

BALDOR® • RELIANCE 

Product Information Packet

EM3616T-5

7.5HP,3470RPM,3PH,60HZ,184T,3646M,TEFC,F

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGS478	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	36G271	Layout:	36LYG271	Poles:	02	Created Date:	08-02-2010
Base:	RG	Eff. Date:	08-31-2016	Leads:	3#16		

Specs			
Catalog Number:	EM3616T-5	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	L
Frame:	184T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	7.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 16 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3646M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	93
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	6.800 A @ 575.0 V	Shaft Rotation:	Reversible

Design Code:	A	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP3441L

CAT.NO.	EM3616T-5							
SPEC.	36G271S478G1							
HP	7.5							
VOLTS	575							
AMP	6.8							
RPM	3470							
FRAME	184T		HZ	60	PH	3		
SER.F.	1.15		CODE	L	DES	A	CL	F
NEMA-NOM-EFF	89.5		PF	93				
RATING	40C AMB-CONT							
CC	010A		USABLE AT 208V					
DE	6206		ODE	6205				
ENCL	TEFC		SN					
VPWM INVERTER READY								
CT6-60H(10:1)VT3-60H(20:1)								

Parts List		
Part Number	Description	Quantity
SA200635	SA 36G271S478G1	1.000 EA
RA187946	RA 36G271S478G1	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	36 LIPPED 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 I-BLT WELDED F/S	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 31190 - Typical performance - not guaranteed values

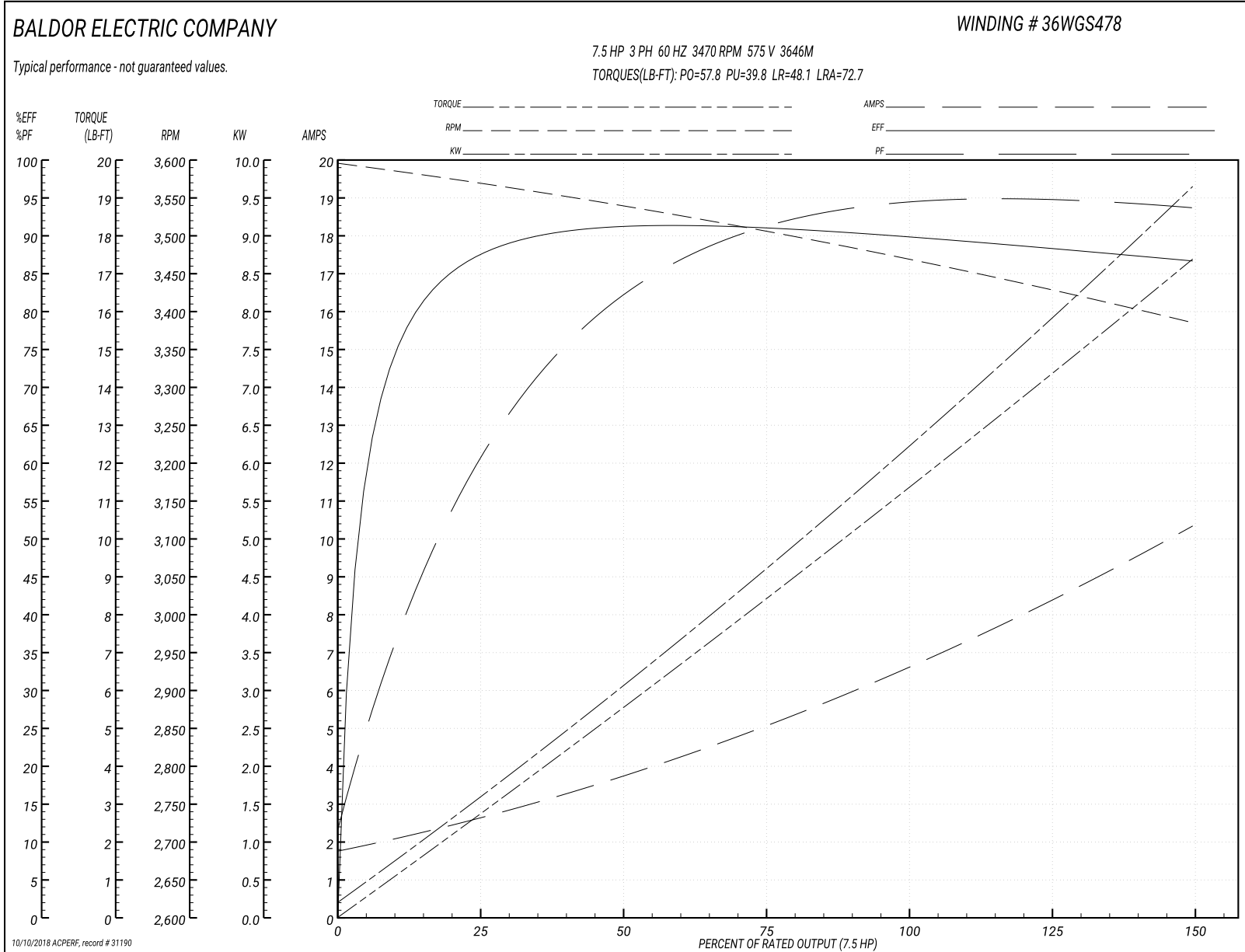
Winding: 36WGS478-R001	Type: 3646M	Enclosure: TEFC
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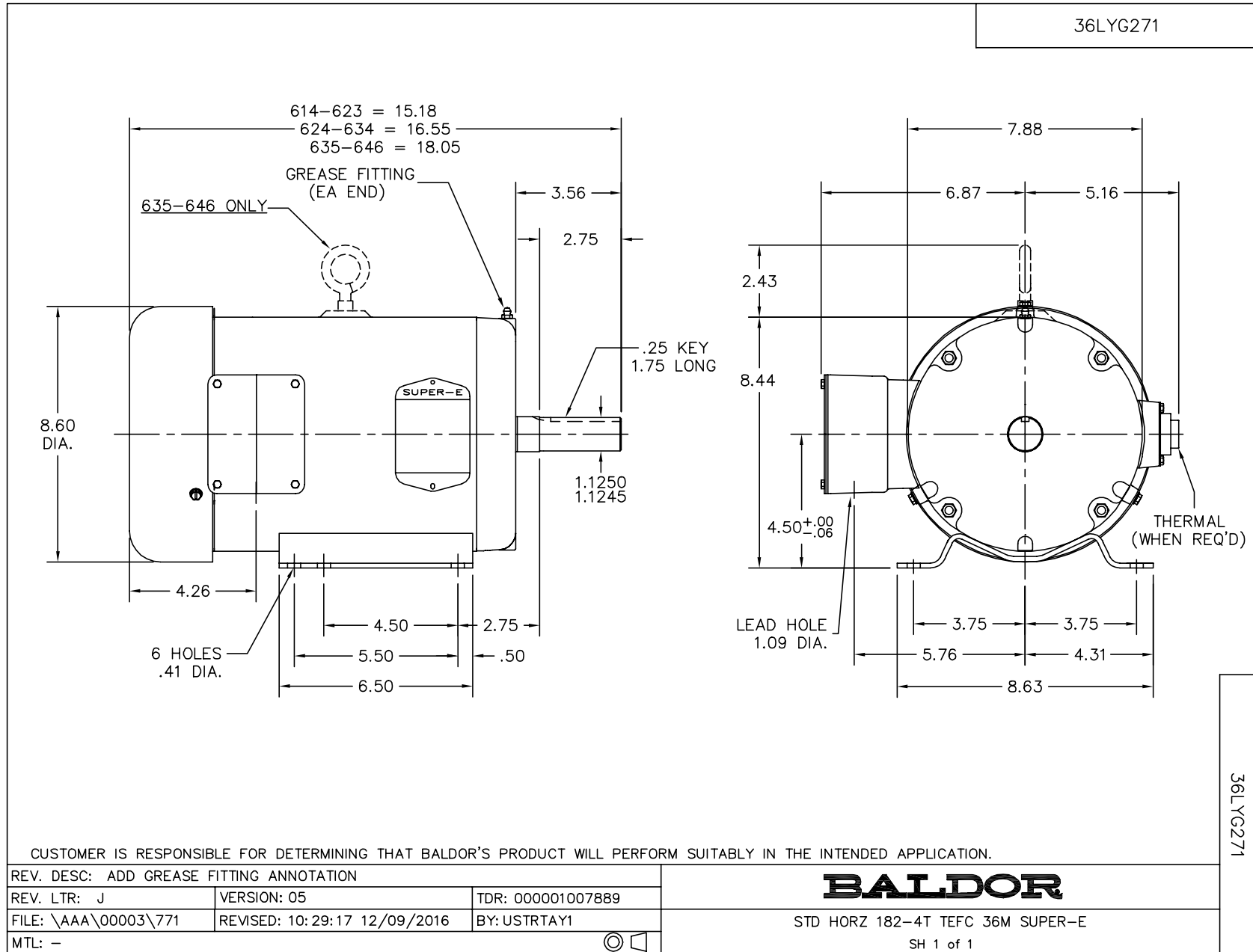
Nameplate Data				575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5			Full Load Torque	11.4 LB-FT
Volts	575			Start Configuration	direct on line
Full Load Amps	6.8			Breakdown Torque	57.8 LB-FT
R.P.M.	3470			Pull-up Torque	39.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	48.1 LB-FT
NEMA Design Code	A	KVA Code	L	Starting Current	72.7 A
Service Factor (S.F.)	1.15			No-load Current	1.86 A
NEMA Nom. Eff.	89.5	Power Factor	93	Line-line Res. @ 25°C	2.26 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	74°C
S.F. Amps				Temp. Rise @ S.F. Load	93°C
				Locked-rotor Power Factor	45
				Rotor inertia	0.205 LB-FT ²

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	85	90	93	94	94	94
Efficiency	86.9	90.6	91	90	88.7	86.5	89.2
Speed	3571	3539	3505	3468	3429	3385	3445
Line amperes	2.51	3.67	5.14	6.74	8.41	10.3	7.74

Performance Graph at 575V, 60Hz, 7.5HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006