

BALDOR® • RELIANCE 

Product Information Packet

EM2531T-8G

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

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX796	CD Diagram:	CD0695	Mfg Plant:	
Mech. Spec:	40E246	Layout:	40LYE246	Poles:	04	Created Date:	09-11-2013
Base:	RG	Eff. Date:	05-04-2018	Leads:	6#8		

Specs			
Catalog Number:	EM2531T-8G	KVA Code:	G
Enclosure:	OPSB	Lifting Lugs:	Standard Lifting Lugs
Frame:	284T	Locked Bearing Indicator:	No Locked Bearing
Frame Material:	Steel	Motor Lead Quantity/Wire Size:	6 @ 8 AWG
Output @ Frequency:	25.000 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	200.0 V @ 60 HZ	Motor Type:	4050M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	82
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	70.000 A @ 200.0 V	Shaft Ground Indicator:	Shaft Grounding
Design Code:	A	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger

Duty Rating:	CONT	Speed Code:	Single Speed
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Part Winding
Front Face Code:	Standard	Thermal Device - Bearing:	NONE (OLD)
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	H	Winding Thermal 1:	None
Inverter Code:	Inverter Ready	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			USABLE AT 208V							
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
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	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	STD KO BOX MODEL 310,312,314 MTRS W/2.00	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
10XN3118K36	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	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
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
LB1350	BAR CODE LABEL FOR YORK	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.070 GA
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
LB1119N	WARNING LABEL	1.000 EA
LC0695	CONNECTION LABEL	1.000 EA
NP3554L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

AC Induction Motor Performance Data

Record # 50226 - Typical performance - not guaranteed values

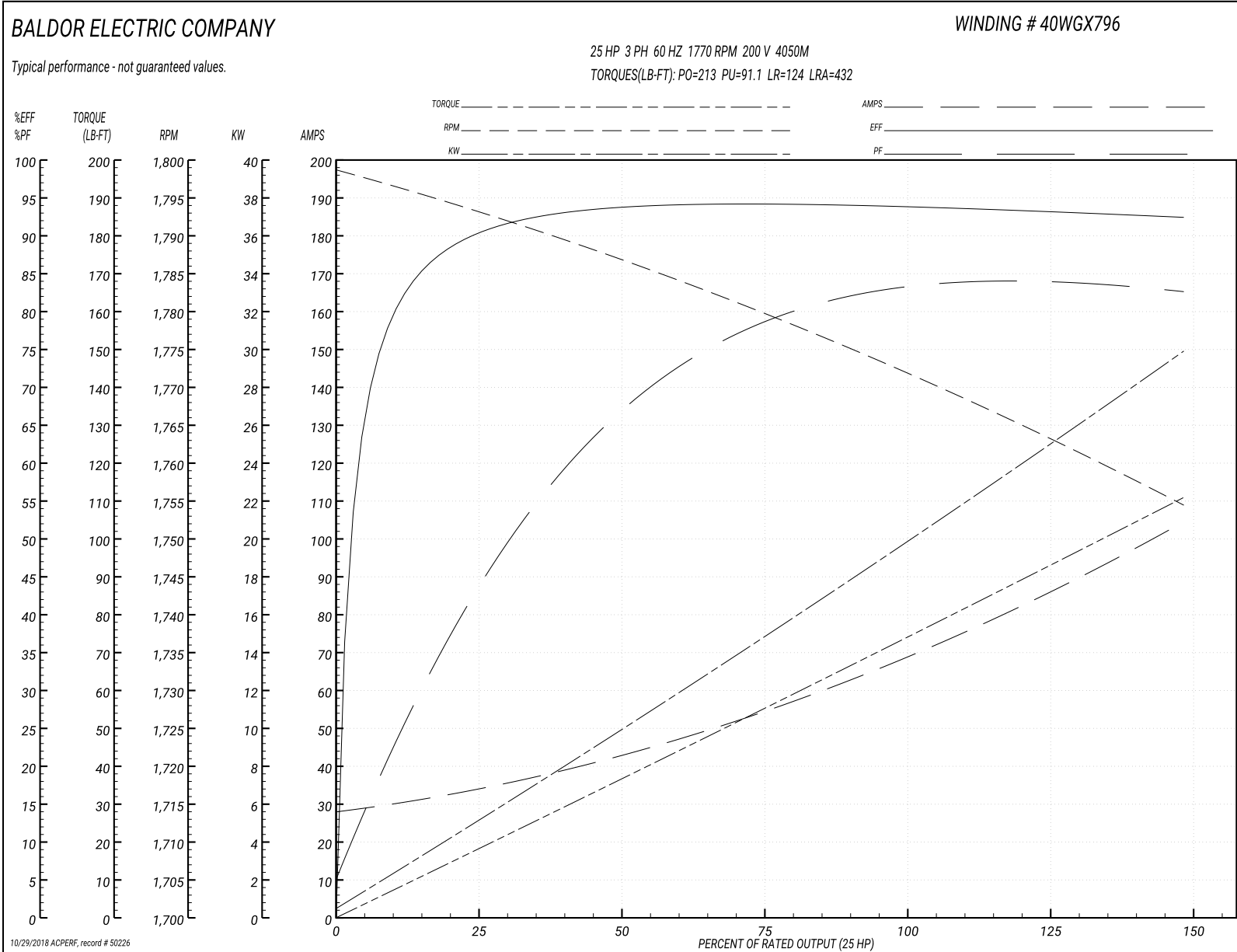
Winding: 40WGX796-R002	Type: 4050M	Enclosure: OPSB
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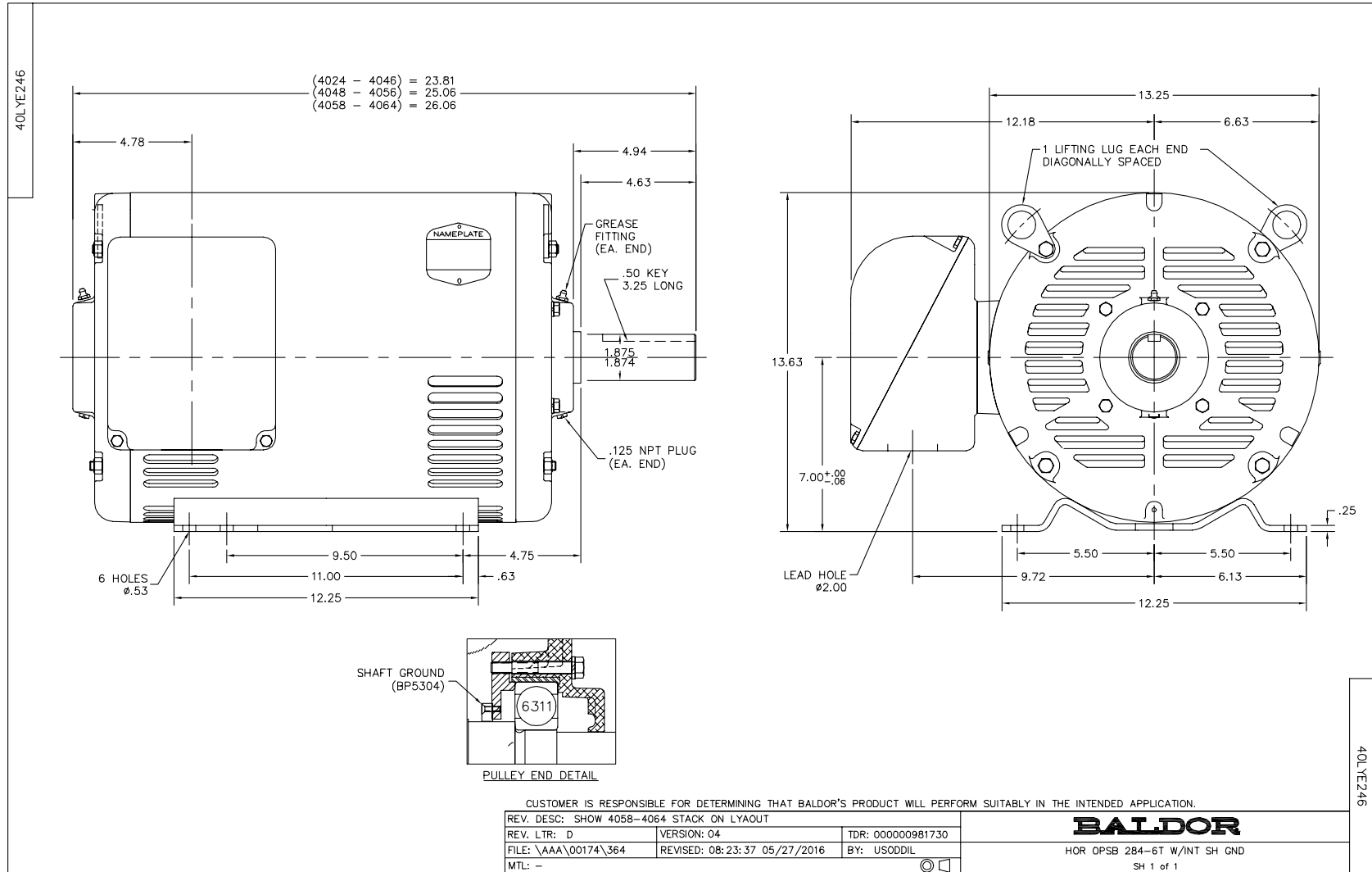
Nameplate Data				200 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	25			Full Load Torque	74.1 LB-FT
Volts	200			Start Configuration	direct on line
Full Load Amps	70			Breakdown Torque	213 LB-FT
R.P.M.	1770			Pull-up Torque	91.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	124 LB-FT
NEMA Design Code	B	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

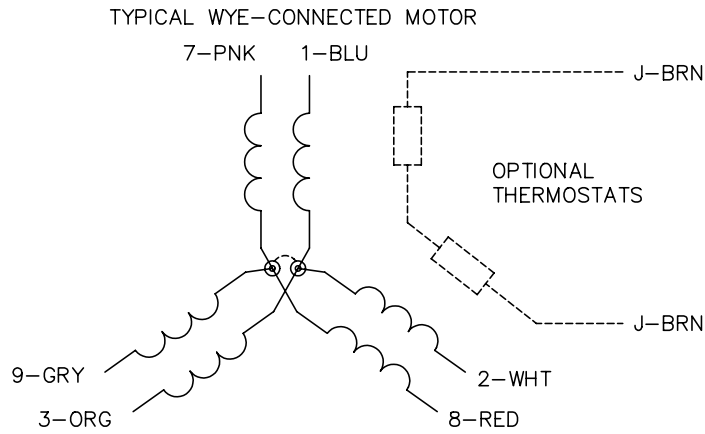
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	83	83
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1786	1780	1772	1764	1754	1767
Line amperes	32.7	42.4	55	69.9	85.7	104	79.4

Performance Graph at 200V, 60Hz, 25.0HP Typical performance - Not guaranteed values

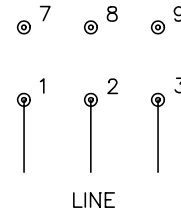




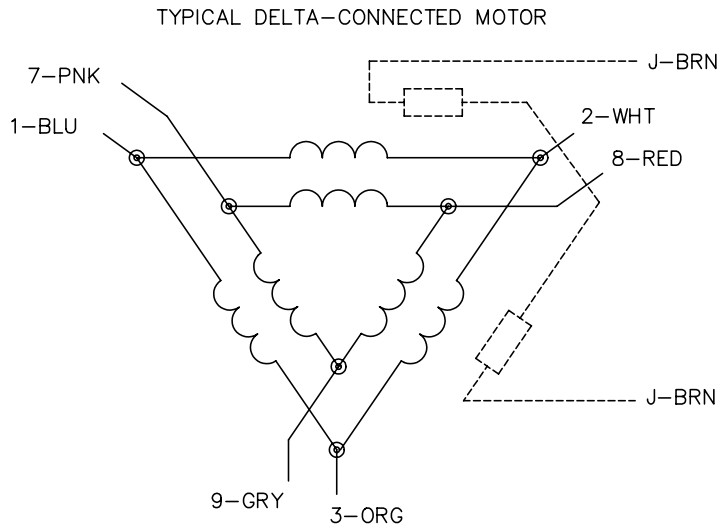
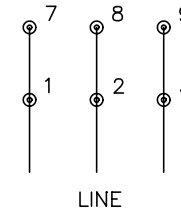
CD0695



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C

BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

9690D0

FILE: AAA00005151

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

CD0695