ABB BALDOR RELIANCE

Customer information packet

ECTM3581T-G

1HP, 1760RPM, 3PH, 60HZ, 143T, 0520M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143T
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	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
Current @ Voltage	3.260 A @ 230.0 V
	3.200 A @ 208.0 V
	1.630 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	Drilled And Tapped Hole

Part Detail

Revision	C
Type	AC
Mech. spec.	05G440
Base	
Status	PRD/A
Elec. spec.	05WGX508
Layout	05LYG440
Eff. date	06-08-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-18-2022

Heater Indicator	Heater Included, 115 V
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	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.82 IN
Power Factor	67
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	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
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1260								
CAT.NO.	ECTM3581T-G							
SPEC.	05G440X508G1							
HP	1							
VOLTS	230/460							
AMP	3.26/1.63							
RPM	1760							
FRAME	143T	**HZ**	60		**PH**	3		
SER.F.	1.15	**CODE**	N	**DES**	B	**CL**	F	
NEMA-NOM-EFF	85.5	**PF**	67					
RATING	40C AMB-CONT							
CC								
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						
	INV DUTY 20:1 VT							

AC Induction Motor Performance Data
Record # 82131
Typical performance - not guaranteed values

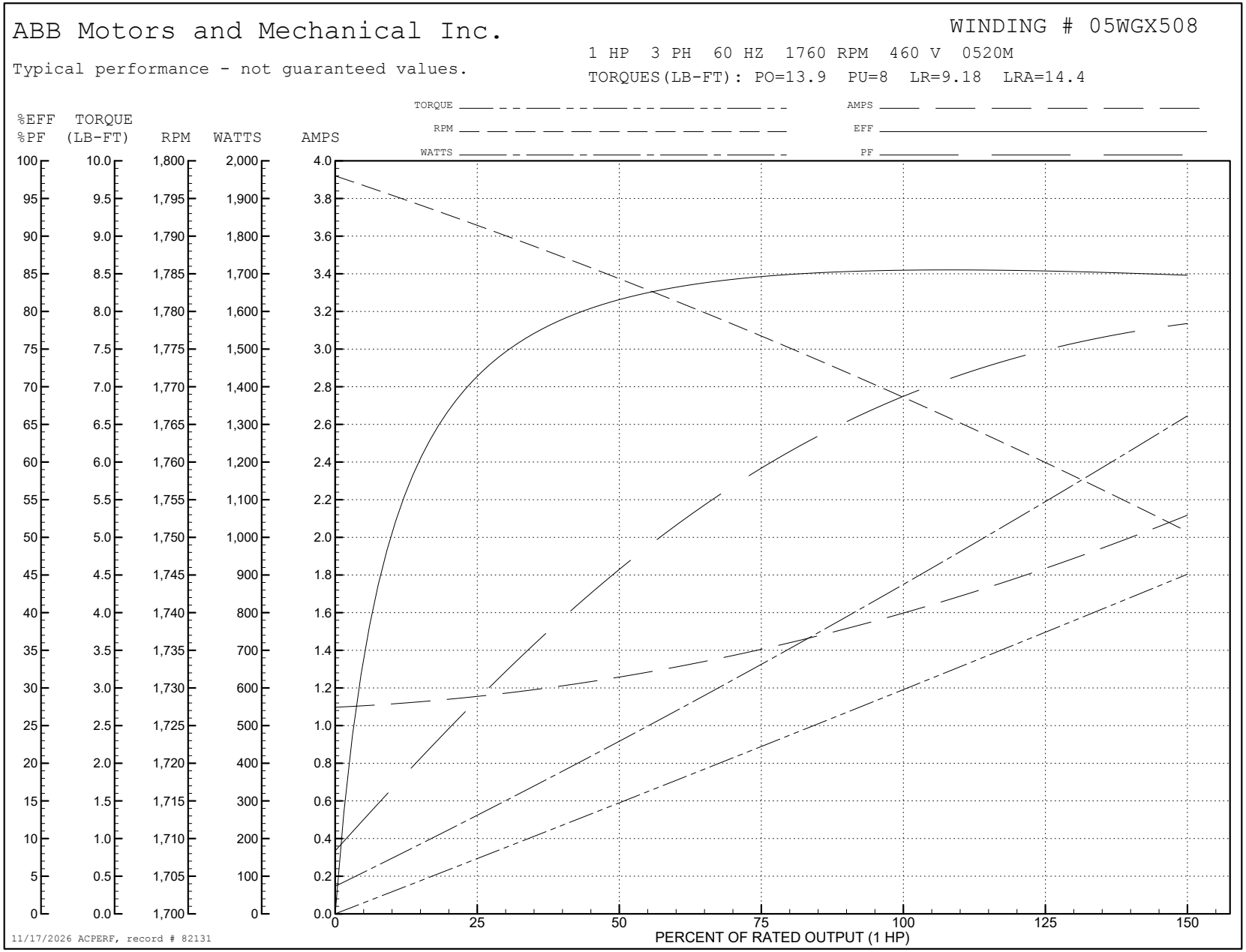
Winding: 05WGX508-R001	**Type:** 0520M	**Enclosure:** TEFC

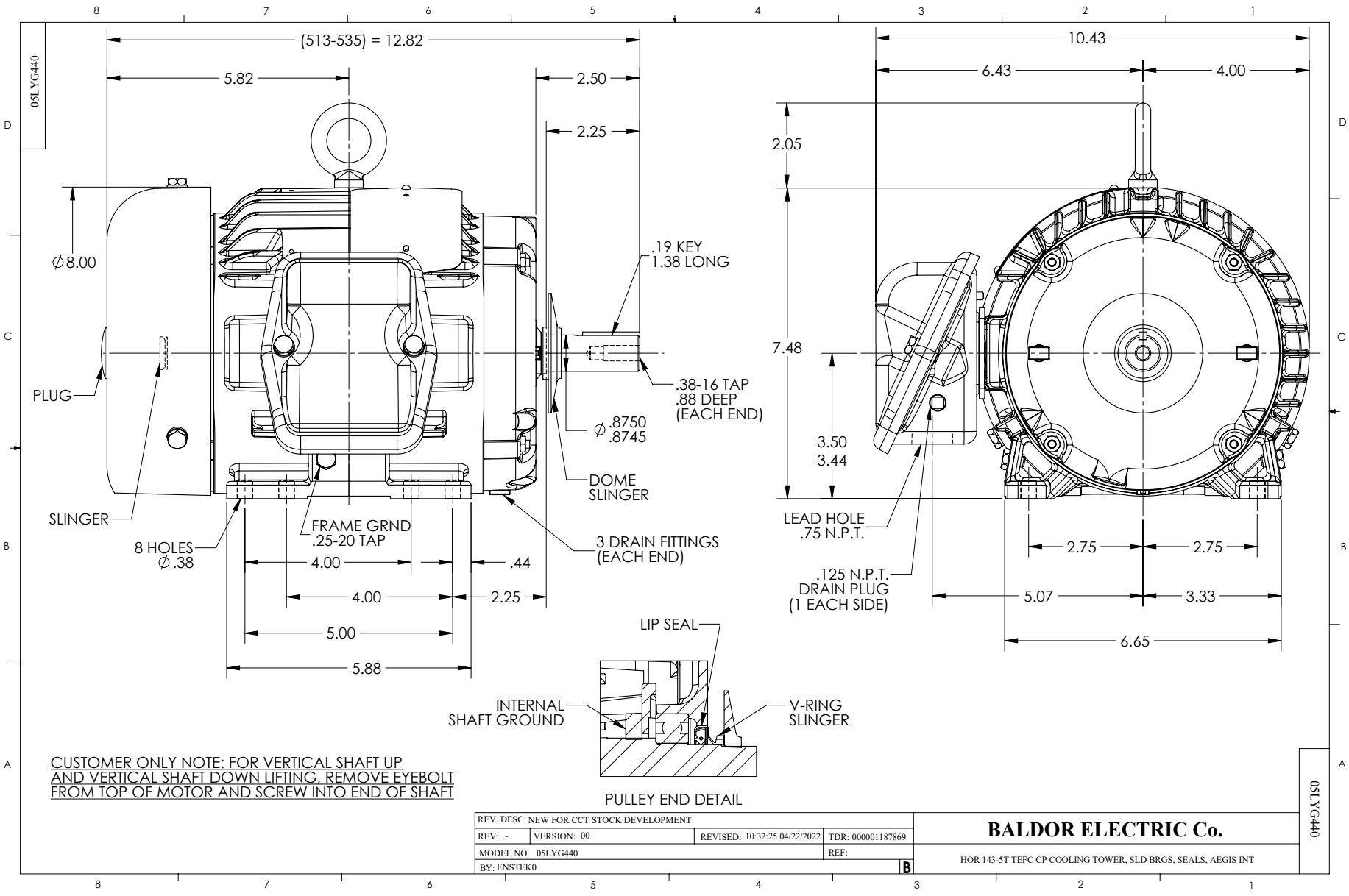
Nameplate Data			
Rated Output (HP)			1
Volts			230/460
Full Load Amps			3.2-3.2/1.6
R.P.M.			1760
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	0	**Power Factor**	0
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.979 LB-FT
Start Configuration	direct on line
Breakdown Torque	13.9 LB-FT
Pull-up Torque	8 LB-FT
Locked-rotor Torque	9.18 LB-FT
Starting Current	14.4 A
No-load Current	1.11 A
Line-line Res. @ 25ºC	16.215 Ω
Temp. Rise @ Rated Load	24°C
Temp. Rise @ S.F. Load	28°C
Locked-rotor Power Factor	62

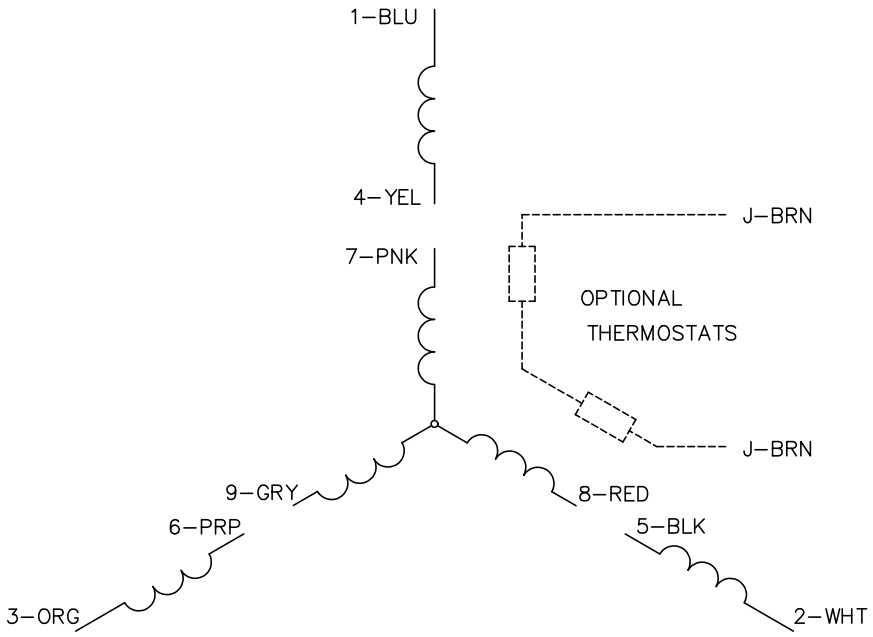
Load Characteristics 460 V, 60 Hz, 1 HP

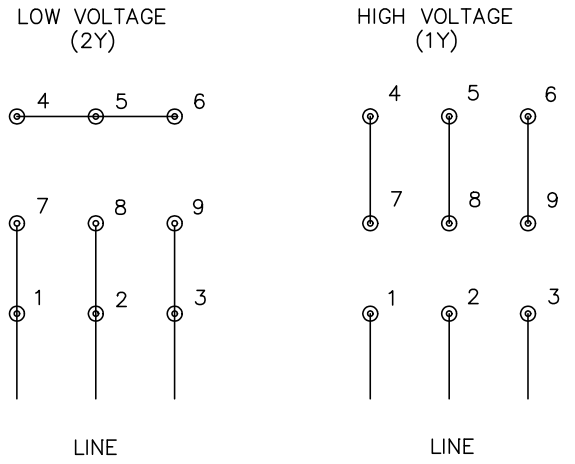
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	46	59	68	74	79	72
Efficiency	71.2	81.4	84.6	85.5	85.4	84.7	85.4
Speed	1791.4	1784.2	1776.7	1768.6	1760	1750.7	1763
Line amperes	1.14	1.25	1.41	1.61	1.84	2.11	1.75


ABB Motors and Mechanical Inc.
WINDING # 05WGX508
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 1760 RPM 460 V 0520M
TORQUES(LB-FT): PO=13.9 PU=8 LR=9.18 LRA=14.4
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 # 82131


05LYG440
(513-535) = 12.82
5.82
2.50
2.25
∅8.00
.19 KEY
1.38 LONG
PLUG
.38-16 TAP
.88 DEEP
(EACH END)
∅ .8750
.8745
DOME
SLINGER
SLINGER
8 HOLES
∅.38
FRAME GRND
.25-20 TAP
3 DRAIN FITTINGS
(EACH END)
4.00
.44
4.00
2.25
5.00
5.88
10.43
6.43
4.00
2.05
7.48
3.50
3.44
LEAD HOLE
.75 N.P.T.
.125 N.P.T.
DRAIN PLUG
(1 EACH SIDE)
2.75
2.75
5.07
3.33
6.65
LIP SEAL
INTERNAL
SHAFT GROUND
V-RING
SLINGER
PULLEY END DETAIL
CUSTOMER ONLY NOTE: FOR VERTICAL SHAFT UP
AND VERTICAL SHAFT DOWN LIFTING, REMOVE EYEBOLT
FROM TOP OF MOTOR AND SCREW INTO END OF SHAFT
REV. DESC: NEW FOR CCT STOCK DEVELOPMENT
REV: - VERSION: 00 REVISED: 10:32:25 04/22/2022 TDR: 000001187869
MODEL NO. 05LYG440 REF:
BY: ENSTEK0 B
BALDOR ELECTRIC Co.
HOR 143-5T TEFC CP COOLING TOWER, SLD BRGS, SEALS, AEGIS INT
05LYG440

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS