

ABB BALDOR RELIANCE III

Customer information packet

EM3580T-G

1HP, 3450RPM, 3PH, 60HZ, 143T, 0516M, 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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA 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	1.400 A @ 460.0 V 2.800 A @ 230.0 V 3.000 A @ 208.0 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

Part Detail

Revision	L
Type	AC
Mech. spec.	05G236
Base	
Status	PRD/A
Elec. spec.	05WGW546
Layout	05LYG236
Eff. date	09-05-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-30-2017

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.4 a
Insulation Class	H
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.54 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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

NP3441LUA									
CAT.NO.	EM3580T-G								
SPEC	05G236W546G1								
HP	1								
VOLTS	208-230/460								
AMPS	3-2.8/1.4								
RPM	3450								
FRAME	143T		HZ	60		PH	3		
SF	1.15	CODE	L	DES	B	CLASS	H		
NEMA NOM. EFF	84	PF	82						
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 1HP 190/380V 3.2/1.6A									SF1.0

AC Induction Motor Performance Data

Record # 64023

Typical performance - not guaranteed values

Winding: 05WGW546-R022			Type: 0516M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		3-2.8/1.4	Breakdown Torque		6.5 LB-FT		
R.P.M.		3450	Pull-up Torque		4.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.7 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		12.1 A
Service Factor (S.F.)		1.15	No-load Current		0.68 A		
NEMA Nom. Eff.		84	Power Factor	82	Line-line Res. @ 25°C		15.3 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		33°C
S.F. Amps					Temp. Rise @ S.F. Load		38°C
					Locked-rotor Power Factor		56.1
					Rotor inertia		0.0442 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	65	77	83	87	87	85
Efficiency	70.4	80.6	84	84.6	84.7	83.7	84.7
Speed	3567	3539	3510	3479	3446	3410	3459
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88	1.47

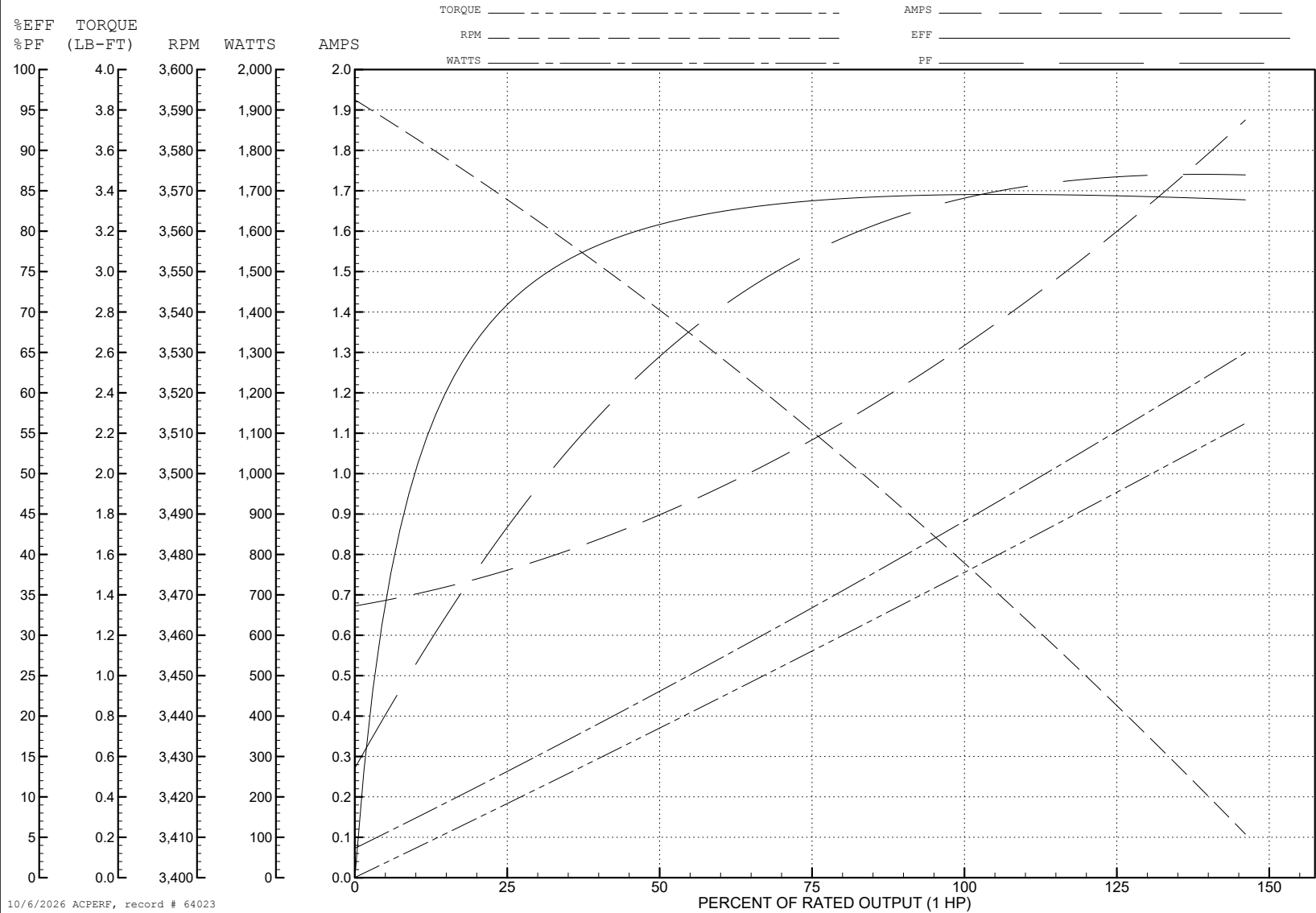
ABB Motors and Mechanical Inc.

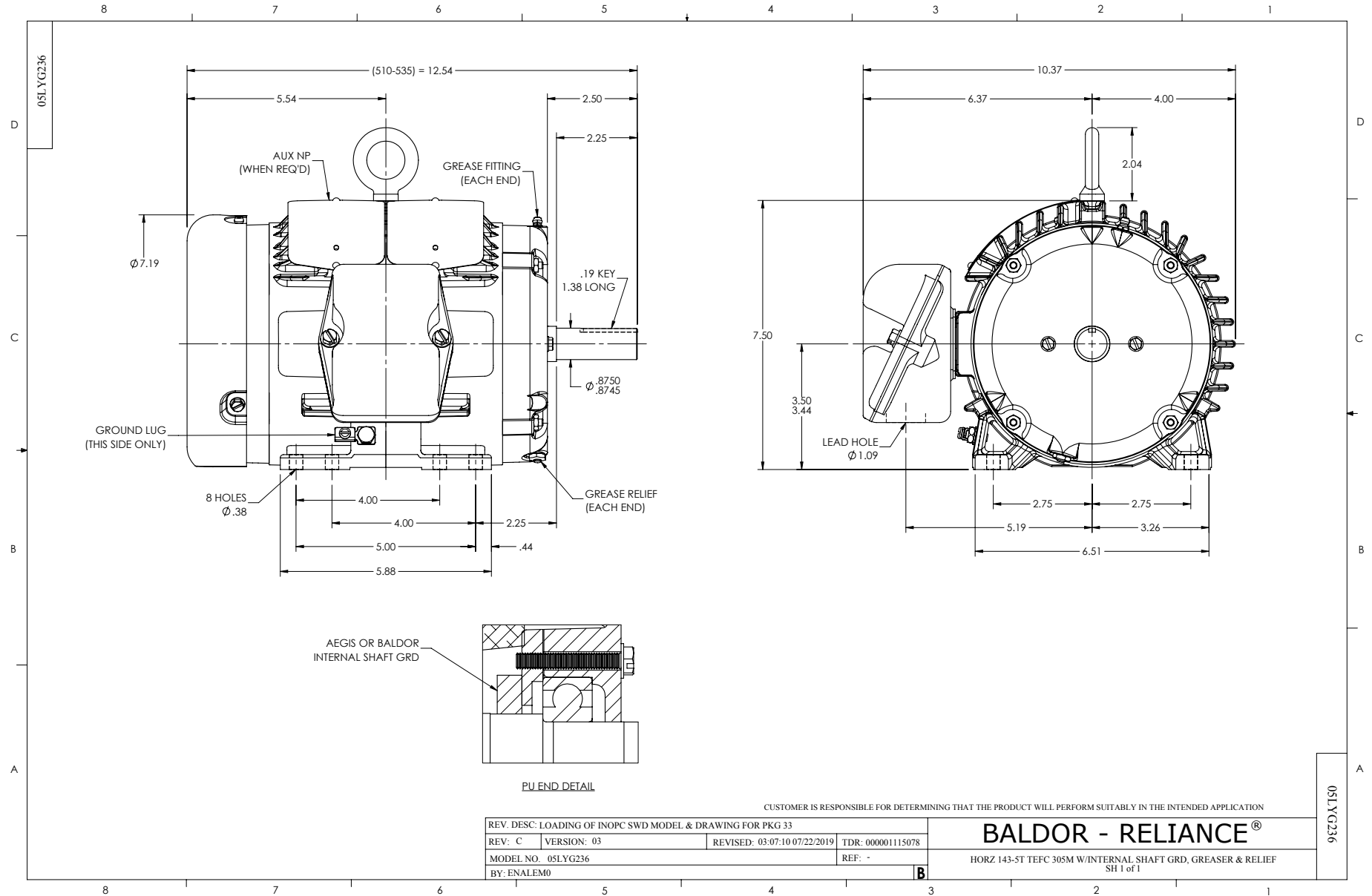
WINDING # 05WGW546

Typical performance - not guaranteed values.

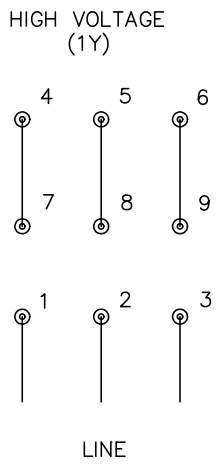
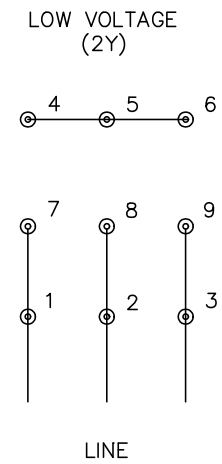
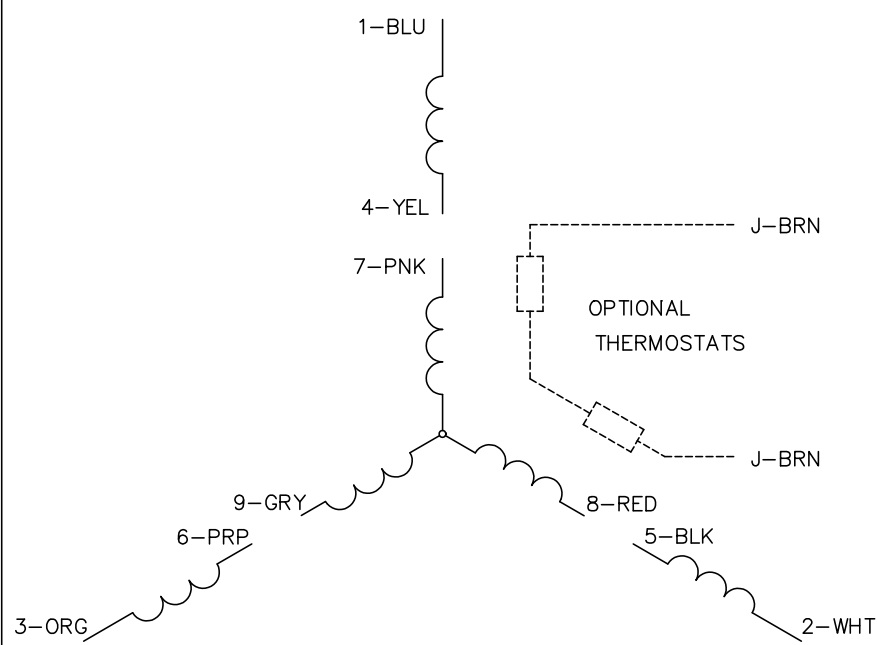
1 HP 3 PH 60 HZ 3450 RPM 460 V 0516M

TORQUES (LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1





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- 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