



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

# Product Technical Information

November 20, 2020

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

<b>Model Number:</b>	<b>5KS286DAE5040A</b>
<b>Catalog Number:</b>	<b>V4007</b>
<b>Instruction Manual:</b>	GEK-95353
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	4002B5828NSP5213

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1C
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

## Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05

Marks:

<b>MODEL NUMBER:</b>	<b>5KS286DAE5040A</b>
<b>Outline Drawing:</b>	4002B5828NSP5213
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Instruction Book:</b>	GEK-95353
<b>Design Code:</b>	28BD0158A
<b>Type:</b>	KS
<b>Frame:</b>	L286TP12
<b>Phases:</b>	3
<b>Poles:</b>	2
<b>Output Power:</b>	40HP 29.6KW
<b>RPM:</b>	3550
<b>Voltage:</b>	230/460
<b>Hertz:</b>	60
<b>Amps - FL:</b>	88.6/44.3
<b>Service Factor:</b>	1.15
<b>Alt Service Factor:</b>	--

<b>Estimated Weight:</b>	470 Lbs
<b>Time Rating:</b>	CONT
<b>Enclosure:</b>	WPI
<b>Encl Construction:</b>	OPEN
<b>Ambient Max(°C):</b>	40
<b>Alt Ambient Max(°C):</b>	--
<b>Insulation Class:</b>	H
<b>NEMA Design:</b>	B
<b>Nominal Efficiency:</b>	92.4 %
<b>Guaranteed Efficiency:</b>	91.0 %
<b>3/4 Load Efficiency:</b>	--
<b>KVA Code:</b>	G
<b>Max KVAR:</b>	7.0
<b>Power Factor:</b>	91.5
<b>Bearing - DE:</b>	7310
<b>Bearing - ODE:</b>	6210-2ZC3

Enclosure is Weather Protected One

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**Stamped Nameplate Notes:**

PREMIUM EFFICIENT MOTOR  
 NEMA ENCL WPI AND CSA ENCL DP  
 ROT CCW FACING ODE LEAD/PH SEQUENCE 1-2-3/1-2-3  
 HTR LDS HE1-HE2 115V 60W  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:  
 1.0 SF VAR TORQUE RANGE 2.5-60 HZ  
 SUITABLE FOR 30HP, 190/380V,  
 50 HZ WITH 80.4/40.2AMPS AND 2960 RPM AT 1.0 SF



**Additional Information:**

2P - TP EXTN  
C/BOX 346 CU IN-2.00 NPT  
AUX LEADS EXIT WITH MOTOR LEADS  
RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &  
CENTER OF GRAVITY 12.00 INCHES  
HOLLOW SHAFT HIGH THRUST  
NON REV CPLG W/BX=1.00" KW=0.25"  
OIL RESISTANT SLEEVING ON LEADS  
BEARING LIFE 7445 HOURS AT 2500 LB THRUST  
BEARING LIFE 8760 HOURS AT 2363 LB THRUST



**Performance Characteristics**

1st Winding 1st Connection

**Design: 28BD0158A**

**Marks:**

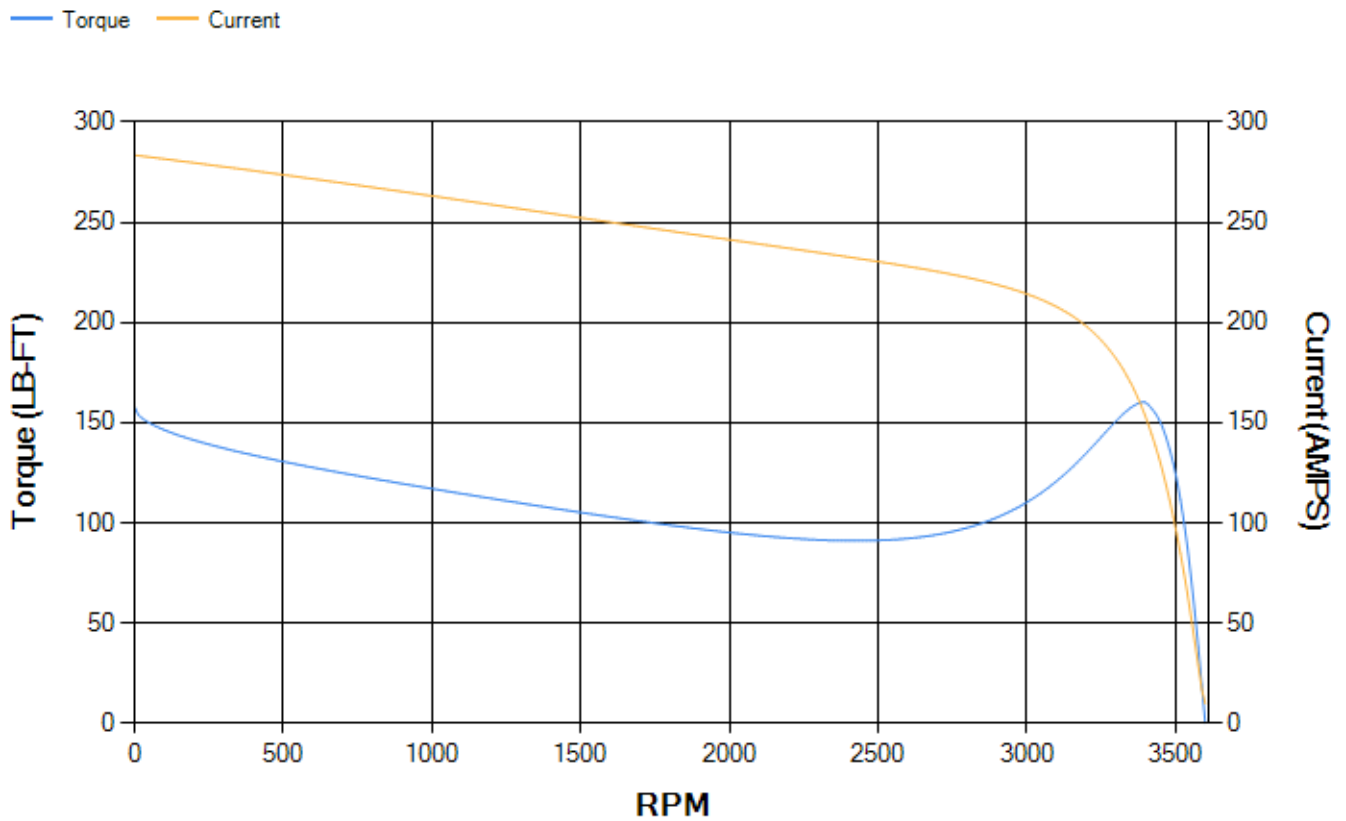
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.25	91.72	92.5	92.9	92.65	89.52	0.00
% PF	91.12	91.34	91.38	90.34	86.27	71.07	9.62
AMPS	56.28	51.39	44.29	33.46	23.42	14.71	9.73

<b>TORQ(FL)#FT</b>	59.13	<b>TORQ(LR)%FL</b>	266.85	<b>TORQ(BD)%FL</b>	269.85
<b>AMPS(LR)</b>	283.54	<b>PF AT START</b>	0.41		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 126 Lb-Ft Sq (5.3 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 16 seconds. Safe stall time at 100% voltage is 27 seconds cold, 20 seconds hot. Rotor inertia is 2.77 Lb-Ft Sq (0.12 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.928	<b>Short Circuit D-C:</b>	0.014
<b>Short Circuit A-C:</b>	0.028	<b>X/R Ratio:</b>	5.394
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

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





Marks:

**Connection Diagram**  
**GEM2034E-FIG9**



**Heater Connection**  
**3027JE-1C**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6235AB1	128D6228PA1
Bearing	235A2508ET01	235A2508AK01
Slinger/Inproseal	235A2300FL2	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5732PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

