ABB BALDOR RELIANCE

Customer information packet

EM3116T-BG

1HP, 1770RPM, 3PH, 60HZ, 143T, 3522M, OPSB, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
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	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM
	CURUSEEV
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	1.700 A @ 460.0 V
	3.400 A @ 230.0 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
High Voltage Full Load Amps	1.7 a
Insulation Class	H

Part Detail

Revision	B
Type	AC
Mech. spec.	35E2261
Base	
Status	PRD/A
Elec. spec.	35WGZ805
Layout	35LYE2261
Eff. date	08-20-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-03-2024

Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	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	11.63 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	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	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

NP3553LUA											
CAT.NO.	EM3116T-BG										
SPEC.	35E2261Z805										
HP	1										
VOLTS	230/460										
AMPS	3.4/1.7										
RPM	1770										
FRAME	143T	**HZ**	60			**PH**	3				
SF	1.15	**CODE**	N	**DES**	B	**CLASS**	H				
NEMA NOM. EFF	85.5	**PF**	66								
RATING	40C AMB-CONT										
CC	010A										
ENCL	OPSB	**SN**									
DE	6205	**ODE**	6203								
VPWM INVERTER READY	SFA 3.6/1.8										
CT30-60(2:1) VT3-60(20:1)											
USABLE AT											

AC Induction Motor Performance Data
Record # 107042
Preliminary Data Sheet

Winding: 35WGZ805-R057	**Type:** 3522M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	2.97 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			3.4/1.7	**Breakdown Torque**	15.9 LB-FT
R.P.M.			1770	**Pull-up Torque**	9.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	10.4 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	15.7 A
Service Factor (S.F.)			1.15	**No-load Current**	1.21 A
NEMA Nom. Eff.	85.5	**Power Factor**	66	**Line-line Res. @ 25ºC**	14.6 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	24°C
S.F. Amps			3.6/1.8	**Temp. Rise @ S.F. Load**	28°C
				Locked-rotor Power Factor	58.6
				Rotor inertia	0.159 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	27	43	56	65	72	76	69
Efficiency	70.7	81	84.4	85.8	85.9	85.5	85.9
Speed	1792	1785	1778	1771	1763	1755	1766
Line amperes	1.23	1.34	1.49	1.68	1.89	2.15	1.81

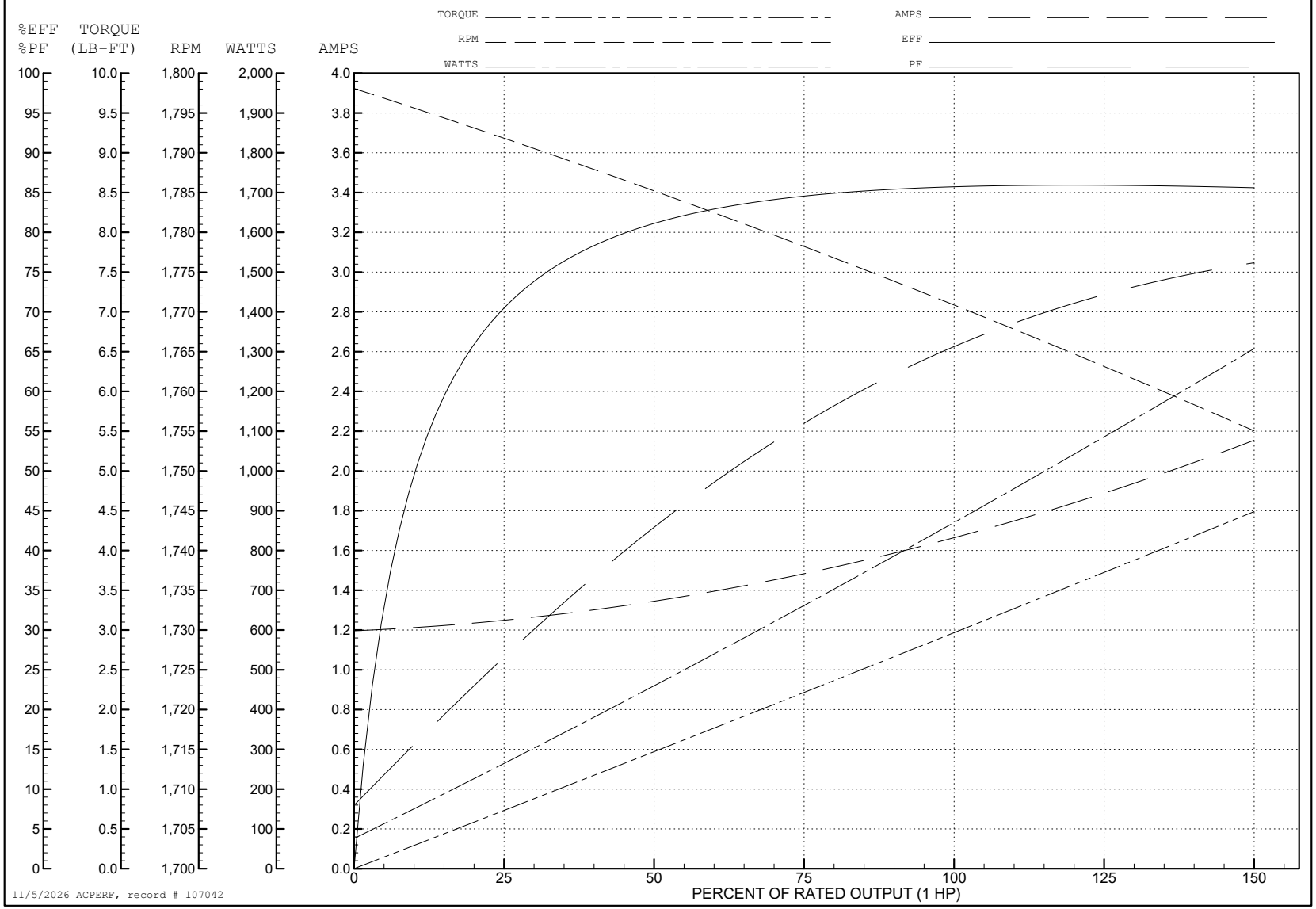
ABB Motors and Mechanical Inc.

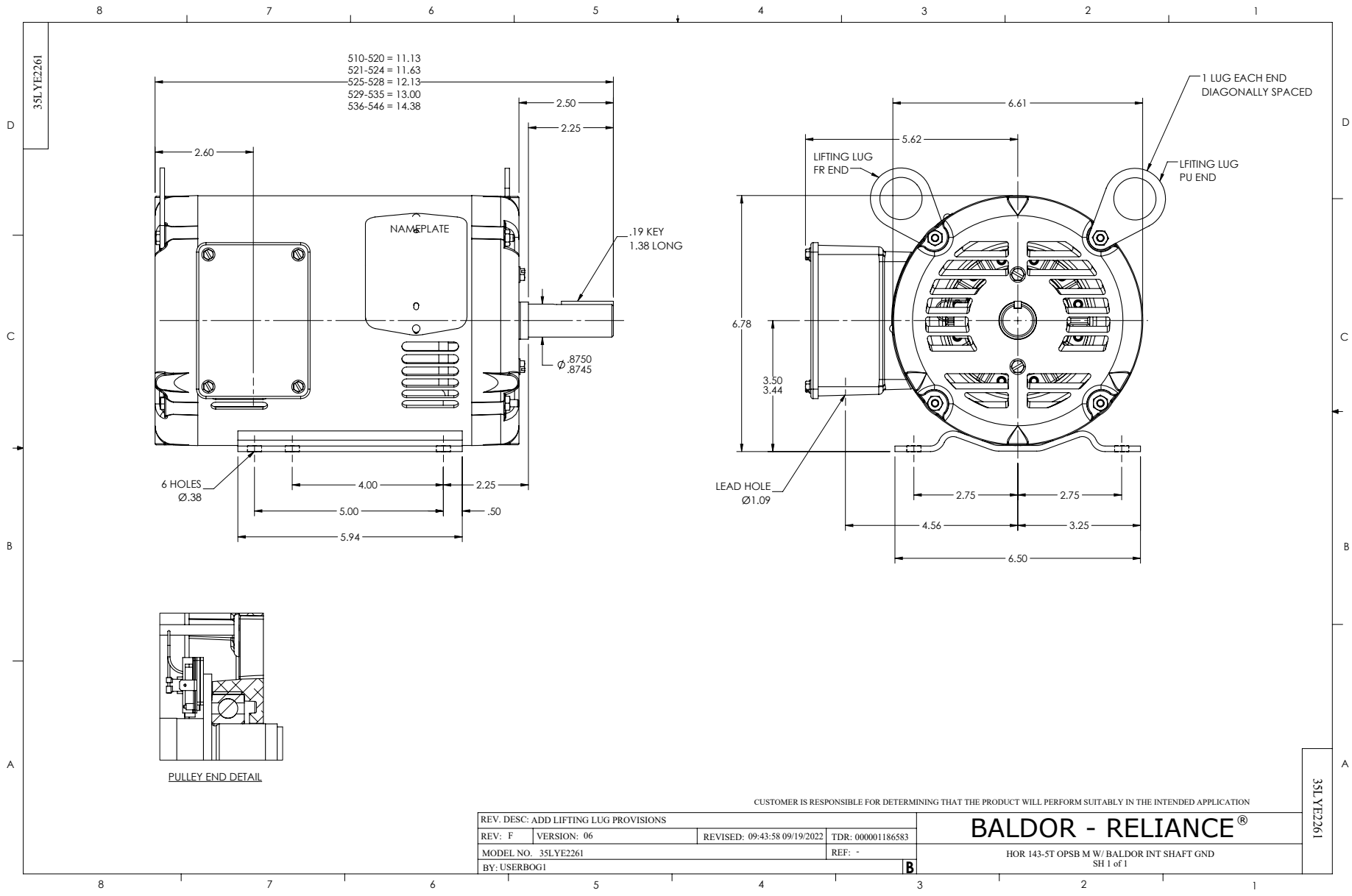
WINDING # 35WGZ805

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

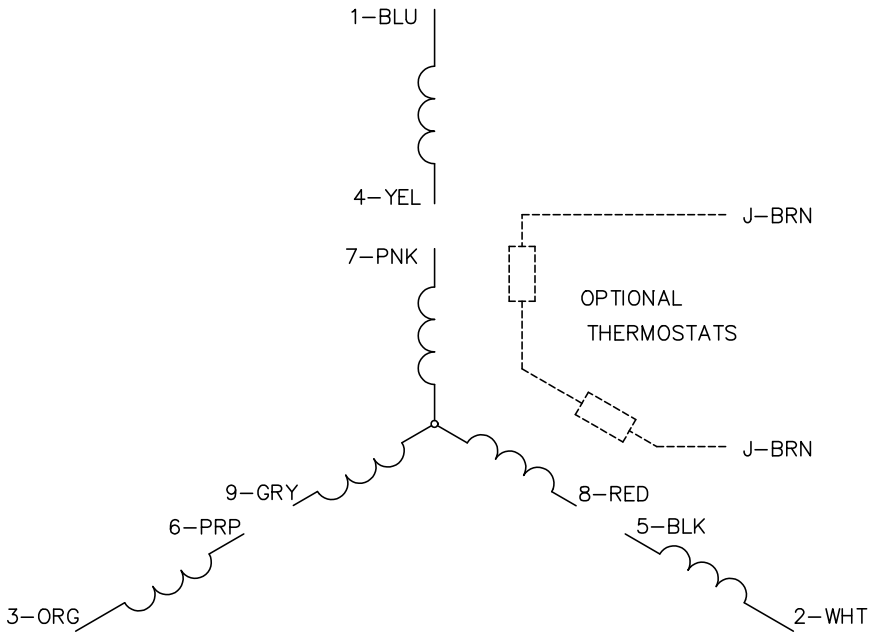
Typical performance - not guaranteed values.

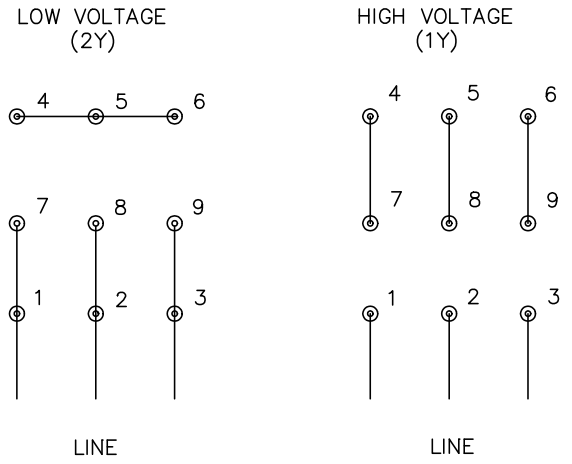
TORQUES(LB-FT): PO=15.9 PU=9.1 LR=10.4 LRA=15.7




35LYE2261
510-520 = 11.13
521-524 = 11.63
525-528 = 12.13
529-535 = 13.00
536-546 = 14.38
2.50
2.25
2.60
NAMEPLATE
.19 KEY
1.38 LONG
Ø .8750
Ø .8745
6 HOLES
Ø.38
4.00
2.25
5.00
.50
5.94
6.61
5.62
1 LUG EACH END
DIAGONALLY SPACED
LIFTING LUG
FR END
LFITING LUG
PU END
6.78
3.50
3.44
LEAD HOLE
Ø1.09
2.75
2.75
4.56
3.25
6.50
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD LIFTING LUG PROVISIONS
REV: F
VERSION: 06
REVISED: 09:43:58 09/19/2022
TDR: 000001186583
MODEL NO. 35LYE2261
REF: -
BY: USERBOG1
B
BALDOR - RELIANCE®
HOR 143-5T OPSB M W/ BALDOR INT SHAFT GND
SH 1 of 1
35LYE2261

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