ABB BALDOR RELIANCE

Customer information packet

BM3542

.75HP, 1725RPM, 3PH, 60HZ, 56, 3420M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
	460.0 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
Current @ Voltage	3.200 A @ 208.0 V
	3.000 A @ 230.0 V
	1.500 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 Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	C
Type	AC
Mech. spec.	34-3108
Base	
Status	PRD/A
Elec. spec.	34WGR707
Layout	34LY3108
Eff. date	03-17-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-29-2021

High Voltage Full Load Amps	1.5 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
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	16.45 IN
Power Factor	64
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
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
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1256L												
CAT.NO.	BM3542											
SPEC.	34-3108R707-C											
HP	.75											
VOLTS	208-230/460											
AMP	3.2-3/1.5											
RPM	1725											
FRAME	56		**HZ**	60			**PH**	3				
SER.F.	1.25	**CODE**	M	**DES**	B	**CLASS**		B				
NEMA-NOM-EFF	75.5	**PF**	64									
RATING	40C AMB-CONT											
CC												
DE	6203		**ODE**	6203								
ENCL	TEFC	**SN**										
	SFA 3.6-3.4/1.7											

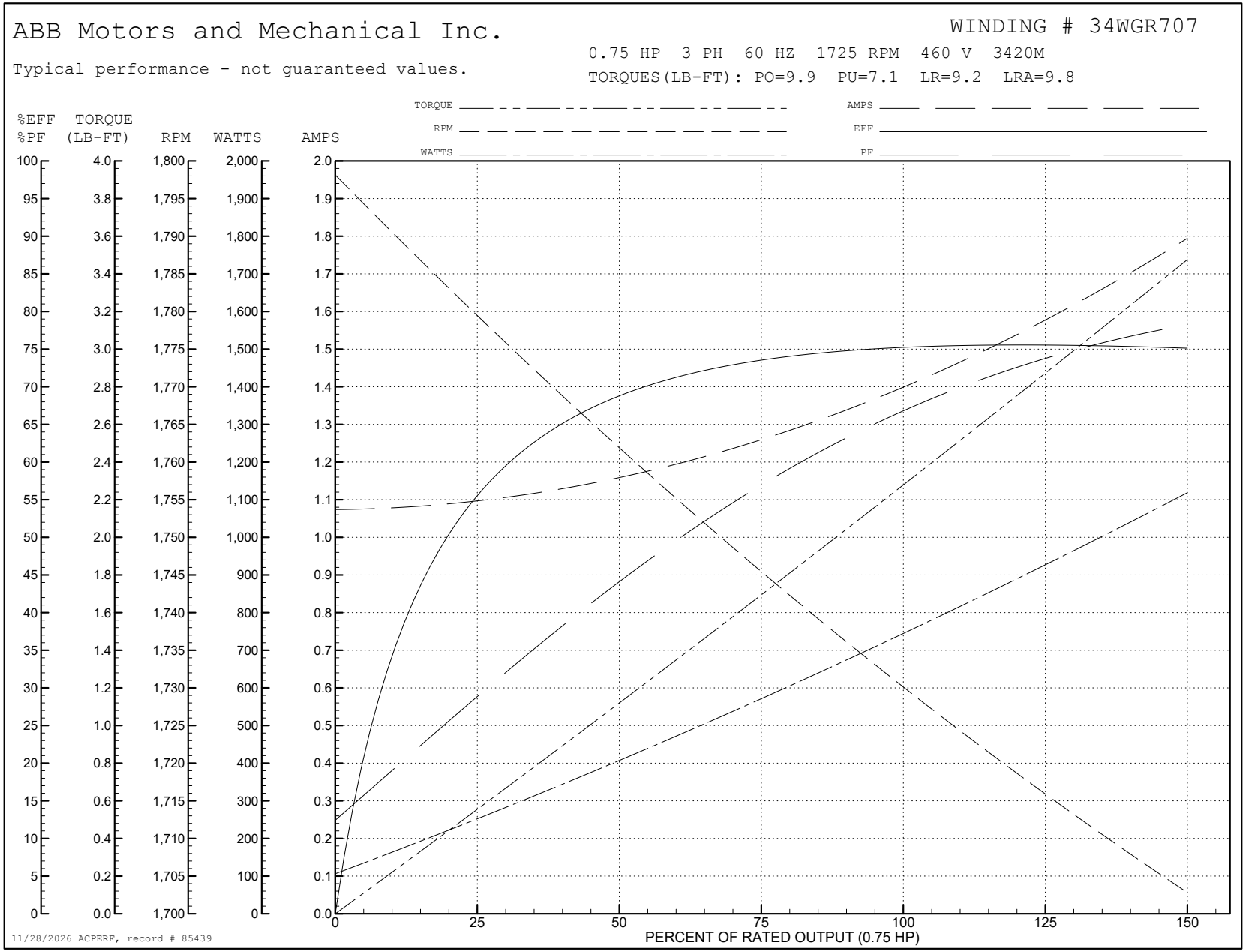
AC Induction Motor Performance Data
Record # 85439
Preliminary Data Sheet

Winding: 34WGR707-R001	**Type:** 3420M	**Enclosure:** TEFC

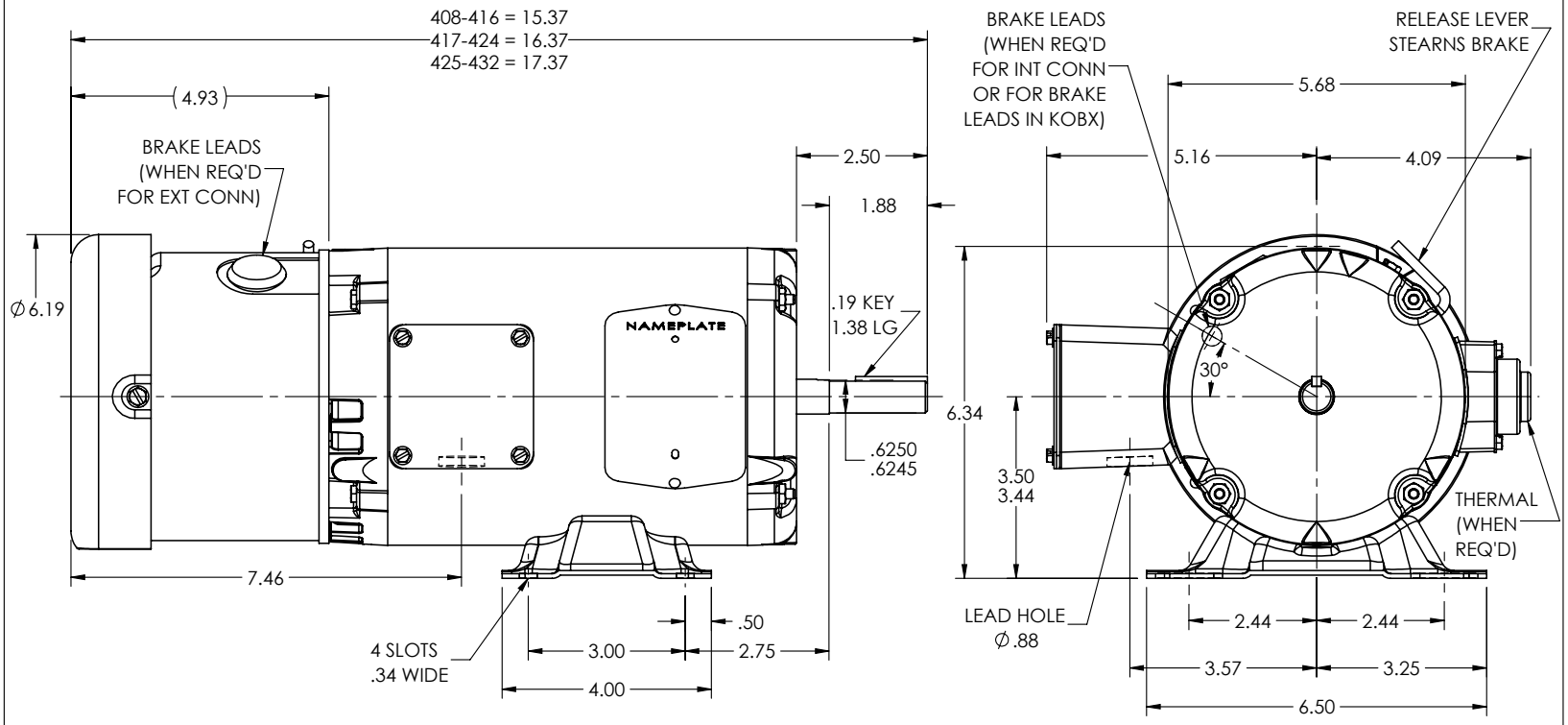
Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			0.75	**Full Load Torque**	2.27 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			3.2-3.0/1.5	**Breakdown Torque**	9.9 LB-FT
R.P.M.			1725	**Pull-up Torque**	7.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	9.2 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	9.8 A
Service Factor (S.F.)			1.25	**No-load Current**	1.08 A
NEMA Nom. Eff.	77	**Power Factor**	61	**Line-line Res. @ 25ºC**	21 Ω
Rating - Duty			40C-AMB CONT	**Temp. Rise @ Rated Load**	69°C
S.F. Amps			3.6-3.4/1.7	**Temp. Rise @ S.F. Load**	83°C
				Locked-rotor Power Factor	59.2
				Rotor inertia	0.0476 LB-FT2

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	44	56	66	73	79	73
Efficiency	54.7	68.4	73.5	75.2	75.8	74.9	76.5
Speed	1780	1763	1745	1726	1723	1700	1723
Line amperes	1.09	1.15	1.26	1.4	1.58	1.79	1.58


ABB Motors and Mechanical Inc.
WINDING # 34WGR707
Typical performance - not guaranteed values.
0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3420M
TORQUES(LB-FT): PO=9.9 PU=7.1 LR=9.2 LRA=9.8
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/28/2026 ACPERF, record # 85439

34LY3108



34LY3108

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

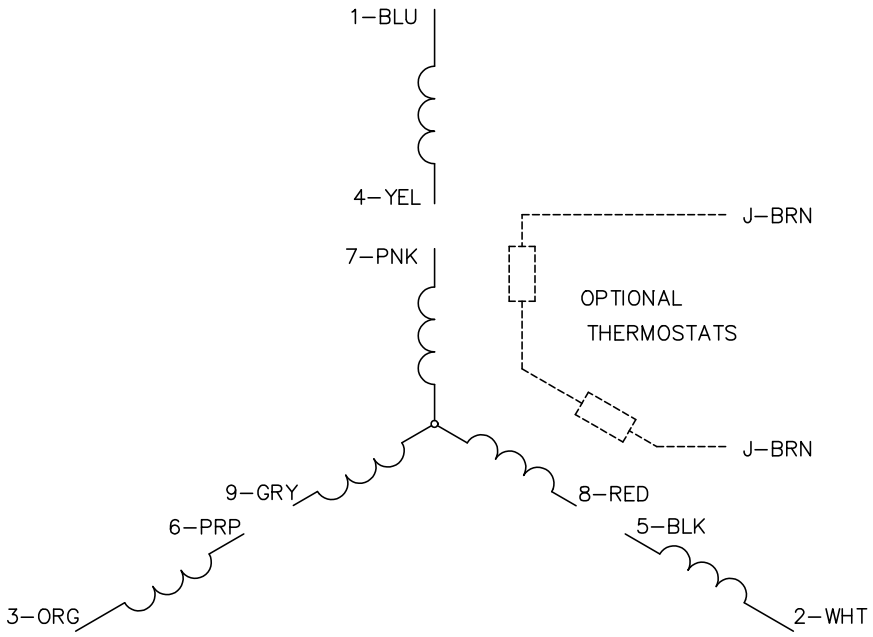
REV. DESC: LOAD TO SOLIDWORKS - REV K			
REV: L	VERSION: 06	REVISED: 01:44:07 12/14/2022	TDR: 000001201165
34LY3108	MODEL NO. 34LY3108		REF: -
	BY: ENFRAJ0		

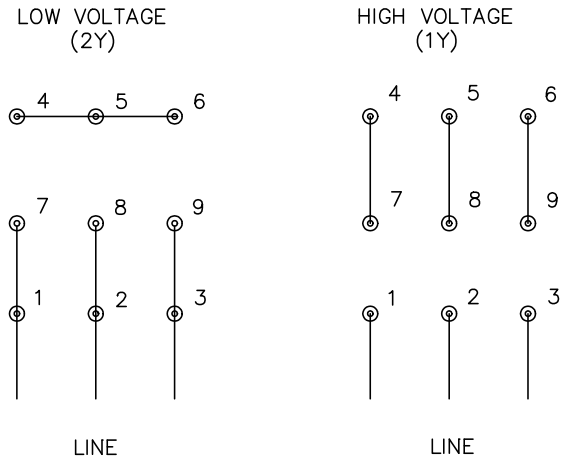
BALDOR - RELIANCE®

STD HORZ MODEL 34M NEMA 56 TEFC W/BRAKE

34LY3108

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