



Product Information Packet

ECP83770T-4

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

Part Detail							
Revision:	BB	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX814	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	07K629	Layout:	07LYK629	Poles:	04	Created Date:	01-24-2006
Base:	RG	Eff. Date:	08-29-2022	Leads:	3#14		

Specs			
Catalog Number:	ECP83770T-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
Motor Letter Type:	Three Phase	Motor Lead Quantity/Wire Size:	3 @ 14 AWG
Output @ Frequency:	7.500 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Type:	0740M
XP Class and Group:	CLI GP A,B,C,D	Mounting Arrangement:	F1
XP Division:	Division II	Power Factor:	81
Agency Approvals:	CSA	Product Family:	Chem Process S/P 32-8 IEEE 841
	CSA EEV	Pulley End Bearing Type:	Ball
	UR	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding

Constant Torque Speed Range:	1.2	Shaft Rotation:	Reversible
Current @ Voltage:	9.500 A @ 460.0 V	Shaft Slinger Indicator:	Shaft Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None
Insulation Class:	F	XP Temp Code:	T3C

Nameplate NP4328E

CAT.NO.	ECP83770T-4				
SPEC.	07K629X814				
HP	7.5	TE		IP	56
VOLTS	460				
AMPS	9.5				
R.P.M.	1765				
FRAME	213T		HZ	60	
SER.F.	1.15		CODE	H	DES. B
RATING	40C AMB-CONT				
SN					
DE	6307		ODE	6307	
NEMA NOM. EFF.	91.7		P.F.	82	
GUAR. MIN. EFF.	90.2		CC	010A	
T. CODE	T3C		TEMP=	160	

PH 3

CLASS F

Nameplate NP3186E

SPEC.	07K629X814		
ABMA DE BRG	35BC03X30X		
ABMA ODE BRG	35BC03X30X		
GREASE	POLYREX EM		
MOTOR WEIGHT	199	ROTOR BARS	28
MAX. R.P.M.	2700	MAX. KVAR	1.3
		STATOR BARS	36
INV.TYPE	PWM		
T=	160		
CHP	60	TO	90
CT	1.2	TO	60
VT	0-	TO	60
HTR-VOLTS	N/A	HTR-AMPS	N/A
HTR-WATTS		MAX. SPACE HEATER TEMP.	N/A

AC Induction Motor Performance Data

Record # 83955

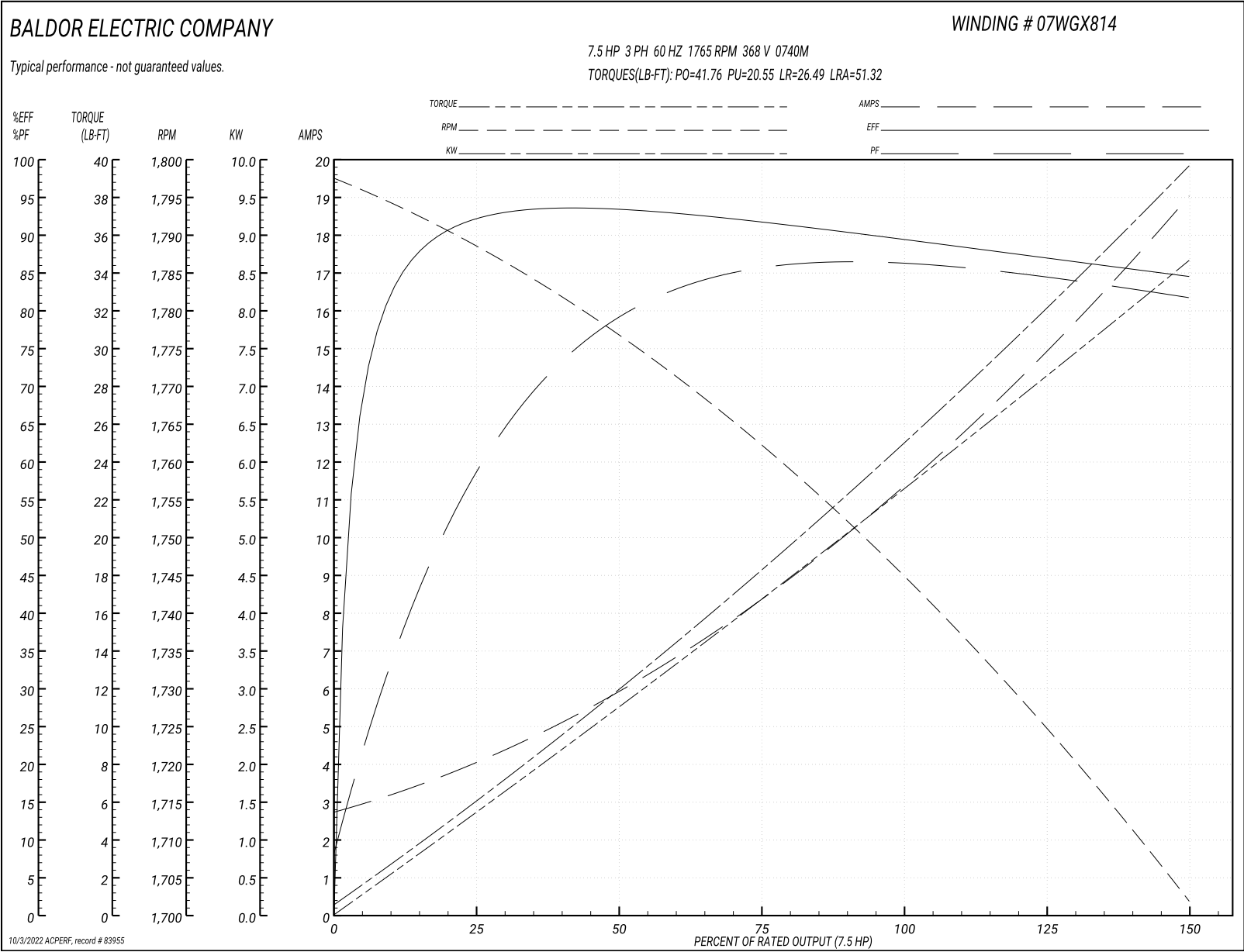
Typical performance - not guaranteed values

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	3	Locked-rotor Torque	26.49 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	51.32 A
Service Factor (S.F.)	1.15			No-load Current	2.84 A
NEMA Nom. Eff.	91.7	Power Factor	81	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-ft²

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

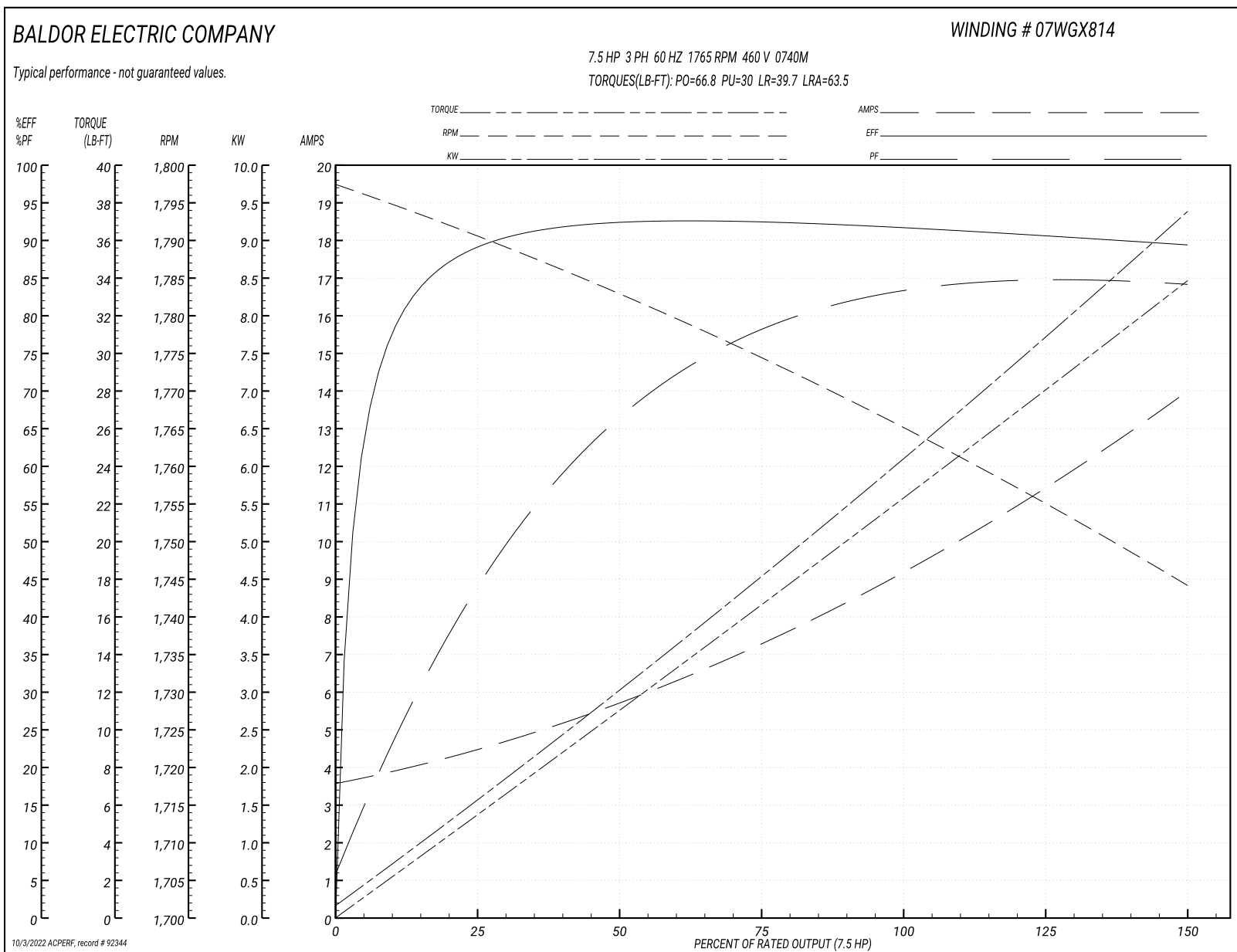
Typical performance - not guaranteed values

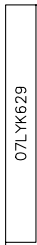
Winding: 07WGX814-R056			Type: 0740M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		22.32 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		9.5	Breakdown Torque		66.8 LB-FT		
R.P.M.		1765	Pull-up Torque		30 LB-FT		
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

TYPICAL WYE-CONNECTED MOTOR

1-BLU

3-ORG

2-WHT

J-BRN

J-BRN

OPTIONAL THERMOSTATS

TYPICAL DELTA-CONNECTED MOTOR

1-BLU

2-WHT

3-ORG

J-BRN

J-BRN

OPTIONAL THERMOSTATS

1

2

3

LINE

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

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -

BALDOR - RELIANCE®

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

SH 1 of 1

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