



Customer information packet

EM3116T

1HP, 1770RPM, 3PH, 60HZ, 143T, 3520M, OPSB, F1

Class - None

Division - Not Applicable

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	CSA EEV NEMA PREMIUM 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	3.200 A @ 230.0 V 3.200 A @ 208.0 V 1.600 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

Part detail

Revision	F
Type	AC
Mech. spec.	35L405
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYL405
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	07-16-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 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	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.13 IN
Power Factor	69
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	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

NP3553LUA

CAT.NO.	EM3116T						
SPEC.	35L405G004G1						
HP	1						
VOLTS	230/460						
AMPS	3.2/1.6						
RPM	1770						
FRAME	143T	HZ	60	PH	3		
SF	1.15	CODE	N	DES	B	CLASS	F
NEMA NOM. EFF	85.5	PF	69				
RATING	40C AMB-CONT						
CC	010A						
ENCL	OPSB	SN					
DE	6205	ODE	6203				
VPWM INVERTER READY	SFA 3.4/1.7						
CT30-60(2:1) VT3-60(20:1)							
USABLE AT	50HZ 1HP 190/380V 3.6/1.8A						SF1.0

Parts list

Part number	Description	Quantity
SA396276	SA 35L405G004G1	1.000 ea
RA387084	RA 35L405G004G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3210A00	MASTER DE,205 BRG,1.000SH,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	2.000 ea
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,GOLD	0.017 ga
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
35-8764	C FACE KIT	A8
35EP1604A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 91625

Typical performance - not guaranteed values

Winding: 35WGG004-R001		Type: 3520M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	1	Full Load Torque	2.982 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	3.2/1.6	Breakdown Torque	14.6 LB-FT		
R.P.M.	1770	Pull-up Torque	7.57 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	9.17 LB-FT	
NEMA Design Code	B KVA Code	N	Starting Current	14.6 A	
Service Factor (S.F.)	1.15	No-load Current	1.2 A		
NEMA Nom. Eff.	85.5 Power Factor	69	Line-line Res. @ 25°C	16.049 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	36°C		
S.F. Amps	3.4/1.7	Temp. Rise @ S.F. Load	41°C		
		Locked-rotor Power Factor	61.549		
		Rotor inertia	0.144 lb-ft ²		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	1.22	1.31	1.46	1.64	1.86	2.11	1.77

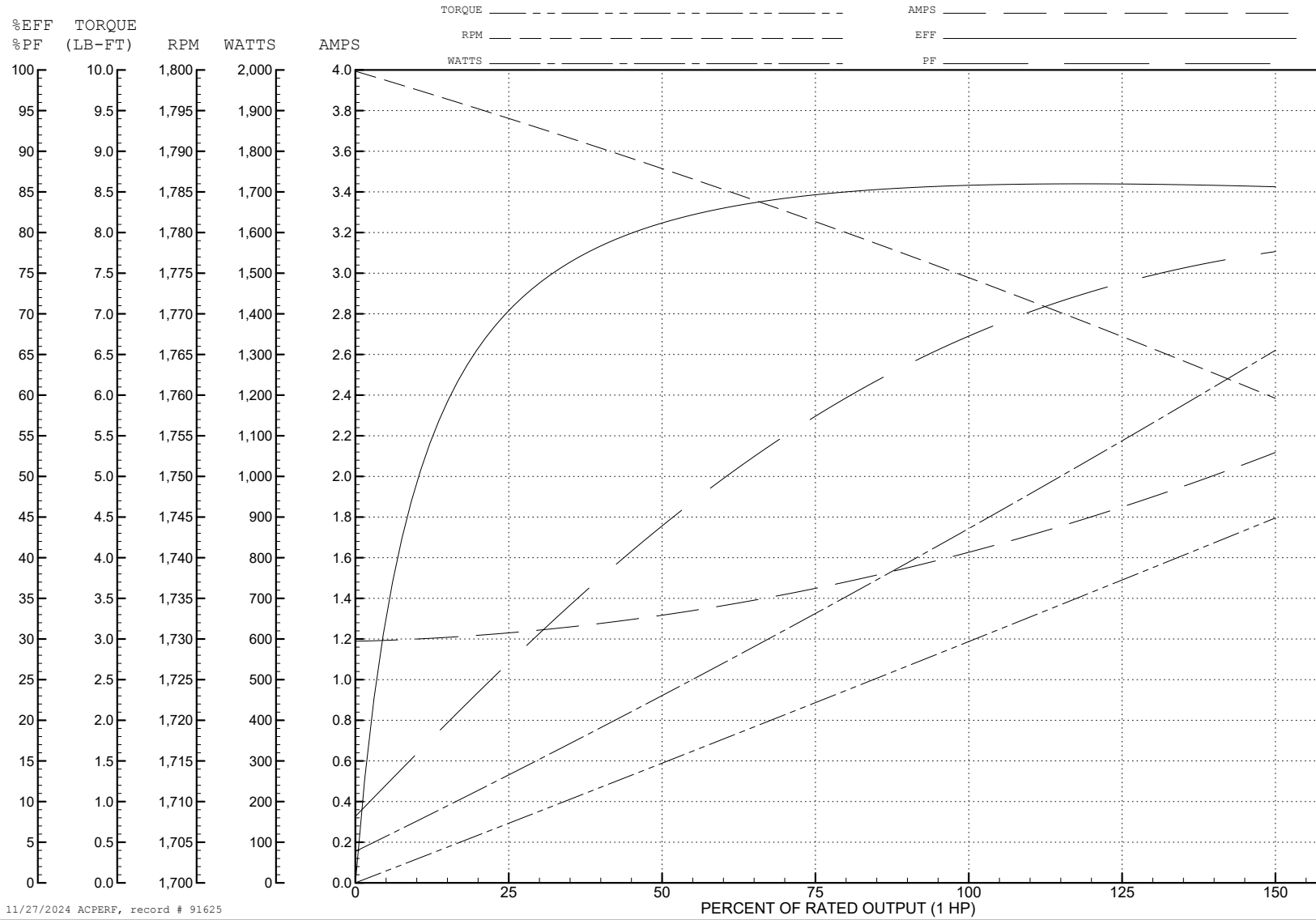
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

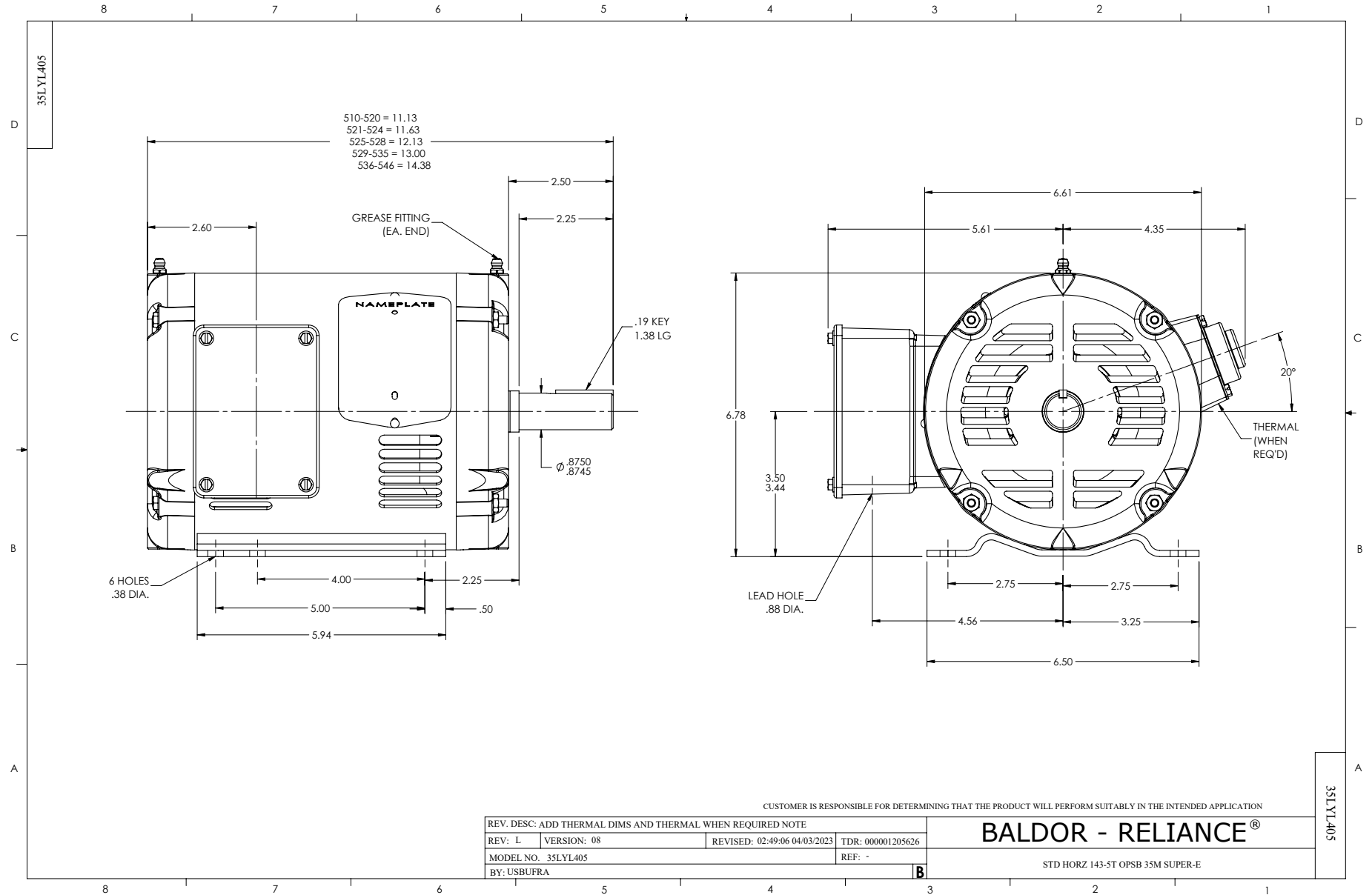
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

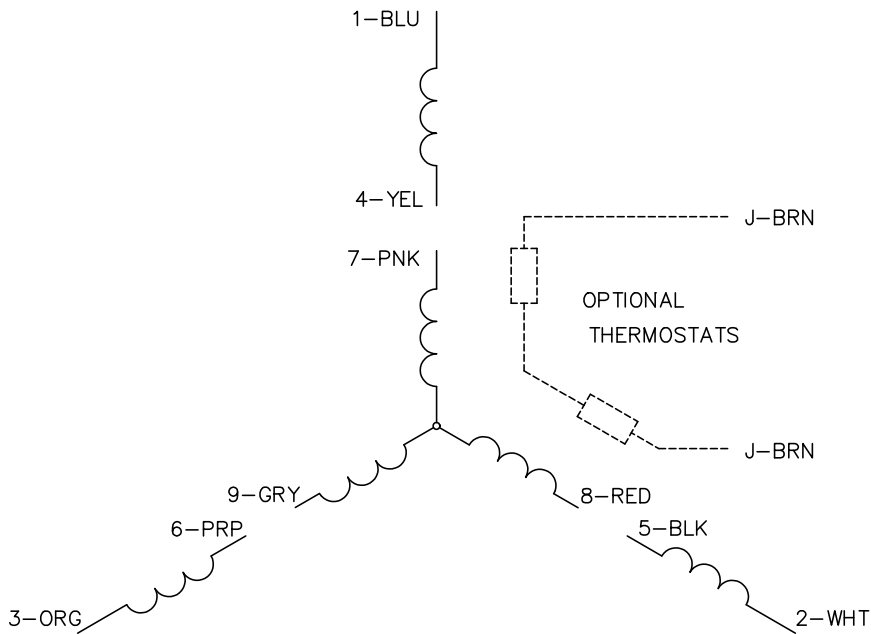
TORQUES (LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6



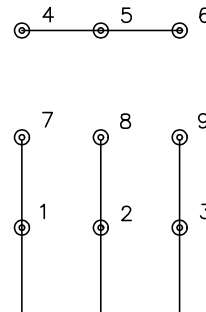
11/27/2024 ACPERF, record # 91625



CD0005

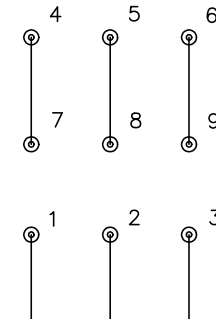


LOW VOLTAGE (2Y)



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