

Product Information Packet

January 13, 2017

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

Model Number:	5KS511XAA250A
Catalog Number:	Q893
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	239C6B00KY

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	235A3027WN	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	235A3027NA		

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Marks:

MODEL NUMBER:	5KS511XAA250A	Estimated Weight:	5451 Lbs
Outline Drawing:	239C6B00KY	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG2	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	50BD1227E	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	5011L	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	95.4 %
Output Power:	400HP 296KW	Guaranteed Efficiency:	94.5
RPM:	1785	3/4 Load Efficiency:	96.4
Voltage:	2300/4000	KVA Code:	G
Hertz:	60	Max KVAR:	78.6
Amps - FL:	87.7/50.4	Power Factor:	89.5
Service Factor:	1.15	Bearing - DE:	NU 320
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

EXCEPTION TO IEEE-STD-841-2009: SOUND POWER 92 DBA
TSTAT HTR LDS HE1-HE2 115V 200W
DE BRG 100RU03M, ODE BRG 75BC03XP3
MAXIMUM EXPOSED INTERNAL AND EXTERNAL SURFACE
TEMPERATURES DO NOT EXCEED 200C UNDER USUAL
SERVICE CONDITIONS AT 1.0SF
MAXIMUM SPACE HEATER SURFACE TEMPERATURE FOR
NORMAL OPERATION AT RATED CONDITIONS 160C
STAMP NP249A5499AP AS BELOW:
MODEL:5KS511XAA250A S/N: XXX
EX NA IIC T3 GC CSA.09.2216219
CLASS I, ZONE 2, AEX NA IIC T3
CLASS I, DIV 2, GROUPS A, B, C, D T3
-25C <= TAMB <= 40C
ROLLER BEARING - FOR BELTED LOAD ONLY
CUSTOM POLYSEAL

Additional Information:

4P - L EXTN
PAINTED FRAME ID & SHAFT, FAN COVER INSIDE &
ODE E/S OUTSIDE
2500 CU IN - 2(4.00" NPT)
INPRO SEAL BOTH ENDS
OIL RESISTANT SLEEVING ON LEADS
.002" TIR SHAFT RUNOUT
ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST
REPORT INCLUDED IN C/B

COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,
RABBETS AND PLUG THREADS.
B5F4C4 HIGH STRENGTH STEEL AISI 4142 SHAFT MATERIAL
100 OHM WINDING RTD LEADS TO AUX C/BOX OPP MAIN C/BOX
SUGGESTED WINDING RTD SETTINGS
ALARM 165C TRIP 175C
115V TSTAT CTRLD HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
SPACE HEATER CAUTION NAMEPLATE
BEARING RTD 100 OHM ON BOTH ENDS
SUGGESTED BEARING RTD SETTINGS
ALARM 115C TRIP 125C
NEMA TYPE GRD PAD
F1 MOUNTING
SHAFT BLOCKING FOR SHIPMENT

Performance Characteristics

1st Winding 1st Connection

Design: 50BD1227E

Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.76	95.94	96.36	96.35	96.08	94.17	0.00
% PF	89.83	89.9	89.69	88.06	82.76	64.84	4.61
AMPS	62.57	57.4	49.85	38.06	27.07	17.63	12.61

TORQ(FL)#FT 1177.41
AMPS(LR) 309.19

TORQ(LR)%FL 124.07
PF AT START 0.27

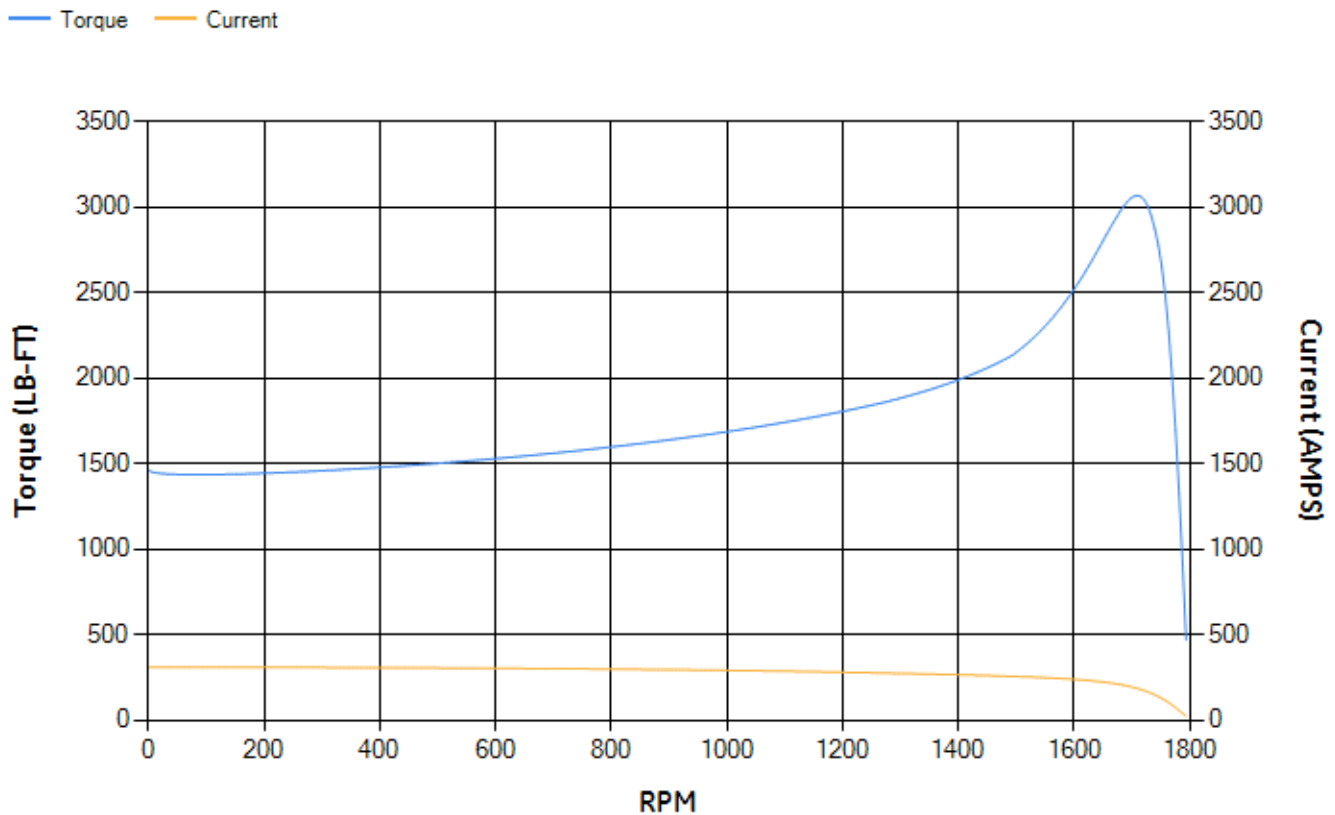
TORQ(BD)%FL 260.2

This motor is capable of two cold or one hot start with a maximum connected load inertia of 10380 Lb-Ft Sq (437 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 95 seconds cold, 59 seconds hot. Rotor inertia is 184.12 Lb-Ft Sq (7.75 Kg-meter Sq).

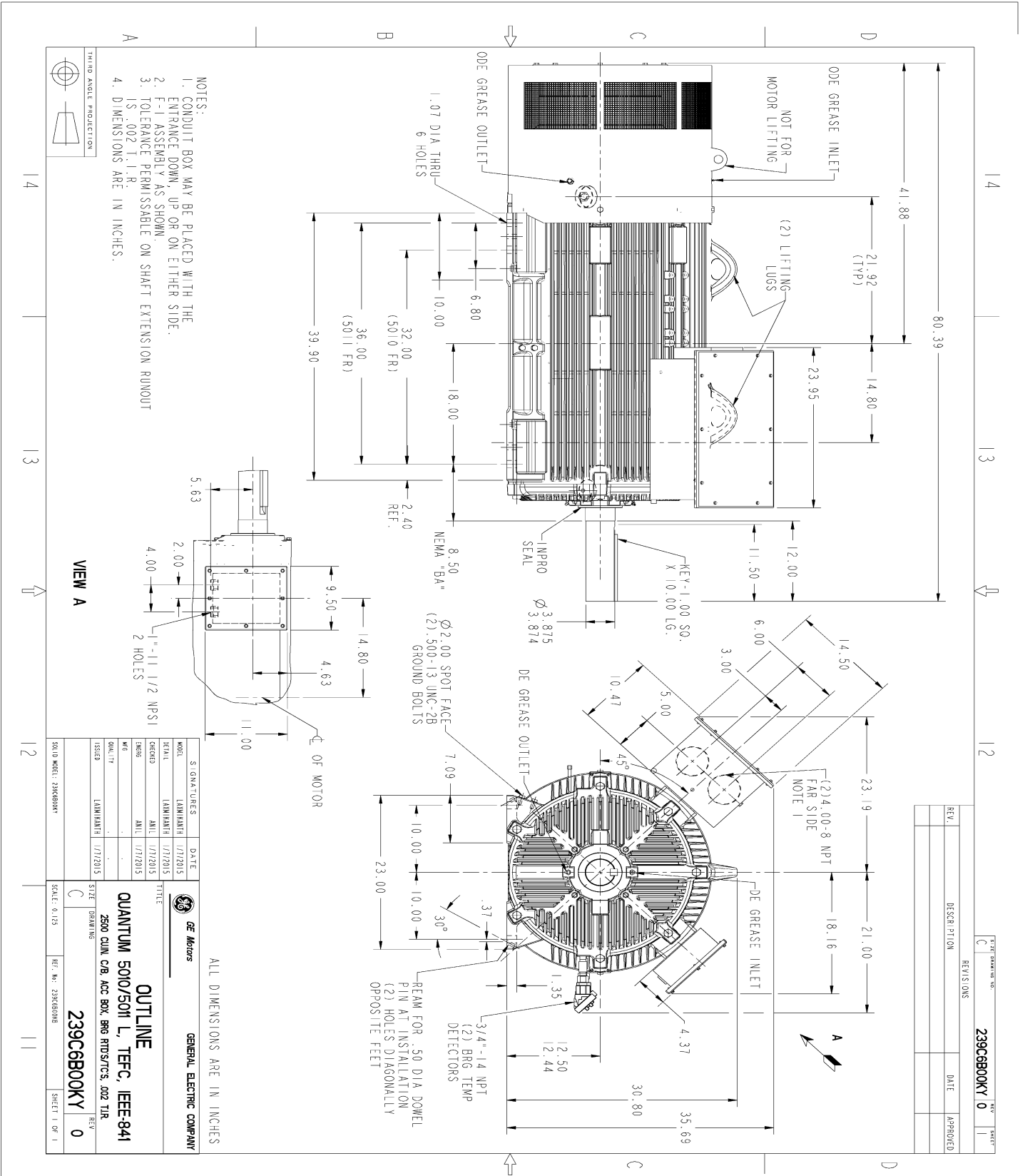
Open Circuit A-C: 1.151
Short Circuit A-C: 0.042
Stator Slots: 72

Short Circuit D-C: 0.034
X/R Ratio: 12.757
Rotor Slots: 58

Speed Torque Current Curve (First Connection, First Speed)



Marks:



- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
 2. F-1 ASSEMBLY AS SHOWN.
 3. TOLERANCE PERMISSABLE ON SHAFT EXTENSION RUNOUT IS .002 T.I.R.
 4. DIMENSIONS ARE IN INCHES.

VIEW A

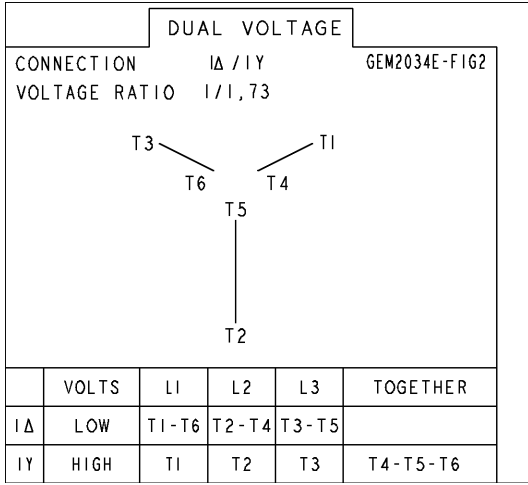
ALL DIMENSIONS ARE IN INCHES

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE
MODEL	LAMINANTH	1/17/2015
SCALE	LAMINANTH	1/17/2015
ORDER	ANIL	1/17/2015
DESIGN	ANIL	1/17/2015
DATE		
ISSUED	LAMINANTH	1/17/2015
SIZE		
SCALE		
REF. NO.		
<p>GE Motors GENERAL ELECTRIC COMPANY</p> <p>OUTLINE QUANTUM 5010/5011 L, TEFC, IEEE-841 2500 CULN C/R, ACC BOX, BRG RDS/TC'S, .002 TIR</p> <p>239C6B00KY</p>		

Marks:

Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



SHEET

REV

235A3027WN

SIZE DRAWING NO. A

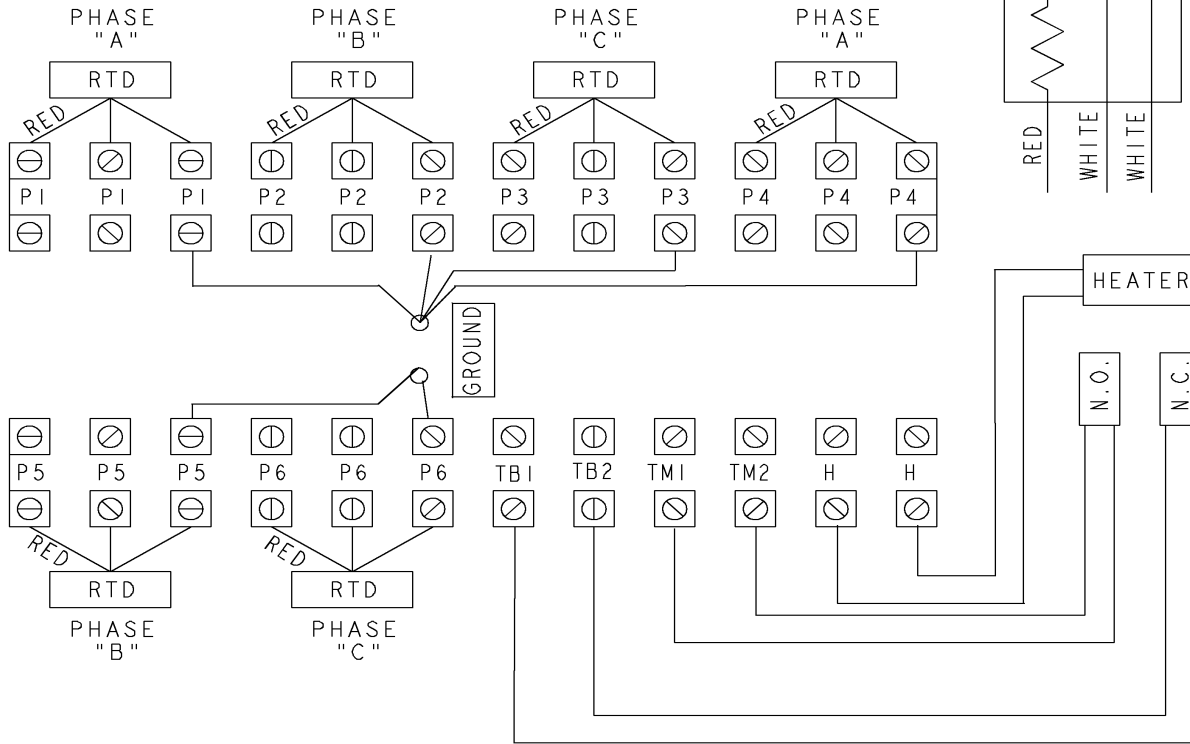
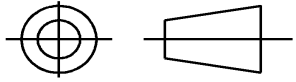
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REVISIONS

REV.	DESCRIPTION	DATE	APPROVED

THIRD ANGLE PROJECTION



- NOTE 1: TERMINAL LABELS ARE PROVIDED FOR ACCESSORIES THAT MAY OR MAY NOT BE INCLUDED WITH THE MOTOR.
- NOTE 2: SPARE RTDS (P7 & P8) FURNISHED IN CASE OF FAILURE IN OTHER RTDS (P1-P6). PHASE LOCATION WILL DEPEND UPON NUMBER OF POLES WINDING CONFIGURATION.
- NOTE 3: IT IS RECOMMENDED THAT RTDS BE GROUNDED AT EITHER THE MACHINE OR CONNECTED TO A GROUNDED CONTROL CIRCUIT. FOR PROPER OPERATION DO NOT GROUND AT THE MACHINE IF CONNECTED TO A GROUND CIRCUIT AT THE CONTROL.

Part must conform to SI 900000 Sect. 4, Toxicity Procedure

FOR ADDITIONAL INFO REFER TO:	SIGNATURES	DATE
APPLIED PRACTICES	MODEL	
DIMENSIONS ARE IN INCHES	DETAIL VIVEK	07/19/13
TOLERANCE ON:	CHECKED VIJAY	07/19/13
1 PL DECIMALS ± 0.1	ENGRG	
2 PL DECIMALS ± 0.02	MFG	
3 PL DECIMALS ± 0.005	QUALITY	
ANGLES ± 0.5	ISSUED VIVEK	07/19/13
FRACTIONS ±		
FINISH ✓		
MATERIAL	SOLID MODEL: MODEL NAME	

GE Motors GENERAL ELECTRIC COMPANY

TITLE: **CONNECTION DIAGRAM**

WINDING RTD'S & T'STATS & HEATERS

SIZE DRAWING: A

235A3027WN REV 0

SCALE: NA SHEET 1 of 1



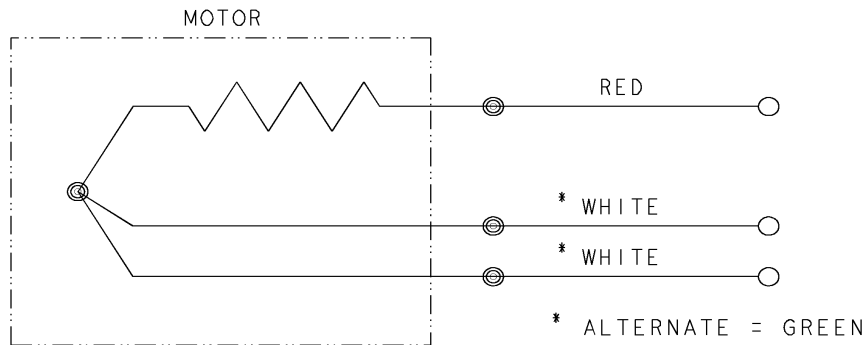
REV SH	THIRD ANGLE PROJECTION	REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
		1	ISAAC #12-1124	HARI	11/19/12

SIZE A
 DWG NO 235A3027NA

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BEARING RTDS



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS ± 3 PL DECIMALS ± ANGLES ± FRACTIONS ± MATERIAL: APPLIED PRACTICES:	SIGNATURES	DATE	Fort Wayne, Indiana <h2>CONNECTION DIAGRAM</h2> BEARING RTDS
	DRAWN D.E. BAIR	12/16/92	
	CHECKED D.E. BAIR	12/16/92	
	ENGRG K. DESAI	12/16/92	
	ISSUED D.E. BAIR	12/16/92	
	CAD NO. F500:235A3027NA	SIZE A	FSCM NO
		SCALE 1/1	DWG NO 235A3027NA
			SHEET 1 OF 1

DISTR TO

