

BALDOR • RELIANCE

Customer information packet

EM2531T-8G

25HP, 1770RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	284T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA EEV UR CSA
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	70.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	70.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	G

Part detail

Revision	U
Type	AC
Mech. spec.	40E246
Base	
Status	PRD/A
Elec. spec.	40WGX796
Layout	40LYE246
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	04
Leads	6#8
Proprietary	False
Created date	09-11-2013

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.06 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554L

CAT.NO.	EM2531T-8G			P/N				ENCL	OPSB
SPEC.	40E246X796G1	CC	010A	FRAME	284T		SER.NO.		
HP	25		CLASS	H	HZ	60			
RPM	1770		PH	3	DES	A			
VOLTS	200		CODE	G	ODE BRG	6309	DE BRG	6311	
AMPS	70								
RATING	40C AMB-CONT		NEMA-NOM-EFF	93.6	GREASE	POLYREX EM			
PF	82	SER.F.	1.15	VPWM INVERTER READY					
HTR-VOLTS		HTR-AMPS		MAX. SPACE HEATER TEMP.					

Parts list

Part number	Description	Quantity
SA269031	SA 40E246X796G1	1.000 ea
RA255685	RA 40E246X796G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 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
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3200B01	STD PUEP OPEN 311 LOCKED BRG W/AIR DEFLE	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LB1350	BAR CODE LABEL FOR YORK	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.070 ga
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea

40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
HA3154A04	THRUBOLT STUD 3/8-16 X 18.750	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0695	CONNECTION LABEL	1.000 ea
NP3554L	SS SUPER-E,CURUS-EEV,NEMA PREM,CC,300 SR	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

AC Induction Motor Performance Data

Record # 50226

Typical performance - not guaranteed values

Winding: 40WGX796-R002		Type: 4050M		Enclosure: OPSB	
Nameplate Data			200 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	25	Full Load Torque	74.1 LB-FT		
Volts	200	Start Configuration	direct on line		
Full Load Amps	70	Breakdown Torque	213 LB-FT		
R.P.M.	1770	Pull-up Torque	91.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	124 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	432 A
Service Factor (S.F.)	1.15	No-load Current	29 A		
NEMA Nom. Eff.	93.6	Power Factor	82	Line-line Res. @ 25°C	0.0619 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	33°C	
S.F. Amps			Temp. Rise @ S.F. Load	40°C	
			Locked-rotor Power Factor	33	
			Rotor inertia	3.96 LB-FT ²	

Load Characteristics 200 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	83	83
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1786	1780	1772	1764	1754	1767
Line amperes	32.7	42.4	55	69.9	85.7	104	79.4

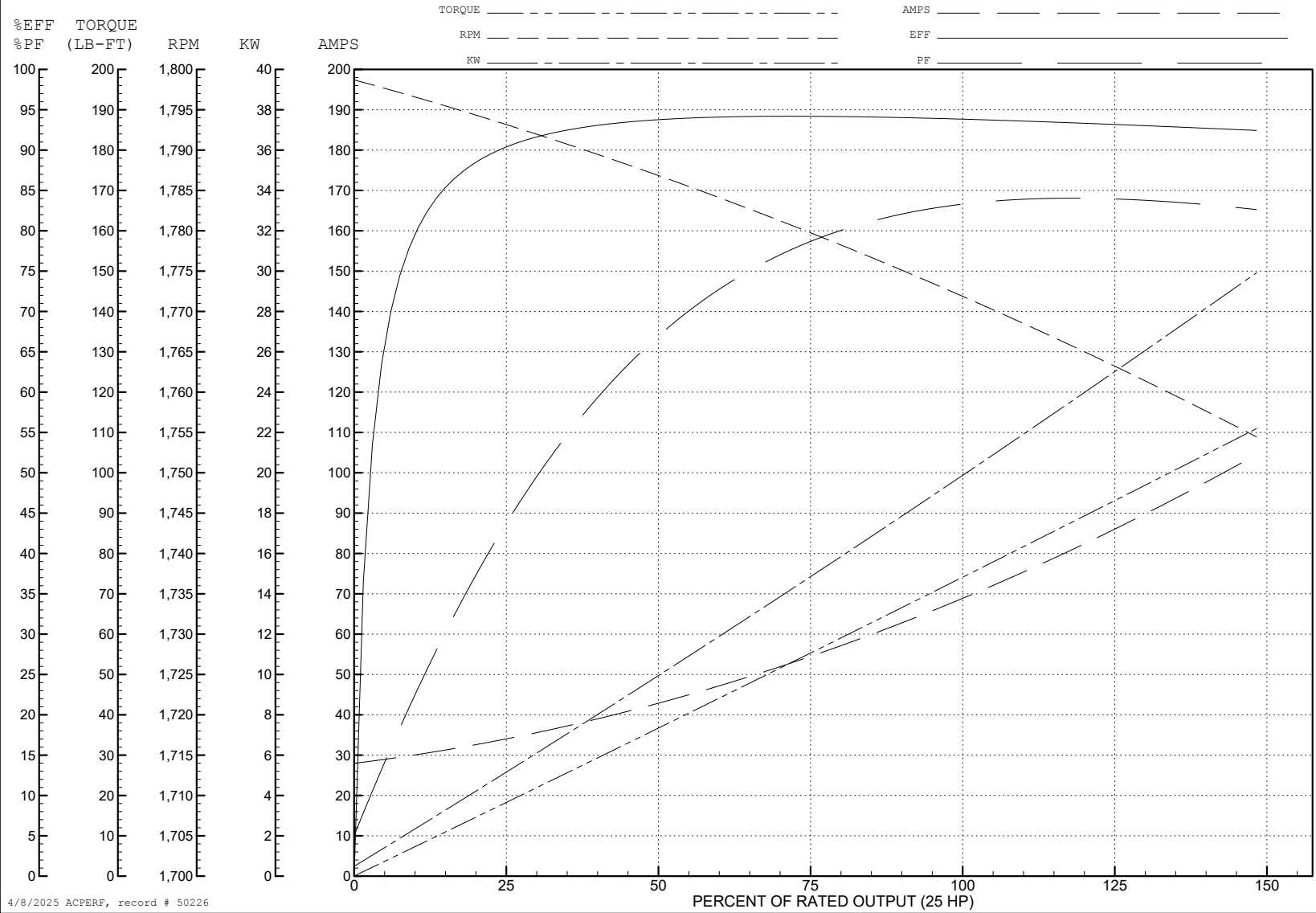
ABB Motors and Mechanical Inc.

WINDING # 40WGx796

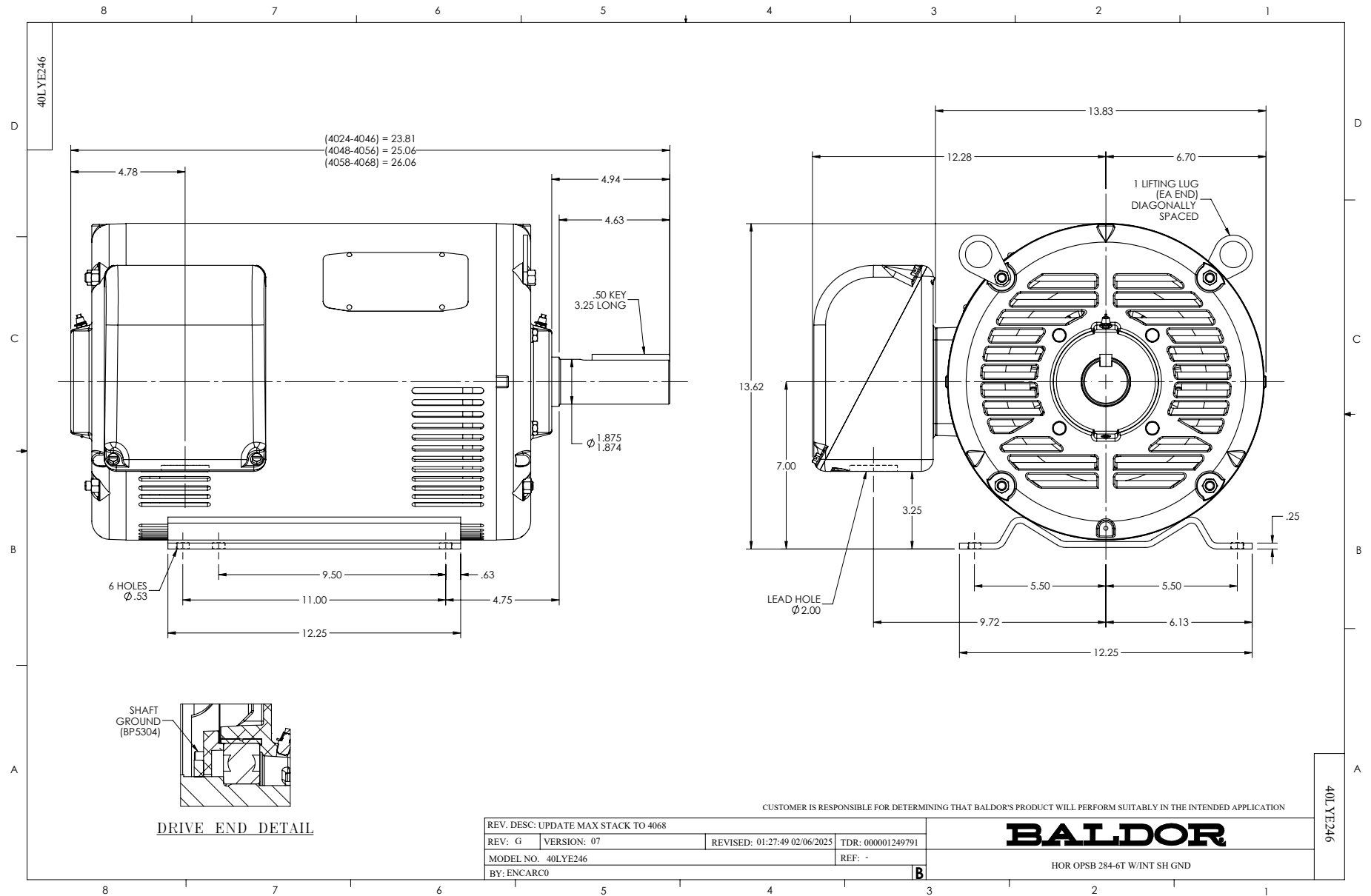
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1770 RPM 200 V 4050M

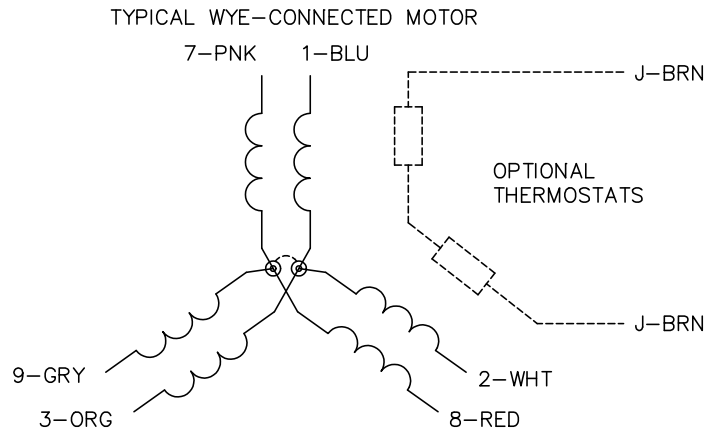
TORQUES (LB-FT): PO=213 PU=91.1 LR=124 LRA=432



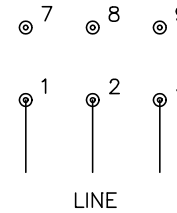
4/8/2025 ACPERF, record # 50226



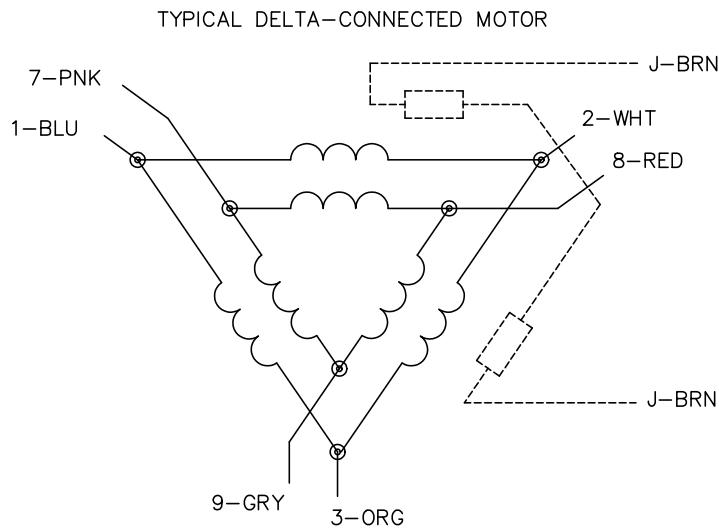
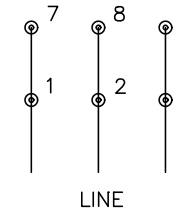
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
S69000		FILE: AAA00005151	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START