABJ [18/02/21]		
SOLID MODEL:	4002B5814PAP5425		

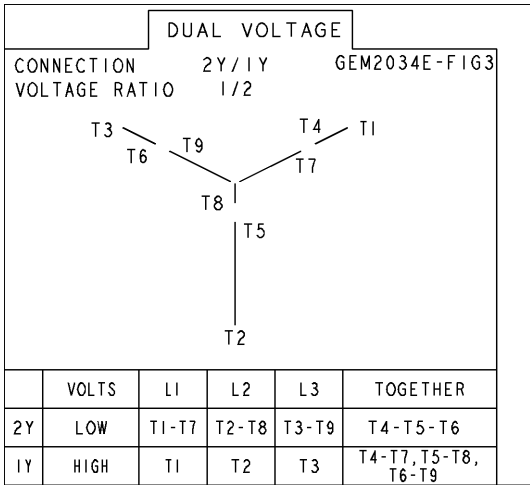
SCALE:	0.500	REF. No.:	4002B5814PAP2201
SHEET	1	REV	0



GE INDUSTRIAL MOTORS
 INDUCTION MOTOR OUTLINE
 STANDARD CONSTRUCTION, GND PAD
 FR 143/145 T TERC XSD

Marks:

Connection Diagram
GEM2034E-FIG3



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5280PB1	4004D5280SG1
Bearing	235A2500AF01	235A2500AF01
Slinger/Inproseal	149C4399G15	149C4399G15

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	4001A5914AM-G01
Fan Cover	4003C5785PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5718PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

