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# Customer information packet

## EM2538T-CI

40HP, 3540RPM, 3PH, 60HZ, 286TS, 1046M, OPEN, F

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	286TS
Frame Material	Iron
Frequency	60.00 Hz
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
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA CSA EEV 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	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	Q
Type	AC
Mech. spec.	10E652
Base	
Status	PRD/A
Elec. spec.	10WGY796
Layout	10LYE652
Eff. date	07-12-2022
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	23.57 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 (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

**Winding Thermal 2**

**None**

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**Nameplate**

NP3554LUA										
<b>CAT.NO.</b>	EM2538T-CI			<b>P/N</b>				<b>ENCL</b>		<b>OPEN</b>
<b>SPEC.</b>	10E652Y796G2	<b>CC</b>	010A	<b>FRAME</b>		286TS	<b>SER.NO.</b>			
<b>HP</b>	40	<b>CLASS</b>		F	<b>HZ</b>	60				
<b>RPM</b>	3515	<b>PH</b>	3	<b>DES</b>		B				
<b>VOLTS</b>	230/460			<b>CODE</b>		F	<b>ODE BRG</b>	6309	<b>DE BRG</b>	6310
<b>AMPS</b>	92/46			<b>USABLE AT 208V</b>			100			
<b>RATING</b>	40C AMB-CONT			<b>NEMA-NOM-EFF</b>			92.4	<b>GREASE</b>	POLYREX EM	
<b>PF</b>	88	<b>SER.F.</b>	1.15	<b>CT30-60(2:1) VT3-60(20:1)</b>						
<b>USABLE AT</b>	50HZ 40HP 190/380V 112/56A			<b>SF 1.0</b>						
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>		<b>MAX. SPACE HEATER TEMP.</b>							

## Parts list

Part number	Description	Quantity
SA244593	SA 10E652Y796G2	1.000 ea
RA231476	RA 10E652Y796G2	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
10EP1200A04	ENDPLATE, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
10AD2000A02	AIR DEFLECTOR, STAT	1.000 ea
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	3.000 ea
10AD2000A02	AIR DEFLECTOR, STAT	1.000 ea
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	3.000 ea
10XN3816K76	3/8-16 X 4.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10EP1200A03	ENDPLATE, MACH PU	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
10XN3118K32	5/16-18 X 2.00" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10XN3118K32	5/16-18 X 2.00" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10XN3816K76	3/8-16 X 4.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501G17	KEY, 3/8 SQ X 1.875	1.000 ea
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb

HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 ea
LB1119N	WARNING LABEL	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 ea

**AC Induction Motor Performance Data**

Record # 68585

Typical performance - not guaranteed values

<b>Winding: 10WGY796-R005</b>		<b>Type: 1046M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	59.55 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	92/46	<b>Breakdown Torque</b>	154 LB-FT		
<b>R.P.M.</b>	3515	<b>Pull-up Torque</b>	67.7 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	85.8 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	F	<b>Starting Current</b>	259 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	12.3 A	
<b>NEMA Nom. Eff.</b>	92.4 <b>Power Factor</b>	88	<b>Line-line Res. @ 25°C</b>	0.21001 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	49°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	63°C	
			<b>Locked-rotor Power Factor</b>	24	

**Load Characteristics 460 V, 60 Hz, 40 HP**

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



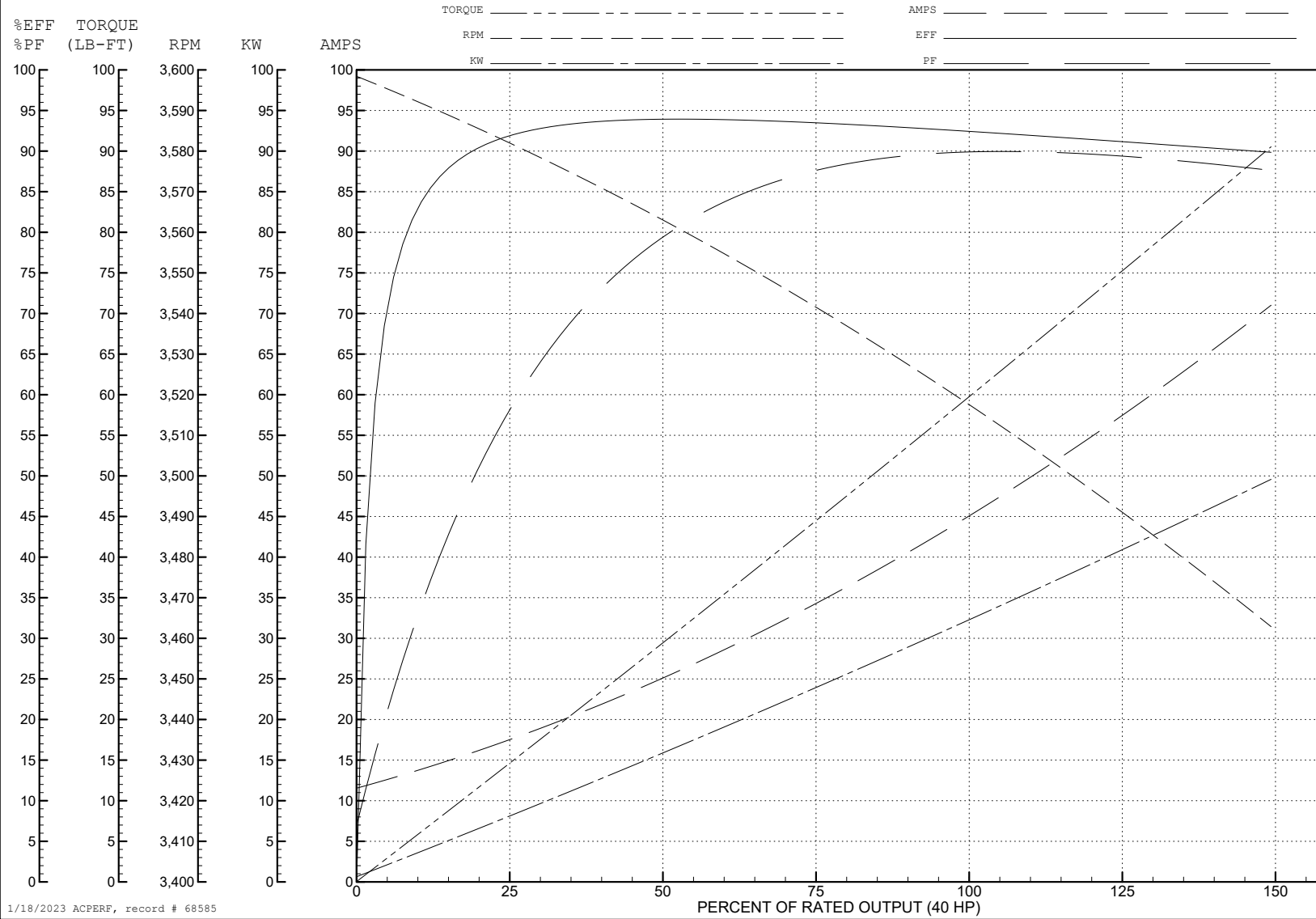
ABB Motors and Mechanical Inc.

WINDING # 10WGY796

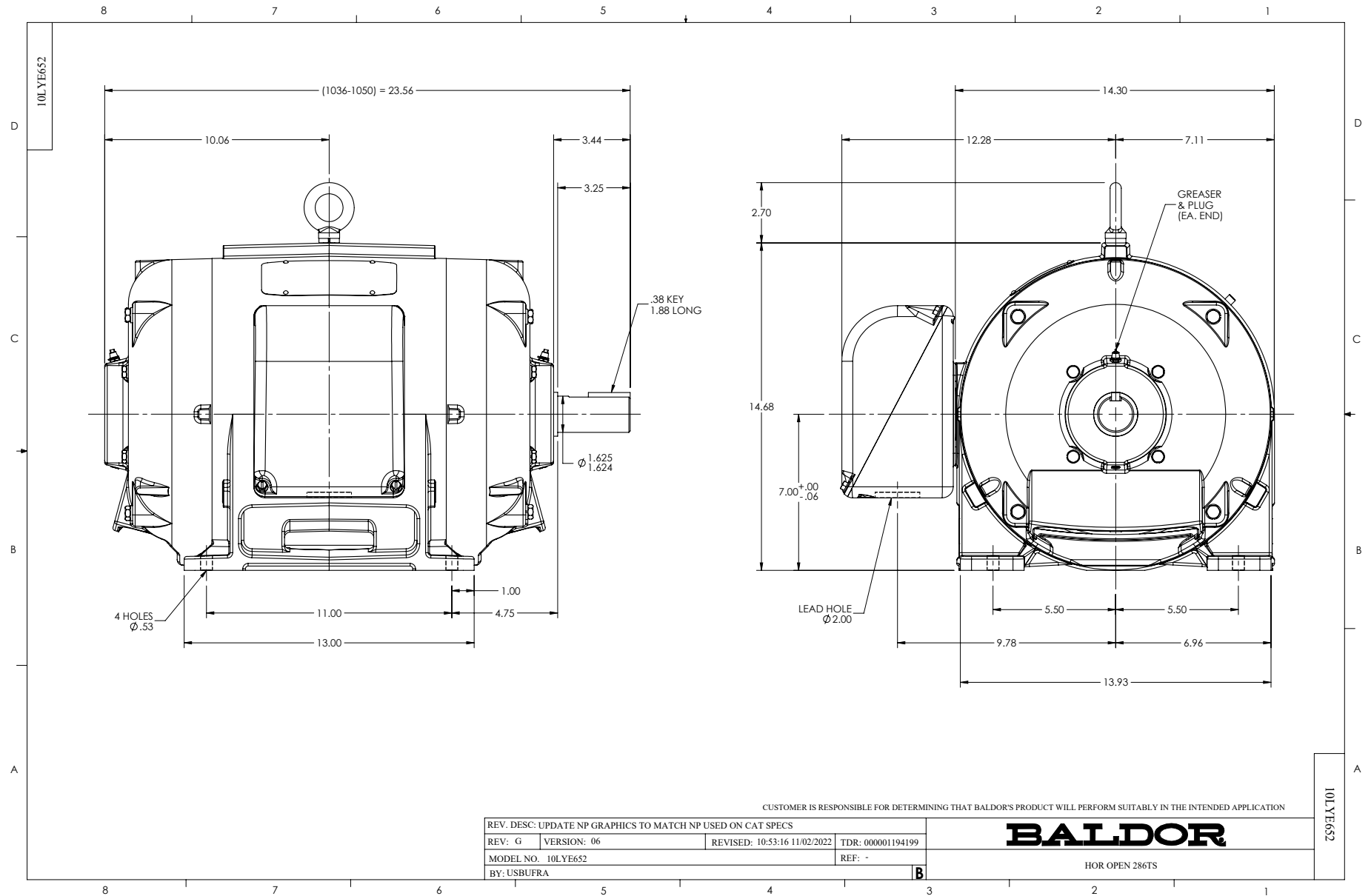
Typical performance - not guaranteed values.

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

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



1/18/2023 ACPERF, record # 68585



CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



**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: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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