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# Customer information packet

## EM3559T

3HP, 3450RPM, 3PH, 60HZ, 145T, 3532M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	145T
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	3.600 A @ 460.0 V 7.200 A @ 230.0 V 7.900 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	T
Type	AC
Mech. spec.	35TT638
Base	
Status	PRD/A
Elec. spec.	35WGQ060
Layout	35LYTT638
Eff. date	08-28-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-10-2012

High Voltage Full Load Amps	3.6 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	3532M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.17 IN
Power Factor	92
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	No 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

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Winding Thermal 2

None

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**Nameplate**

**NP3441LUA**

<b>CAT.NO.</b>	EM3559T						
<b>SPEC</b>	35TT638Q060G2						
<b>HP</b>	3						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	7.2/3.6						
<b>RPM</b>	3450						
<b>FRAME</b>	145T		<b>HZ</b>	60		<b>PH</b>	3
<b>SF</b>	1.15	<b>CODE</b>	L	<b>DES</b>	B	<b>CLASS</b>	F
<b>NEMA NOM. EFF</b>	86.5	<b>PF</b>	92				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>ENCL</b>	TEFC	<b>SER</b>					
<b>DE</b>	6205	<b>ODE</b>	6203				
<b>VPWM INVERTER READY</b>							
<b>CT6-60H(10:1)VT3-60H(20:1</b>	50Hz 3HP 190/380V 8.8/4.4A						SF1.0

**AC Induction Motor Performance Data**

Record # 50261

Typical performance - not guaranteed values

<b>Winding: 35WGQ060-R002</b>		<b>Type: 3532M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	3	<b>Full Load Torque</b>	4.5 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	7.2/3.6	<b>Breakdown Torque</b>	18 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	11 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	16 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	L	<b>Starting Current</b>	33 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	1.2 A	
<b>NEMA Nom. Eff.</b>	86.5 <b>Power Factor</b>	92	<b>Line-line Res. @ 25°C</b>	4.72 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	61°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	76°C	

**Load Characteristics 460 V, 60 Hz, 3 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>	62	81	88	92	93	94	93
<b>Efficiency</b>	83.7	87.9	88.2	87.2	85.6	83.5	86.2
<b>Speed</b>	3562	3531	3498	3462	3421	3375	3437
<b>Line amperes</b>	1.5	2.1	2.8	3.6	4.5	5.4	4.1

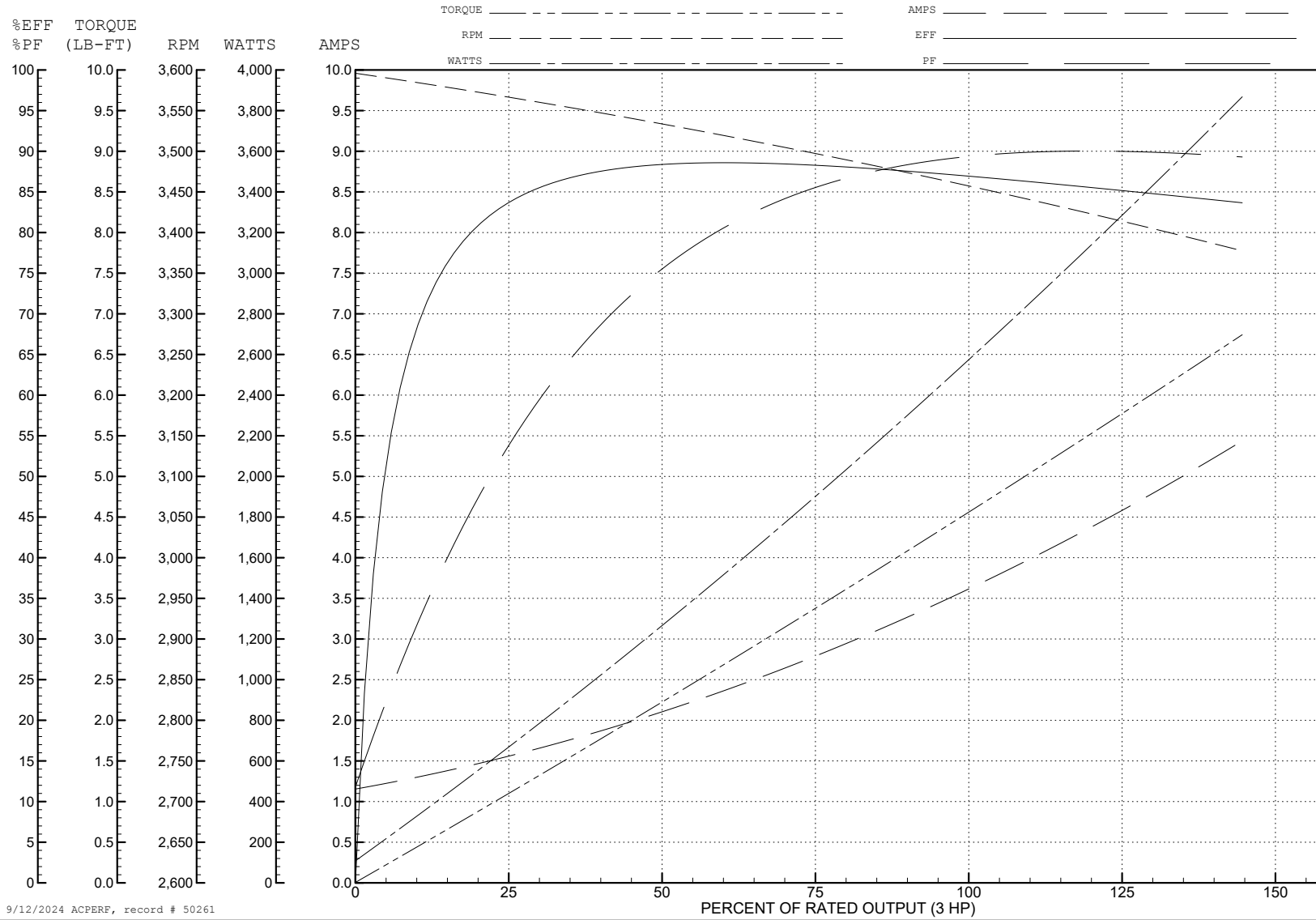
ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

3 HP 3 PH 60 HZ 3450 RPM 460 V 3532M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=33



9/12/2024 ACPERF, record # 50261

**AC Induction Motor Performance Data**

Record # 59171

Typical performance - not guaranteed values

<b>Winding: 35WGQ060-R002</b>		<b>Type: 3532M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	3	<b>Full Load Torque</b>	4.5 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	7.2/3.6	<b>Breakdown Torque</b>	18 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	11 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	16 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	L	<b>Starting Current</b>	66 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	2.4 A	
<b>NEMA Nom. Eff.</b>	86.5	<b>Power Factor</b>	92	<b>Line-line Res. @ 25°C</b>	1.17 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	61°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	73°C	
			<b>Locked-rotor Power Factor</b>	47.1	
			<b>Rotor inertia</b>	0.0885 LB-FT <sup>2</sup>	

**Load Characteristics 230 V, 60 Hz, 3 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>	57	77	85	88	89	90	89
<b>Efficiency</b>	84.1	87.9	88.4	87.2	85.7	83.5	86.3
<b>Speed</b>	3562	3531	3498	3462	3421	3375	3437
<b>Line amperes</b>	3	4.2	5.6	7.2	9	10.8	8.28



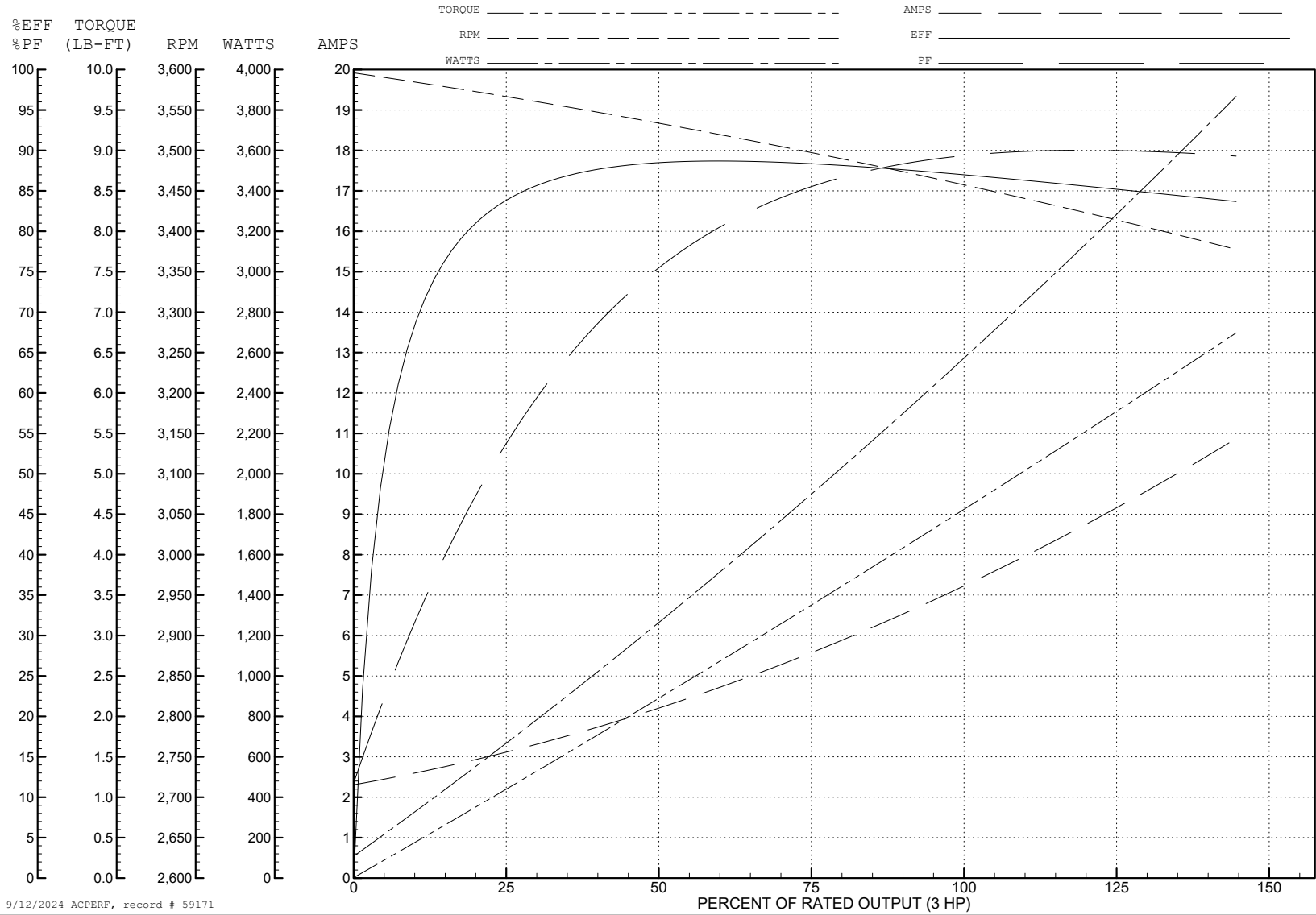
ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

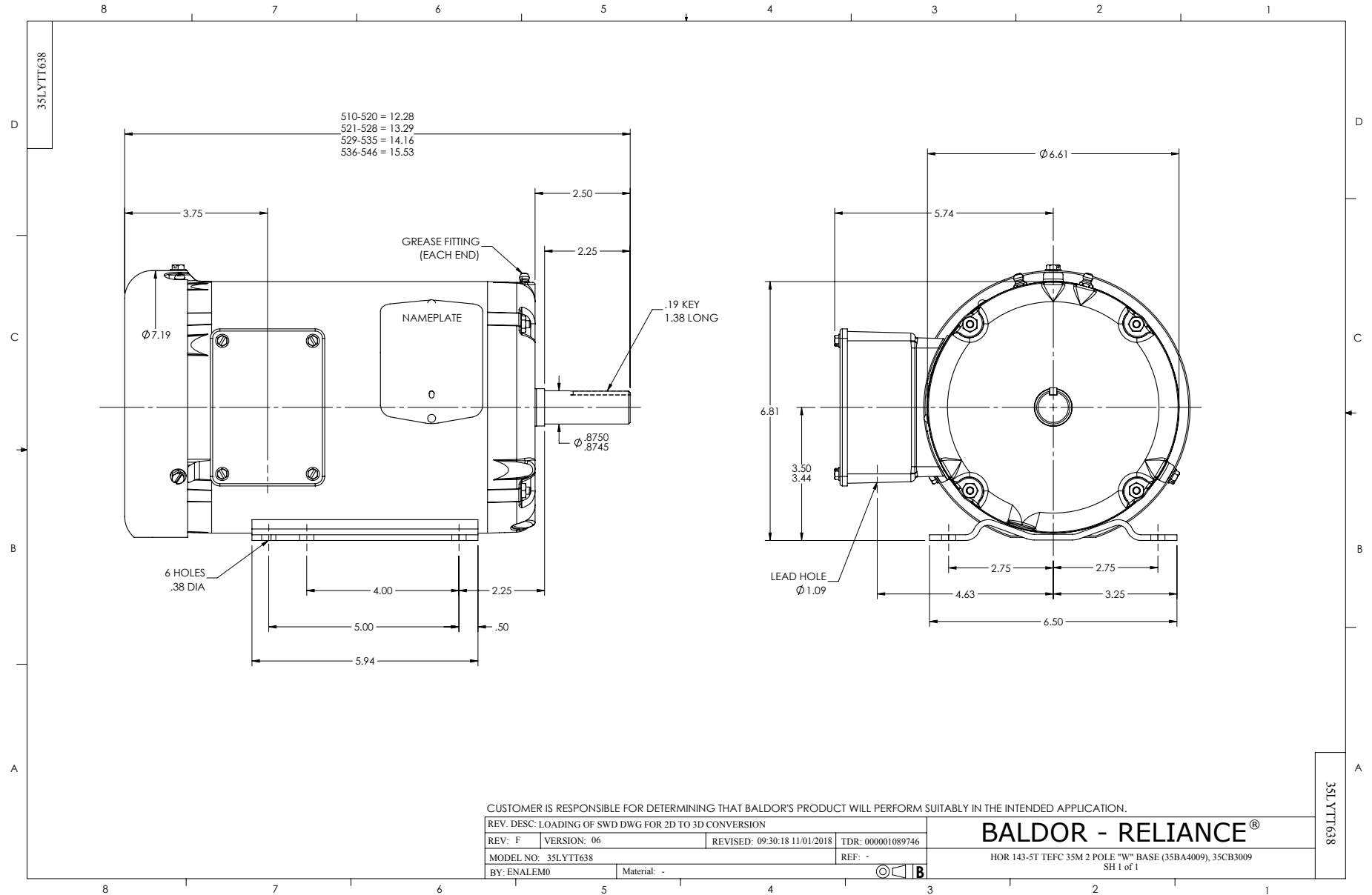
3 HP 3 PH 60 HZ 3450 RPM 230 V 3532M

Typical performance - not guaranteed values.

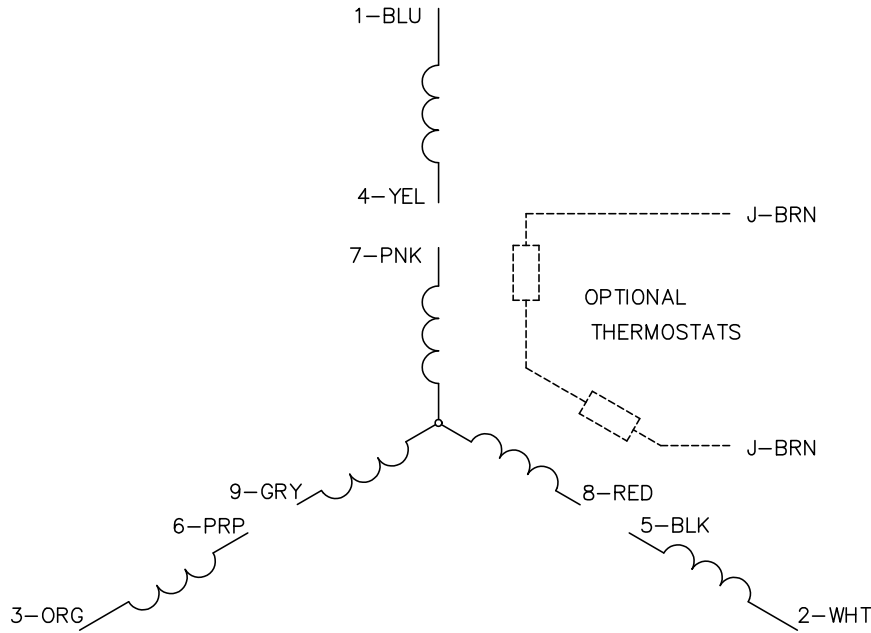
TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=66



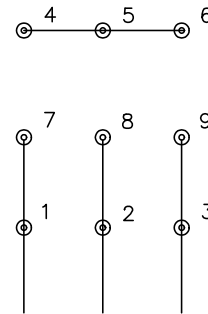
9/12/2024 ACPERF, record # 59171



CD0005

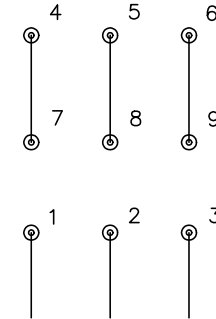


LOW VOLTAGE  
(2Y)



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