

BALDOR • RELIANCE

Customer information packet

EM2539T-G

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	324T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	98.000 A @ 230.0 V 99.000 A @ 208.0 V 49.000 A @ 460.0 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	49.0 a

Part detail

Revision	AG
Type	AC
Mech. spec.	40E245
Base	
Status	PRD/A
Elec. spec.	40WGX166
Layout	40LYE245
Eff. date	08-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	08-24-2010

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 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	2.125 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

NP3554LUA										
CAT.NO.	EM2539T-G			P/N				ENCL		OPSB
SPEC.	40E245X166G1	CC	010A	FRAME		324T	SER.NO.			
HP	40	CLASS		H	HZ	60				
RPM	1770	PH	3	DES		A				
VOLTS	230/460			CODE		H	ODE BRG	6309	DE BRG	6312
AMPS	98/49									
RATING	40C AMB-CONT			NEMA-NOM-EFF		94.1	GREASE	POLYREX EM		
PF	82	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 40HP 190/380V 114/57A			SF1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.								

AC Induction Motor Performance Data

Record # 35574

Typical performance - not guaranteed values

Winding: 40WGX166-R003		Type: 4064M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40	Full Load Torque	119 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	98/49	Breakdown Torque	427 LB-FT
R.P.M.	1770	Pull-up Torque	187 LB-FT
Hz	60 Phase	Locked-rotor Torque	246 LB-FT
NEMA Design Code	A KVA Code	Starting Current	330 A
Service Factor (S.F.)	1.15	No-load Current	21.1 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.16236 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	41°C
S.F. Amps		Temp. Rise @ S.F. Load	51°C
		Locked-rotor Power Factor	32
		Rotor inertia	5.09 LB-FT ²

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	24.1	30.7	39.2	48.7	59.3	71.3	55.1

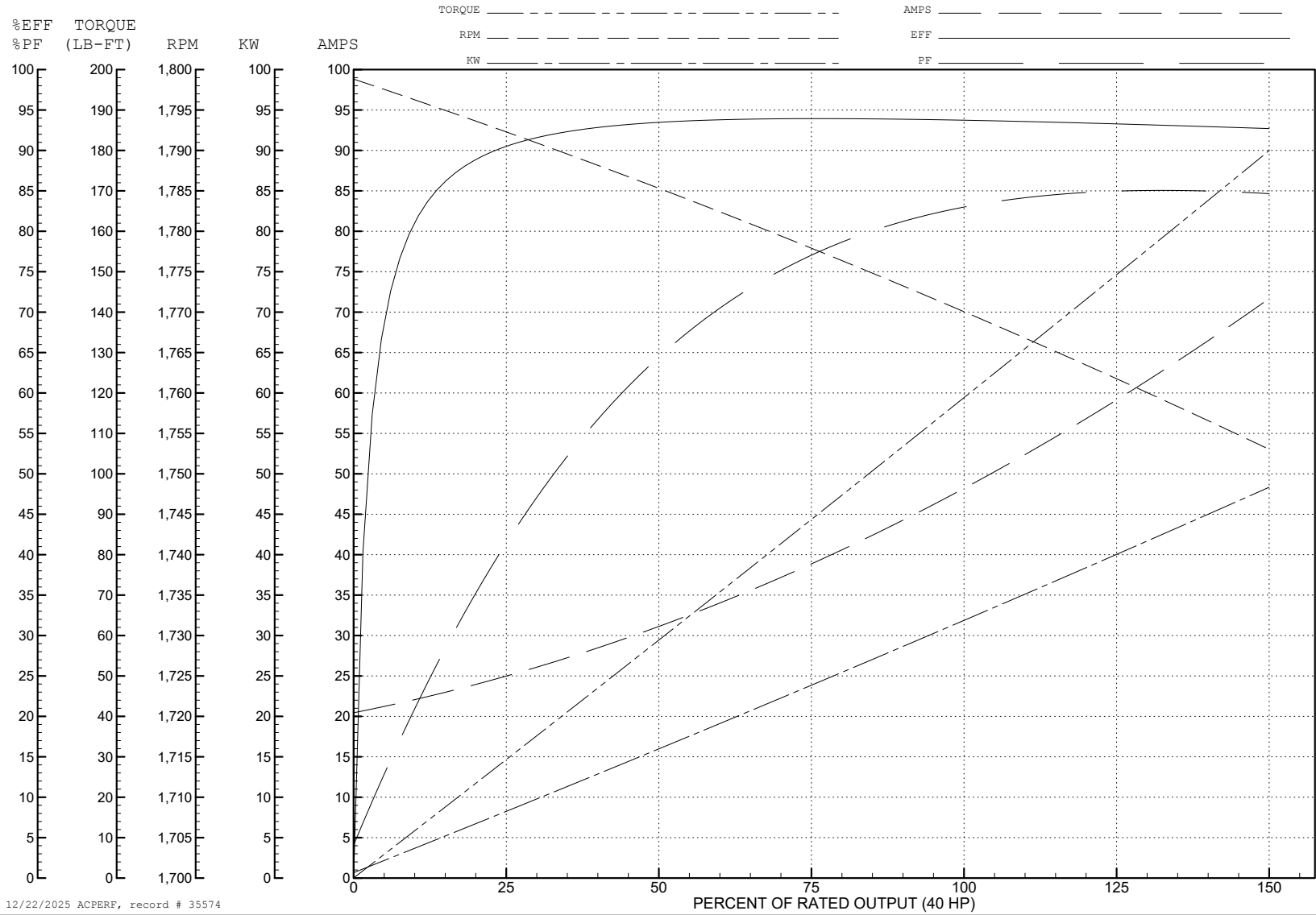
ABB Motors and Mechanical Inc.

WINDING # 40WG166

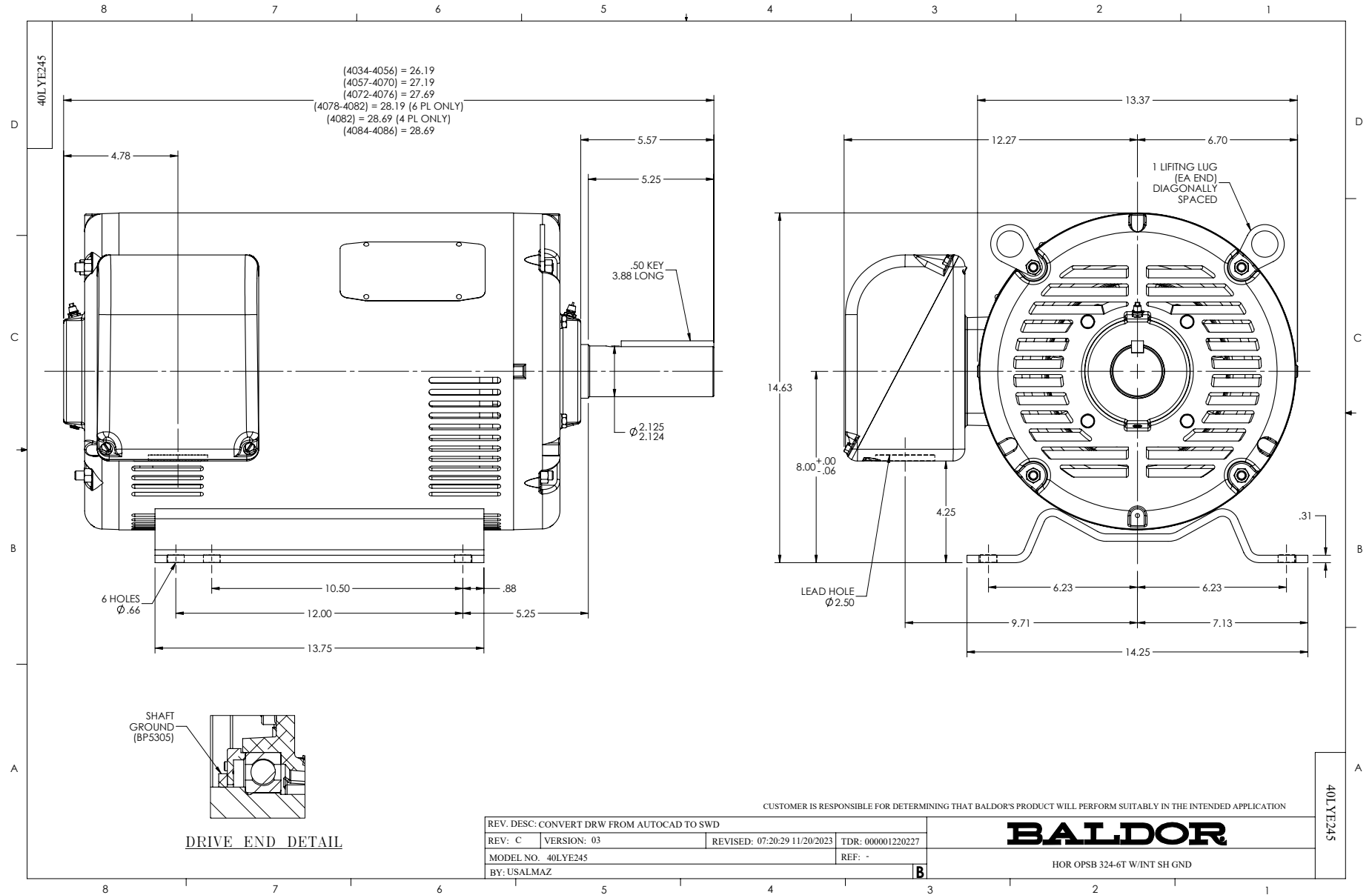
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 460 V 4064M

TORQUES (LB-FT): PO=427 PU=187 LR=246 LRA=330



12/22/2025 ACPERF, record # 35574



CD0005

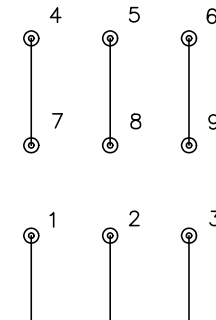


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS