ABB BALDOR RELIANCE

Customer information packet

CEM3583T-5

1.5HP, 3500RPM, 3PH, 60HZ, 143TC, 0520M, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM (OLD LOGO) CURUSEEV NEMA PREMIUM
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	1.500 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F

Part Detail

Revision	R
Type	AC
Mech. spec.	05C052
Base	
Status	PRD/A
Elec. spec.	05WGX103
Layout	05LYC052
Eff. date	04-29-2024
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	05-21-2010

Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
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	2
Overall Length	13.04 IN
Power Factor	85
Product Family	General Purpose
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

	NP1259L							
CAT.NO.	CEM3583T-5							
SPEC.	05C052X103G1							
HP	1.5							
VOLTS	575							
AMP	1.5							
RPM	3500							
FRAME	143TC	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	L	**DES**	B	**CL**	F	
NEMA-NOM-EFF	84	**PF**	85					
RATING	40C AMB-CONT							
CC	010A							
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						

AC Induction Motor Performance Data
Record # 31308
Typical performance - not guaranteed values

Winding: 05WGX103-R001	**Type:** 0520M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1.5	**Full Load Torque**	2.22 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			1.5	**Breakdown Torque**	9.55 LB-FT
R.P.M.			3500	**Pull-up Torque**	3.64 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	7.41 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	14.5 A
Service Factor (S.F.)			1.15	**No-load Current**	0.763 A
NEMA Nom. Eff.	84	**Power Factor**	85	**Line-line Res. @ 25ºC**	19.2 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	43°C
S.F. Amps				**Temp. Rise @ S.F. Load**	51°C

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	44	66	78	85	89	90	87
Efficiency	72.1	82.1	84.3	84.7	84.3	82.8	84.5
Speed	3575	3552	3527	3499	3468	3434	3480
Line amperes	0.839	1.01	1.25	1.54	1.85	2.24	1.73

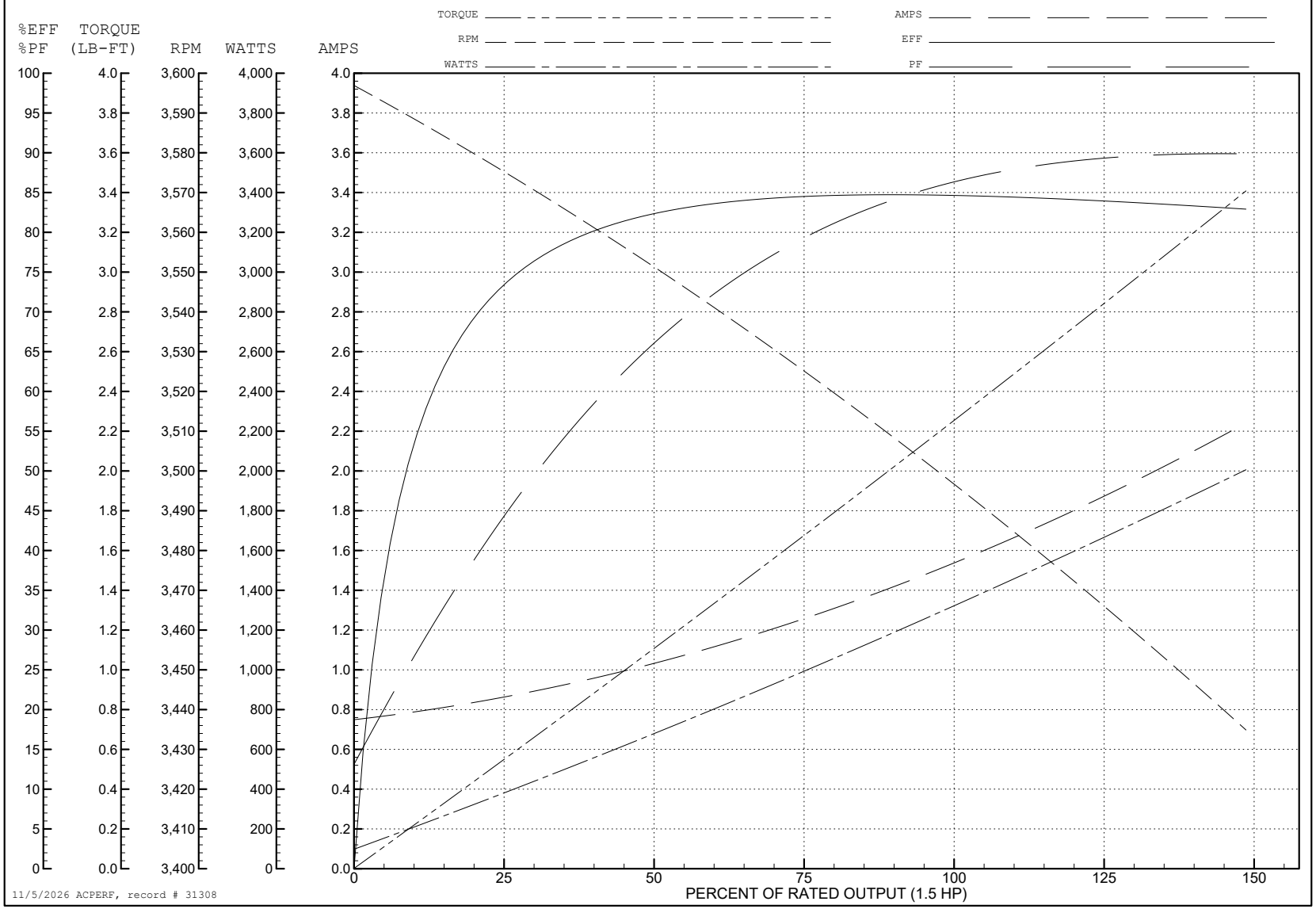
ABB Motors and Mechanical Inc.

WINDING # 05WGX103

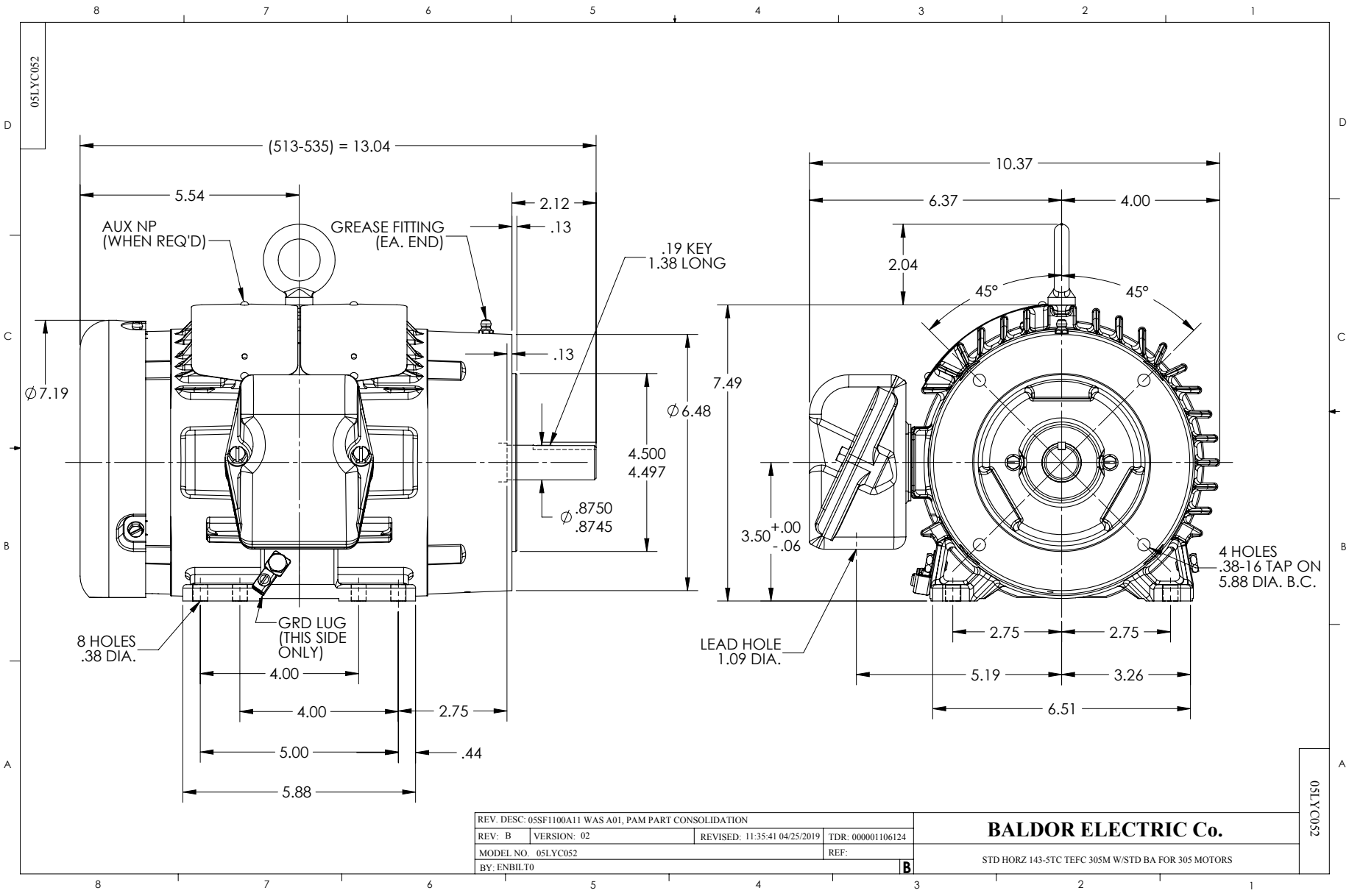
1.5 HP 3 PH 60 HZ 3500 RPM 575 V 0520M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=9.55 PU=3.64 LR=7.41 LRA=14.5

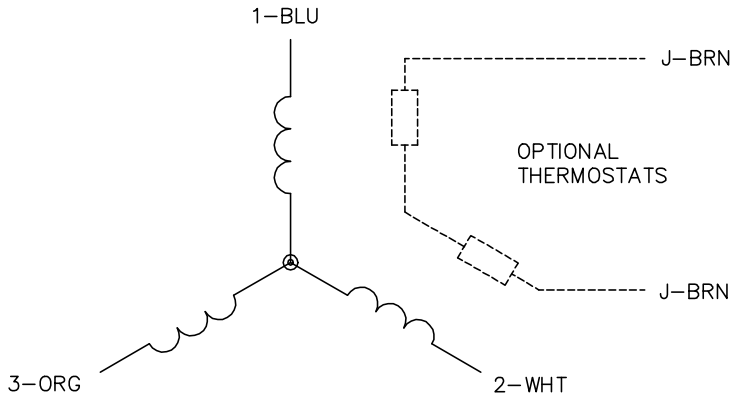


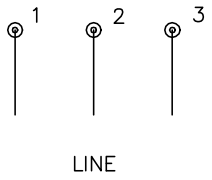
11/5/2026 ACPERF, record # 31308


05LYC052
(513-535) = 13.04
5.54
2.12
.13
AUX NP
(WHEN REQ'D)
GREASE FITTING
(EA. END)
.19 KEY
1.38 LONG
∅7.19
.13
∅6.48
4.500
4.497
∅.8750
.8745
8 HOLES
.38 DIA.
GRD LUG
(THIS SIDE
ONLY)
4.00
4.00
2.75
5.00
.44
5.88
10.37
6.37
4.00
2.04
45°
45°
7.49
3.50 +.00 -.06
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C.
LEAD HOLE
1.09 DIA.
2.75
2.75
5.19
3.26
6.51
REV. DESC: 05SF1100A11 WAS A01, PAM PART CONSOLIDATION
REV: B
VERSION: 02
REVISED: 11:35:41 04/25/2019
TDR: 000001106124
MODEL NO. 05LYC052
REF:
BY: ENBILT0
B
BALDOR ELECTRIC Co.
STD HORZ 143-5TC TEFC 305M W/STD BA FOR 305 MOTORS
05LYC052

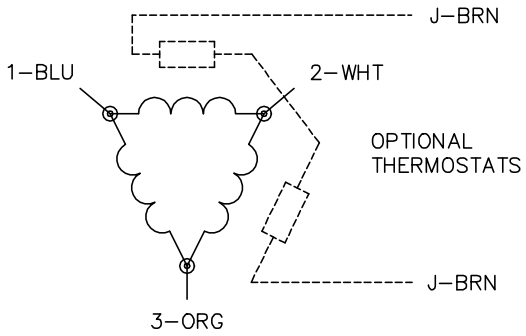
CD0006

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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