

BALDOR • RELIANCE

Customer information packet

HBEM4103T

54M 4P TEFC HOR 284T

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284T
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	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM WEEE
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	62.000 A @ 230.0 V 64.000 A @ 208.0 V 31.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	E
Type	AC
Mech. spec.	10T007
Base	
Status	PRD/A
Elec. spec.	10WGZ651
Layout	10LYT007
Eff. date	08-03-2023
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	31.0 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1054M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.63 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP4312A05A01L

CAT #	HBEM4103T		SER			CC	010A	WGT		LBS				
SPEC	10T007Z651G1		RATING	40C AMB-CONT										
HZ	VOLTS		AMPS	RPM	HP	SF	NEMA NOM EFF							
60	230/460		62/31			1775	25HP	1.15	93.6					
PH	3	CL	H	CODE	J	DES	A	ENCL	TEFC	IP	54	PF	81	%
DE BRG	6311		ODE BRG	6309			FRAME	284T						
INV TYPE:	VPWM	SL HZ	0.8	CHP	60	TO	90	1.5:1						
WK2	4.13	LB FT2	MAX RPM	2700	CT	6	TO	60	10:1					
	27.2/13.6		VT	3	TO	60	20:1							

SFA 69/34.5

YR

AC Induction Motor Performance Data

Record # 67463

Typical performance - not guaranteed values

Winding: 10WGZ651-R005		Type: 1054M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	25	Full Load Torque	74.02 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	62/31	Breakdown Torque	262 LB-FT	
R.P.M.	1775	Pull-up Torque	118 LB-FT	
Hz	60 Phase	Locked-rotor Torque	142 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	223 A	
Service Factor (S.F.)	1.15	No-load Current	13.6 A	
NEMA Nom. Eff.	93.6 Power Factor	Line-line Res. @ 25°C	0.2345 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	51°C	
S.F. Amps		Temp. Rise @ S.F. Load	61°C	
		Locked-rotor Power Factor	30.6	

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	81	84	85	83
Efficiency	88.3	92.8	93.9	94	93.7	93.1	93.8
Speed	1794.1	1789.3	1783.5	1777.8	1770.8	1763.8	1774
Line amperes	15.3	19.3	24.6	30.6	37.2	44.5	34.6

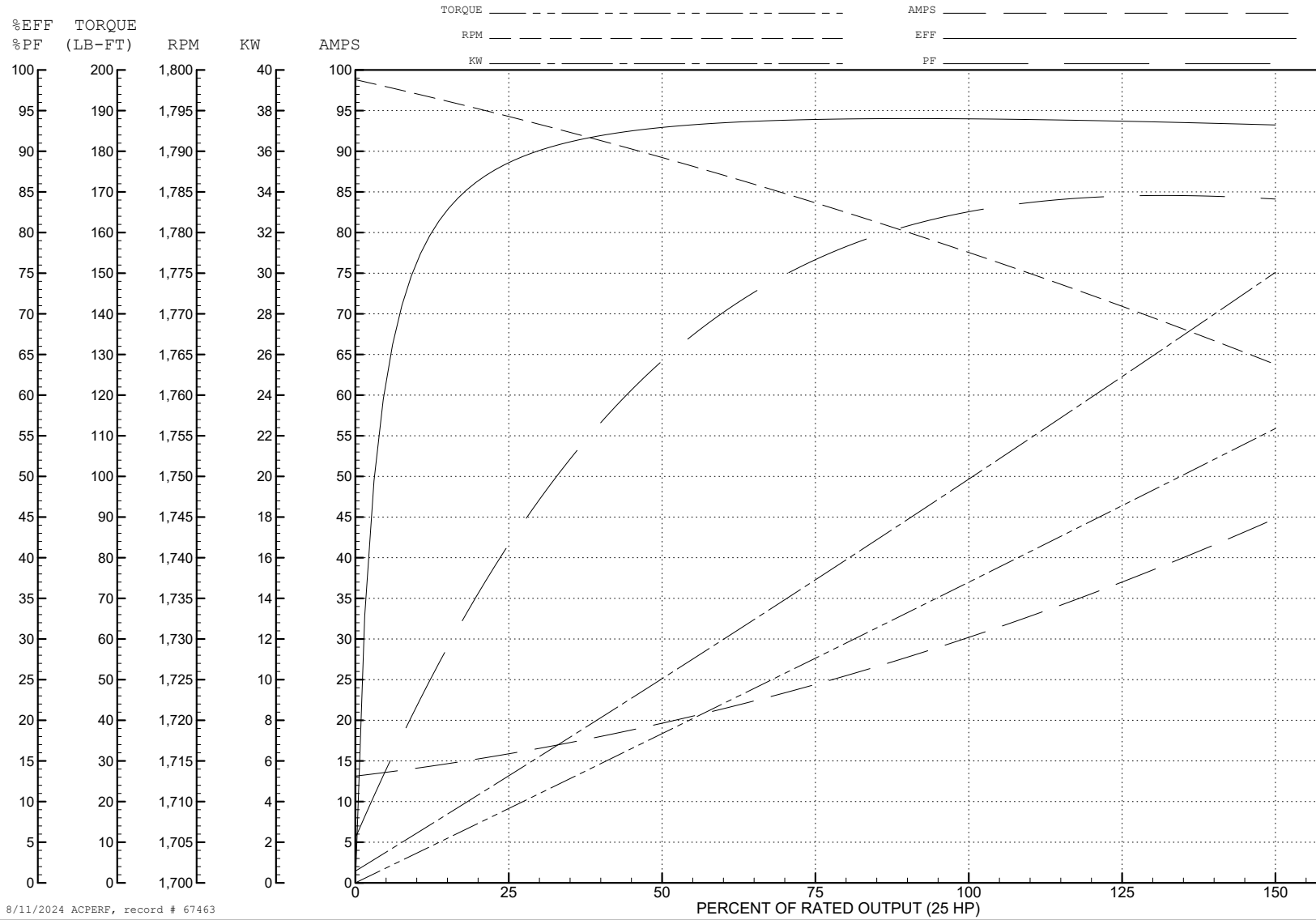
ABB Motors and Mechanical Inc.

WINDING # 10WGZ651

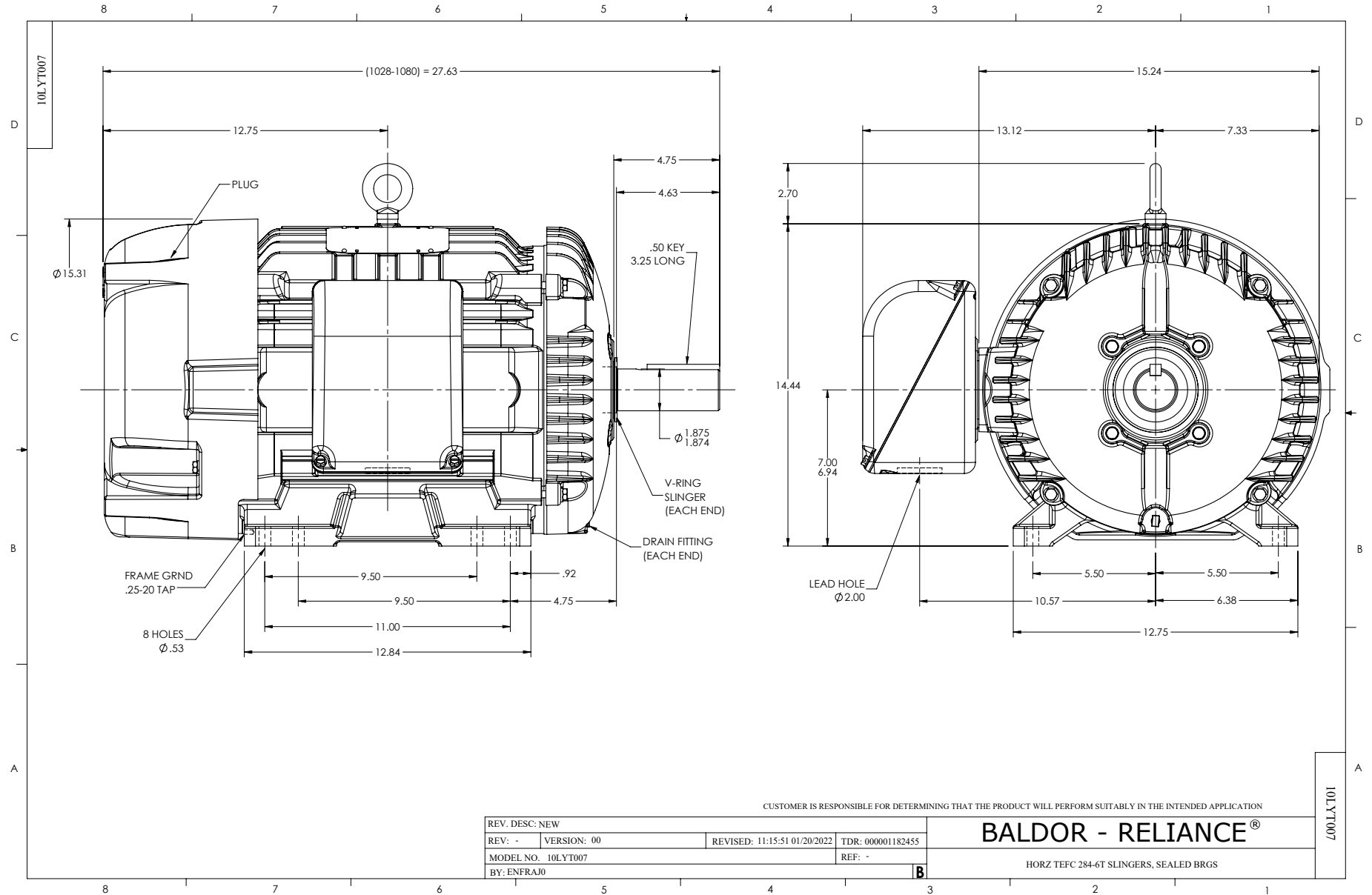
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1775 RPM 460 V 1054M

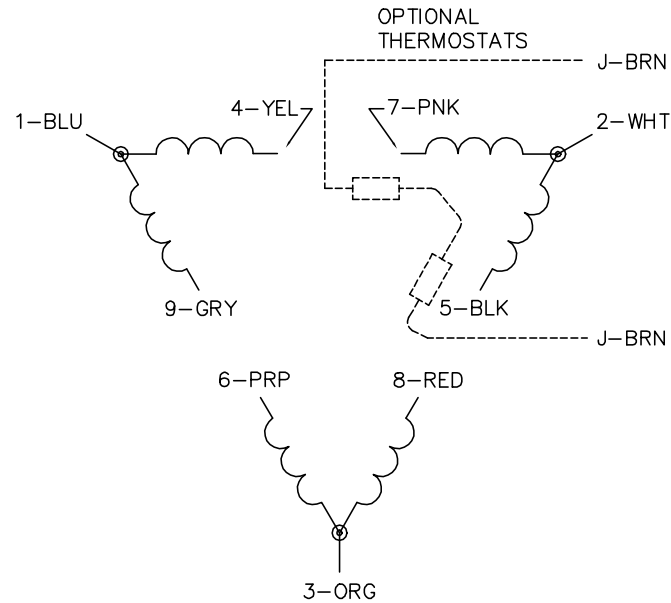
TORQUES (LB-FT): PO=262 PU=118 LR=142 LRA=223



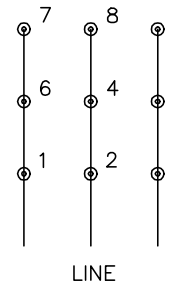
8/11/2024 ACPERF, record # 67463



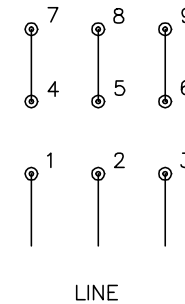
CD0180



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: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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