

BALDOR® • RELIANCE 

Product Information Packet

EM4104T-58

30HP,1470RPM,3PH,50HZ,286T,1064M,TEFC,F1

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGZ706	CD Diagram:	CD0382	Mfg Plant:	
Mech. Spec:	10C151	Layout:	10LYC151	Poles:	04	Created Date:	11-10-2017
Base:	RG	Eff. Date:	09-13-2019	Leads:	6#8		

Specs			
Catalog Number:	EM4104T-58	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	H
Frame:	286T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	30.000 HP @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 8 AWG
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	400.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1064M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	81
	WEEE	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
	CE	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding

Current @ Voltage:	43.000 A @ 400.0 V	Shaft Rotation:	Reversible
Design Code:	A	Shaft Slinger Indicator:	Shaft Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Wye Start - Delta Run
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP3444L											
CAT NO	EM4104T-58										
SPEC.	10C151Z706G1										
HP	30							PH	3		
VOLTS	400										
AMP	43										
RPM	1470										
FRAME	286T				HZ	50			I.P.	54	
SER.F.	1.15		CODE	H		DES	A		CL	F	
NOM.EFF.	93										
PF	81			USABLE AT 208V							
RATING	40C AMB-CONT							CC			
DE BRG	6311				ODE	6309					
ENCL	TEFC			SN							
VPWM INVERTER READY											
CT5-50(10:1)VT2.5-50(20:1											
BLANK	IE3-93.6(75)92.8(50%)										

Parts List		
Part Number	Description	Quantity
SA347618	SA 10C151Z706G1	1.000 EA
RA336176	RA 10C151Z706G1	1.000 EA
09FN3001C02	EXTERNAL FAN, PLASTIC	1.000 EA
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10EP1106A01	FR ENDPLATE, MACH	1.000 EA
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K32	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10EP1105A01	PU ENDPLATE	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
10FH4000	310 FAN HOUSING STAMPED	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.130 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.125 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0382	CONNECTION LABEL	1.000 EA
NP3444L	ALUM SUPER-E VPWM INV READY NEMA IE3 UL	1.000 EA
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
FE-0000022	ZRTG FE ASSEMBLY	1.000 EA

LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 EA
PE-0000013	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 68540 - Typical performance - not guaranteed values

Winding: 10WGZ706-R001	Type: 1064M	Enclosure: TEFC
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Nameplate Data				400 V, 50 Hz: Single Voltage Motor	
Rated Output (HP)	30			Full Load Torque	107.2 LB-FT
Volts	400			Start Configuration	direct on line
Full Load Amps	43			Breakdown Torque	349 LB-FT
R.P.M.	1470			Pull-up Torque	154 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	180 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	292 A
Service Factor (S.F.)	1.15			No-load Current	19.1 A
NEMA Nom. Eff.	93	Power Factor	81	Line-line Res. @ 25°C	0.18648 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	69°C
S.F. Amps				Temp. Rise @ S.F. Load	78°C
				Locked-rotor Power Factor	34.7

Load Characteristics 400 V, 50 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	76	81	83	84	82
Efficiency	89	92.8	93.6	93.4	93	92.8	93.2
Speed	1493.1	1487.1	1480.8	1474.1	1469.7	1466.8	1471
Line amperes	21.7	27.1	34.3	42.6	48.2	51.9	46

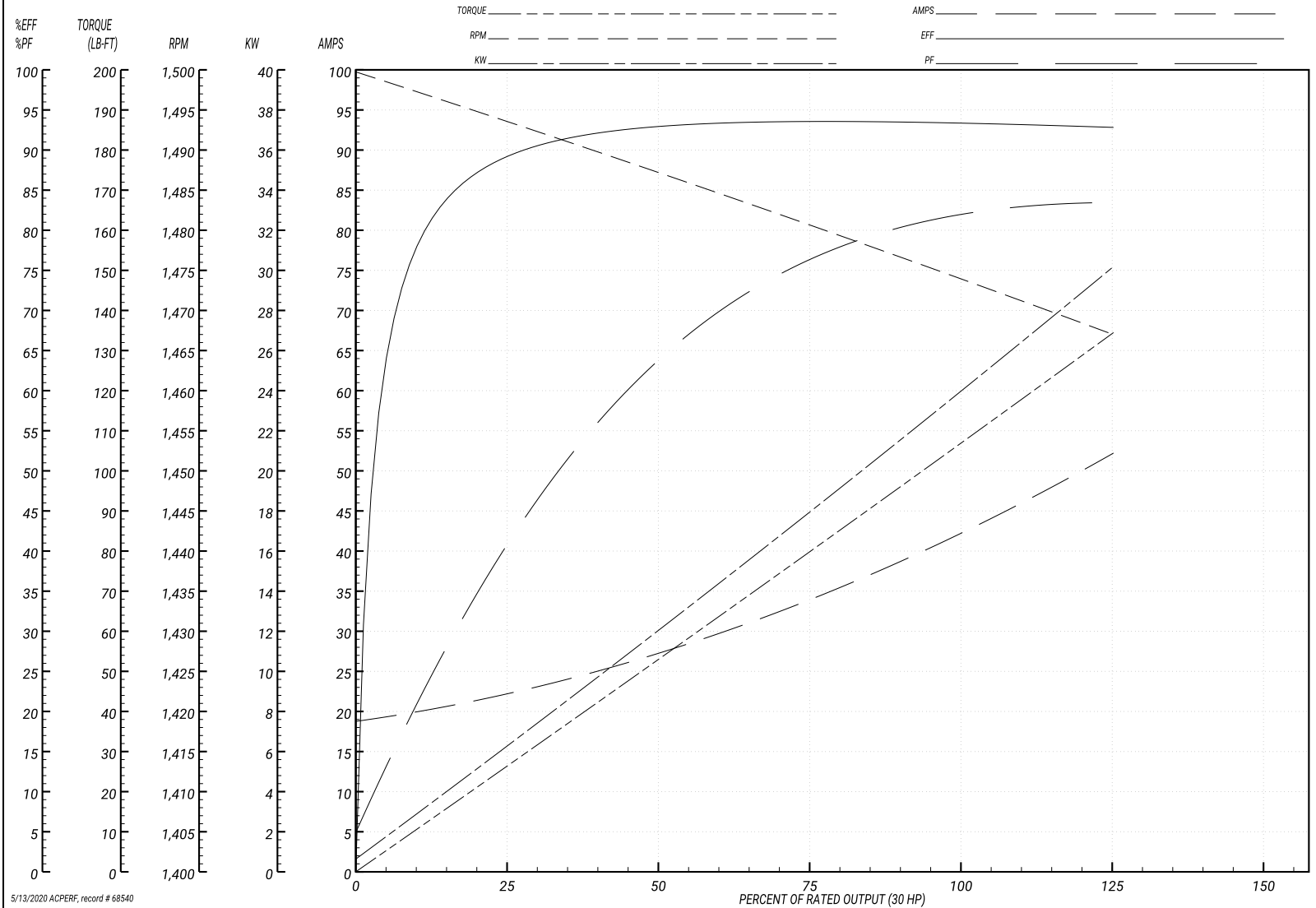
Performance Graph at 400V, 50Hz, 30.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

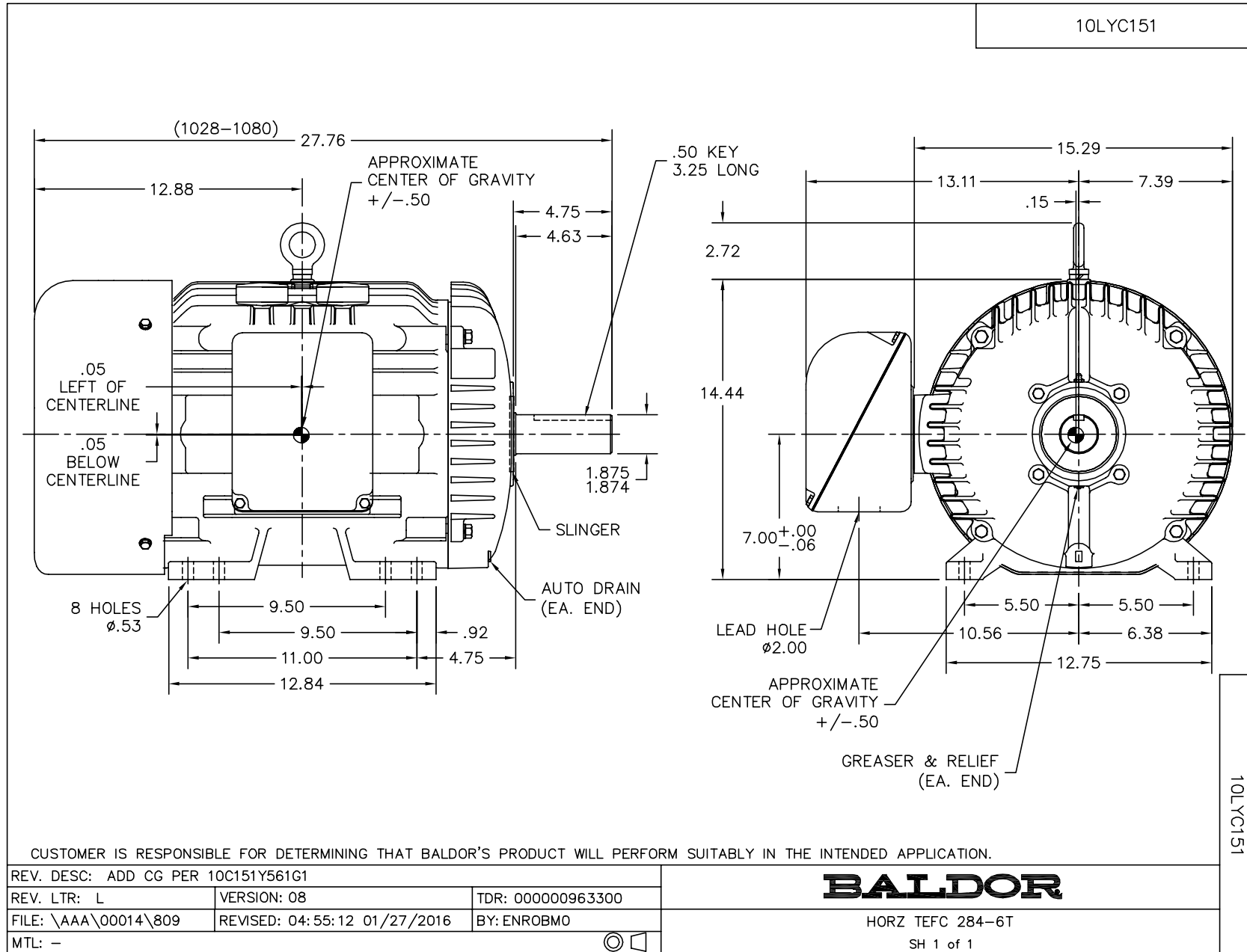
WINDING # 10WGZ706

Typical performance - not guaranteed values.

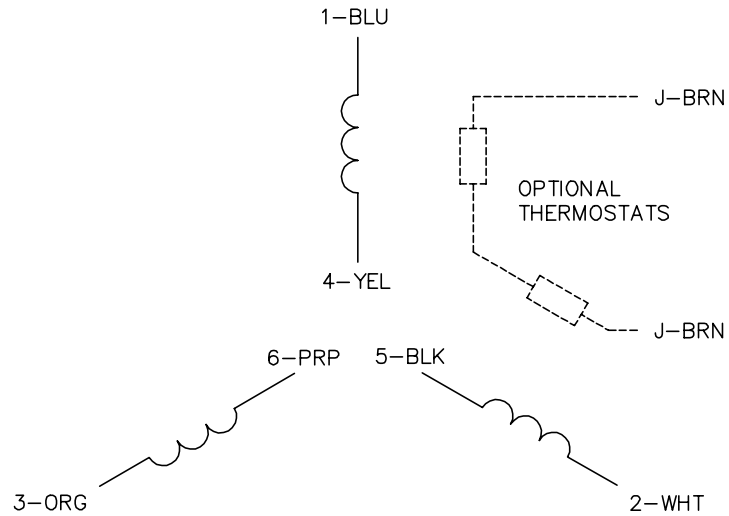
30 HP 3 PH 50 HZ 1470 RPM 400 V 1064M
 TORQUES(LB-FT): PO=349 PU=154 LR=180 LRA=292



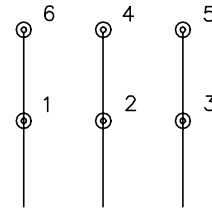
5/13/2020 ACPERF, record # 68540



CD0382

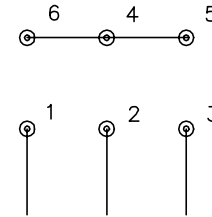


RUN CONNECTION
(1D)



LINE

START CONNECTION
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIRO
MTL: -	⊙ □	

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3PH, SV, 6 LEADS, Y START/D RUN

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