BALDOR • RELIANCE

Customer information packet

EM3583T-G

1.5HP, 3500RPM, 3PH, 60HZ, 143T, TEFC, F1
Class - None
Division - Not Applicable

12/4/2024 6:13:25 AM

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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	NEMA PREMIUM
	UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.000 A @ 208.0 V
	3.800 A @ 230.0 V
	1.900 A @ 460.0 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
Heater Indicator	No Heater

Part detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	05WGX102
Layout	05LYG784
Eff. date	05-06-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	04-09-2019

High Voltage Full Load Amps	1.9 a
Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.54 IN
Power Factor	85
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3500 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441LUA										
CAT.NO.	EM3583T-G									
SPEC	05-0000-0044									
HP	1.5									
VOLTS	230/460									
AMPS	3.8/1.9									
RPM	3500									
FRAME	143T	**HZ**	60	**PH**	3					
SF	1.15	**CODE**	L	**DES**	B	**CLASS**	H			
NEMA NOM. EFF	84	**PF**	85							
RATING	40C AMB-CONT									
CC	010A									
ENCL	TEFC	**SER**								
DE	6205	**ODE**	6203							
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1										
	50HZ 1.5HP 190/380V 4.6/2.3A									SF1.0

AC Induction Motor Performance Data
Record # 75454
Typical performance - not guaranteed values

Winding: 05WGX102-R004	**Type:** 0520M	**Enclosure:** TEFC

Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		1.5	**Full Load Torque**	2.22 LB-FT
Volts		230/460	**Start Configuration**	direct on line
Full Load Amps		3.8/1.9	**Breakdown Torque**	9.49 LB-FT
R.P.M.		3500	**Pull-up Torque**	3.61 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	7.35 LB-FT
NEMA Design Code	B **KVA Code**	L	**Starting Current**	17.9 A
Service Factor (S.F.)		1.15	**No-load Current**	0.932 A
NEMA Nom. Eff.	84 **Power Factor**	85	**Line-line Res. @ 25ºC**	12.2 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	43°C
S.F. Amps			**Temp. Rise @ S.F. Load**	50°C
			Locked-rotor Power Factor	60.1
			Rotor inertia	0.0553 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	79	85	89	90	87
Efficiency	72.2	82.1	84.4	84.7	84.3	82.7	84.5
Speed	3575	3551	3526	3498	3466	3433	3479
Line amperes	1.03	1.25	1.55	1.91	2.31	2.79	2.15

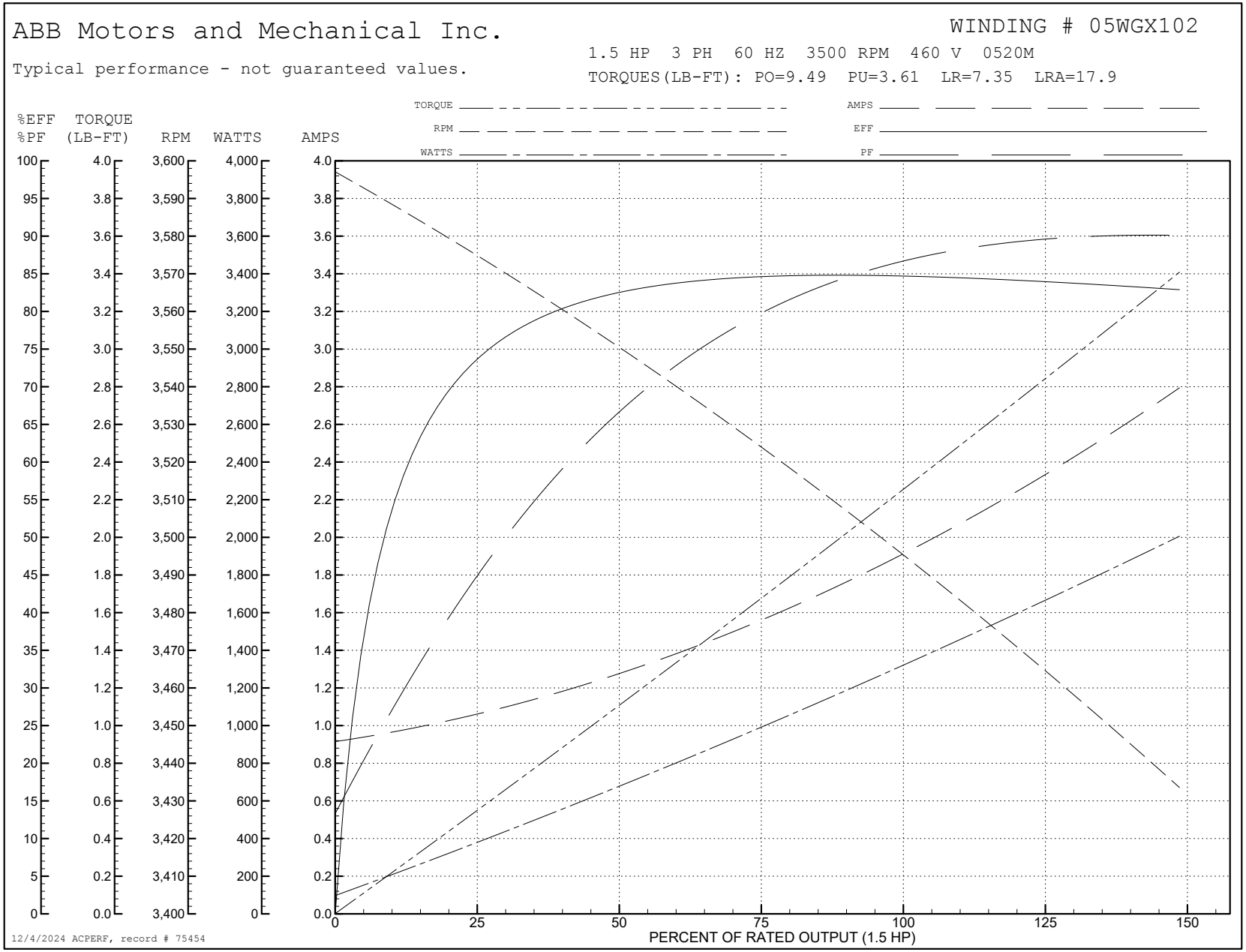
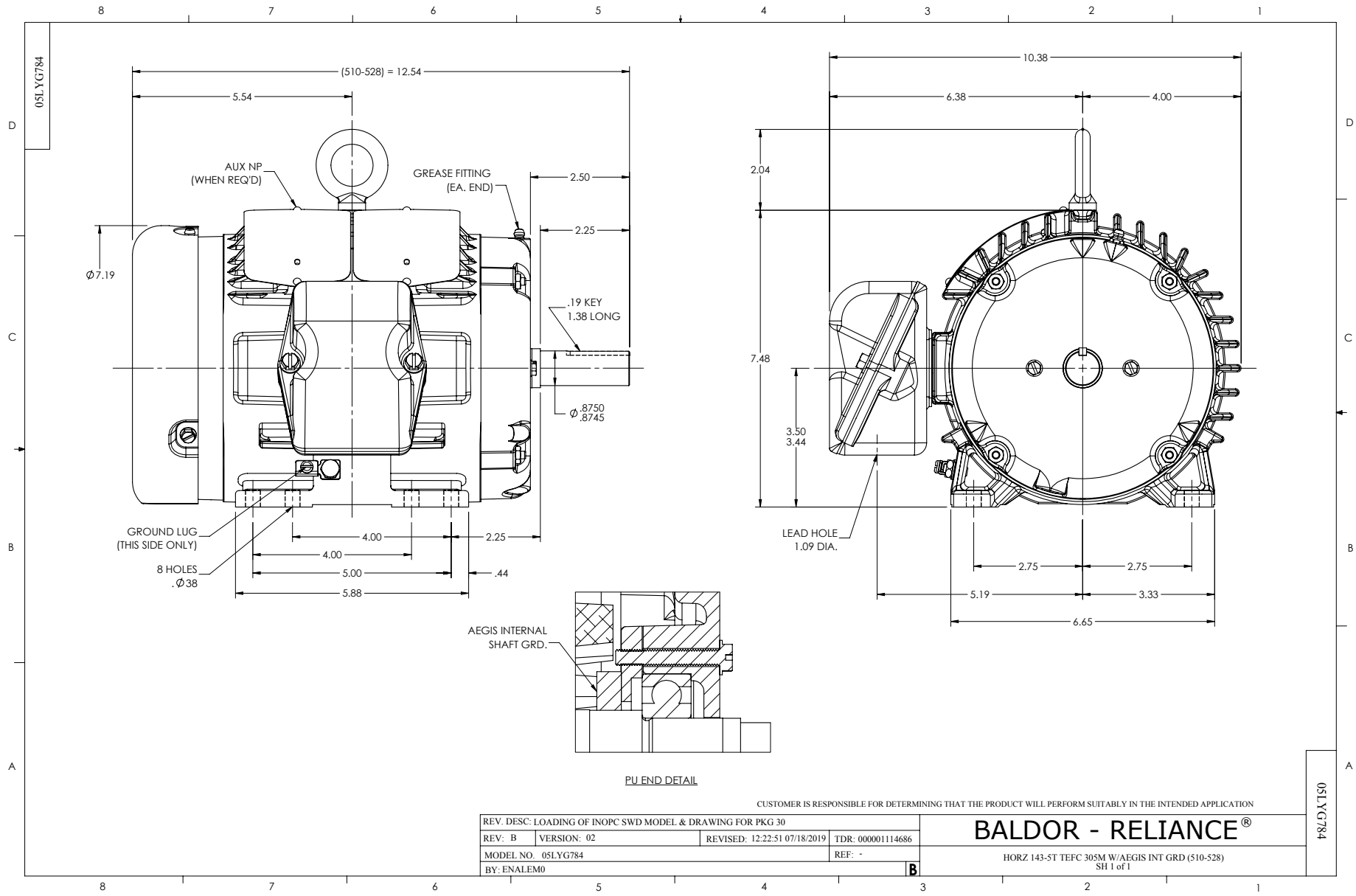
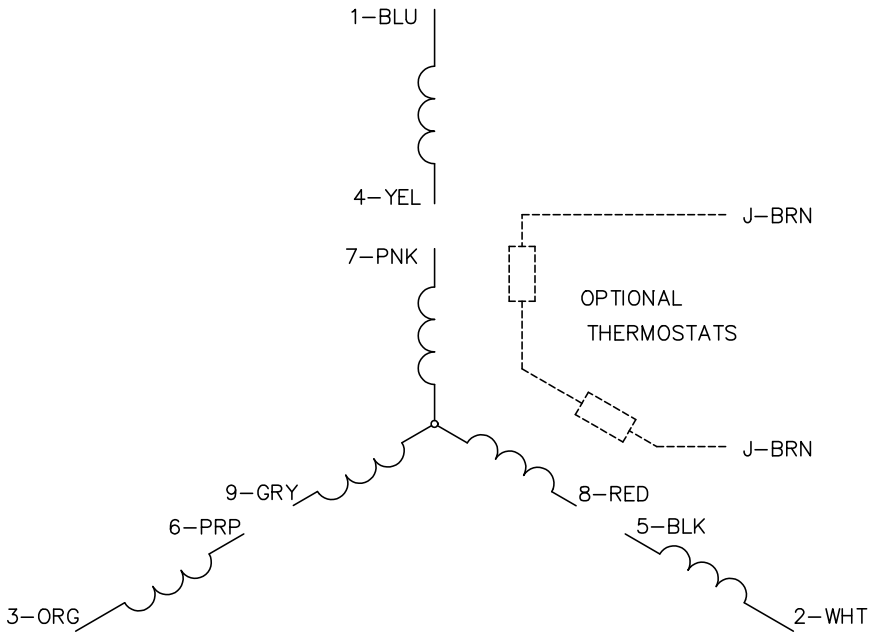
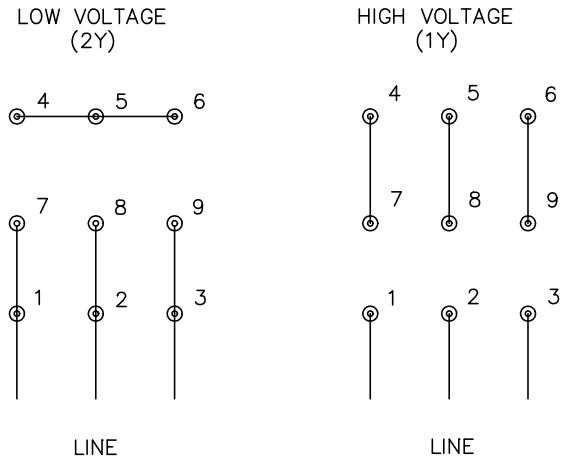


ABB Motors and Mechanical Inc.
WINDING # 05WGX102
1.5 HP 3 PH 60 HZ 3500 RPM 460 V 0520M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=9.49 PU=3.61 LR=7.35 LRA=17.9
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1.5 HP)
12/4/2024 ACPERF, record # 75454


05LYG784
(510-528) = 12.54
5.54
AUX NP
(WHEN REQ'D)
GREASE FITTING
(EA. END)
2.50
2.25
Ø7.19
.19 KEY
1.38 LONG
Ø .8750
.8745
GROUND LUG
(THIS SIDE ONLY)
8 HOLES
.Ø38
4.00
2.25
4.00
5.00
.44
5.88
10.38
6.38
4.00
2.04
7.48
3.50
3.44
LEAD HOLE
1.09 DIA.
2.75
2.75
5.19
3.33
6.65
AEGIS INTERNAL
SHAFT GRD.
PU END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF INOPC SWD MODEL & DRAWING FOR PKG 30
REV: B
VERSION: 02
REVISED: 12:22:51 07/18/2019
TDR: 000001114686
MODEL NO. 05LYG784
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ 143-5T TEFC 305M W/AEGIS INT GRD (510-528)
SH 1 of 1
05LYG784

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