ABB BALDOR RELIANCE

Customer information packet

BM3116

1HP, 1725RPM, 3PH, 60HZ, 56, BRAKE, 3424M, OPEN
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	56
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
	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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Brake Torque	3.0 lb-ft
Current @ Voltage	3.700 A @ 208.0 V
	3.400 A @ 230.0 V
	1.700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part Detail

Revision	U
Type	AC
Mech. spec.	34F039
Base	
Status	PRD/A
Elec. spec.	34WGW990
Layout	34LYF039
Eff. date	12-31-2024
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	1.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	3424M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.64 IN
Power Factor	70
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
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.	BM3116										
SPEC.	34F039W990G1										
HP	1										
VOLTS	208-230/460										
AMP	3.7-3.4/1.7										
RPM	1725										
FRAME	56		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	K	**DES**	B	**CLASS**		B			
NEMA-NOM-EFF	78.5	**PF**	70								
RATING	40C AMB-CONT										
CC											
DE	6203		**ODE**	6203							
ENCL	OPEN	**SN**									

AC Induction Motor Performance Data
Record # 50818
Typical performance - not guaranteed values

Winding: 34WGW990-R002	**Type:** 3424M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	3.1 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			3.7-3.4/1.7	**Breakdown Torque**	11.8 LB-FT
R.P.M.			1725	**Pull-up Torque**	8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	10.5 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	11.4 A
Service Factor (S.F.)			1.15	**No-load Current**	1.1 A
NEMA Nom. Eff.	78.5	**Power Factor**	70	**Line-line Res. @ 25ºC**	13.4 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	34	51	63	72	77	81	75
Efficiency	59.6	72.6	77.3	79.1	79.3	78.6	79.2
Speed	1778	1760	1741	1721	1698	1673	1707
Line amperes	1.2	1.3	1.4	1.7	1.9	2.2	1.8

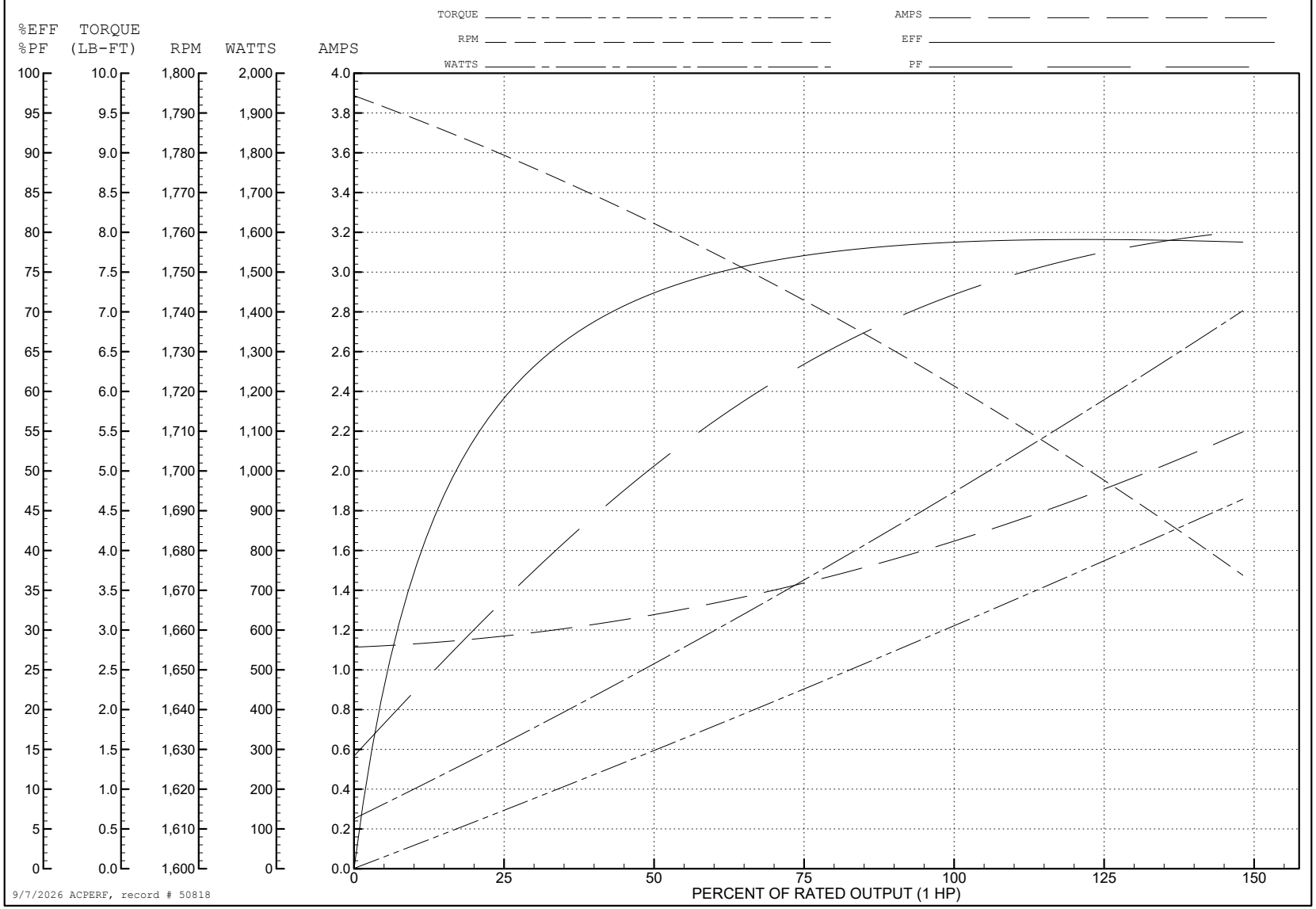
ABB Motors and Mechanical Inc.

WINDING # 34WGW990

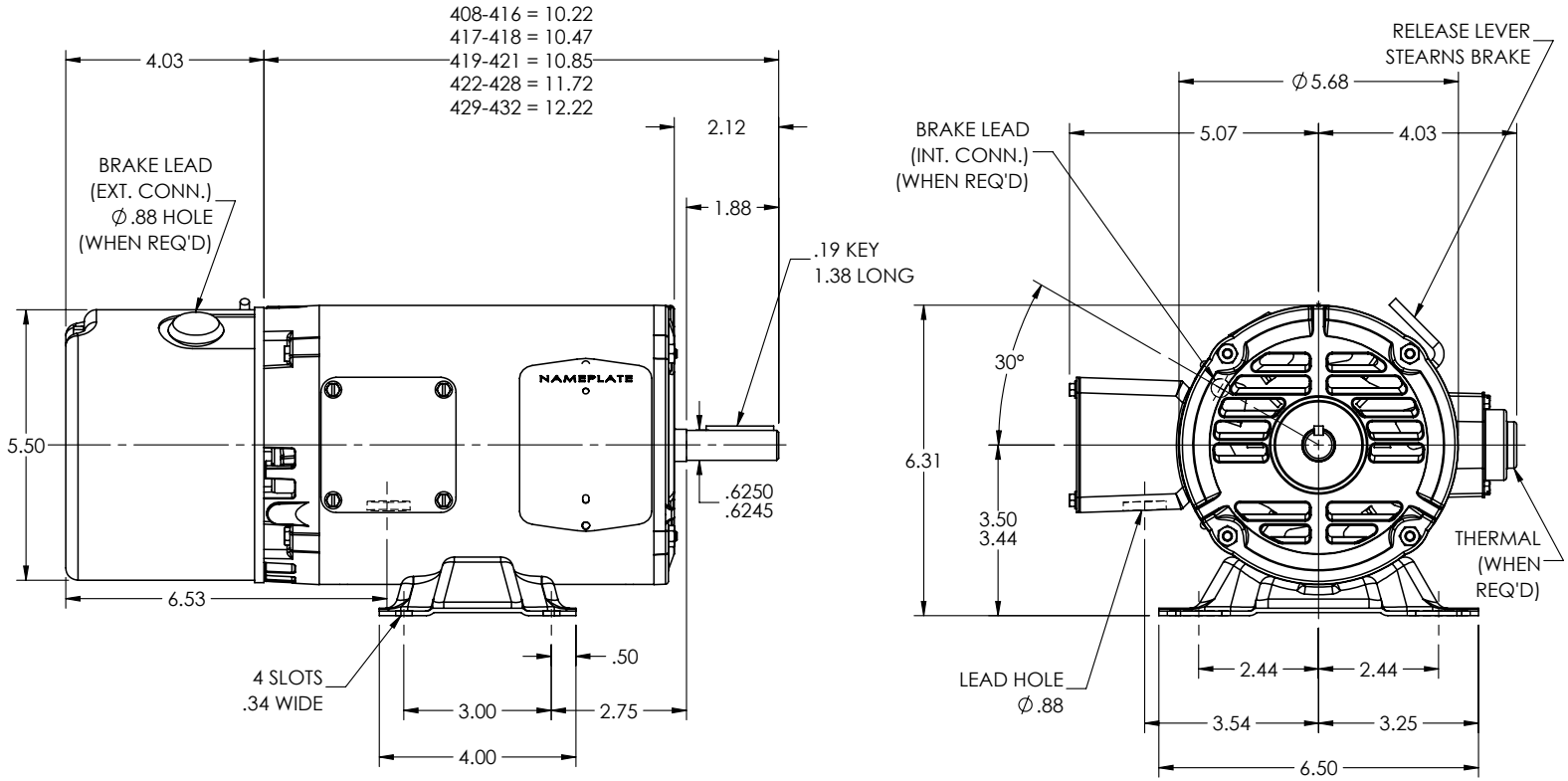
1 HP 3 PH 60 HZ 1725 RPM 460 V 3424M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=11.8 PU=8 LR=10.5 LRA=11.4



34LYF039



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

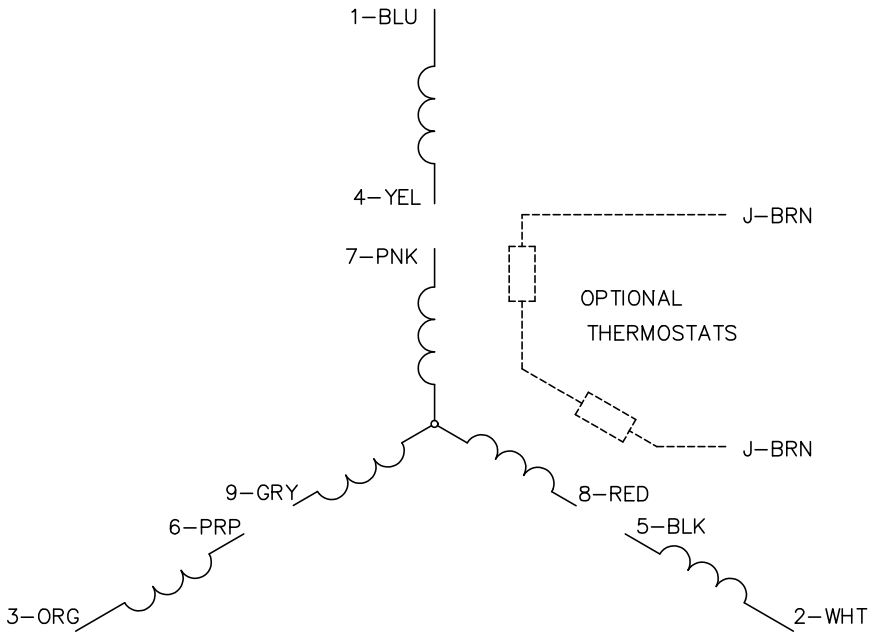
REV. DESC: LOAD TO SOLIDWORKS - REV C			
REV: D	VERSION: 02	REVISED: 04:44:40 05/18/2023	TDR: 000001201165
34LYF039	MODEL NO. 34LYF039		REF: -
	BY: ENFRAJ0		

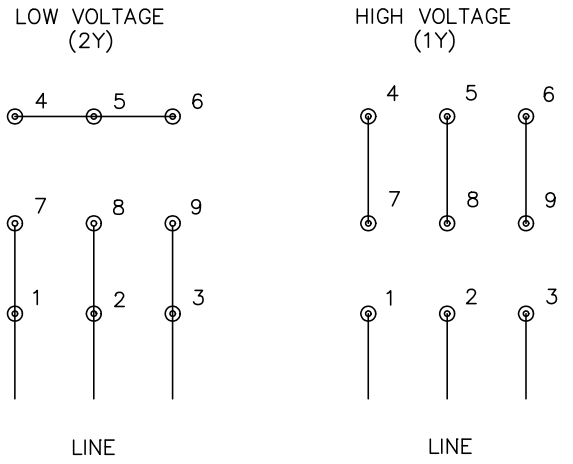
BALDOR - RELIANCE®

STD HORZ MODEL 34M NEMA 56 OPEN W/BRAKE

34LYF039

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