ABB BALDOR RELIANCE

Customer information packet

ECTM3581T-5G

1HP, 1770RPM, 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	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
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	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
Feedback Device	NO FEEDBACK
Front Shaft Indicator	Drilled And Tapped Hole
Heater Indicator	Heater Included, 115 V
High Voltage Full Load Amps	1.2 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	05G440
Base	
Status	PRD/A
Elec. spec.	05WGX567
Layout	05LYG440
Eff. date	06-08-2023
CD Diagram	CD0006
Poles	04
Leads	3#18 Y
Proprietary	False
Created date	04-19-2022

Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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	12.82 IN
Power Factor	72
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	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

NP1260											
CAT.NO.	ECTM3581T-5G										
SPEC.	05G440X567G1										
HP	1										
VOLTS	575										
AMP	1.2										
RPM	1770										
FRAME	143T	**HZ**	60		**PH**	3					
SER.F.	1.15	**CODE**	M	**DES**	B		**CL**	F			
NEMA-NOM-EFF	85.5	**PF**	72								
RATING	40C AMB-CONT										
CC											
DE	6205	**ODE**	6203								
ENCL	TEFC	**SN**									
	INV DUTY 20:1 VT										

AC Induction Motor Performance Data
Record # 89183
Typical performance - not guaranteed values

Winding: 05WGX567-R001	**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

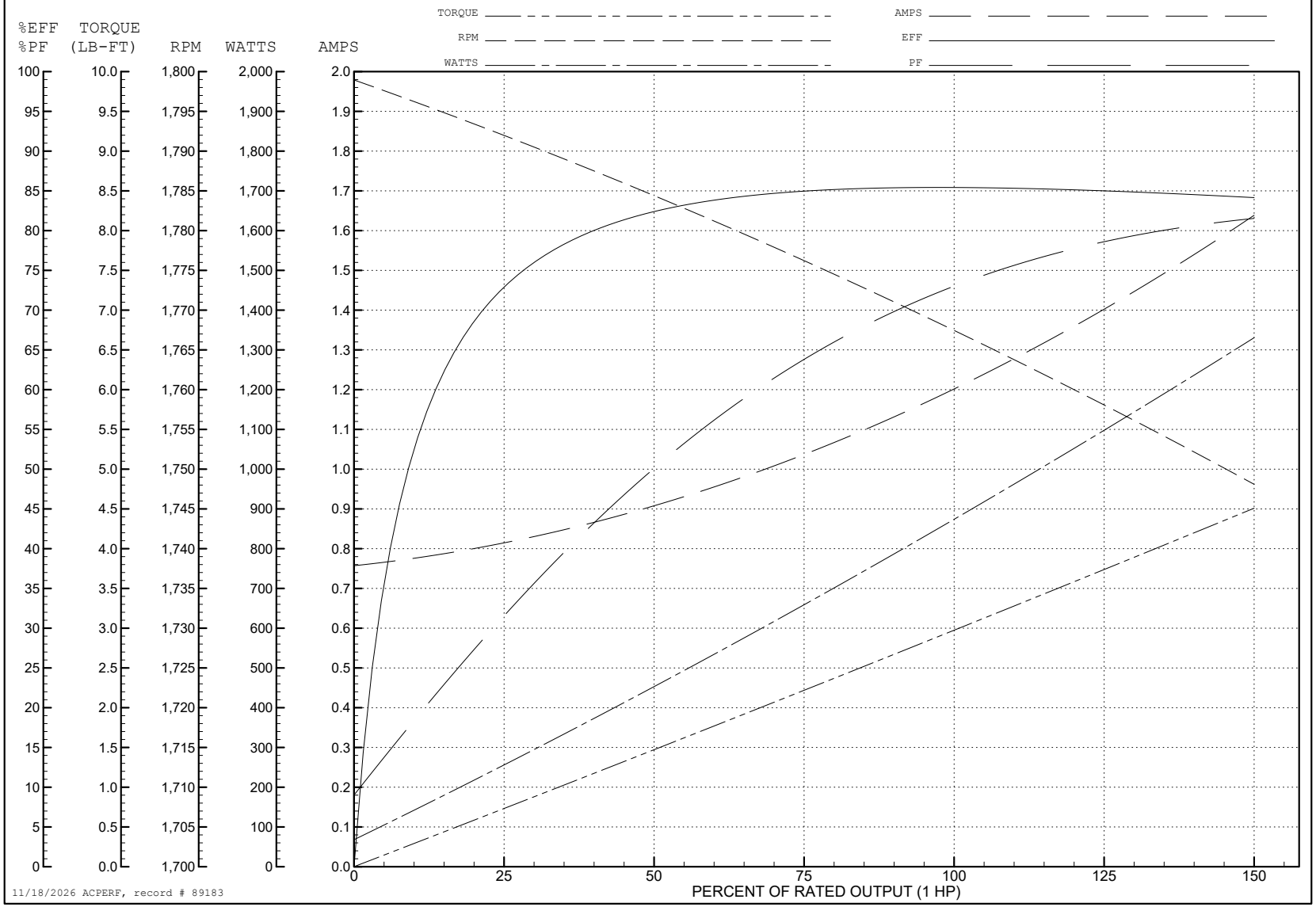
ABB Motors and Mechanical Inc.

WINDING # 05WGX567

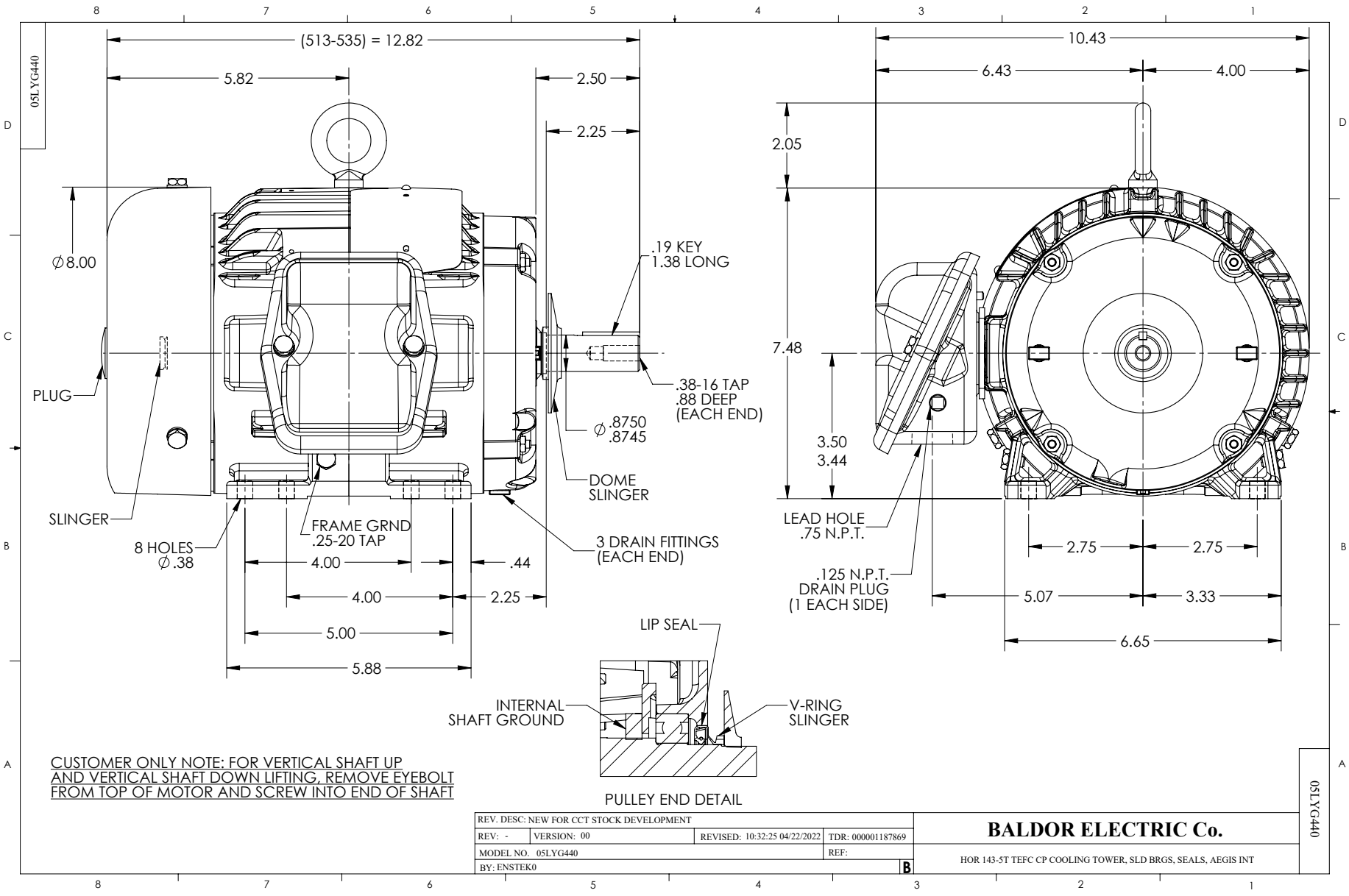
1 HP 3 PH 60 HZ 1770 RPM 575 V 0520M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=11.89 PU=7.42 LR=9.63 LRA=10.72

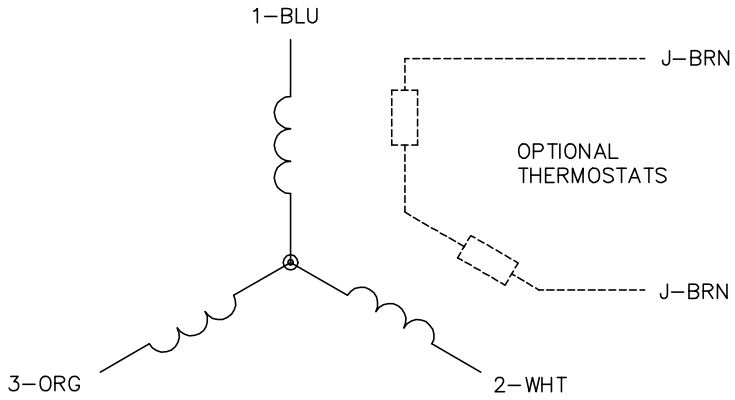


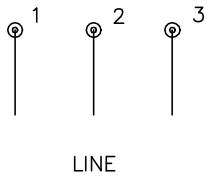
11/18/2026 ACPERF, record # 89183


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

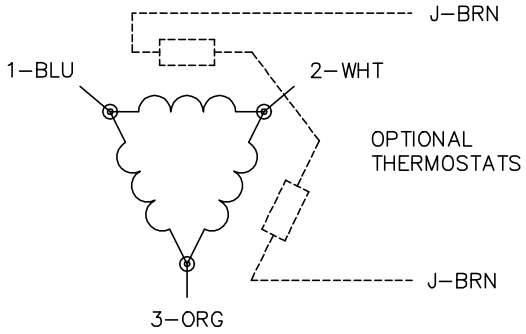
CD0006

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			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1