ABB BALDOR RELIANCE

Customer information packet

CECP3581T-5

1HP, 1770RPM, 3PH, 60HZ, 143TC, 0520M, TEFC, F1
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CCSA US
	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	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
Constant Torque Speed Range	6
Current @ Voltage	1.200 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	F
Type	AC
Mech. spec.	05F007
Base	
Status	PRD/A
Elec. spec.	05WGX567
Layout	05LYF007
Eff. date	08-25-2026
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.38 IN
Power Factor	72
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 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

NP3257								
CAT.NO.	CECP3581T-5							
SPEC.	05F007X567G1							
HP	1 TE							
VOLTS	575							
AMP	1.2							
RPM	1770							
FRAME	143TC	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	M	**DES**	B	**CL**	F	
RATING	40C AMB-CONT							
SN								
DE	6205	**ODE**	6205					
NEMA-NOM-EFF	85.5	**PF**	72					
G.MIN.EFF	85.5	**CC**	010A					
T. CODE	T3	**T=**	200					

NP3260			
SPEC.	05F007X567G1		
D.E. BRG.	25BC02XP30X		
O.D.E. BRG.	25BC02XP30X		
GREASE	POLYREX EM		
RPM MAX	2700	**MAX. KVAR**	0.42
	CECP3581T-5		
BLANK	SFA 1.33		
INV.TYPE	PWM		
T=	200		
C HP FR	60	**C HP TO**	90
CT HZ FROM	6	**CT HZ TO**	60
VT HZ FROM	6	**VT HZ TO**	60
HTR-VOLTS		**HTR-AMPS**	
HTR-WATTS		**MAX. SPACE HEATER TEMP.**	

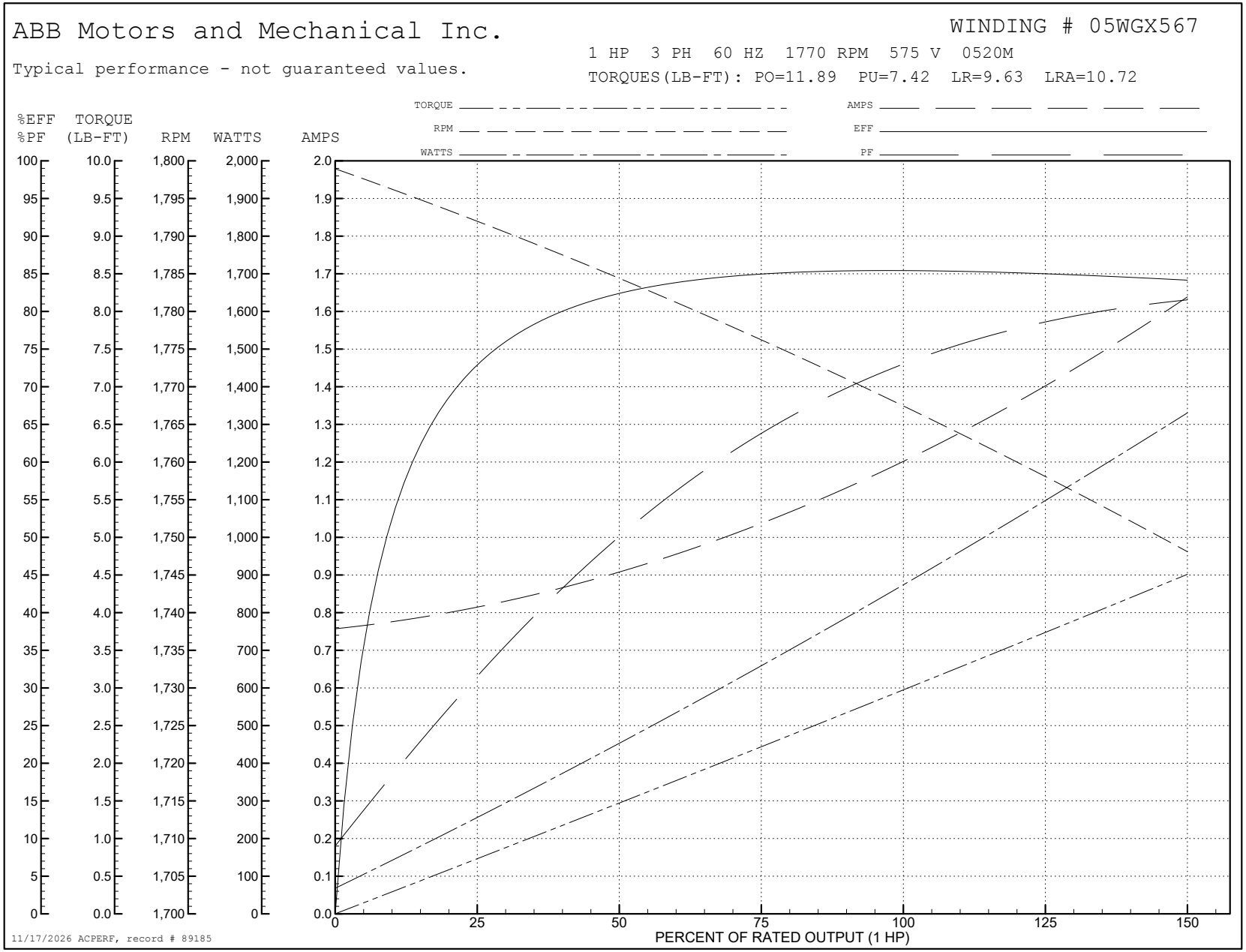
AC Induction Motor Performance Data
Record # 89185
Typical performance - not guaranteed values

Winding: 05WGX567-R003	**Type:** 0520M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1	**Full Load Torque**	2.96 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			1.2	**Breakdown Torque**	11.89 LB-FT
R.P.M.			1770	**Pull-up Torque**	7.42 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	9.63 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	10.72 A
Service Factor (S.F.)			1.15	**No-load Current**	0.768 A
NEMA Nom. Eff.	85.5	**Power Factor**	72	**Line-line Res. @ 25ºC**	32.1 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	31°C
S.F. Amps				**Temp. Rise @ S.F. Load**	37°C
				Locked-rotor Power Factor	62.9842
				Rotor inertia	0.144 lb-ft²

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	51	64	72	78	82	76
Efficiency	72.5	82.2	85.1	85.4	85.1	84	85.2
Speed	1792	1784	1776	1768	1758	1748	1762
Line amperes	0.803	0.9	1.04	1.21	1.41	1.63	1.33


ABB Motors and Mechanical Inc.
WINDING # 05WGX567
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 1770 RPM 575 V 0520M
TORQUES(LB-FT): PO=11.89 PU=7.42 LR=9.63 LRA=10.72
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/17/2026 ACPERF, record # 89185

AC Induction Motor Performance Data
Record # 110711
Typical performance - not guaranteed values

Winding: 05WGX567-R003	**Type:** 0520M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1	**Full Load Torque**	2.99 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			1.2	**Breakdown Torque**	7.6 LB-FT
R.P.M.			1770	**Pull-up Torque**	4.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	6.1 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	8.5 A
Service Factor (S.F.)			1.15	**No-load Current**	0.59 A
NEMA Nom. Eff.	85.5	**Power Factor**	72	**Line-line Res. @ 25ºC**	32.1 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	35°C
S.F. Amps			1.33	**Temp. Rise @ S.F. Load**	45°C
				Locked-rotor Power Factor	62.2
				Rotor inertia	0.144 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	65	76	81	84	86	83
Efficiency	78.2	84.8	85.4	83.9	81.8	78.7	82.6
Speed	1788	1776	1763	1749	1731	1711	1738
Line amperes	0.67	0.85	1.08	1.37	1.7	2.07	1.57

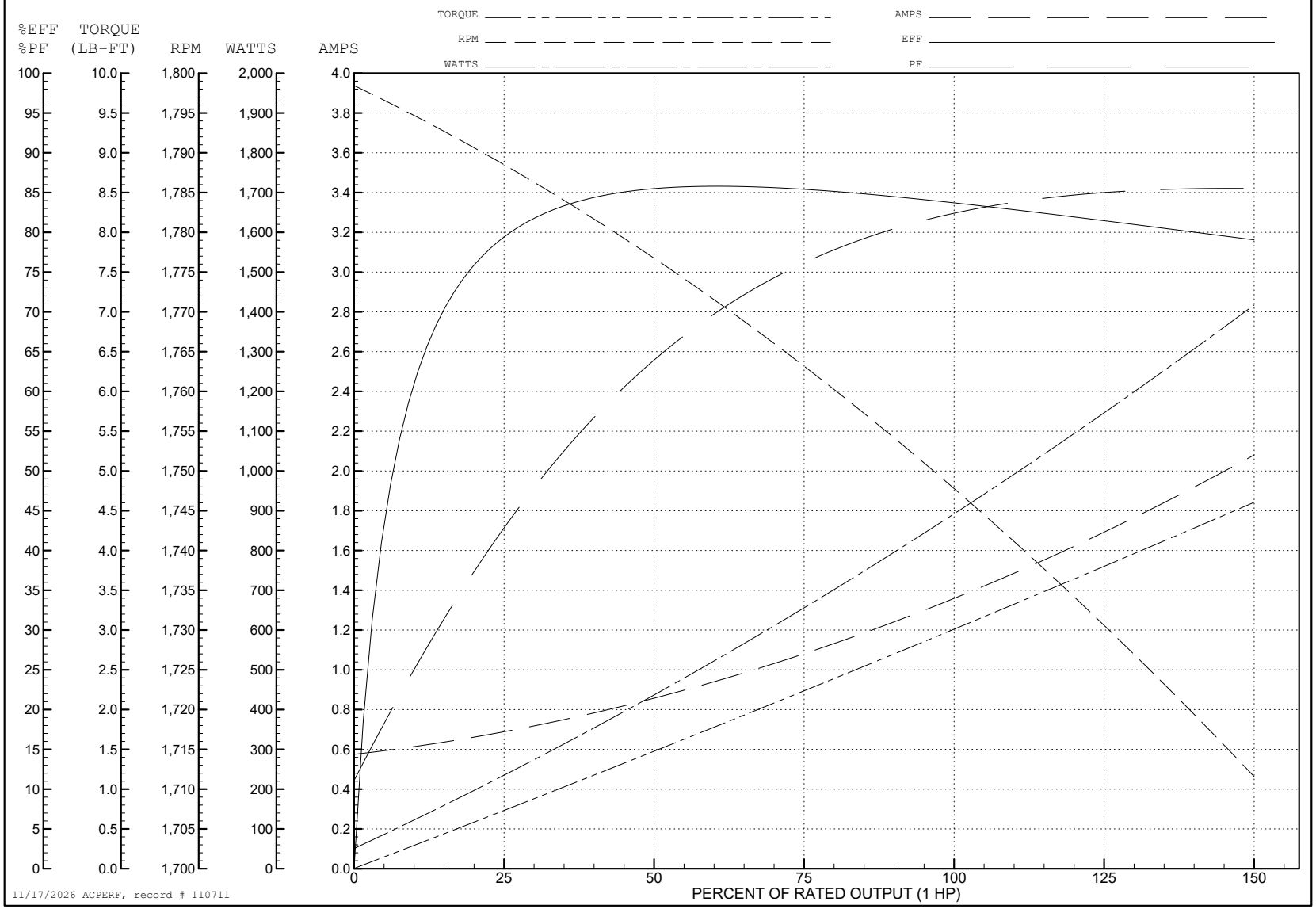
ABB Motors and Mechanical Inc.

WINDING # 05WGX567

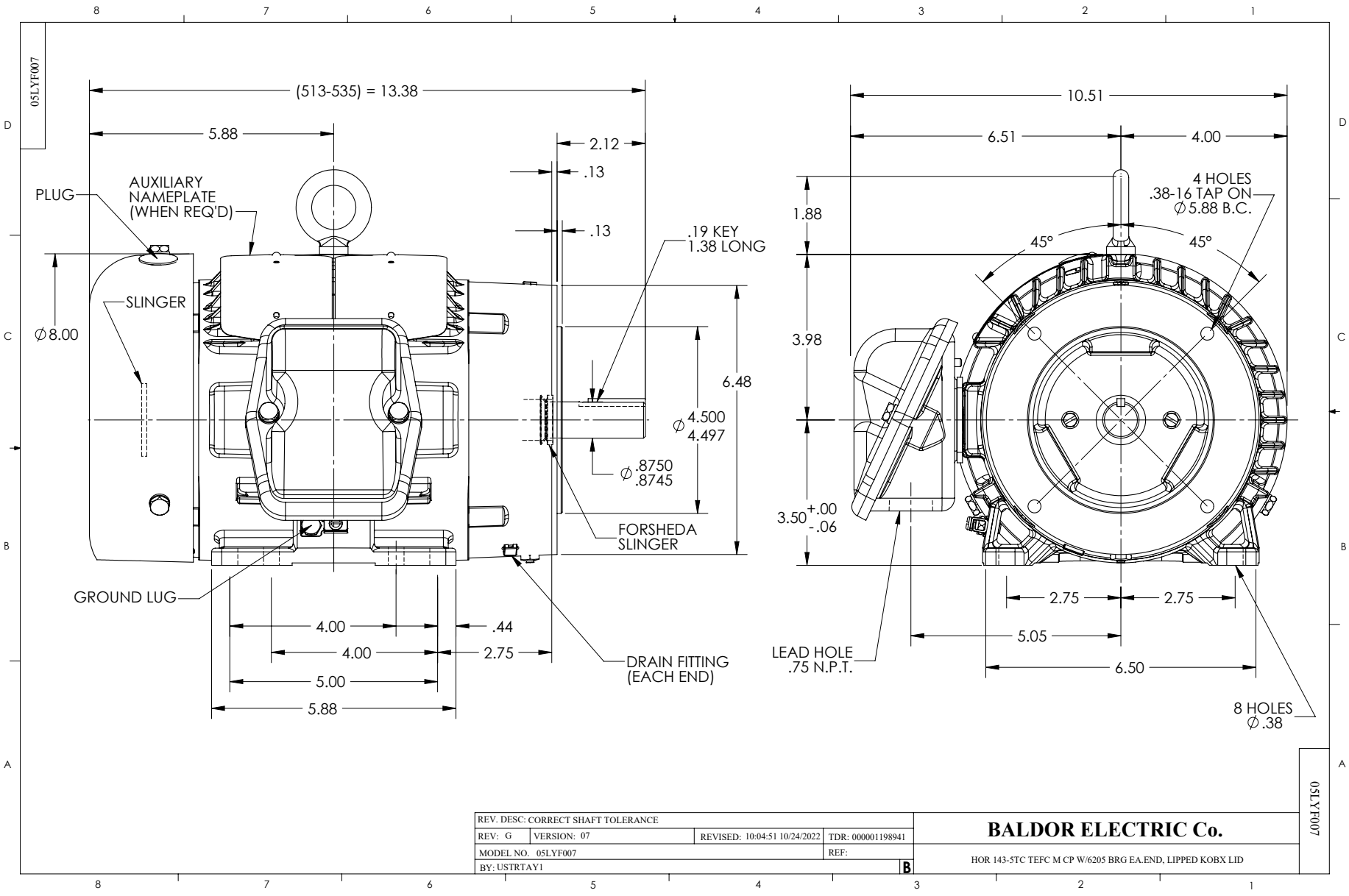
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 0520M

TORQUES(LB-FT): PO=7.6 PU=4.7 LR=6.1 LRA=8.5

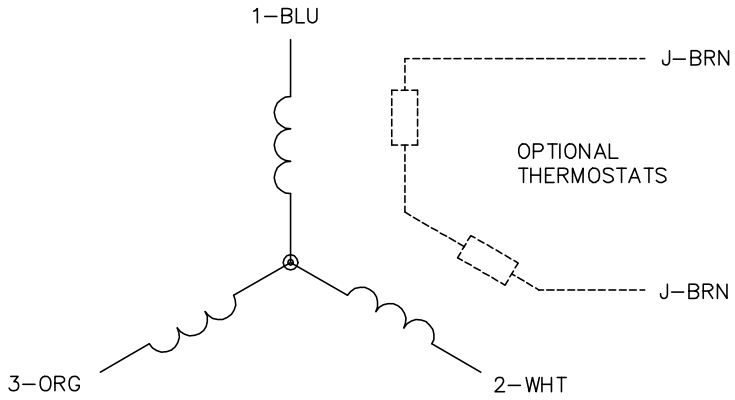


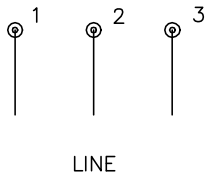
11/17/2026 ACPERF, record # 110711


05LYF007
(513-535) = 13.38
5.88
2.12
.13
.13
.19 KEY
1.38 LONG
PLUG
AUXILIARY
NAMEPLATE
(WHEN REQ'D)
SLINGER
∅8.00
6.48
∅4.500
4.497
∅.8750
.8745
FORSHEDA
SLINGER
GROUND LUG
4.00
.44
4.00
2.75
5.00
5.88
DRAIN FITTING
(EACH END)
10.51
6.51
4.00
4 HOLES
.38-16 TAP ON
∅5.88 B.C.
1.88
45°
45°
3.98
3.50 +.00 -.06
2.75
2.75
5.05
6.50
LEAD HOLE
.75 N.P.T.
8 HOLES
∅.38
REV. DESC: CORRECT SHAFT TOLERANCE
REV: G
VERSION: 07
REVISED: 10:04:51 10/24/2022
TDR: 000001198941
MODEL NO. 05LYF007
REF:
BY: USTRTAY1
B
BALDOR ELECTRIC Co.
HOR 143-5TC TEFC M CP W/6205 BRG EA.END, LIPPED KOBX LID
05LYF007

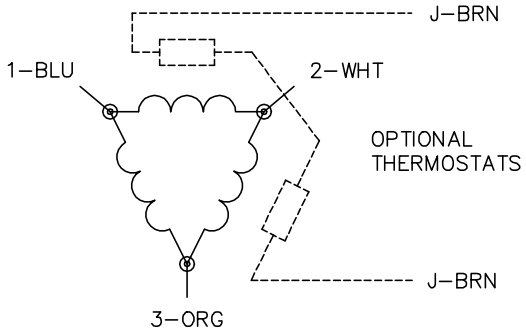
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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