Customer information packet

VDM3537

.5HP, 3450RPM, 3PH, 60HZ, 56C, 3414M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56C
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CCSA US
	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
Constant Torque Speed Range	6
Current @ Voltage	1.700 A @ 208.0 V
	1.800 A @ 230.0 V
	.900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	M
Type	AC
Mech. spec.	34M809
Base	
Status	PRD/A
Elec. spec.	34WGR421
Layout	34LYM809
Eff. date	03-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	04-19-2016

Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	P
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3414M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 IN
Power Factor	75
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 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

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3659					
CAT.NO.	VDM3537				
SPEC.	34M809R421G1		**ENCL**	TEFC	
FRAME	56C	**H.P.**	.5		
VOLTS	230/460				
AMPS	1.8/.9		**IP**	56	
R.P.M.	3450				
HZ.	60	**PH.** 3	**CLASS**	F	
SER.F.	1.25	**DES.** B	**CC**		
NEMA NOM. EFF.	68				
RATING	40C AMB-CONT				
DE	6203	**ODE** 6203			
GREASE	POLYREX EM				
SN					
	50C AT 1.0SF				
	SFA 2/1				

AC Induction Motor Performance Data
Record # 58290
Typical performance - not guaranteed values

Winding: 34WGR421-R001	**Type:** 3414M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.763 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.8/.9	**Breakdown Torque**	4.6 LB-FT
R.P.M.			3450	**Pull-up Torque**	3.07 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	3.86 LB-FT
NEMA Design Code	B	**KVA Code**	P	**Starting Current**	8.39 A
Service Factor (S.F.)			1.25	**No-load Current**	0.626 A
NEMA Nom. Eff.	68	**Power Factor**	75	**Line-line Res. @ 25ºC**	26.14 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
S.F. Amps			2/1	**Temp. Rise @ S.F. Load**	59°C
				Locked-rotor Power Factor	69.4

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	58	67	75	80	84	80
Efficiency	39.7	56.1	64.1	69.1	70.6	72.3	70.6
Speed	3536.7	3517.5	3497.4	3469	3451.9	3427.2	3452
Line amperes	0.674	0.731	0.817	0.915	1.04	1.15	1.04

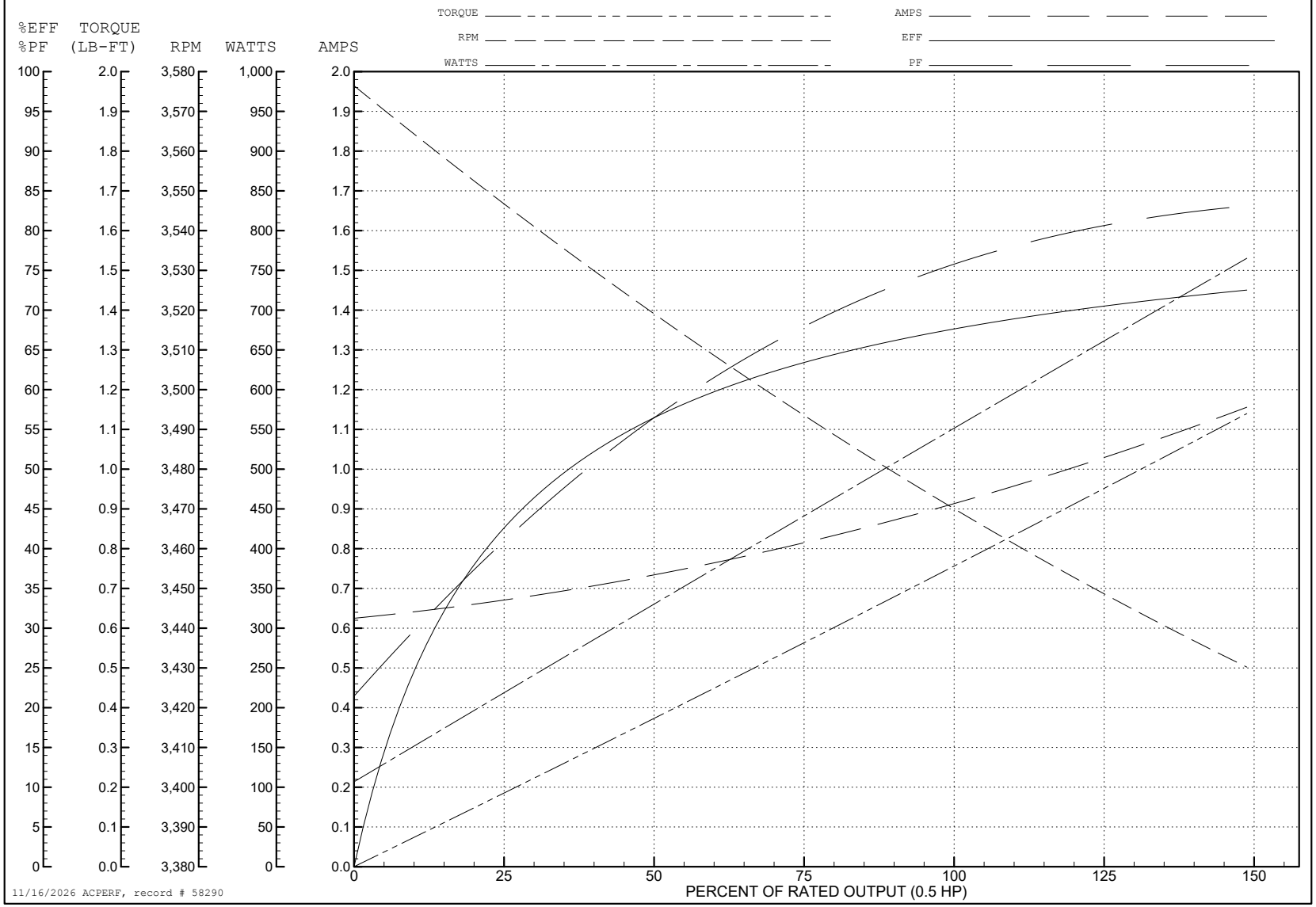
ABB Motors and Mechanical Inc.

WINDING # 34WGR421

0.5 HP 3 PH 60 HZ 3450 RPM 460 V 3414M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.6 PU=3.07 LR=3.86 LRA=8.39



11/16/2026 ACPERF, record # 58290

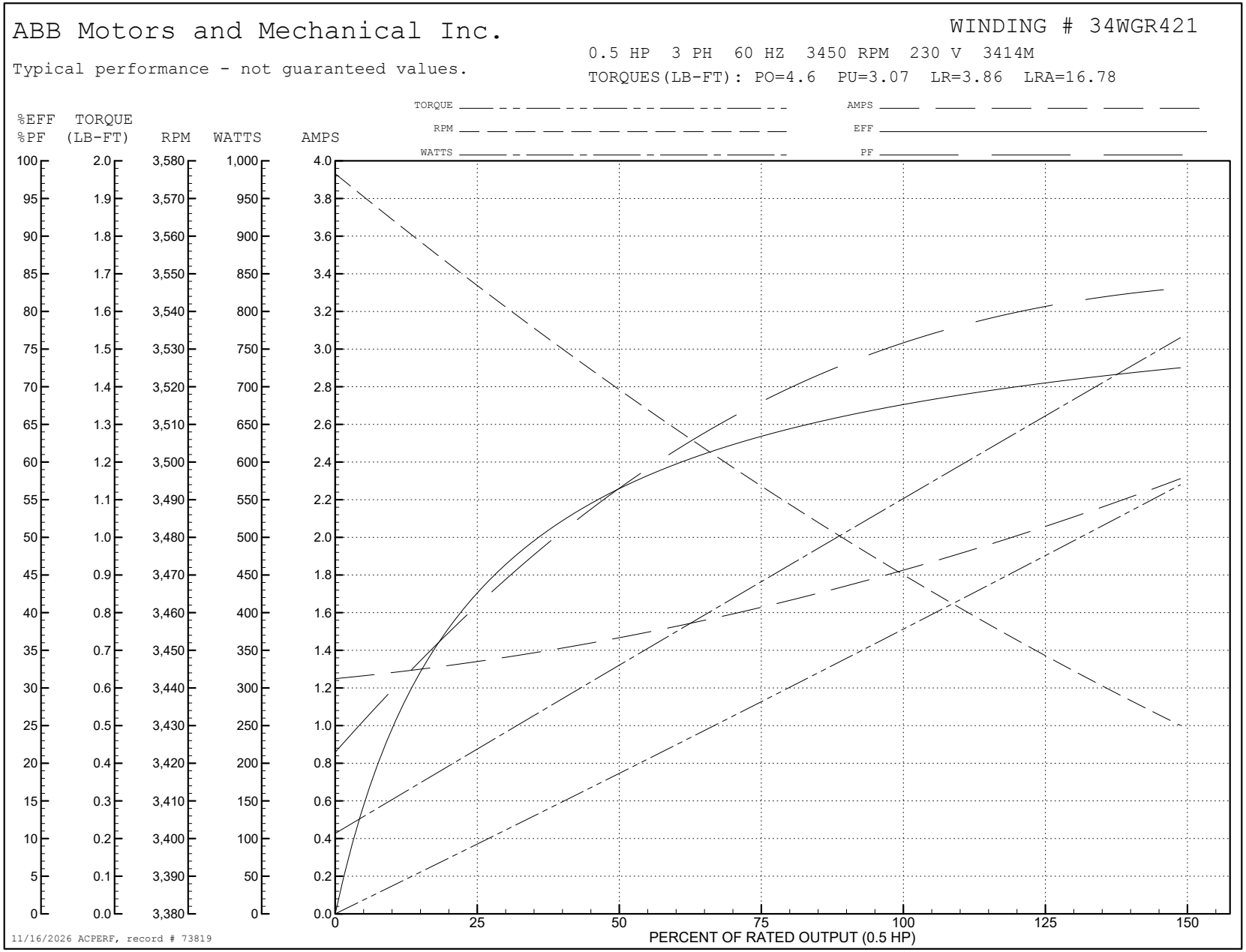
AC Induction Motor Performance Data
Record # 73819
Typical performance - not guaranteed values

Winding: 34WGR421-R001	**Type:** 3414M	**Enclosure:** TEFC

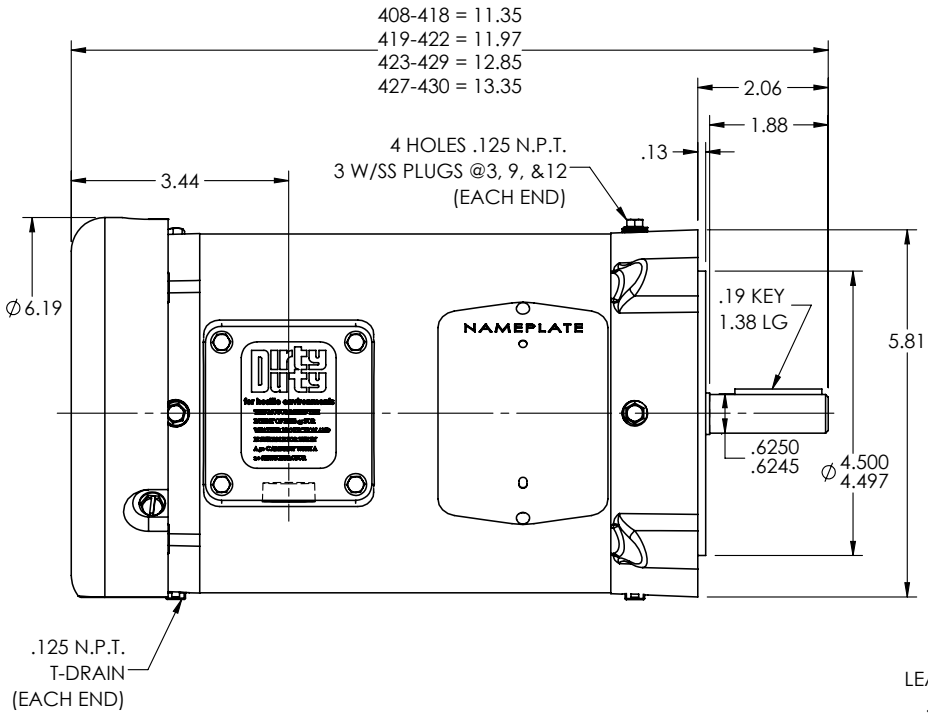
Nameplate Data				**230 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.763 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.8/.9	**Breakdown Torque**	4.6 LB-FT
R.P.M.			3450	**Pull-up Torque**	3.07 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	3.86 LB-FT
NEMA Design Code	B	**KVA Code**	P	**Starting Current**	16.78 A
Service Factor (S.F.)			1.25	**No-load Current**	1.25 A
NEMA Nom. Eff.	68	**Power Factor**	75	**Line-line Res. @ 25ºC**	6.46 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
S.F. Amps			2/1	**Temp. Rise @ S.F. Load**	57°C
				Locked-rotor Power Factor	69.4
				Rotor inertia	0.013 LB-FT2

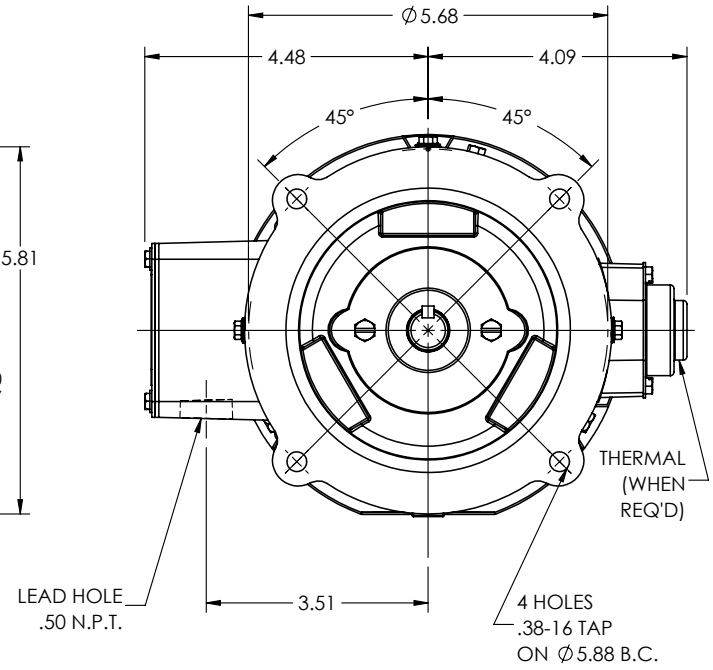
Load Characteristics 230 V, 60 Hz, 0.5 HP

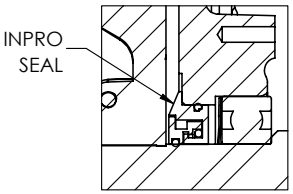
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	58	68	75	80	84	80
Efficiency	39.6	56.2	64.1	69.1	70.6	71.9	70.6
Speed	3537	3518	3497	3469	3452	3427	3452
Line amperes	1.35	1.46	1.63	1.83	2.08	2.3	2.08


ABB Motors and Mechanical Inc.
WINDING # 34WGR421
0.5 HP 3 PH 60 HZ 3450 RPM 230 V 3414M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=4.6 PU=3.07 LR=3.86 LRA=16.78
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.5 HP)
11/16/2026 ACPERF, record # 73819

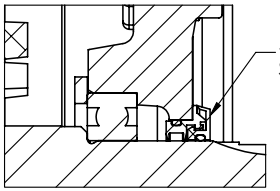
34LYM809







FRONT END DETAIL



PULLEY END DETAIL

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

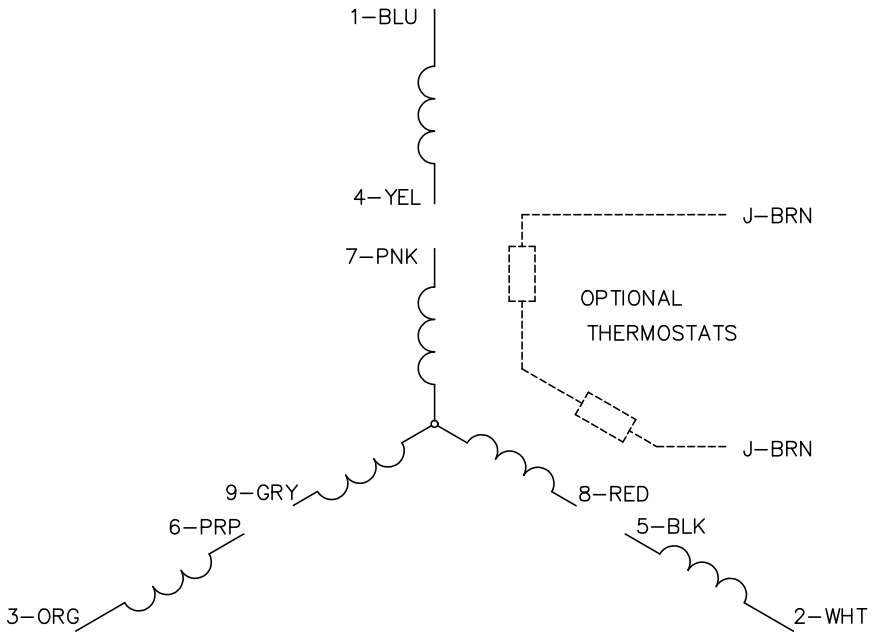
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REV: A	VERSION: 01	REVISED: 04:50:31 04/21/2023	TDR: 000001201165
MODEL NO. 34LYM809			REF: -
BY: ENFRAJ0			

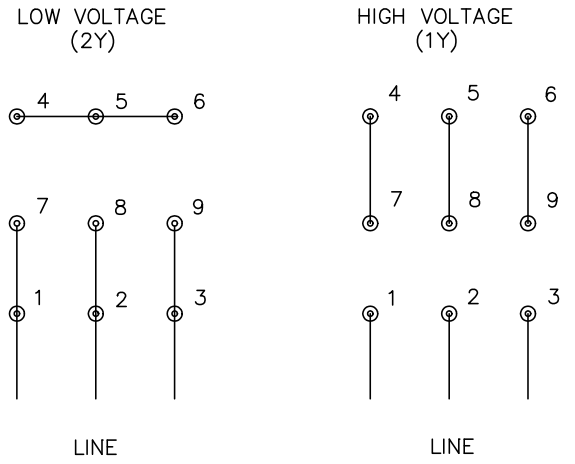
BALDOR - RELIANCE®

VER 56C TEFC 34M DDP (S/P032-002-002) LOW RES ENDRINGS

34LYM809

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