ABB BALDOR RELIANCE

Customer information packet

EWDM4109T

40HP, 3530RPM, 3PH, 60HZ, 324TS, TEFC, F1
Class - None
Division - Not Applicable

8/23/2026 2:03:39 AM

Specifications

Enclosure	TEFC
Frame	324TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 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	90.000 A @ 230.0 V
	45.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGY652
Layout	10LYG676
Eff. date	02-21-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	08-15-2019

High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1058M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.89 IN
Power Factor	90
Product Family	Washdown Features
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3530 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

NP1669L									
CAT.NO.	EWDM4109T								
SPEC.	10-0000-1020								
HP	40								
VOLTS	230/460 10:1 CT/VT								
AMP	90/45								
RPM	3530								
FRAME	324TS	**HZ**	60			**PH**	3		
SER.F.	1.00	**CODE**	H	**DES**	A	**CLASS**	F		
NEMA-NOM-EFF	92.4	**PF**	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6312	**ODE**	6309						
ENCL	TEFC	**SN**							
BLANK	1.15SF ON SINEWAVE								

AC Induction Motor Performance Data
Record # 30898
Typical performance - not guaranteed values

Winding: 10WGY652-R001	**Type:** 1058M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	59.5 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			90/45	**Breakdown Torque**	197 LB-FT
R.P.M.			3525	**Pull-up Torque**	85.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	125 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	324 A
Service Factor (S.F.)			1.15	**No-load Current**	12 A
NEMA Nom. Eff.	92.4	**Power Factor**	90	**Line-line Res. @ 25ºC**	0.159 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	78°C
S.F. Amps				**Temp. Rise @ S.F. Load**	96°C
				Locked-rotor Power Factor	22.8
				Rotor inertia	2.49 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	65	82	88	90	90	91	90
Efficiency	88.6	92	92.8	92.6	91.9	90.8	92.7
Speed	3583	3567	3550	3531	3511	3485	3519
Line amperes	16.3	24.7	34.3	45.1	56.3	70.6	51.8

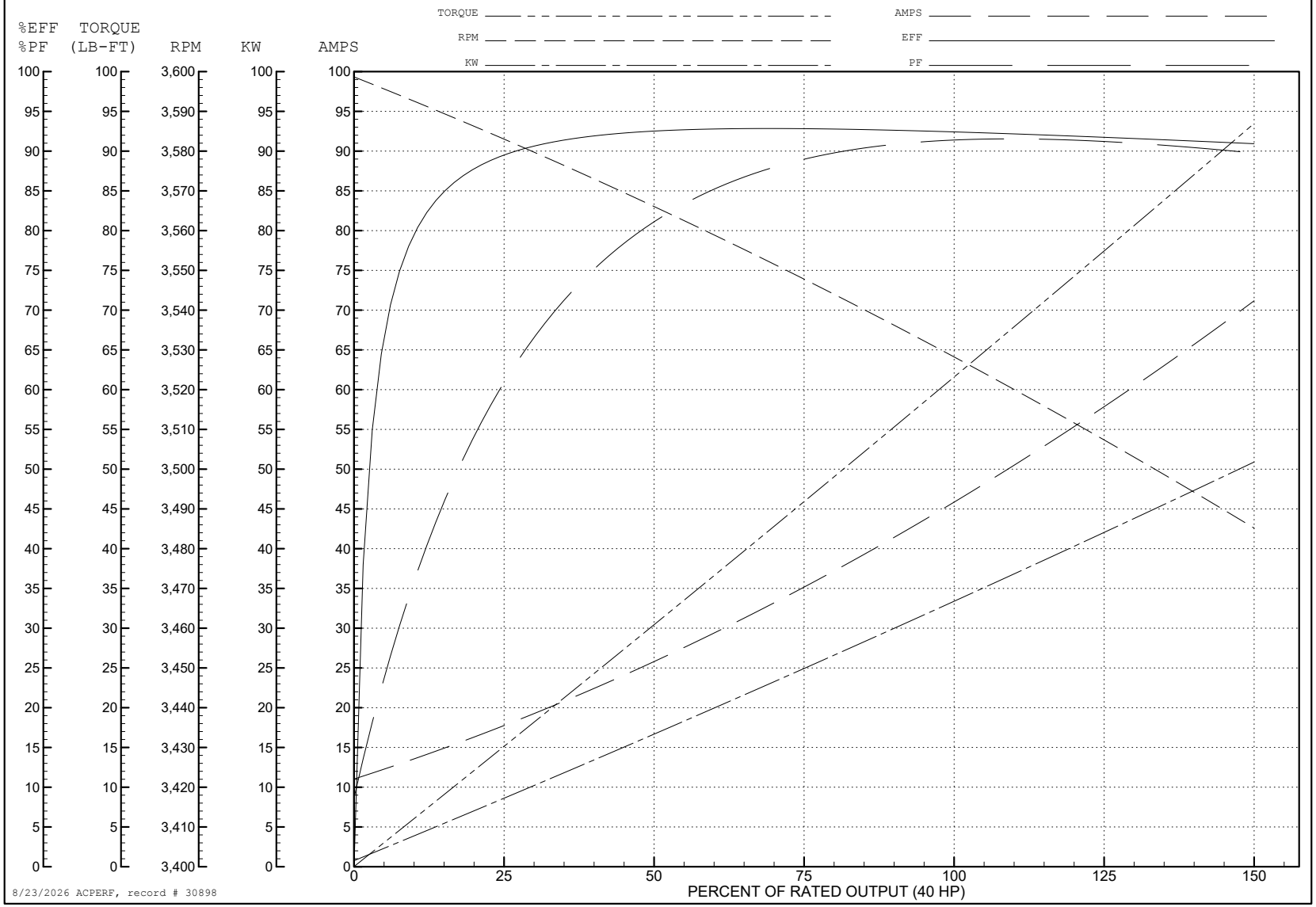
ABB Motors and Mechanical Inc.

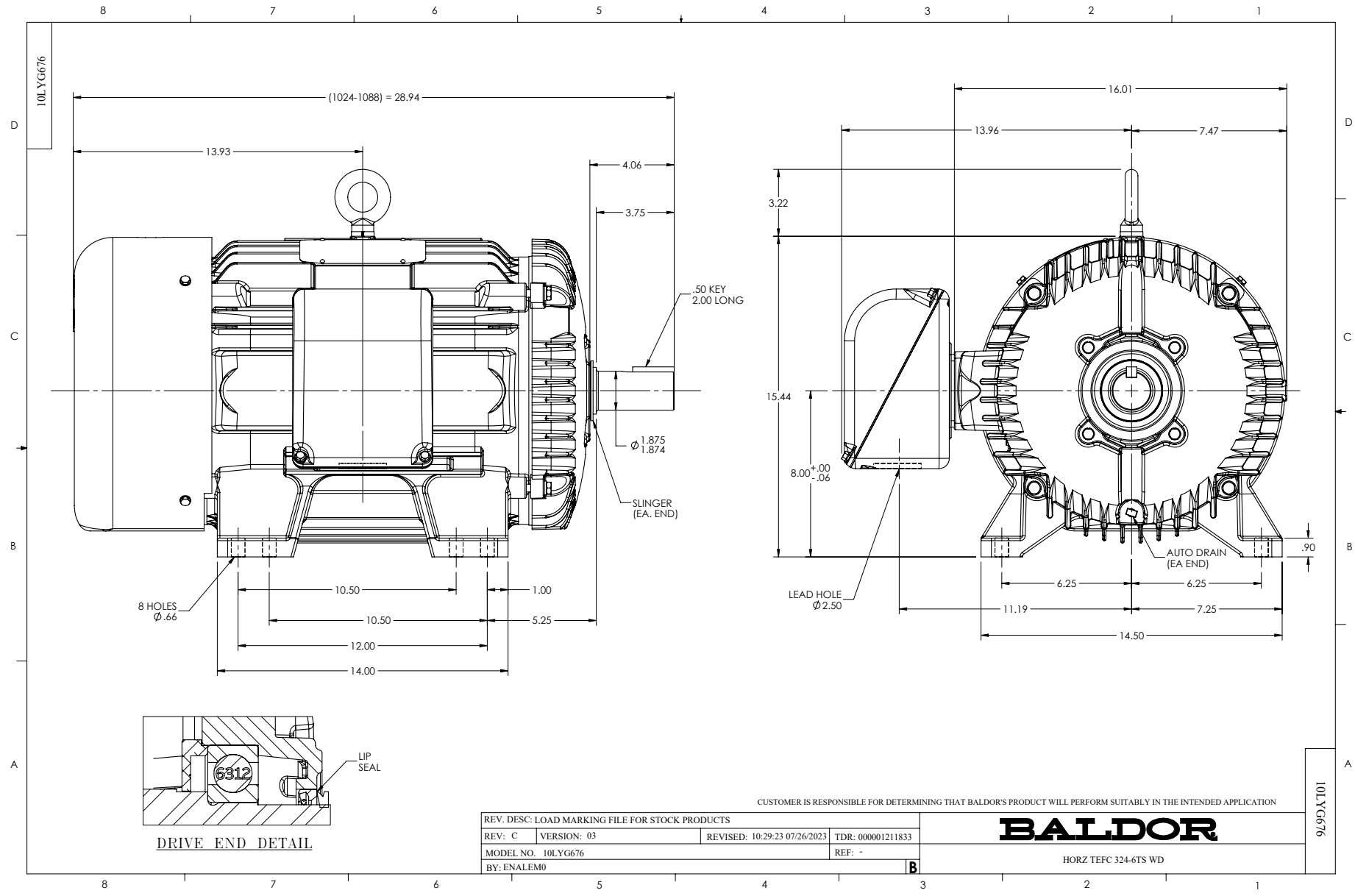
WINDING # 10WGY652

40 HP 3 PH 60 HZ 3525 RPM 460 V 1058M

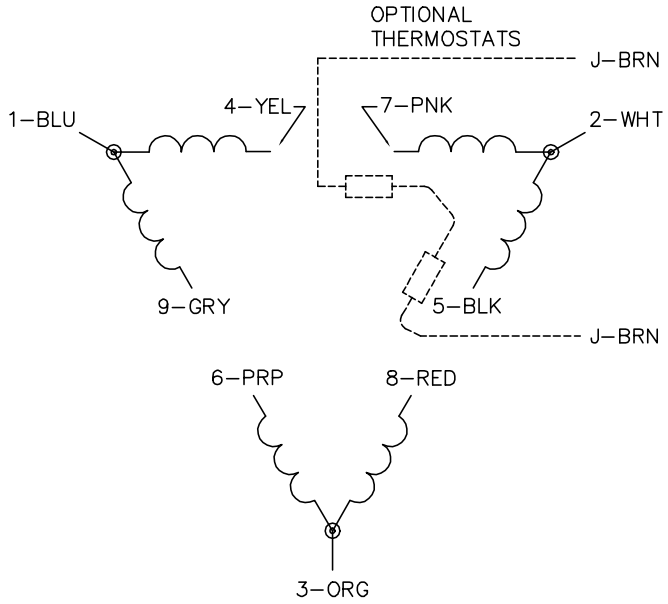
Typical performance - not guaranteed values.

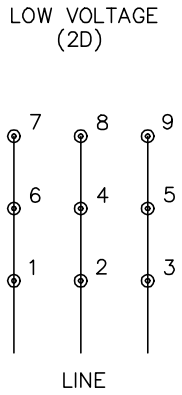
TORQUES(LB-FT): PO=197 PU=85.4 LR=125 LRA=324

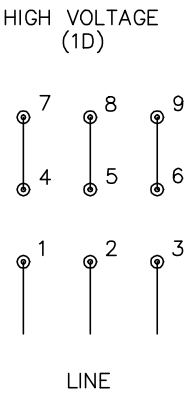



10LYG676
(1024-1088) = 28.94
13.93
4.06
3.75
.50 KEY
2.00 LONG
Ø 1.875
1.874
SLINGER
(EA. END)
8 HOLES
Ø.66
10.50
1.00
10.50
5.25
12.00
14.00
16.01
13.96
7.47
3.22
15.44
8.00 +.00 -.06
AUTO DRAIN
(EA END)
.90
LEAD HOLE
Ø2.50
6.25
6.25
11.19
7.25
14.50
6312
LIP
SEAL
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD MARKING FILE FOR STOCK PRODUCTS
REV: C
VERSION: 03
REVISED: 10:29:23 07/26/2023
TDR: 000001211833
MODEL NO. 10LYG676
REF: -
BY: ENALEM0
B
BALDOR
HORZ TEFC 324-6TS WD
10LYG676

CD0180







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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1