ABB BALDOR RELIANCE

Customer information packet

EM3616T

7.5HP, 3488RPM, 3PH, 60HZ, 184T, 3640M, TEFC, F
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/1/2026 10:46:06 PM

Specifications

Enclosure	TEFC
Frame	184T
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
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	22.600 A @ 230.0 V
	11.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	11.3 a
Insulation Class	F

Part Detail

Revision	B
Type	AC
Mech. spec.	36G271
Base	
Status	PRD/A
Elec. spec.	36WGZ654
Layout	36LYG271
Eff. date	09-14-2026
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	11-07-2025

Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3640M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.04 IN
Power Factor	86
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	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3488 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

NP3441LUA										
CAT.NO.	EM3616T									
SPEC	36G271Z654									
HP	7.5									
VOLTS	230/460									
AMPS	17.6/8.8									
RPM	3490									
FRAME	184T	**HZ**	60	**PH**	3					
SF	1.15	**CODE**	L	**DES**	A	**CLASS**	F			
NEMA NOM. EFF	89.5	**PF**	86							
RATING	40C AMB-CONT									
CC	010A									
ENCL	TEFC	**SER**								
DE	6206	**ODE**	6205							
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1										
	50HZ 7.5HP 190/380V 21/10.5A									SF1.0

Parts List

Part number	Description	Quantity
SA443037	SA 36G271Z654	1.000 ea
RA435533	RA 36G271Z654	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP3104A01	FREP MACH W/GRSR, RAISED FH PADS	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3100A01SP	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 ea
36FH4009A102	IEC FH GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

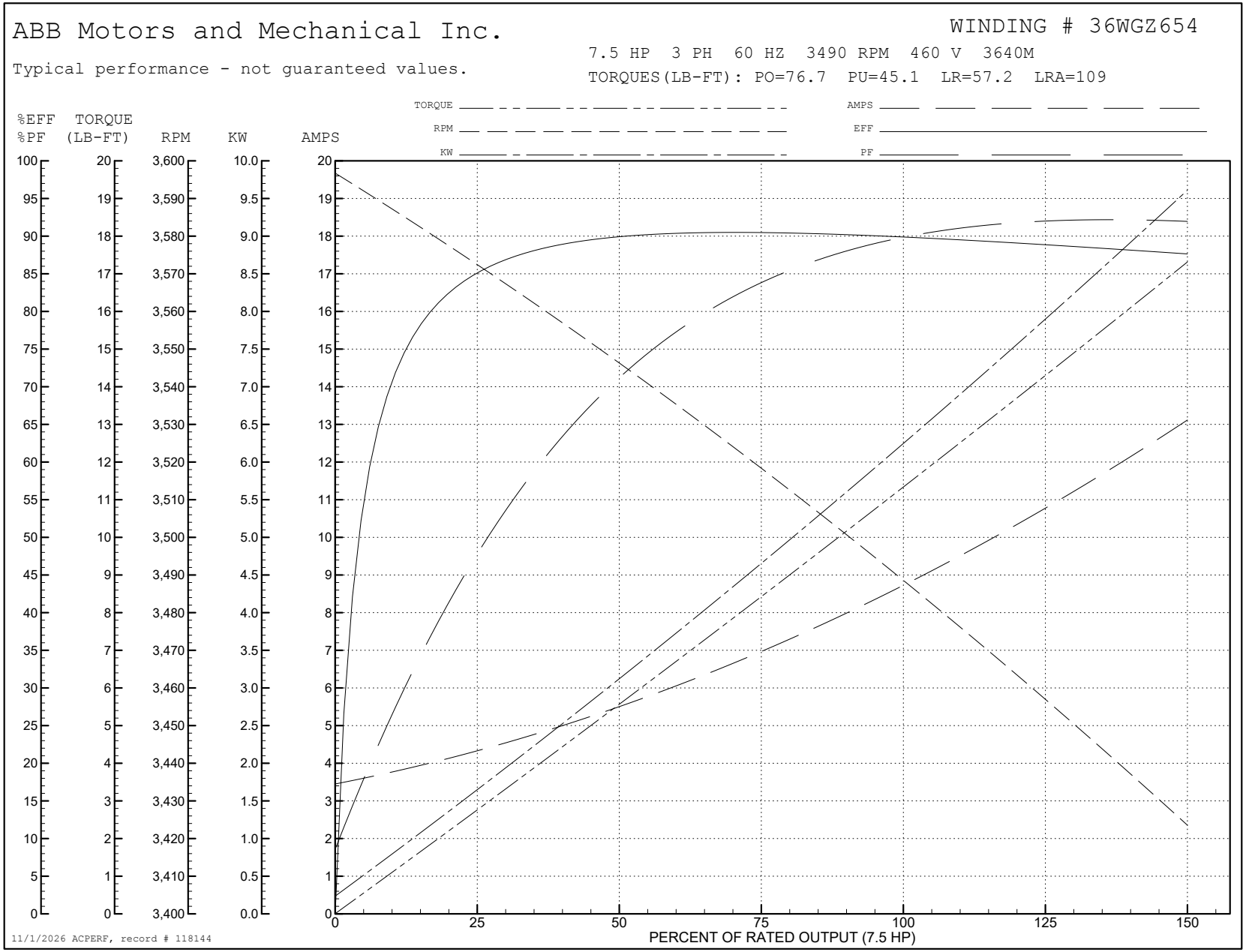
AC Induction Motor Performance Data
Record # 118144
Typical performance - not guaranteed values

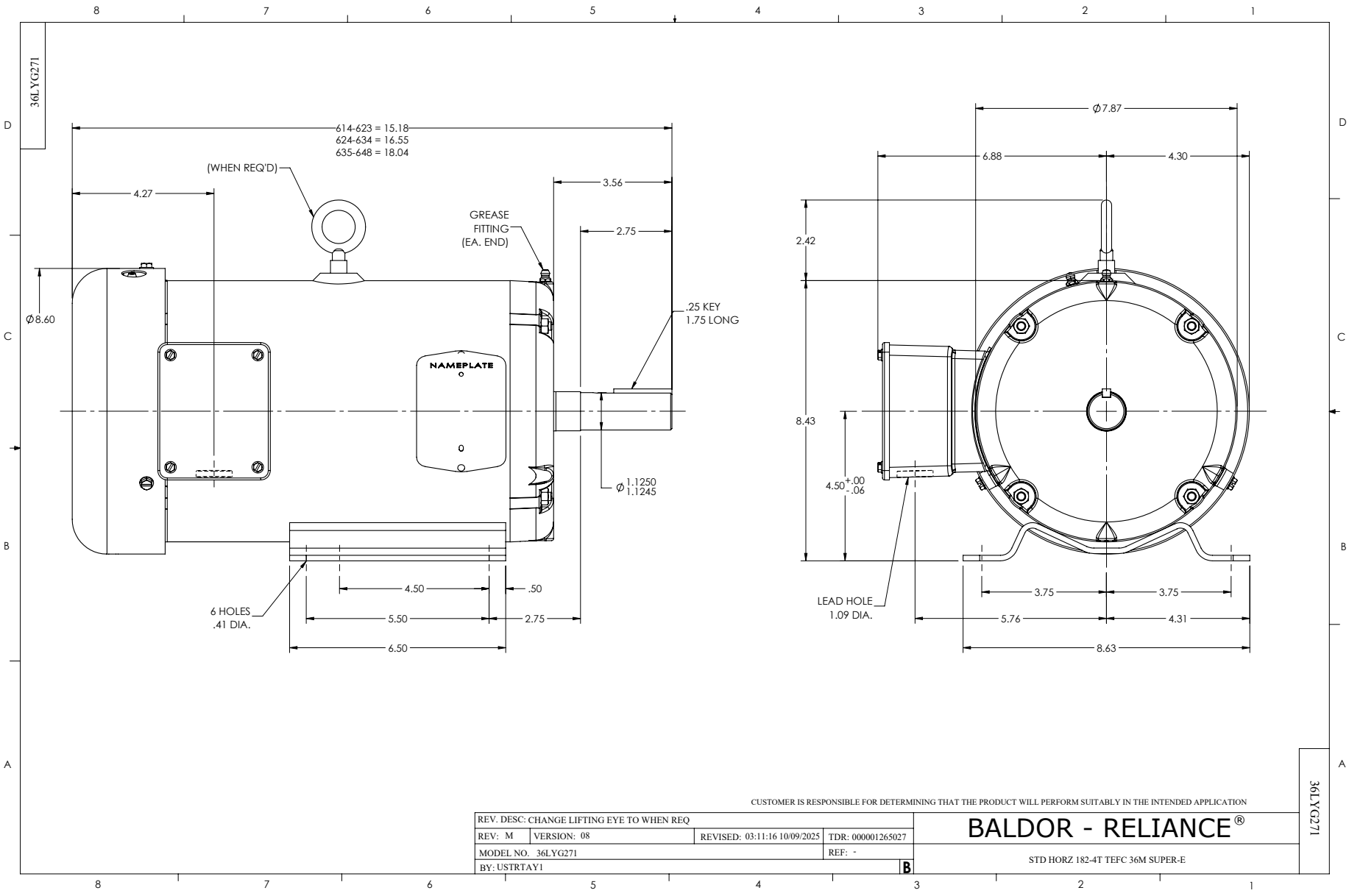
Winding: 36WGZ654-R003	**Type:** 3640M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	11.39 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			17.6/8.8	**Breakdown Torque**	76.7 LB-FT
R.P.M.			3490	**Pull-up Torque**	45.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	57.2 LB-FT
NEMA Design Code	A	**KVA Code**	L	**Starting Current**	109 A
Service Factor (S.F.)			1.15	**No-load Current**	3.6 A
NEMA Nom. Eff.	89.5	**Power Factor**	86	**Line-line Res. @ 25ºC**	1.4142 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	75°C
S.F. Amps				**Temp. Rise @ S.F. Load**	93°C
				Locked-rotor Power Factor	50
				Rotor inertia	0.178 lb-ft²

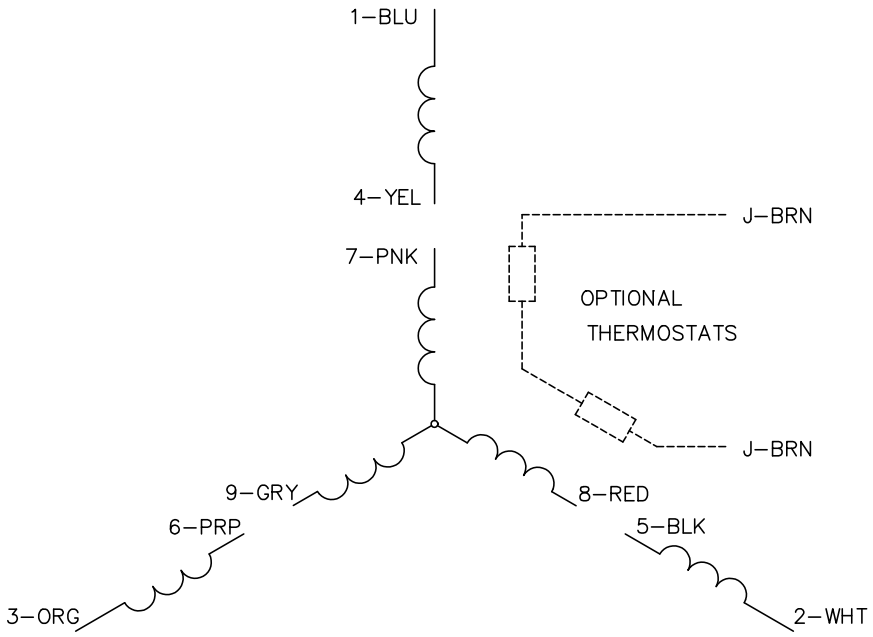
Load Characteristics 460 V, 60 Hz, 7.5 HP

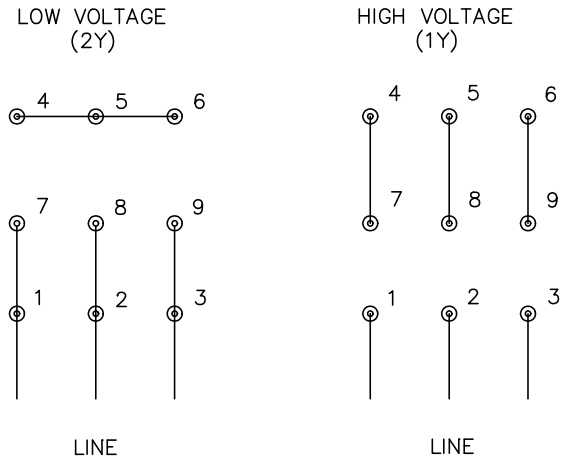
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	51	73	83	89	91	92	90
Efficiency	84.8	89.7	90.4	90	88.9	87.5	89.3
Speed	3571.6	3545.5	3517.7	3488.2	3456.6	3423.4	3469
Line amperes	4.17	5.41	7.06	8.89	10.9	13	10.1


ABB Motors and Mechanical Inc.
WINDING # 36WGZ654
7.5 HP 3 PH 60 HZ 3490 RPM 460 V 3640M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=76.7 PU=45.1 LR=57.2 LRA=109
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (7.5 HP)
11/1/2026 ACPERF, record # 118144


36LYG271
614-623 = 15.18
624-634 = 16.55
635-648 = 18.04
(WHEN REQ'D)
4.27
3.56
2.75
GREASE FITTING (EA. END)
Ø8.60
.25 KEY 1.75 LONG
NAMEPLATE
Ø 1.1250 1.1245
6 HOLES .41 DIA.
4.50
.50
5.50
2.75
6.50
Ø7.87
6.88
4.30
2.42
8.43
4.50 +.00 -.06
LEAD HOLE 1.09 DIA.
3.75
3.75
5.76
4.31
8.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE LIFTING EYE TO WHEN REQ
REV: M
VERSION: 08
REVISED: 03:11:16 10/09/2025
TDR: 000001265027
MODEL NO. 36LYG271
REF: -
BY: USTRTAY1
B
BALDOR - RELIANCE®
STD HORZ 182-4T TEFC 36M SUPER-E
36LYG271

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