ABB BALDOR RELIANCE

Customer information packet

EM2531T-8G

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

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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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary 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	V
Type	AC
Mech. spec.	40E246
Base	
Status	PRD/A
Elec. spec.	40WGX796
Layout	40LYE246
Eff. date	07-20-2026
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.**						

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. @ 25ºC**	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-FT2

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

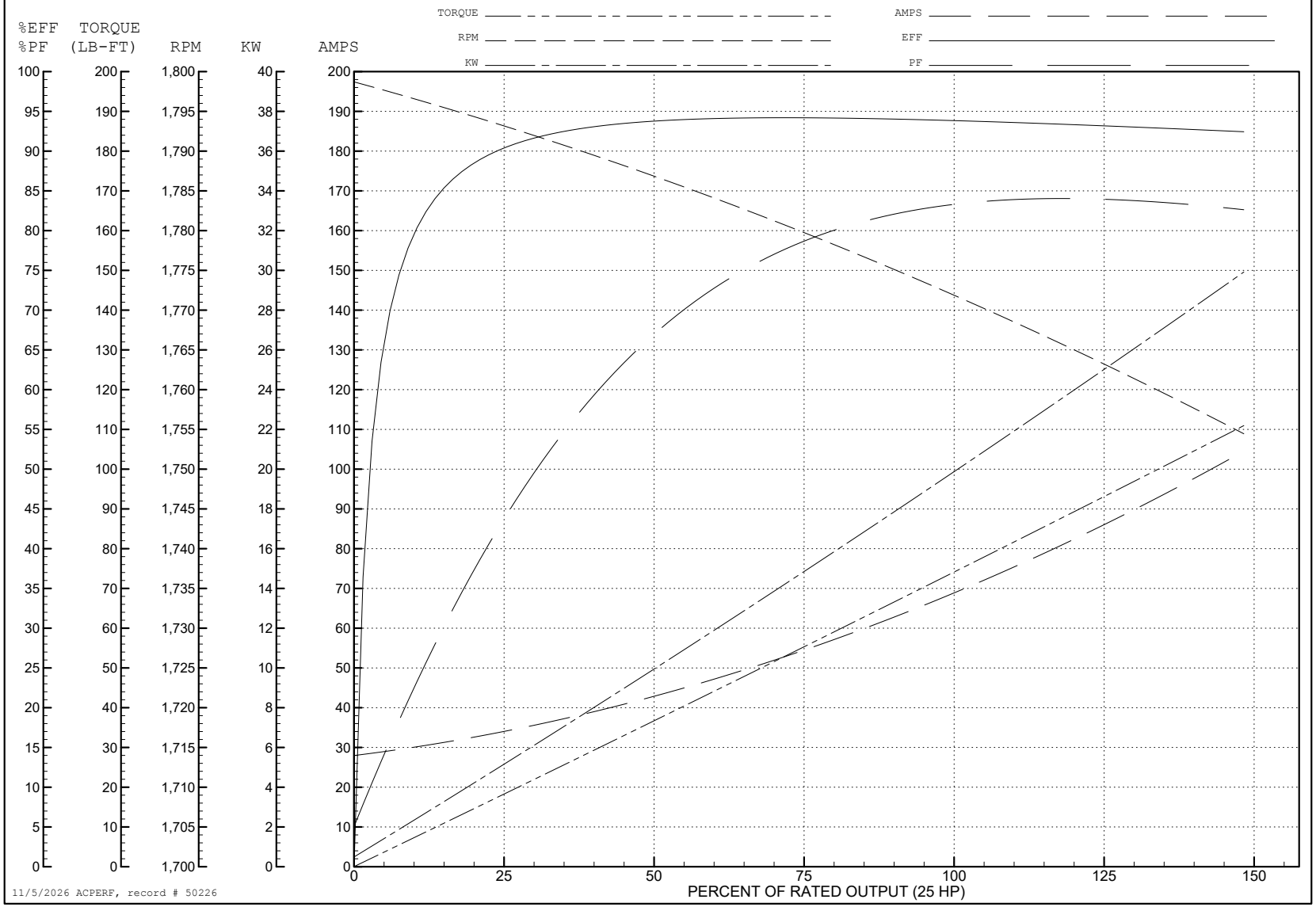
ABB Motors and Mechanical Inc.

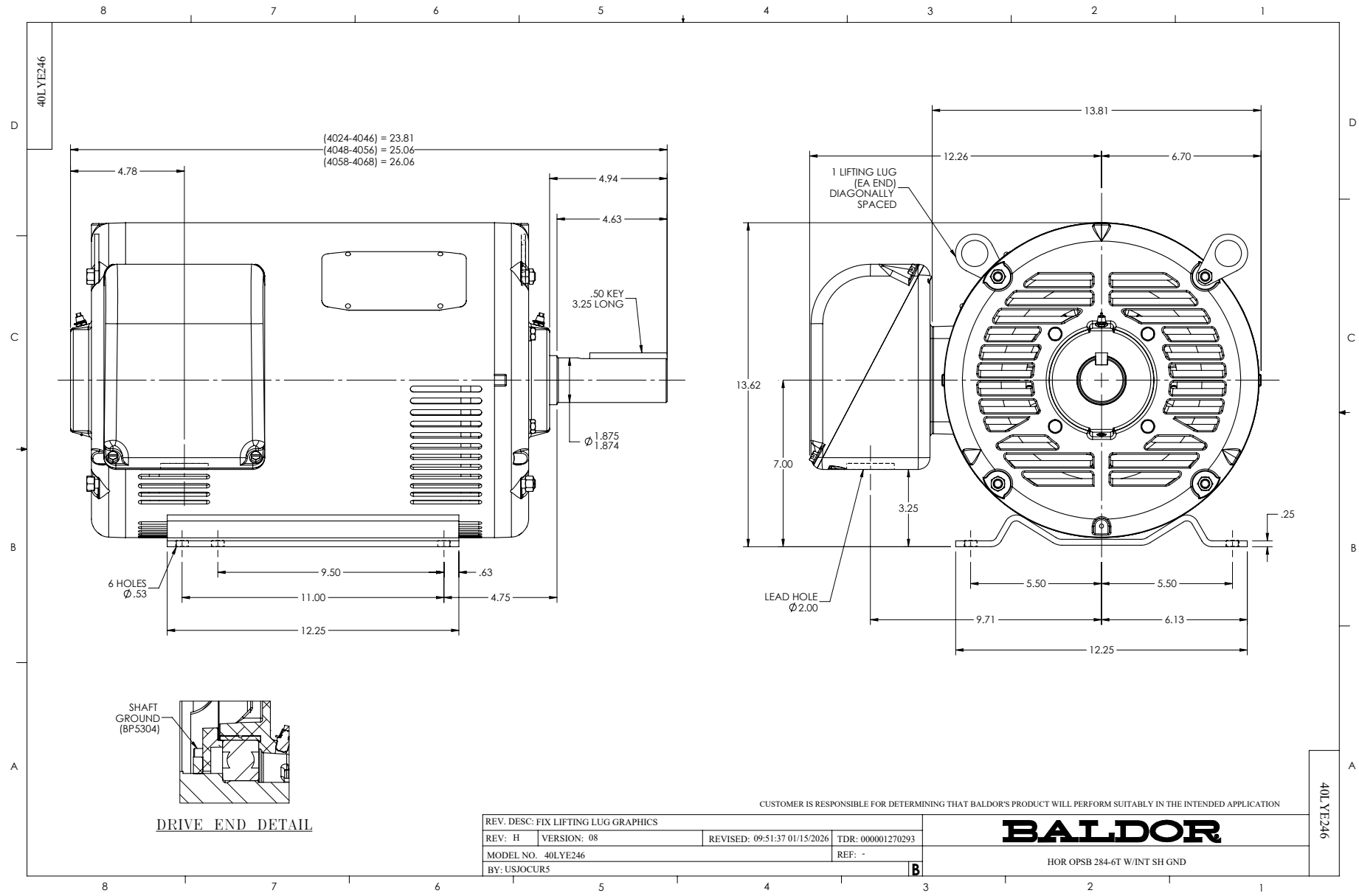
WINDING # 40WGX796

Typical performance - not guaranteed values.

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

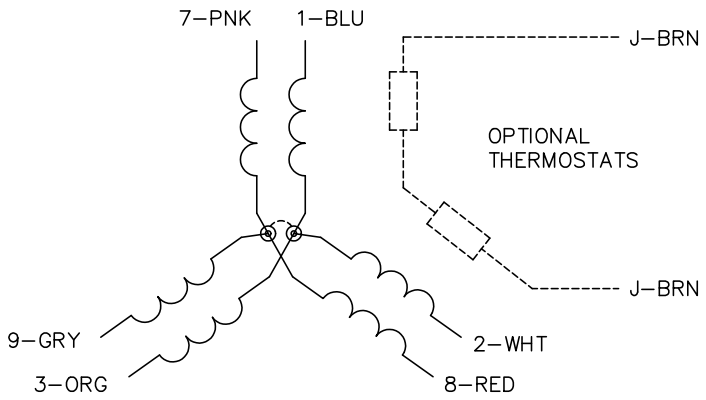
TORQUES(LB-FT): PO=213 PU=91.1 LR=124 LRA=432



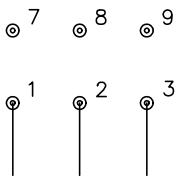

40LYE246
(4024-4046) = 23.81
(4048-4056) = 25.06
(4058-4068) = 26.06
4.78
4.94
4.63
.50 KEY
3.25 LONG
Ø 1.875
1.874
6 HOLES
Ø.53
9.50
.63
11.00
4.75
12.25
13.81
12.26
6.70
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
13.62
7.00
3.25
.25
LEAD HOLE
Ø2.00
5.50
5.50
9.71
6.13
12.25
SHAFT
GROUND
(BP5304)
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FIX LIFTING LUG GRAPHICS
REV: H
VERSION: 08
REVISED: 09:51:37 01/15/2026
TDR: 000001270293
MODEL NO. 40LYE246
REF: -
BY: USJOCUR5
B
BALDOR
HOR OPSB 284-6T W/INT SH GND
40LYE246

CD0695

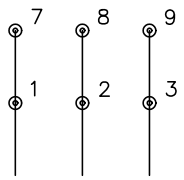
TYPICAL WYE–CONNECTED MOTOR



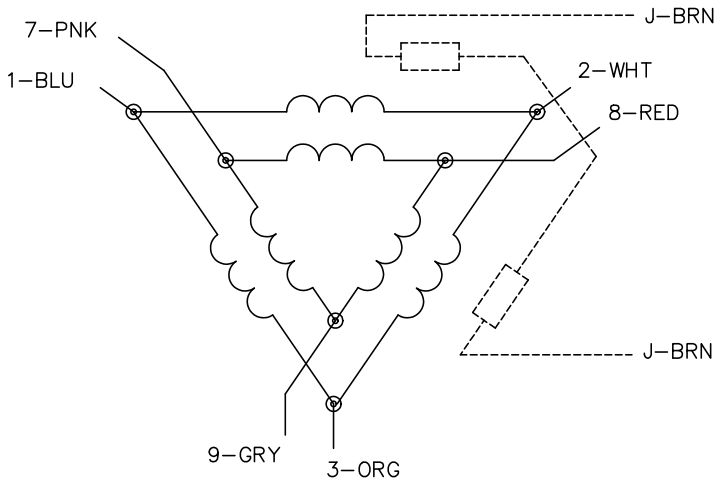
START CONNECTION



RUN CONNECTION



TYPICAL DELTA–CONNECTED MOTOR



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			BALDOR ELECTRIC Co.
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
CD0695		FILE: AAA00005151	MDL: –
		MTL: –	3PH, SV, 6 LEADS, PART WINDING START