

BALDOR® • RELIANCE 

Product Information Packet

ECP63770TR-4

7.5HP, 1765RPM, 3PH, 60HZ, 213T, 0740M, TEFC, F

Part Detail							
Revision:	AE	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX814	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	07M686	Layout:	07LYM686	Poles:	04	Created Date:	08-22-2013
Base:	RG	Eff. Date:	02-11-2022	Leads:	3#14		

Specs			
Catalog Number:	ECP63770TR-4	Inverter Code:	Inverter Duty
Enclosure:	TEFC	KVA Code:	H
Frame:	213T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	7.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 14 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP A,B,C,D	Motor Type:	0740M
XP Division:	Division II	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	81
	CSA EEV	Product Family:	Chemical Processing (Not DC)
	UR	Pulley End Bearing Type:	Roller
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:	Mobilith SHC220, HC9455	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Constant Torque Speed Range:	1.2	Shaft Ground Indicator:	No Shaft Grounding

Current @ Voltage:	9.500 A @ 460.0 V	Shaft Rotation:	Reversible
Design Code:	B	Shaft Slinger Indicator:	Shaft 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:	C-Face	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
		XP Temp Code:	T3C

Nameplate NP3200E										
CAT.NO.	ECP63770TR-4									
SPEC.	07M686X814G1									
HP	7.5	TE								
VOLTS	460									
AMP	9.5									
RPM	1765									
FRAME	213T					HZ	60			
SER.F.	1.15			CODE	H		DES	B		
RATING	40C AMB-CONT									
SN										
DE	NU307				ODE	6307				
NEMA-NOM-EFF	91.7				PF	82				
G.MIN.EFF	90.2				CC	010A				
T. CODE	T3C				T=	160				
								IP	56	
								PH	3	
								CL	F	

Nameplate NP3187E			
SPEC.	07M686X814G1		
D.E. BRG.	35RU03X30X		
O.D.E. BRG.	35BC03XP30X		
GREASE	MOBILITH SHC220		
WEIGHT	211	# OF ROTOR BARS	28
RPM MAX	2700	MAX. KVAR	1.3
BLANK			# OF STATOR SLOTS 36
INV. TYPE	PWM		
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	1.2	CT HZ TO	60
VT HZ FROM	0-	VT HZ TO	60
HTR-VOLTS	N/A	HTR-AMPS	N/A
WATTS	N/A	MAX. SPACE HEATER TEMP.	N/A

Parts List		
Part Number	Description	Quantity
SA268130	SA 07M686X814G1	1.000 EA
RA254793	RA 07M686X814G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
09CB1002A05G	CONDUIT BOX, 1.00 N.P.T. (GRAY)	1.000 EA
RM1017	LEAD SEPERATOR GASKET MODEL 307 1/8" THK	1.000 EA
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	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
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	1.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
07EP1119A04G	307 BRG,CI FH, GRSR, RLF, DRAIN FITTING,	1.000 EA
HW4601B25	INPRO SEAL, 307 BRG, MINI66	1.000 EA
HW4500A32	FIT./EXT 1698-B (ALEMITE)GREASE FITTING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	2.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	2.000 EA
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 EA
HW4600G51	DOME SLINGER, 4.25 OD X 1.370/1.320 ID	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
07EP1119A01G	307 BRG,BRG RET,GRSR,RLF,DRAIN FITTING,I	1.000 EA
HW4601B25	INPRO SEAL, 307 BRG, MINI66	1.000 EA
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 EA
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA4051A00	PLASTIC CAP FOR GREASE FITTING	2.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	2.000 EA
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 EA
07FH1001A16G	SPL FAN HOUSING, 307, W/GREASER,SH HOLE,	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	3.000 EA
WD4100A91	DP-1375 HEYCO DOME PLUGS P/N 2753 BLACK	1.000 EA
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 EA
12CB1503G	CONDUIT BOX CAST. (GRAY)	1.000 EA
09GS1013A01	09 GS FOR 09CB3501 LID - BLACK NEOPRENE	1.000 EA
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 EA
MJ1000A73	INPRO P-80 ASSEMBLY LUB./ 1 QT. CONTAIN	0.001 QT
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LT0019A00	MOTOR NO-LOAD PERFORMANCE DATA SHEET	1.000 EA
WD1000D21	TRM,T&B #B71M,RING,18-14,.25,NON-INSL	3.000 EA
MJ1000A62	GREASE - MOBILITH SHC220, HC9455	0.050 LB
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.036 GA
LB1119N	WARNING LABEL	1.000 EA

LB1449	DIV-2/NEC WARNING LABEL	1.000 EA
NP3200E	SS IEEE661 DIV-2 UL CSA-C US EEV PREM	1.000 EA
NP3187E	SS IEEE661 INV AUX DATA INFORMATION	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
10XL3808A28	3/8 X 1 3/4" LAG SCREW	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 83955

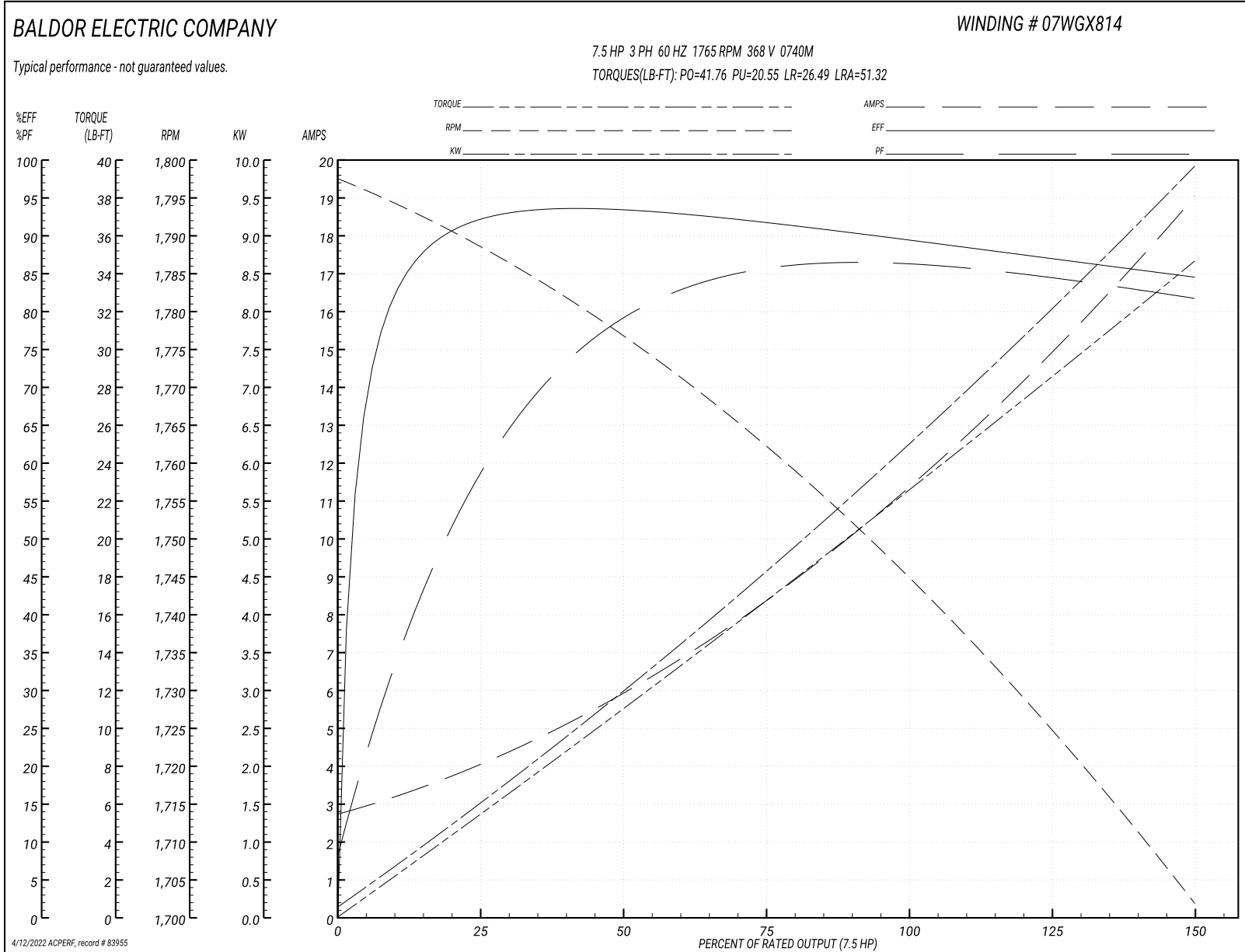
Typical performance - not guaranteed values

Winding: 07WGX814-R056		Type: 0740M	Enclosure: TEFC
Nameplate Data		368 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5	Full Load Torque	22.6 LB-FT
Volts	460	Start Configuration	direct on line
Full Load Amps	9.5	Breakdown Torque	41.76 LB-FT
R.P.M.	1765	Pull-up Torque	20.55 LB-FT
Hz	60 Phase	Locked-rotor Torque	26.49 LB-FT
NEMA Design Code	B KVA Code	Starting Current	51.32 A
Service Factor (S.F.)	1.15	No-load Current	2.84 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	1.47 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	73°C
S.F. Amps		Temp. Rise @ S.F. Load	97°C
		Locked-rotor Power Factor	36.2
		Rotor inertia	0.984 lb-ft ²

Load Characteristics 368 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	80	85	86	84	82	85
Efficiency	90.9	92.4	91.5	89.8	87.4	84.2	88.4
Speed	1787	1775	1762	1746	1727	1700	1735
Line amperes	3.89	5.98	8.5	11.39	14.91	19.04	13.5

Performance Graph at 368V, 60Hz, 7.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 92344

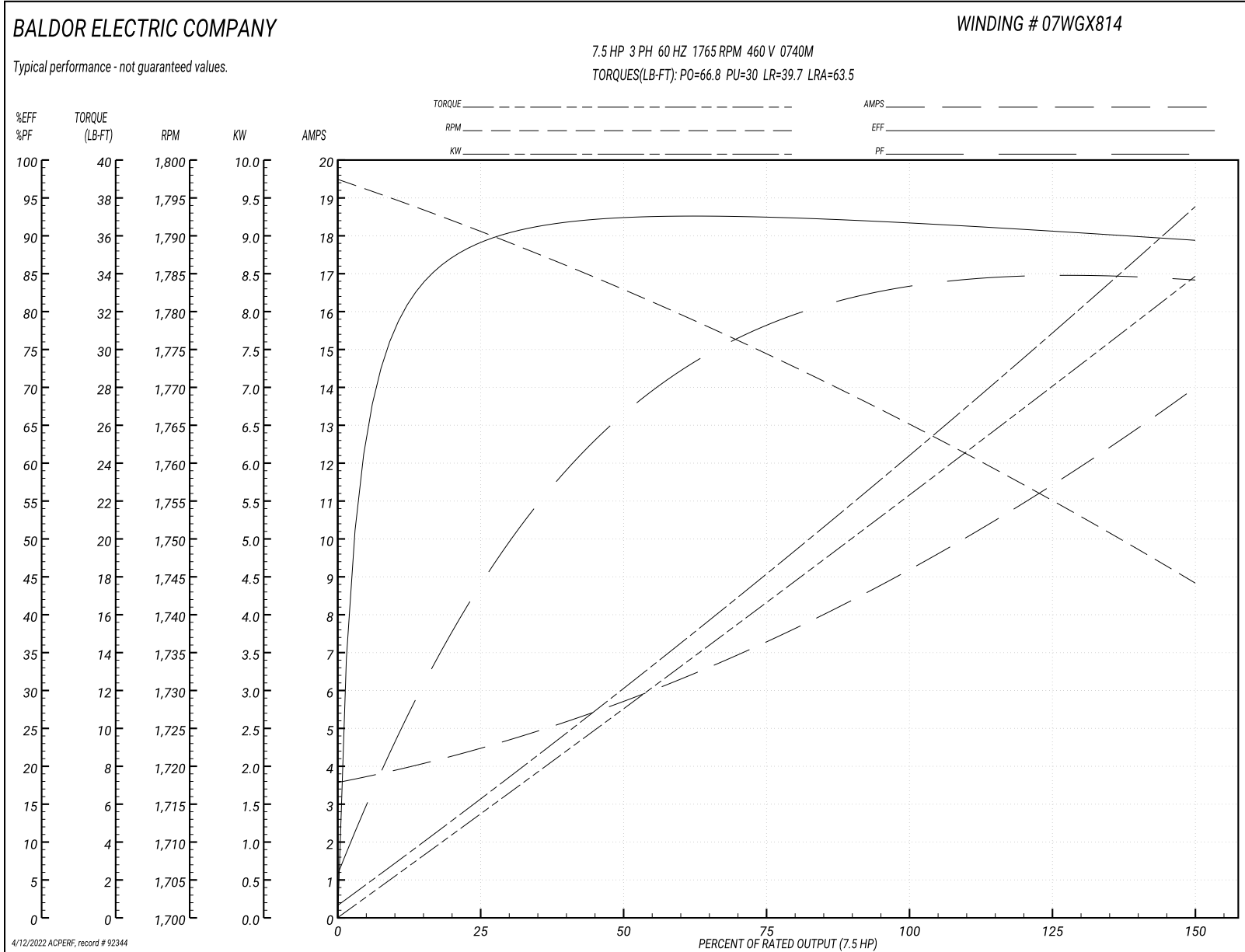
Typical performance - not guaranteed values

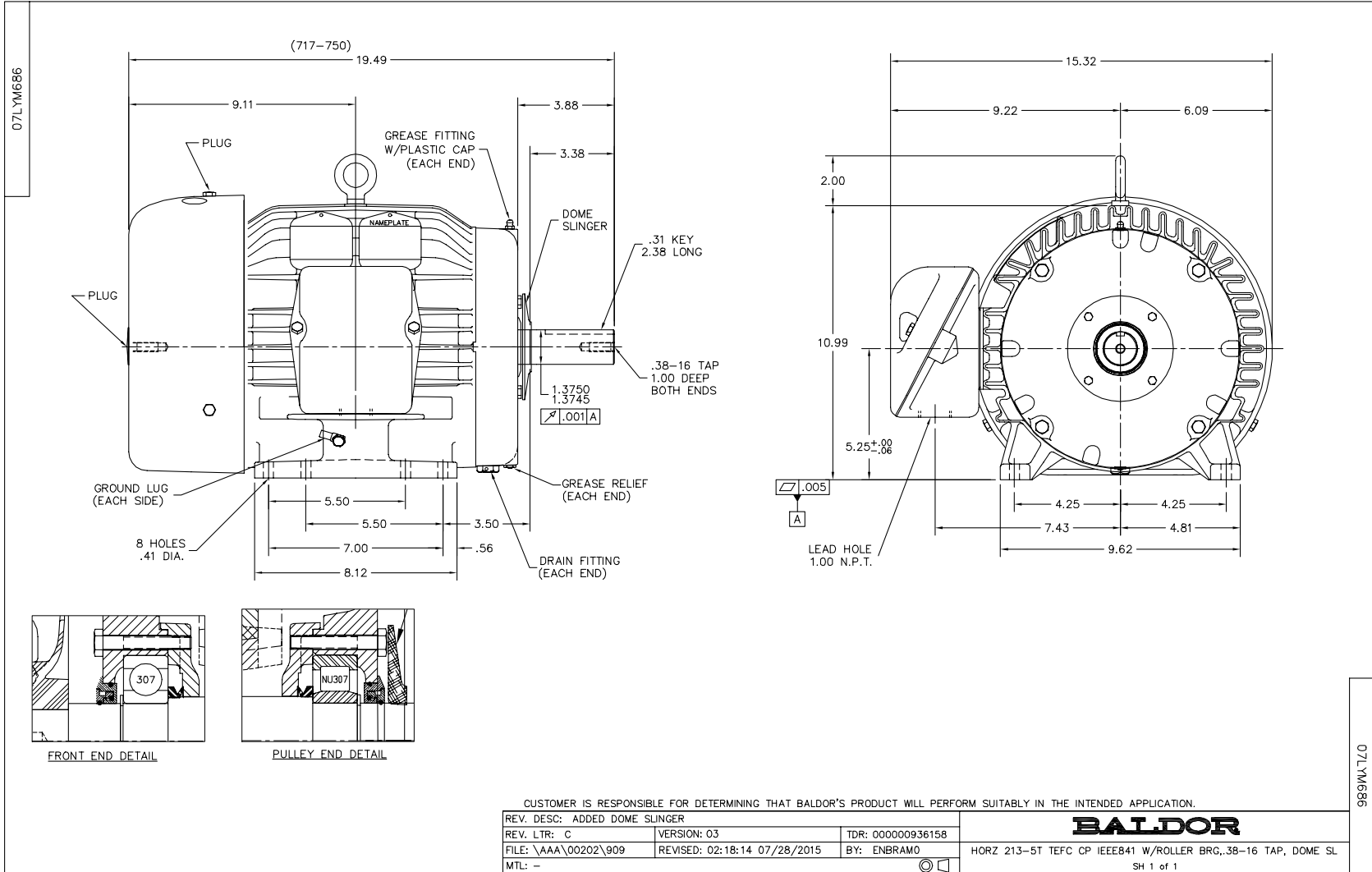
Winding: 07WGX814-R056		Type: 0740M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	7.5	Full Load Torque	22.32 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	9.5	Breakdown Torque	66.8 LB-FT		
R.P.M.	1765	Pull-up Torque	30 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	39.7 LB-FT	
NEMA Design Code	B KVA Code	H	Starting Current	63.5 A	
Service Factor (S.F.)	1.15		No-load Current	3.71 A	
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	1.485 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	49°C	
S.F. Amps			Temp. Rise @ S.F. Load	61°C	
			Locked-rotor Power Factor	36.2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

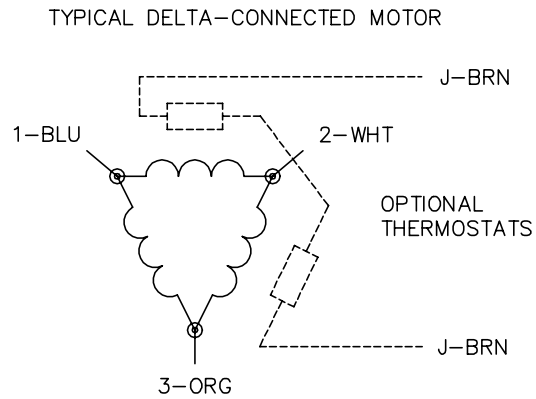
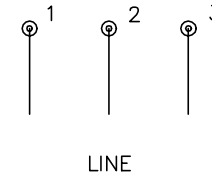
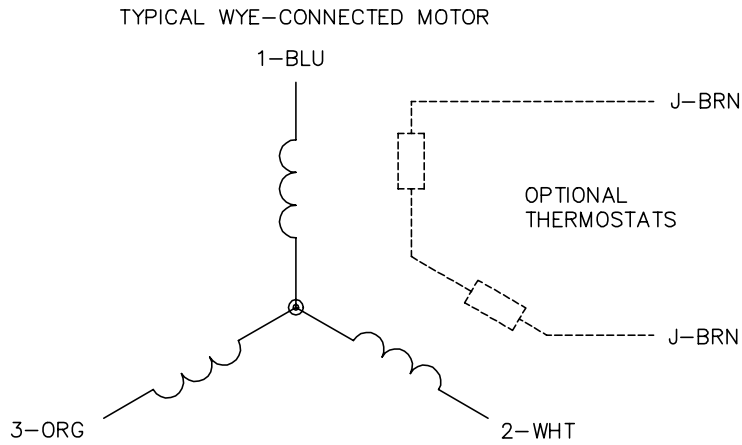
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	85	83
Efficiency	88.6	92.1	92.4	91.7	90.7	89.3	91.1
Speed	1789.9	1782.7	1774.5	1765.4	1755.6	1743.7	1760
Line amperes	4.3	5.61	7.32	9.31	11.5	13.9	10.6

Performance Graph at 460V, 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.

CD0006

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REV. LTR: E	VERSION: 01	TDR: 000001099922
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

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