ABB BALDOR RELIANCE

Customer information packet

CEM3616T

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

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Specifications

Enclosure	TEFC
Frame	184TC
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
	NEMA PREMIUM (OLD LOGO)
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	17.600 A @ 230.0 V
	8.800 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	8.8 a

Part Detail

Revision	A
Type	AC
Mech. spec.	36A002
Base	
Status	PRD/A
Elec. spec.	36WGZ654
Layout	36LYA002
Eff. date	09-14-2026
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	11-07-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	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	C-Face
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	3490 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.	CEM3616T									
SPEC	36A002Z654									
HP	7.5									
VOLTS	230/460									
AMPS	17.6/8.8									
RPM	3490									
FRAME	184TC	**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

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

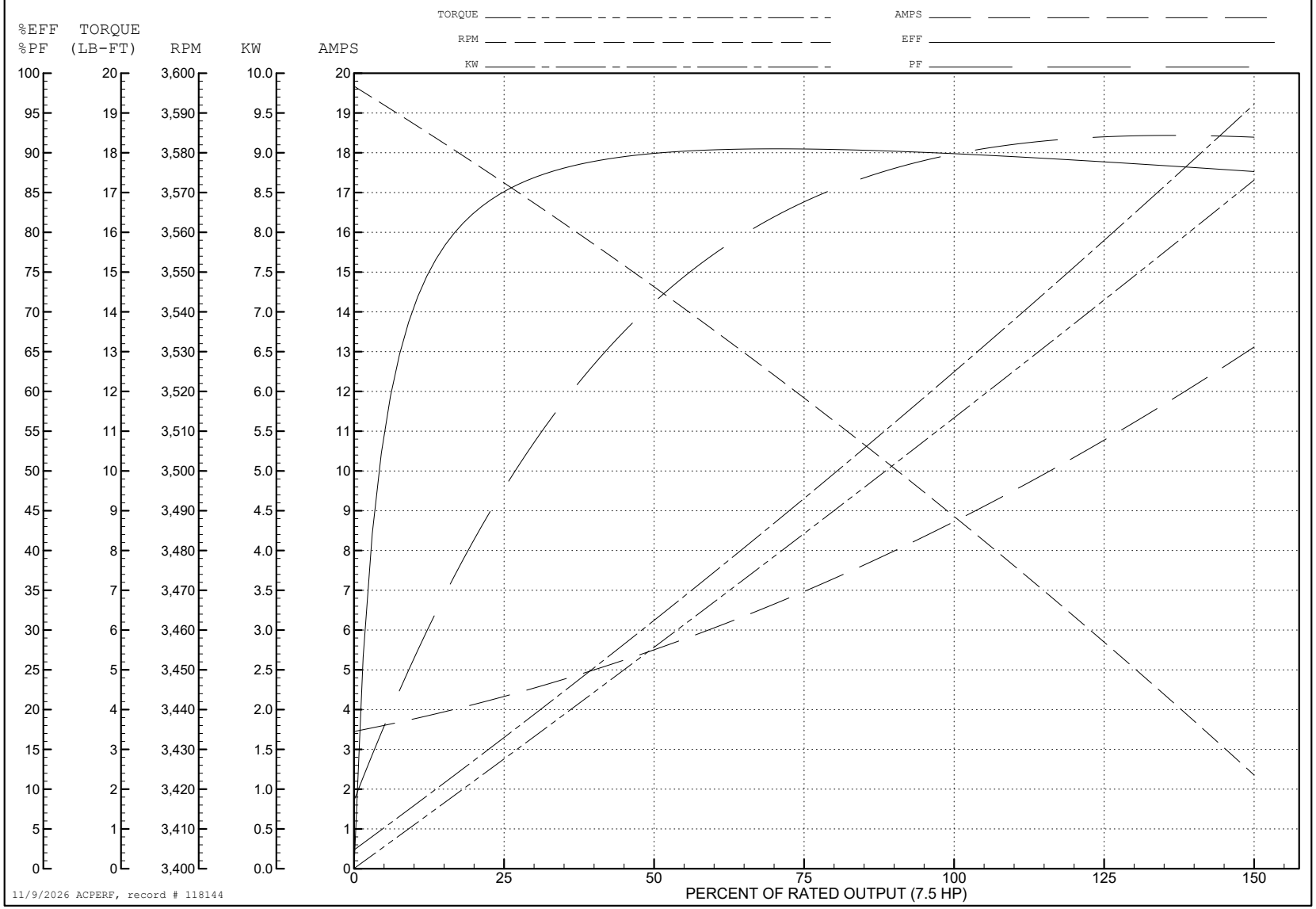
ABB Motors and Mechanical Inc.

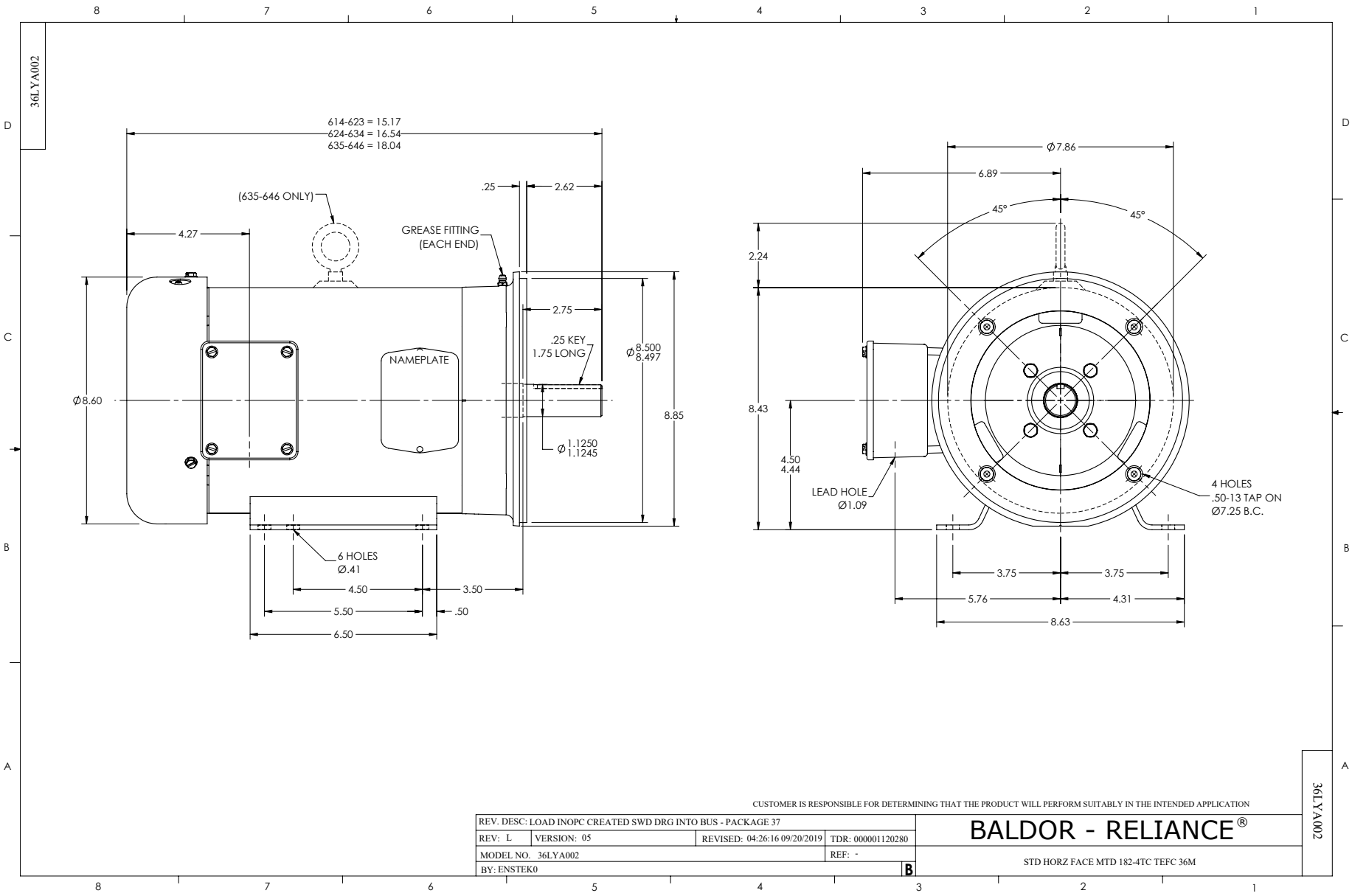
WINDING # 36WGZ654

7.5 HP 3 PH 60 HZ 3490 RPM 460 V 3640M

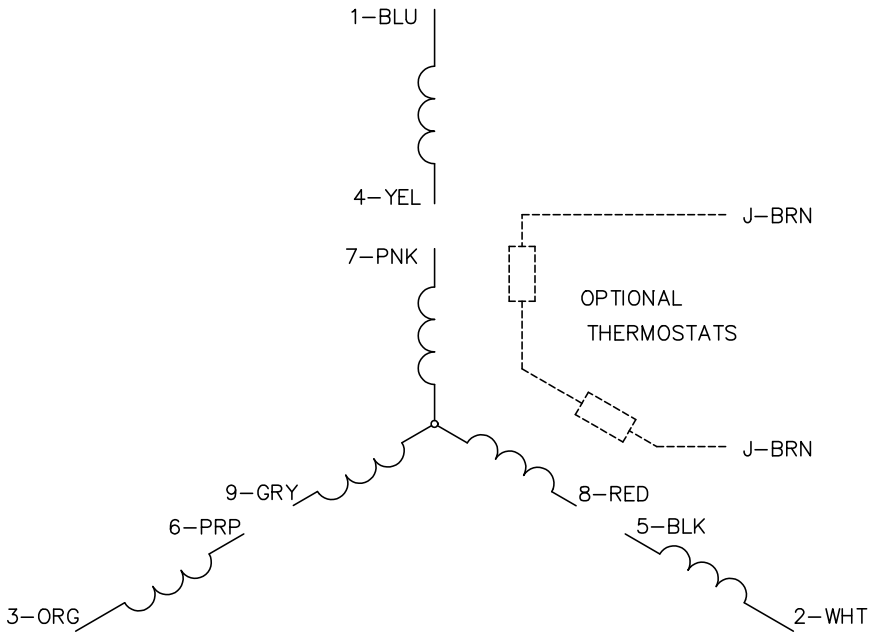
Typical performance - not guaranteed values.

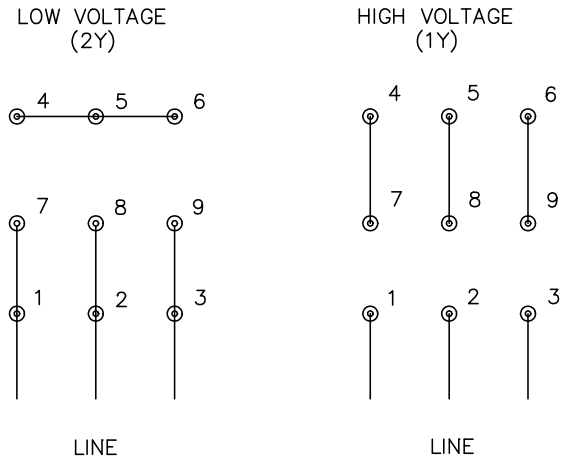
TORQUES(LB-FT): PO=76.7 PU=45.1 LR=57.2 LRA=109




36LYA002
614-623 = 15.17
624-634 = 16.54
635-646 = 18.04
(635-646 ONLY)
.25
2.62
4.27
GREASE FITTING
(EACH END)
2.75
.25 KEY
1.75 LONG
NAMEPLATE
Ø8.500
8.497
Ø8.60
8.85
Ø1.1250
1.1245
6 HOLES
Ø.41
4.50
3.50
5.50
.50
6.50
Ø7.86
6.89
45°
45°
2.24
8.43
4.50
4.44
LEAD HOLE
Ø1.09
4 HOLES
.50-13 TAP ON
Ø7.25 B.C.
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: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 37
REV: L
VERSION: 05
REVISED: 04:26:16 09/20/2019
TDR: 000001120280
MODEL NO. 36LYA002
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD HORZ FACE MTD 182-4TC TEFC 36M
36LYA002

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