

BALDOR • RELIANCE

Customer information packet

EM2531T-8

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 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	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	F
Inverter Code	Inverter Ready

Part detail

Revision	X
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WG796
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0695
Poles	04
Leads	6#6
Proprietary	False
Created date	01-22-2013

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	6 @ 6 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	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-8	P/N		ENCL	OPSB
SPEC.	40G048X796	CC	010A	FRAME	284T
HP	25	CLASS	F	HZ	60
RPM	1770	PH	3	DES	A
VOLTS	200	CODE	G	ODE BRG	6309
AMPS	70	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 # 41057

Typical performance - not guaranteed values

Winding: 40WGX796-R001		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	Locked-rotor Torque	124 LB-FT		
NEMA Design Code	Phase 3	Starting Current	432 A		
Service Factor (S.F.)	KVA Code G	No-load Current	29 A		
NEMA Nom. Eff.	93.6	Line-line Res. @ 25°C	0.0619 Ω		
Rating - Duty	Power Factor 82	Temp. Rise @ Rated Load	33°C		
S.F. Amps	40C AMB-CONT	Temp. Rise @ S.F. Load	40°C		
		Locked-rotor Power Factor	33		
		Rotor inertia	3.96 LB-FT ²		

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

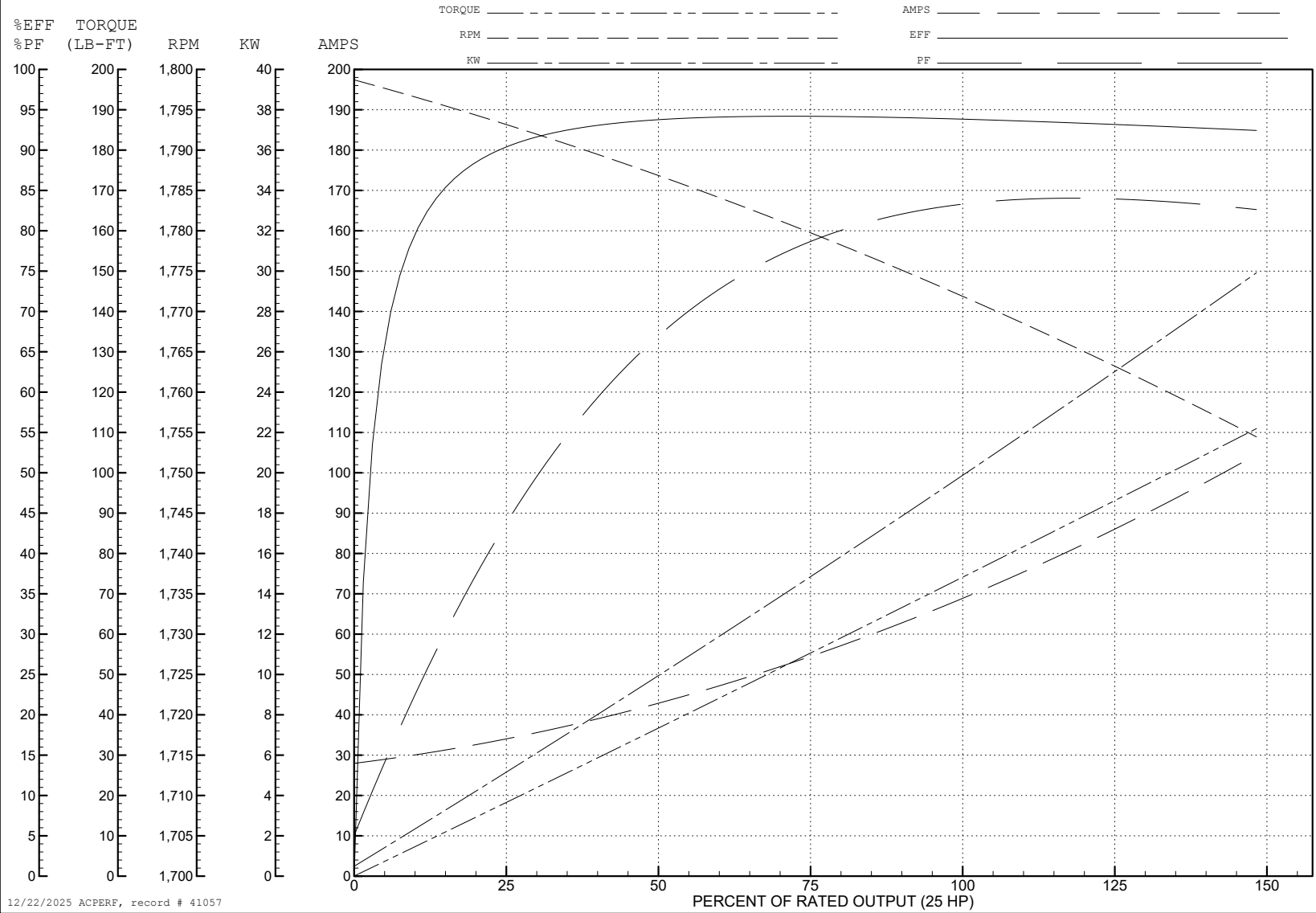
ABB Motors and Mechanical Inc.

WINDING # 40WGX796

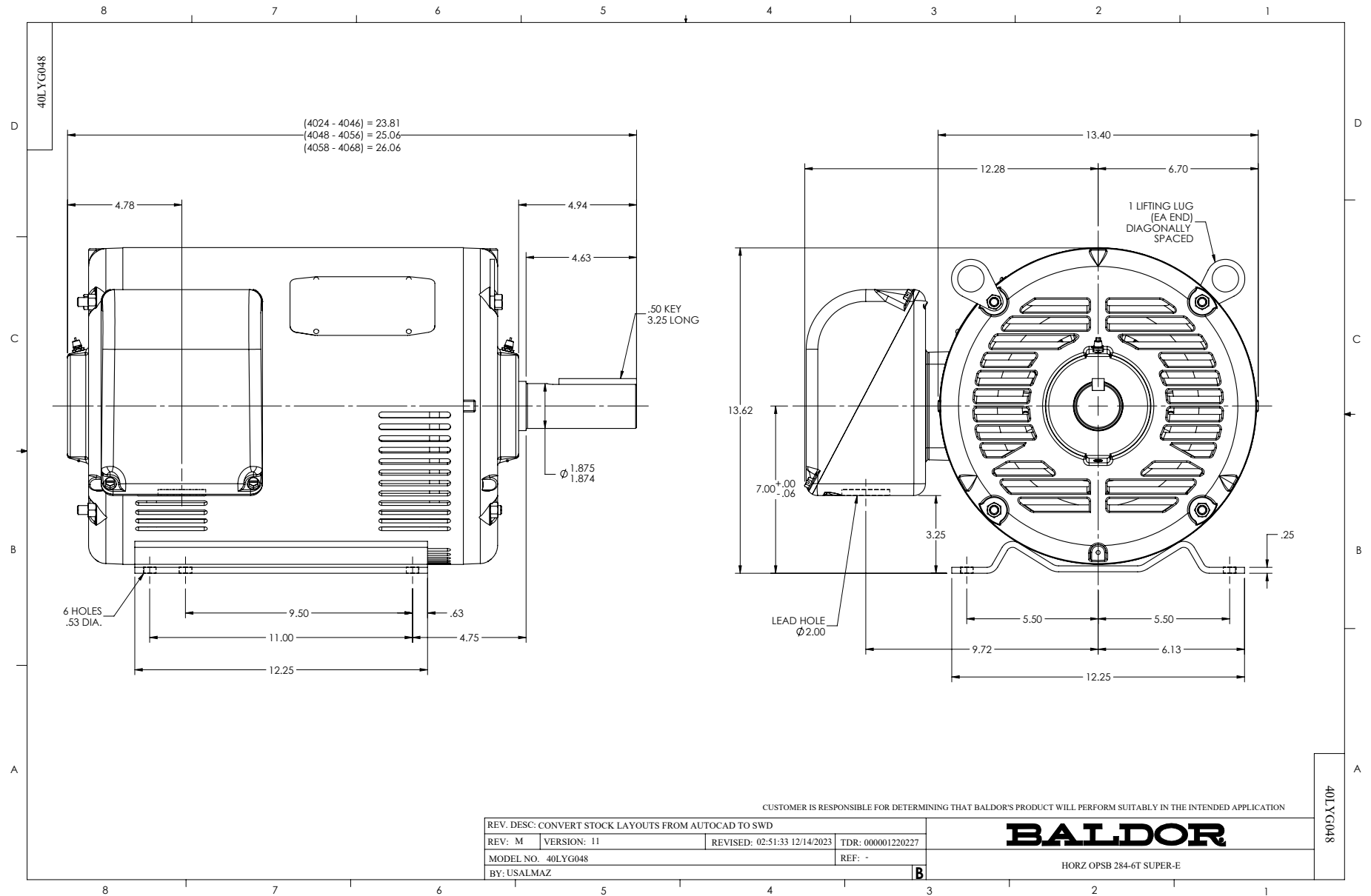
Typical performance - not guaranteed values.

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

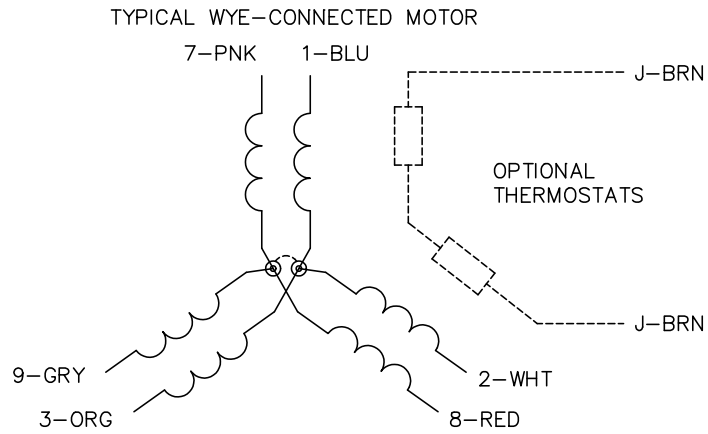
TORQUES (LB-FT): PO=213 PU=91.1 LR=124 LRA=432



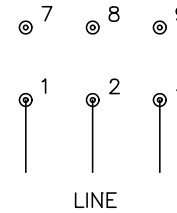
12/22/2025 ACPERF, record # 41057



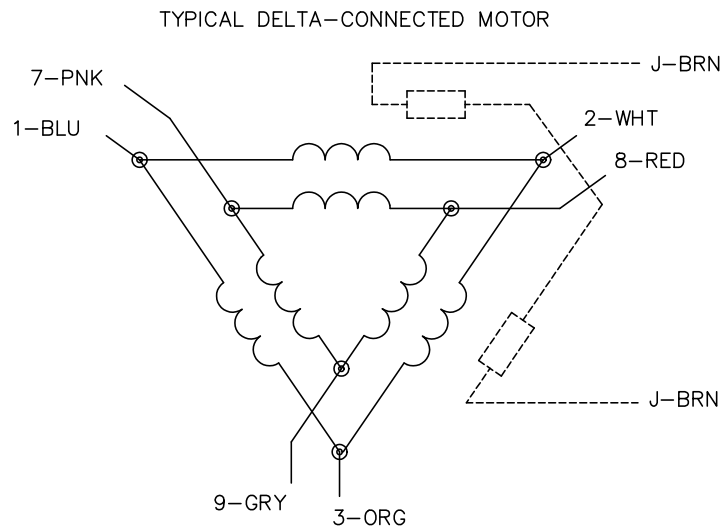
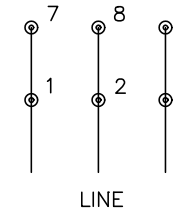
CD0695



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