

BALDOR • RELIANCE

Customer information packet

VXM18542T

5//3HP, 1750//1460RPM, 3PH, 60//50HZ, 184TC

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	184TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ 3.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
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
Constant Torque Speed Range	30
Current @ Voltage	11.200 A @ 190.0 V 13.600 A @ 230.0 V 5.600 A @ 380.0 V 6.800 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGR866
Layout	36LYQ330
Eff. date	04-26-2021
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	04-19-2021

Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	5.6 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3646M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.36 IN
Power Factor	74
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP0887XPSLEV										
NO.		CC	010A							
S/N		TEMP CODE	T3C							
SPEC.	36-0000-0472		INV.TYPE	PWM						
CAT.NO.	VXM18542T		C HP FR	60	C HP TO	90				
HP	5//3		CT HZ FROM	30	CT HZ TO	60				
VOLTS	230/460//190/380		VT HZ FROM	6	VT HZ TO	60				
AMPS	13.6/6.8//11.2/5.6		MAG CUR	7.4/3.7						
RPM	1750//1460		MX RPM	2700						
HZ	60//50	PH	3	CL	F	NOM.EFF.	89.5			
SER.F.	1.00	DES	A	SL HZ	1.4	WK2	0.428			
FRAME	184TC	RATING	40C AMB-CONT							
	NEMA MG-1 PART 5, IP54									
	1.15 SF ON SINE WAVE									

AC Induction Motor Performance Data

Record # 78059

Typical performance - not guaranteed values

Winding: 36WGR866-R001		Type: 3646M		Enclosure: XPFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)	5//3		Full Load Torque	14.92 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	13.6/6.8//11.2/5.6		Breakdown Torque	68.7 LB-FT		
R.P.M.	1750//1460		Pull-up Torque	35.1 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	42.8 LB-FT	
NEMA Design Code	A		KVA Code	L	Starting Current	59.1 A
Service Factor (S.F.)	1			No-load Current	3.71 A	
NEMA Nom. Eff.	89.5	Power Factor	74	Line-line Res. @ 25°C	1.91 Ω	
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	58°C	
				Locked-rotor Power Factor	39.7	
				Rotor inertia	0.428 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	36	57	69	76	81	83
Efficiency	80.6	87.7	89.6	89.8	89.5	88.7
Speed	1789	1780	1770	1760	1749	1737
Line amperes	4.01	4.72	5.7	6.83	8.1	9.53

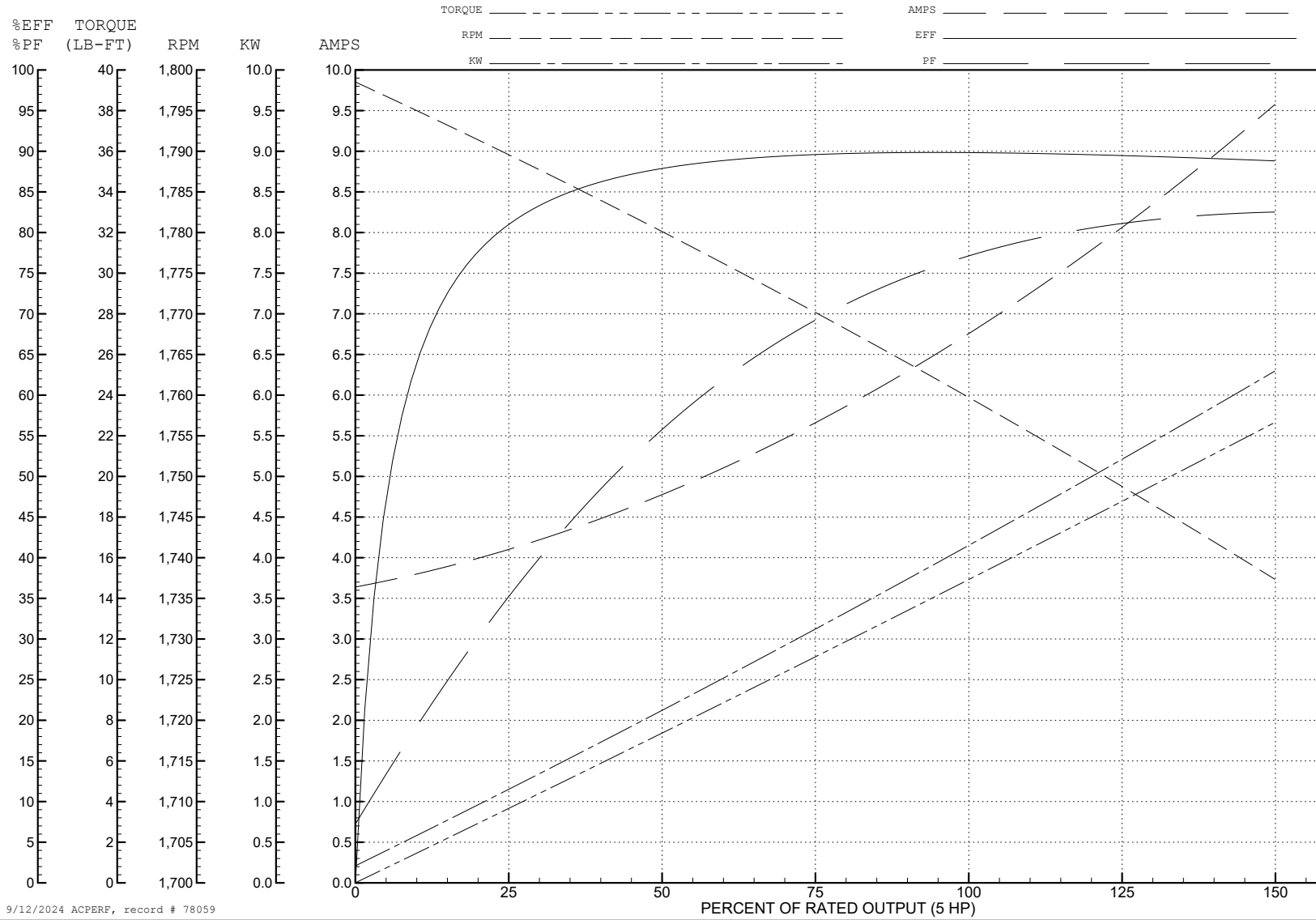
ABB Motors and Mechanical Inc.

WINDING # 36WGR866

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1760 RPM 460 V 3646M

TORQUES (LB-FT): PO=68.7 PU=35.1 LR=42.8 LRA=59.1



9/12/2024 ACPERF, record # 78059

AC Induction Motor Performance Data

Record # 78060

Typical performance - not guaranteed values

Winding: 36WGR866-R001		Type: 3646M	Enclosure: XPFC	
Nameplate Data			380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	5//3	Full Load Torque	10.7 LB-FT	
Volts	230/460//190/380	Start Configuration	direct on line	
Full Load Amps	13.6/6.8//11.2/5.6	Breakdown Torque	65.1 LB-FT	
R.P.M.	1750//1460	Pull-up Torque	35.75 LB-FT	
Hz	60//50 Phase	Locked-rotor Torque	43.59 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	57.03 A	
Service Factor (S.F.)	1	No-load Current	3.63 A	
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	1.91 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	42°C	
		Locked-rotor Power Factor	44	
		Rotor inertia	0.428 LB-FT ²	

Load Characteristics 380 V, 50 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	29	47	60	68	75	78
Efficiency	75.9	84.9	87.8	88.7	88.8	88.4
Speed	1492	1485	1477	1470	1461	1453
Line amperes	3.82	4.27	4.89	5.6	6.42	7.34

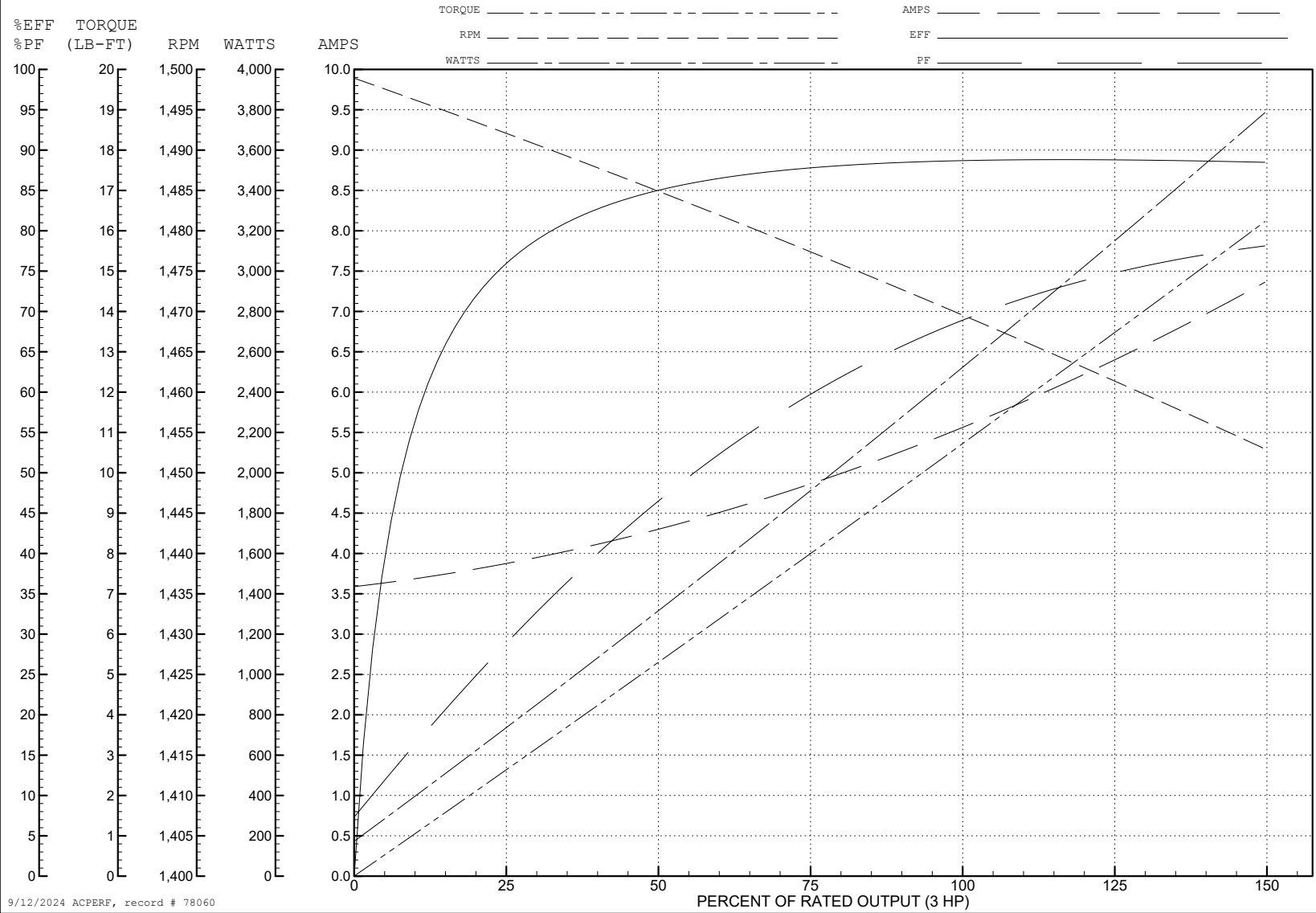
ABB Motors and Mechanical Inc.

WINDING # 36WGR866

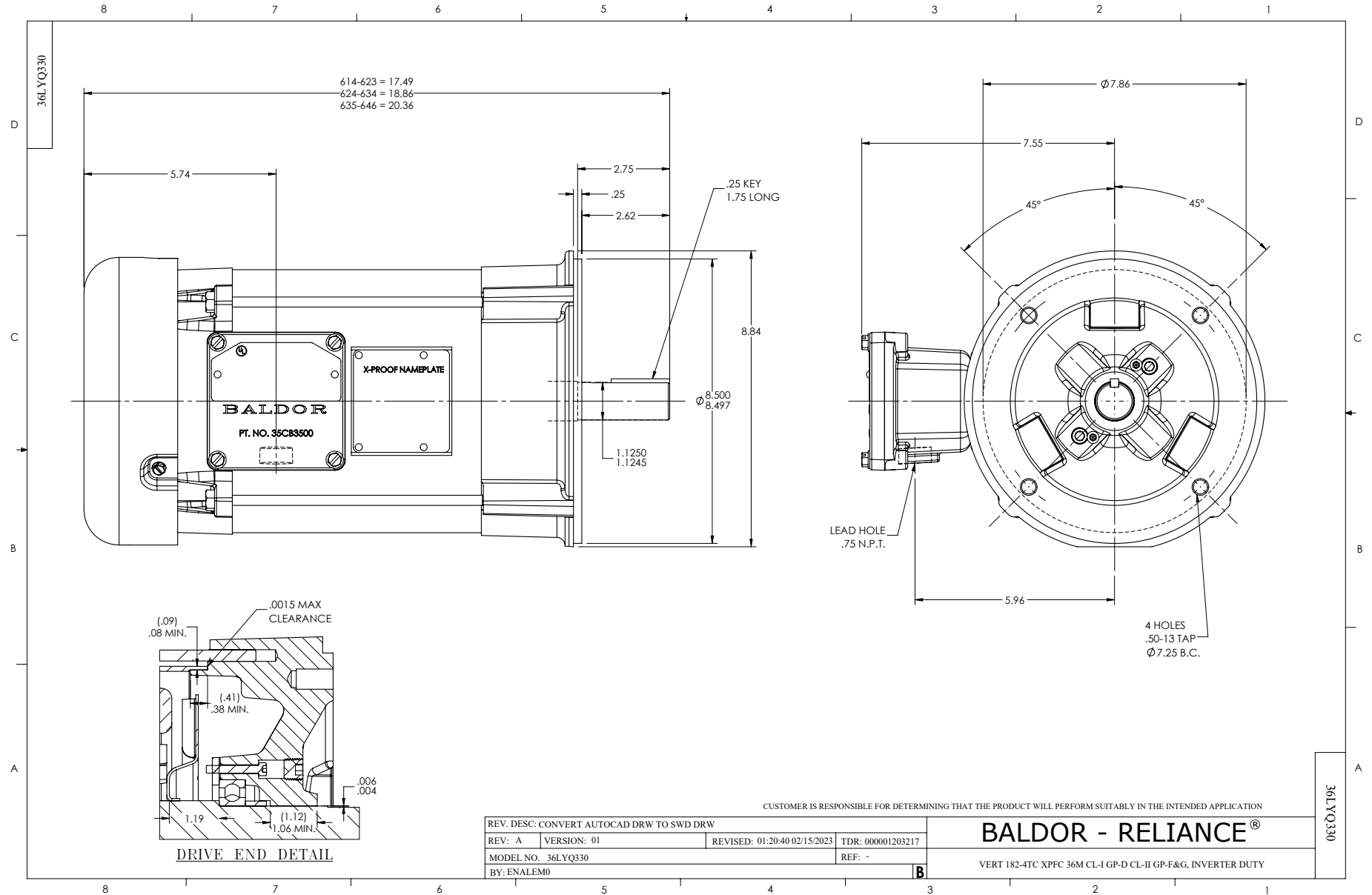
3 HP 3 PH 50 HZ 1470 RPM 380 V 3646M

Typical performance - not guaranteed values.

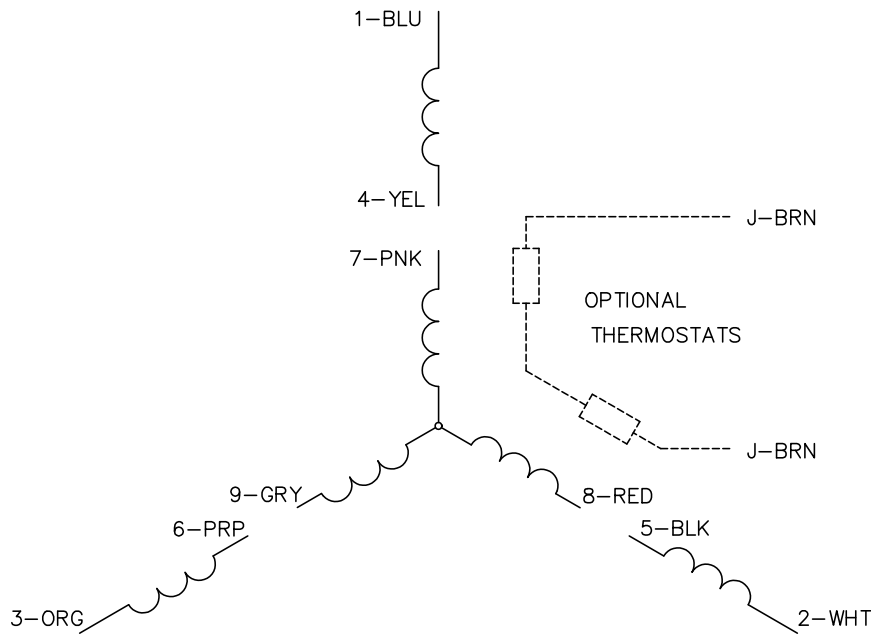
TORQUES (LB-FT): PO=65.1 PU=35.75 LR=43.59 LRA=57.03



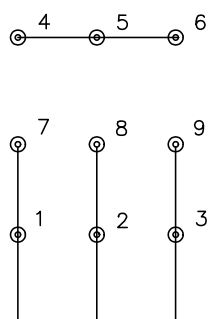
9/12/2024 ACPERF, record # 78060



CD0005

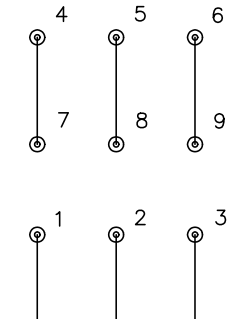


LOW VOLTAGE
(2Y)



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