

BALDOR • RELIANCE

Customer information packet

HBEM4100T

46M 6P 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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM WEEE CURUSEEV
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	21.000 A @ 460.0 V 42.000 A @ 208.0 V 42.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
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.	10WGY561
Layout	10LYT007
Eff. date	08-03-2023
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	21.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	27.63 IN
Power Factor	73
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1175 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 #	HBEM4100T				SER					CC	01A	WGT		LBS
SPEC	10T007Y561G1				RATING	40C AMB-CONT								
HZ	VOLTS		AMPS		RPM	HP		SF	NEMA NOM EFF					
60	230/460		42/21					1175	15HP	1.15	91.7			
PH	3	CL	H	CODE	H	DES	A	ENCL	TEFC	IP	54	PF	73	%
DE BRG	6311				ODE BRG	6309				FRAME	284T			
INV TYPE:	VPWM		SL HZ	0.83	CHP	60	TO	90	1.5:1					
WK2	4.9	LB FT2	MAX RPM	1800	CT	6	TO	60	10:1					
	20.6/10.3				VT	3	TO	60	20:1					
SFA 25.4/22.7														

YR

AC Induction Motor Performance Data

Record # 36291

Typical performance - not guaranteed values

Winding: 10WGY561-R006		Type: 1046M	Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	15	Full Load Torque	67 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	42/21	Breakdown Torque	239 LB-FT		
R.P.M.	1175	Pull-up Torque	72.8 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	116 LB-FT	
NEMA Design Code	A	KVA Code	H	Starting Current	136 A
Service Factor (S.F.)	1.15	No-load Current	10.3 A		
NEMA Nom. Eff.	91.7	Power Factor	73	Line-line Res. @ 25°C	0.50771 Ω
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load		43°C
S.F. Amps			Temp. Rise @ S.F. Load		51°C
			Locked-rotor Power Factor	33	
			Rotor inertia	5.63 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	69	76	79	81	78
Efficiency	86.7	91.5	92.6	92.6	92.2	91.3	92.4
Speed	1196.3	1192.7	1189.2	1185.1	1180.6	1174.6	1182
Line amperes	11.4	13.6	16.7	20.3	24.4	29.7	22.8

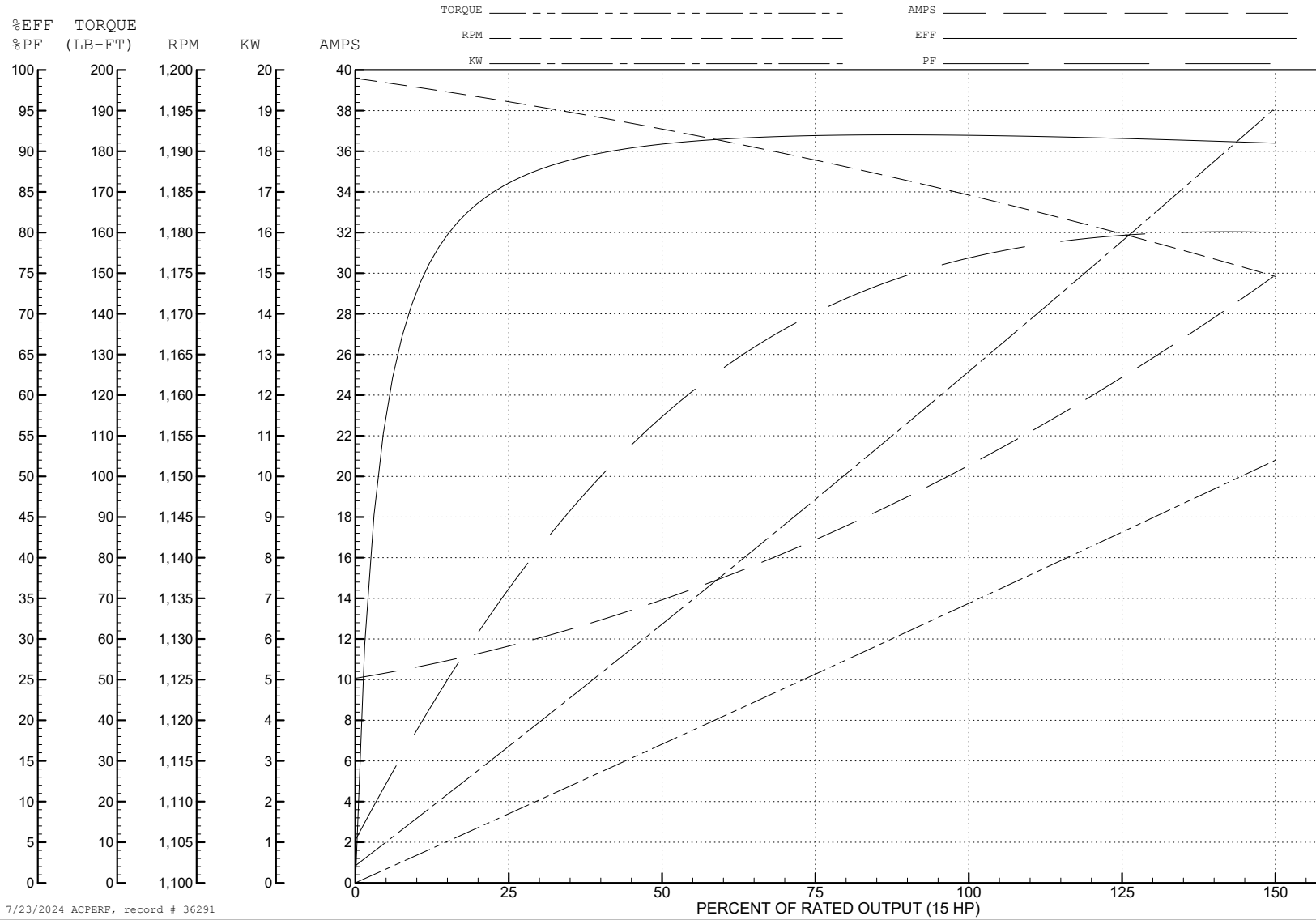
ABB Motors and Mechanical Inc.

WINDING # 10WGY561

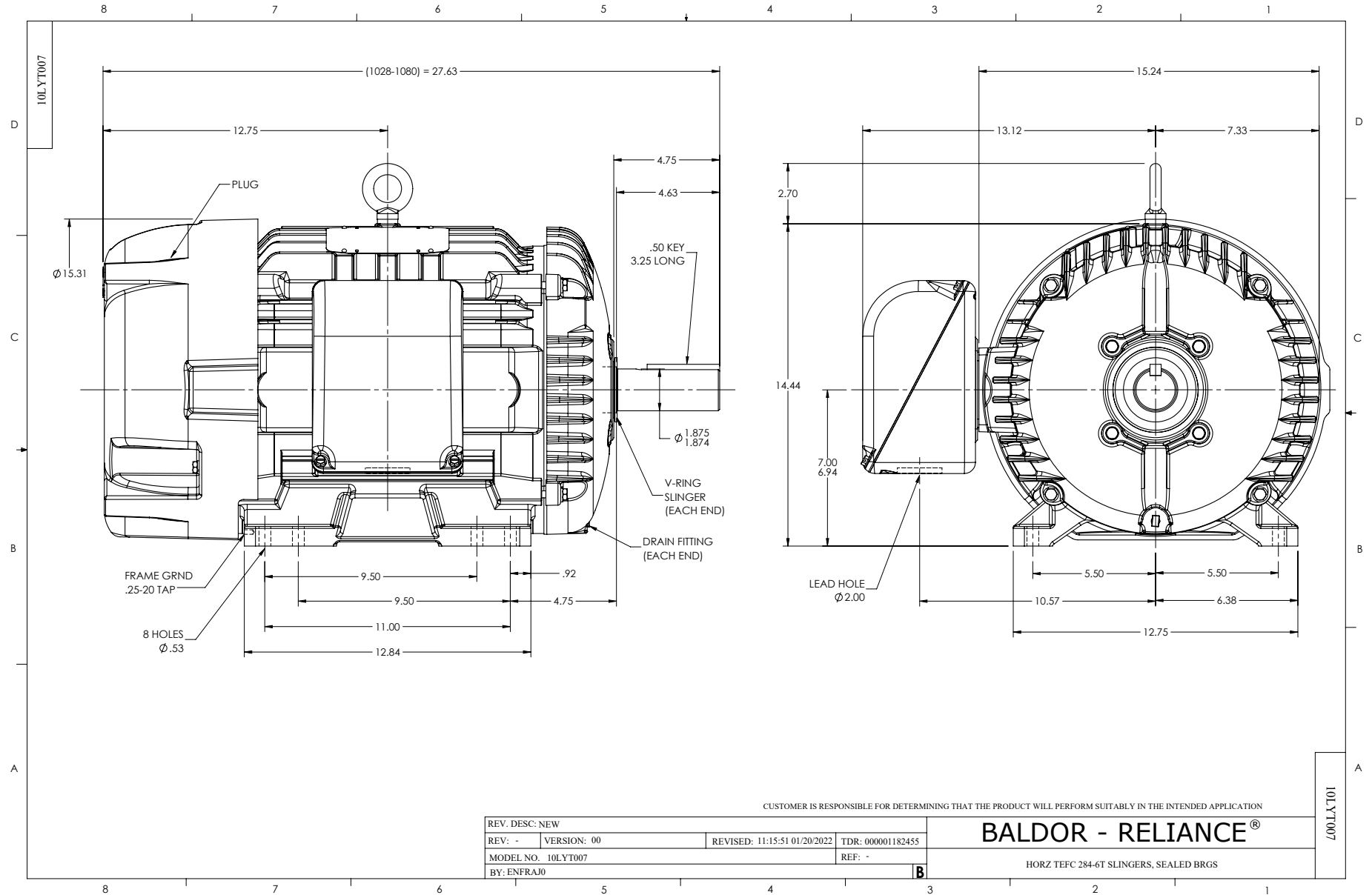
Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1175 RPM 460 V 1046M

TORQUES (LB-FT): PO=239 PU=72.8 LR=116 LRA=136



7/23/2024 ACPERF, record # 36291



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

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3PH, DV, 9 LEADS, DELTA CONNECTION

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