

BALDOR • RELIANCE

Customer information packet

EM2531T-5

25HP, 1760RPM, 3PH, 60HZ, 284T, 4046M, 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	CURUSEEV NEMA PREMIUM NEMA_PREMIUM
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	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	24.5 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part detail

Revision	Z
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX795
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	01-22-2013

KVA Code	G
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	No 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-5	P/N		ENCL	OPSB
SPEC.	40G048X795	CC	010A	FRAME	284T
HP	25	CLASS	F	HZ	60
RPM	1770	PH	3	DES	A
VOLTS	575	CODE	G	ODE BRG	6309
AMPS	24.5	DE BRG	6311		
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.			

Accessories

Part number	Description	Multiplier
40-1400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 41056

Typical performance - not guaranteed values

Winding: 40WGX795-R001		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	Locked-rotor Torque	128 LB-FT		
NEMA Design Code	B	Starting Current	155 A		
Service Factor (S.F.)	1.15	No-load Current	10.6 A		
NEMA Nom. Eff.	93.6	Line-line Res. @ 25°C	0.508 Ω		
Rating - Duty	40C	Temp. Rise @ Rated Load	28°C		
S.F. Amps	AMB-CONT	Temp. Rise @ S.F. Load	35°C		
		Locked-rotor Power Factor	34		
		Rotor inertia	3.96 LB-FT ²		

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

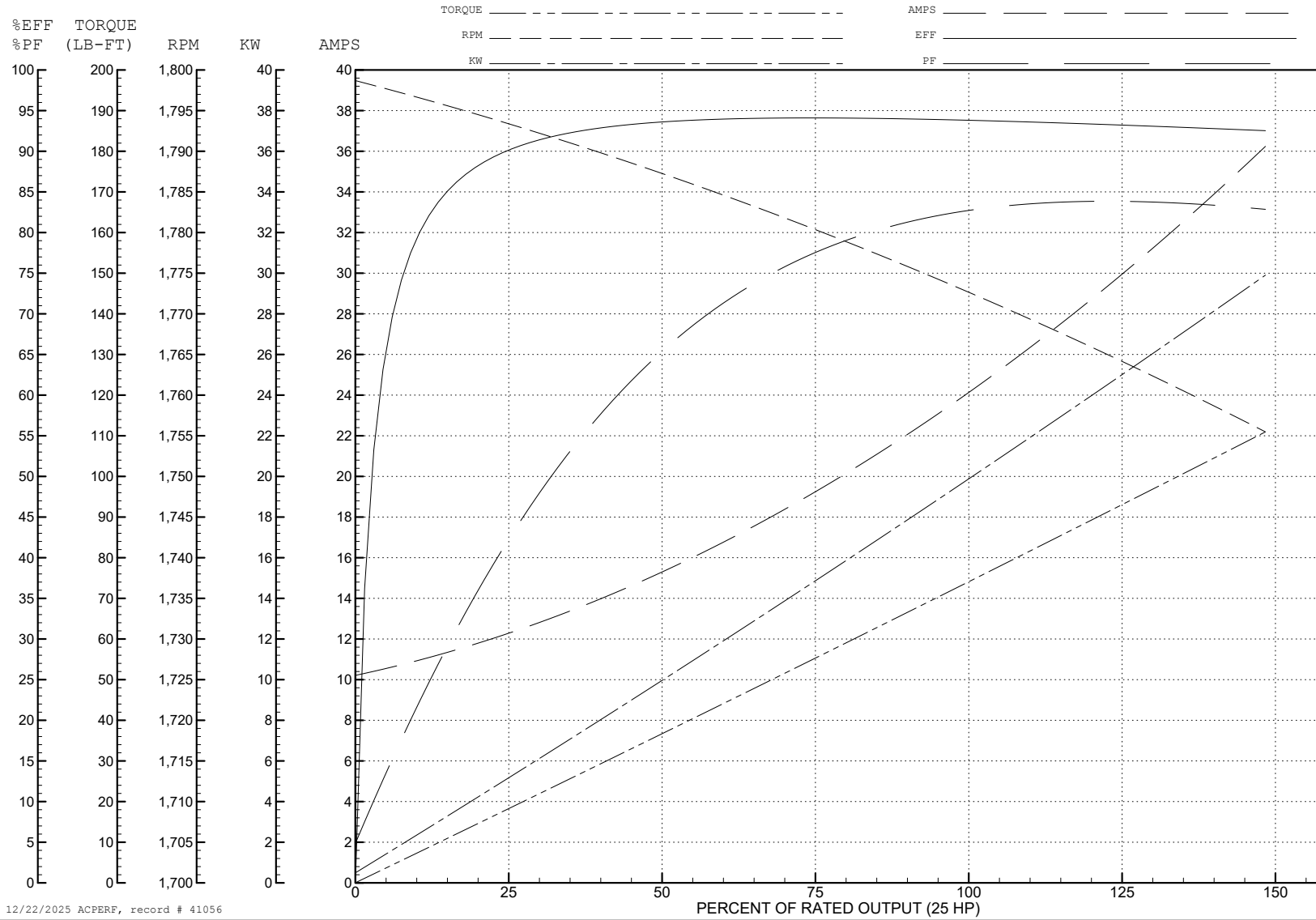
ABB Motors and Mechanical Inc.

WINDING # 40WGx795

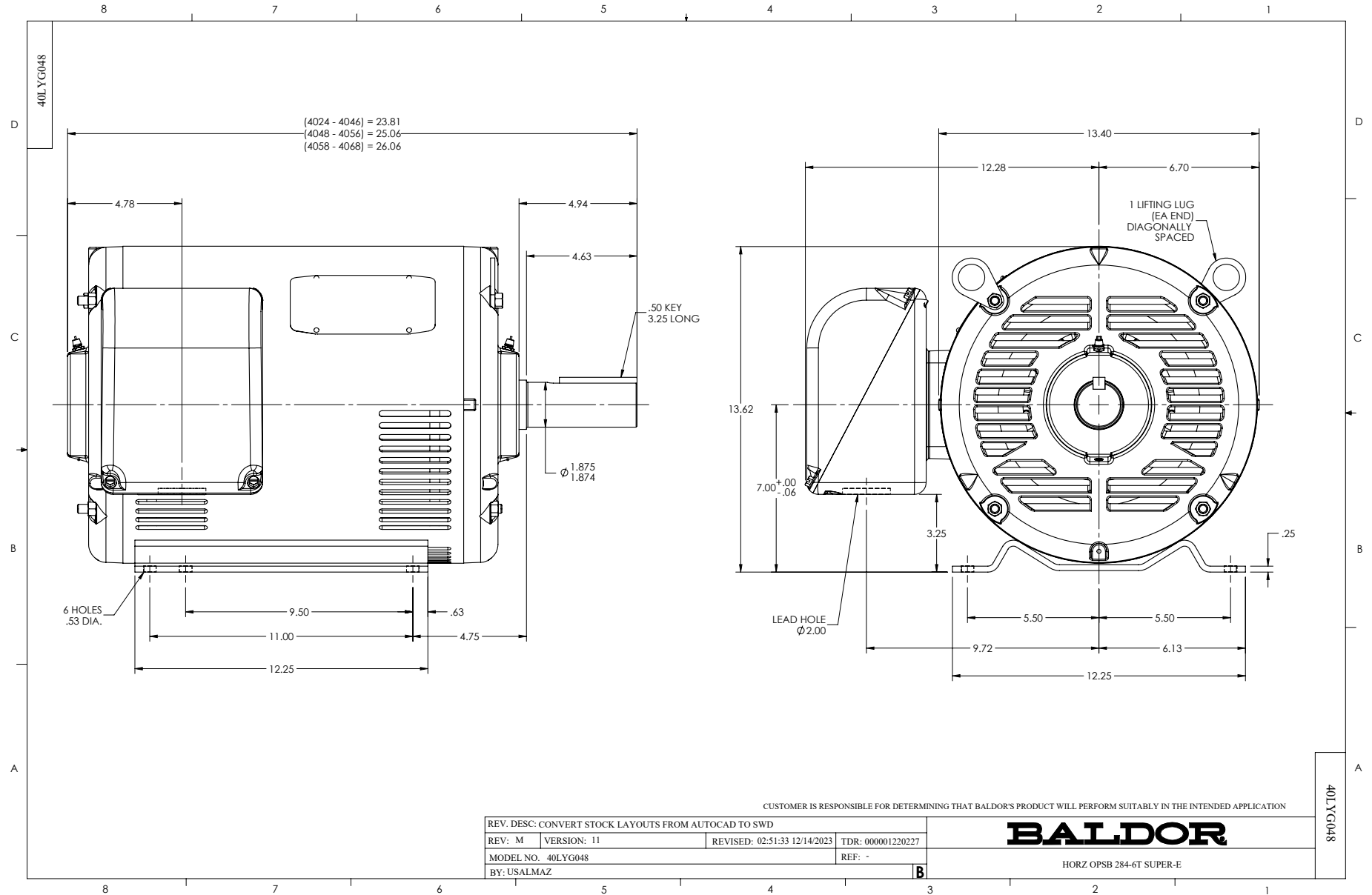
Typical performance - not guaranteed values.

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

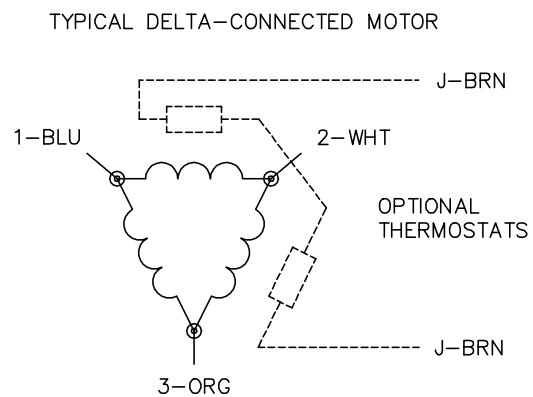
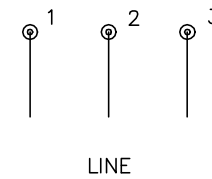
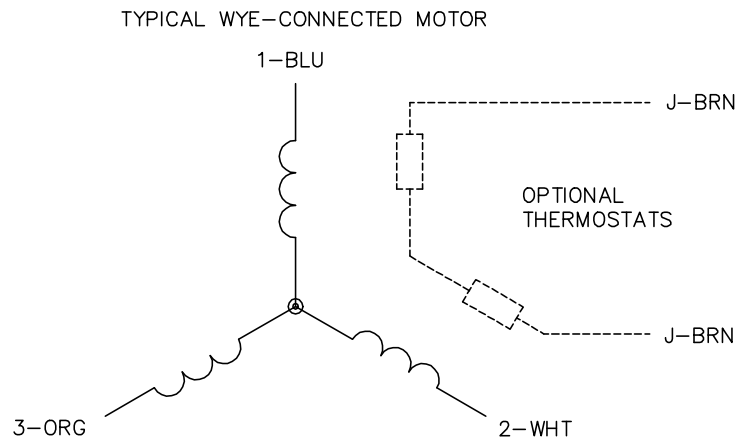
TORQUES (LB-FT): PO=220 PU=94.1 LR=128 LRA=155



12/22/2025 ACPERF, record # 41056



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

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BALDOR - RELIANCE®

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

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