ABB BALDOR RELIANCE

Customer information packet

VM3545-50

1HP, 2850RPM, 3PH, 50HZ, 56C, 3420M, TEFC, F1
Class -
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56C
Frequency	50.00 Hz
Haz Area Division	Not Applicable
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	440.0 V @ 50 HZ
	380.0 V @ 50 HZ
	220.0 V @ 50 HZ
Agency Approvals	CE
	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	1.700 A @ 440.0 V
	2.000 A @ 380.0 V
	3.400 A @ 220.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	79.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a

Part Detail

Revision	S
Type	AC
Mech. spec.	34A063
Base	
Status	NLA/A
Elec. spec.	34WGW637
Layout	34LYA063
Eff. date	03-29-2012
CD Diagram	CD0044
Poles	02
Leads	12#18
Proprietary	False
Created date	01-01-0001

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	12 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 IN
Power Factor	74
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	1.25
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	2850 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

NP1372L										
CAT.NO.										
SPEC.	34A63W637									
HP	1									
VOLTS	220/380/440									
AMP	3.4/2/1.7									
FRAME	56C		**HZ**	50			**PH**	3		
SER.F.	1.25	**CODE**	L	**DES**	B	**CL**	B			
NEMA-NOM-EFF	80	**PF**	74							
RATING	40C AMB-CONT									
CC										
DE	6203		**ODE**	6203						
ENCL	TEFC	**SN**								
	SFA 3.8/2.2/1.9									

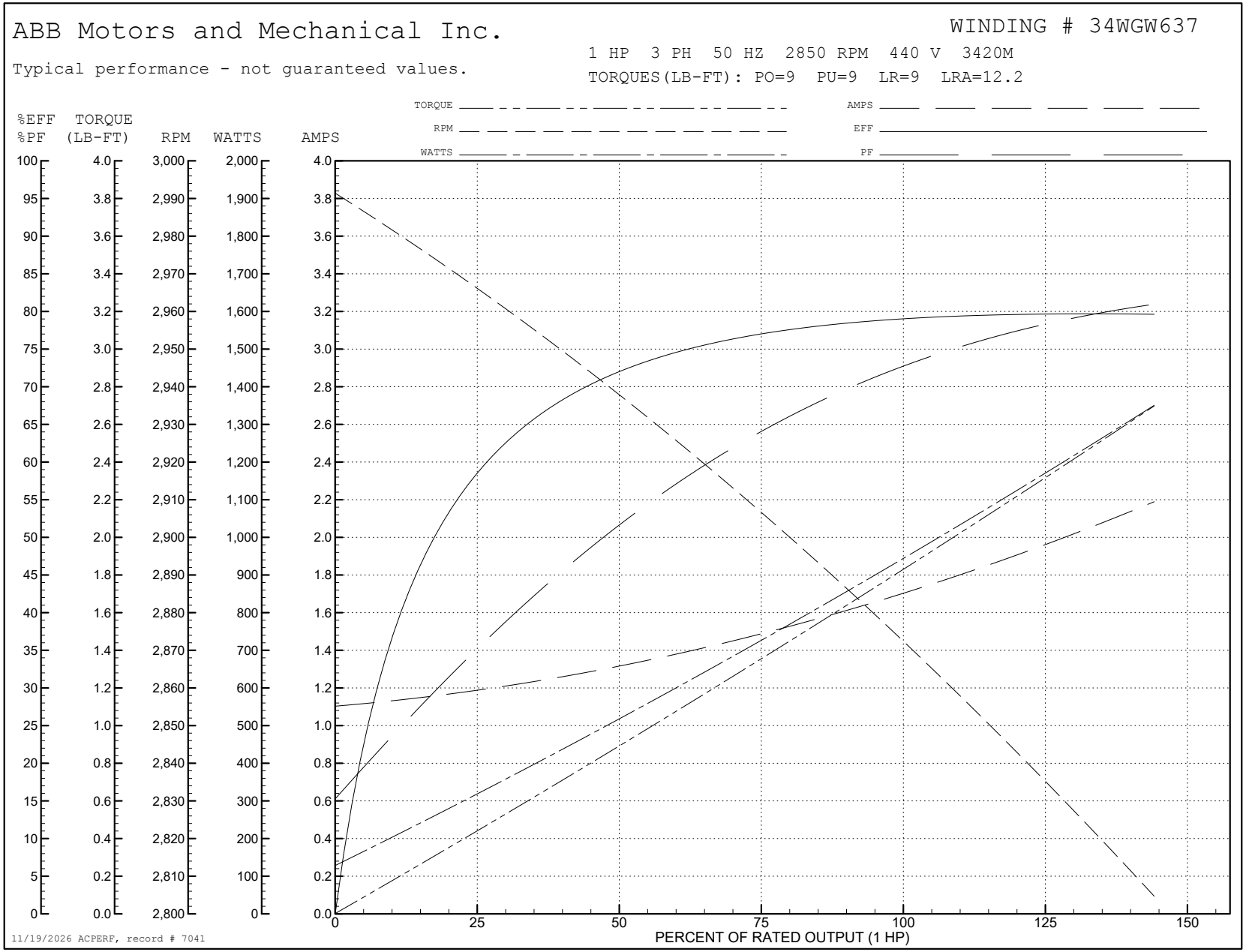
AC Induction Motor Performance Data
Record # 7041
Typical performance - not guaranteed values

Winding: 34WGW637-R001	**Type:** 3420M	**Enclosure:** TEFC

Nameplate Data				**440 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.8 LB-FT
Volts			220/380/440	**Start Configuration**	direct on line
Full Load Amps			3.4/2/1.7	**Breakdown Torque**	9 LB-FT
R.P.M.			2850	**Pull-up Torque**	9 LB-FT
Hz	50	**Phase**	3	**Locked-rotor Torque**	9 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	12.2 A
Service Factor (S.F.)			1.25	**No-load Current**	1.1 A
NEMA Nom. Eff.	80	**Power Factor**	74	**Line-line Res. @ 25ºC**	12.1 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
S.F. Amps			3.8/2.2/1.9	**Temp. Rise @ S.F. Load**	73°C
				Locked-rotor Power Factor	72
				Rotor inertia	0.0186 LB-FT2

Load Characteristics 440 V, 50 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	36	53	65	74	80	84	0
Efficiency	58.4	71.9	77	79.1	79.8	79.5	0
Speed	2965	2937	2907	2875	2841	2804	0
Line amperes	1.2	1.3	1.5	1.7	1.9	2.2	1.9


ABB Motors and Mechanical Inc.
WINDING # 34WGW637
1 HP 3 PH 50 HZ 2850 RPM 440 V 3420M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=9 PU=9 LR=9 LRA=12.2
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/19/2026 ACPERF, record # 7041

AC Induction Motor Performance Data
Record # 27358
Typical performance - not guaranteed values

Winding: 34WGW637-R001	**Type:** 3420M	**Enclosure:** TEFC

Nameplate Data				**440 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.9 LB-FT
Volts			220/380/440	**Start Configuration**	direct on line
Full Load Amps			3.4/2/1.7	**Breakdown Torque**	9.6 LB-FT
R.P.M.			2850	**Pull-up Torque**	8.31 LB-FT
Hz	50	**Phase**	3	**Locked-rotor Torque**	10 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	13.5 A
Service Factor (S.F.)			1.25	**No-load Current**	1.19 A
NEMA Nom. Eff.	80	**Power Factor**	74	**Line-line Res. @ 25ºC**	12 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	70°C
S.F. Amps			3.8/2.2/1.9	**Temp. Rise @ S.F. Load**	88°C
				Locked-rotor Power Factor	72
				Rotor inertia	0.0186 LB-FT2

Load Characteristics 440 V, 50 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	36	54	68	77	84	87	84
Efficiency	62.7	73.7	78.1	79.2	79.1	78	79.1
Speed	2959	2925	2886	2850	2806	2761	2806
Line amperes	1.21	1.3	1.46	1.66	1.91	2.21	1.91

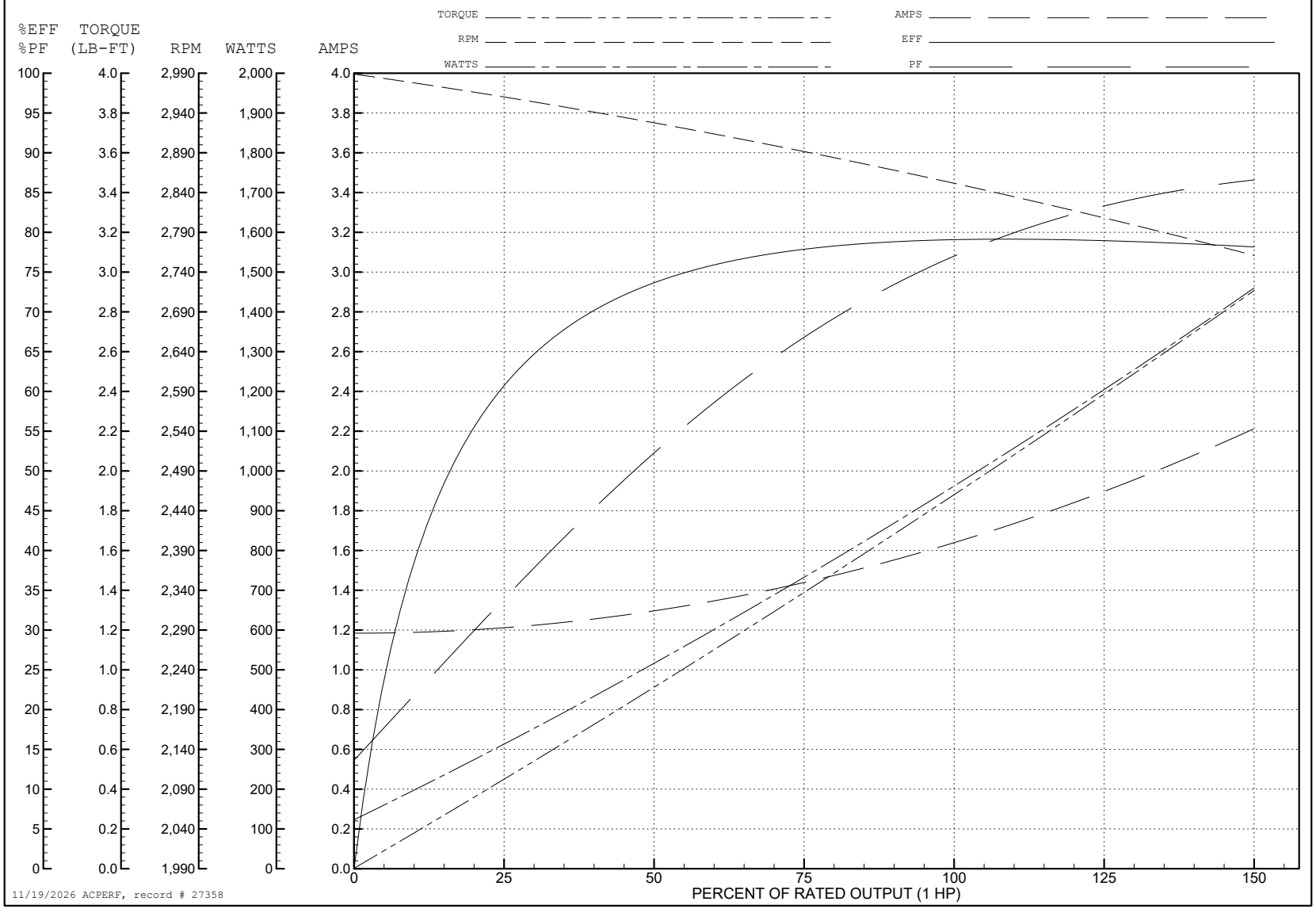
ABB Motors and Mechanical Inc.

WINDING # 34WGW637

1 HP 3 PH 50 HZ 2850 RPM 440 V 3420M

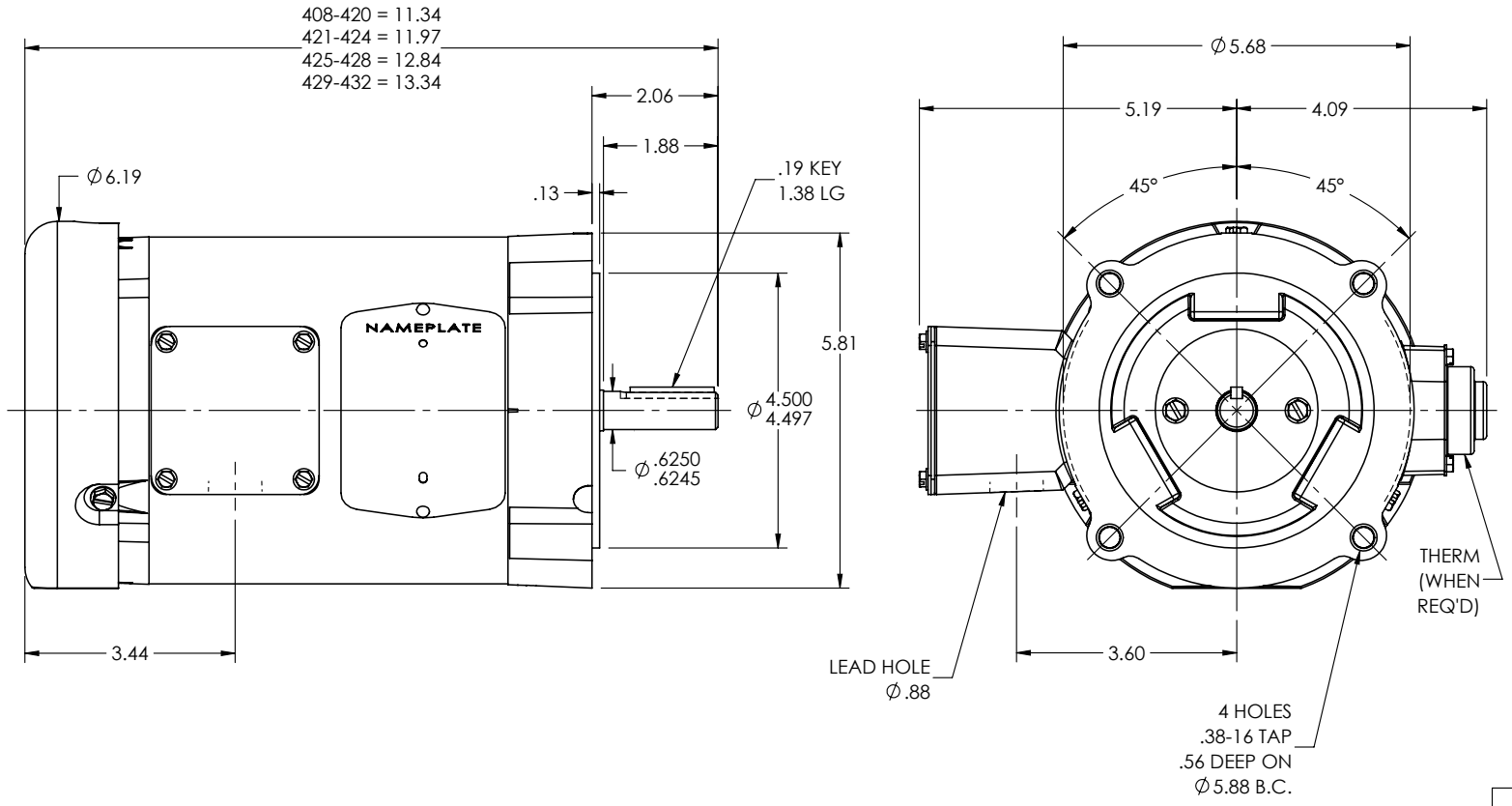
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=9.6 PU=8.31 LR=10 LRA=13.5



11/19/2026 ACPERF, record # 27358

34LYA063



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

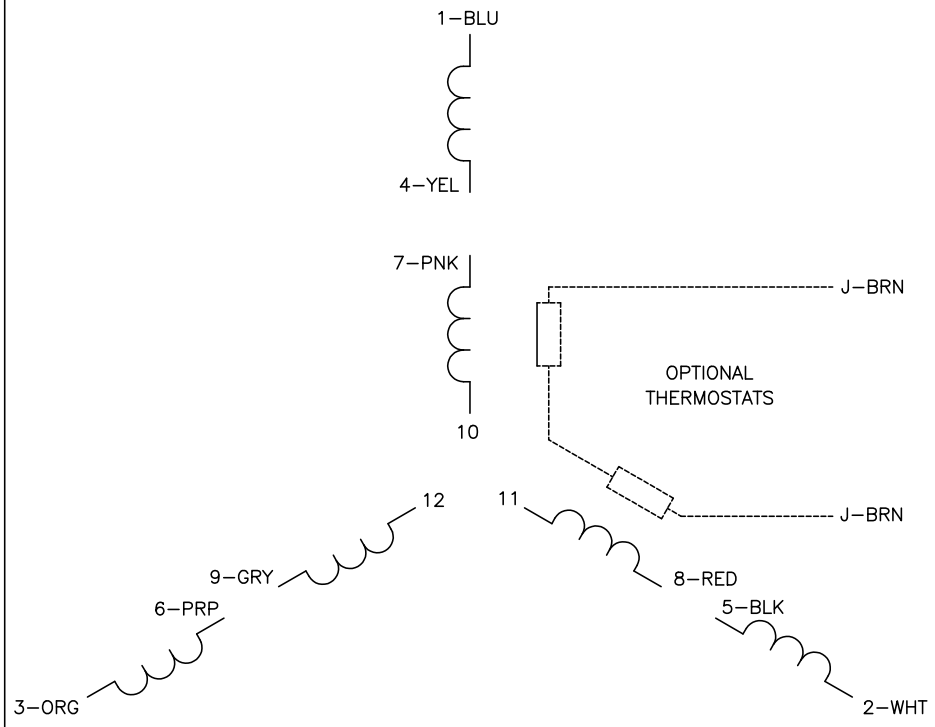
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REV: P	VERSION: 05	REVISED: 08:51:08 10/31/2024	TDR: 000001243684
34LYA063	MODEL NO. 34LYA063		REF: -
	BY: ENJEFD0		

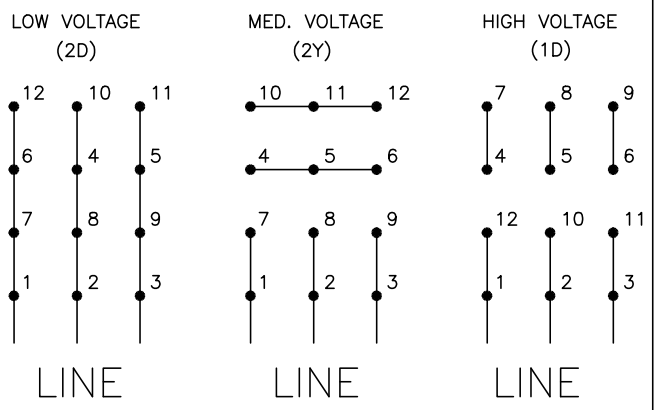
BALDOR - RELIANCE®

STD VERT 34M NEMA 56C TEFC

34LYA063

CD0044





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.

CD0044

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: G	BY: JLP	REVISED: 01/19/99 4:09	TDR: 0171435
CD0044		FILE: AAA00008373	MDL: –
		MTL: –	3PH, TV, 12 LEADS, 2D/2Y/1D