

ABB BALDOR RELIANCE III

Customer information packet

EM3583T-G

1.5HP, 3500RPM, 3PH, 60HZ, 143T, TEFC, F1

Class - None

Division - Not Applicable

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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary 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	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	05WGX102
Layout	05LYG784
Eff. date	04-30-2025
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

Parts List

Part number	Description	Quantity
SA368277	SA 05-0000-0044	1.000 ea
RA357777	RA 05-0000-0044	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	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
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
51XB0818A12	8-18X3/4 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100A37	THRUBOLT 10-32 X 8.500	4.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
35EP1102A42	PULLEY ENCL 205 BRG W/ GREASER & LOCKED	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 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
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea

HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea

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
Service Factor (S.F.)		1.15	No-load Current		0.932 A	
NEMA Nom. Eff.		84	Power Factor		85	Line-line Res. @ 25°C
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps					Temp. Rise @ S.F. Load	
					Locked-rotor Power Factor	
					Rotor inertia	

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

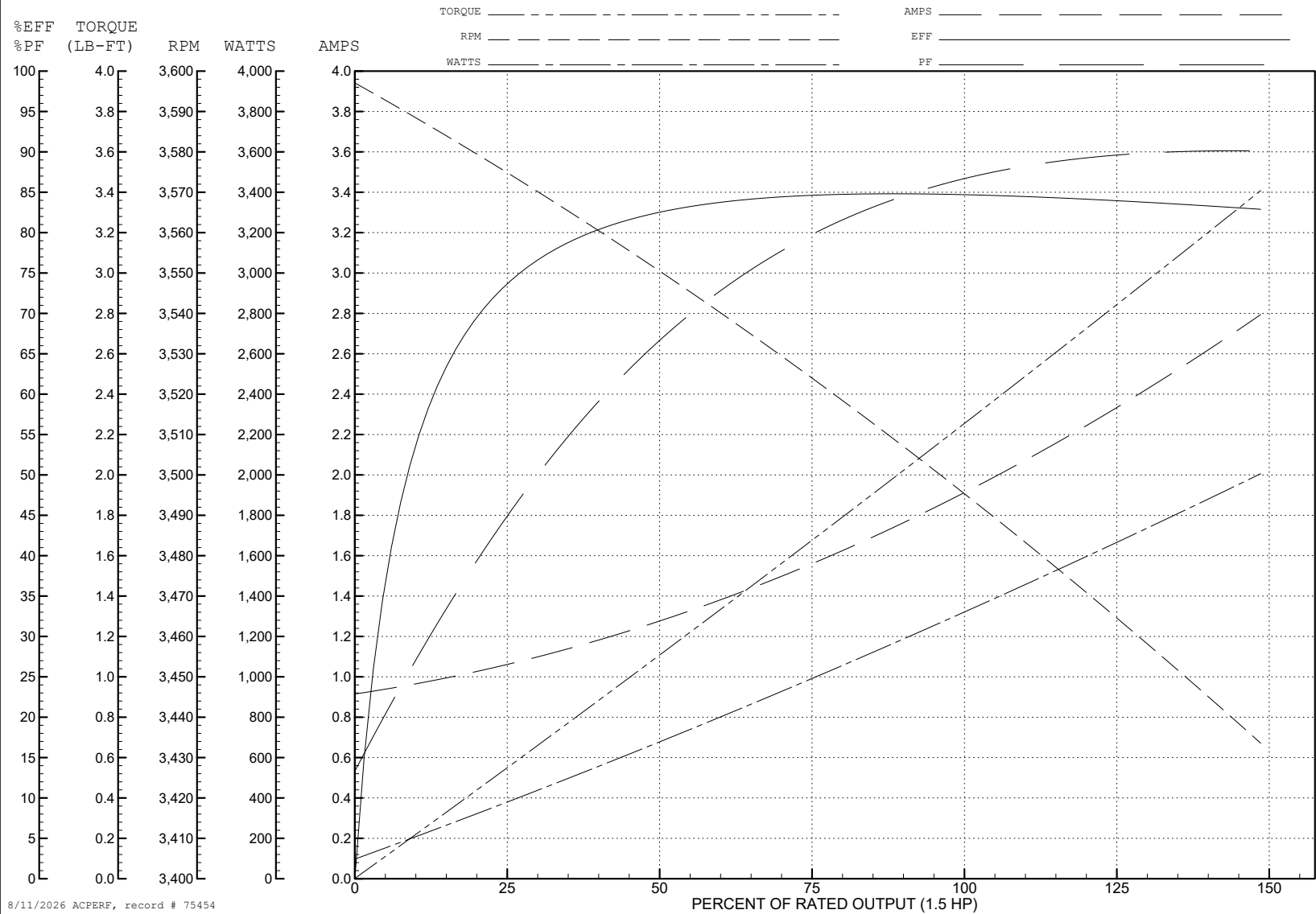
ABB Motors and Mechanical Inc.

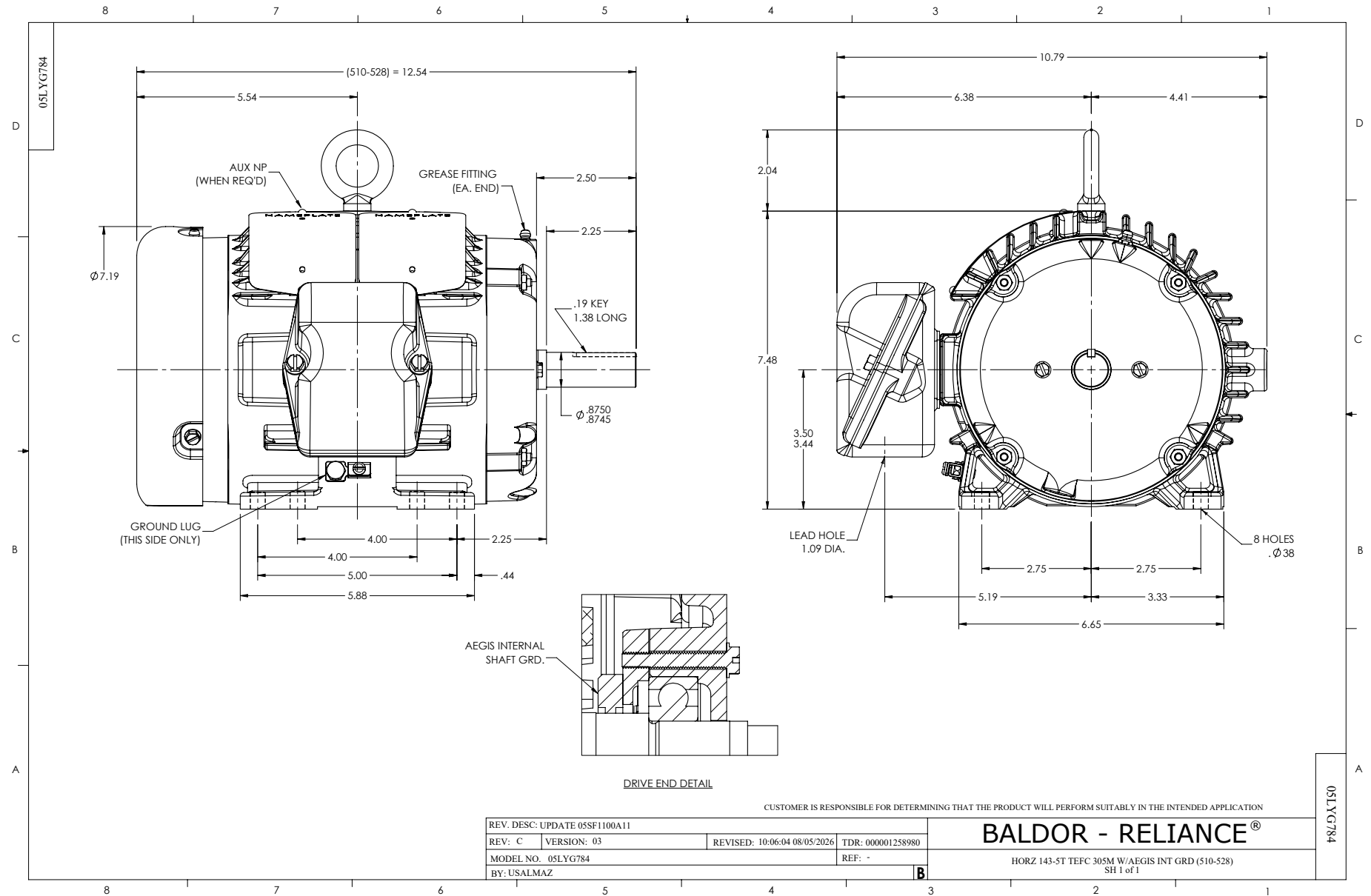
WINDING # 05WGX102

Typical performance - not guaranteed values.

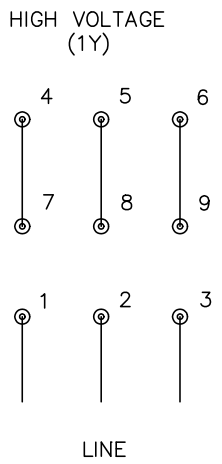
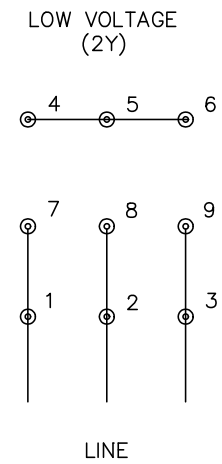
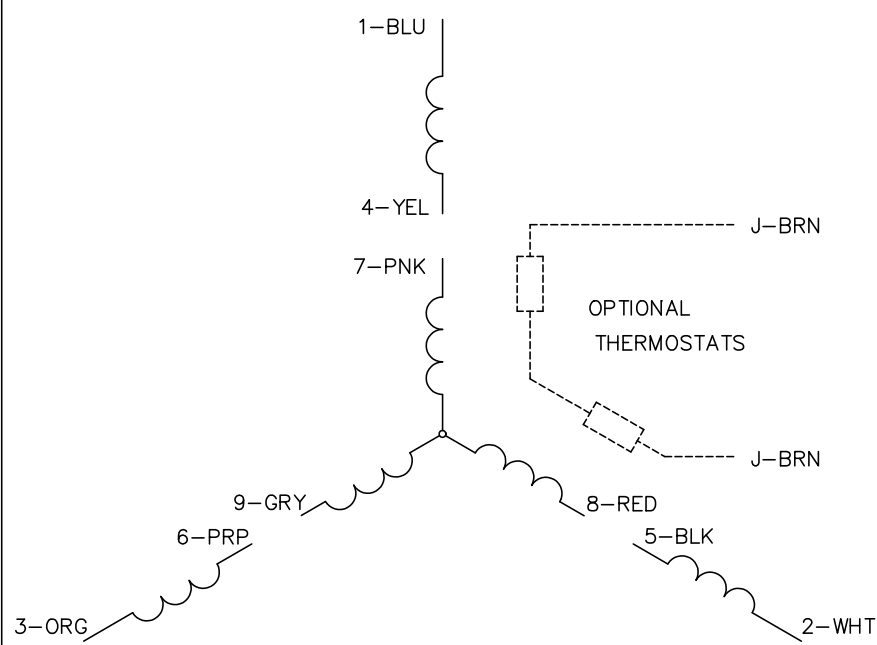
1.5 HP 3 PH 60 HZ 3500 RPM 460 V 0520M

TORQUES (LB-FT) : PO=9.49 PU=3.61 LR=7.35 LRA=17.9





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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005