

BALDOR® • RELIANCE 

Product Information Packet

ZDPM18010C-BV

10HP,1800RPM,3PH,60HZ,1831C,TEBC,FOOT,

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	PM3923A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617227-326	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	10-24-2019	Leads:			

Specs			
Catalog Number:	ZDPM18010C-BV		
Enclosure:	TEBC		
Frame:	FL1831C		
Frame Material:	Aluminum		
Output @ Frequency:	10.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	No Grease		
Current @ Voltage:	10.600 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	TACHOMETER		
Frame Prefix:	FL		
Heater Indicator:	No Heater		
Insulation Class:	H		
Mounting Arrangement:	F3		

Product Family:	General Industrial		
Pulley End Bearing Type:	Ball		
Pulley Face Code:	C-Face		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Motor Standards:	NEMA		
Thermal Device - Bearing:	None		
Thermal Device - Winding:	Normally Closed Thermostat		

Nameplate 000613006NS									
		DUTY	HP	RPM	AMPS	VOLTS	HZ		
		CONT	10	1800	10.6	460	60		
		CONT	10	3000	10.3	460	100		
		CONT	10	1800	21.2	230	60		
		CONT	10	3000	20.6	230	100		
CAT.NO.	ZDPM18010C-BV		SPEC. NO.		P18M0501				
SER.NO.			FR	FL 1831C	INSUL	H			
PH.	3	MAX SAFE SPEED		7200	AMB.	40			
DESIGN NO.	PM3923A		TYPE		ENCL. TEAO-BC				
S.F.	1.0		D.E. BRG.		45BC02JPP30A				
ENCL MOD			O.D.E. BRG.		35BC02JPP30A				
					MIN. AMB. -25				

Nameplate 000692000VY		
IS <input type="text"/>	MEAS OPEN CIRCUIT VOLTAGE VOLTS AT <input type="text"/>	RPM.
EXCEED <input type="text"/>	MTR PH CURRENT SHOULD NOT	AMPS RMS PEAK TO
AVOID DEMAGNETIZATION		

Parts List		
Part Number	Description	Quantity
WS286794	WS P18M0501	1.000 EA
RA283002	RA P18M0501	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
418057747A	METAL FASTENER	8.000 EA
000613006NS	RPM AC WITH CERTIFIED LOGO	1.000 EA
000692000NH	LABEL DIRECTION AIR FL	1.000 EA
411716004A	219P039 - 219P039 - LA	1.000 EA
418056062A	NP AC BLOWER DATA	1.000 EA
000692000VY	PERMANENT MAGNET MOTOR NAMEPLATE	1.000 EA
422927001	C/D LABEL	1.000 EA
032003116CB	THRU BOLT	4.000 EA
033102012AG	HXNUT LEAD CONN	4.000 EA
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 EA
036000050JB	M8-1,25 X 50 MHHCS	2.000 EA
400638001D	WAVEN (Customer number 43699)	1.000 EA
411693051B	LUG, LIFTING	2.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
807580002BAA	BRKT,DE,FL181 807580-1WCC	1.000 EA
807580003AAB	BRKT,ODE180AC 807580-1WCC	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	2.000 EA
036000045JB	M8-1.25 X 45MM HXHCS	4.000 EA
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA


Parts List (continued)		
Part Number	Description	Quantity
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
036310010FB	RHMS TERM/BLK MTG	2.000 EA
418057461B	PLATE, ENCODER	1.000 EA
036320008CB	M2.5 SCREW	4.000 EA
036500006AB	M4-0.7 METRIC HEX NUT	2.000 EA
065530000B	GASK	1.000 EA
075451000A	COVER, CONDUIT BOX	1.000 EA
406673002C	.75 CAP PLUG	2.000 EA
415000103G	TLUG	1.000 EA
422962051BW	STUB SHAFT	1.000 EA
800123015A	RESOLVER DYNAPAR	1.000 EA
417733001A	GSK C/ BOX BASE	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
418057260A	SCREW PHILLIPS PAN HD	4.000 EA
418057373A	SCREW SHEET METAL	3.000 EA
613450011A	BLMTR SQ AC 210	1.000 EA
706320003A	CONDUIT BOX	1.000 EA
807505050B	SHROUD, FAN/BLOWER	1.000 EA
807505051A	GRILL, FAN COVER	1.000 EA
418057243A	GROOVE PIN	1.000 EA
807504052A	FL180 FRAME	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180020EA	KEY 5/16X5/16X2-1/2 L	1.000 EA

034180020EA	KEY 5/16X5/16X2-1/2 L	1.000 EA
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S.O. 0	VOLTS 460	TYPE IPM	STATOR RES. @ 25 °C 1.303
FRAME F11831	AMPS 10.3	ENCLOSURE TEBC	OHMS (BETWEEN LINES)
HP 10	DUTY CONT	MAX SAFE RPM 7200	
BASE SPEED 1800	S.F. 1.0	WK ² (lb-Ft ²) .46	
PHASE/HERTZ 3/60	AMB °C/INSUL	MAX INSTANTANEOUS OVERLOAD AMPS 30.9	

CUSTOM MOTOR BLOCK PARAMETERS

Parameter Name	Value	Units	Description
Motor Rated HP	10.0	HP	Horsepower rating of the motor
Motor Rated Volt	460.0	V	Motor rated volts at full speed and load
Motor Rated Spd	1800.	RPM	Motor rated speed at full load
Motor Rated Freq	60.00	Hz	Motor rated speed frequency
Motor Rated Amps	10.3	A	Motor rated amps at full load and speed
Motor Peak Amps	30.9	A	Maximum current level that can be applied to motor
Stator R	.651	Ohms	Line-to-Neutral stator resistance
Voltage Constant	172.1	V/KRPM	RMS line-to-line EMF at 1000 RPM
Stator Id	22.100	mH	D-axis stator inductance
Stator Iq	91.100	mH	Q-axis stator inductance
Iq @ 2.0 Hp	164.100	mH	Q-axis inductance at lowest partial load
Iq @ 4.6 Hp	122.600	mH	Q-axis inductance at mid partial load
Iq @ 7.2 Hp	100.100	mH	Q-axis inductance at highest partial load
Iq @ 2.0 Hp	2.3	A	Optimum Q-axis current at lowest partial load
Iq @ 4.6 Hp	4.0	A	Optimum Q-axis current at mid partial load
Iq @ 7.2 Hp	5.5	A	Optimum Q-axis current at highest partial load
Iq @ 10.0 Hp	6.7	A	Optimum Q-axis current at rated load

	DR. BY _____	CD _____	IPM MOTOR PARAMETERS DATA
	CK. BY _____	RM _____	
APP. BY _____		DATE 11/23/09	PM3923A
			ISSUE DATE 11/23/09

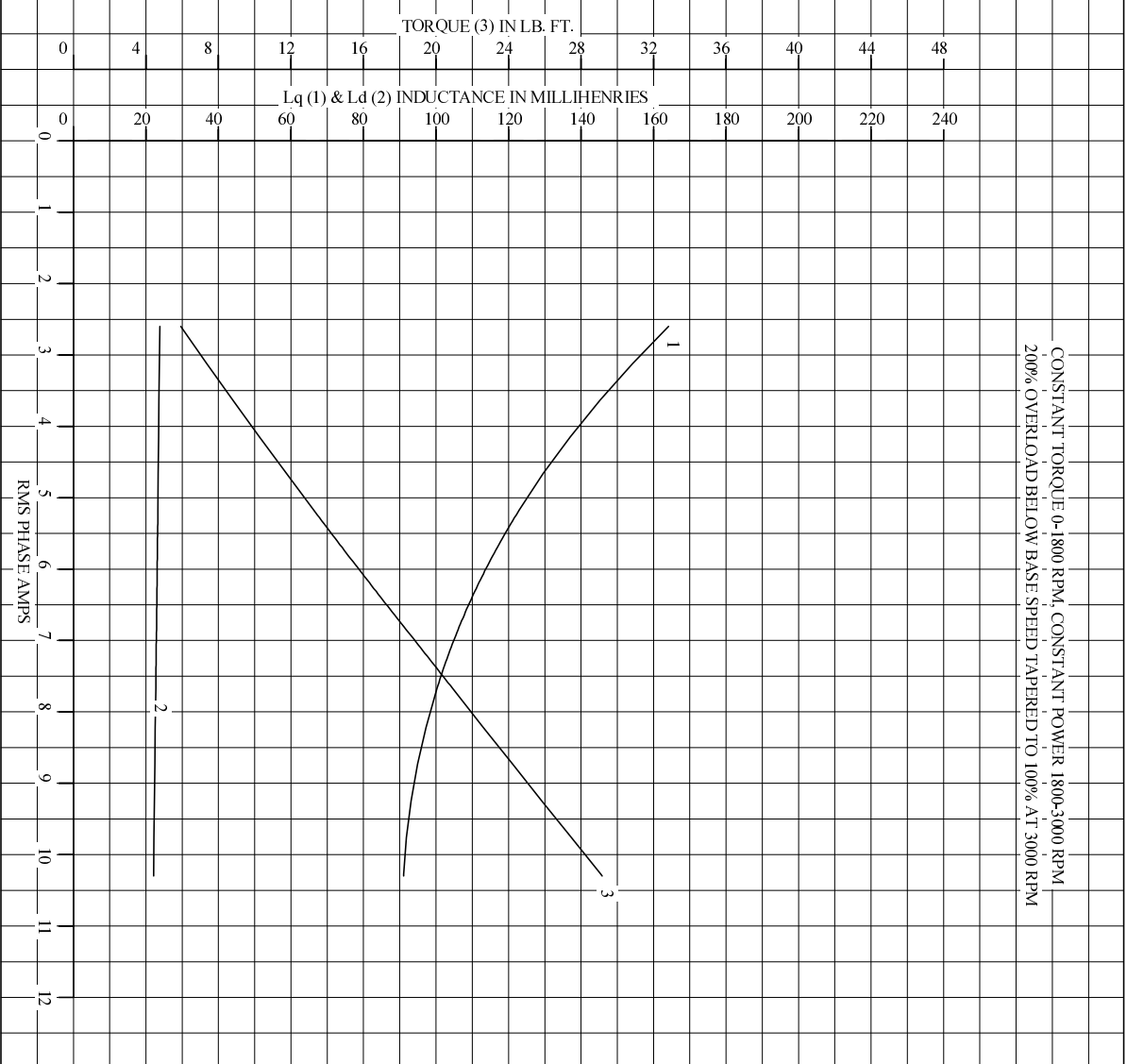
S.O. 0
 FRAME F11831
 HP 10
 BASE SPEED 1800
 PHASE/HERTZ 3/60

VOLTS 460
 AMPS 10.3
 DUTY CONT
 S.F. 1.0
 AMB °C/INSUL 40/H

TYPE IPM
 ENCLOSURE TEBC
 MAX SAFE RPM 7200
 WK² (Lb-Ft²) .46
 MAX INSTANTANEOUS OVERLOAD AMPS 30.9

STATOR RES. @ 25 °C 1.303
 OHMS (BETWEEN LINES)

Lq, Ld, & Torque vs. RMS Phase Amps



REMARKS : TYPICAL DATA

BALDOR

DR. BY _____ CD _____
 CK. BY _____ RM _____
 APP. BY _____ RM _____
 DATE 11/23/09

IPM MOTOR PERFORMANCE DATA

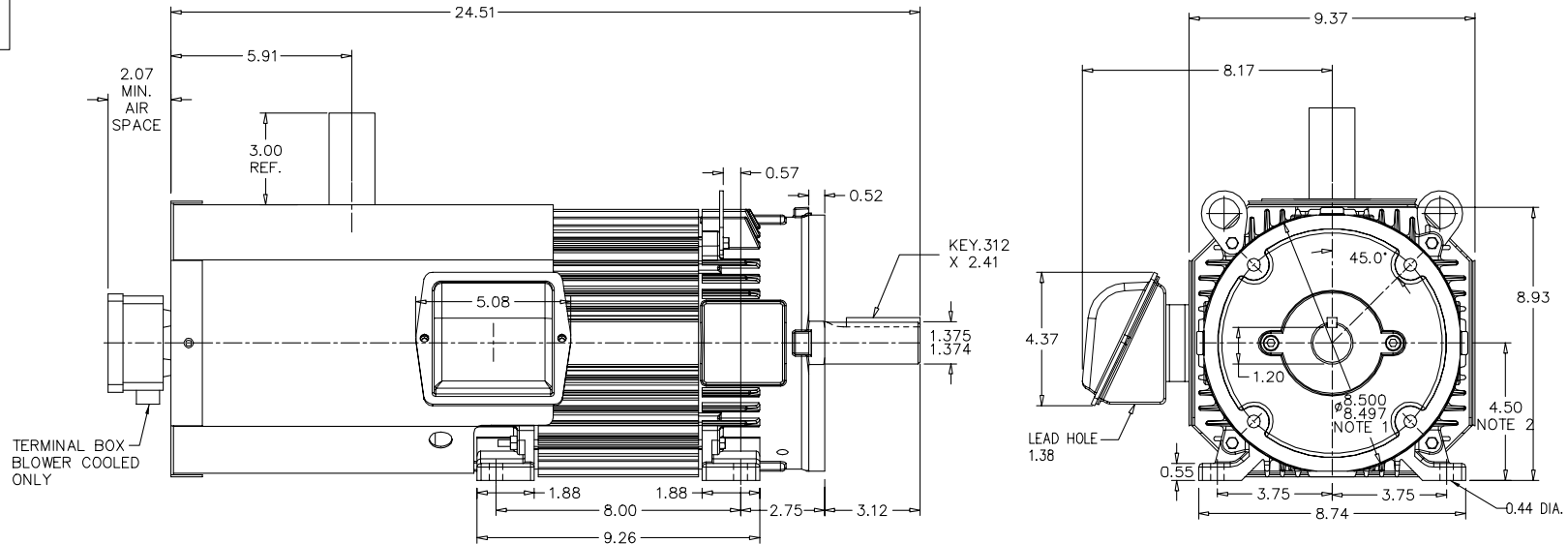
ISSUE DATE 11/23/09

617227-326

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL1831CZ

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT/NEMA 210TC C-FACE
DRIVE METHOD: COUPLED OR BELTED

COOLING: BLOWER COOLED
ACCESSORIES: ENCODER



NOTE 1: C-FACE & TACHOMETER MOUNTING
1/2-13 TAP, 1.00 DEEP, ON A 7.25 DIA. BOLT CIRCLE
FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.
NOTE 2: SHAFT HEIGHT WILL NOT BE EXCEEDED
SHIMS UP TO 0.03 INCHES IN THICKNESS ARE USUALLY
REQUIRED FOR COUPLED OR GEARED MACHINES

TERMINAL BOX (40 AMPS)
(706320-003A)
ROTATABLE IN 90° INCREMENTS

MOTOR WEIGHT: 133 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THIS PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: INITIAL RELEASE	VERSION: 00	TDR: 000001063820
REV. LTR: -	REVISED: 03:05:29 03/09/2018	BY: RGGWT
FILE: \RGG\00028\992		
MTL: -		

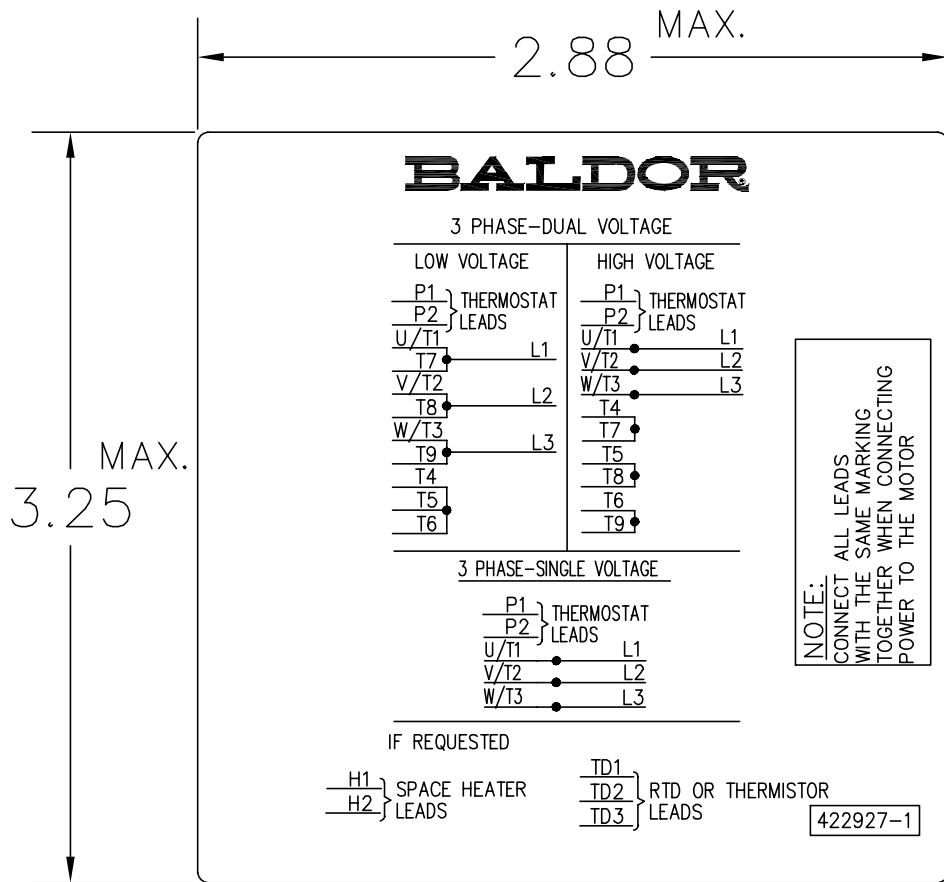
BALDOR

DIM SHT,RPMAC,TEBC,FL1831CZ,ENCODER

SH 1 of 1

617227-326

422927-001



NOTE:
DATA TO BE SIZED
SO THAT IT FITS INTO
MATERIAL DECAL
DIMENSIONS. MAKE
LETTERS & NUMBERS
AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS
AND LINES TO BE BLACK
ON WHITE BACKGROUND.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1

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<http://www.baldor.com/support/Literature/Load.ashx/MN406?ManNumber=MN406>