

ABB BALDOR RELIANCE III

Customer information packet

CECP3581T-5

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

Class - CLI GP A,B,C,D

Division - Division II

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	E
Type	AC
Mech. spec.	05F007
Base	
Status	PRD/A
Elec. spec.	05WGX567
Layout	05LYF007
Eff. date	06-11-2024
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.	

Parts List

Part number	Description	Quantity
SA408938	SA 05F007X567G1	1.000 ea
RA400485	RA 05F007X567G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
06CB1000A02G	CONDUIT BOX, MACH GRAY	1.000 ea
RM1016	LEAD SEPARATOR GASKET - 305/306 C.P.MOTO	1.000 ea
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
35EP1102B03G	FREP TEFC 205 BRG,GRSR,RLF,.125 NPT DRAI	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP1329A16G	PUEP ENCL 143-5TC 205 BRG,GRSR,RLF,NPT D	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH1000A01G	35FH1000A01 W/GRAY FLUIDIZ	1.000 ea
10XN2520A16	1/4-20 X 1 HEX HEAD CAP SCR, ZINC PLATED	3.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 ea
WD4100A03	DE-750 HEYCO PLUG 62MP0750 MICRO PLASTIC	1.000 ea
06CB1502G	LIPPED CONDUIT BOX LID CAST, GRAY EPOXY	1.000 ea
06GS1003	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
HW4600B32SP	V-RING SLINGER 1.000 X 1.540 X .24 VITON	1.000 ea
HA1005A03SP	SLINGER, OD 1.750, ID .938, 205 BRG	1.000 ea

HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.022 ga
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP3257	SS CP SUPER-E DIV-2 UL CSA-C US EEV PREM	1.000 ea
NP3260	SS CP SUPER-E AUX DATA INFORMATION	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

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. @ 25°C	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

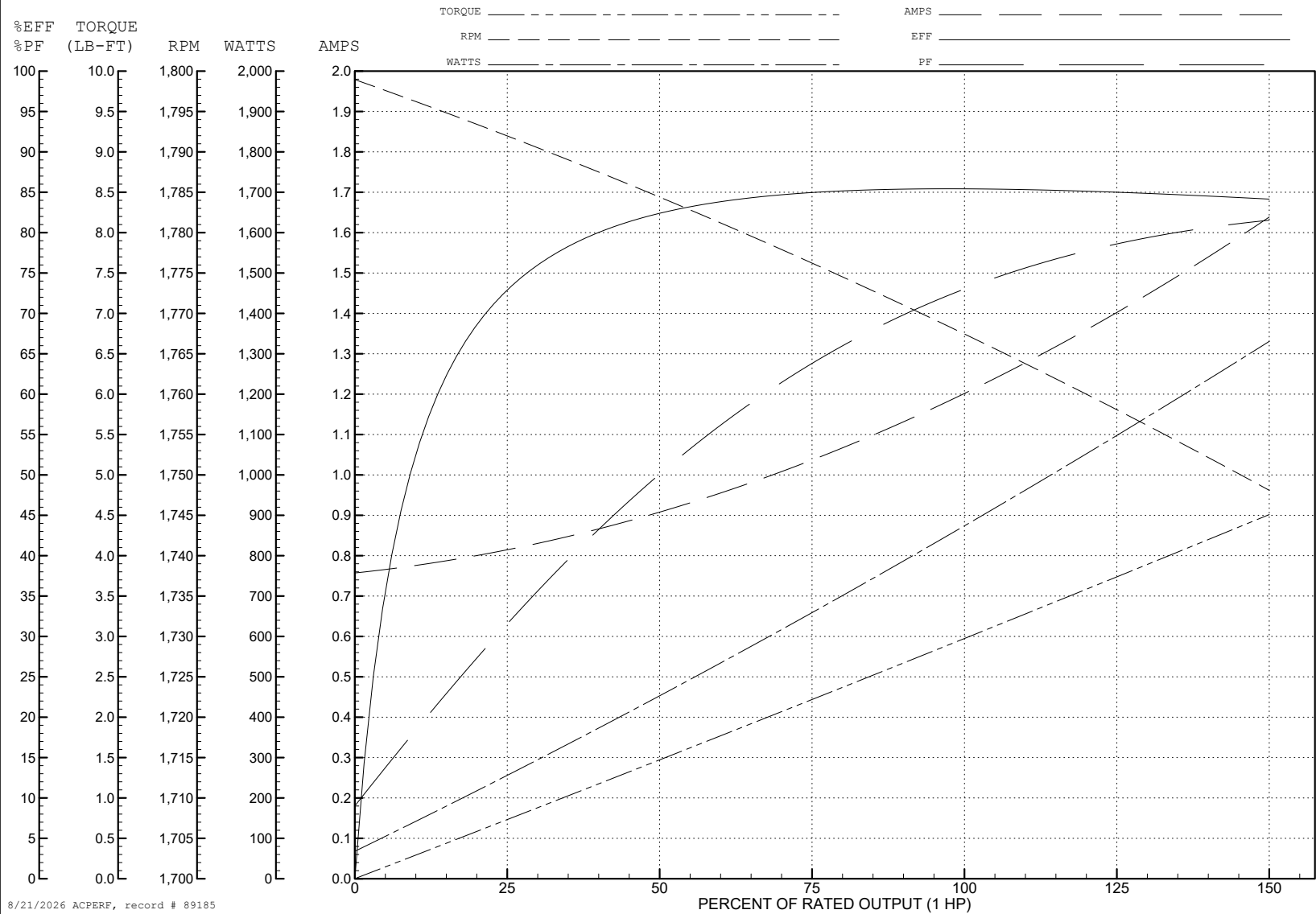
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WINDING # 05WGX567

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



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	
NEMA Design Code		B		KVA Code		M	
Service Factor (S.F.)		1.15		No-load Current		0.59 A	
NEMA Nom. Eff.		85.5		Power Factor		72	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	
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

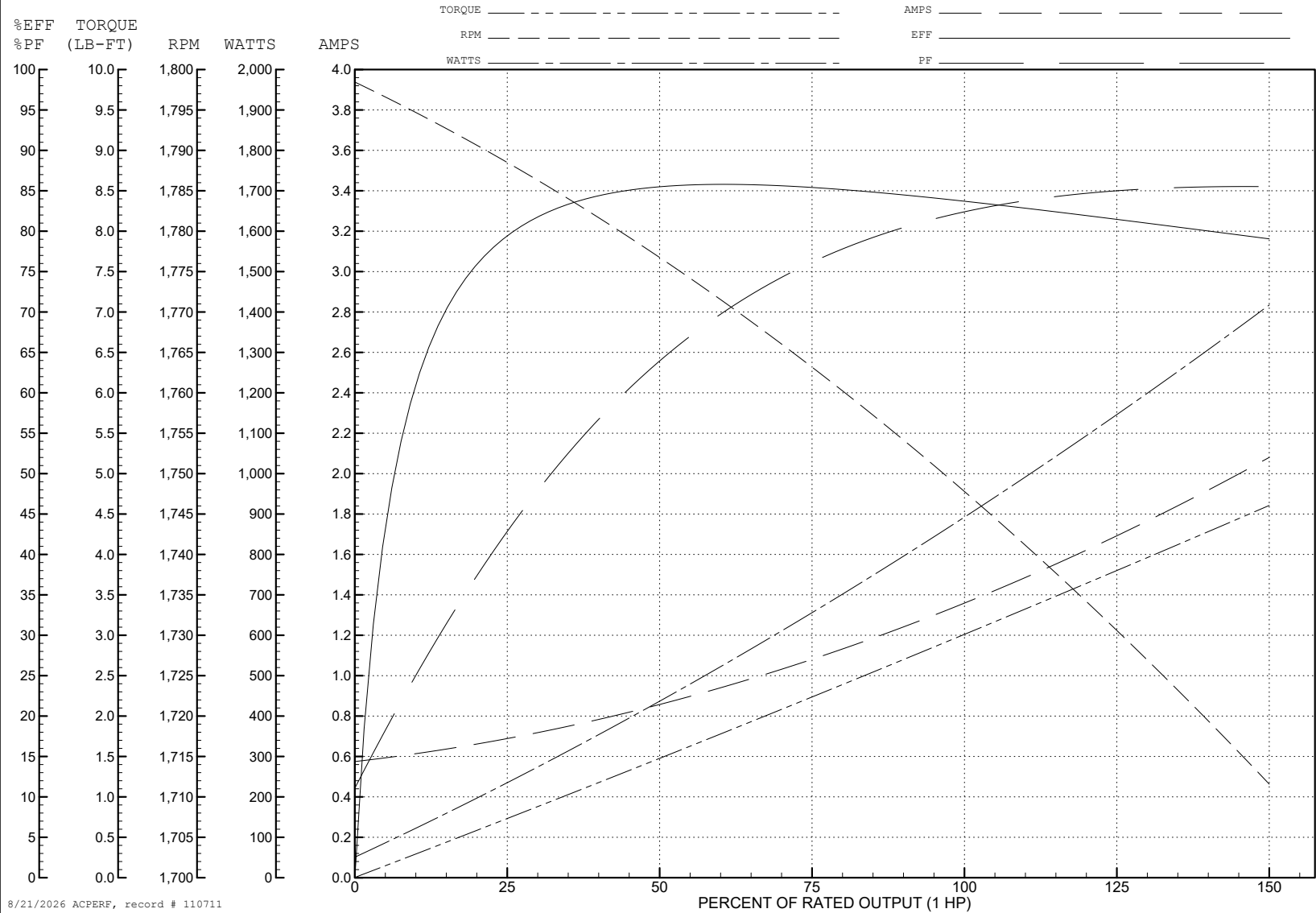
ABB Motors and Mechanical Inc.

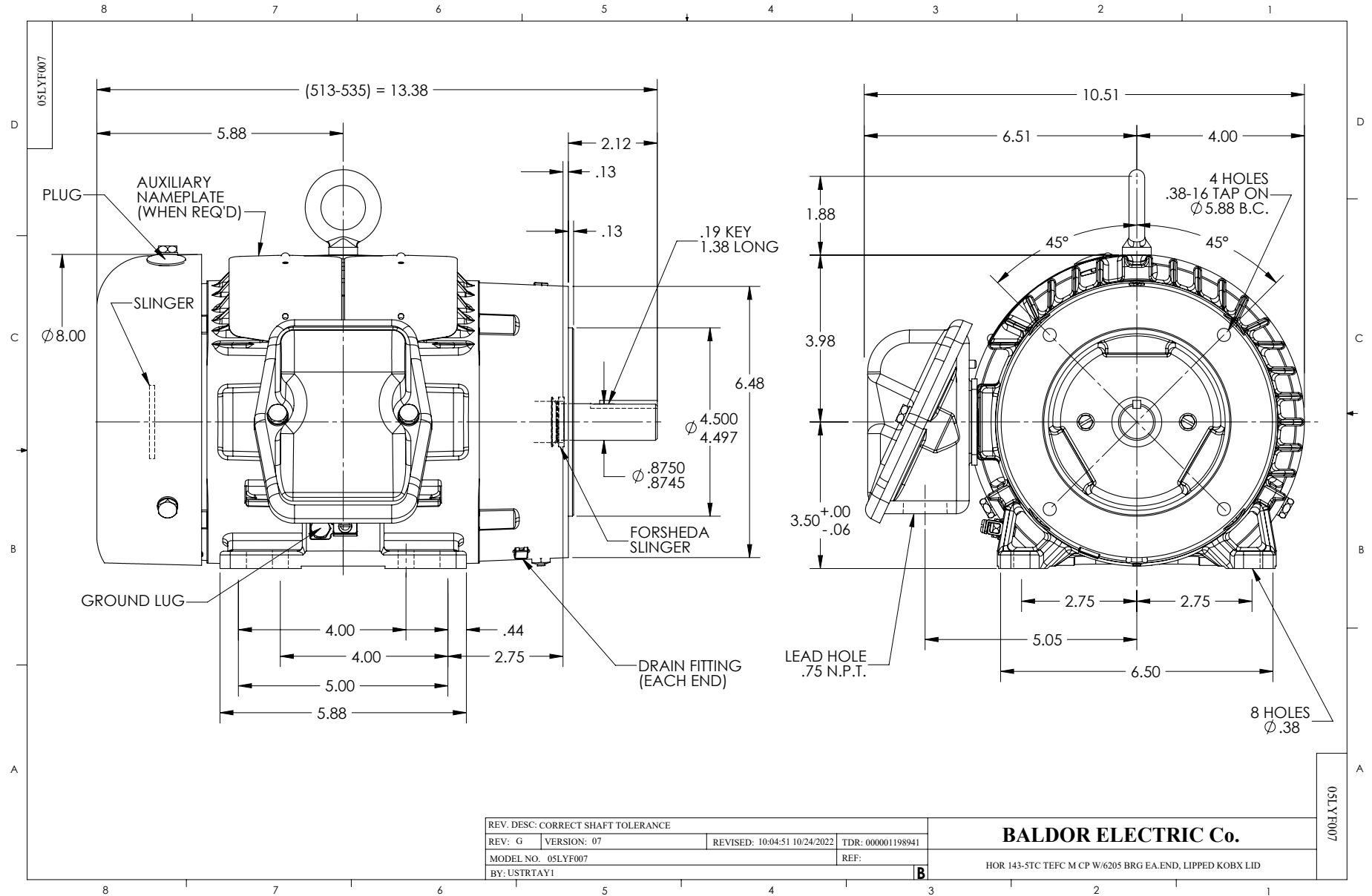
WINDING # 05WGX567

Typical performance - not guaranteed values.

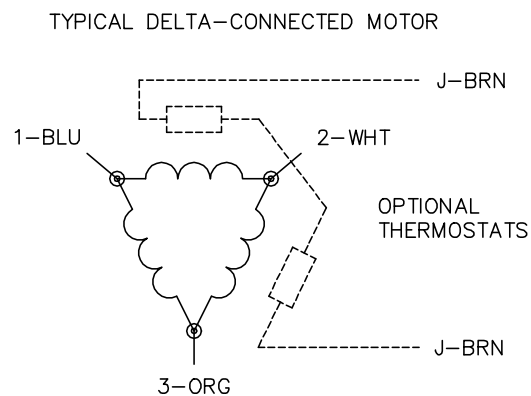
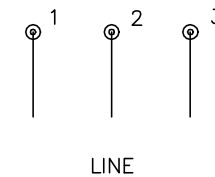
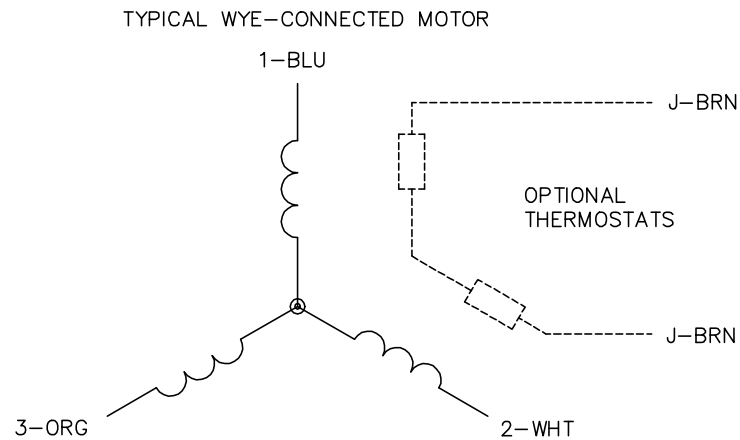
1 HP 3 PH 60 HZ 1770 RPM 460 V 0520M

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





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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