

BALDOR • RELIANCE

Customer information packet

EM2540T

40HP, 1180RPM, 3PH, 60HZ, 364T, 4278M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	364T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	51.000 A @ 460.0 V 110.000 A @ 208.0 V 104.000 A @ 230.0 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	51.0 a

Part detail

Revision	E
Type	AC
Mech. spec.	42F100
Base	
Status	PRD/A
Elec. spec.	42WGW920
Layout	42LYF100
Eff. date	11-29-2023
CD Diagram	CD0005
Poles	06
Leads	9#8
Proprietary	False
Created date	03-30-2022

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4278M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	30.69 IN
Power Factor	79
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	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1180 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

NP2138LUA

CAT.NO.	EM2540T	P/N		ENCLOSURE	OPSB
SPEC.	42F100W920G1	CC	010A	FRAME	364T
HP	40	CLASS	F	HZ	60
RPM	1180	PH	3	DES	A
VOLT	230/460	KVA-CODE	H	ODE BRG	6311
AMP	104/51	DE BRG			6313
RATING	40C AMB-CONT	GREASE	POLYREX EM		
NEMA-NOM-EFF	94.1	PF	79	SER.F.	1.15
HTR-VOLTS	50HZ 40HP 190/380V 120/60A			SF	1.0
HTR-AMPS					

AC Induction Motor Performance Data

Record # 34461

Typical performance - not guaranteed values

Winding: 42WGW920-R001		Type: 4278M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40	Full Load Torque	178 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	104/51	Breakdown Torque	521 LB-FT
R.P.M.	1180	Pull-up Torque	232 LB-FT
Hz	60 Phase	Locked-rotor Torque	317 LB-FT
NEMA Design Code	A KVA Code	Starting Current	337 A
Service Factor (S.F.)	1.15	No-load Current	21.9 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.154 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	41°C
S.F. Amps		Temp. Rise @ S.F. Load	50°C
		Locked-rotor Power Factor	28
		Rotor inertia	14.9 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	64	74	79	81	82	80
Efficiency	89.3	93.1	94.1	94.1	93.3	92.2	93.6
Speed	1195	1191	1187	1183	1177	1170	1179
Line amperes	24.8	31.6	40.5	50.9	62.2	77.5	57.7

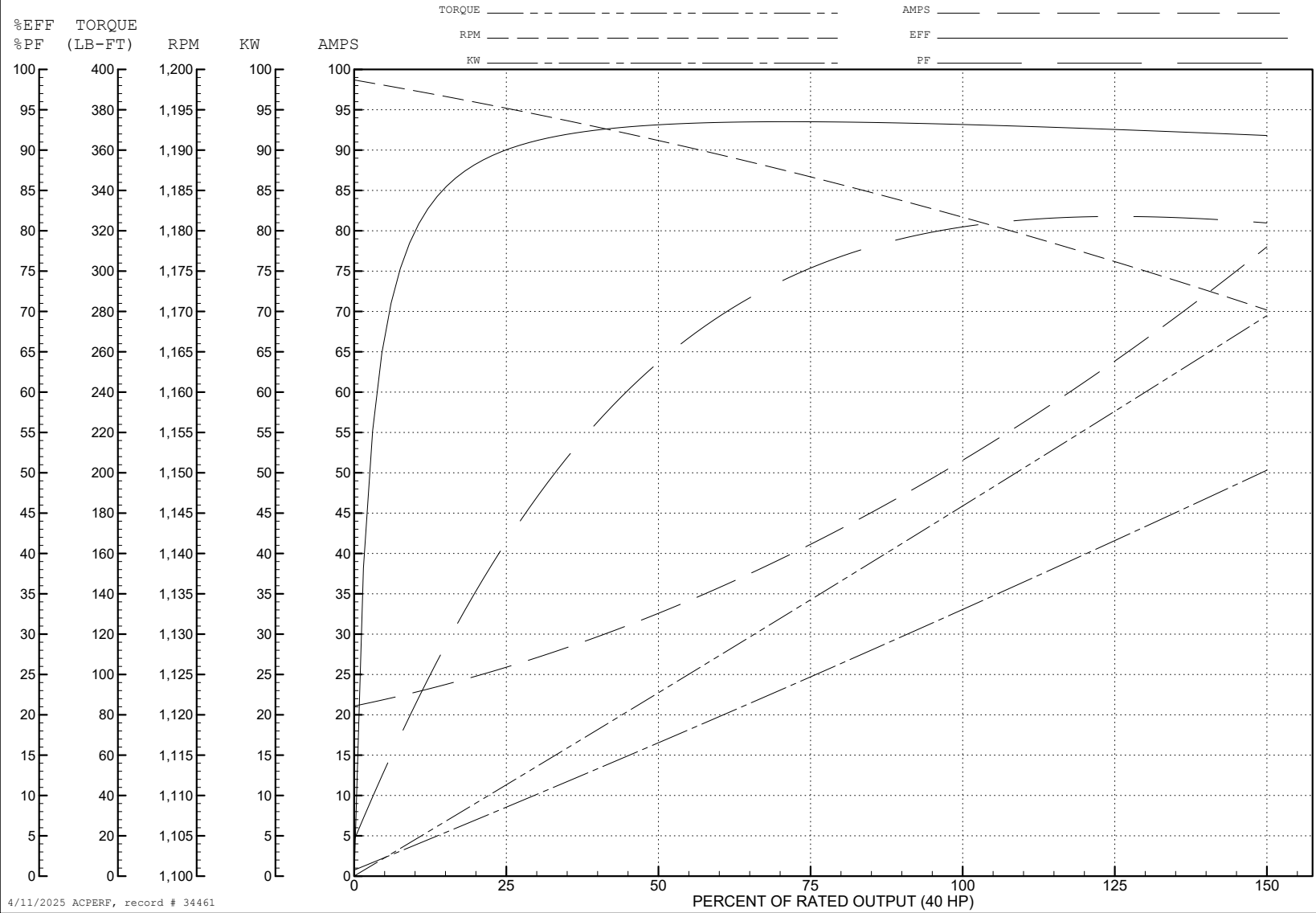
ABB Motors and Mechanical Inc.

WINDING # 42WGW920

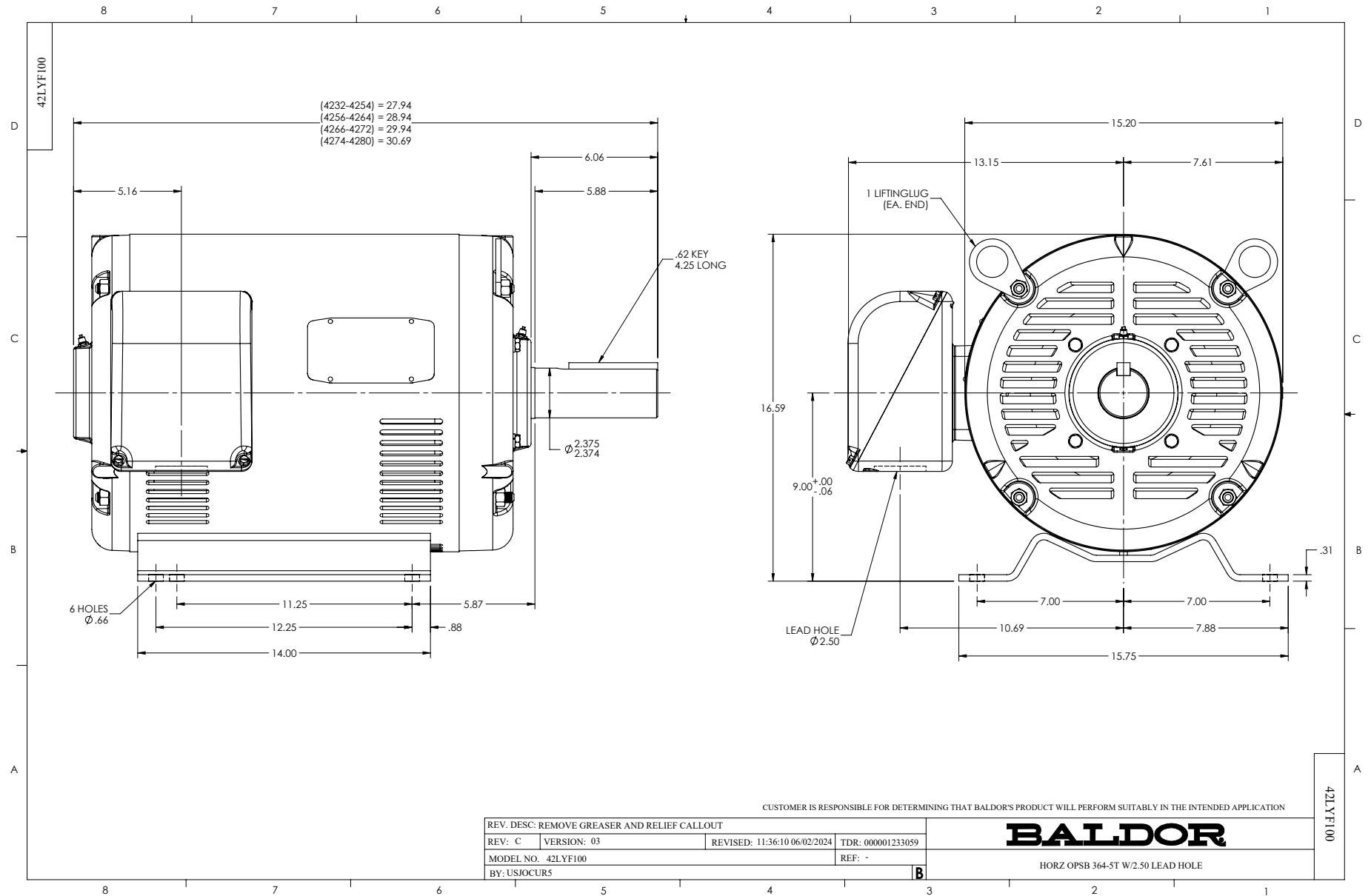
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1180 RPM 460 V 4278M

TORQUES (LB-FT): PO=521 PU=232 LR=317 LRA=337



4/11/2025 ACPERF, record # 34461



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