

**BALDOR • RELIANCE**

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# Customer information packet

## CEM3559T

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

Class - None

Division - Not Applicable

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4/10/2025 10:18:01 PM

## Specifications

Enclosure	TEFC
Frame	143TC
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	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	7.900 A @ 208.0 V 7.200 A @ 230.0 V 3.600 A @ 460.0 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

## Part detail

Revision	R
Type	AC
Mech. spec.	35TT856
Base	
Status	PRD/A
Elec. spec.	35WGQ060
Layout	35LYTT856
Eff. date	04-30-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	08-03-2010

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	C-Face
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

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

**NP3441LUA**

<b>CAT.NO.</b>	CEM3559T						
<b>SPEC</b>	35TT856Q060G1						
<b>HP</b>	3						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	7.2/3.6						
<b>RPM</b>	3450						
<b>FRAME</b>	143TC		<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

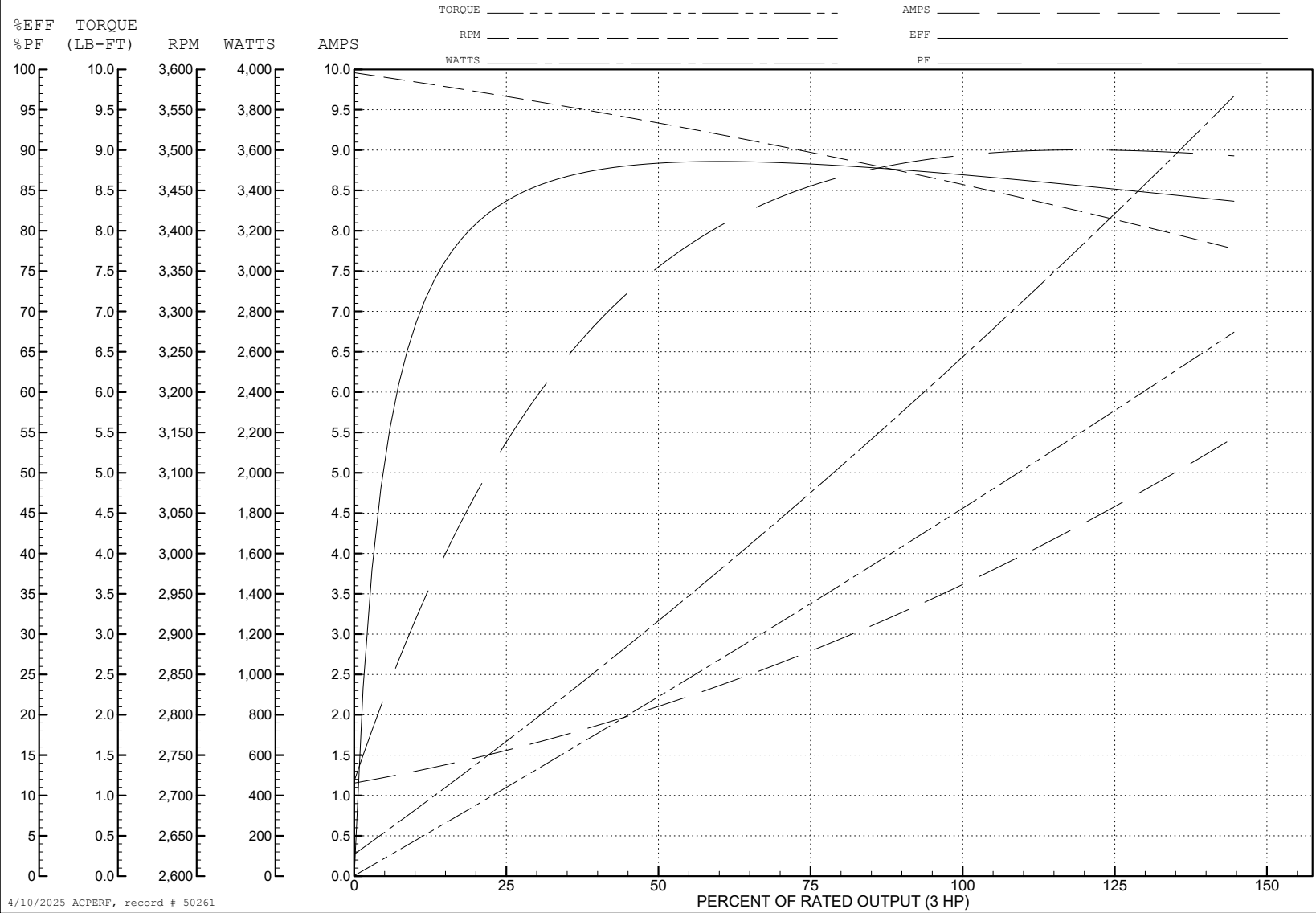
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WINDING # 35WGQ060

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



4/10/2025 ACPERF, record # 50261

**AC Induction Motor Performance Data**

Record # 59171

Typical performance - not guaranteed values

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

**Load Characteristics 230 V, 60 Hz, 3 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	77	85	88	89	90	89
Efficiency	84.1	87.9	88.4	87.2	85.7	83.5	86.3
Speed	3562	3531	3498	3462	3421	3375	3437
Line amperes	3	4.2	5.6	7.2	9	10.8	8.28

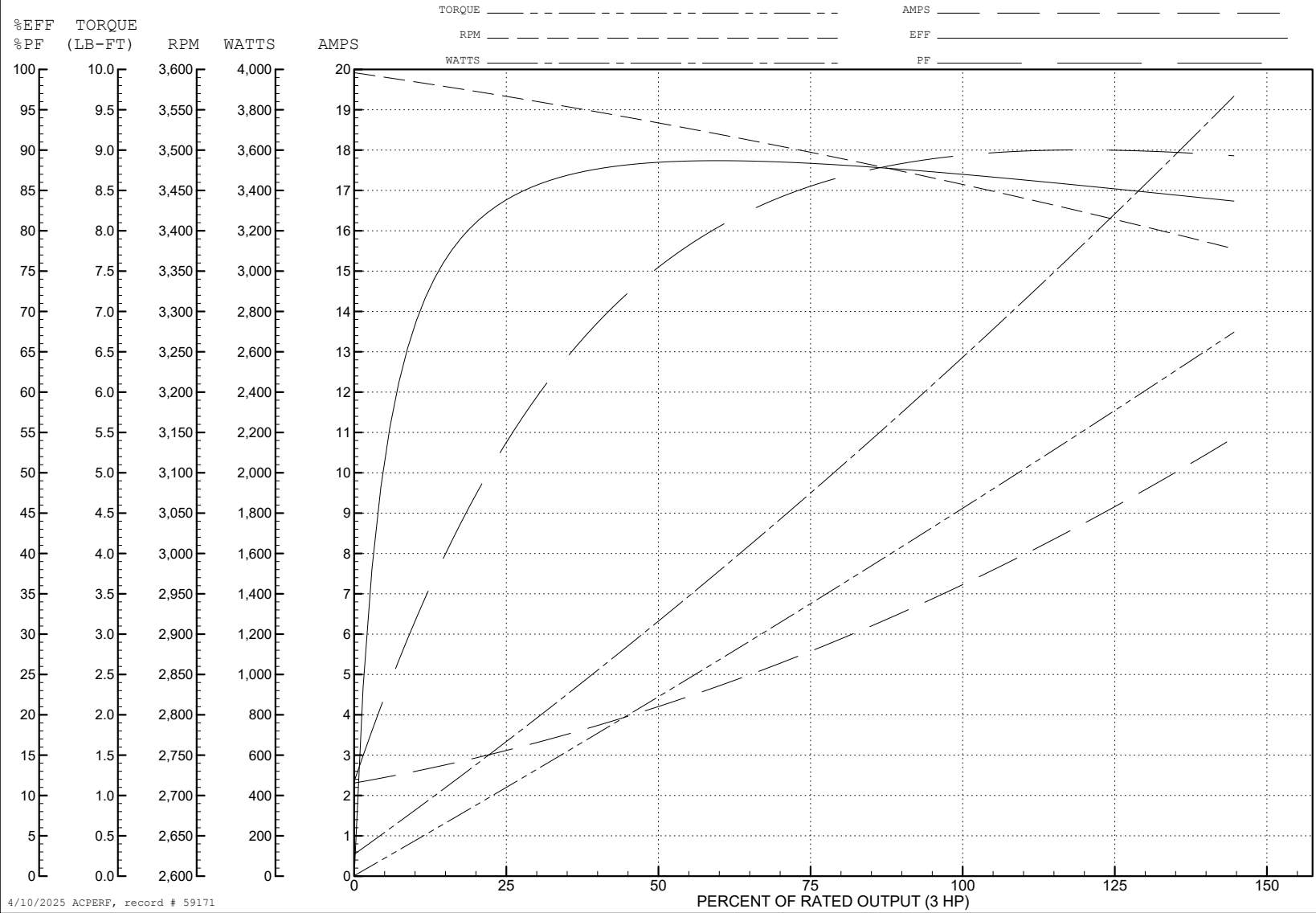
ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

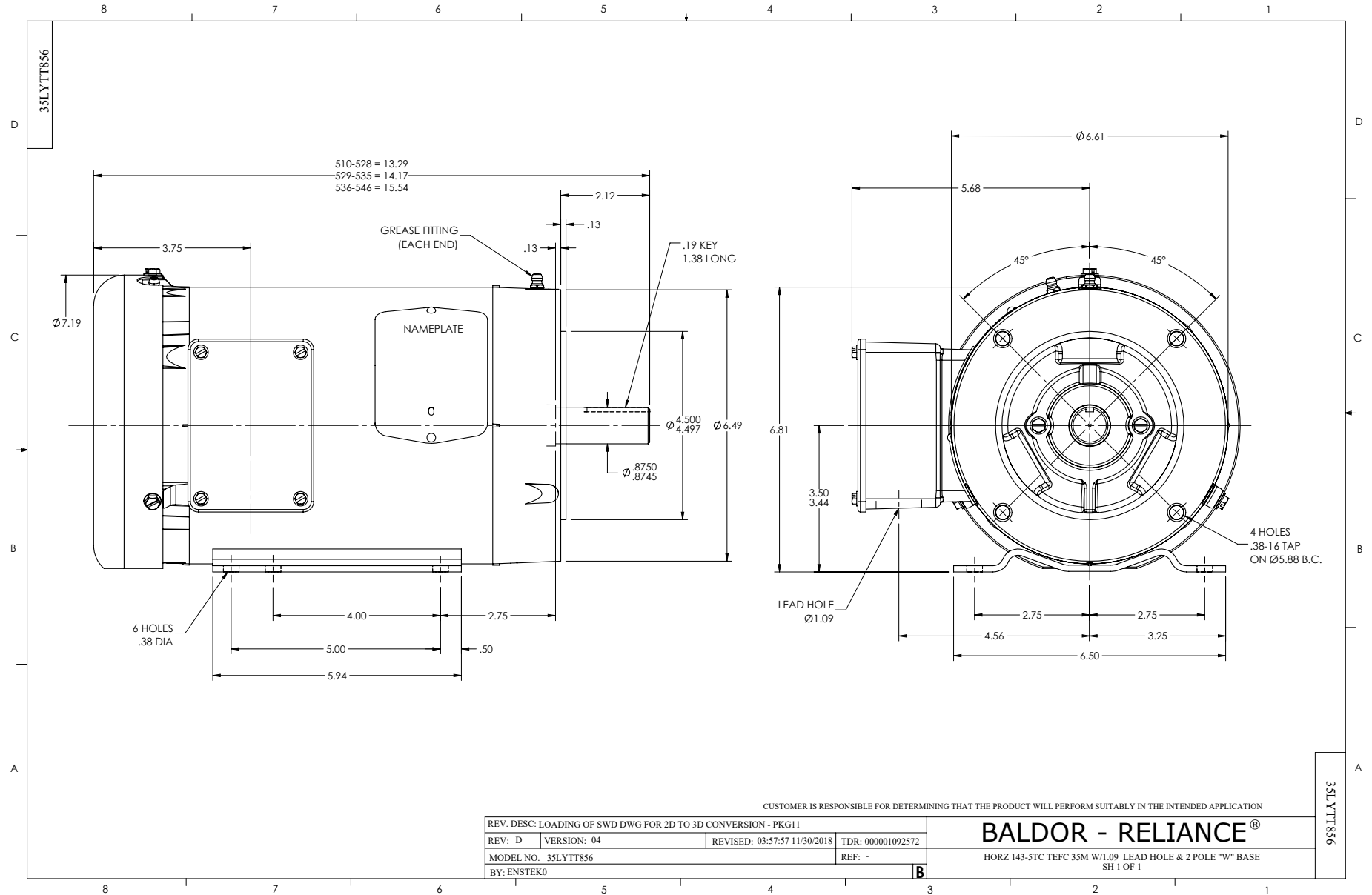
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Typical performance - not guaranteed values.

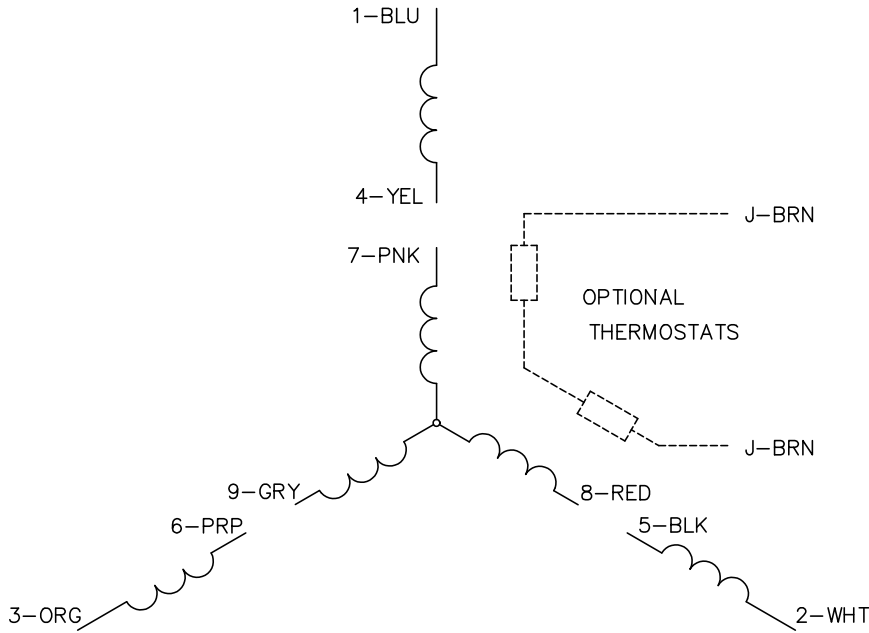
TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=66



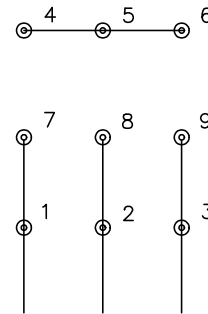
4/10/2025 ACPERF, record # 59171



CD0005

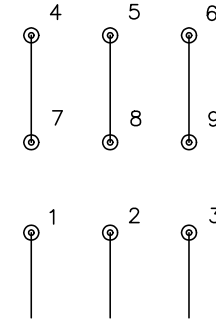


LOW VOLTAGE  
(2Y)



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