

ABB BALDOR RELIANCE III

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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary 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	F
Type	AC
Mech. spec.	10T007
Base	
Status	PRD/A
Elec. spec.	10WGZ651
Layout	10LYT007
Eff. date	09-12-2025
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	3	Locked-rotor Torque		142 LB-FT	
NEMA Design Code		A	KVA Code	J		Starting Current	223 A
Service Factor (S.F.)		1.15		No-load Current		13.6 A	
NEMA Nom. Eff.		93.6	Power Factor	81		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

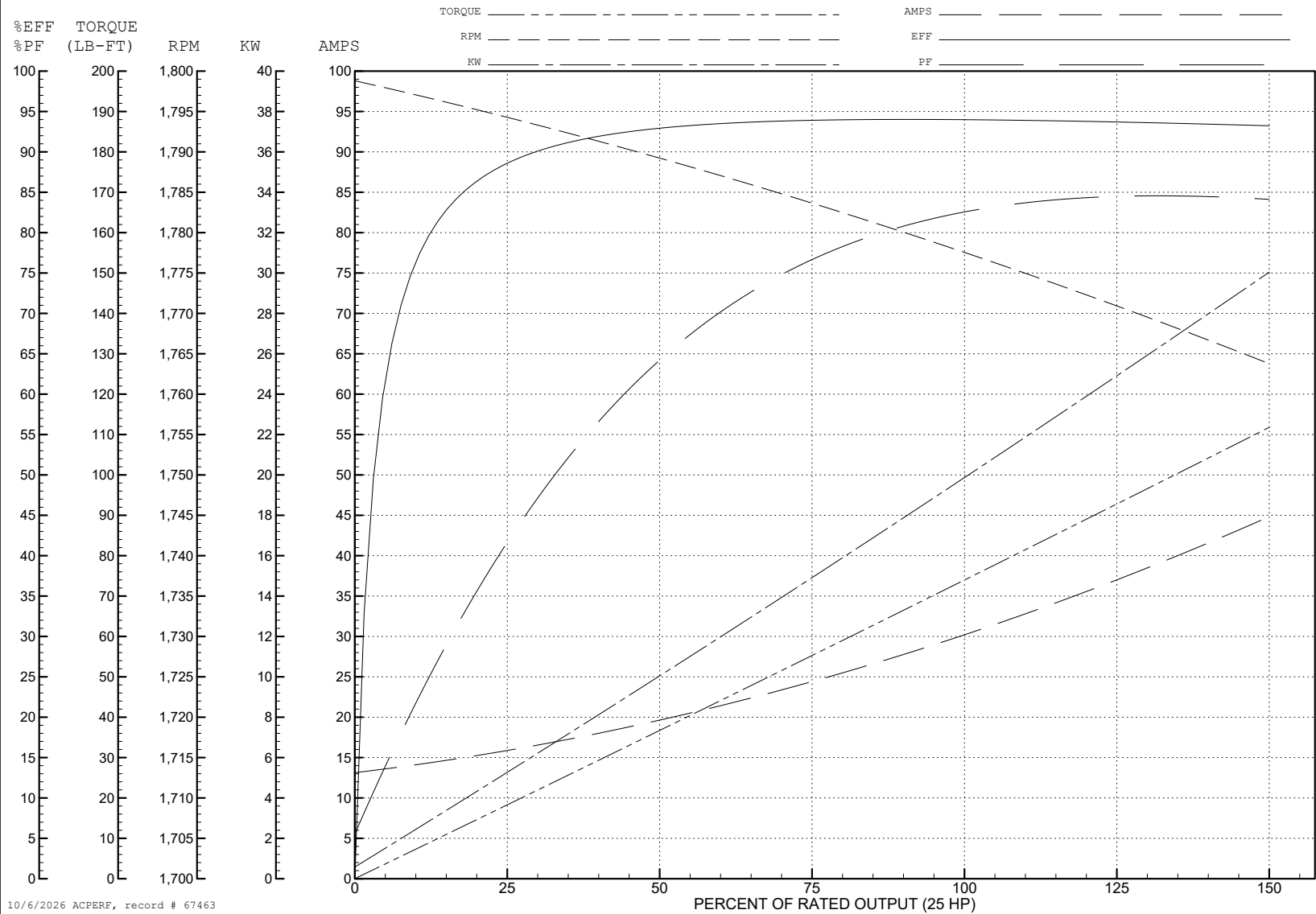
ABB Motors and Mechanical Inc.

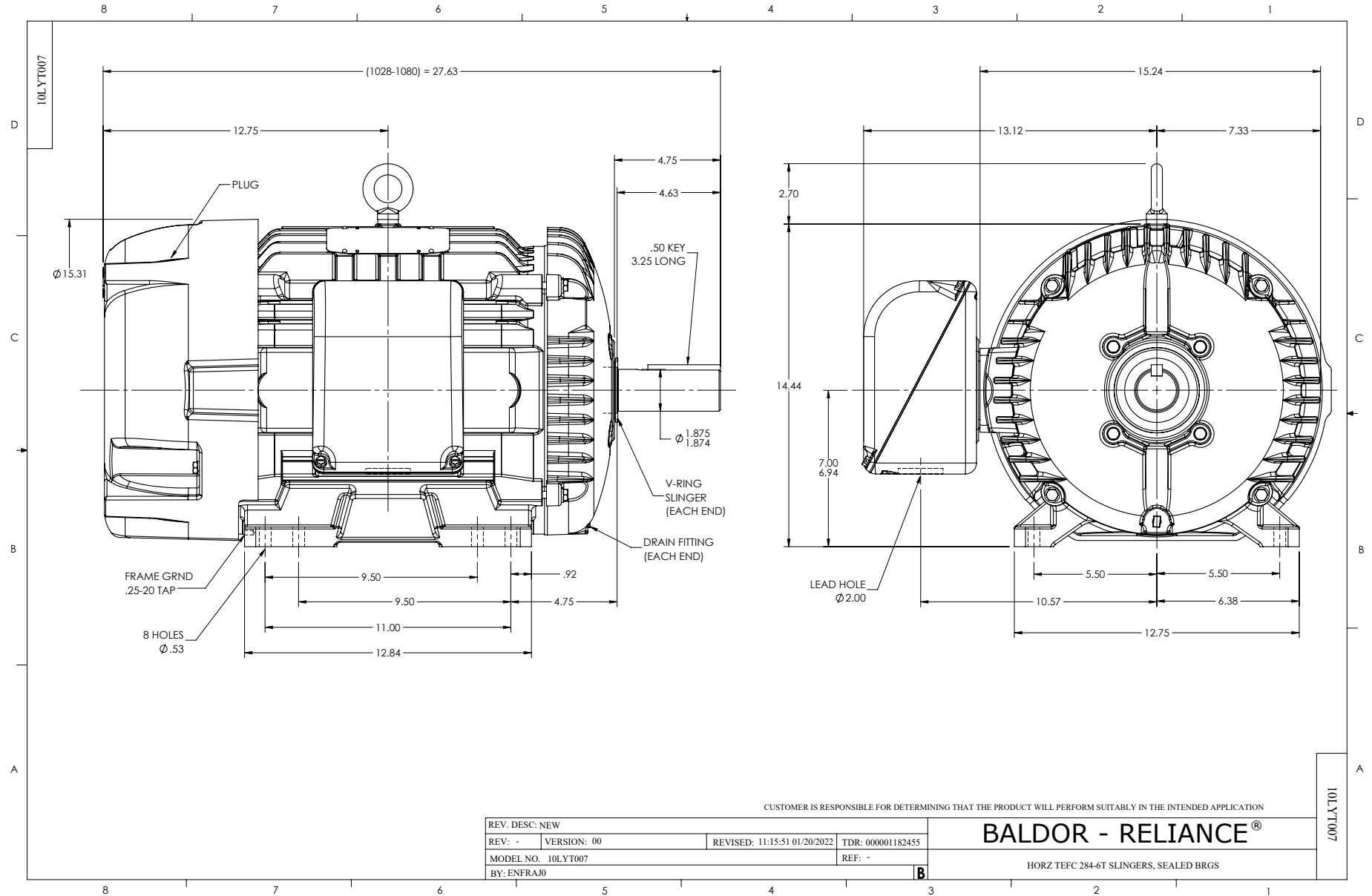
WINDING # 10WGZ651

Typical performance - not guaranteed values.

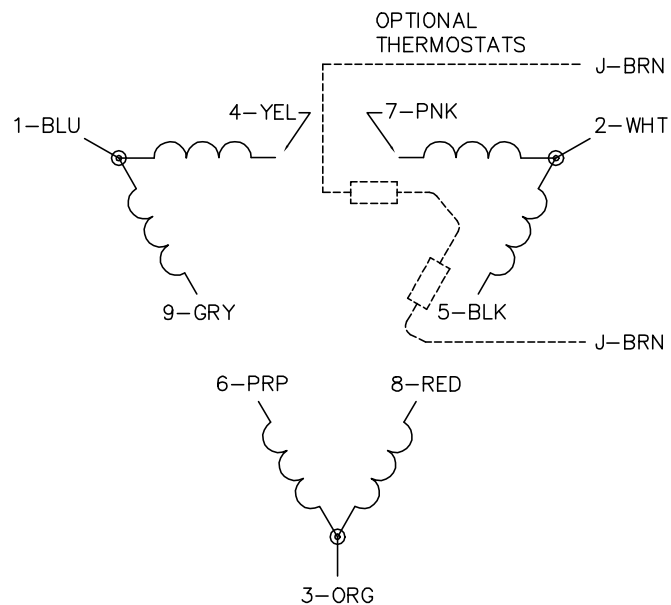
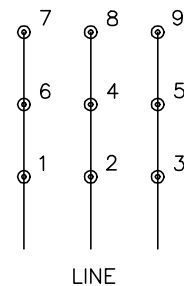
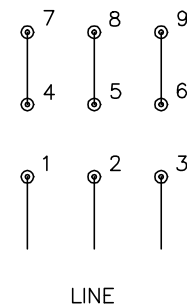
25 HP 3 PH 60 HZ 1775 RPM 460 V 1054M

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





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.

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

SH 1 of 1

CD0180