

ABB BALDOR RELIANCE III

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
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. @ 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-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

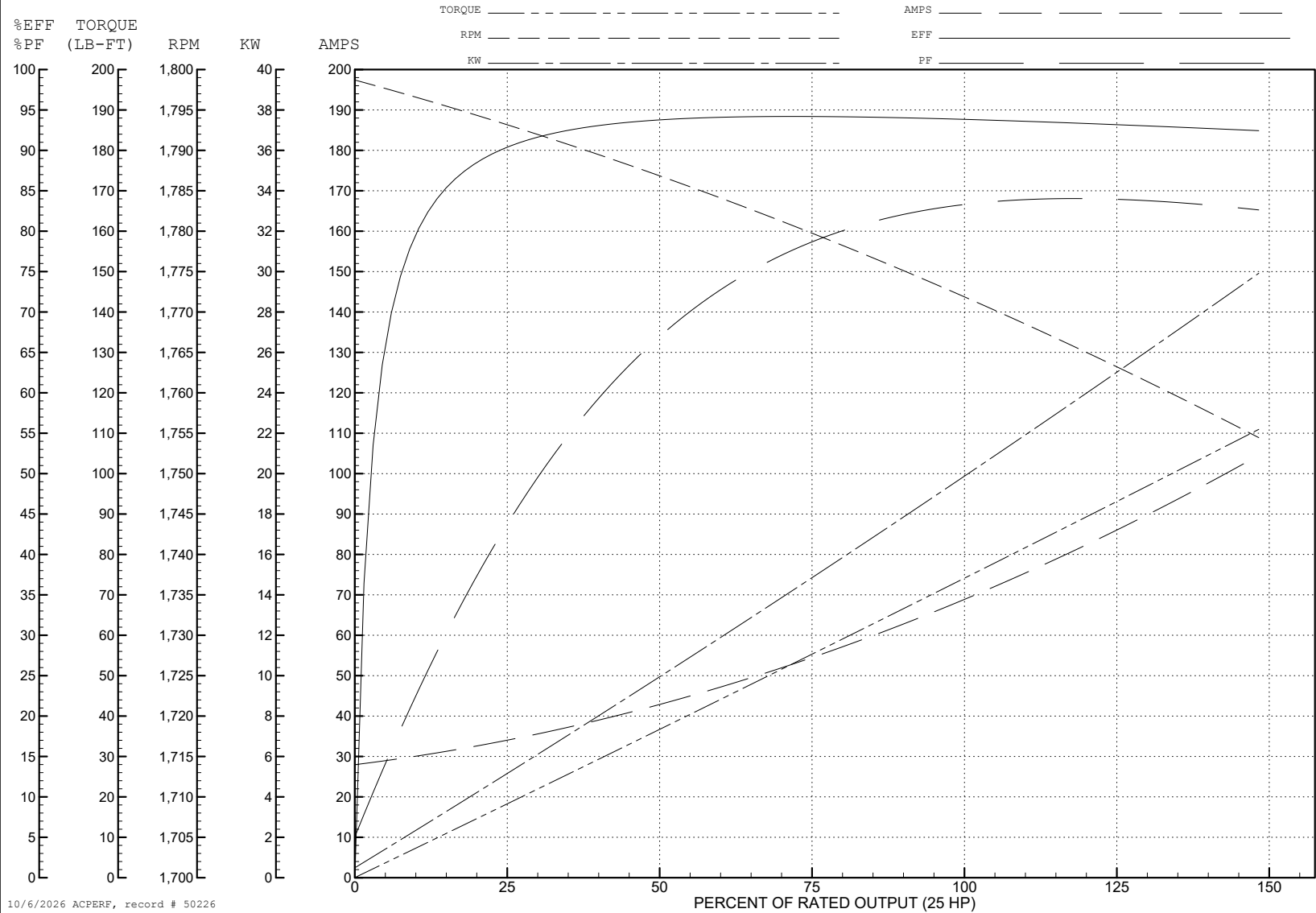
ABB Motors and Mechanical Inc.

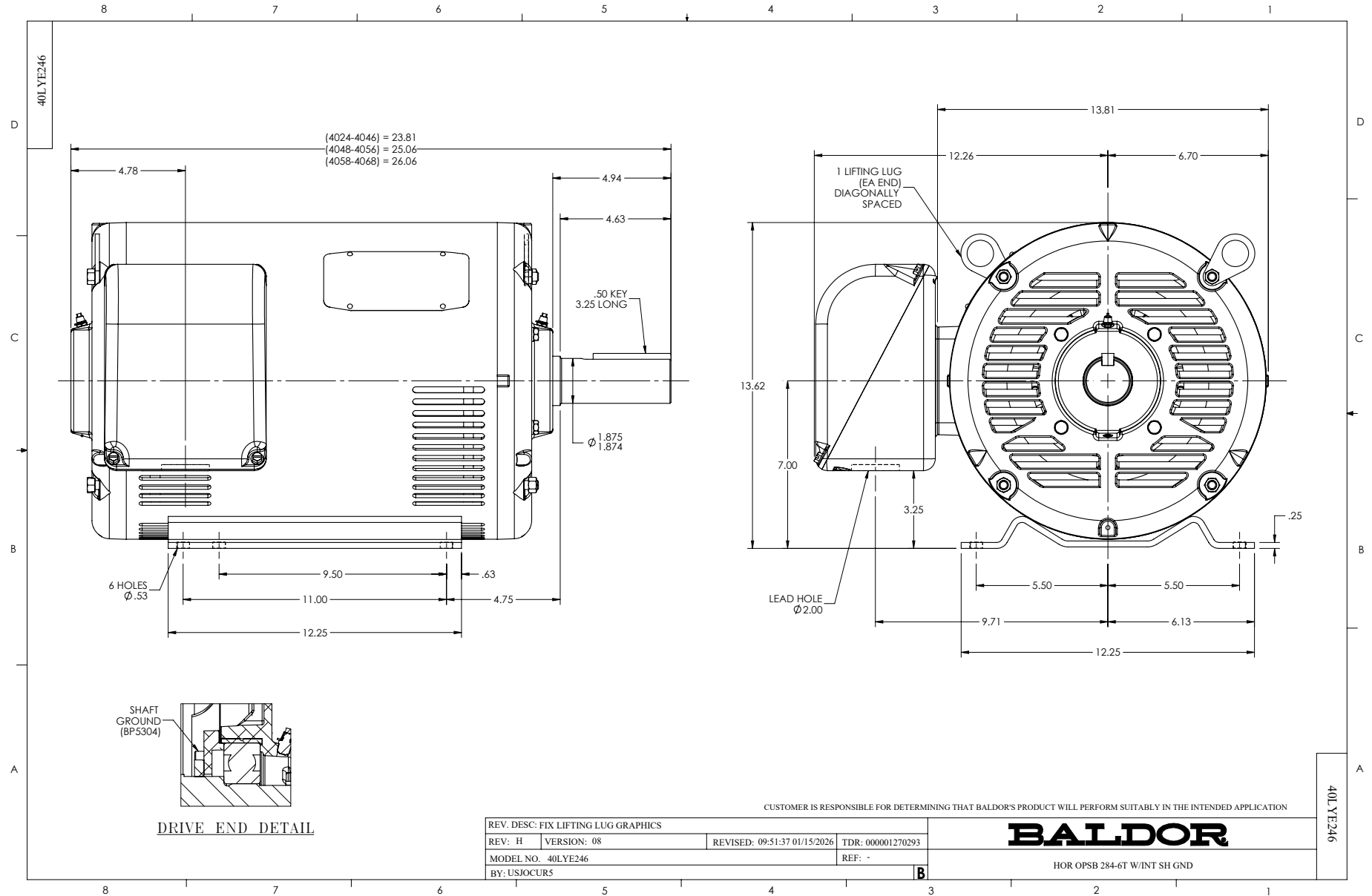
WINDING # 40WGX796

Typical performance - not guaranteed values.

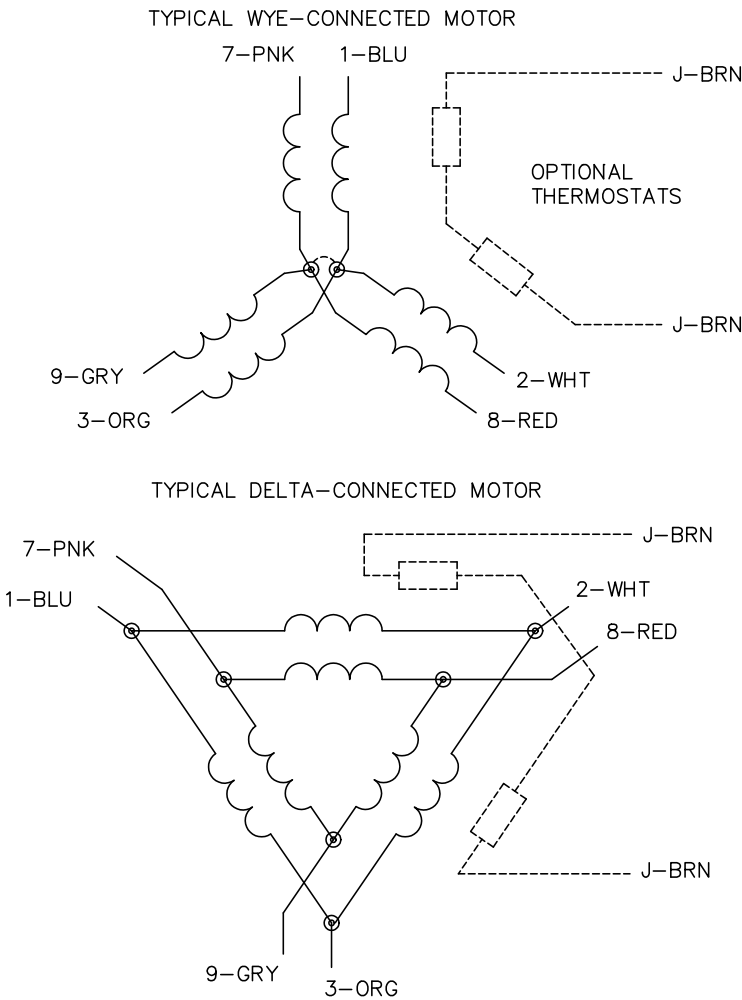
25 HP 3 PH 60 HZ 1770 RPM 200 V 4050M

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

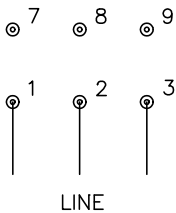




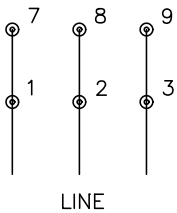
CD0695



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