

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3616T**

**7.5HP,3450RPM,3PH,60HZ,184T,3646M,TEFC,F**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGS428	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	36G271	Layout:	36LYG271	Poles:	02	Created Date:	07-28-2010
Base:	RG	Eff. Date:	07-19-2017	Leads:	9#16		

Specs			
Catalog Number:	EM3616T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	184T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	L
Output @ Frequency:	7.500 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 16 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3646M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	93
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	16.800 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	18.500 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	8.400 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3441LUA											
CAT.NO.	EM3616T										
SPEC	36G271S428G1										
HP	7.5										
VOLTS	230/460										
AMPS	16.8/8.4										
RPM	3450										
FRAME	184T					HZ	60		PH	3	
SF	1.15			CODE	L		DES	A		CLASS	F
NEMA NOM. EFF	89.5			PF	93						
RATING	40C AMB-CONT										
CC	010A						USABLE AT 208V		18.5		
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
SA200420	SA 36G271S428G1	1.000 EA
RA187734	RA 36G271S428G1	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 ASSEMBLY FOR ROUTING	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
37GS1001	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 I-BLT WELDED F/S	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

**AC Induction Motor Performance Data**

Record # 52145

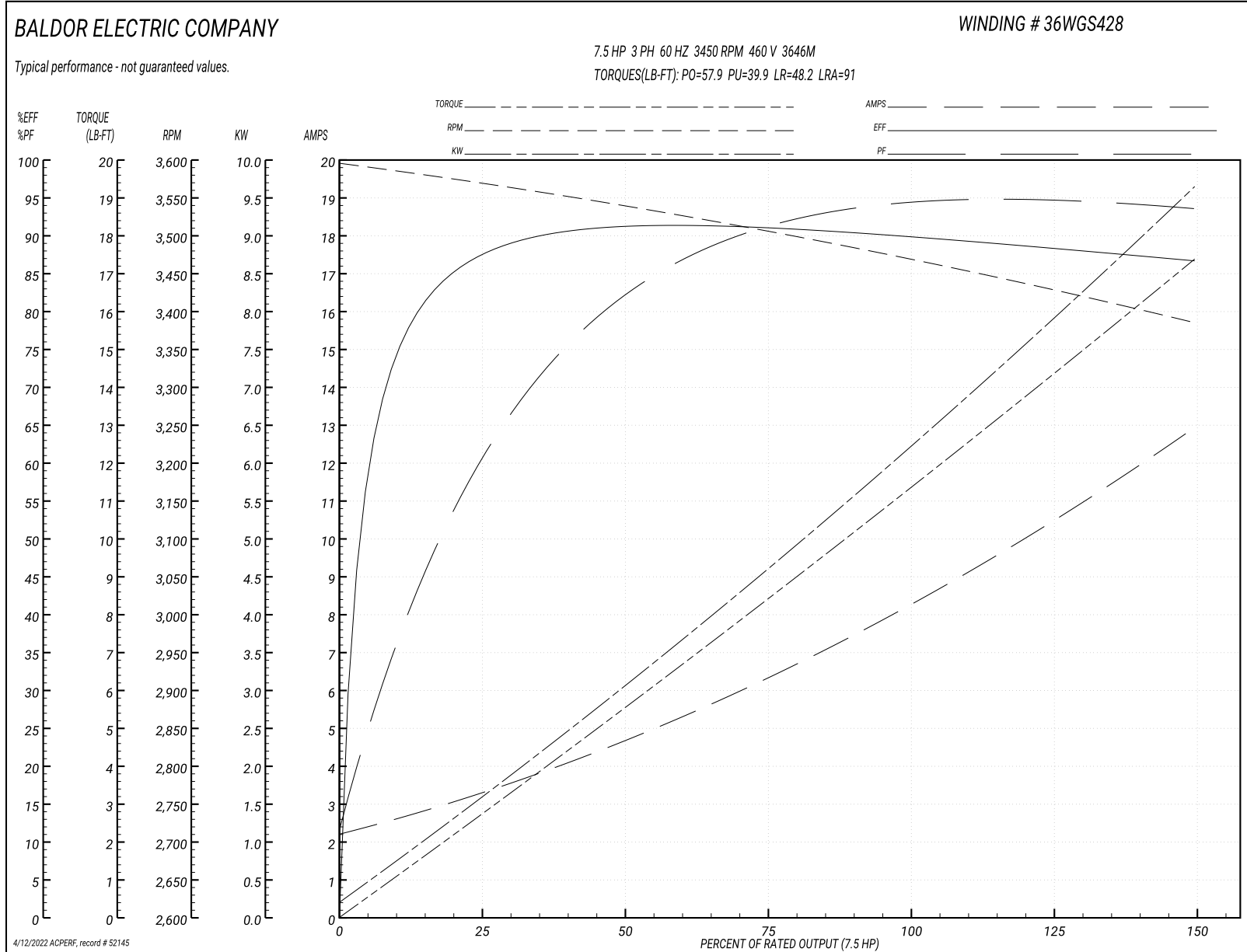
Typical performance - not guaranteed values

<b>Winding: 36WGS428-R020</b>		<b>Type: 3646M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	11.4 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	16.8/8.4	<b>Breakdown Torque</b>	57.9 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	39.9 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	48.2 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	L	<b>Starting Current</b>	91 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	2.33 A		
<b>NEMA Nom. Eff.</b>	89.5 <b>Power Factor</b>	93	<b>Line-line Res. @ 25°C</b>	1.43 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	74°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	92°C		
		<b>Locked-rotor Power Factor</b>	44.4		
		<b>Rotor inertia</b>	0.205 LB-FT <sup>2</sup>		

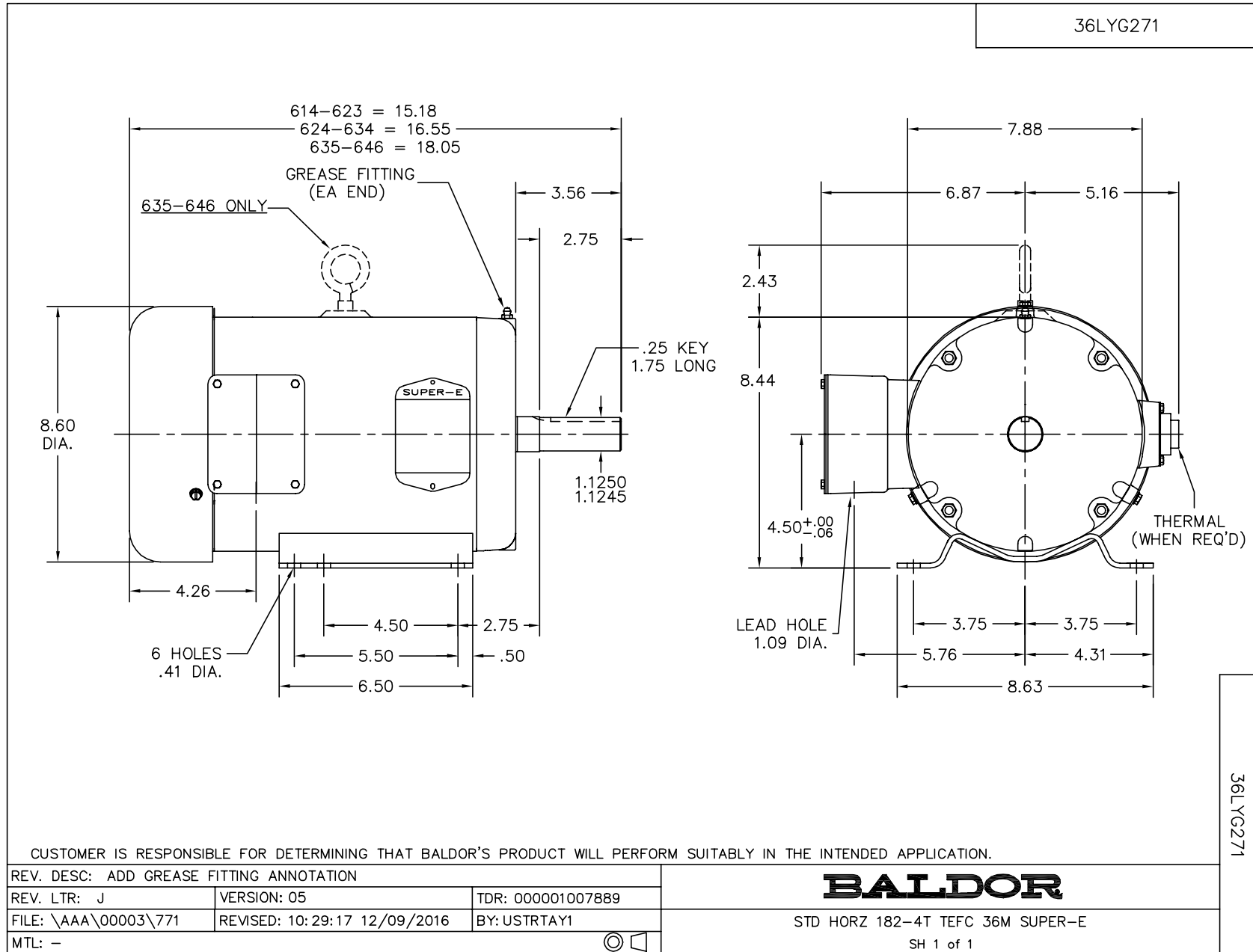
**Load Characteristics 460 V, 60 Hz, 7.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	64	85	90	93	94	94	94
<b>Efficiency</b>	86.9	90.6	91	90.1	88.8	86.5	89.3
<b>Speed</b>	3571	3539	3505	3468	3429	3385	3445
<b>Line amperes</b>	3.14	4.59	6.43	8.43	10.5	12.9	9.67

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values







CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005