

ABB BALDOR RELIANCE III

Customer information packet

EM2531T-5G

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	575.0 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	24.500 A @ 575.0 V
Design Code	B
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	24.5 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.	40WGX795
Layout	40LYE246
Eff. date	07-20-2026
CD Diagram	CD0006
Poles	04
Leads	3#10
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	3 @ 10 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	Direct on line
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-5G			P/N						ENCL	OPSB
SPEC.	40E246X795G1	CC	010A	FRAME		284T	SER.NO.				
HP	25		CLASS		H	HZ	60				
RPM	1770		PH	3			DES	A			
VOLTS	575			CODE		G	ODE BRG		6309	DE BRG	6311
AMPS	24.5										
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 # 50225

Typical performance - not guaranteed values

Winding: 40WGX795-R002			Type: 4050M		Enclosure: OPSB		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		25	Full Load Torque		74 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		24.5	Breakdown Torque		220 LB-FT		
R.P.M.		1770	Pull-up Torque		94.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		128 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		155 A
Service Factor (S.F.)		1.15	No-load Current		10.6 A		
NEMA Nom. Eff.		93.6	Power Factor	82	Line-line Res. @ 25°C		0.508 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		28°C	
S.F. Amps				Temp. Rise @ S.F. Load		35°C	
				Locked-rotor Power Factor		34	
				Rotor inertia		3.96 LB-FT2	

Load Characteristics 575 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	67	77	82	83	83	82
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1787	1780	1773	1765	1755	1768
Line amperes	11.8	15.1	19.4	24.5	29.9	36	27.7

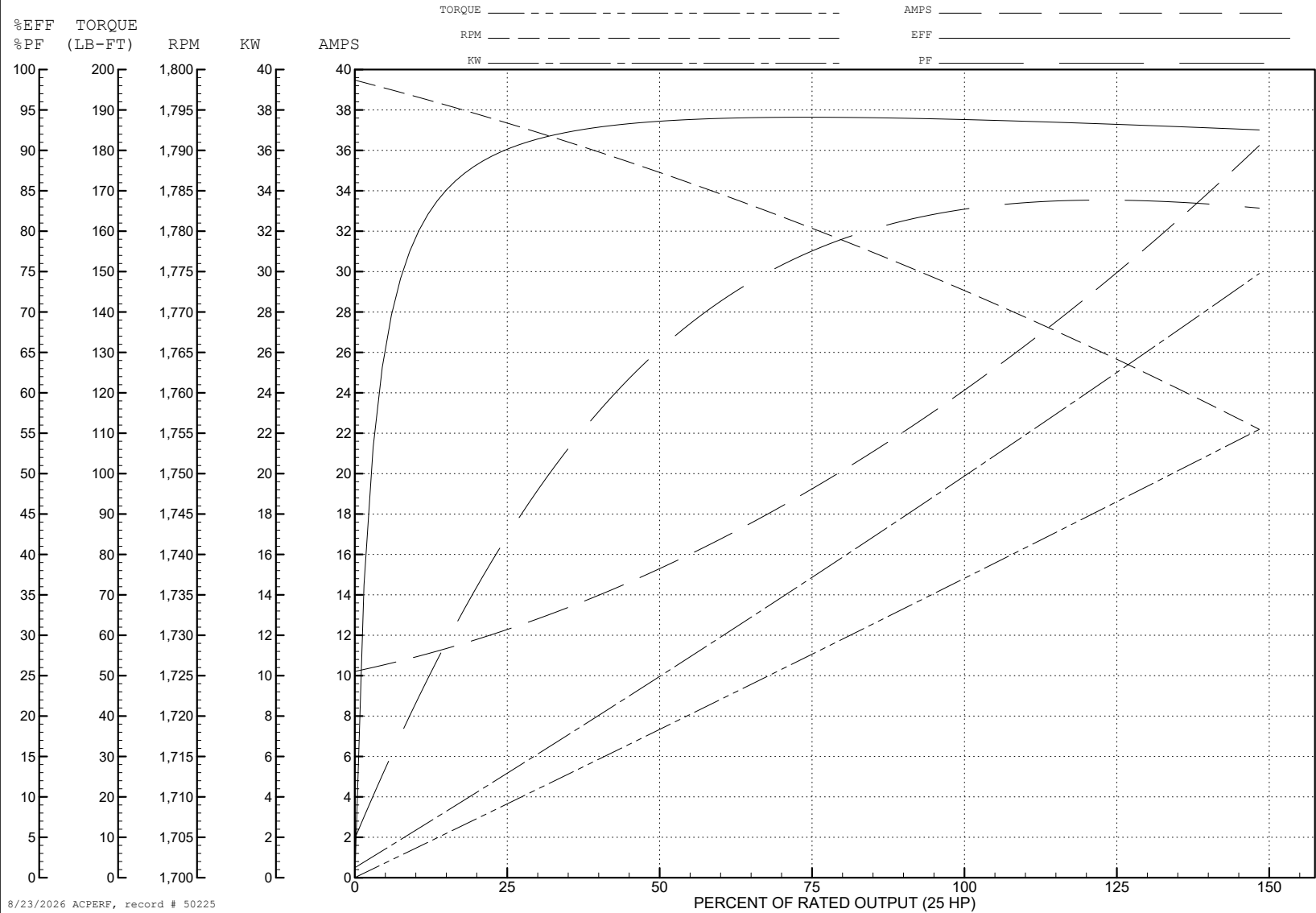
ABB Motors and Mechanical Inc.

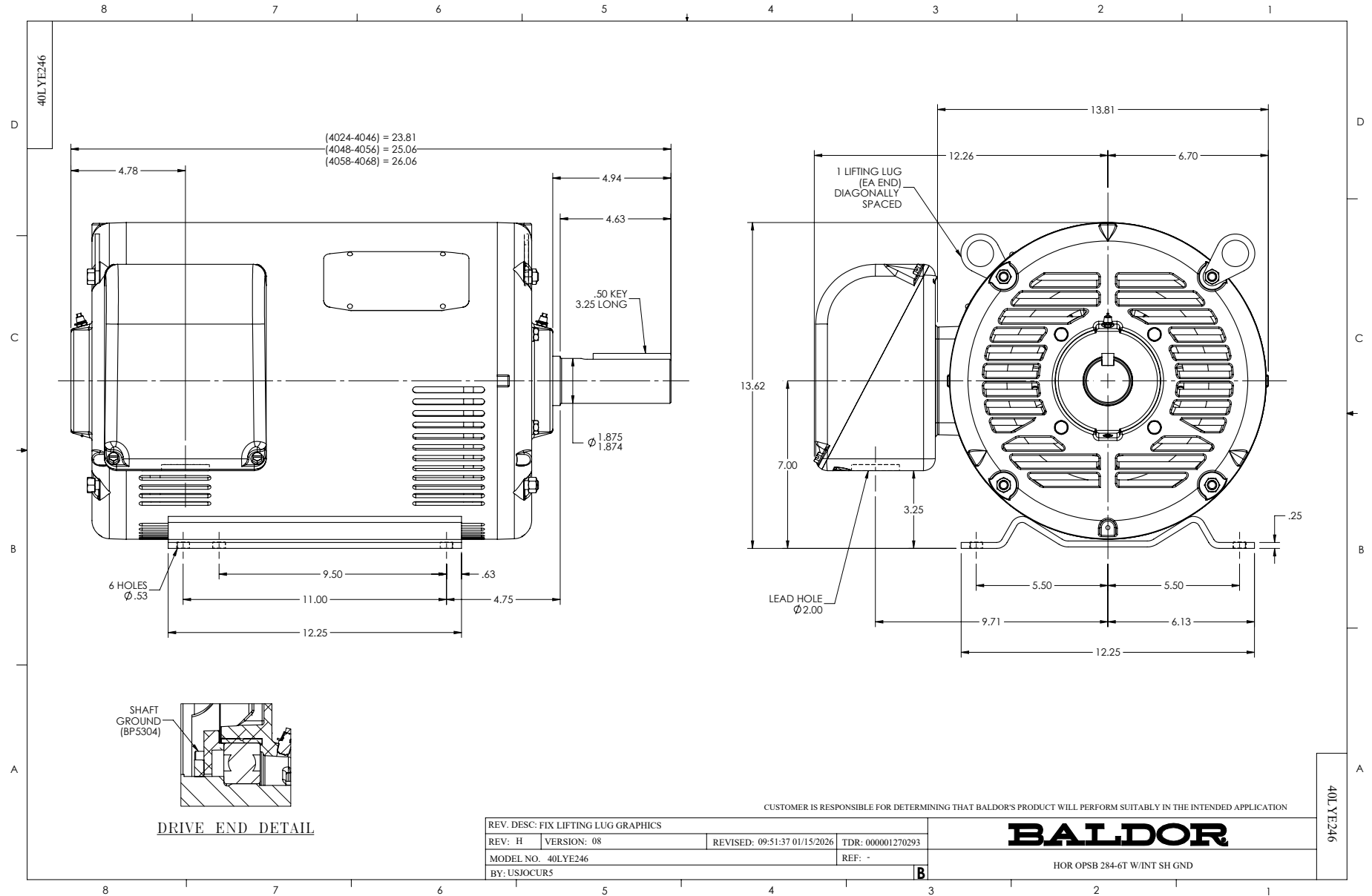
WINDING # 40WGX795

Typical performance - not guaranteed values.

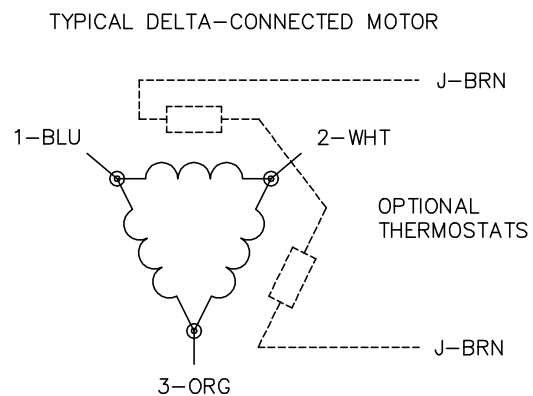
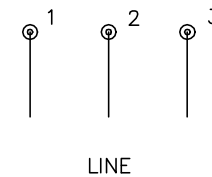
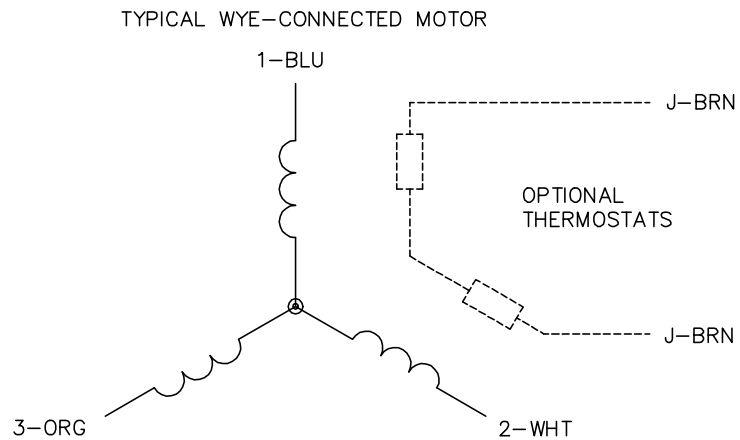
25 HP 3 PH 60 HZ 1770 RPM 575 V 4050M

TORQUES (LB-FT): PO=220 PU=94.1 LR=128 LRA=155





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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