

ABB BALDOR RELIANCE III

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
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. @ 25°C		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

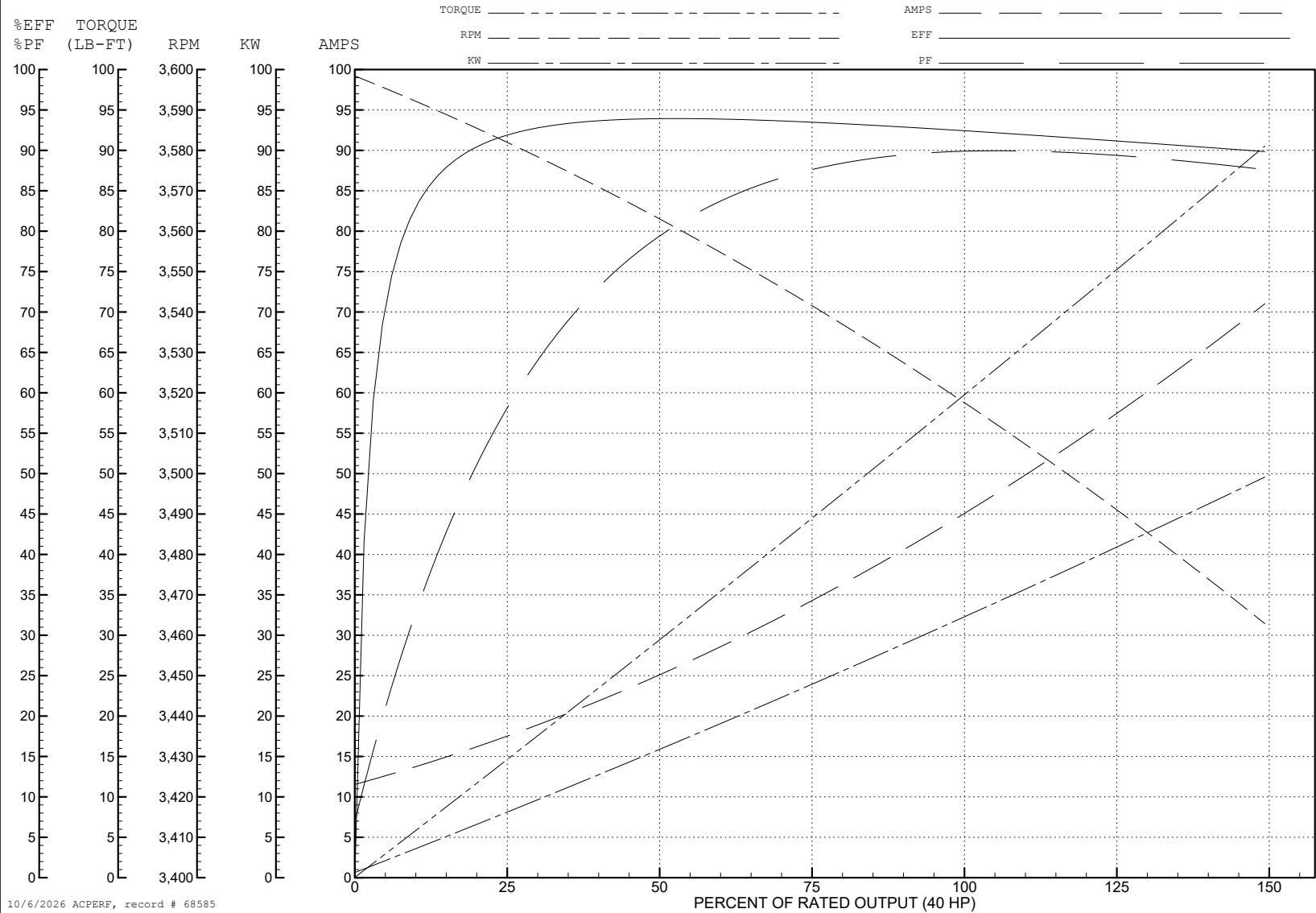
ABB Motors and Mechanical Inc.

WINDING # 10WGY796

Typical performance - not guaranteed values.

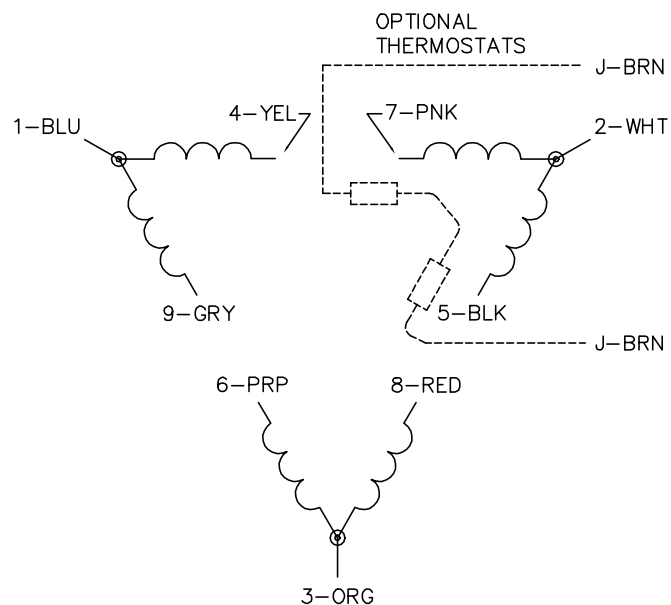
40 HP 3 PH 60 HZ 3515 RPM 460 V 1046M

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

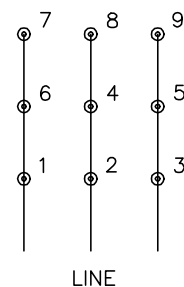




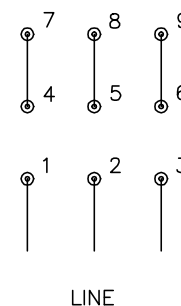
CD0180



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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