ABB BALDOR RELIANCE

Customer information packet

M1509T

7.5/3.8HP, 1740/860RPM, 3PH, 60HZ, 215T, 3754
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	215T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
	3.800 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
Agency Approvals	UR
	CSA
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	18.900 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	16.6 a
Insulation Class	F
Inverter Code	Not Inverter

Part Detail

Revision	P
Type	AC
Mech. spec.	37A001
Base	
Status	PRD/A
Elec. spec.	37WGS296
Layout	37LYA001
Eff. date	11-05-2025
CD Diagram	CD0011
Poles	04/08
Leads	6#14
Proprietary	False
Created date	02-06-2007

KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3754M
Mounting Arrangement	F1
Number of Poles	4
	8
Overall Length	20.51 IN
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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1740 rpm
	860 rpm
Speed Code	2S-1W-CT
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

NP1256L											
CAT.NO.	M1509T										
SPEC.	37A001S296										
HP	7.5/3.8										
VOLTS	230										
AMP	18.9/16.6										
RPM	1740/860										
FRAME	215T		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	K	**DES**	B	**CLASS**	F				
NEMA-NOM-EFF		**PF**									
RATING	40C AMB-CONT										
CC											
DE	6307		**ODE**	6206							
ENCL	TEFC	**SN**									

Accessories

Part number	Description	Multiplier
37-3301	C FACE KIT	P1

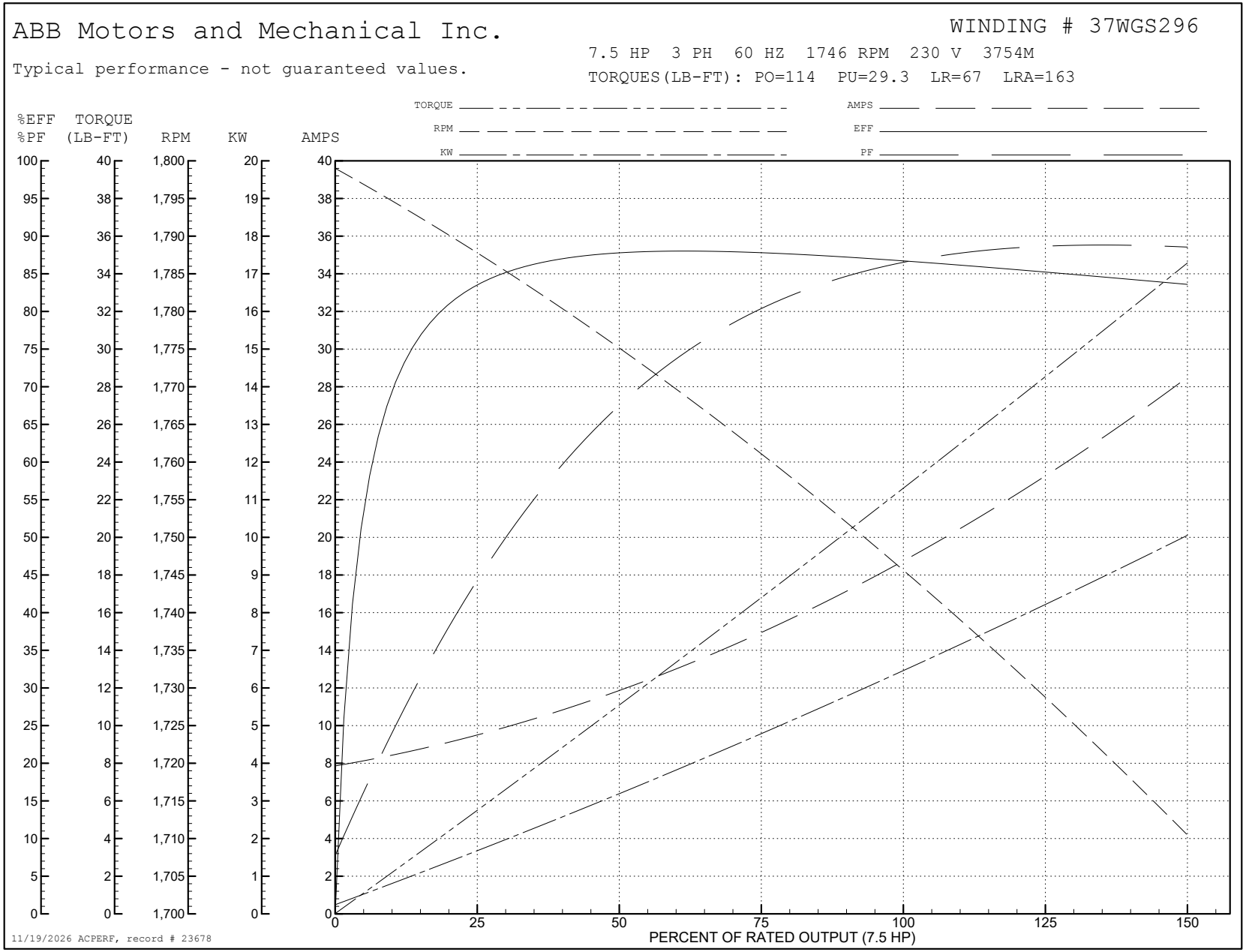
AC Induction Motor Performance Data
Record # 23678
Typical performance - not guaranteed values

Winding: 37WGS296-R001	**Type:** 3754M	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: High Speed Connection**	
Rated Output (HP)			7.5/3.8	**Full Load Torque**	22.4 LB-FT
Volts			230	**Start Configuration**	direct on line
Full Load Amps			18.9/16.6	**Breakdown Torque**	114 LB-FT
R.P.M.			1740/860	**Pull-up Torque**	29.3 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	67 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	163 A
Service Factor (S.F.)			1.15	**No-load Current**	8.18 A
NEMA Nom. Eff.	0	**Power Factor**	0	**Line-line Res. @ 25ºC**	0.489 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	75°C
S.F. Amps				**Temp. Rise @ S.F. Load**	94°C

Load Characteristics 230 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	46	69	80	85	88	89	87
Efficiency	83.9	88.4	88.6	87.4	85.7	83.5	86.4
Speed	1788	1775	1761	1746	1730	1710	1736
Line amperes	9.11	11.6	15	18.9	23.3	28.3	21.5


ABB Motors and Mechanical Inc.
WINDING # 37WGS296
7.5 HP 3 PH 60 HZ 1746 RPM 230 V 3754M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=114 PU=29.3 LR=67 LRA=163
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (7.5 HP)
11/19/2026 ACPERF, record # 23678

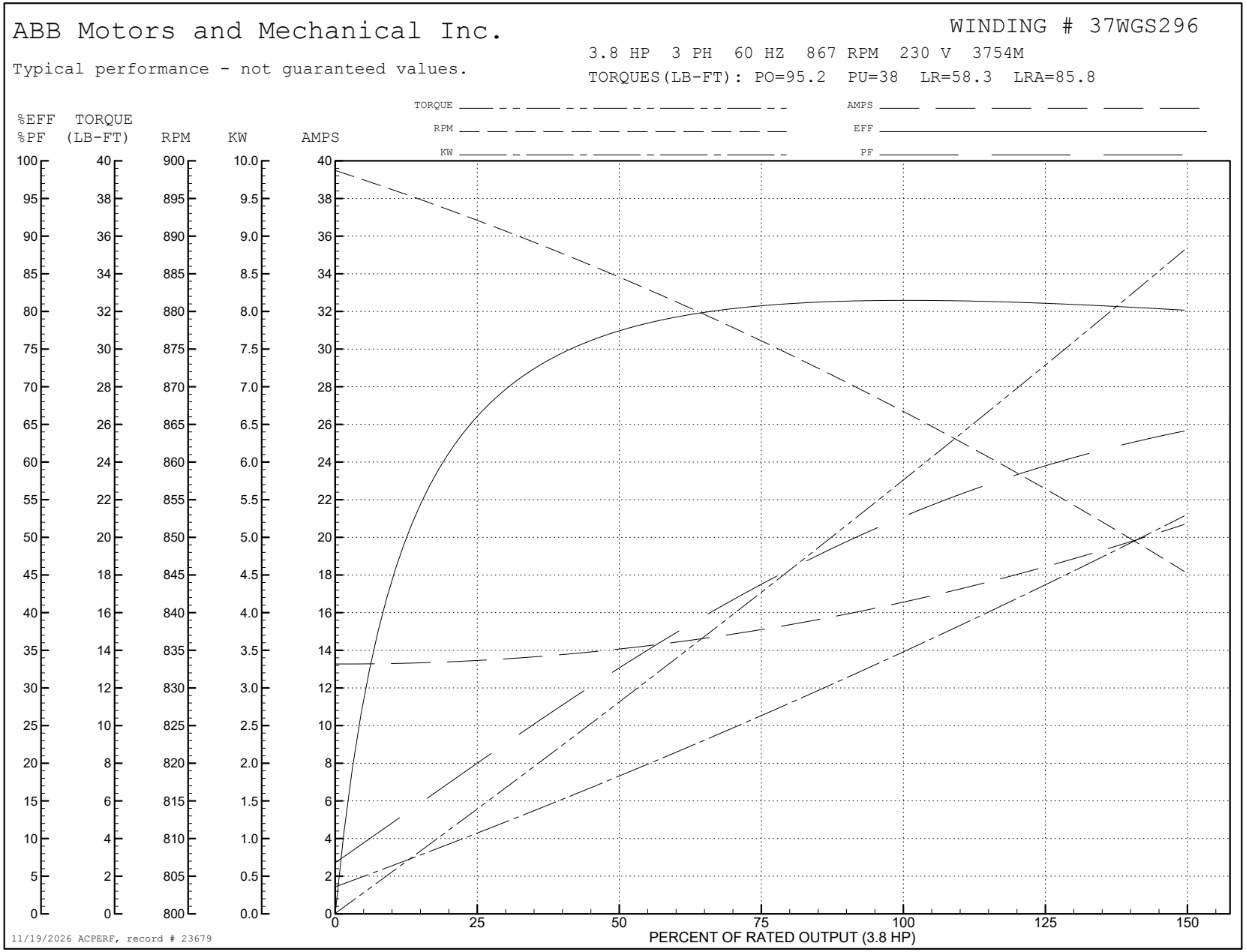
AC Induction Motor Performance Data
Record # 23679
Typical performance - not guaranteed values

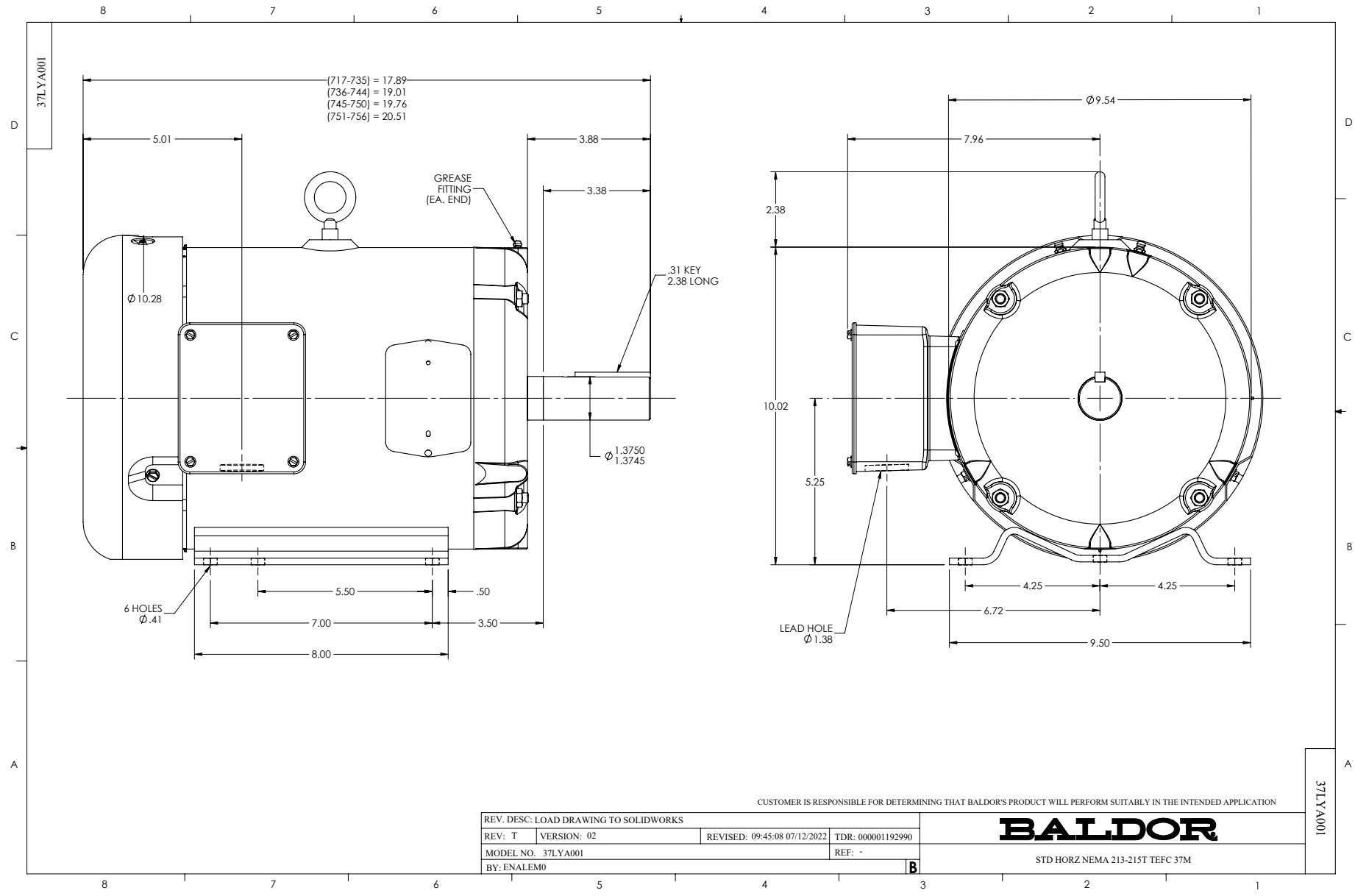
Winding: 37WGS296-R001	**Type:** 3754M	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: Low Speed Connection**	
Rated Output (HP)			7.5/3.8	**Full Load Torque**	23.1 LB-FT
Volts			230	**Start Configuration**	direct on line
Full Load Amps			18.9/16.6	**Breakdown Torque**	95.2 LB-FT
R.P.M.			1740/860	**Pull-up Torque**	38 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	58.3 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	85.8 A
Service Factor (S.F.)			1.15	**No-load Current**	13.3 A
NEMA Nom. Eff.	0	**Power Factor**	0	**Line-line Res. @ 25ºC**	0.645 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	84°C
S.F. Amps				**Temp. Rise @ S.F. Load**	98°C

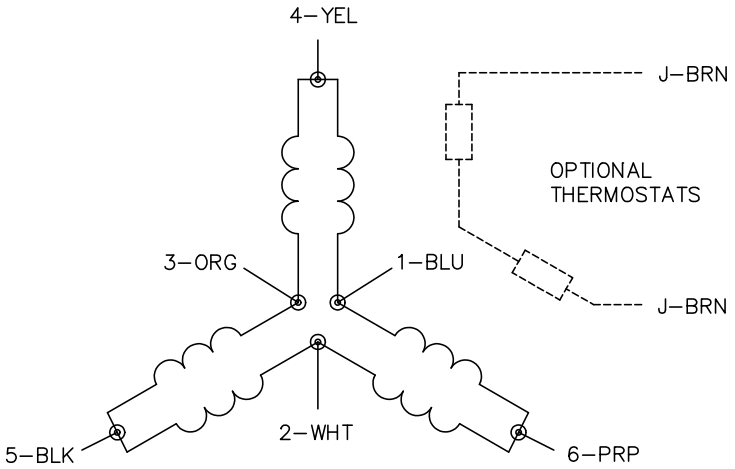
Load Characteristics 230 V, 60 Hz, 3.8 HP

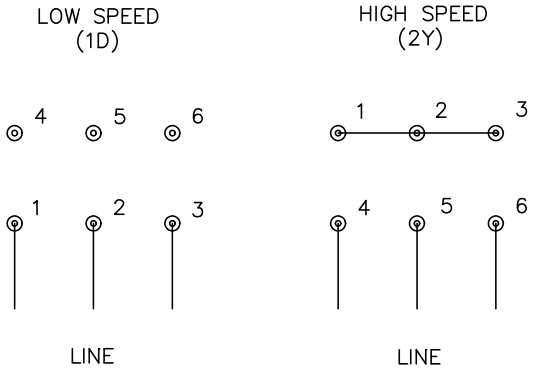
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	20	33	44	52	59	64	56
Efficiency	65.8	77.3	80.9	81.8	81.3	80.1	81.5
Speed	892	884	876	867	857	845	861
Line amperes	13.4	14.1	15.1	16.6	18.4	20.7	17.7


ABB Motors and Mechanical Inc.
WINDING # 37WGS296
3.8 HP 3 PH 60 HZ 867 RPM 230 V 3754M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=95.2 PU=38 LR=58.3 LRA=85.8
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (3.8 HP)
11/19/2026 ACPERF, record # 23679


37LYA001
(717-735) = 17.89
(736-744) = 19.01
(745-750) = 19.76
(751-756) = 20.51
5.01
3.88
3.38
GREASE FITTING (EA. END)
.31 KEY 2.38 LONG
Ø10.28
Ø1.3750 1.3745
6 HOLES Ø.41
5.50
.50
7.00
3.50
8.00
Ø9.54
7.96
2.38
10.02
5.25
4.25
4.25
6.72
LEAD HOLE Ø1.38
9.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: T
VERSION: 02
REVISED: 09:45:08 07/12/2022
TDR: 000001192990
MODEL NO. 37LYA001
REF: -
BY: ENALEM0
B
BALDOR
STD HORZ NEMA 213-215T TEFC 37M
37LYA001

CD0011





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.

CD0011

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: F	BY: JLP	REVISED: 01/21/99 5:04	TDR: 0171435
CD0011		FILE: DWG\142.wg	MDL: –
		MTL: –	3PH, SV, 6 LEADS, 2–SPEED 1–WINDING CONSTANT TORQUE