BALDOR • RELIANCE

Customer information packet

36G271T031G16

5HP, 1750RPM, 3PH, 60HZ, 184T, 3644M, TEFC, F1
Class - None
Division - Not Applicable

2/16/2025 9:11:11 PM

Specifications

Enclosure	TEFC
Frame	184T
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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	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	13.600 A @ 208.0 V
	6.500 A @ 460.0 V
	13.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	H
Type	AC
Mech. spec.	36G271
Base	
Status	PRD/A
Elec. spec.	36WGT031
Layout	36LYG271
Eff. date	06-03-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	08-28-2009

Heater Indicator	No Heater
High Voltage Full Load Amps	6.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No 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	3644M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.05 IN
Power Factor	80
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	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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L											
CAT.NO.											
SPEC.	36G271T031G16										
HP	5										
VOLTS	230/460										
AMP	13/6.5										
RPM	1750										
FRAME	184T		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	K	**DES**	B	**CL**	F				
NEMA-NOM-EFF	90.2	**PF**	80								
RATING	40C AMB-CONT										
CC	010A										
DE	6206		**ODE**	6205							
ENCL	TEFC	**SN**									

AC Induction Motor Performance Data
Record # 10561
Typical performance - not guaranteed values

Winding: 36WGT031-R001	**Type:** 3644M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	15.1 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			13/6.5	**Breakdown Torque**	59.57 LB-FT
R.P.M.			1750	**Pull-up Torque**	25.39 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	38.53 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	54.47 A
Service Factor (S.F.)			1.15	**No-load Current**	3.32 A
NEMA Nom. Eff.	90.2	**Power Factor**	80	**Line-line Res. @ 25ºC**	2.26 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	54°C
S.F. Amps				**Temp. Rise @ S.F. Load**	65°C
				Locked-rotor Power Factor	51.7
				Rotor inertia	0.409 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	39	61	73	80	84	86	82
Efficiency	84.8	89.6	90.3	90.2	88.9	87.7	90
Speed	1790	1779	1767	1755	1742	1725	1746
Line amperes	3.62	4.36	5.37	6.55	7.9	9.67	7.3

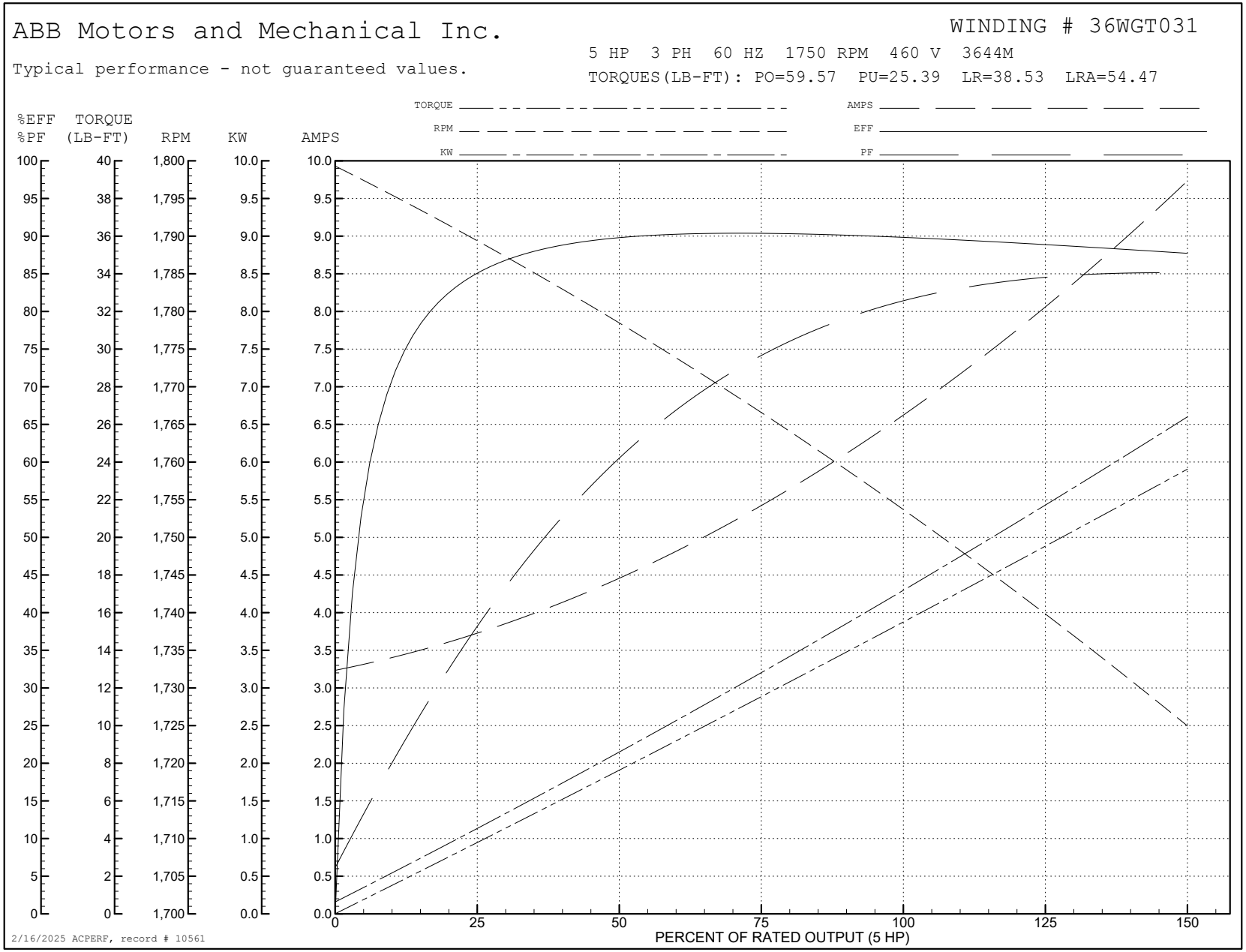


ABB Motors and Mechanical Inc.
WINDING # 36WGT031
Typical performance - not guaranteed values.
5 HP 3 PH 60 HZ 1750 RPM 460 V 3644M
TORQUES(LB-FT): PO=59.57 PU=25.39 LR=38.53 LRA=54.47
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
2/16/2025 ACPERF, record # 10561

AC Induction Motor Performance Data
Record # 38488
Typical performance - not guaranteed values

Winding: 36WGT031-R001	**Type:** 3644M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	15.1 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			13/6.5	**Breakdown Torque**	59.57 LB-FT
R.P.M.			1750	**Pull-up Torque**	25.39 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	38.53 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	54.47 A
Service Factor (S.F.)			1.15	**No-load Current**	3.32 A
NEMA Nom. Eff.	90.2	**Power Factor**	80	**Line-line Res. @ 25ºC**	2.26 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	54°C
S.F. Amps				**Temp. Rise @ S.F. Load**	65°C
				Locked-rotor Power Factor	51.7
				Rotor inertia	0.409 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	39	61	73	80	84	86	81
Efficiency	84.8	89.6	90.3	90.2	88.9	87.7	89.6
Speed	1790	1779	1767	1755	1742	1725	1748
Line amperes	3.62	4.36	5.37	6.55	7.9	9.67	7.41

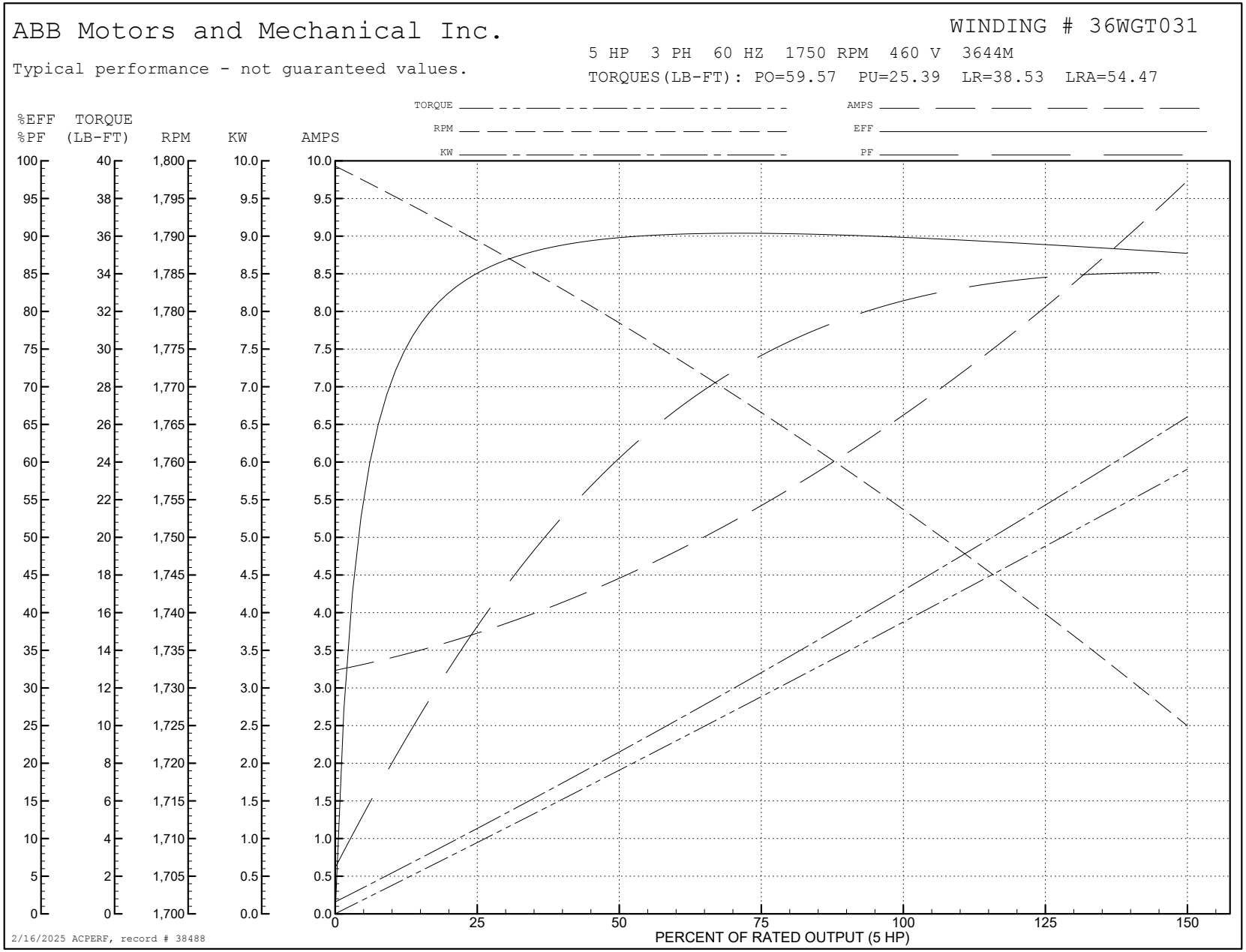
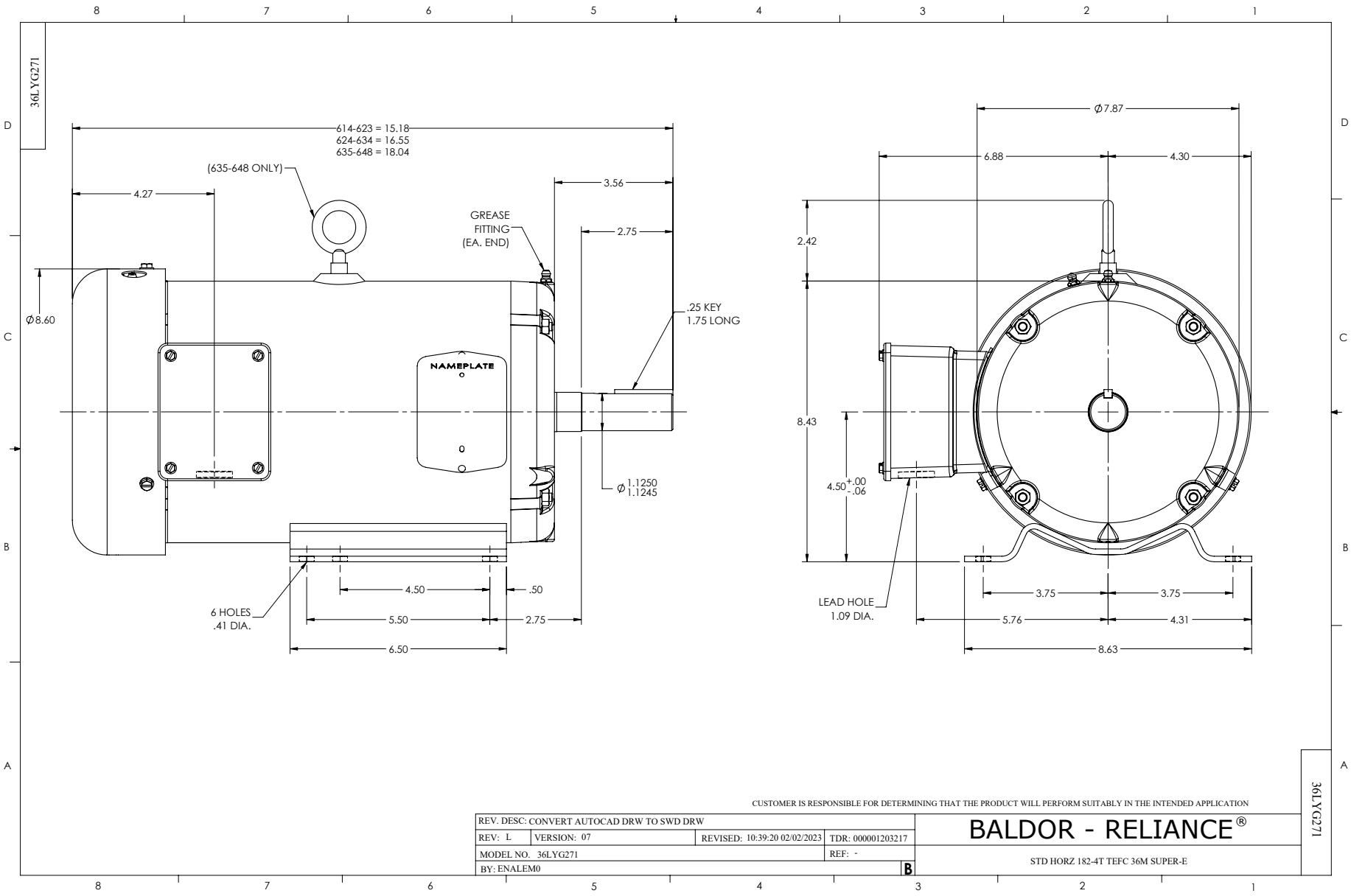
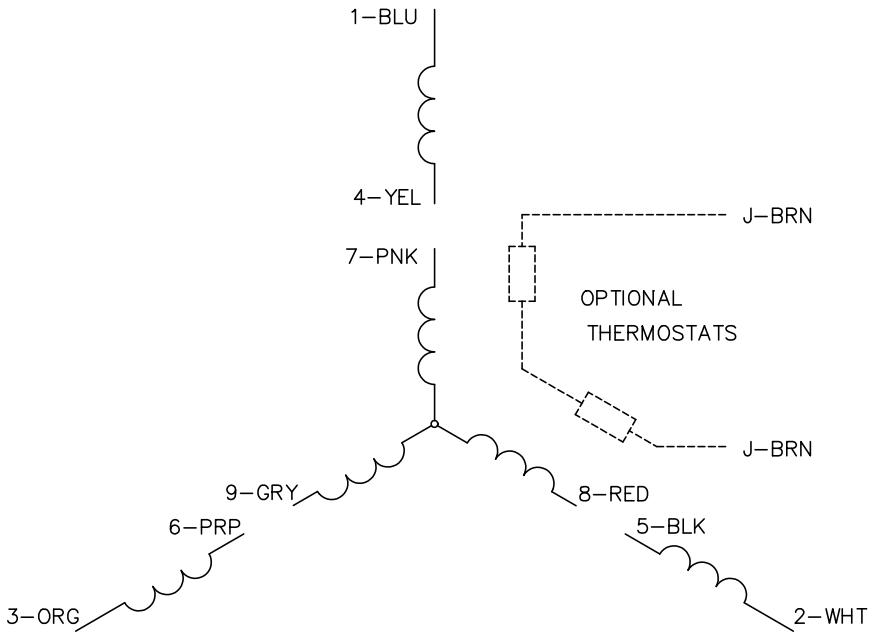
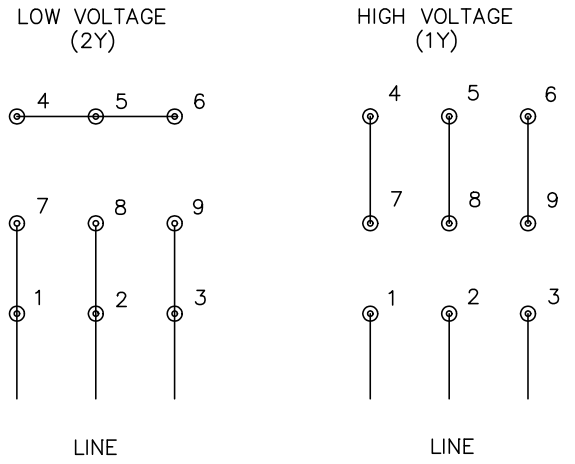


ABB Motors and Mechanical Inc.
WINDING # 36WGT031
Typical performance - not guaranteed values.
5 HP 3 PH 60 HZ 1750 RPM 460 V 3644M
TORQUES(LB-FT): PO=59.57 PU=25.39 LR=38.53 LRA=54.47
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
2/16/2025 ACPERF, record # 38488


36LYG271
614-623 = 15.18
624-634 = 16.55
635-648 = 18.04
(635-648 ONLY)
4.27
3.56
2.75
GREASE FITTING (EA. END)
Ø8.60
.25 KEY
1.75 LONG
NAMEPLATE
Ø 1.1250
1.1245
6 HOLES
.41 DIA.
4.50
.50
5.50
2.75
6.50
Ø7.87
6.88
4.30
2.42
8.43
4.50 +.00 -.06
LEAD HOLE
1.09 DIA.
3.75
3.75
5.76
4.31
8.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD DRW
REV: L
VERSION: 07
REVISED: 10:39:20 02/02/2023
TDR: 000001203217
MODEL NO. 36LYG271
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD HORZ 182-4T TEFC 36M SUPER-E
36LYG271

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS