

ABB BALDOR RELIANCE III

Customer information packet

VEM7073T

7.5//5HP, 3450//2890RPM, 3PH, 60//50HZ, 184T

Class - CLI GP D

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
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 50 HZ 7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.900 A @ 380.0 V 8.400 A @ 460.0 V 18.500 A @ 208.0 V 16.800 A @ 230.0 V 13.800 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	F
Type	AC
Mech. spec.	36N022
Base	
Status	PRD/A
Elec. spec.	36WGS428
Layout	36LYN022
Eff. date	03-08-2024
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	09-30-2015

Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T2C
Heater Indicator	No Heater
High Voltage Full Load Amps	6.9 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No 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	3646M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.36 IN
Power Factor	93
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	1.00
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	2890 rpm
	3450 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

NP0015XPSLEV									
NO.		CC	010A						
SER.									
SPEC.	36N022S428G1								
CAT.NO.	VEM7073T								
HP	7.5//5	T. CODE	T2C						
VOLTS	230/460//190/380								
AMPS	16.8/8.4//13.8/6.9								
RPM	3450//2890								
HZ	60//50	PH	3	CL	B				
SER.F.	1.00	DES	A	CODE	L				
RATING	40C AMB-CONT								
FRAME	184TC	NEMA-NOM-EFF							89.5
		PF	93						
BLANK									

AC Induction Motor Performance Data

Record # 68106

Typical performance - not guaranteed values

Winding: 36WGS428-R021				Type: 3646M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5//5		Full Load Torque		11.4 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		16.8/8.4//13.8/6.9		Breakdown Torque		57.9 LB-FT	
R.P.M.		3450//2890		Pull-up Torque		39.9 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		48.2 LB-FT	
NEMA Design Code		A	KVA Code	L	Starting Current		91 A
Service Factor (S.F.)		1		No-load Current		2.33 A	
NEMA Nom. Eff.		89.5	Power Factor	93	Line-line Res. @ 25°C		1.45 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		74°C	
				Locked-rotor Power Factor		44.6	
				Rotor inertia		0.205 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	64	85	90	93	94	94
Efficiency	86.8	90.5	90.9	90	88.7	86.4
Speed	3571	3539	3505	3468	3429	3385
Line amperes	3.14	4.59	6.43	8.43	10.5	12.9

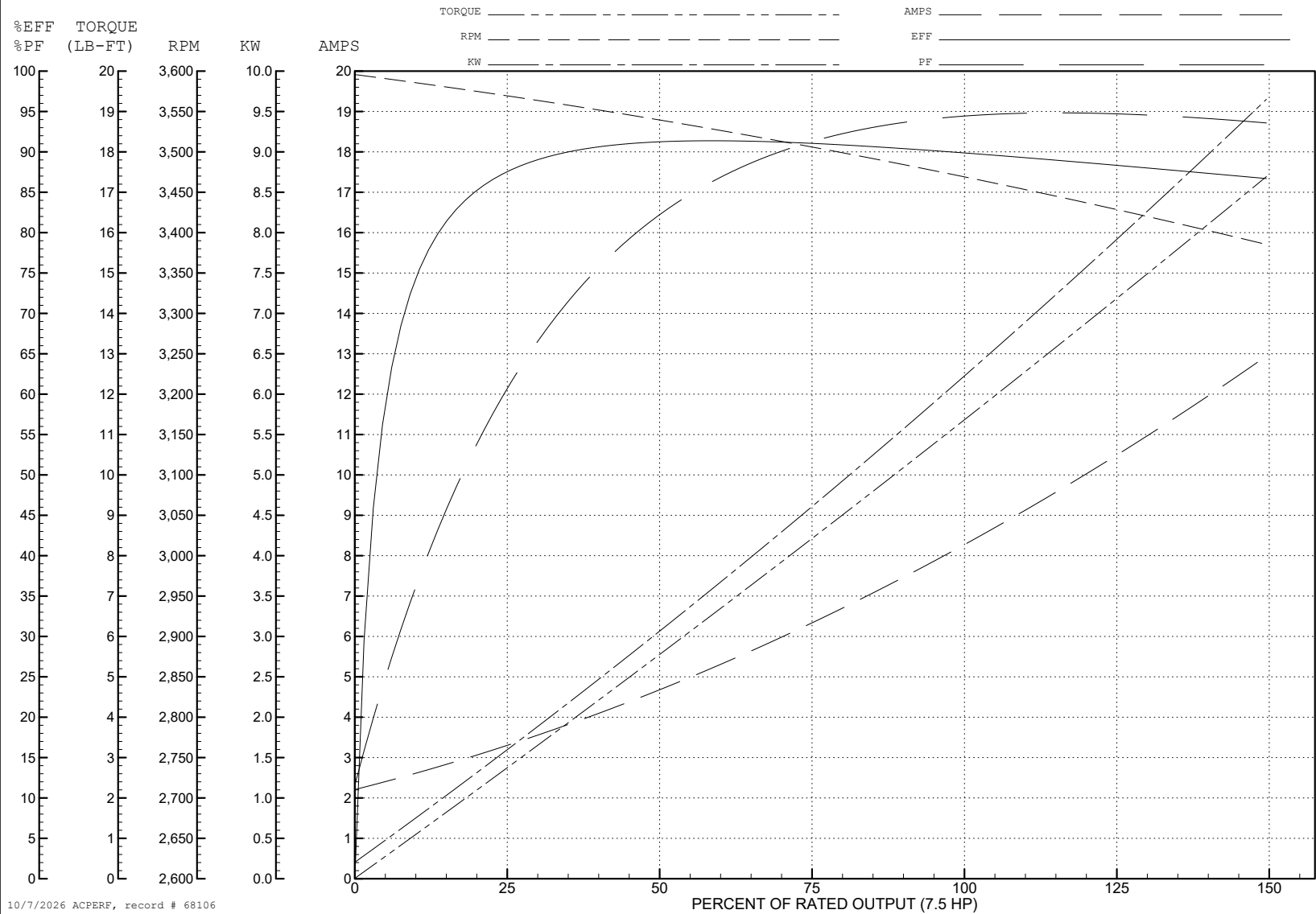
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WINDING # 36WGS428

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3468 RPM 460 V 3646M

TORQUES (LB-FT) : PO=57.9 PU=39.9 LR=48.2 LRA=91



AC Induction Motor Performance Data

Record # 68107

Typical performance - not guaranteed values

Winding: 36WGS428-R021				Type: 3646M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		7.5//5		Full Load Torque		9.11 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		16.8/8.4//13.8/6.9		Breakdown Torque		54.55 LB-FT	
R.P.M.		3450//2890		Pull-up Torque		42.54 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		L	
Service Factor (S.F.)		1		No-load Current		2.29 A	
NEMA Nom. Eff.		89.5		Power Factor		93	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		55°C	
				Locked-rotor Power Factor		50.9	
				Rotor inertia		0.205 LB-FT2	

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	58	81	88	92	94	94
Efficiency	85.5	89.9	90.5	89.7	88.5	86.4
Speed	2976	2950	2922	2892	2861	2826
Line amperes	2.85	3.94	5.35	6.92	8.55	10.43

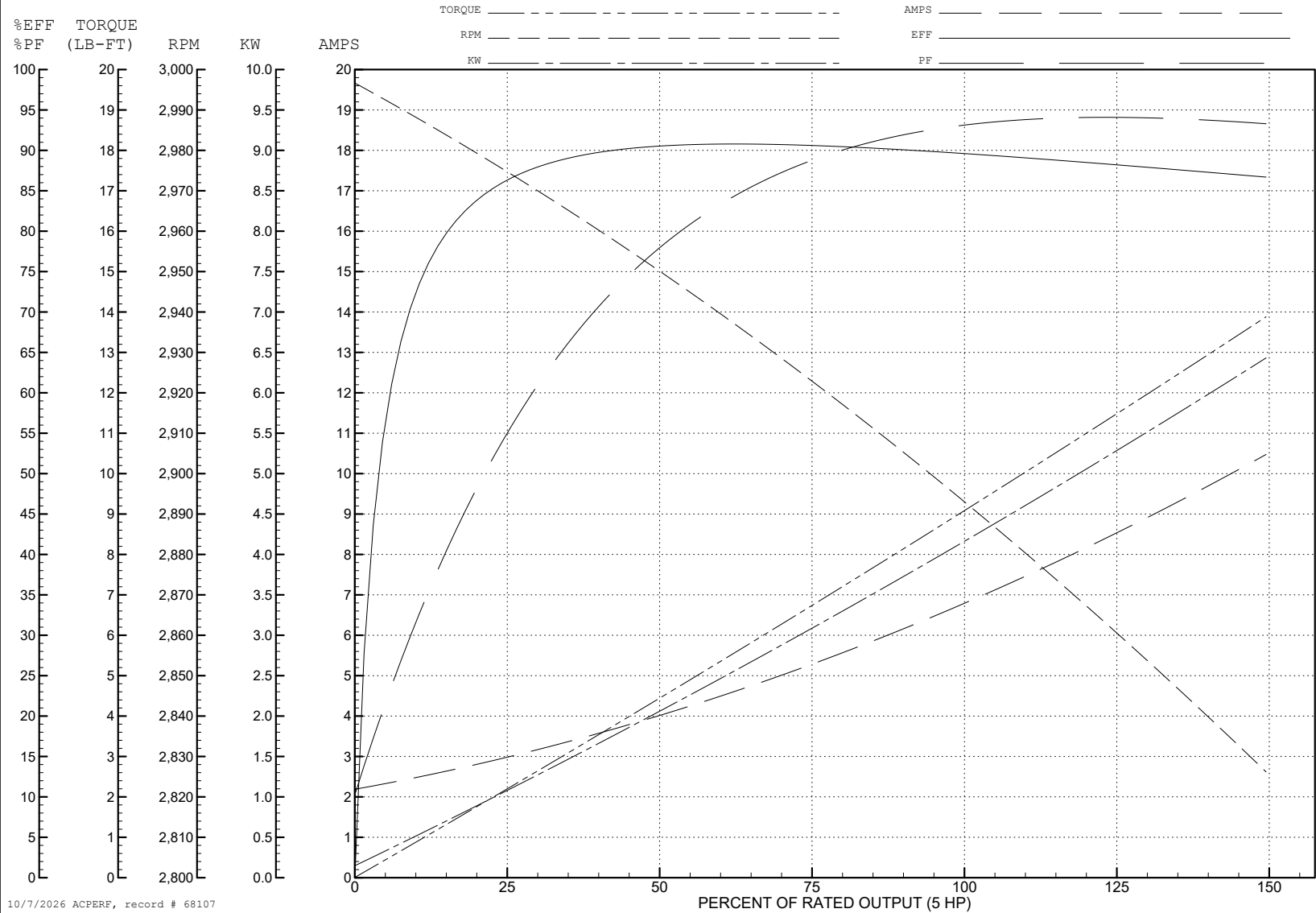
ABB Motors and Mechanical Inc.

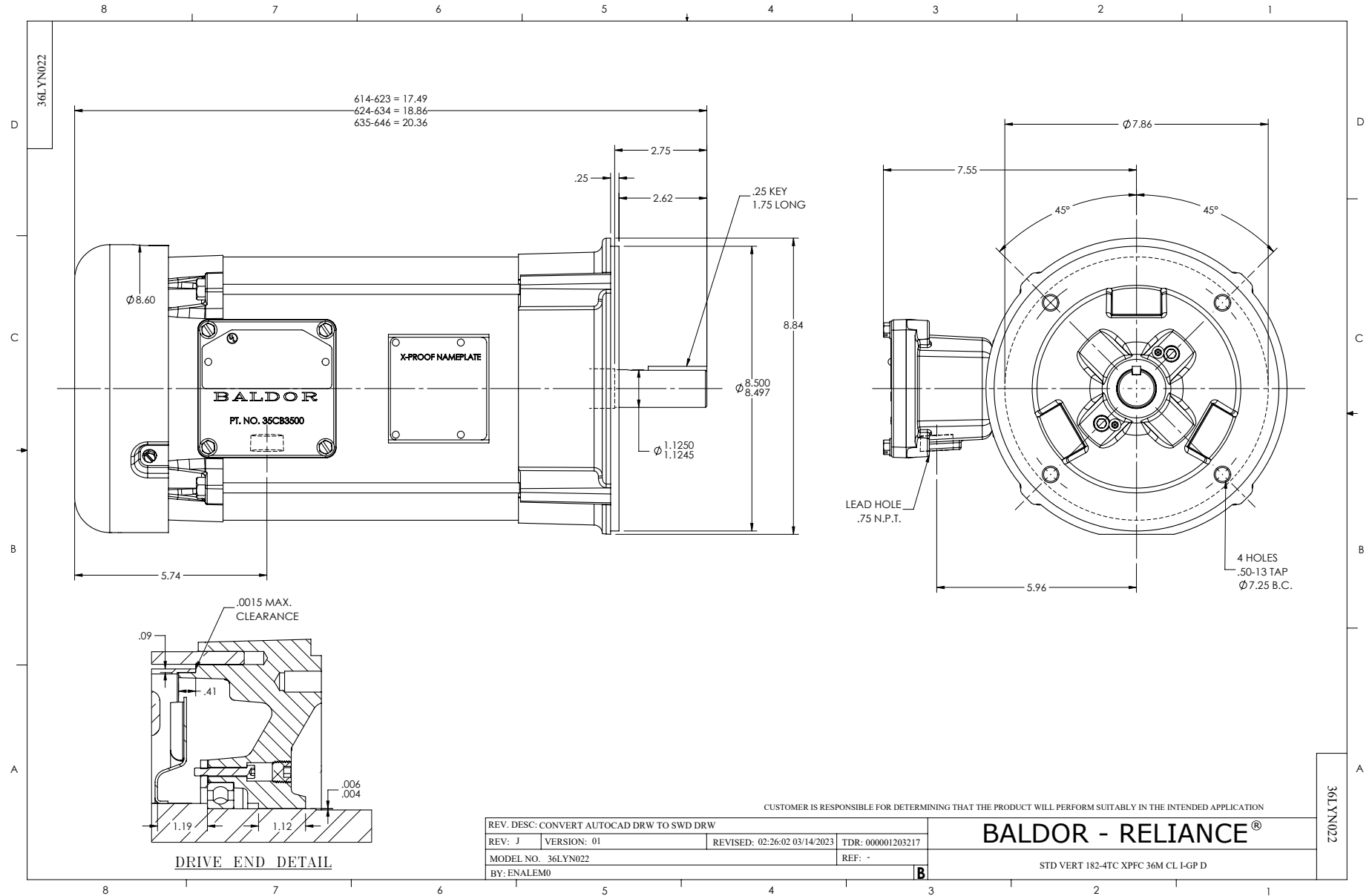
WINDING # 36WGS428

Typical performance - not guaranteed values.

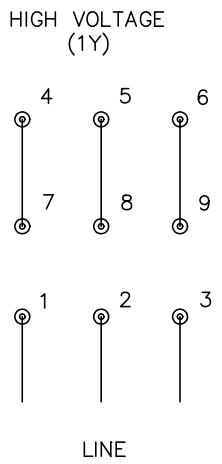
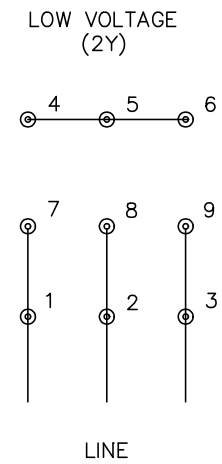
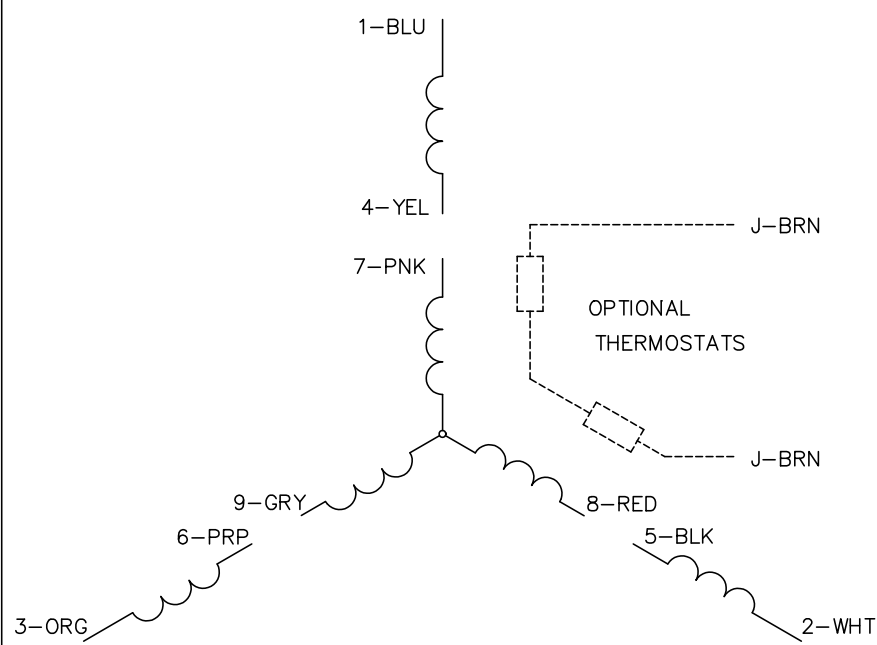
5 HP 3 PH 50 HZ 2892 RPM 380 V 3646M

TORQUES (LB-FT) : PO=54.55 PU=42.54 LR=51.39 LRA=86.55





CD0005



- 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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005