

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CM3616T**

**7.5HP,3450RPM,3PH,60HZ,184TC,3640M,TEFC**

Part Detail							
Revision:	R	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGx875	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	36A002	Layout:	36LYA002	Poles:	02	Created Date:	
Base:	RG	Eff. Date:	05-05-2009	Leads:	9#16		

Specs			
Catalog Number:	CM3616T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	184TC	KVA Code:	M
Output @ Frequency:	7.500 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	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
	208.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3640M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	UR	Power Factor:	93
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	C-Face
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	17.400 A @ 230.0 V	Shaft Extension Location:	Pulley End
	18.500 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding

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

Nameplate NP1256L										
CAT.NO.	CM3616T									
SPEC.	36A002X875H1									
HP	7.5									
VOLTS	208-230/460									
AMP	18.5-17.4/8.7									
RPM	3450									
FRAME	184TC				HZ	60			PH	3
SER.F.	1.15		CODE	M	DES	A		CLASS	F	
NEMA-NOM-EFF	88.5		PF	93						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V		18.5			
DE	6206				ODE	6205				
ENCL	TEFC		SN							

Parts List		
Part Number	Description	Quantity
SA033736	SA 36A002X875H1	1.000 EA
RA029764	RA 36A002X875H1	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
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	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
36EP3301A23	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.022 GA
S/P101-000-000	EPACT PROCEDURES-FS PLANT-POLYREX EM, NO	1.000 EA
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 EA
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 EA
LB1125C04	STD-E (STOCK CTN LABEL STD-E WITH FLAG)	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP1256L	ALUM UL CSA CC INDUSTRIAL MOTOR A60	1.000 EA
36PA1001	PKG GRP, PRINT PK1017A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 EA

**AC Induction Motor Performance Data**

Record # 11137

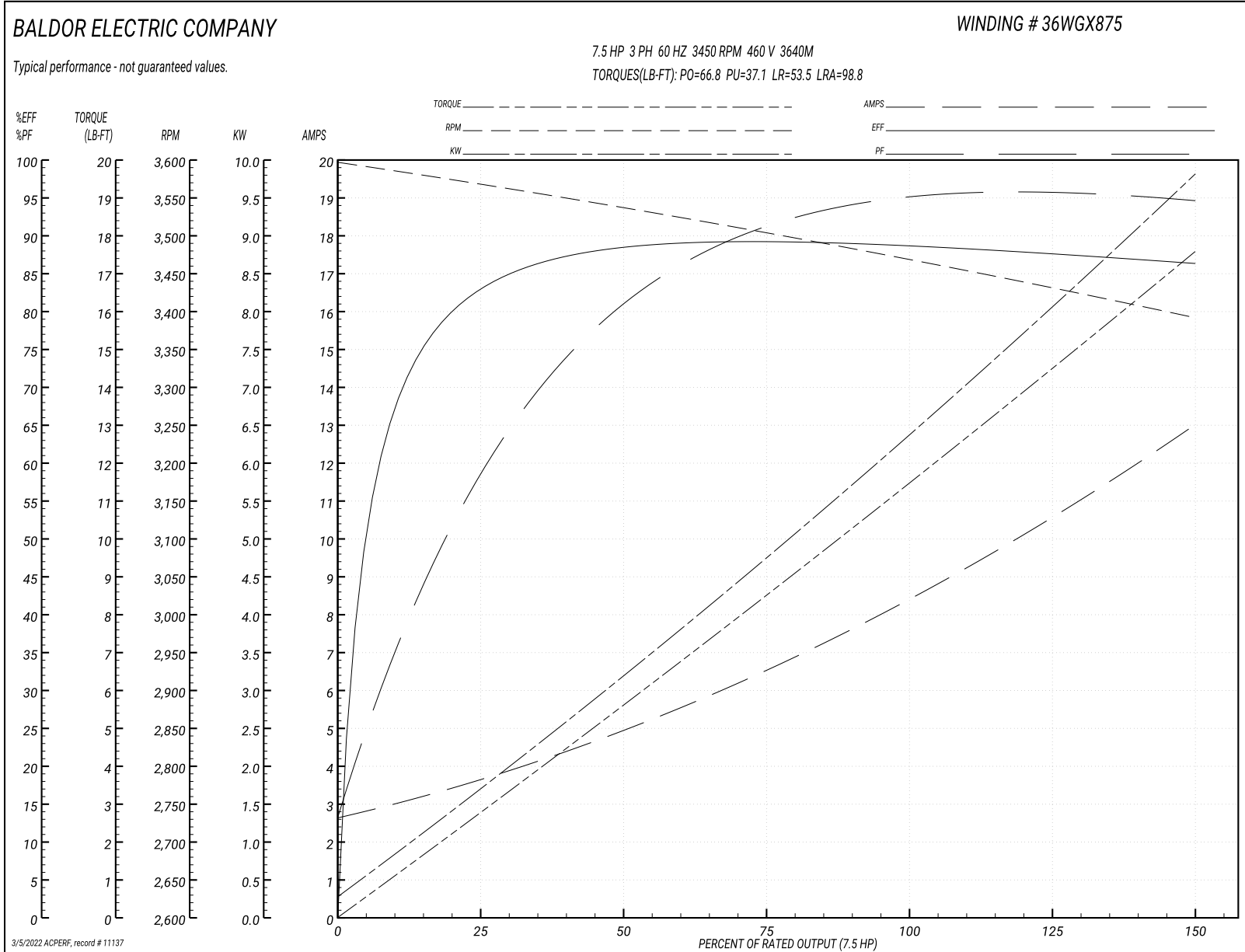
Typical performance - not guaranteed values

Winding: 36WGX875-R001		Type: 3640M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	7.5	Full Load Torque	11.5 LB-FT	
Volts	208-230/460	Start Configuration	direct on line	
Full Load Amps	18.5-17.4/8.7	Breakdown Torque	66.8 LB-FT	
R.P.M.	3450	Pull-up Torque	37.1 LB-FT	
Hz	60 Phase	Locked-rotor Torque	53.5 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	98.8 A	
Service Factor (S.F.)	1.15	No-load Current	2.78 A	
NEMA Nom. Eff.	88.5 Power Factor	Line-line Res. @ 25°C	1.45 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	74°C	
S.F. Amps		Temp. Rise @ S.F. Load	91°C	
		Locked-rotor Power Factor	48	
		Rotor inertia	0.178 LB-FT <sup>2</sup>	

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

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	83	91	94	95	96	95
Efficiency	83.3	88.4	89.3	88.7	87.6	86.1	88
Speed	3564	3535	3506	3468	3432	3391	3446
Line amperes	3.51	4.89	6.61	8.52	10.7	12.9	9.83

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



**AC Induction Motor Performance Data**

Record # 20871

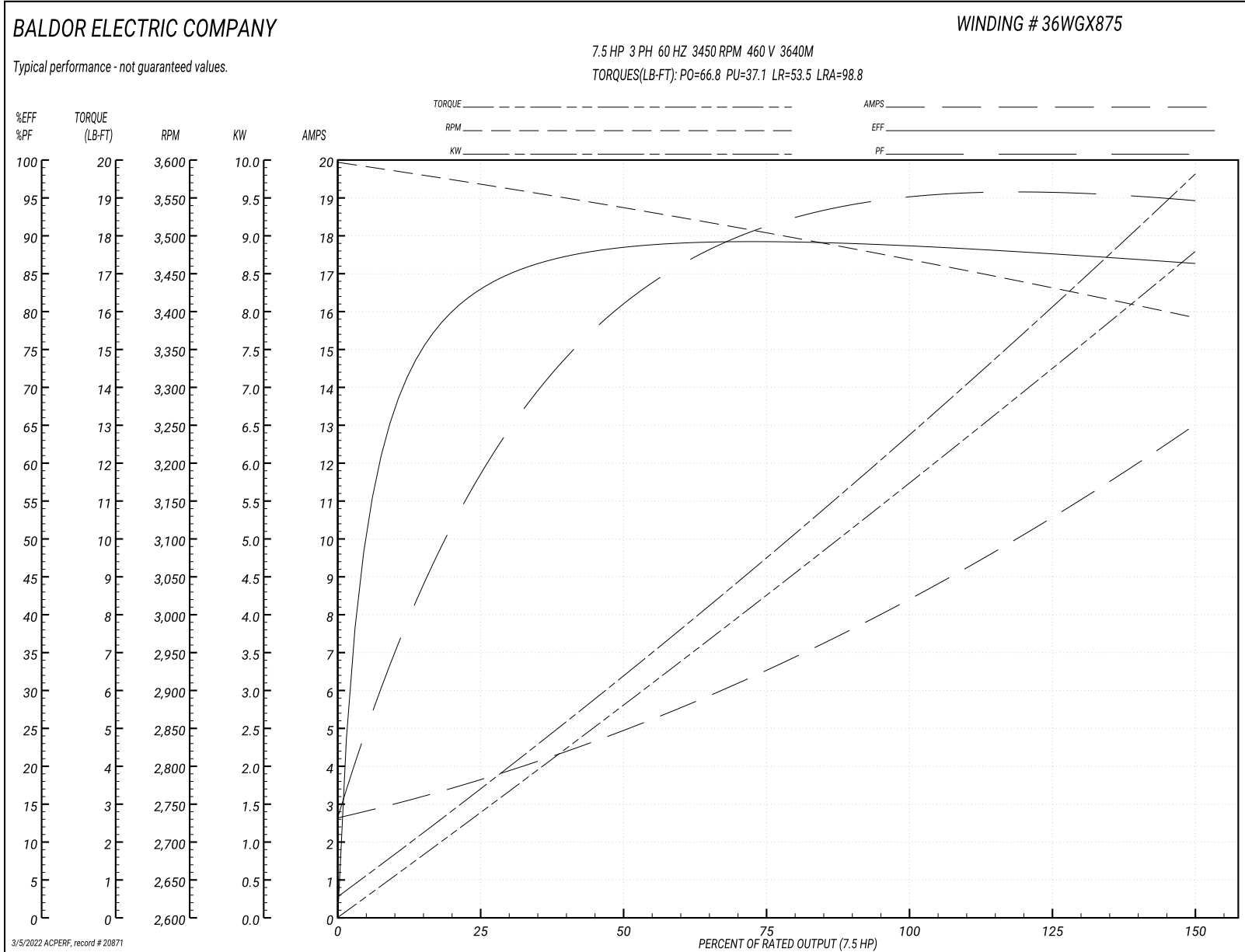
Typical performance - not guaranteed values

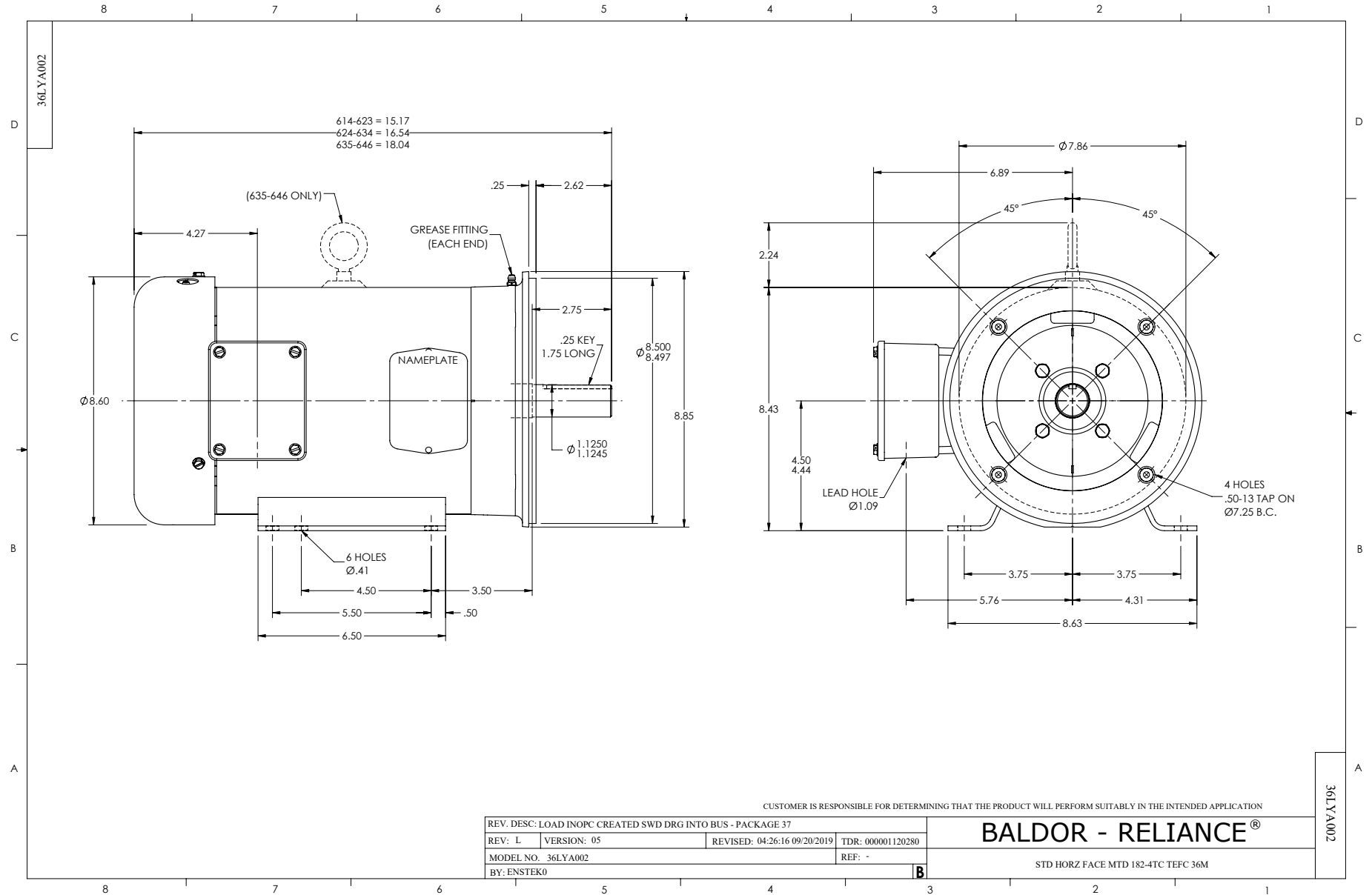
<b>Winding: 36WGX875-R004</b>		<b>Type: 3640M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>		11.5 LB-FT	
<b>Volts</b>	208-230/460	<b>Start Configuration</b>		direct on line	
<b>Full Load Amps</b>	18.5-17.4/8.7	<b>Breakdown Torque</b>		66.8 LB-FT	
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>		37.1 LB-FT	
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>		53.5 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	M	<b>Starting Current</b>	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>		2.78 A	
<b>NEMA Nom. Eff.</b>	88.5	<b>Power Factor</b>	93	<b>Line-line Res. @ 25°C</b>	
<b>Rating - Duty</b>	40C	AMB-CONT		<b>Temp. Rise @ Rated Load</b>	
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	
				<b>Locked-rotor Power Factor</b>	
				<b>Rotor inertia</b>	
				0.178 LB-FT <sup>2</sup>	

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

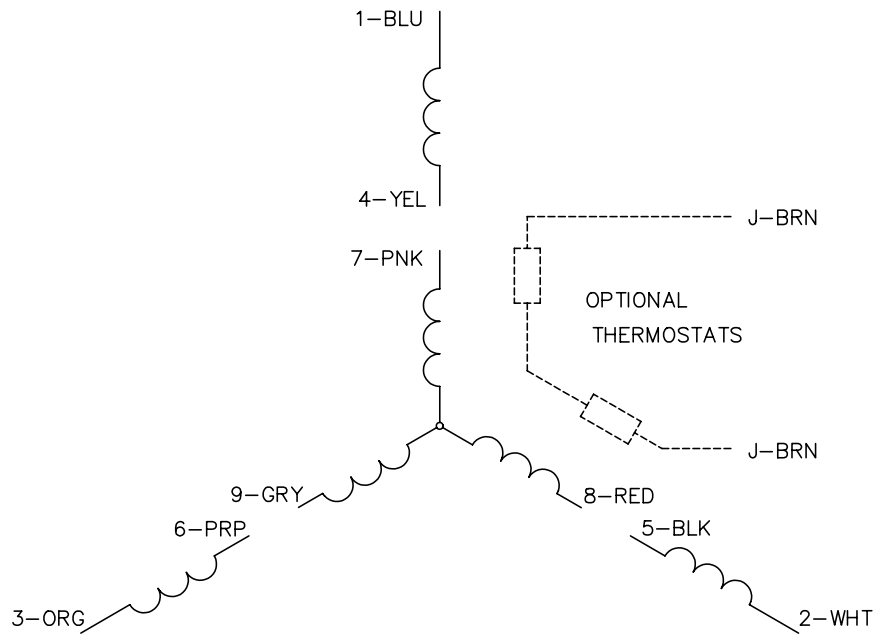
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	63	83	91	94	95	96	95
<b>Efficiency</b>	83.3	88.4	89.3	88.7	87.6	86.1	88
<b>Speed</b>	3564	3535	3506	3468	3432	3391	3446
<b>Line amperes</b>	3.51	4.89	6.61	8.52	10.7	12.9	9.83

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

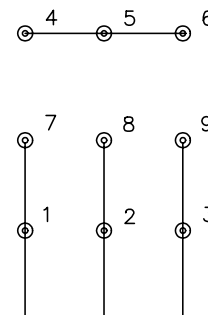




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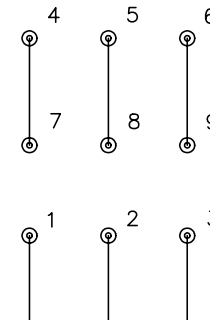


LOW VOLTAGE  
(2Y)



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