



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

May 25, 2022

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

Model Number:	5KS286DAE6040D
Catalog Number:	V4411
Instruction Manual:	GEK-95353
Connection Diagram:	GEM2034E-FIG9
Outline Drawing:	4002B5828NMP5216

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KS286DAE6040D
Outline Drawing:	4002B5828NMP5216
Connection Diagram:	GEM2034E-FIG9
Instruction Book:	GEK-95353
Design Code:	28BD1142A
Type:	KS
Frame:	L286TP16
Phases:	3
Poles:	4
Output Power:	30HP 22.2KW
RPM:	1780
Voltage:	230/460
Hertz:	60
Amps - FL:	70.6/35.3
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:	A
Nominal Efficiency:	94.1 %
Guaranteed Efficiency:	93.0 %
3/4 Load Efficiency:	--
KVA Code:	H
Max KVAR:	9.6
Power Factor:	84.5
Bearing - DE:	7310
Bearing - ODE:	6210-2ZC3

Enclosure is Weather Protected One

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 20-60 HZ
 SUITABLE FOR 25HP, 190/380V,
 50 HZ WITH 70.8/35.4AMPS AND 1480 RPM AT 1.0 SF



Additional Information:

4P - TP EXTN
C/BOX 137 CU IN-1.50 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 8760 HOURS AT 2960 LB THRUST



Performance Characteristics

1st Winding 1st Connection

Design: 28BD1142A

Marks:

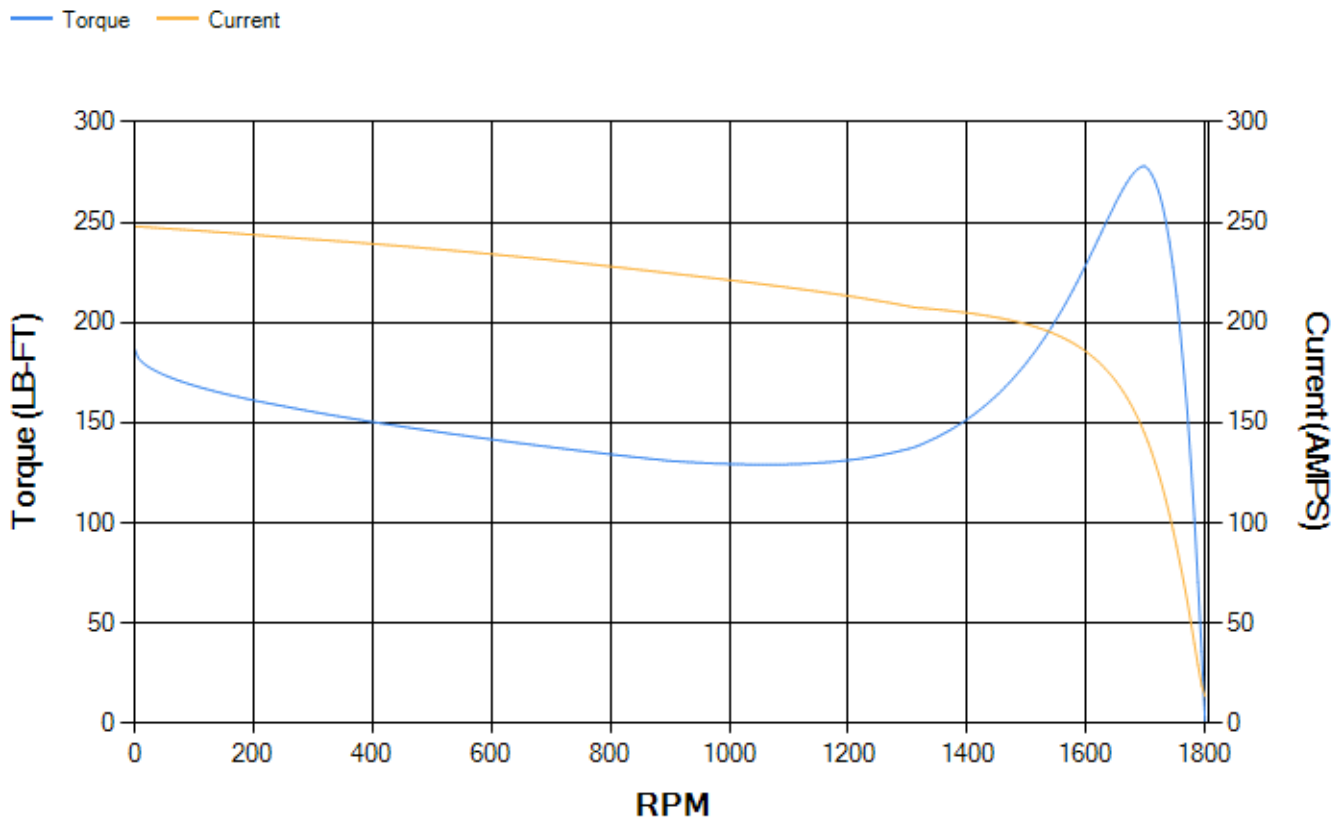
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.22	93.54	94.14	94.33	94.04	91.34	0.00
% PF	86.1	85.63	84.44	80.35	70.89	48.62	4.22
AMPS	43.73	40.31	35.3	27.78	21.06	15.81	13.33

TORQ(FL)#FT	88.41	TORQ(LR)%FL	211.28	TORQ(BD)%FL	313.48
AMPS(LR)	247.93	PF AT START	0.39		

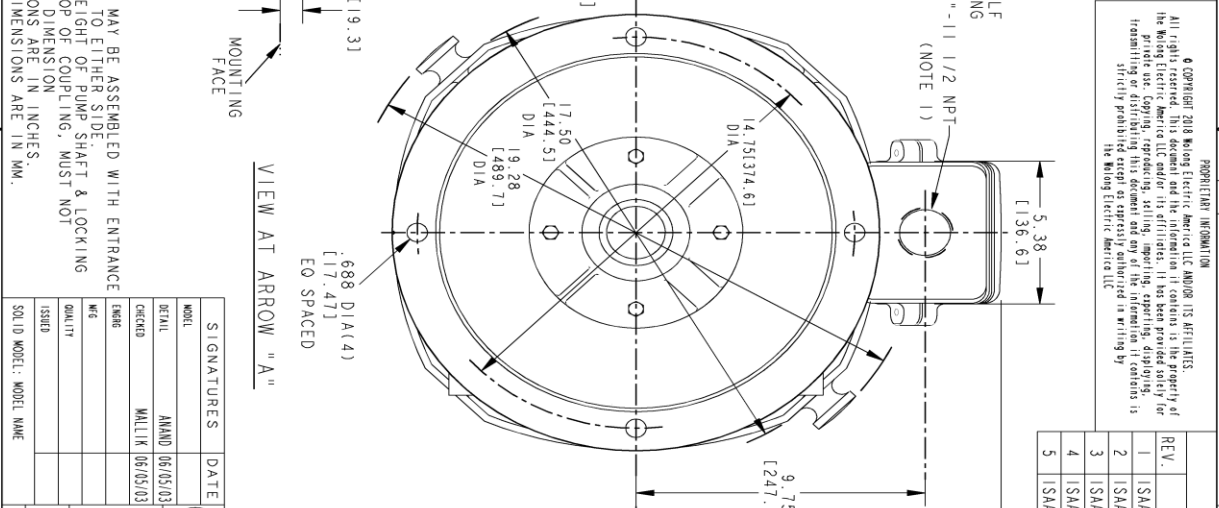
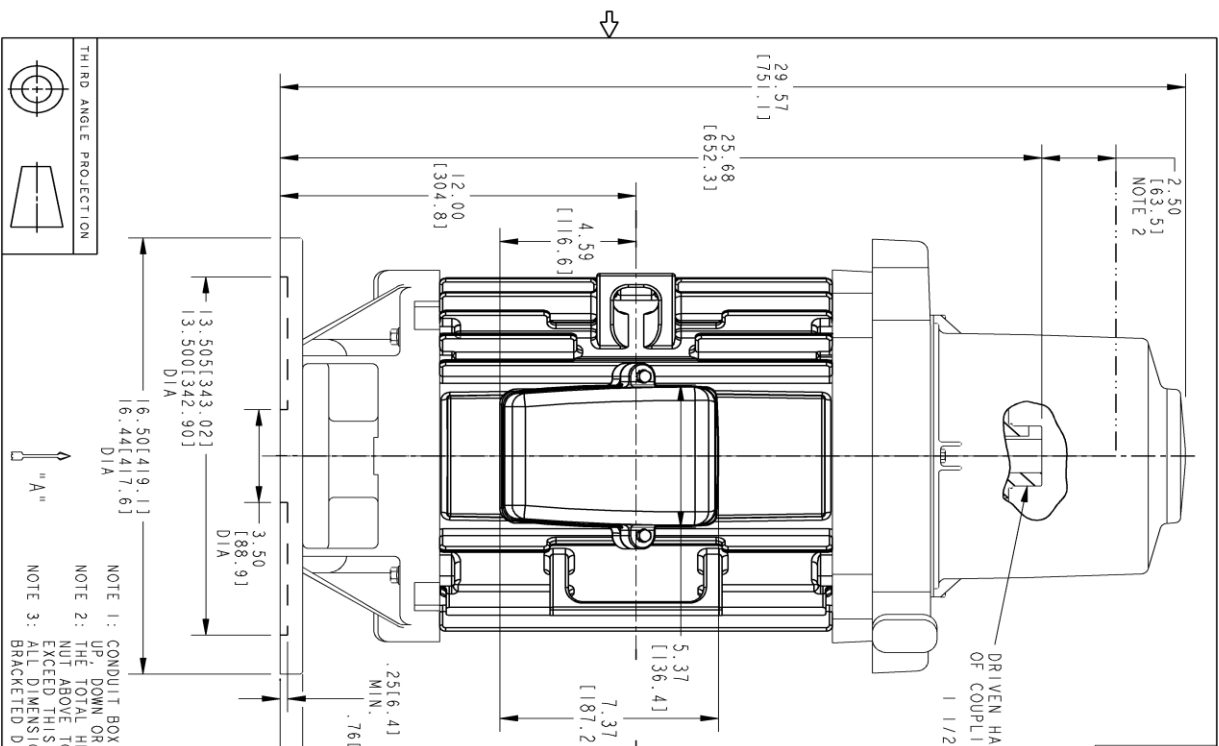
This motor is capable of two cold or one hot start with a maximum connected load inertia of 973 Lb-Ft Sq (40.96 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 44 seconds. Safe stall time at 100% voltage is 83 seconds cold, 68 seconds hot. Rotor inertia is 5.39 Lb-Ft Sq (0.23 Kg-meter Sq).

Open Circuit A-C:	0.66	Short Circuit D-C:	0.016
Short Circuit A-C:	0.028	X/R Ratio:	5.918
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



Marks:



PROPRIETARY INFORMATION
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SIZE DRAWING NO. **B** REV. **005** SHEET **1**

4002B5828NMP5216

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 13-0028	01/10/13	VIJAYT
2	ISAC# 15-0305	03/31/15	PIYUSH
3	ISAC# 16-1202	12/09/16	KARTHIK
4	ISAC# 18-0869	11/08/18	PRAASHANTH
5	ISAC# 19-0504	06/18/2019	RAGHU

REVISIONS

COUPLING KIT	GR.	"BY"	"BT"	BORE DIA.	"BX"	KEYWAY	"W"	"D"
4002B55254A	1	1/4-20	1.750	1.252	1.251			
	2	1/4-20	1.750	1.189	1.188	.250	.125	
4002B55254A	3	#10-32	1.375	1.002	1.001			
	4	#10-32	1.375	.877	.876			
4002B55254A	5	1/4-20	1.750	.752	.751	.188	.094	
	7	1/4-20	1.750	1.525	1.524	.375	.188	
4002B55254B	1	1/4-20	1.750	1.252	1.251			
	2	1/4-20	1.750	1.189	1.188	.250	.125	
4002B55254B	3	#10-32	1.375	1.002	1.001			
	4	#10-32	1.375	.877	.876			
4002B55254B	5	1/4-20	1.750	.752	.751	.188	.094	
	7	1/4-20	1.750	1.232	1.231	.375	.188	

DRIVEN HALF OF COUPLING
 DIMENSIONS IN TABLE ARE IN INCHES

"BY" (4)
 TAPPED HOLES
 EO, SPACED

"BX"

"B7" DIA.

VIEW AT ARROW "A"

THIRD ANGLE PROJECTION

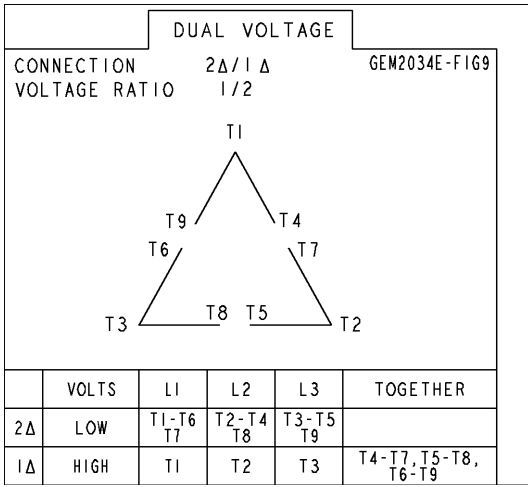
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.
 NOTE 2: THE TOTAL HEIGHT OF PUMP SHAFT & LOCKING NUT ABOVE TOP OF COUPLING, MUST NOT EXCEED THIS DIMENSION.
 NOTE 3: ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE IN MM.

SIGNATURES DATE
 MODEL ANAND 06/05/03
 DETAIL MALLIK 06/05/03
 CHECKER
 ENGRG
 HGT
 QUALITY
 ISSUED
 SOLID MODEL: MODEL NAME
 SCALE: .25 REF. NO.:
 SHEET 1 OF 1

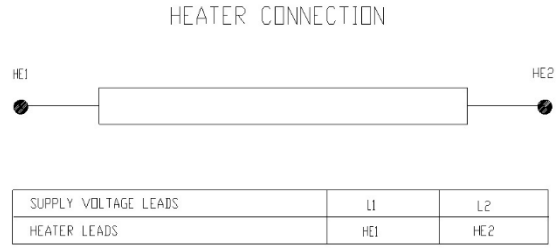
TITLE
 INDUCTION MOTOR OUTLINE
 FR290, WP-1, STANDARD "P" BASE VERTICAL
 HOLLOW SHAFT - HIGH THRUST (BP16)
 4002B5828NMP5216
 REV. 005
 SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG9



Heater Connection
3027JE-1C



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6226PA1	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	

