



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

# Product Technical Information

April 1, 2021

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

<b>Model Number:</b>	<b>5KE256DAE6020C</b>
<b>Catalog Number:</b>	<b>VF102</b>
<b>Instruction Manual:</b>	GEK-95353
<b>Connection Diagram:</b>	GEM2034E-FIG254
<b>Outline Drawing:</b>	4002B5825NSP5210

## 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>5KE256DAE6020C</b>	<b>Estimated Weight:</b>	315 Lbs
<b>Outline Drawing:</b>	4002B5825NSP5210	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG254	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEK-95353	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	25BD1320A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KE	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L256TP10	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	91.0 %
<b>Output Power:</b>	20HP 14.8KW	<b>Guaranteed Efficiency:</b>	--
<b>RPM:</b>	1770	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	230/460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	7.2
<b>Amps - FL:</b>	50.2/25.1	<b>Power Factor:</b>	82.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	7309
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6209-2ZC3

Enclosure is Weather Protected One

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Stamped Nameplate Notes:

NEMA ENCL WPI AND CSA ENCL DP  
 ROT CCW FACING ODE LEAD/PH SEQUENCE 1-2-3/1-2-3  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:  
 1.0 SF VAR TORQUE RANGE 5-60 HZ



**Additional Information:**

4P - TP EXTN - WYE START DELTA RUN  
C/BOX 137 CU IN-1.25 NPT  
RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &  
CENTER OF GRAVITY 10.75 INCHES  
HOLLOW SHAFT HIGH THRUST  
NON REV CPLG W/BX=1.00" KW=0.25"  
OIL RESISTANT SLEEVING ON LEADS  
BEARING LIFE 8760 HOURS AT 2574 LB THRUST  
FIRE PUMP MOTOR  
WYE START DELTA RUN AT BOTH VOLTAGES  
PART WINDING START AT LOW VOLTAGE ONLY



**Performance Characteristics**

1st Winding 1st Connection

**Design: 25BD1320A**

**Marks:**

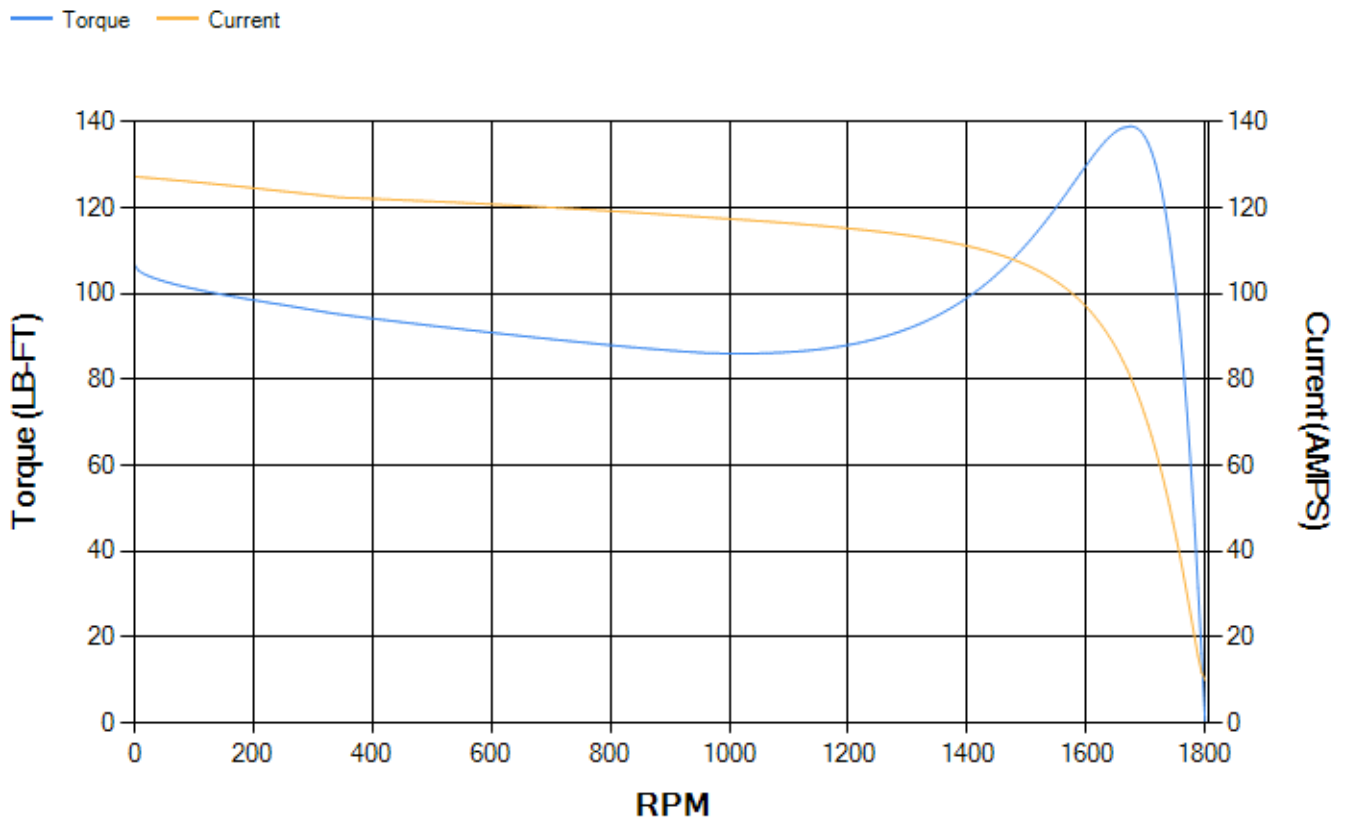
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.79	91.34	92.23	92.8	92.74	89.92	0.00
% PF	83.72	83.29	82.05	77.6	67.44	45.02	4.28
AMPS	30.78	28.3	24.74	19.5	14.96	11.56	10.05

<b>TORQ(FL)#FT</b>	59.29	<b>TORQ(LR)%FL</b>	180.05	<b>TORQ(BD)%FL</b>	233.5
<b>AMPS(LR)</b>	127.31	<b>PF AT START</b>	0.46		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 448 Lb-Ft Sq (18.86 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 74 seconds cold, 52 seconds hot. Rotor inertia is 2.08 Lb-Ft Sq (0.09 Kg-meter Sq).

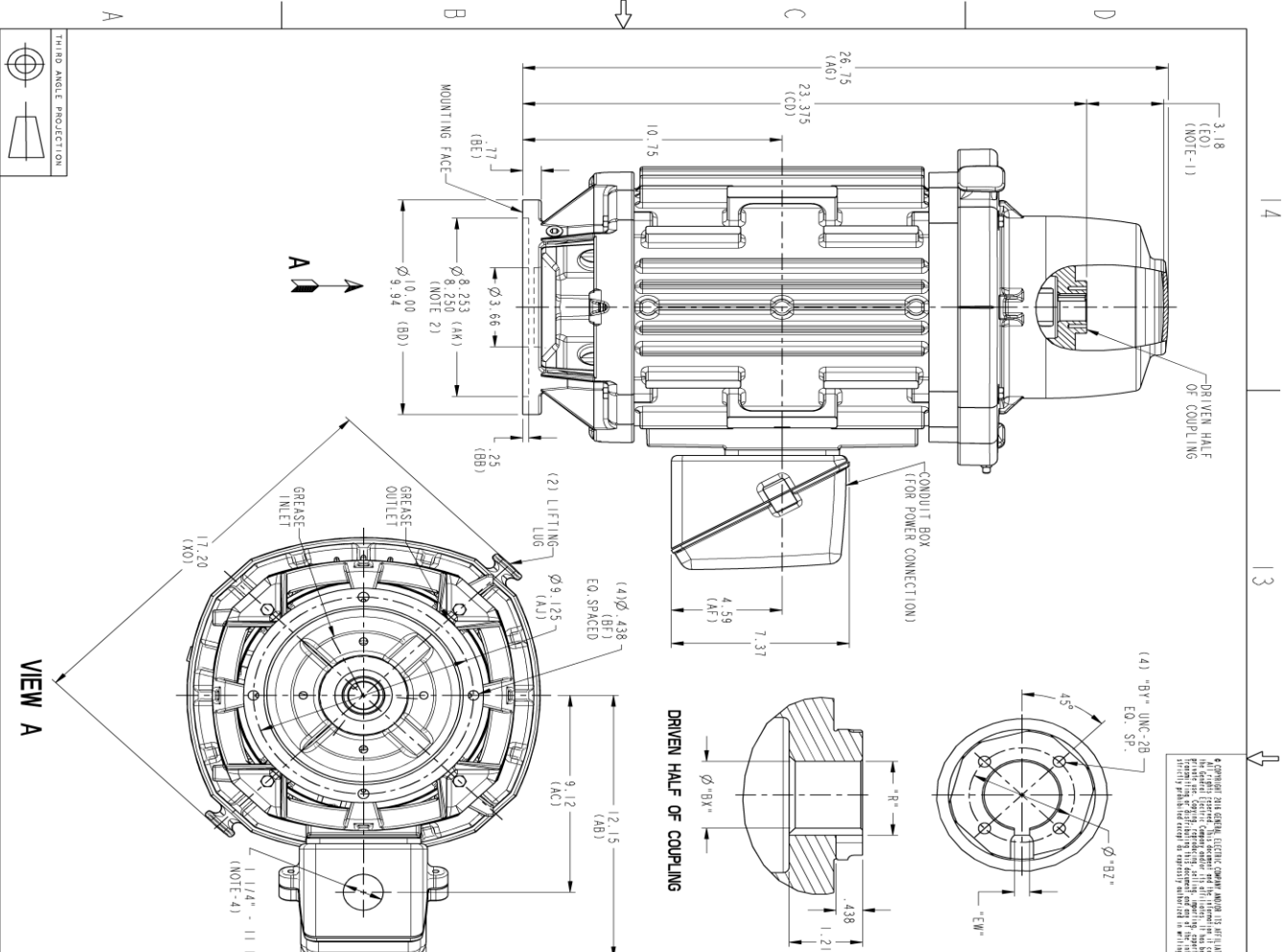
<b>Open Circuit A-C:</b>	0.394	<b>Short Circuit D-C:</b>	0.012
<b>Short Circuit A-C:</b>	0.024	<b>X/R Ratio:</b>	4.541
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

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



Marks:

SOLID MODEL: 4002B5825NSP5210



4. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED IN INCHES. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

NOTES:

1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
2. TOLERANCE ON FACE RUNOUT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBIT ARE .007 T.I.R.
3. CENTRE OF MOUNTING BOLT HOLES SHOULD BE WITHIN .025 OF ANGULAR & DIAMETRICAL LOCATION WITH REFERENCE TO THE CENTERLINE OF MOUNTING RABBIT.
4. PROVIDED MOUNTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD OR FROM EITHER SIDE.
5. FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
6. MAINTAIN MINIMUM CLEARANCE FOR SHAFT SLINGER.

DIMENSIONS IN INCHES  
NEMA TYPE P-BASE

BORE DIA. "Bx"	"B1"	"B2"	KEYWAY	
			D1W "Ew"	D1W "R"
1.252			1.377	1.367
1.189			1.314	1.304
1.066	1/4-20	1.750	1.191	1.181
1.127			1.252	1.242
1.126			.250	.250
1.002			1.124	1.114
1.001			1.061	1.051
.939			.997	.987
.877	#10-32	1.375	.847	.837
.752			.190	.180
1.032			252	1.139
1.031			250	1.129

GE POWER CONVERSION

**OUTLINE, WPI**  
1000 BD, 137 CU IN BOX

4002B5825NSP5210

SCALE: 0.300

SHEET 1 OF 1

REV.	DESCRIPTION	DATE	APPROVED
1	FIRST RELEASE FROM TC	01/24/17	RAVI

REV.	DATE	APPROVED
1	12/28/16	MGARAJ
2	12/28/16	RAVI
3	12/28/16	RAVI

GE POWER CONVERSION

CLASS II GE NEMA CERTIFIED

GE POWER CONVERSION

1000 BD, 137 CU IN BOX

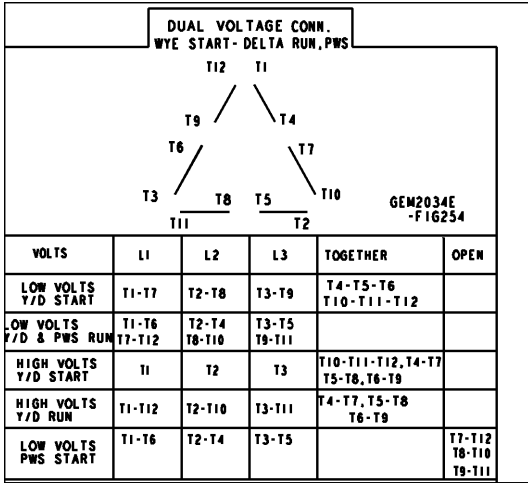
4002B5825NSP5210

SCALE: 0.300

SHEET 1 OF 1

Marks:

**Connection Diagram**  
**GEM2034E-FIG254**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6124PA1	128D6128PA1
Bearing	235A2507AC01	235A2507EE01
Slinger/Inproseal	235A2300FL3	

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

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

