



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.

Model Number:	5KE286DAE6020C
Catalog Number:	VF104
Instruction Manual:	GEK-95353
Connection Diagram:	GEM2034E-FIG254
Outline Drawing:	4002B5828NSP5217

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: 5KE286DAE6020C
Outline Drawing: 4002B5828NSP5217
Connection Diagram: GEM2034E-FIG254
Instruction Book: GEK-95353
Design Code: 28BD1246A
Type: KE
Frame: L286TP16
Phases: 3
Poles: 4
Output Power: 30HP 22.2KW
RPM: 1775
Voltage: 230/460
Hertz: 60
Amps - FL: 69/34.5
Service Factor: 1.15
Alt Service Factor: --

Estimated Weight: 470 Lbs
Time Rating: CONT
Enclosure: WPI
Encl Construction: OPEN
Ambient Max(°C): 40
Alt Ambient Max(°C): --
Insulation Class: H
NEMA Design: B
Nominal Efficiency: 92.4 %
Guaranteed Efficiency: --
3/4 Load Efficiency: --
KVA Code: G
Max KVAR: 6.3
Power Factor: 88.0
Bearing - DE: 7310
Bearing - ODE: 6210-2ZC3

Enclosure is Weather Protected One

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-1.50 NPT
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 8760 HOURS AT 2959 LB THRUST
TRI-RATED MOTOR
FIRE PUMP MOTOR
WYE START DELTA RUN AT BOTH VOLTAGES
PART WINDING START AT LOW VOLTAGE ONLY
STAMP NP249A5570AC AS PER MODELS 5KE286DAE6020CRA1
AND 5KE286DAE6020CRA2 AND ATTACH TO THIS MOTOR



Performance Characteristics

1st Winding 1st Connection

Design: 28BD1246A

Marks:

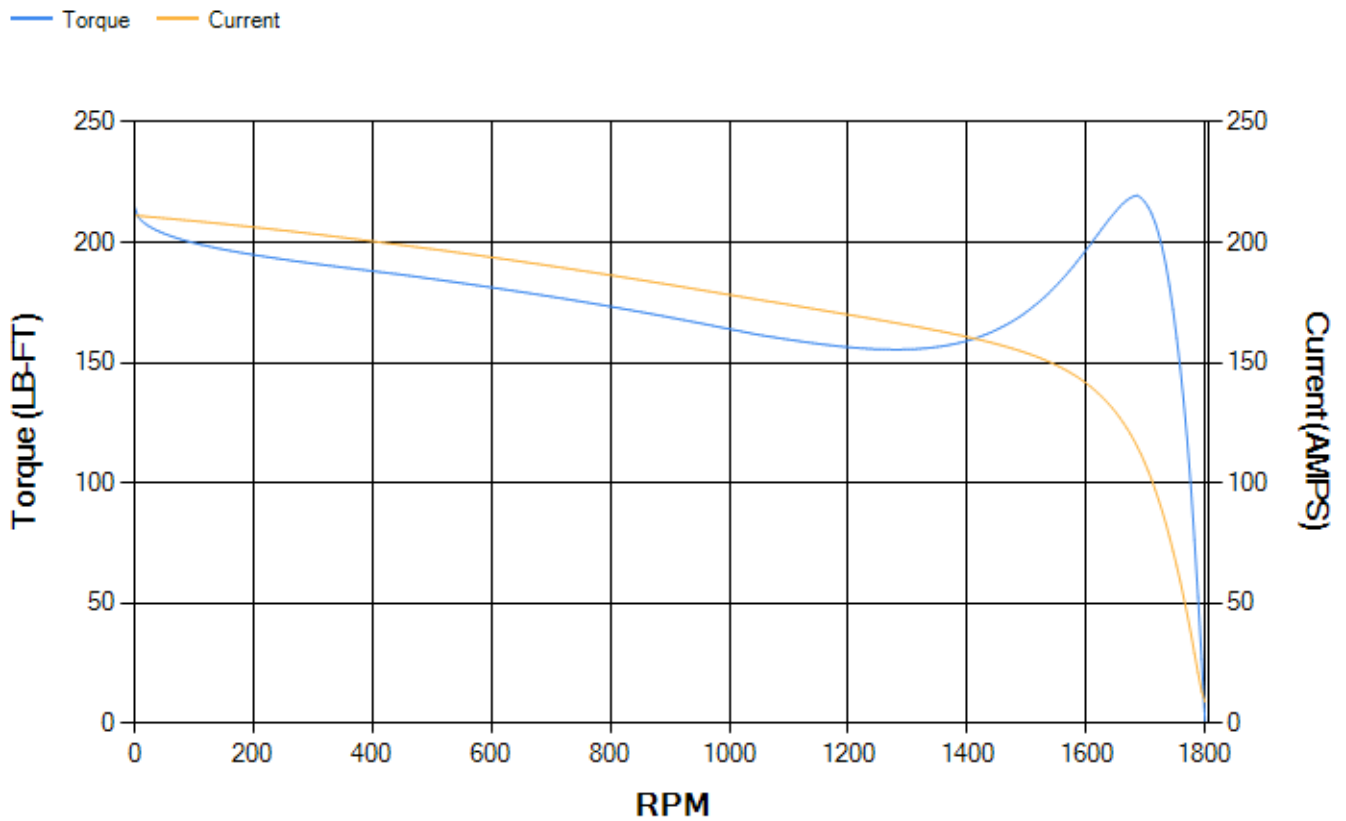
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.57	92.17	93.14	93.91	94.26	92.62	0.00
% PF	87.86	88.15	88.17	86.7	81.27	63.01	5.01
AMPS	43.62	39.74	34.17	25.86	18.33	12.03	8.74

TORQ(FL)#FT	88.8	TORQ(LR)%FL	241.73	TORQ(BD)%FL	246.12
AMPS(LR)	211.21	PF AT START	0.5		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1058 Lb-Ft Sq (44.54 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 41 seconds. Safe stall time at 100% voltage is 71 seconds cold, 54 seconds hot. Rotor inertia is 5.39 Lb-Ft Sq (0.23 Kg-meter Sq).

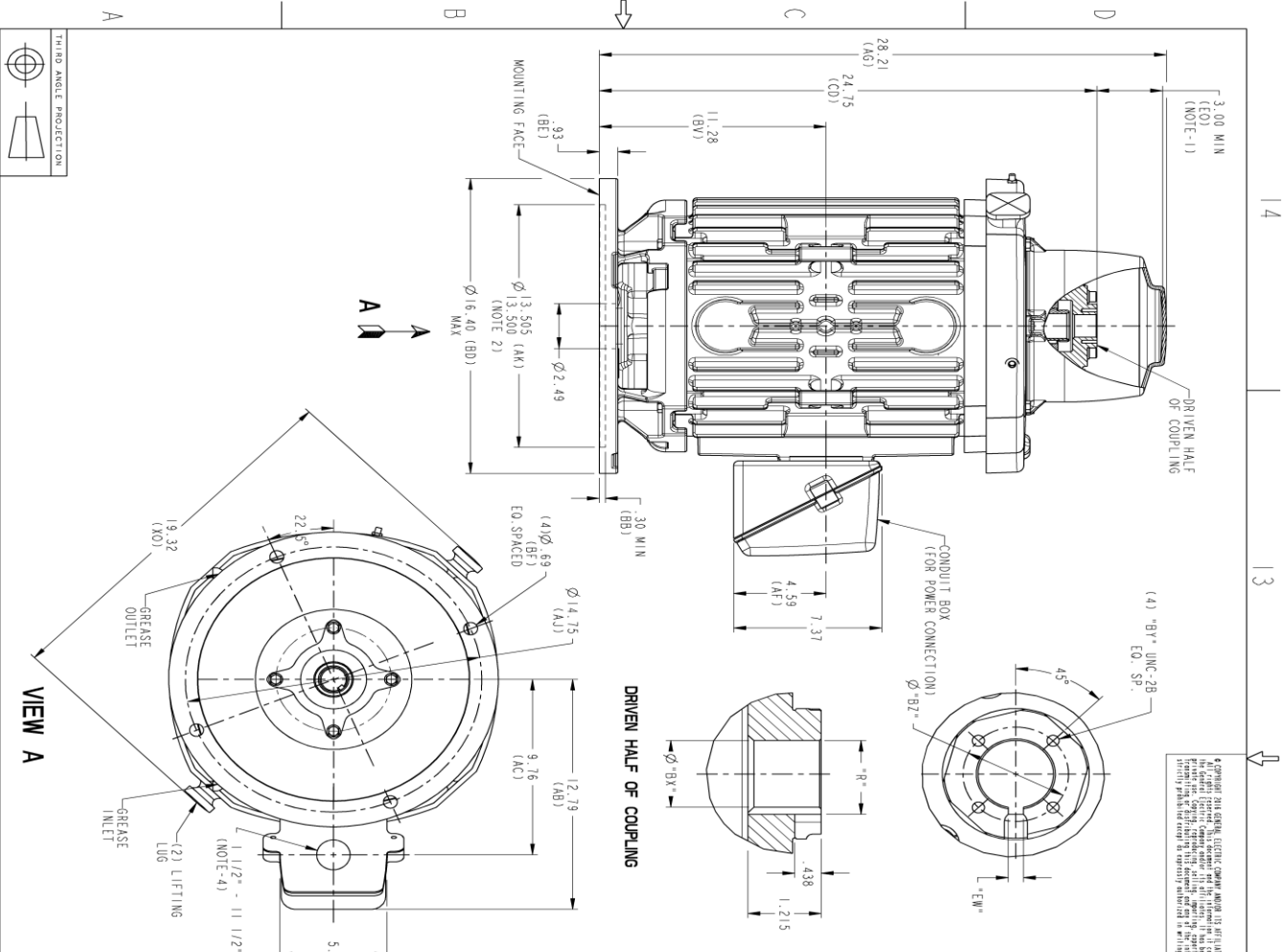
Open Circuit A-C:	0.735	Short Circuit D-C:	0.012
Short Circuit A-C:	0.023	X/R Ratio:	4.648
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



Marks:

SOLID MODEL: 4002B5828NSP5217



* ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS. DIMENSIONS IN MILLIMETERS ARE NOT TO BE USED FOR CONSTRUCTION. DIMENSIONS IN PARENTHESES ARE NOT TO BE USED FOR CONSTRUCTION. DIMENSIONS IN PARENTHESES ARE NOT TO BE USED FOR CONSTRUCTION. DIMENSIONS IN PARENTHESES ARE NOT TO BE USED FOR CONSTRUCTION.

- 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.

BORE DIA. Bx	Bz	KEYWAY	
		DIM EW	DIM RW
1.252			1.377
1.231			1.367
1.189			1.314
1.188			1.304
1.066	1/4-20	1.750	1.191
1.065			1.181
1.127			1.252
1.126			1.242
1.002			1.124
1.001			1.114
.938			1.061
.938			1.051
.877	#10-32	1.315	.997
.876			.887
.752			.847
.751			.837
1.032			1.139
1.031			1.129

GE POWER CONVERSION

NEMA 280 HOLLOW SHAFT, HIGH THRUST

6550 BD, 137 CU, IN BOX

4002B5828NSP5217

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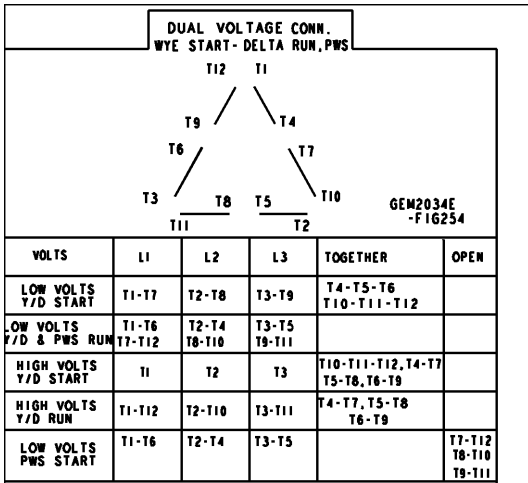
REV	DATE	DESCRIPTION	APPROVED
1	12/01/16	FIRST RELEASE FORM TC	MGARAJ
			01/24/17
			RAVI

SCALE: 0.250

SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG254



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6235AA1	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	4002B5728PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

