ABB BALDOR RELIANCE

Customer information packet

M3355

.17HP, 1725RPM, 3PH, 60HZ, 42, 3316M, TEFC, F1

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/5/2026 12:09:48 PM

Specifications

Enclosure	TEFC
Frame	42
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	.170 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	C UR US
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	.600 A @ 460.0 V
	1.200 A @ 230.0 V
	1.400 A @ 208.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	62.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Feedback Signal	NONE
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.6 a
Insulation Class	B

Part Detail

Revision	AG
Type	AC
Mech. spec.	33-870
Base	
Status	PRD/A
Elec. spec.	33WG0423
Layout	33LY0870
Eff. date	10-24-2024
CD Diagram	CD0005A05
Poles	04
Leads	9#18
Proprietary	False
Created date	06-25-2007

Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	-
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	3316M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	9.56 IN
Power Factor	51
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.35
Shaft Diameter	0.375 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
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1256L							
CAT.NO.	M3355						
SPEC.	33-870-423						
HP	.17						
VOLTS	230/460						
AMP	1.2/.6						
RPM	1725						
FRAME	42	**HZ**	60		**PH**	3	
SER.F.	1.35	**CODE**	-	**DES**	-	**CLASS**	B
NEMA-NOM-EFF	62	**PF**	51				
RATING	40C AMB-CONT						
CC							
DE	6203	**ODE**	6203				
ENCL	TEFC	**SN**					
	SFA 1.3/.65						

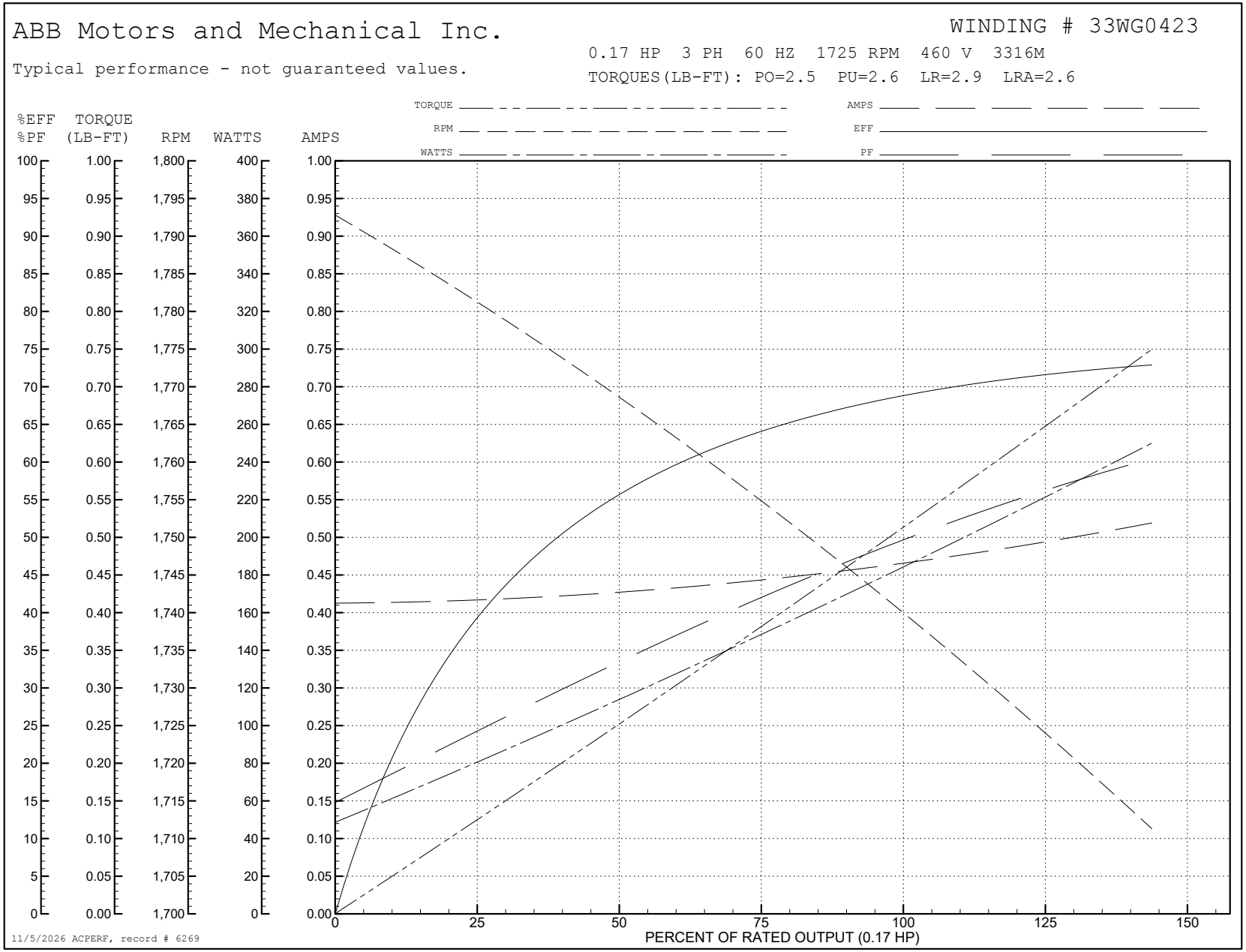
AC Induction Motor Performance Data
Record # 6269
Typical performance - not guaranteed values

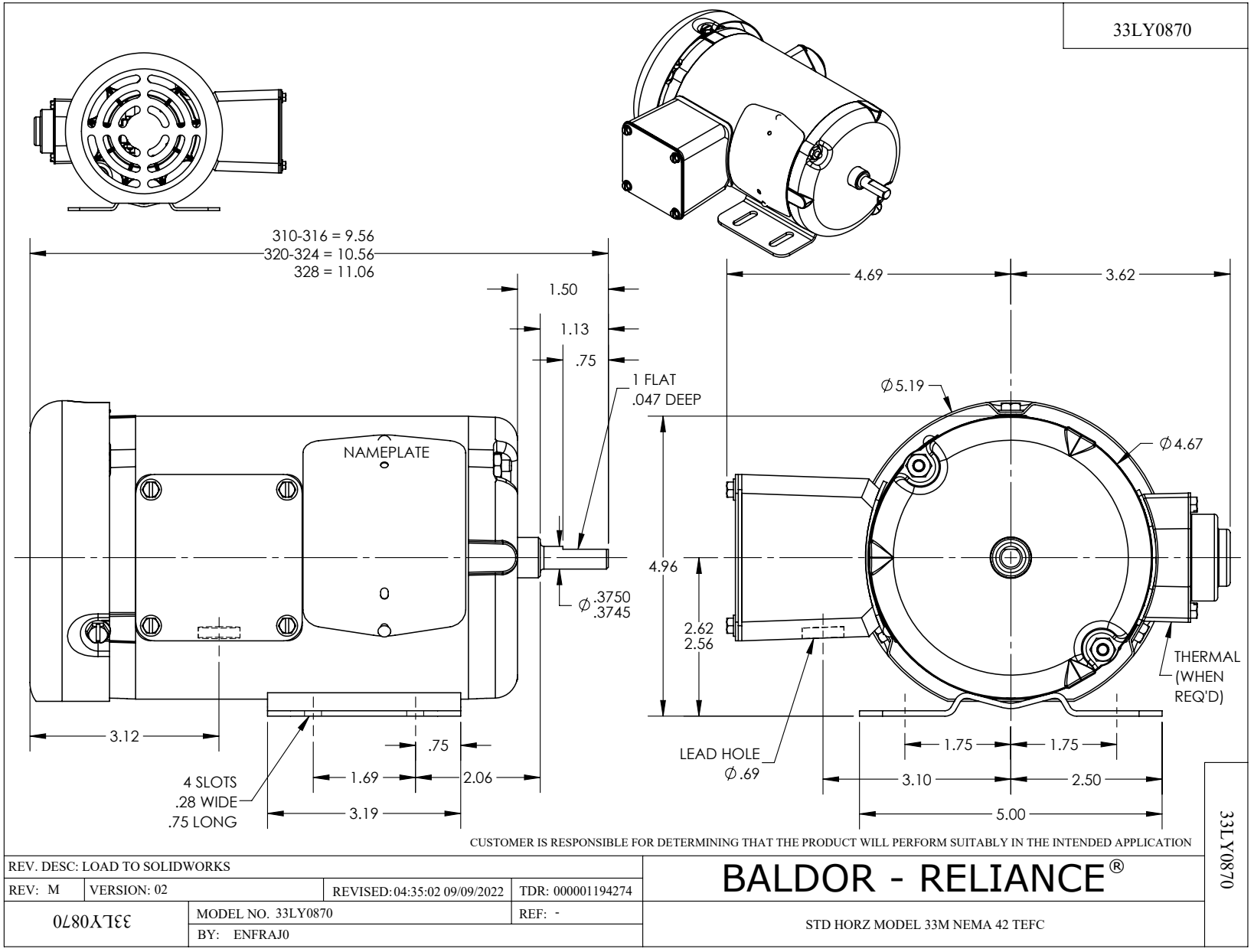
Winding: 33WG0423-R001	**Type:** 3316M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.17	**Full Load Torque**	0.5 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.2/.6	**Breakdown Torque**	2.5 LB-FT
R.P.M.			1725	**Pull-up Torque**	2.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	2.9 LB-FT
NEMA Design Code	-	**KVA Code**	-	**Starting Current**	2.6 A
Service Factor (S.F.)			1.35	**No-load Current**	0.41 A
NEMA Nom. Eff.	62	**Power Factor**	51	**Line-line Res. @ 25ºC**	68.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	26°C
S.F. Amps			1.3/.65	**Temp. Rise @ S.F. Load**	32°C

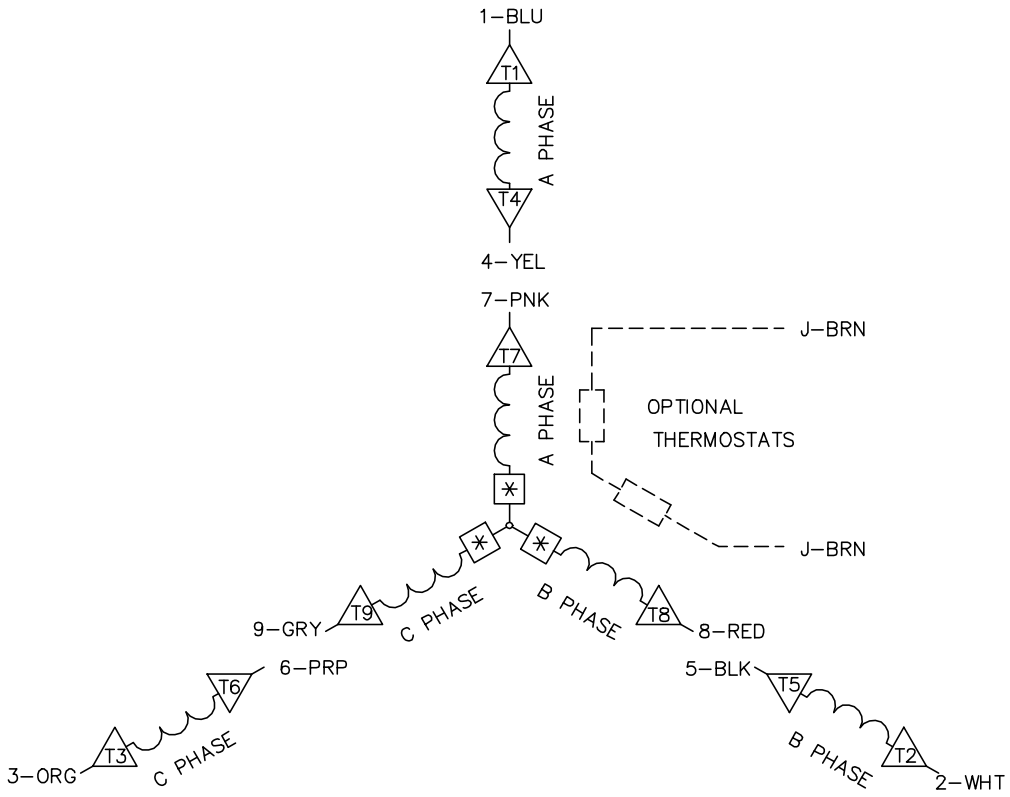
Load Characteristics 460 V, 60 Hz, 0.17 HP

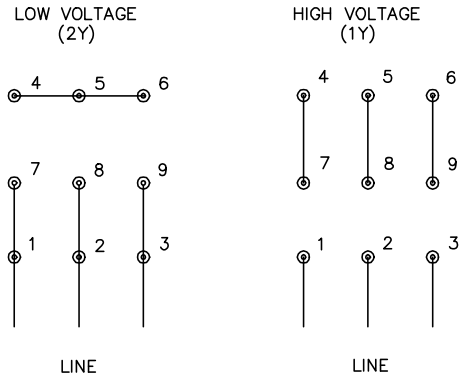
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	24	34	42	50	57	63	60
Efficiency	39.3	55.4	63.8	68.5	71.4	72.9	72.6
Speed	1781	1769	1755	1742	1727	1711	1721
Line amperes	0.42	0.43	0.44	0.46	0.49	0.52	0.5


ABB Motors and Mechanical Inc.
WINDING # 33WG0423
Typical performance - not guaranteed values.
0.17 HP 3 PH 60 HZ 1725 RPM 460 V 3316M
TORQUES(LB-FT): PO=2.5 PU=2.6 LR=2.9 LRA=2.6
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.17 HP)
11/5/2026 ACPERF, record # 6269


33LY0870
310-316 = 9.56
320-324 = 10.56
328 = 11.06
1.50
1.13
.75
1 FLAT
.047 DEEP
NAMEPLATE
Ø.3750
.3745
3.12
.75
1.69
2.06
4 SLOTS
.28 WIDE
.75 LONG
3.19
4.69
3.62
Ø5.19
Ø4.67
4.96
2.62
2.56
THERMAL
(WHEN
REQ'D)
LEAD HOLE
Ø.69
1.75
1.75
3.10
2.50
5.00
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD TO SOLIDWORKS
REV: M
VERSION: 02
REVISED: 04:35:02 09/09/2022
TDR: 000001194274
BALDOR - RELIANCE®
33LY0870
MODEL NO. 33LY0870
REF: -
BY: ENFRAJ0
STD HORZ MODEL 33M NEMA 42 TEFC
33LY0870

CD0005A05





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.
5. (#) =MAGNET WIRE COIL END WITH I.D. NUMBER.
6. [*] =MAGNET WIRE COIL END WITH I.D. SYMBOL.
7. SEE CW PRINT FOR NEST TO NEST CROSSOVER CONNECTIONS.

CD0005A05

REV. DESC: ADD NEST NOTE			BALDOR • DODGE • RELIANCE
REV. LTR: C	VERSION: 03	TDR: 000000445597	
CD0005A05	FILE: \CKA\00024\847	REVISED: 12:51:06 11/15/2007	3PH, DV, 9 LEADS, CK
	MTL: –	BY: CKMICRO	