ABB BALDOR RELIANCE

Customer information packet

EBM4104T

30HP, 1760RPM, 3PH, 60HZ, 284T, 1056M, TEFC, F1
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/16/2026 5:46:45 AM

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	30.000 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	CSA
	CSA EEV
	UR
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	76.000 A @ 230.0 V
	78.000 A @ 208.0 V
	38.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Fan Housing Cover For Brake
Front Shaft Indicator	None

Part Detail

Revision	K
Type	AC
Mech. spec.	10F791
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYF791
Eff. date	06-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	07-13-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
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	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	42.84 IN
Power Factor	80
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 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

Nameplate

NP2138L												
CAT.NO.	EBM4104T		**P/N**			**ENCLOSURE**	TEFC					
SPEC.	10F791Y538G2	**CC**	010A	**FRAME**	284T	**S/N**						
HP	30		**CLASS**	F	**HZ**	60						
RPM	1760		**PH**	3	**DES**	A						
VOLT	230/460				**KVA-CODE**	J	**ODE BRG**	6309	**DE BRG**	6311		
AMP	76/38											
RATING	40C AMB-CONT			**GREASE**	POLYREX EM							
NEMA-NOM-EFF	93.6	**PF**	80	**SER.F.**	1.15							
	SFA 84.8/42.4											
HTR-VOLTS		**HTR-AMPS**										

AC Induction Motor Performance Data
Record # 32189
Typical performance - not guaranteed values

Winding: 10WGY538-R004	**Type:** 1056M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			30	**Full Load Torque**	88.7 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			76/38	**Breakdown Torque**	330 LB-FT
R.P.M.			1760	**Pull-up Torque**	142 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	178 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	270 A
Service Factor (S.F.)			1.15	**No-load Current**	17.9 A
NEMA Nom. Eff.	93.6	**Power Factor**	80	**Line-line Res. @ 25ºC**	0.19377 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	64°C
S.F. Amps				**Temp. Rise @ S.F. Load**	76°C
				Locked-rotor Power Factor	30.9
				Rotor inertia	4.47 LB-FT2

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	41	63	73	80	82	85	81
Efficiency	87.6	92.3	93.5	93.7	93.4	92.9	93.5
Speed	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
Line amperes	19.8	24.3	30.7	37.6	45.6	55.2	42.4

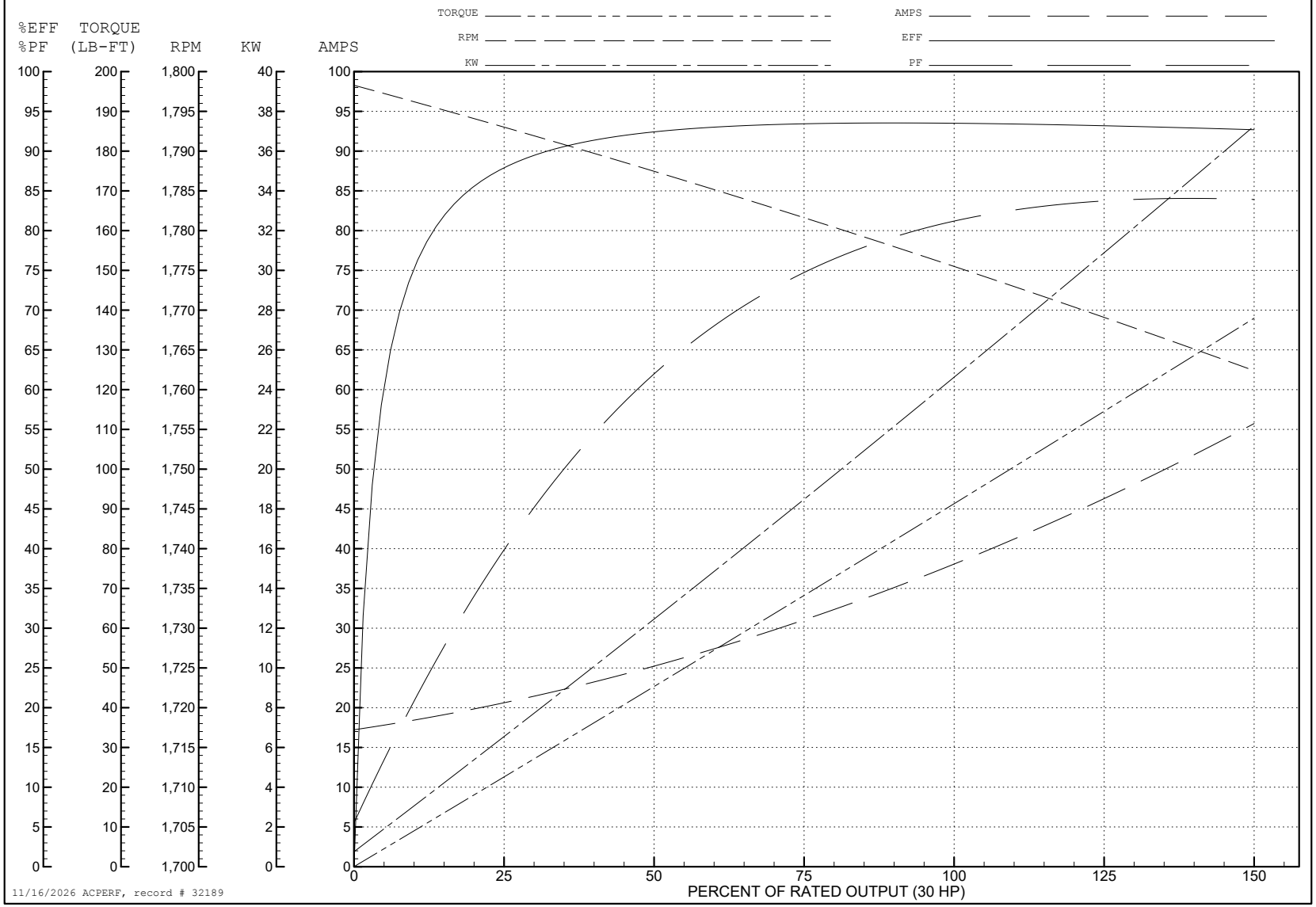
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=330 PU=142 LR=178 LRA=270



AC Induction Motor Performance Data
Record # 114688
Typical performance - not guaranteed values

Winding: 10WGY538-RXXX	**Type:** 1056M	**Enclosure:** TEFC

Nameplate Data				**400 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			25	**Full Load Torque**	73.94 LB-FT
Volts			200/400	**Start Configuration**	direct on line
Full Load Amps			66/33	**Breakdown Torque**	248 LB-FT
R.P.M.			1760	**Pull-up Torque**	103 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	129 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	228 A
Service Factor (S.F.)			1.15	**No-load Current**	11.97 A
NEMA Nom. Eff.	93.6	**Power Factor**	87	**Line-line Res. @ 25ºC**	0.202 Ω
Rating - Duty			50C AMB-CONT	**Temp. Rise @ Rated Load**	52°C
S.F. Amps				**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	30.7
				Rotor inertia	4.47 lb-ft²

Load Characteristics 400 V, 60 Hz, 25 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	54	76	83	87	87	88	87
Efficiency	88.2	92.3	93.4	93.6	93.2	92.3	93.4
Speed	1792	1787	1781	1775	1768	1758	1771
Line amperes	14.25	19.31	26.04	33.15	41.28	50.91	38

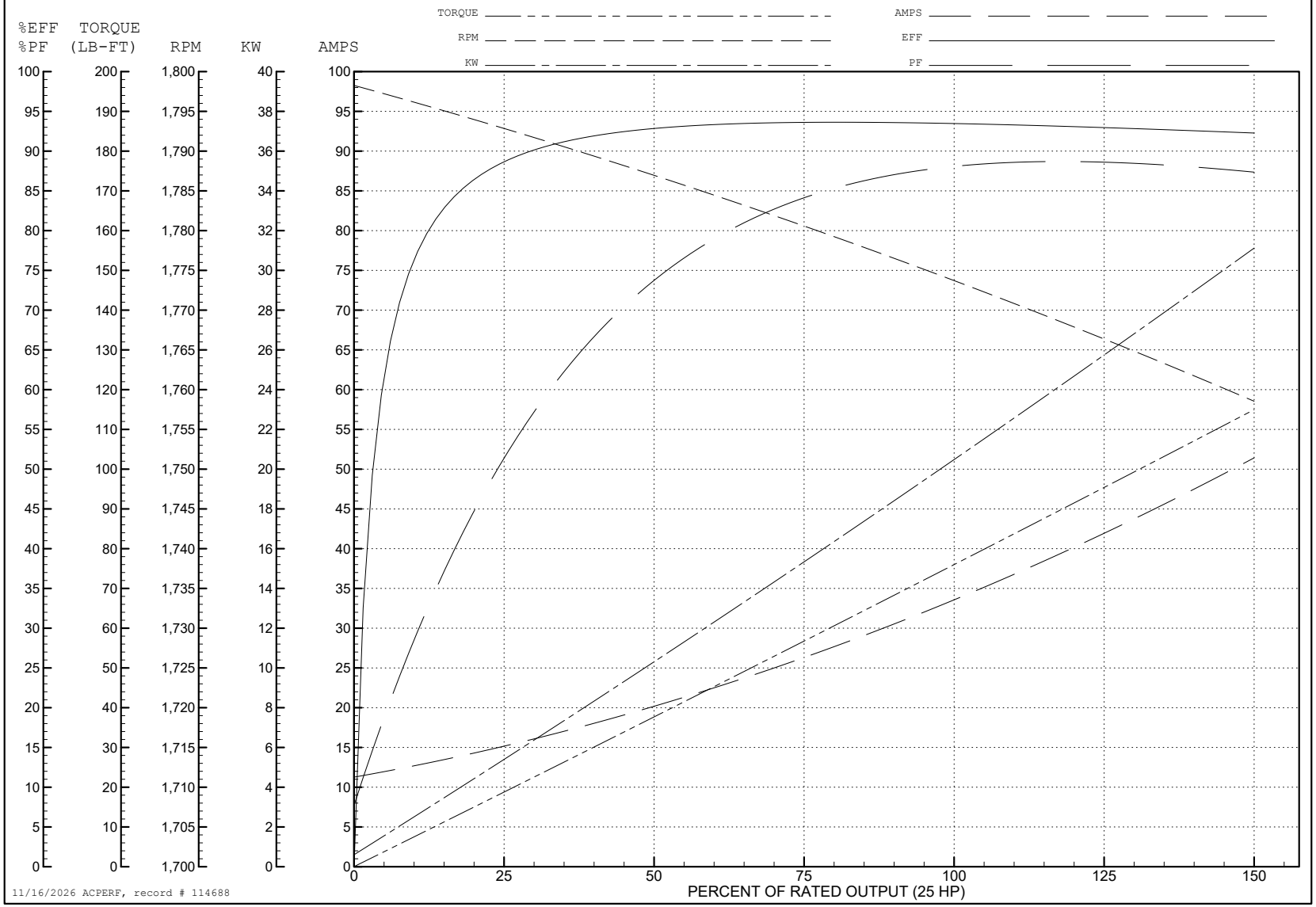
ABB Motors and Mechanical Inc.

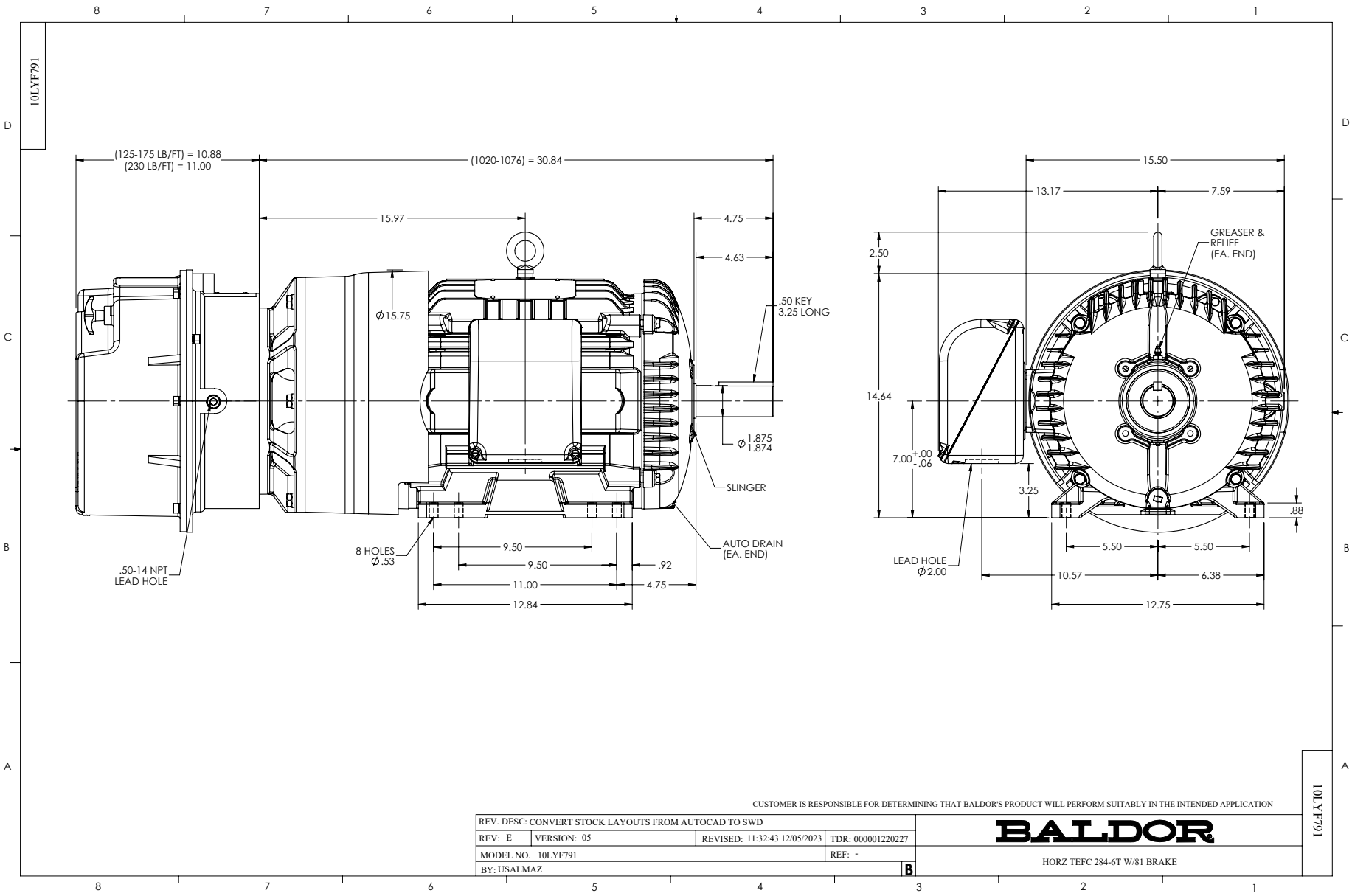
WINDING # 10WGY538

25 HP 3 PH 60 HZ 1760 RPM 400 V 1056M

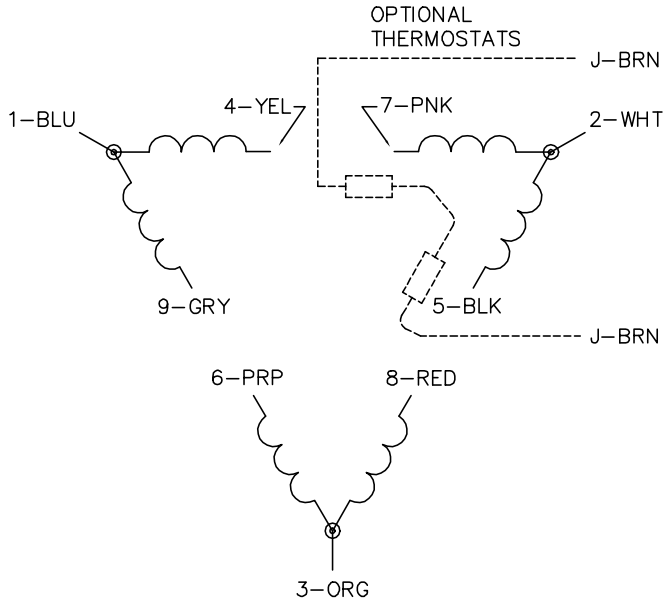
Typical performance - not guaranteed values.

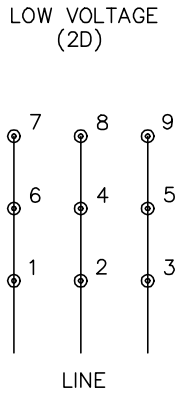
TORQUES(LB-FT): PO=248 PU=103 LR=129 LRA=228

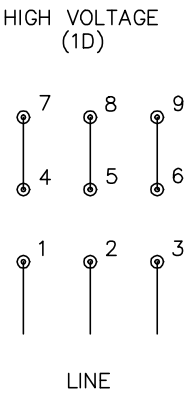



10LYF791
(125-175 LB/FT) = 10.88
(230 LB/FT) = 11.00
(1020-1076) = 30.84
15.97
4.75
4.63
Ø15.75
.50 KEY
3.25 LONG
Ø1.875
1.874
SLINGER
AUTO DRAIN
(EA. END)
8 HOLES
Ø.53
.50-14 NPT
LEAD HOLE
9.50
9.50
.92
11.00
4.75
12.84
15.50
13.17
7.59
GREASER &
RELIEF
(EA. END)
2.50
14.64
7.00 +.00 -.06
3.25
.88
LEAD HOLE
Ø2.00
5.50
5.50
10.57
6.38
12.75
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: E
VERSION: 05
REVISED: 11:32:43 12/05/2023
TDR: 000001220227
MODEL NO. 10LYF791
REF: -
BY: USALMAZ
B
BALDOR
HORZ TEFC 284-6T W/81 BRAKE
10LYF791

CD0180







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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1