

BALDOR • RELIANCE

Customer information packet

EM3546T

1HP, 1770RPM, 3PH, 60HZ, 143T, 3522M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143T
Frame Material	Steel
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	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
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	3.400 A @ 230.0 V 3.300 A @ 208.0 V 1.700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	B
Type	AC
Mech. spec.	35AA001
Base	
Status	PRD/A
Elec. spec.	35Wgz805
Layout	35LYAA001
Eff. date	05-15-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-10-2024

High Voltage Full Load Amps	1.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.28 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	Y
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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.	EM3546T						
SPEC	35AA001Z805G3						
HP	1						
VOLTS	208-230/460						
AMPS	3.3-3.4/1.7						
RPM	1770						
FRAME	143T		HZ	60		PH	3
SF	1.15	CODE	N	DES	B	CLASS	F
NEMA NOM. EFF	85.5	PF	66				
RATING	40C AMB-CONT						
CC	010A						
ENCL	TEFC	SER					
DE	6205	ODE	6203				
VPWM INVERTER READY	SFA 3.6/1.8						
CT6-60H(10:1)VT3-60H(20:1)							

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 105401

Typical performance - not guaranteed values

Winding: 35WGZ805-R001		Type: 3522M		Enclosure: TEFC				
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)	1	Full Load Torque	2.97 LB-FT					
Volts	208-230/460	Start Configuration	direct on line					
Full Load Amps	3.3-3.4/1.7	Breakdown Torque	14.7 LB-FT					
R.P.M.	1770	Pull-up Torque	7.5 LB-FT					
Hz	60 Phase	3	Locked-rotor Torque	9.4 LB-FT				
NEMA Design Code	B	KVA Code	N	Starting Current	15.6 A			
Service Factor (S.F.)	1.15	No-load Current	1.2 A					
NEMA Nom. Eff.	85.5	Power Factor	66	Line-line Res. @ 25°C	14.6 Ω			
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load			37°C		
S.F. Amps	3.6/1.8	Temp. Rise @ S.F. Load		43°C				
		Locked-rotor Power Factor		58.6				
		Rotor inertia		0.159 lb-ft ²				

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	44	57	66	73	78	70
Efficiency	71.1	81.8	85.2	86.5	86.6	86.3	86.6
Speed	1796	1790	1784	1778	1772	1765	1774
Line amperes	1.23	1.31	1.46	1.64	1.86	2.09	1.77

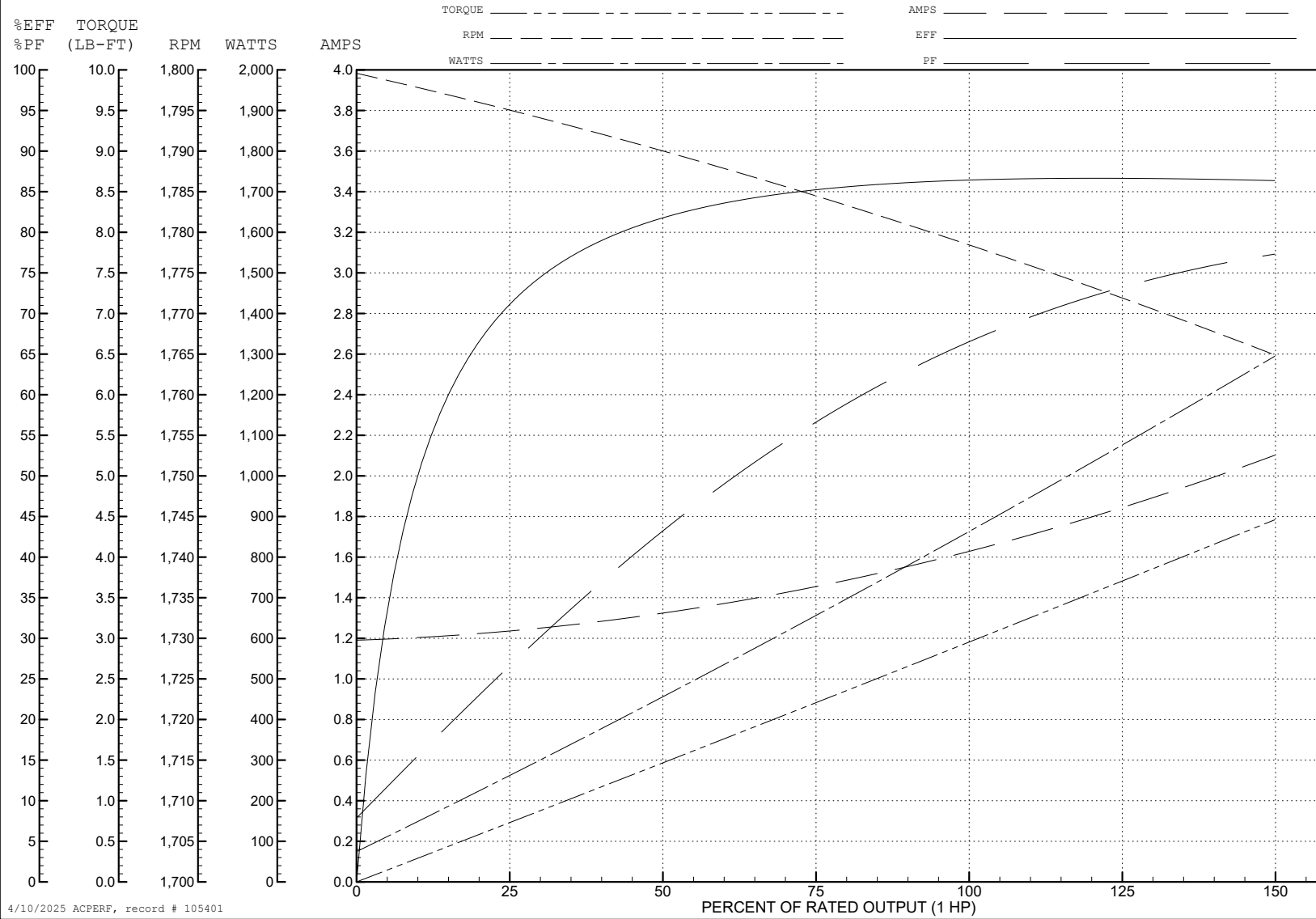
ABB Motors and Mechanical Inc.

WINDING # 35WGZ805

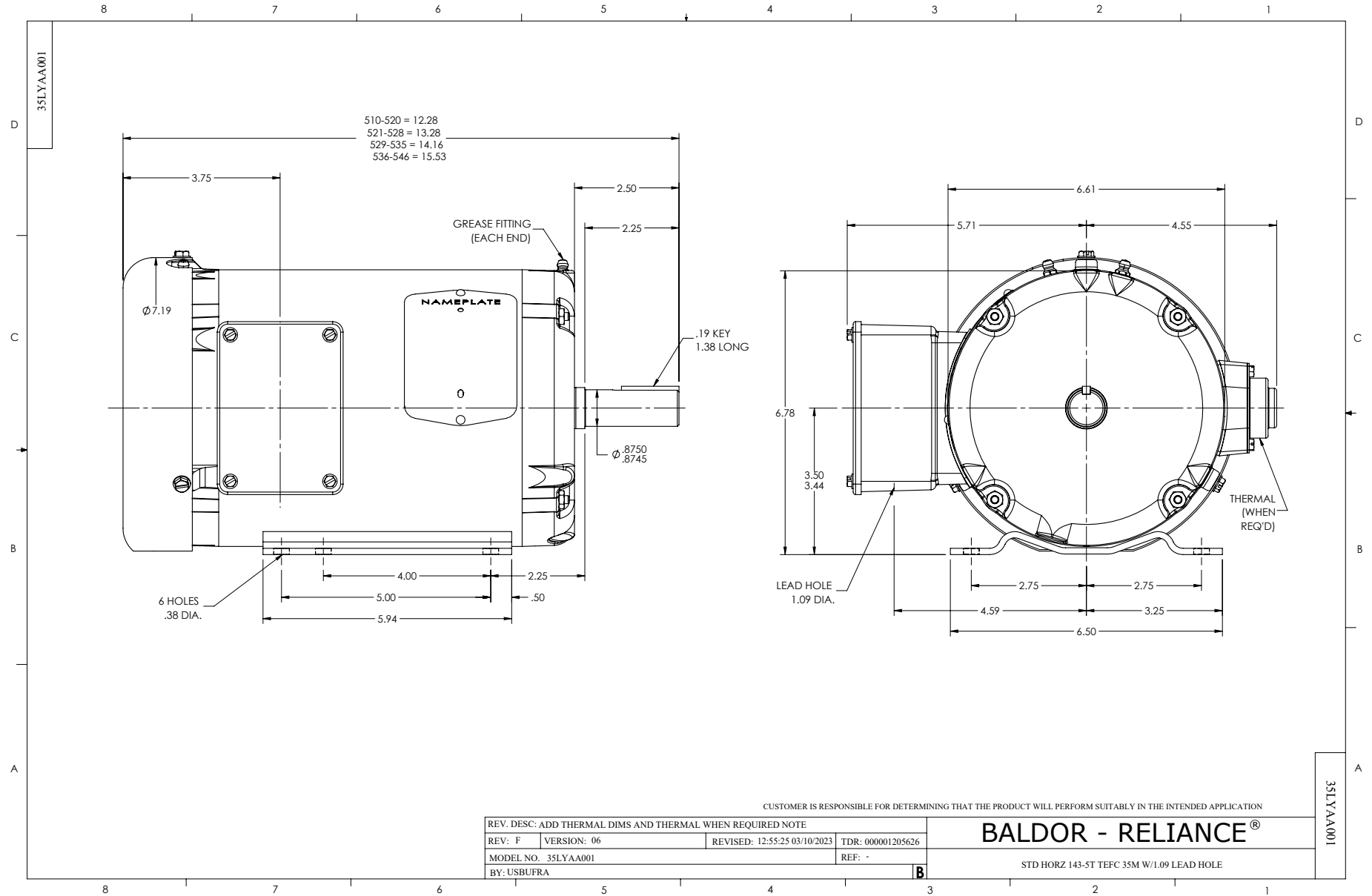
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

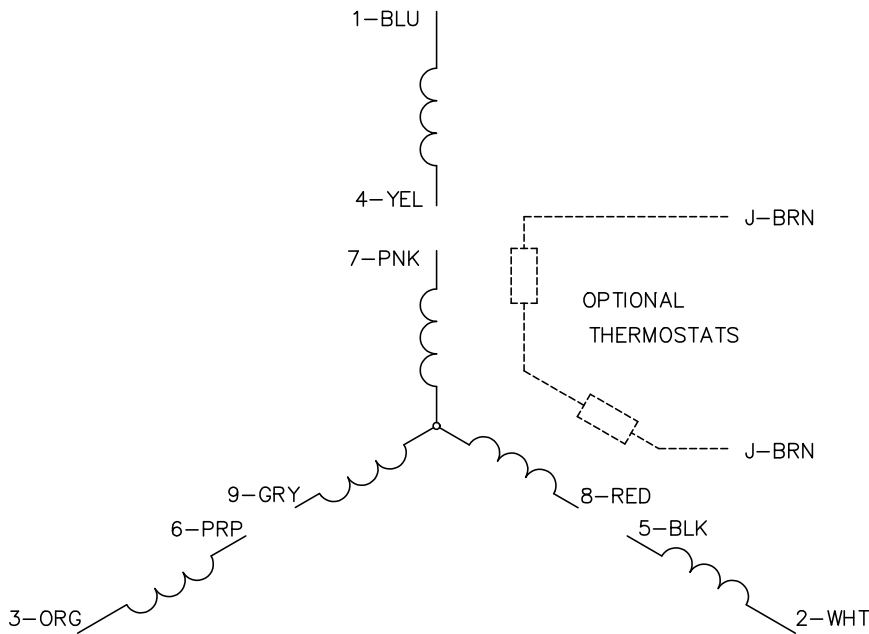
TORQUES (LB-FT): PO=14.7 PU=7.5 LR=9.4 LRA=15.6



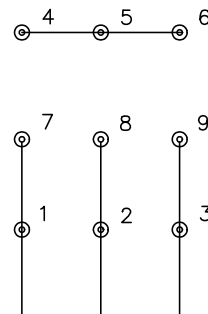
4/10/2025 ACPERF, record # 105401



CD0005

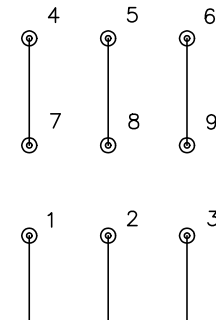


LOW VOLTAGE
(2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS