



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:	5KE284DAE6020C
Catalog Number:	VF103
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		

Table of Contents

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

Marks:

MODEL NUMBER:	5KE284DAE6020C	Estimated Weight:	420 Lbs
Outline Drawing:	4002B5828NSP5217	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG254	Enclosure:	WPI
Instruction Book:	GEK-95353	Encl Construction:	OPEN
Design Code:	28BD1217A	Ambient Max(°C):	40
Type:	KE	Alt Ambient Max(°C):	--
Frame:	L284TP16	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	91.7 %
Output Power:	25HP 18.5KW	Guaranteed Efficiency:	--
RPM:	1775	3/4 Load Efficiency:	--
Voltage:	230/460	KVA Code:	G
Hertz:	60	Max KVAR:	5.8
Amps - FL:	58.4/29.2	Power Factor:	87.5
Service Factor:	1.15	Bearing - DE:	7310
Alt Service Factor:	--	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
FIRE PUMP MOTOR
WYE START DELTA RUN AT BOTH VOLTAGES
PART WINDING START AT LOW VOLTAGE ONLY



Performance Characteristics

1st Winding 1st Connection

Design: 28BD1217A

Marks:

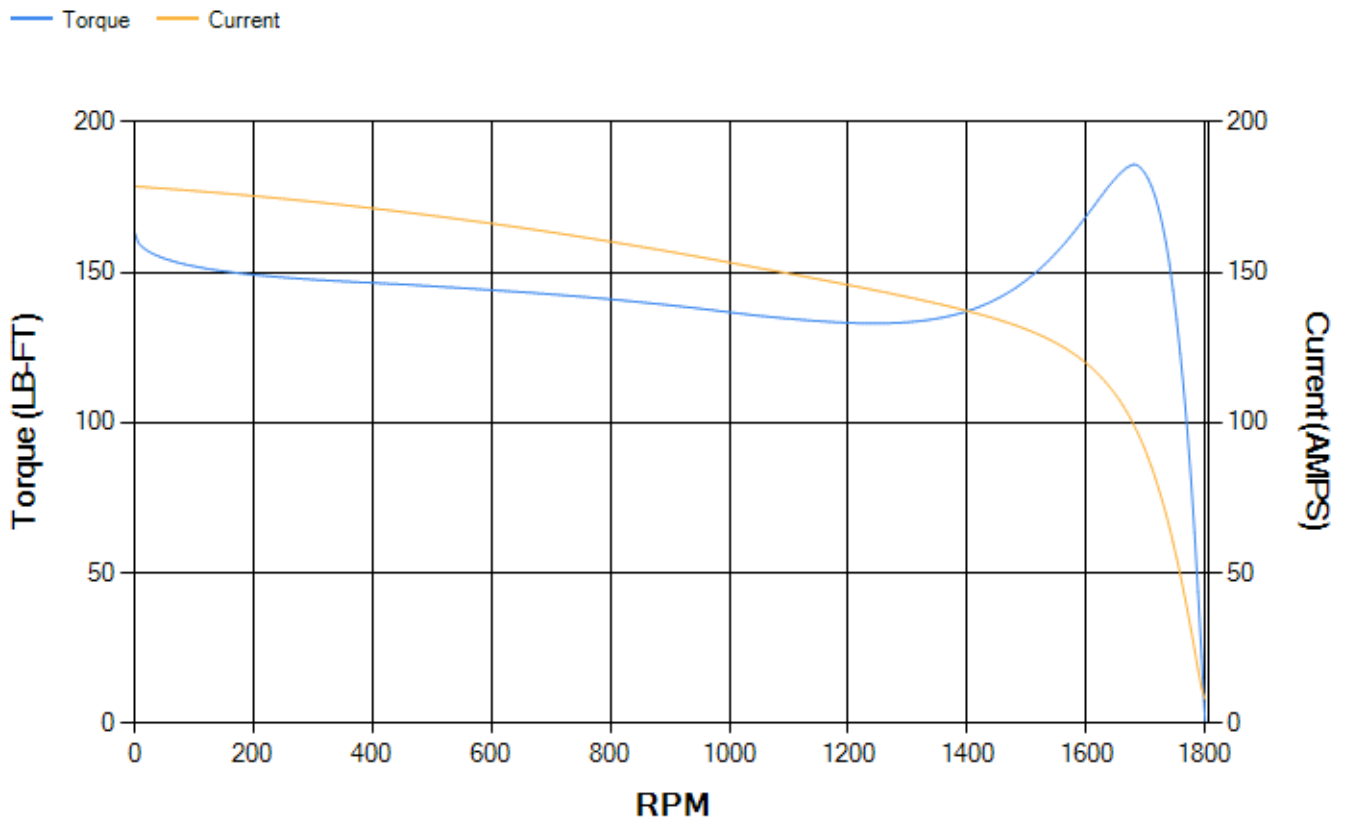
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.05	91.67	92.67	93.45	93.74	91.83	0.00
% PF	87.44	87.61	87.43	85.48	79.18	59.67	5.08
AMPS	36.74	33.51	28.86	21.97	15.76	10.67	8.11

TORQ(FL)#FT	74	TORQ(LR)%FL	220.63	TORQ(BD)%FL	250.26
AMPS(LR)	178.64	PF AT START	0.49		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 805 Lb-Ft Sq (33.89 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 39 seconds. Safe stall time at 100% voltage is 70 seconds cold, 56 seconds hot. Rotor inertia is 3.87 Lb-Ft Sq (0.16 Kg-meter Sq).

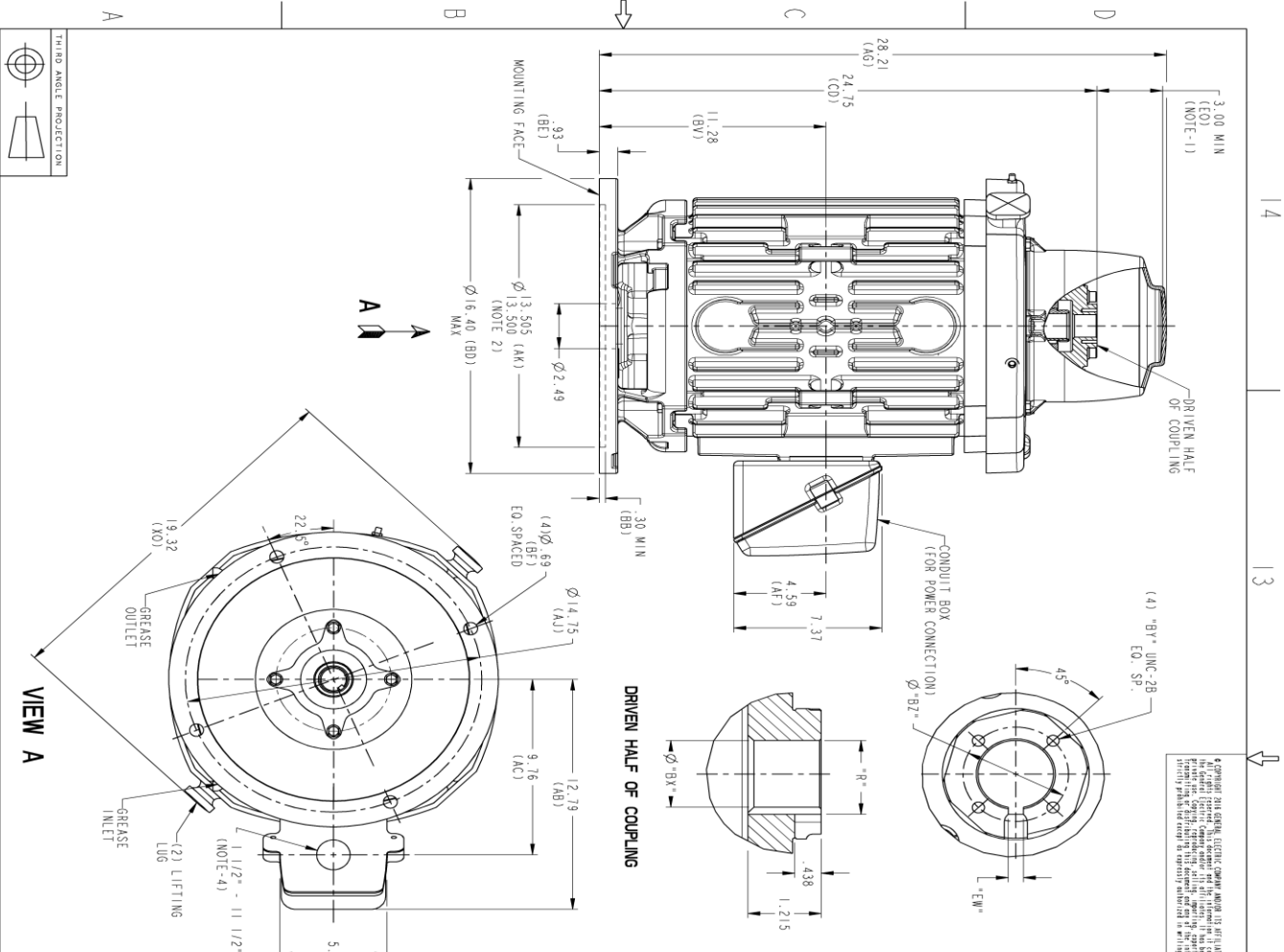
Open Circuit A-C:	0.663	Short Circuit D-C:	0.011
Short Circuit A-C:	0.023	X/R Ratio:	4.196
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



Marks:

SOLID MODEL: 4002B5828NSP5217



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

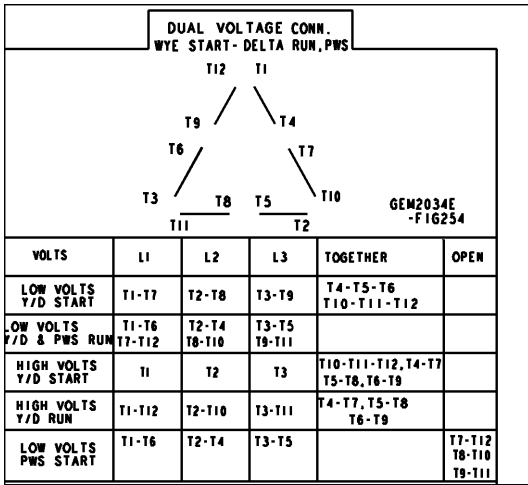
BORE DIA. Bx	Bz	KEYWAY	
		DIM EW	DIM R-
1.252			1.377
1.231			1.367
1.189			1.314
1.188			1.304
1.066	1/4-20	1.750	1.191
1.065			1.181
1.127		.252	1.252
1.126		.250	1.242
1.002			1.124
1.001			1.114
.938			1.061
.938			1.051
.877	#10-32	1.315	.997
.876			.887
.752			.847
.751			.837
1.032			1.139
1.031			1.129

DIMENSIONS IN INCHES
NEMA TYPE P-BASE

SIGNATURES		DATE	REV	
DESIGN	MGRJAU	12/01/16	1	FIRST RELEASE FORM TC
CHECKED	RAVI	12/01/16	2	DATE
ENG	RAVI	12/01/16	3	APPROVED
QUALITY	RAVI	12/01/16	4	MGRJAU
ISSUED	RAVI	12/01/16	5	01/24/17
SCALE: 0.250		REF. NO.	4002B5828NSP5217 001	
NEMA 280 HOLLOW SHAFT, HIGH THRUST		OUTLINE, WPI		
6550 BD, 137 CU, IN BOX		POWER CONVERSION		
4002B5828NSP5217		CLASS II, REF. NEMA 280		
001		NEMA 280 HOLLOW SHAFT, HIGH THRUST		
SHEET 1 OF 1		REV		

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	

