

BALDOR® • RELIANCE 

Product Information Packet

CEM3581T

1HP,1760RPM,3PH,60HZ,143TC,0519M,TEFC,F1

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX122	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	05C052	Layout:	05LYC052	Poles:	04	Created Date:	08-03-2010
Base:	RG	Eff. Date:	06-26-2019	Leads:	9#18		

Specs			
Catalog Number:	CEM3581T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	143TC	KVA Code:	L
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	1.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0518M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	71
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	1.500 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
	3.000 A @ 230.0 V	Shaft Rotation:	Reversible
	3.100 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3441LUA										
CAT.NO.	CEM3581T									
SPEC	05C052X122G1									
HP	1									
VOLTS	230/460									
AMPS	3/1.5									
RPM	1760									
FRAME	143TC				HZ	60			PH	3
SF	1.15		CODE	L	DES	B		CLASS	F	
NEMA NOM. EFF	85.5		PF	71						
RATING	40C AMB-CONT									
CC	010A			USABLE AT 208V						3.1
ENCL	TEFC		SER							
DE	6205			ODE	6203					
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										
50Hz 1HP 190/380V 3.6/1.8A									SF1.0	

Parts List		
Part Number	Description	Quantity
SA201057	SA 05C052X122G1	1.000 EA
RA188362	RA 05C052X122G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 EA
06CB3000	BALDOR CONDUIT BOX CAST	1.000 EA
06GS1000	GASKET,CONDUIT BOX	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
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP1329A01	PU EP ENCL 143-5TC 205 BRG W/GRSR & STD	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	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
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
06CB3500	BALDOR CONDUIT BOX LID	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 53432

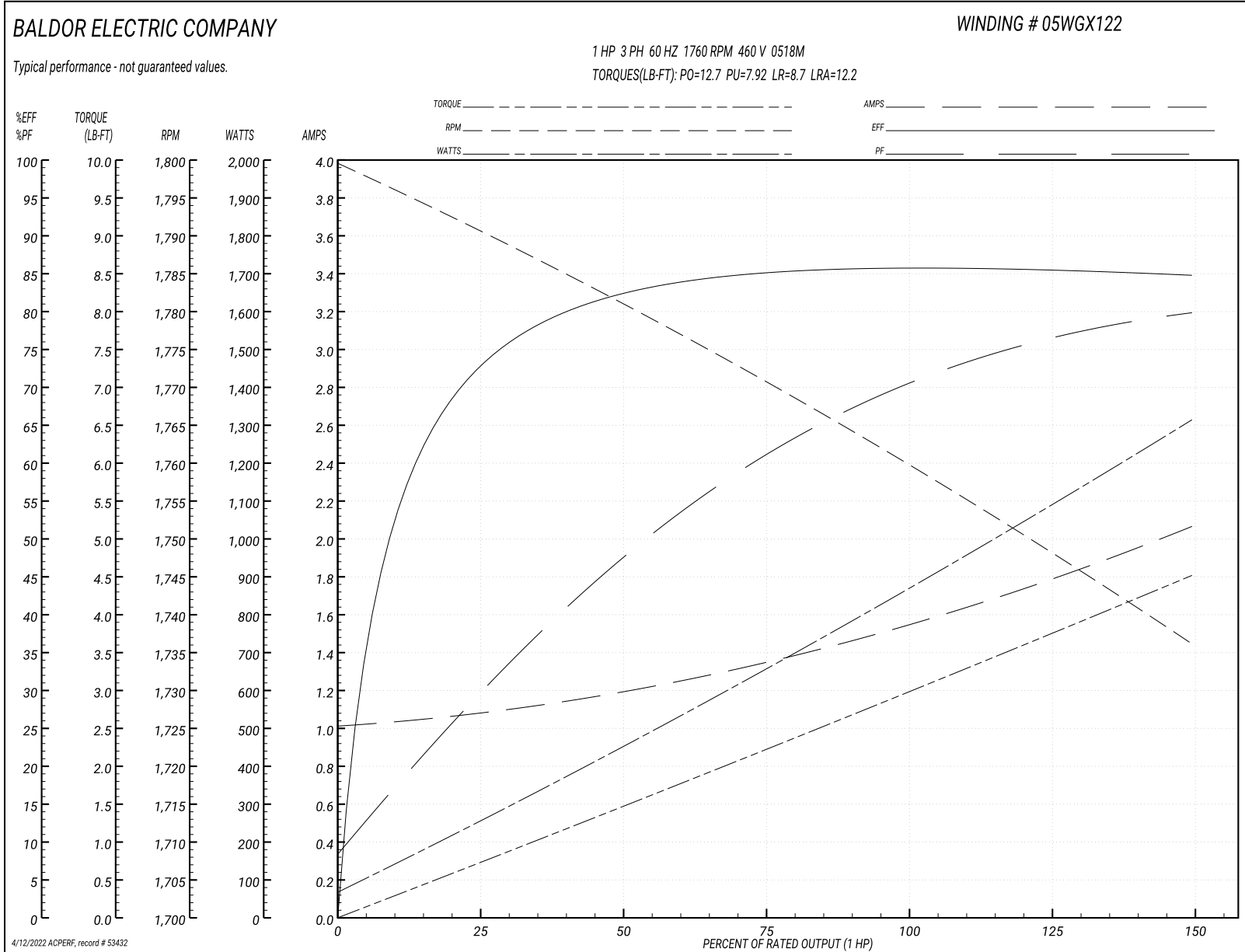
Typical performance - not guaranteed values

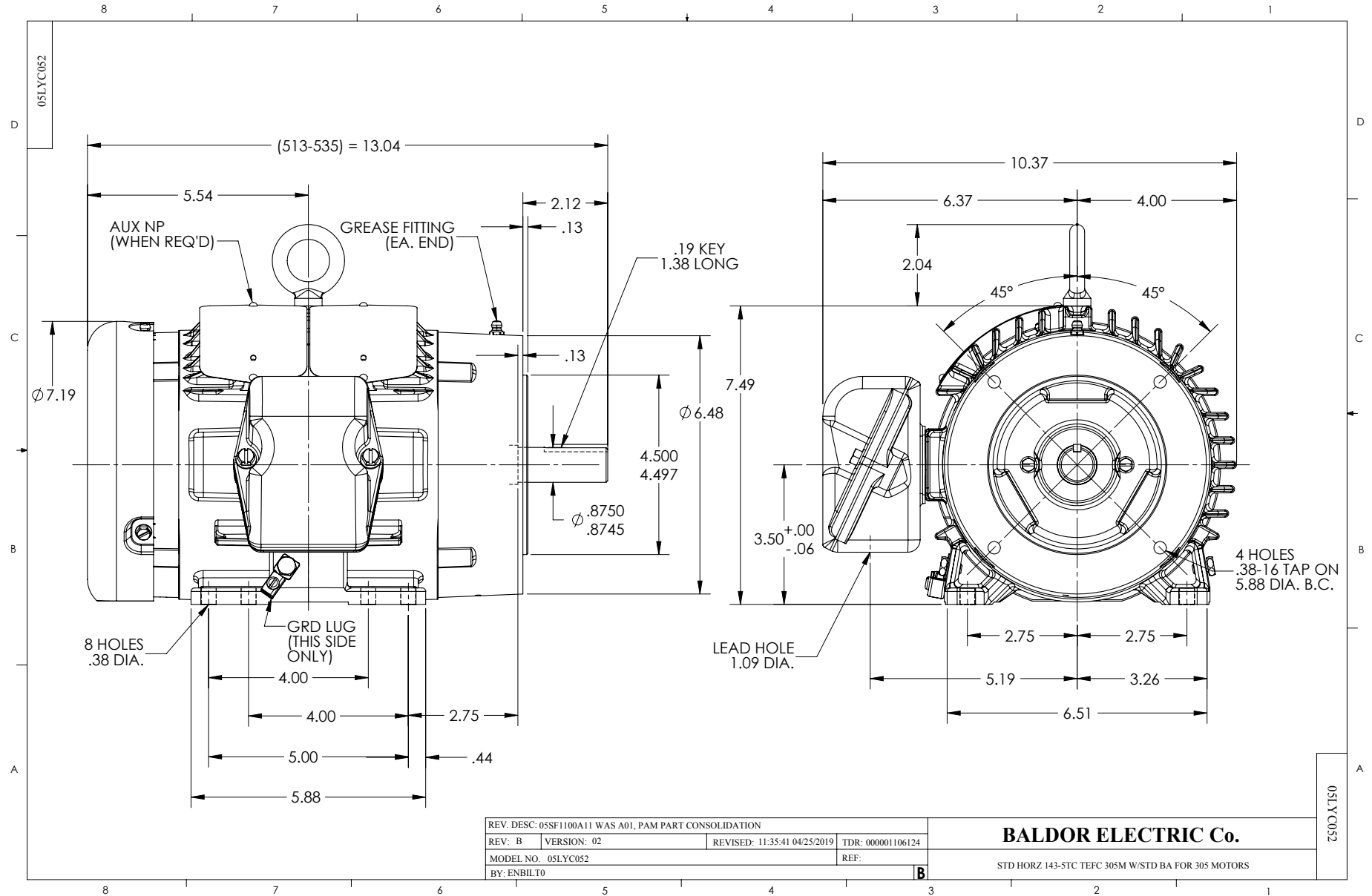
Winding: 05WGX122-R023		Type: 0518M	Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	2.98 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	3/1.5	Breakdown Torque	12.7 LB-FT	
R.P.M.	1760	Pull-up Torque	7.92 LB-FT	
Hz	60 Phase	Locked-rotor Torque	8.7 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	12.2 A	
Service Factor (S.F.)	1.15	No-load Current	1.02 A	
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	15.4 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	29°C	
S.F. Amps		Temp. Rise @ S.F. Load	34°C	
		Locked-rotor Power Factor	54.1	
		Rotor inertia	0.106 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	48	61	70	76	80	74
Efficiency	72.2	82.2	85.2	86	85.6	84.7	85.6
Speed	1790	1781	1771	1760	1748	1736	1754
Line amperes	1.07	1.19	1.35	1.55	1.8	2.06	1.69

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values





CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900003

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005