

ABB BALDOR RELIANCE III

Customer information packet

ECP3581T-4

1HP, 1770RPM, 3PH, 60HZ, 143T, 0520M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	143T
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	460.0 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	1.2
Current @ Voltage	1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T4

Part Detail

Revision	D
Type	AC
Mech. spec.	05F008
Base	
Status	PRD/A
Elec. spec.	05WGX565
Layout	05LYF008
Eff. date	08-05-2026
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No 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	12.88 IN
Power Factor	68
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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

NP3258									
CAT.NO.	ECP3581T-4								
SPEC.	05F008X565G1								
HP	1 TE								
VOLTS	460								
AMP	1.6								
RPM	1770								
FRAME	143T	HZ	60	PH		3			
SER.F.	1.15	CODE	N	DES	B	CL	F		
RATING	40C AMB-CONT								
SN									
DE	6205	ODE	6205						
NEMA-NOM-EFF	85.5	PF	68						
G.MIN.EFF	82.5	CC	010A						
T. CODE	T4	T=	135						

NP3261			
SPEC.	05F008X565G1		
D.E. BRG.	25BC02XP30X		
O.D.E. BRG.	25BC02XP30X		
GREASE	POLYREX EM		
RPM MAX	2700	MAX. KVAR	0.52
BLANK	SFA 1.75		
INV.TYPE	PWM		
T=	135		
C HP FR	60	C HP TO	90
CT HZ FROM	1.2	CT HZ TO	60
VT HZ FROM	0-	VT HZ TO	60
HTR-VOLTS		HTR-AMPS	
HTR-WATTS		MAX. SPACE HEATER TEMP.	

Accessories

Part number	Description	Multiplier
35-1300	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 82133

Typical performance - not guaranteed values

Winding: 05WGX565-R001			Type: 0520M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		1	Full Load Torque		2.97 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		1.6	Breakdown Torque		13.86 LB-FT	
R.P.M.		1760	Pull-up Torque		7.96 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	9.14 LB-FT	
NEMA Design Code	B	KVA Code	N	Starting Current	14.35 A	
Service Factor (S.F.)		1.15	No-load Current		1.11 A	
NEMA Nom. Eff.	85.5	Power Factor	67	Line-line Res. @ 25°C	16.8 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		24°C	
S.F. Amps		1.8	Temp. Rise @ S.F. Load		28°C	
			Locked-rotor Power Factor		61.8256	
			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	29	46	59	68	75	79	73
Efficiency	71.7	81.5	84.6	85.6	85.4	84.8	85.6
Speed	1791	1784	1776	1768	1759	1751	1763
Line amperes	1.14	1.25	1.4	1.61	1.84	2.1	1.73

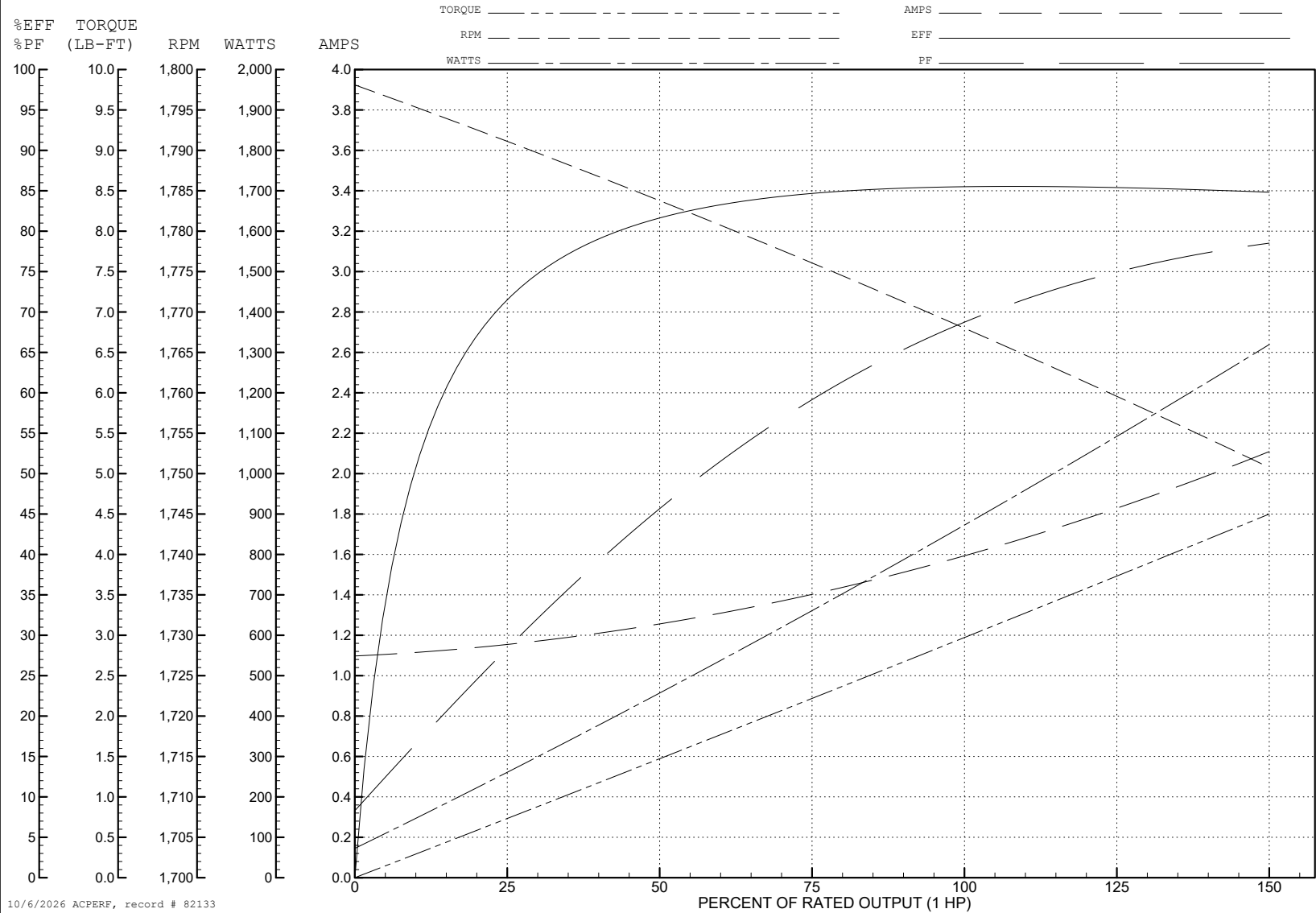
ABB Motors and Mechanical Inc.

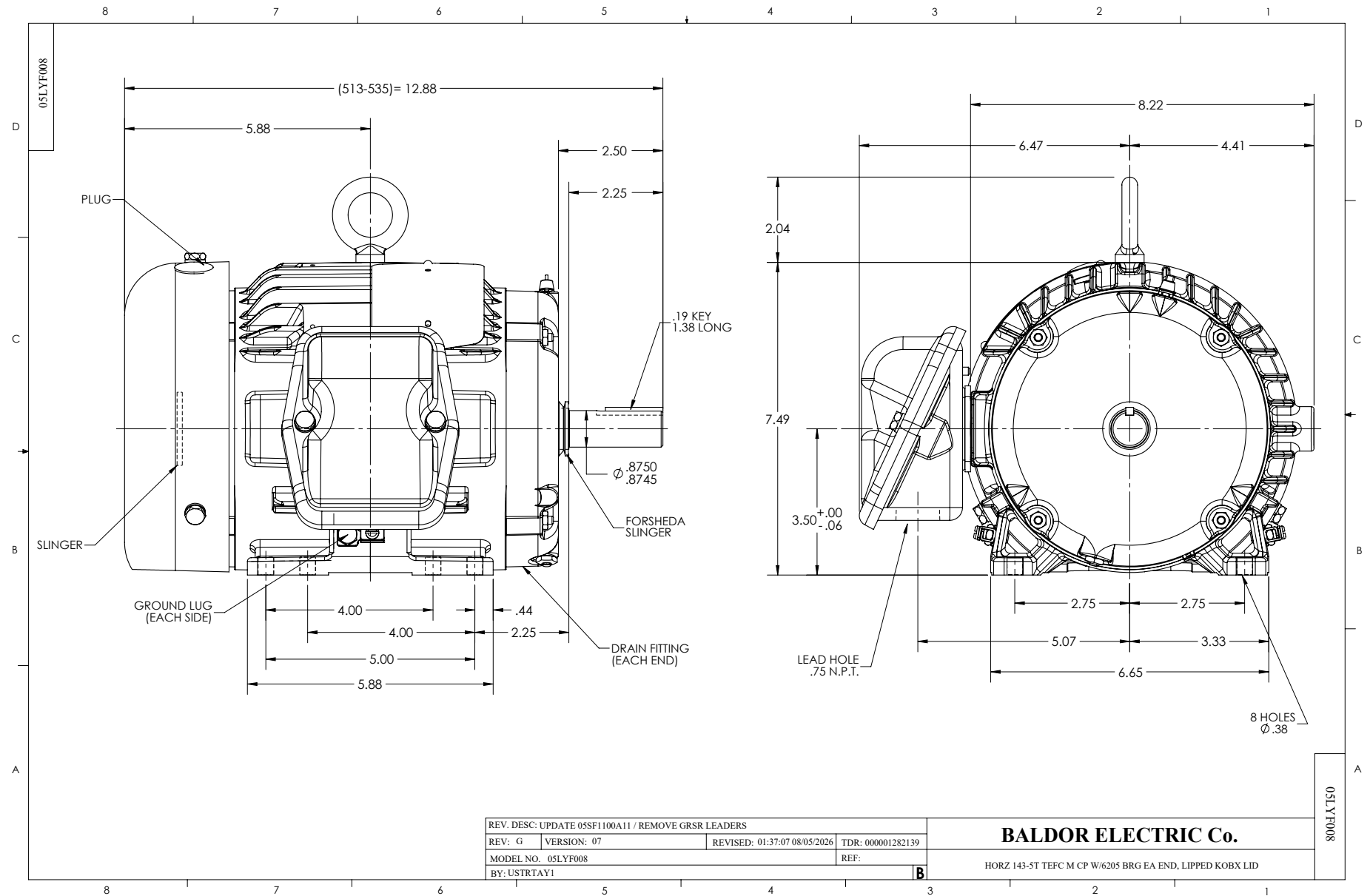
WINDING # 05WGX565

Typical performance - not guaranteed values.

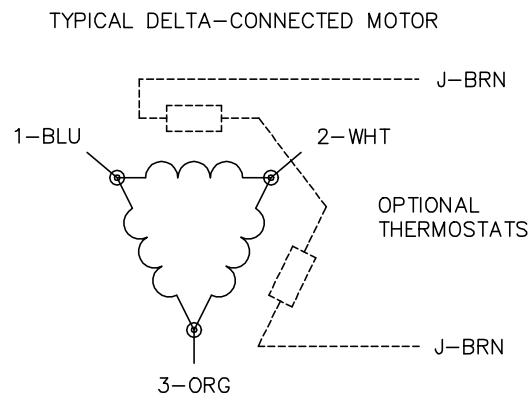
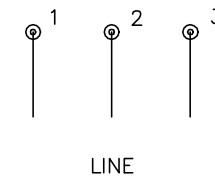
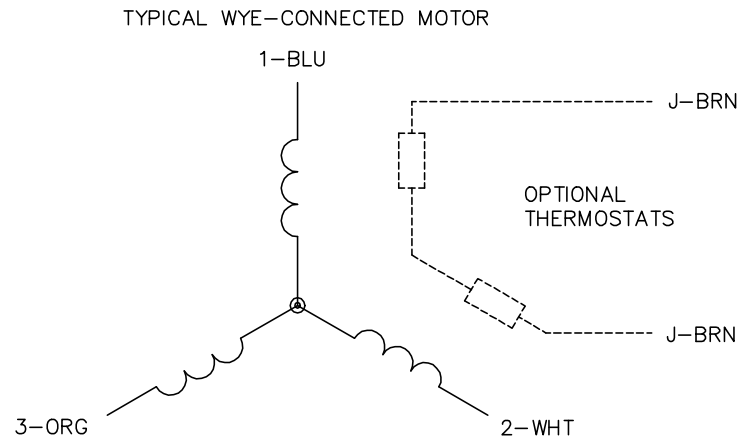
1 HP 3 PH 60 HZ 1760 RPM 460 V 0520M

TORQUES (LB-FT): PO=13.86 PU=7.96 LR=9.14 LRA=14.35





CD0006


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: ENBRIRO

MTL: —


BALDOR - RELIANCE®

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

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