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# Customer information packet

## EM3546T-57

1/.75KWHP, 1470RPM, 3PH, 50HZ, 143T, 3520M, TE

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	143T
Frame Material	Steel
Frequency	50.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ 230.0 V @ 50 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	C UR US CE CURUS IE3 UKCA WEEE
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	3.450 A @ 230.0 V 2.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

## Part detail

Revision	B
Type	AC
Mech. spec.	35AA001
Base	
Status	PRD/A
Elec. spec.	35WGZ921
Layout	35LYAA001
Eff. date	07-06-2023
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	03-11-2022

<b>Front Shaft Indicator</b>	None
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	2.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Not Inverter
<b>KVA Code</b>	N
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	6 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3520M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	12.31 IN
<b>Power Factor</b>	65
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	0.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1470 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP2716L</b>									
<b>CAT NO</b>	EM3546T-57								
<b>SPEC.</b>	35AA001Z921G1								
<b>HP</b>	1/.75KW				<b>PH</b>	3			
<b>VOLTS</b>	230/400								
<b>AMP</b>	3.45/2								
<b>R.P.M. (1/MIN)</b>	1470								
<b>FRAME</b>	143T		<b>HZ</b>	50		<b>I.P.</b>	44		
<b>SER.F.</b>	1.15	<b>CODE</b>	N	<b>DES</b>	B	<b>CL</b>	F		
<b>NOM.EFF.</b>	82.5		<b>% (100%)</b>						
<b>PF</b>	65								
<b>RATING</b>	40C AMB-S1 CONT				<b>CC</b>				
<b>DE BRG</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>BLANK</b>	SFA 3.7/2.15								
	IC411 15KG								

**AC Induction Motor Performance Data**

Record # 88662

Typical performance - not guaranteed values

<b>Winding:</b> 35WZ921-R001		<b>Type:</b> 3520M		<b>Enclosure:</b> TEFC	
<b>Nameplate Data</b>			<b>400 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	3.56 LB-FT		
<b>Volts</b>	230/400	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3.45/2	<b>Breakdown Torque</b>	17.3 LB-FT		
<b>R.P.M.</b>	1470	<b>Pull-up Torque</b>	11 LB-FT		
<b>Hz</b>	50 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	12.7 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	N	<b>Starting Current</b>	18.2 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	1.65 A		
<b>NEMA Nom. Eff.</b>	82.5 <b>Power Factor</b>	65	<b>Line-line Res. @ 25°C</b>	13.5 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	32°C		
<b>S.F. Amps</b>	3.7/2.15	<b>Temp. Rise @ S.F. Load</b>	36°C		
		<b>Locked-rotor Power Factor</b>	68		
		<b>Rotor inertia</b>	0.144 lb-ft <sup>2</sup>		

**Load Characteristics 400 V, 50 Hz, 1 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	26	40	53	62	70	75	67
<b>Efficiency</b>	62.7	75.6	80.6	82.5	83.1	82.9	82.6
<b>Speed</b>	1494	1488	1483	1477	1470	1463	1473
<b>Line amperes</b>	1.67	1.77	1.9	2.09	2.32	2.59	2.23

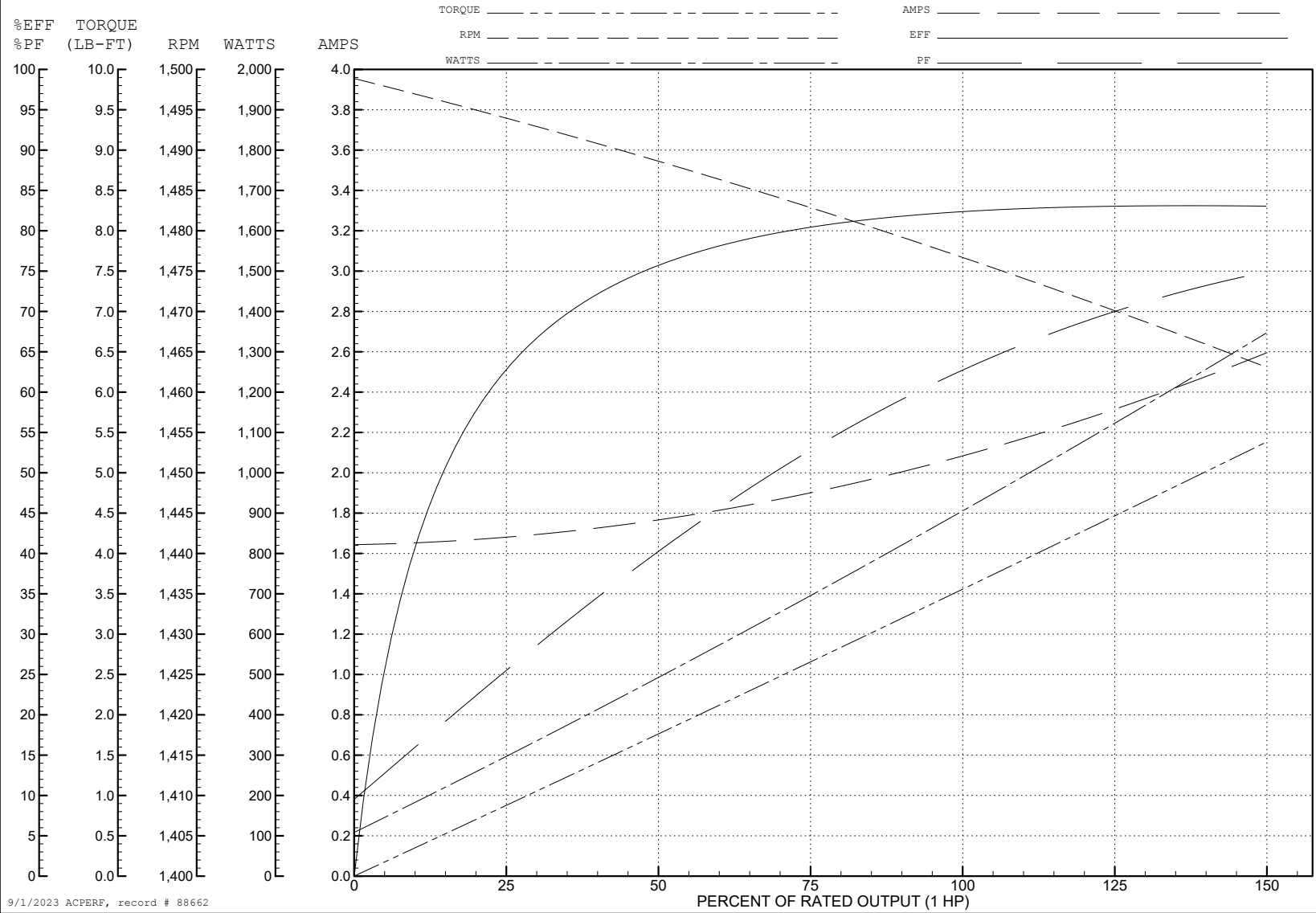
ABB Motors and Mechanical Inc.

WINDING # 35WGZ921

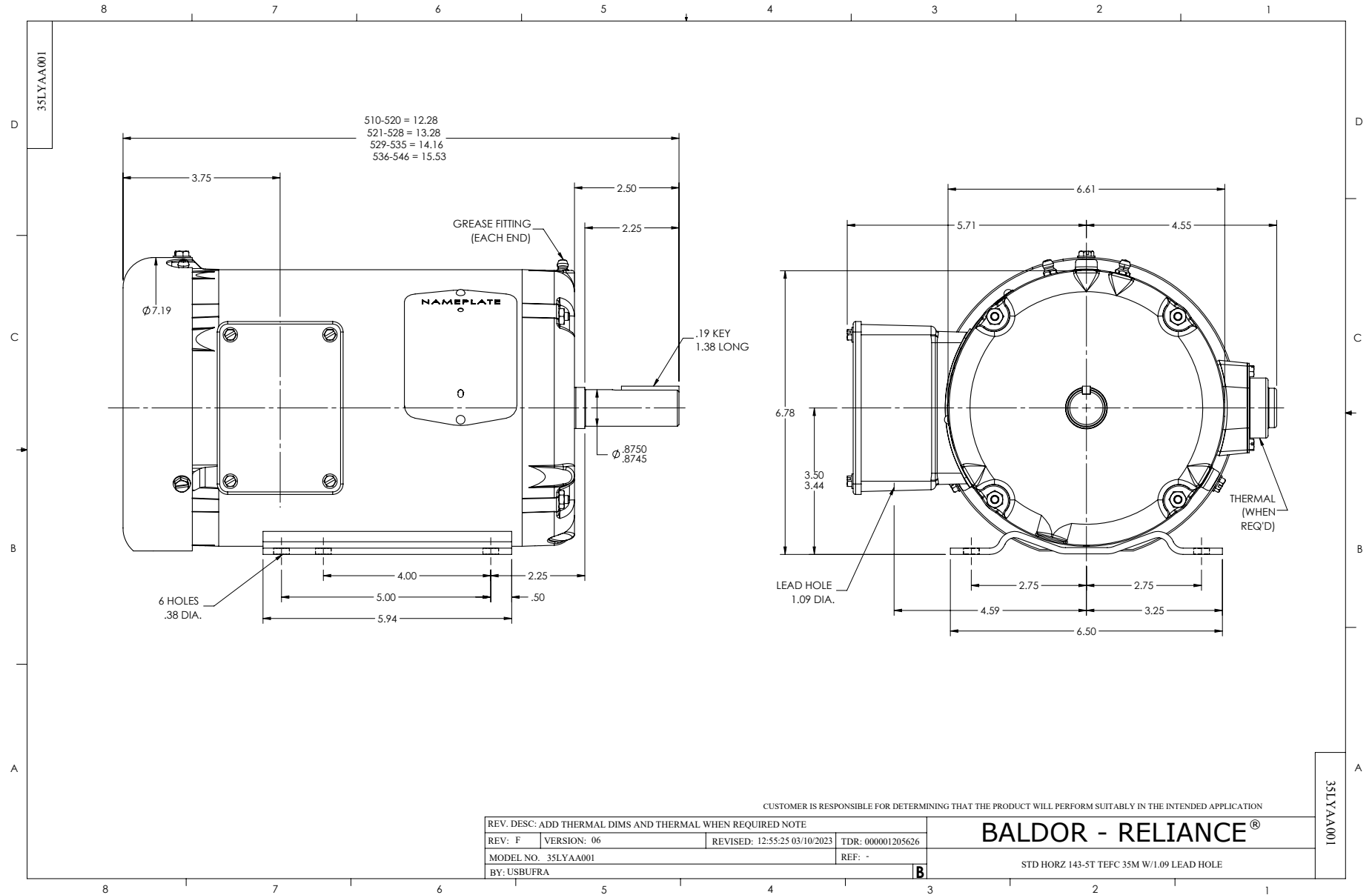
Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 1470 RPM 400 V 3520M

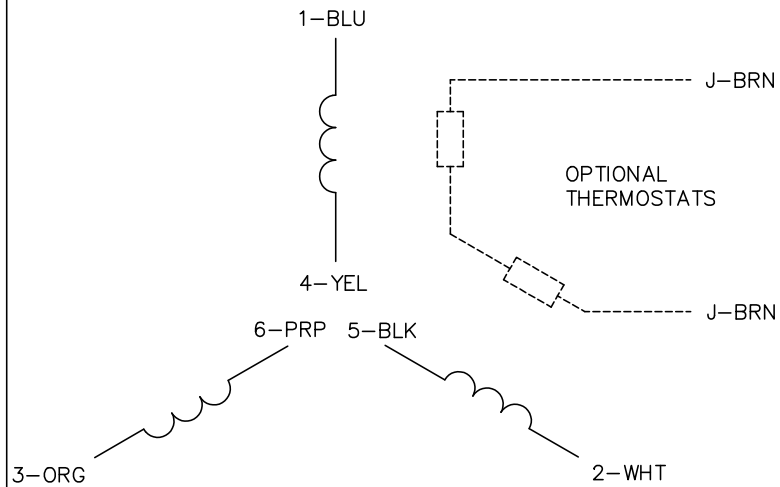
TORQUES (LB-FT): PO=17.3 PU=11 LR=12.7 LRA=18.2



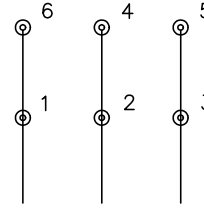
9/1/2023 ACPERF, record # 88662



CD0022

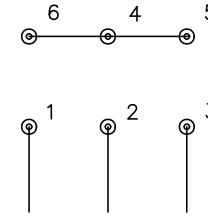


LOW VOLTAGE  
(1D)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022