ABB BALDOR RELIANCE

Customer information packet

EM2531T-12

25HP, 1770RPM, 3PH, 60HZ, 284T, 4046M, OPSB, F1

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11/15/2026 8:59:52 AM

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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
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	30.000 A @ 460.0 V
	60.000 A @ 230.0 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	30.0 a
Insulation Class	F

Part Detail

Revision	W
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX794
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0104
Poles	04
Leads	12#10
Proprietary	False
Created date	01-22-2013

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 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	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554LUA												
CAT.NO.	EM2531T-12			**P/N**						**ENCL**	OPSB	
SPEC.	40G048X794	**CC**	010A	**FRAME**	284T		**SER.NO.**					
HP	25	**CLASS**	F	**HZ**	60							
RPM	1770	**PH**	3	**DES**	B							
VOLTS	230/460	**CODE**	G	**ODE BRG**	6309	**DE BRG**	6311					
AMPS	60/30											
RATING	40C AMB-CONT	**NEMA-NOM-EFF**	93.6	**GREASE**	POLYREX EM							
PF	82	**SER.F.**	1.15	**CT30-60(2:1) VT3-60(20:1)**								
USABLE AT	50HZ 25HP 190/380V 72/36A			SF 1.0								
HTR-VOLTS	**HTR-AMPS**	**MAX. SPACE HEATER TEMP.**										

AC Induction Motor Performance Data
Record # 41055
Typical performance - not guaranteed values

Winding: 40WGX794-R001	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			25	**Full Load Torque**	74.1 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			60/30	**Breakdown Torque**	199 LB-FT
R.P.M.			1770	**Pull-up Torque**	86.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	118 LB-FT
NEMA Design Code	B	**KVA Code**	G	**Starting Current**	184 A
Service Factor (S.F.)			1.15	**No-load Current**	12.2 A
NEMA Nom. Eff.	93.6	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.315 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	33
				Rotor inertia	3.96 LB-FT2

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	47	70	79	83	84	84	84
Efficiency	89.7	93.5	94	93.9	93.4	92.4	93.6
Speed	1793	1787	1780	1773	1764	1755	1768
Line amperes	13.9	18.2	23.7	30.1	37.1	44.9	34.3

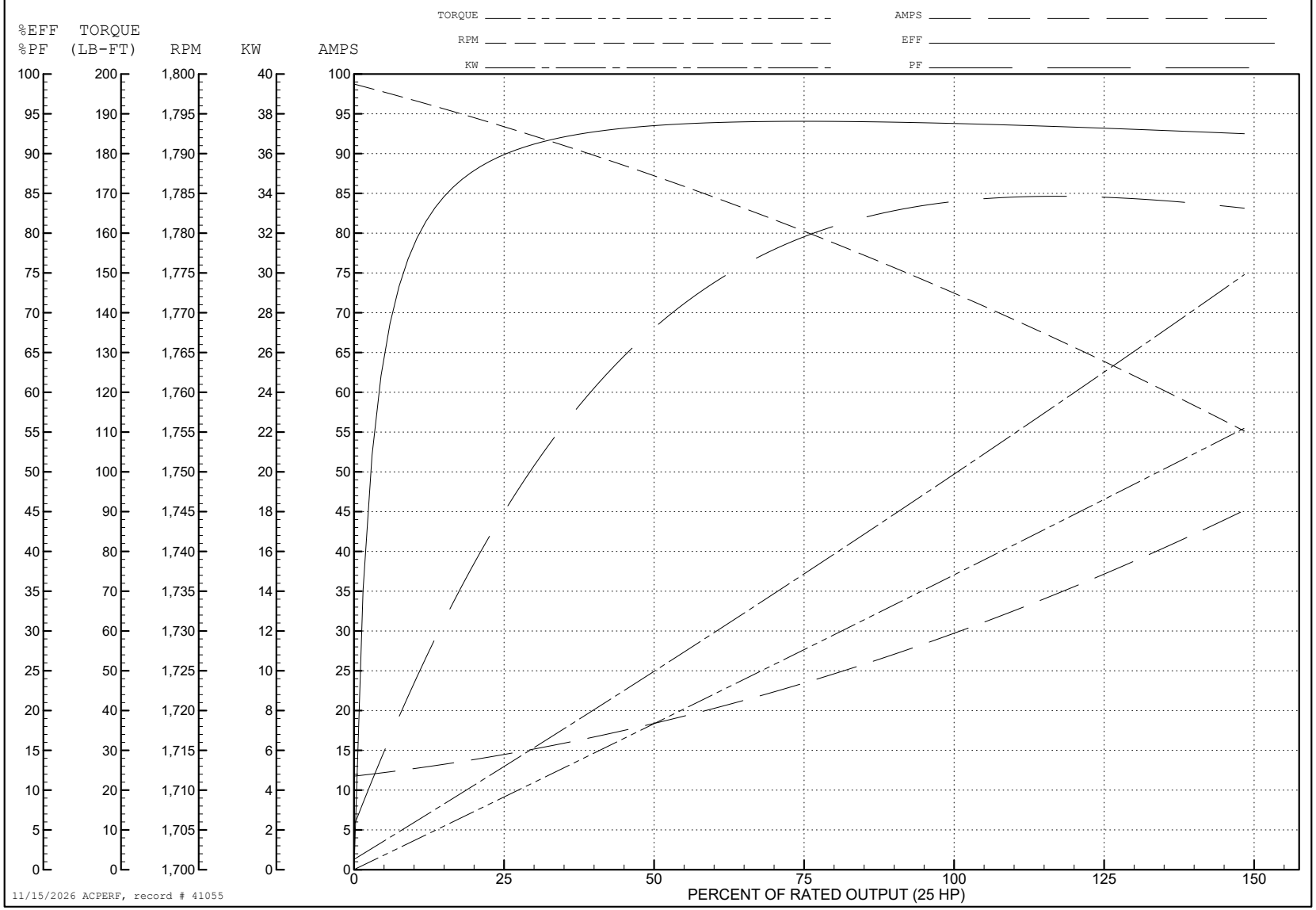
ABB Motors and Mechanical Inc.

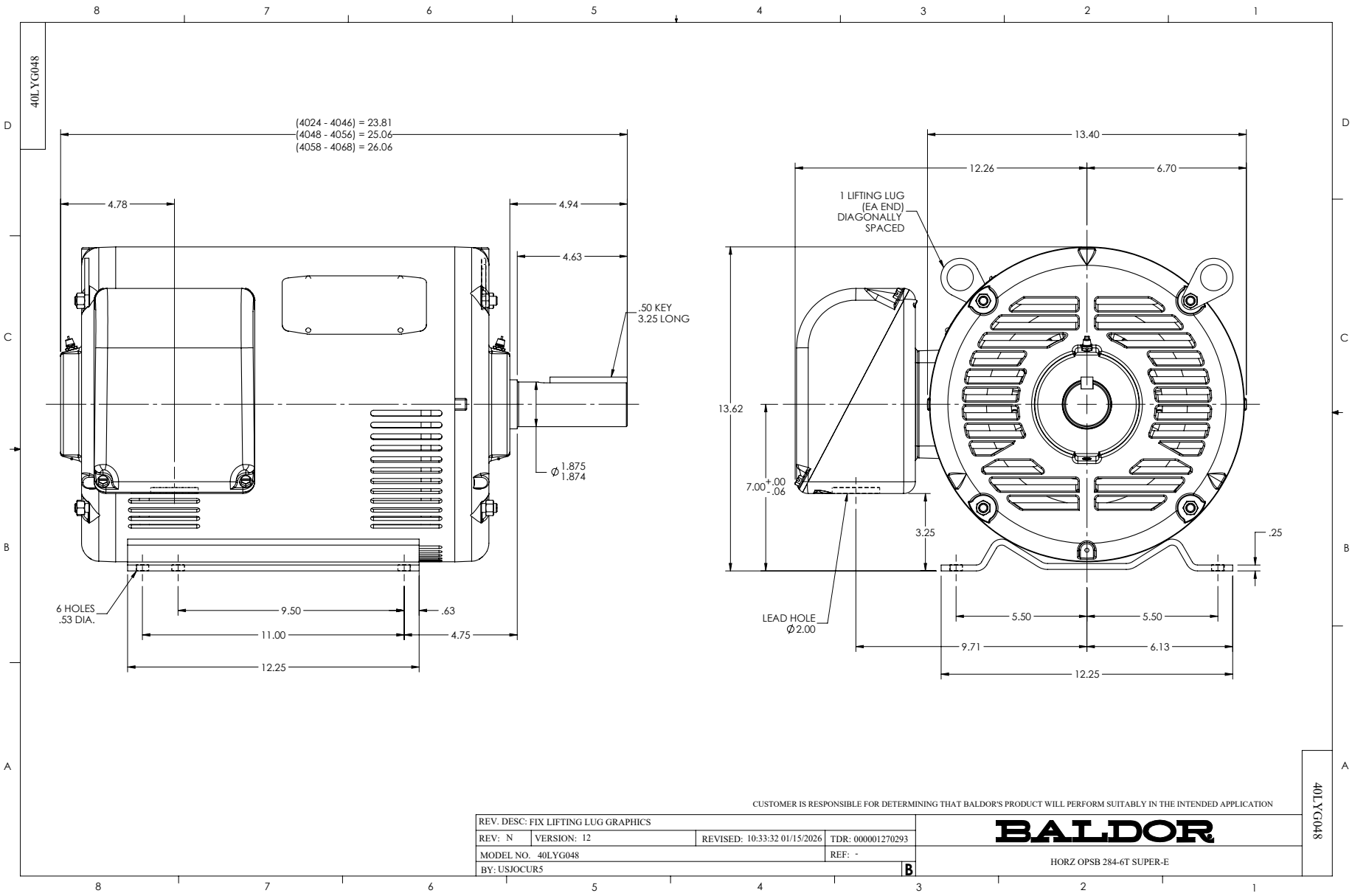
WINDING # 40WGX794

25 HP 3 PH 60 HZ 1770 RPM 460 V 4050M

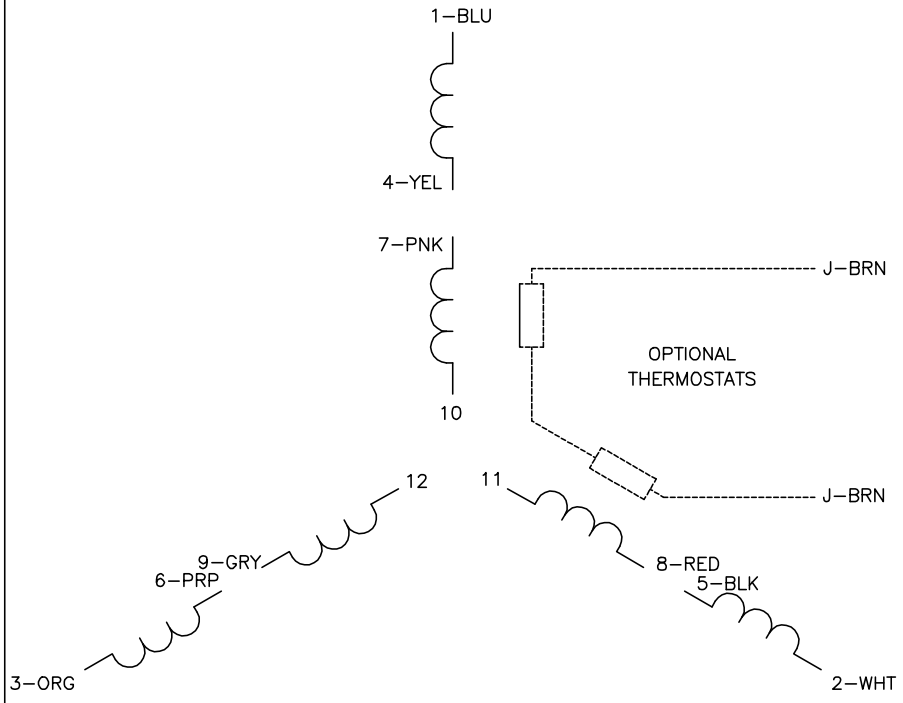
Typical performance - not guaranteed values.

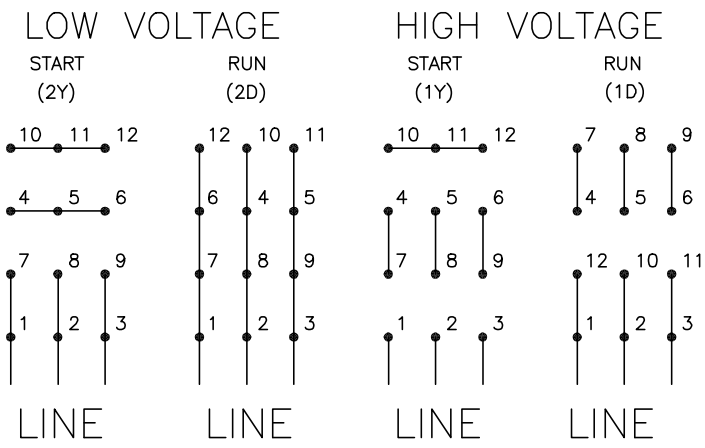
TORQUES(LB-FT): PO=199 PU=86.8 LR=118 LRA=184




40LYG048
(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
.53 DIA.
9.50
.63
11.00
4.75
12.25
13.40
12.26
6.70
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
13.62
7.00 +.00 -.06
3.25
.25
LEAD HOLE
Ø 2.00
5.50
5.50
9.71
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FIX LIFTING LUG GRAPHICS
REV: N
VERSION: 12
REVISED: 10:33:32 01/15/2026
TDR: 000001270293
MODEL NO. 40LYG048
REF: -
BY: USJOCUR5
B
BALDOR
HORZ OPSB 284-6T SUPER-E
40LYG048

CD0104





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0104

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 12 LEADS, Y START/D RUN

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