

ABB BALDOR RELIANCE III

Customer information packet EM2535T-8G

30HP, 1775RPM, 3PH, 60HZ, 286T, 4060M, OPSB, N

Specifications

Enclosure	OPSB
Frame	286T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	NEMA PREMIUM
	UR
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	83.000 A @ 200.0 V
	83.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	83.0 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	F
Type	AC
Mech. spec.	40E246
Base	
Status	PRD/A
Elec. spec.	40WGX451
Layout	40LYE246
Eff. date	07-20-2026
CD Diagram	CD0695
Poles	04
Leads	6#6
Proprietary	False
Created date	07-07-2021

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4060M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.06 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 Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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.	EM2535T-8G			P/N						ENCL	OPSB
SPEC.	40E246X451G1	CC	010A	FRAME		286T	SER.NO.				
HP	30		CLASS		H	HZ	60				
RPM	1775		PH	3	DES		A				
VOLTS	200		CODE		H	ODE BRG		6309 <th>DE BRG</th> <td colspan="2">6311</td>	DE BRG	6311	
AMPS	83										
RATING	40C AMB-CONT		NEMA-NOM-EFF			94.1	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 # 89138

Typical performance - not guaranteed values

Winding: 40WGX451-R002			Type: 4060M		Enclosure: OPSB		
Nameplate Data			200 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		30	Full Load Torque		88.7 LB-FT		
Volts		200	Start Configuration		direct on line		
Full Load Amps		83	Breakdown Torque		281 LB-FT		
R.P.M.		1775	Pull-up Torque		131 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		162 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		581 A
Service Factor (S.F.)		1.15	No-load Current		35.3 A		
NEMA Nom. Eff.		94.1	Power Factor	82	Line-line Res. @ 25°C		0.0382 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		29°C
S.F. Amps					Temp. Rise @ S.F. Load		36°C
					Locked-rotor Power Factor		31.2768
					Rotor inertia		4.77 lb-ft²

Load Characteristics 200 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	67	77	82	84	85	83
Efficiency	90.5	93.9	94.5	94.3	93.5	93.1	93.8
Speed	1794	1788	1783	1777	1770	1763	1773
Line amperes	40.6	51.6	66.7	83.4	102	122	94.6

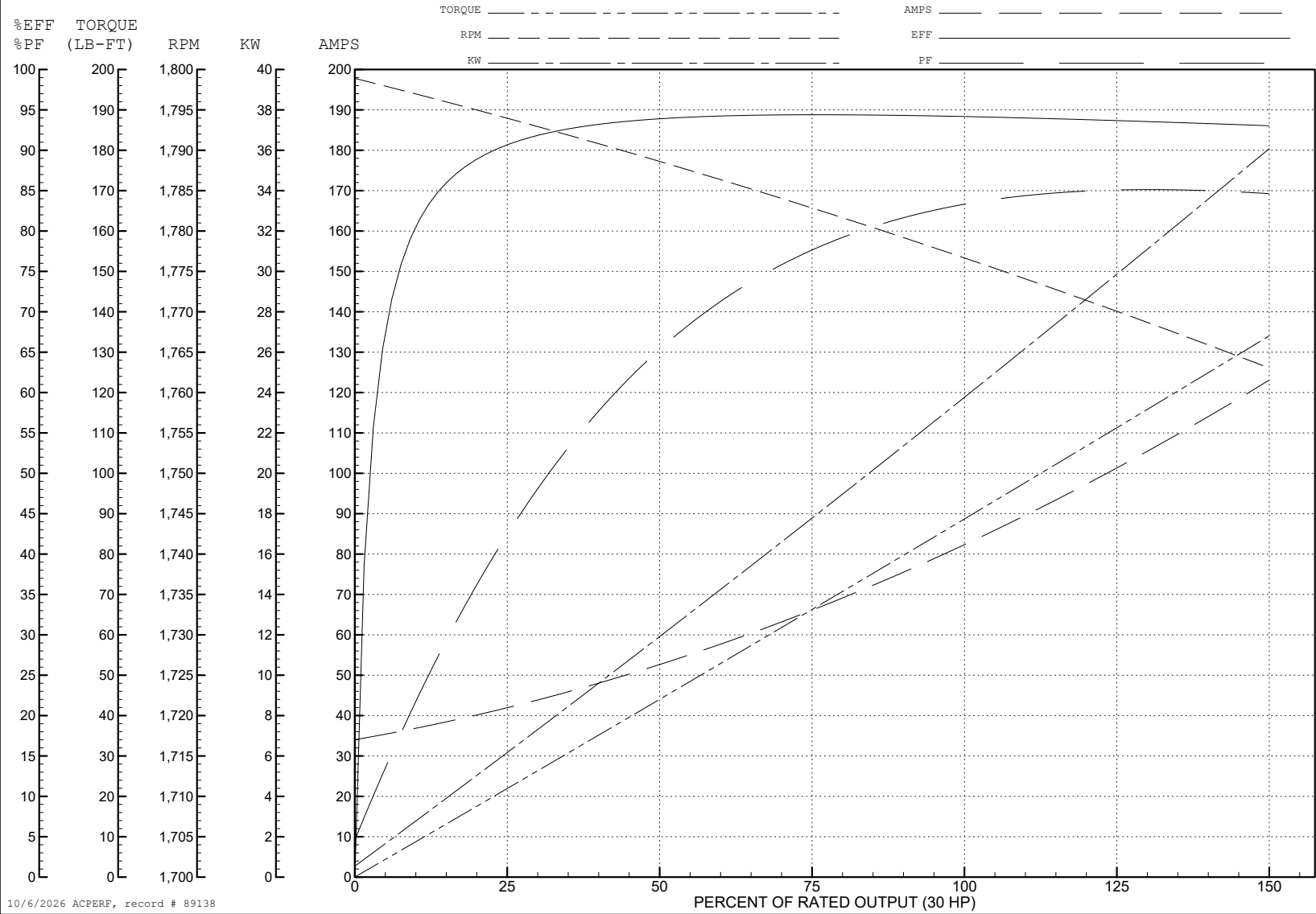
ABB Motors and Mechanical Inc.

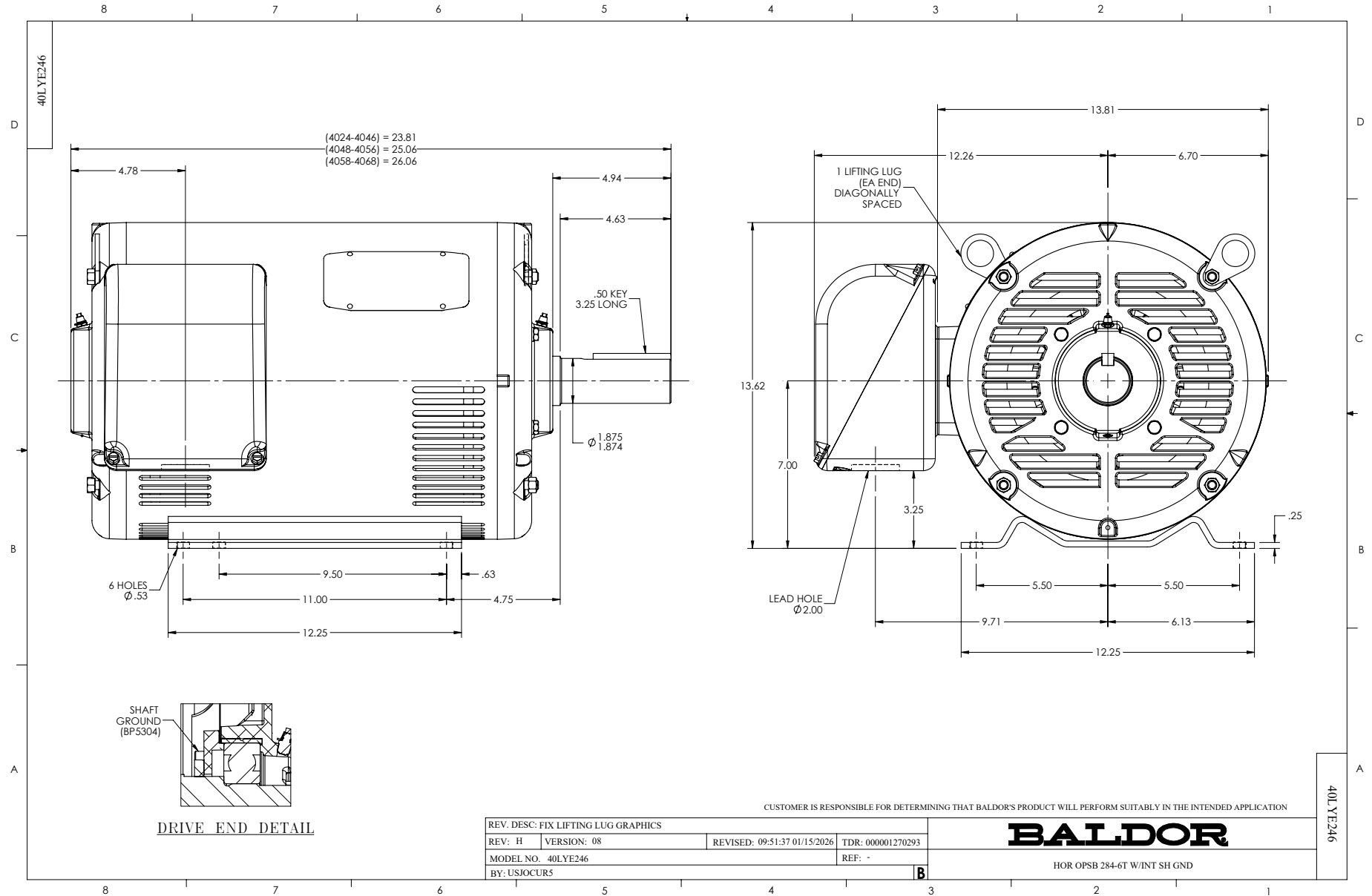
WINDING # 40WGX451

Typical performance - not guaranteed values.

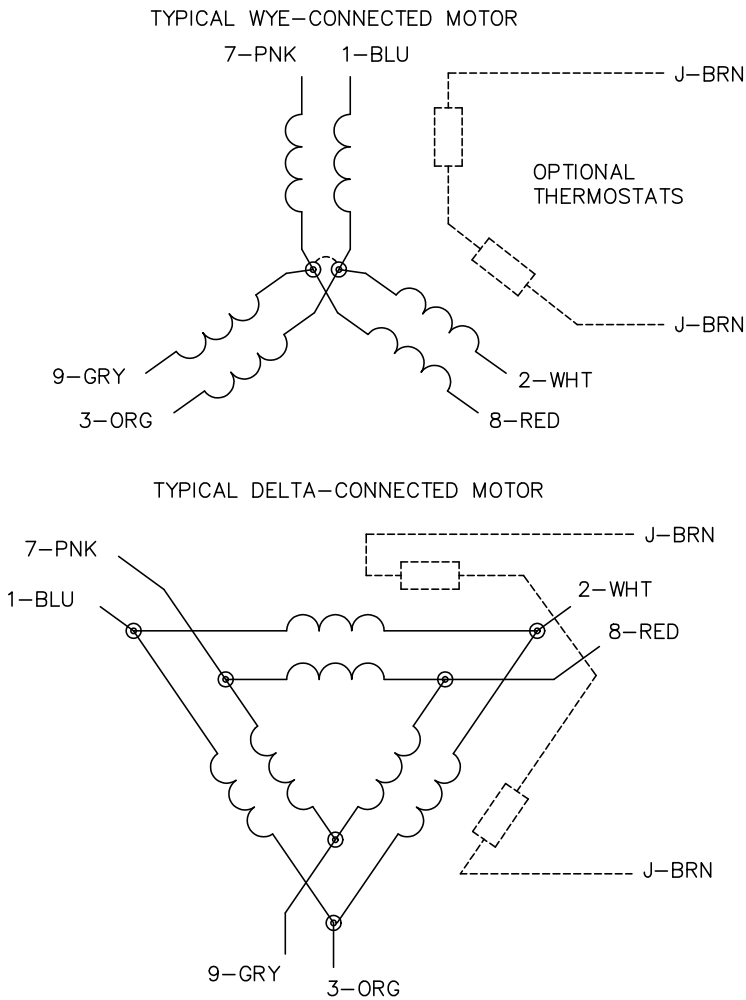
30 HP 3 PH 60 HZ 1775 RPM 200 V 4060M

TORQUES (LB-FT): PO=281 PU=131 LR=162 LRA=581

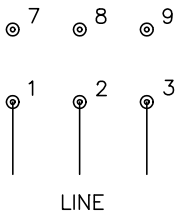




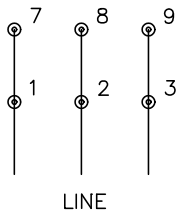
CD0695



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.

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

CD0695