ABB BALDOR RELIANCE

Customer information packet

EM2538T-CI

40HP, 3540RPM, 3PH, 60HZ, 286TS, 1046M, OPEN, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	286TS
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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
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	46.000 A @ 460.0 V
	92.000 A @ 230.0 V
	100.000 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	T
Type	AC
Mech. spec.	10E652
Base	
Status	PRD/A
Elec. spec.	10WGY796
Layout	10LYE652
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	05-14-2012

Heater Indicator	No Heater
High Voltage Full Load Amps	46.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	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	1046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.56 IN
Power Factor	88
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3515 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.	EM2538T-CI			**P/N**						**ENCL**	OPEN	
SPEC.	10E652Y796G2	**CC**	010A		**FRAME**	286TS		**SER.NO.**				
HP	40		**CLASS**	F	**HZ**	60						
RPM	3515		**PH**	3	**DES**	B						
VOLTS	230/460			**CODE**	F		**ODE BRG**	6309	**DE BRG**	6310		
AMPS	92/46											
RATING	40C AMB-CONT			**NEMA-NOM-EFF**	92.4		**GREASE**	POLYREX EM				
PF	88	**SER.F.**	1.15		**CT30-60(2:1) VT3-60(20:1)**							
USABLE AT	50HZ 40HP 190/380V 112/56A			SF 1.0								
HTR-VOLTS	**HTR-AMPS**		**MAX. SPACE HEATER TEMP.**									

AC Induction Motor Performance Data
Record # 68585
Typical performance - not guaranteed values

Winding: 10WGY796-R005	**Type:** 1046M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	59.55 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			92/46	**Breakdown Torque**	154 LB-FT
R.P.M.			3515	**Pull-up Torque**	67.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	85.8 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	259 A
Service Factor (S.F.)			1.15	**No-load Current**	12.3 A
NEMA Nom. Eff.	92.4	**Power Factor**	88	**Line-line Res. @ 25ºC**	0.21001 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	49°C
S.F. Amps				**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	24

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	62	80	87	89	89	88	89
Efficiency	91.3	93.6	93.4	92.6	91.3	89.7	91.8
Speed	3581.8	3563.4	3541	3518.8	3492.2	3462.2	3503
Line amperes	16.3	24.6	34.5	45.5	57.3	70.7	52.6

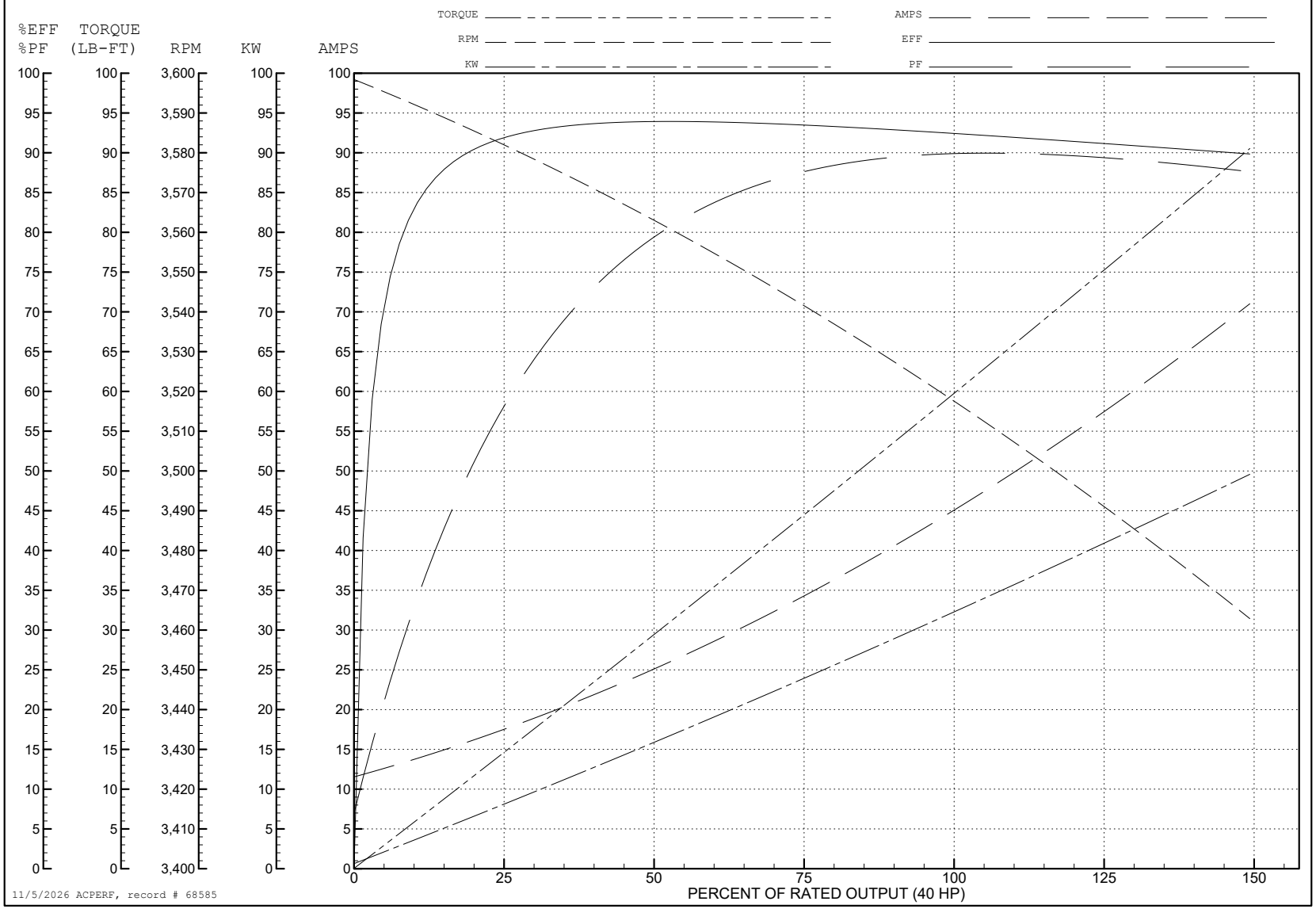
ABB Motors and Mechanical Inc.

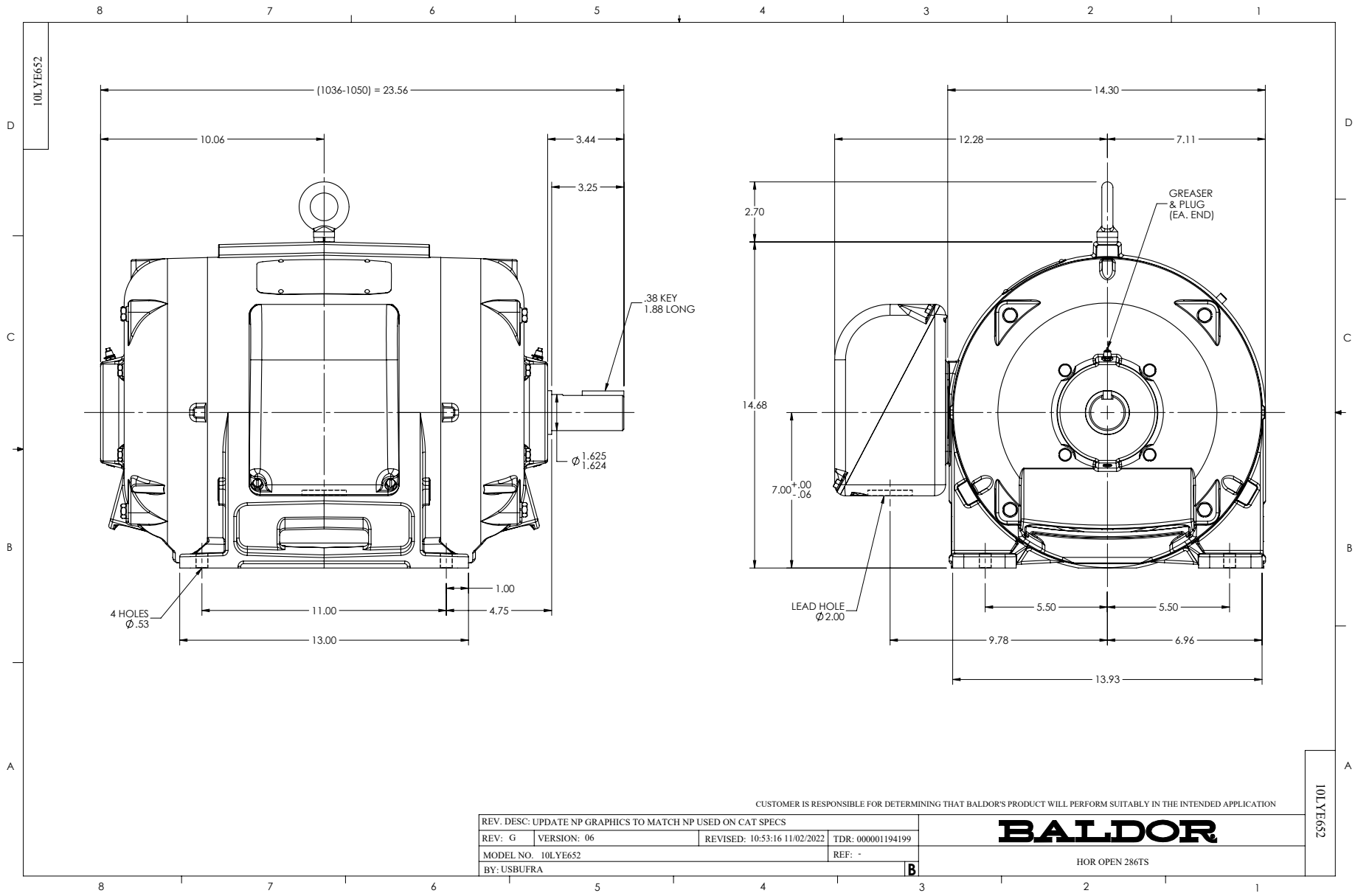
WINDING # 10WGY796

40 HP 3 PH 60 HZ 3515 RPM 460 V 1046M

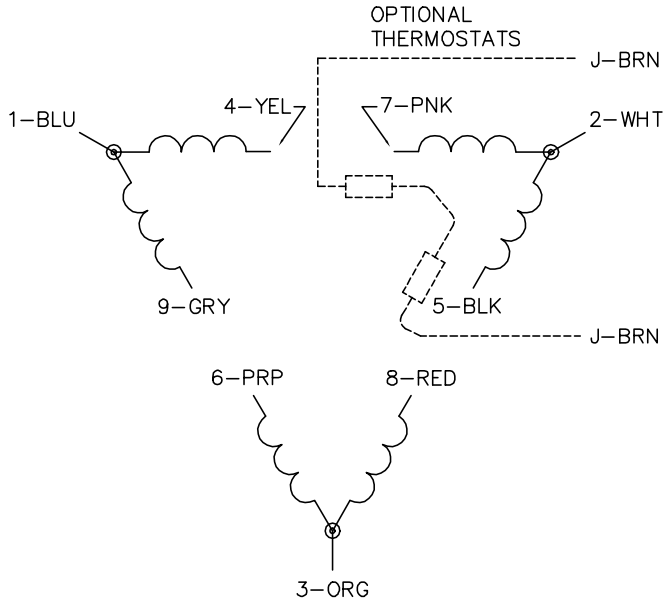
Typical performance - not guaranteed values.

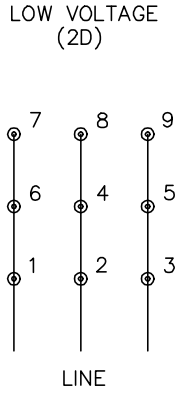
TORQUES(LB-FT): PO=154 PU=67.7 LR=85.8 LRA=259

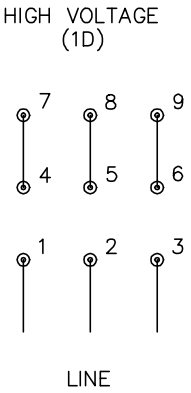



10LYE652
(1036-1050) = 23.56
10.06
3.44
3.25
.38 KEY
1.88 LONG
Ø 1.625
1.624
4 HOLES
Ø .53
11.00
1.00
4.75
13.00
14.30
12.28
7.11
2.70
GREASER
& PLUG
(EA. END)
14.68
7.00 +.00 -.06
LEAD HOLE
Ø 2.00
5.50
5.50
9.78
6.96
13.93
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE NP GRAPHICS TO MATCH NP USED ON CAT SPECS
REV: G
VERSION: 06
REVISED: 10:53:16 11/02/2022
TDR: 000001194199
MODEL NO. 10LYE652
REF: -
BY: USBUFRA
B
BALDOR
HOR OPEN 286TS
10LYE652

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