

BALDOR • RELIANCE

Customer information packet

VEM3218T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3640M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	184TC
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	5.000 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 CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	14.000 A @ 208.0 V 6.600 A @ 460.0 V 13.200 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	P
Type	AC
Mech. spec.	36Q489
Base	
Status	PRD/A
Elec. spec.	36WGS270
Layout	36LYQ489
Eff. date	09-23-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	05-05-2015

Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3640M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.03 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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.	VEM3218T								
SPEC.	36Q489S270G1								
HP	5								
VOLTS	230/460								
AMPS	13.2/6.6								
RPM	1750								
FRAME	184TC	HZ	60	PH	3				
SF	1.15	CODE	J	DES	B	CLASS	F		
NEMA NOM. EFF	89.5	PF	80						
RATING	40C AMB-CONT								
CC	010A								
ENCL	ODP	SN							
DE	6206	ODE	6205						
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 5HP 190/380V 15.6/7.8A								SF1.0

AC Induction Motor Performance Data

Record # 53360

Typical performance - not guaranteed values

Winding: 36WGS270-R004		Type: 3640M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	5		Full Load Torque	15.05 LB-FT	
Volts	230/460		Start Configuration	direct on line	
Full Load Amps	13.2/6.6		Breakdown Torque	44.8 LB-FT	
R.P.M.	1750		Pull-up Torque	25.5 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	30.1 LB-FT	
NEMA Design Code	B KVA Code	J	Starting Current	44.8 A	
Service Factor (S.F.)	1.15		No-load Current	2.97 A	
NEMA Nom. Eff.	89.5 Power Factor	80	Line-line Res. @ 25°C	2.632 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	44°C	
S.F. Amps			Temp. Rise @ S.F. Load	56°C	
			Locked-rotor Power Factor	41	
			Rotor inertia	0.372 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	80	83	84	82
Efficiency	85.4	89.7	90.2	89.5	88.2	86.4	88.7
Speed	1789.2	1778.5	1766.9	1753.8	1739.5	1722.1	1745
Line amperes	3.33	4.14	5.26	6.59	8.05	9.68	7.47

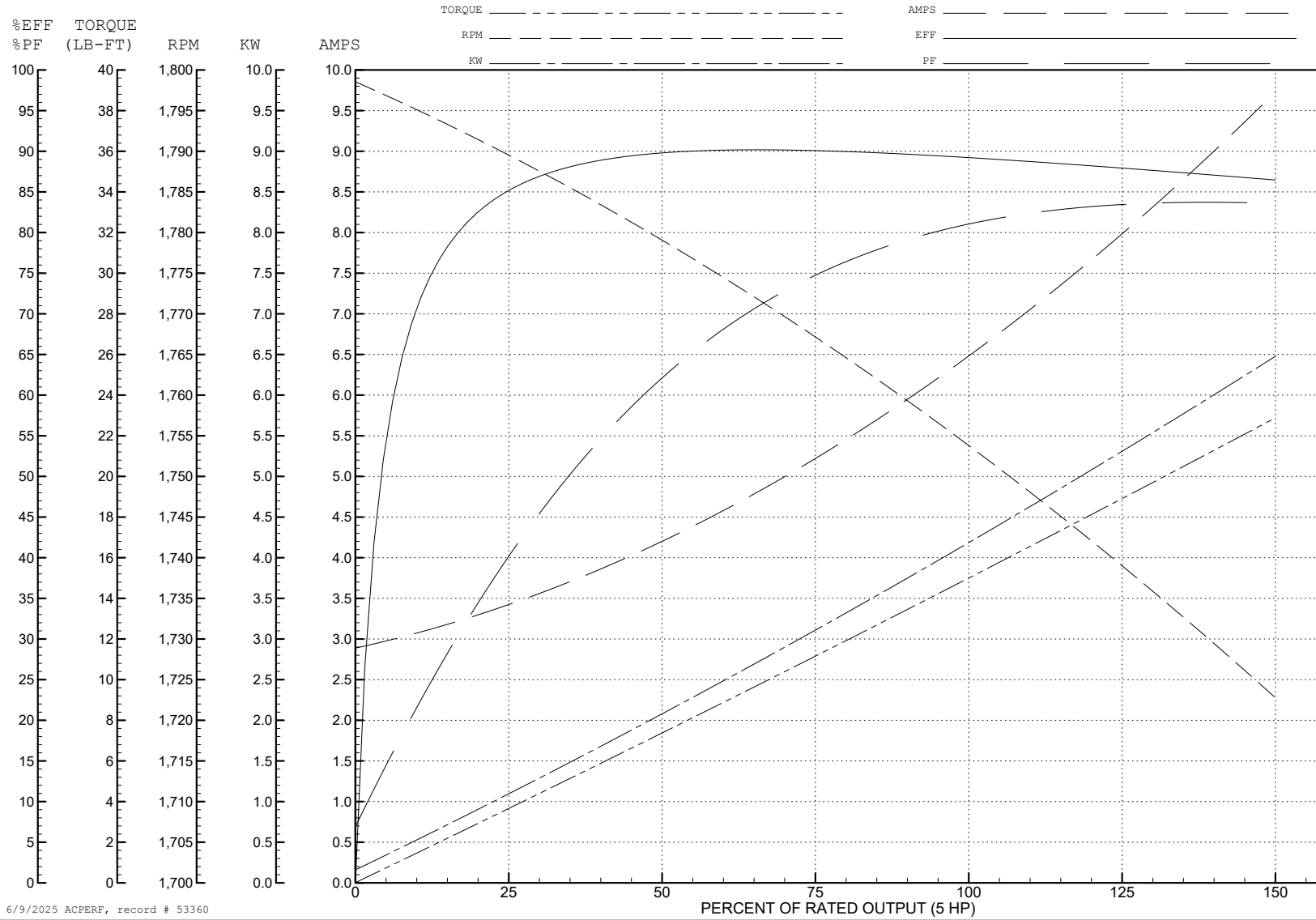
ABB Motors and Mechanical Inc.

WINDING # 36WGS270

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3640M

TORQUES (LB-FT): PO=44.8 PU=25.5 LR=30.1 LRA=44.8



6/9/2025 ACPERF, record # 53360

AC Induction Motor Performance Data

Record # 86108

Typical performance - not guaranteed values

Winding: 36WGS270-R004		Type: 3640M	Enclosure: OPSB	
Nameplate Data			230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	5	Full Load Torque	15.05 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	13.2/6.6	Breakdown Torque	44.8 LB-FT	
R.P.M.	1750	Pull-up Torque	25.5 LB-FT	
Hz	60 Phase	Locked-rotor Torque	30.1 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	89.6 A	
Service Factor (S.F.)	1.15	No-load Current	5.94 A	
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	0.656 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C	
S.F. Amps		Temp. Rise @ S.F. Load	54°C	
		Locked-rotor Power Factor	40.8	
		Rotor inertia	0.372 lb-ft ²	

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	80	83	84	82
Efficiency	84.3	89.2	89.7	89.6	88.2	86.2	88.8
Speed	1789	1779	1767	1754	1740	1722	1746
Line amperes	6.66	8.28	10.52	13.18	16.1	19.36	14.9

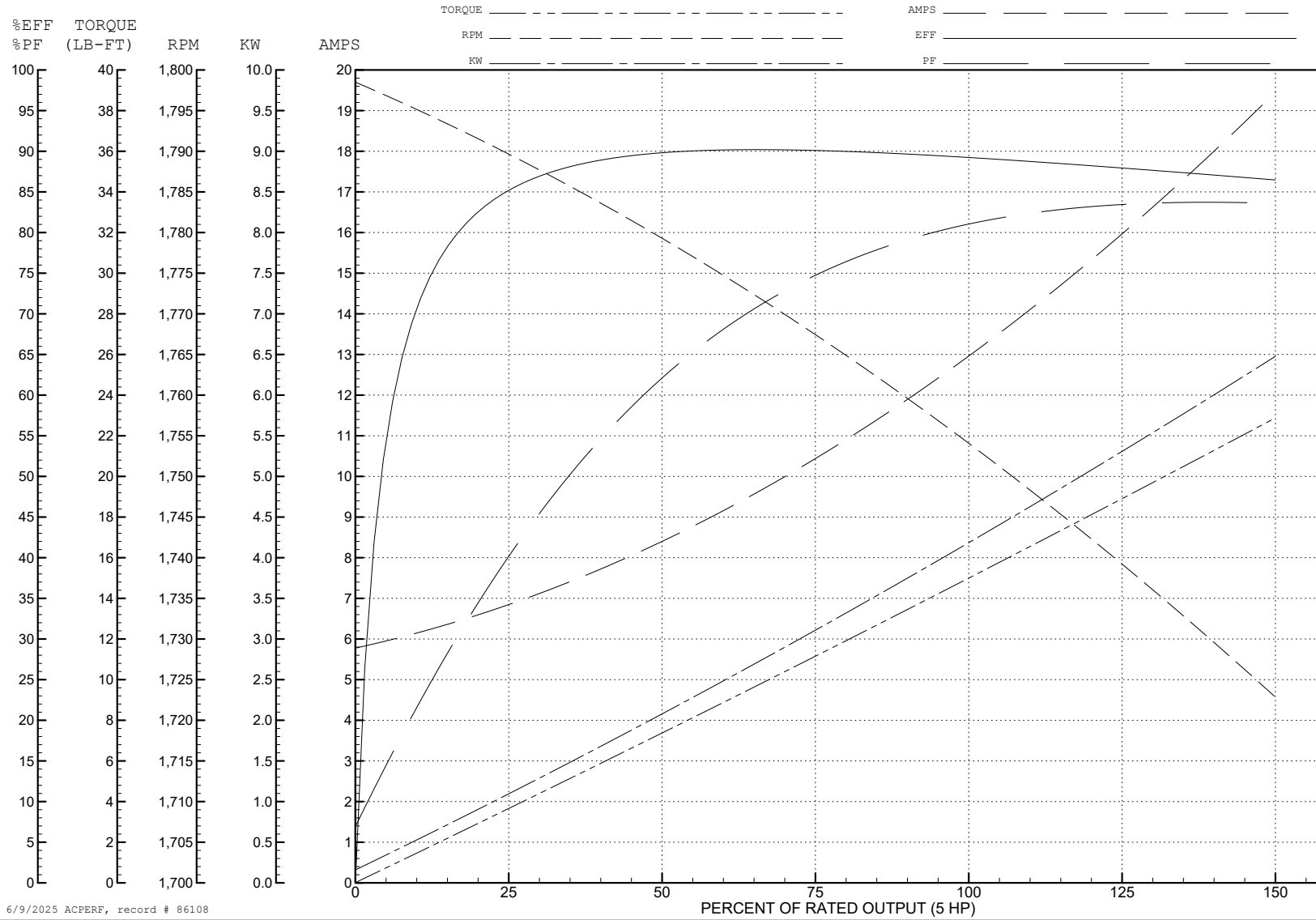
ABB Motors and Mechanical Inc.

WINDING # 36WGS270

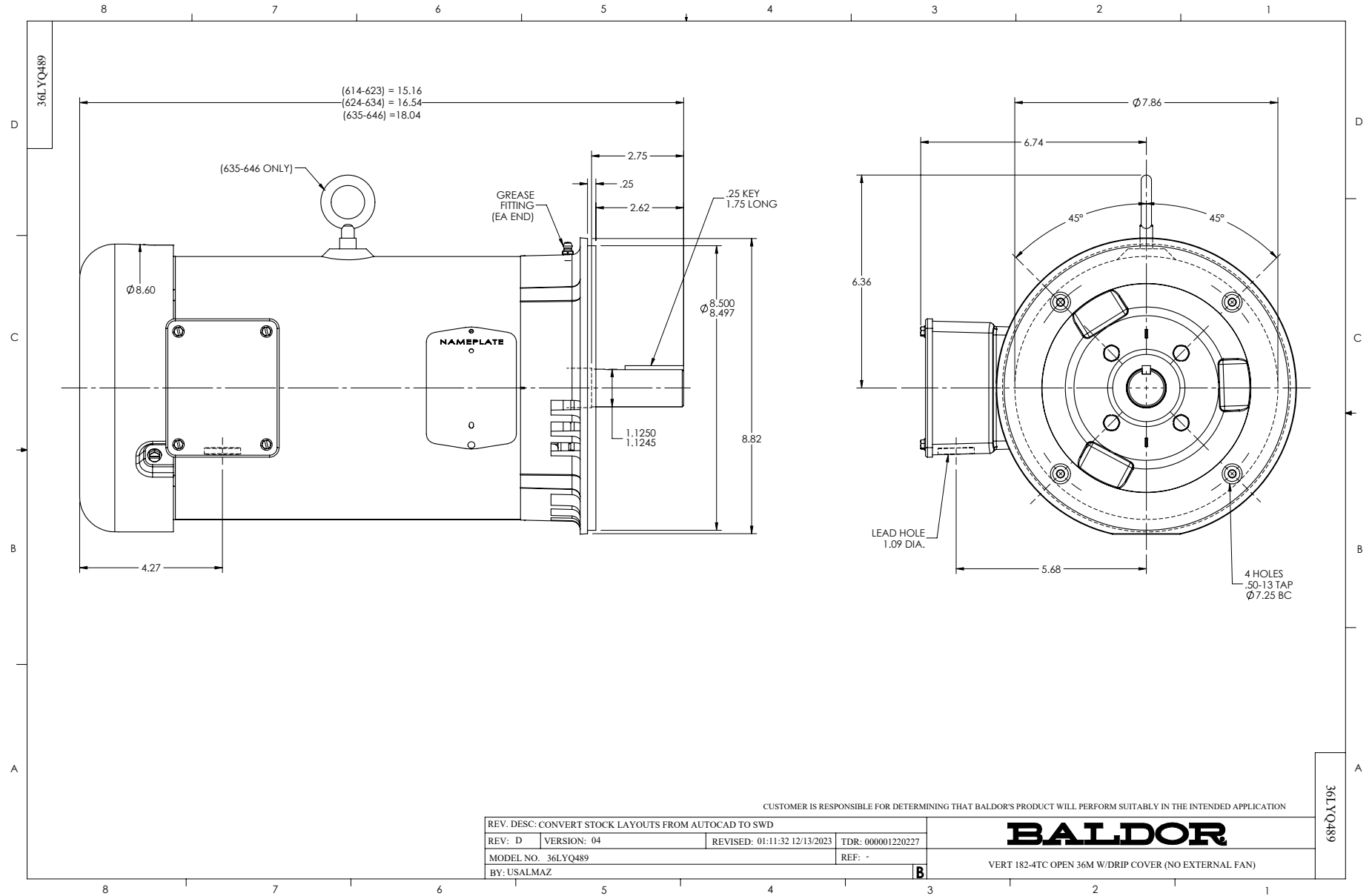
5 HP 3 PH 60 HZ 1750 RPM 230 V 3640M

Typical performance - not guaranteed values.

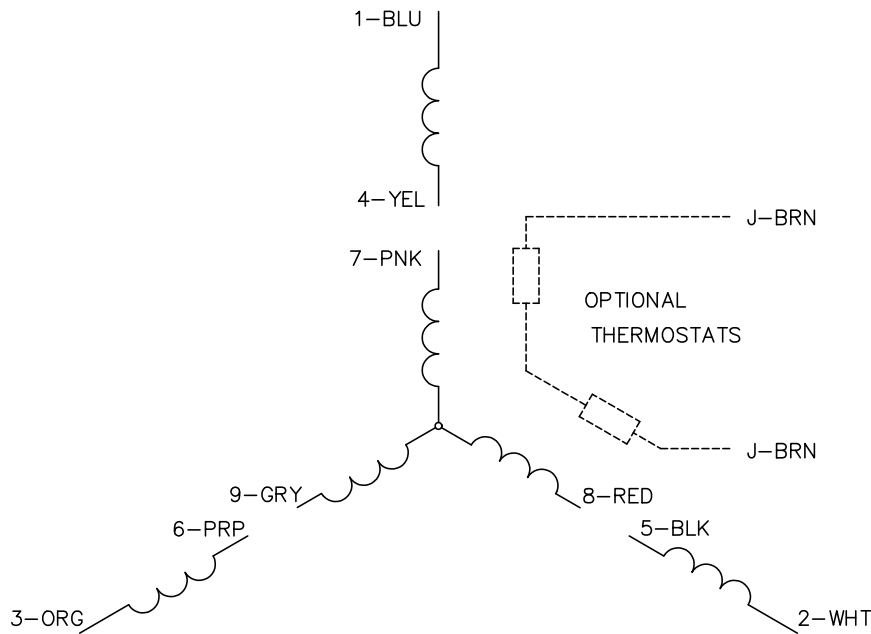
TORQUES (LB-FT): PO=44.8 PU=25.5 LR=30.1 LRA=89.6



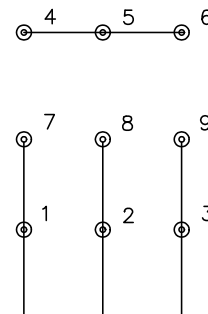
6/9/2025 ACPERF, record # 86108



CD0005

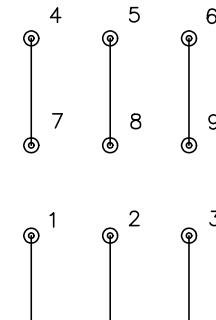


LOW VOLTAGE
(2Y)



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