ABB BALDOR RELIANCE

Customer information packet

VBM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, BRAKE, 3420M
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
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	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
Agency Approvals	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
Brake Torque	3.0 lb-ft
Current @ Voltage	1.900 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	75.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part Detail

Revision	AJ
Type	AC
Mech. spec.	34K045
Base	
Status	PRD/A
Elec. spec.	34WG0097
Layout	34LYK045
Eff. date	10-28-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.98 IN
Power Factor	69
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	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1725 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP1256L									
CAT.NO.	VBM3538								
SPEC.	34K45-97-B								
HP	.5								
VOLTS	208-230/460								
AMP	1.9-1.8/.9								
RPM	1725								
FRAME	56C		**HZ**	60			**PH**	3	
SER.F.	1.00	**CODE**	K	**DES**	B	**CLASS**		B	
NEMA-NOM-EFF	75.5	**PF**	69						
RATING	40C AMB-CONT								
CC									
DE	6203		**ODE**	6203					
ENCL	TENV	**SN**							

AC Induction Motor Performance Data
Record # 6542
Typical performance - not guaranteed values

Winding: 34WG0097-R001	**Type:** 3420M	**Enclosure:** TENV

Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		.5	**Full Load Torque**	1.5 LB-FT
Volts		208-230/460	**Start Configuration**	direct on line
Full Load Amps		1.9-1.8/.9	**Breakdown Torque**	6.8 LB-FT
R.P.M.		1725	**Pull-up Torque**	4.6 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	5.8 LB-FT
NEMA Design Code	B **KVA Code**	K	**Starting Current**	7 A
Service Factor (S.F.)		1	**No-load Current**	0.54 A
NEMA Nom. Eff.	75.5 **Power Factor**	69	**Line-line Res. @ 25ºC**	27.56 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	57°C

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	38	53	65	71	75	81
Efficiency	55	69	74	78	75.5	74.4
Speed	1787	1774	1760	1749	1728	1717
Line amperes	0.6	0.65	0.74	0.84	1	1.1

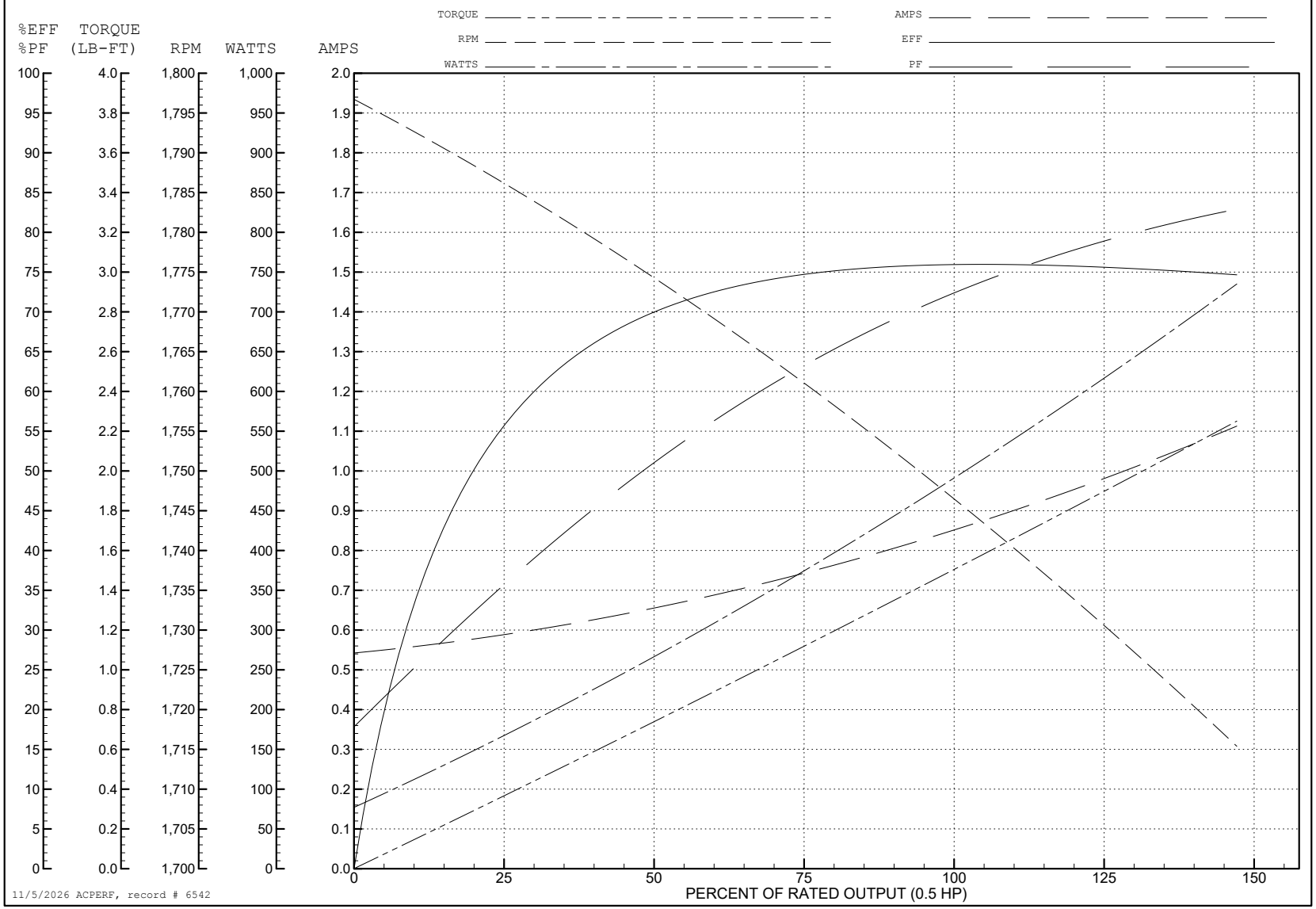
ABB Motors and Mechanical Inc.

WINDING # 34WG0097

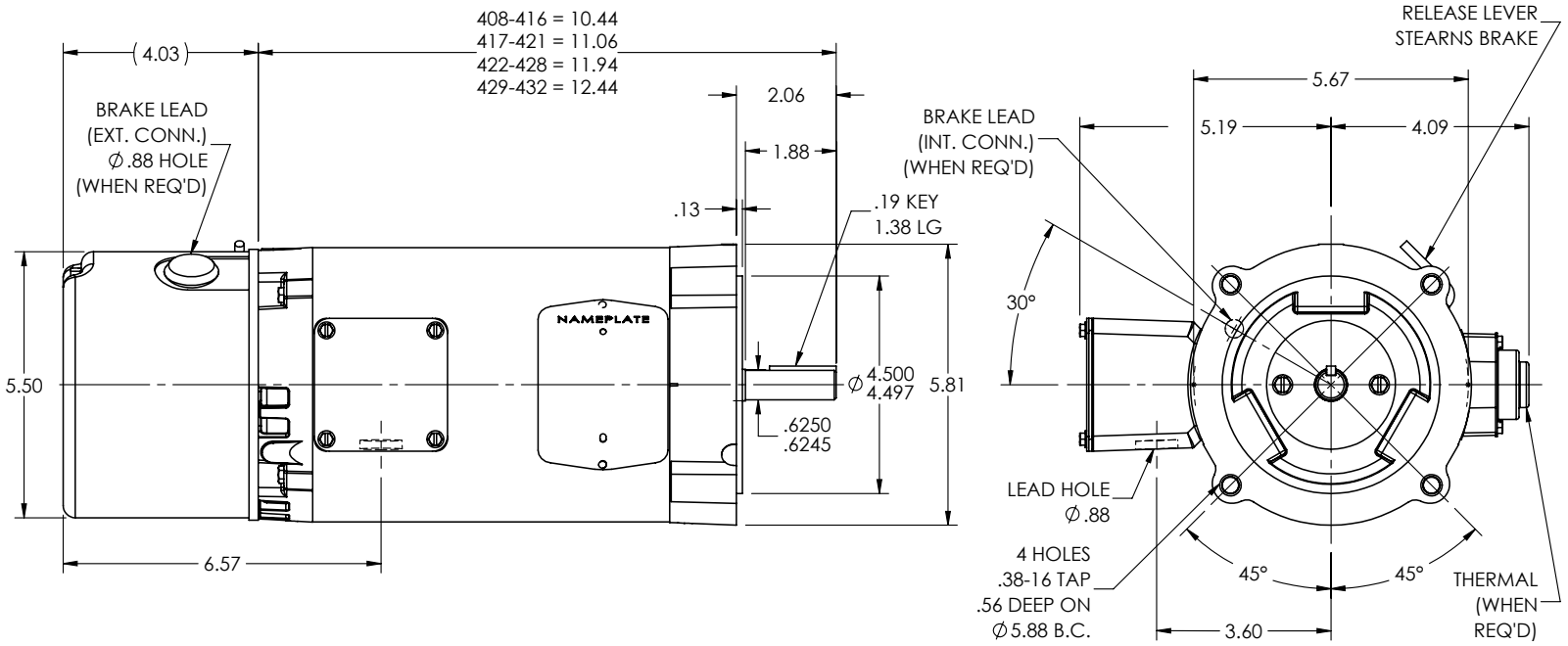
0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=6.8 PU=4.6 LR=5.8 LRA=7



34LYK045



34LYK045

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

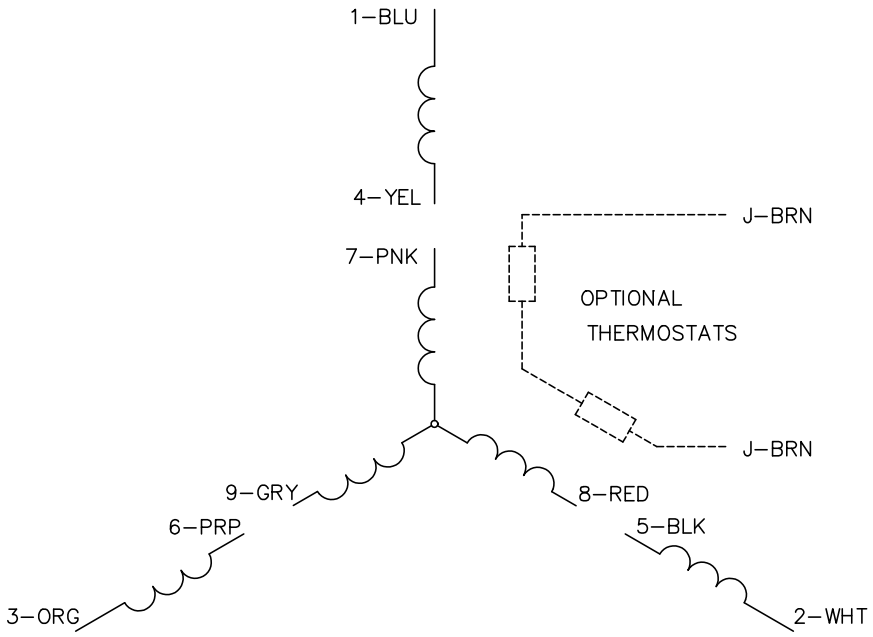
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REV: J	VERSION: 03	REVISED: 08:31:02 04/13/2023	TDR: 000001201165
34LYK045	MODEL NO. 34LYK045		REF: -
	BY: ENFRAJ0		

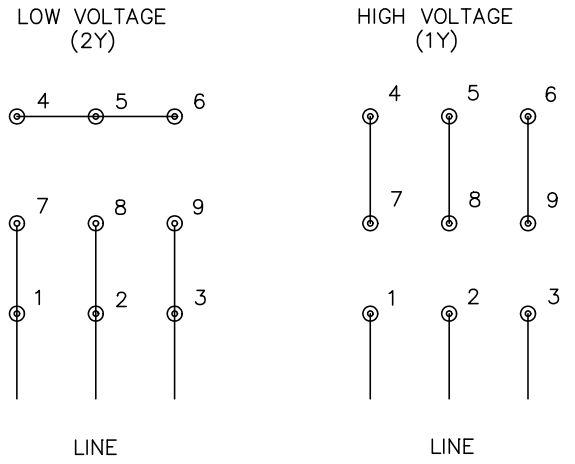
BALDOR - RELIANCE®

VERT 34M NEMA 56C TENV W/STEARNS BRAKE (48 SERIES)

34LYK045

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