



**GE INDUSTRIAL MOTORS**  
a **WOLONG** company

# Product Technical Information

May 2, 2023

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

<b>Model Number:</b>	<b>5KS445BAA118</b>
<b>Catalog Number:</b>	<b>M1512</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239CG600AB

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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Marks:

<b>MODEL NUMBER:</b>	<b>5KS445BAA118</b>	<b>Estimated Weight:</b>	1970 Lbs
<b>Outline Drawing:</b>	239CG600AB	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	GP
<b>Design Code:</b>	44BD0275A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	445TS	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	95.0 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	--
<b>RPM:</b>	3580	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	28.6
<b>Amps - FL:</b>	163.0	<b>Power Factor:</b>	90.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6314ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6314ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

VT 0-60 HZ NEMA MG1-31



**Additional Information:**

2P - TS EXTN  
C/BOX 700 CU IN - 3.00" NPT  
F1 MOUNTING  
INVERTER DUTY PER NEMA MG1 PART 31  
ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
VAR TORQUE RANGE 0-60 HZ



**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD0275A**

**Marks:**

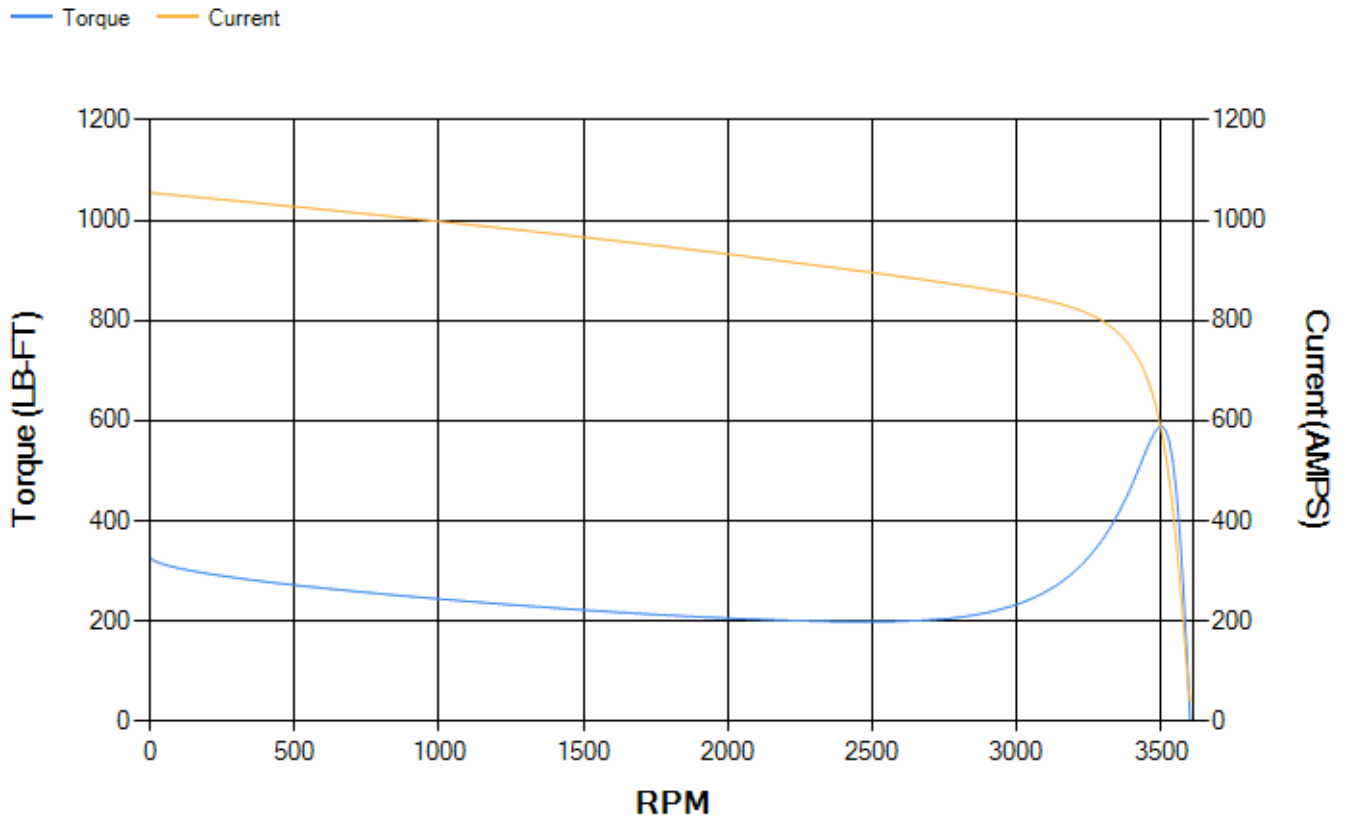
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.96	95.1	95.45	95.23	94.52	91.33	0.00
% PF	90.6	90.67	90.49	89	84.1	67.21	7.5
AMPS	203.99	187.23	162.54	124.24	88.31	57.18	39.93

<b>TORQ(FL)#FT</b>	220.06	<b>TORQ(LR)%FL</b>	149.6	<b>TORQ(BD)%FL</b>	267.56
<b>AMPS(LR)</b>	1055.17	<b>PF AT START</b>	0.21		

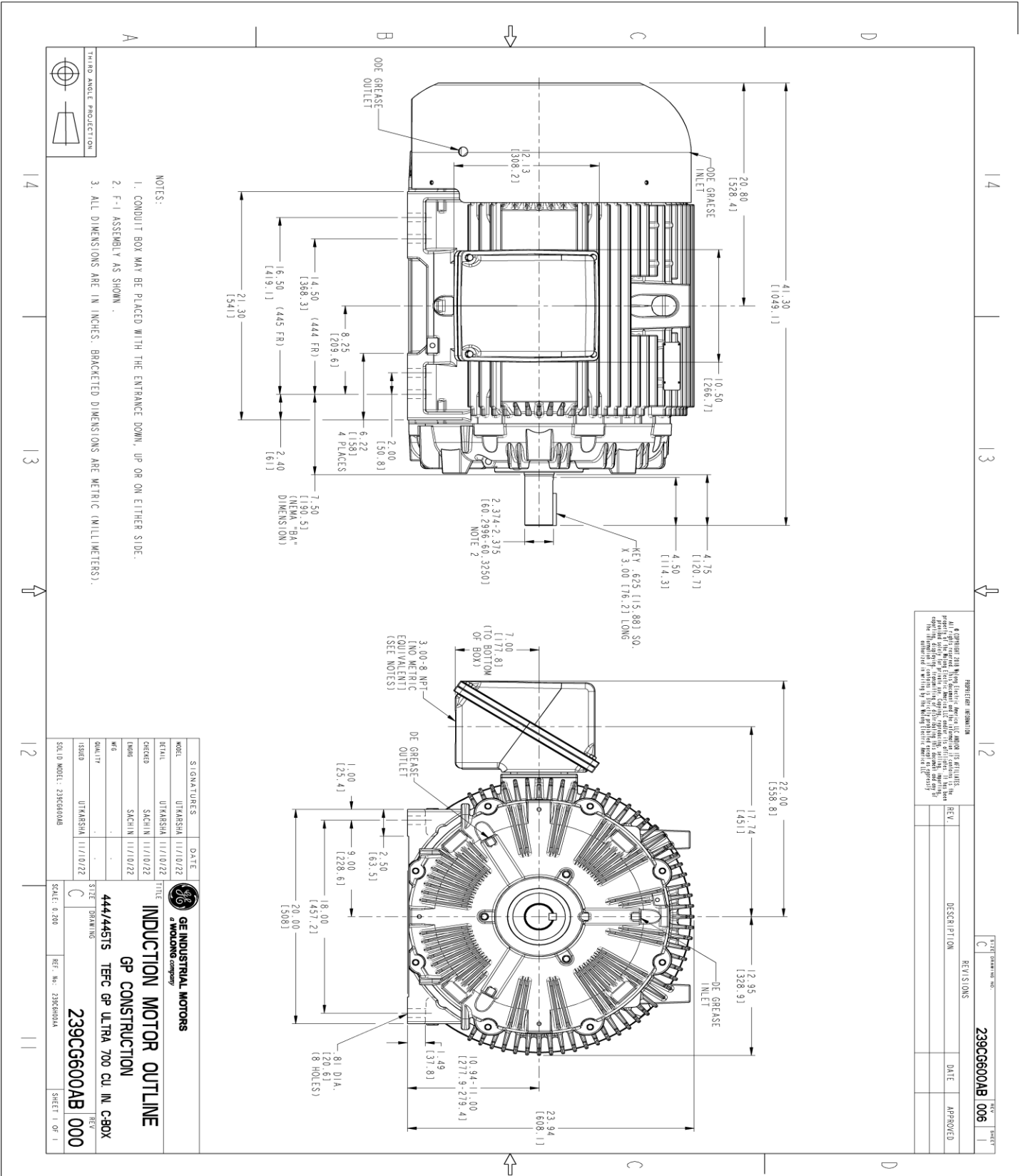
This motor is capable of two cold or one hot start with a maximum connected load inertia of 480 Lb-Ft Sq (20.21 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 33 seconds. Safe stall time at 100% voltage is 73 seconds cold, 39 seconds hot. Rotor inertia is 28.69 Lb-Ft Sq (1.21 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.82	<b>Short Circuit D-C:</b>	0.037
<b>Short Circuit A-C:</b>	0.072	<b>X/R Ratio:</b>	13.765
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

**Speed Torque Current Curve (First Connection, First Speed)**



Marks:



SIGNATURES		DATE	
MODEL	UTKARSHA	11/10/22	
REV.	UTKARSHA	11/10/22	
DESCRPTION	SACHIN	11/10/22	
DATE	SACHIN	11/10/22	
APPROVED			

REGISTRATION INFORMATION		REV'S IONS		DATE		APPROVED	
REV.							
DESCRPTION							
DATE							
APPROVED							

SCALE: 0.200	REF. No: 239CG600AB	SHEET 1 OF 1
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GE INDUSTRIAL MOTORS	INDUCTION MOTOR OUTLINE
GP CONSTRUCTION	444/445TS TEFC GP ULTRA 700 CU IN CBOX
239CG600AB	000

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG7**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4354AA1	115E4354ZA1
Bearing	235A2616AA01	235A2616AA01
Slinger/Inproseal	149C4399G05	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA1
Fan Cover	128D6851AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

