

BALDOR® • ***RELIANCE***

Product Information Packet

ZDPM21040-BV

40HP, 1800RPM, 3PH, 60HZ, 2162, TEBC, FOOT,

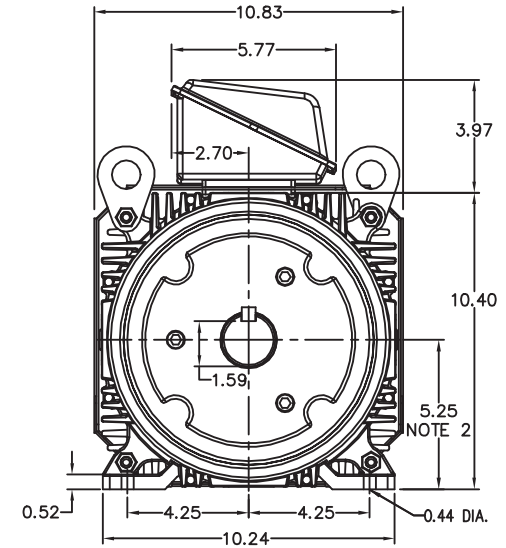
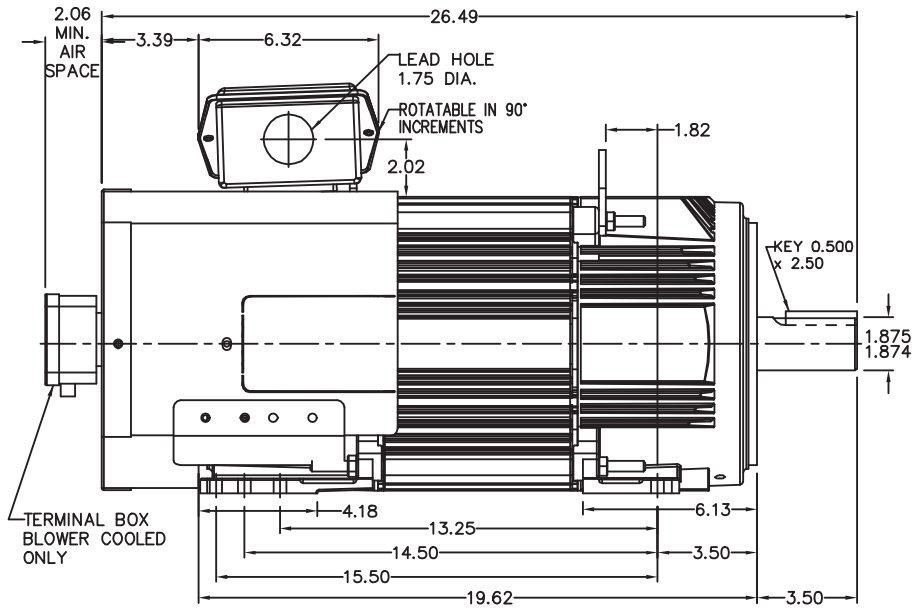
Part Detail			
Model Number:	ZDPM21040-BV	Environment:	General Purpose
Voltage:	460	HP:	40
RPM:	1800/1980	Efficiency:	
Phase:	3	Frequency:	N/A
Inverter Duty:	Y	Enclosure:	TEBC
Frame Group:	210	Frame Size:	FL2162
Features:	Vector Duty	Mounting:	
Service Factor:	1	Enclosure Group:	TEBC
Weight:	0	Price Symbol:	E2
Speed Range:		Insulation Class:	H
Nema Design:		Encl. Enhancement:	
Catalog Page:	197	Dimension Sheet:	617517-1
Connection Diagram:	422927-1	Electric Design:	PM3927A
Single HP:	40	Get Notes:	Vector Duty
Revision:		Instruction Manual:	
Application:	Variable Speed-V*S	Epact:	
Scaled Drawing:		Obsolete:	N
Last Data Source:	RGG,MADD	Bearing Type:	
Electrical Type:		Mounting Pos.:	
Ambient:	40	Duty:	
Amps:		Nominal Eff.:	
Kva Code:		Power Factor:	
Poles:	00	Literature:	

617517-001

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL2162Z

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT
DRIVE METHOD: COUPLED OR BELTED

COOLING: BLOWER COOLED or FAN COOLED
ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED



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 GREARED MACHINES

TERMINAL BOX MAY BE LOCATED F1 OR F2 IF SPECIFIED
61 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 290 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

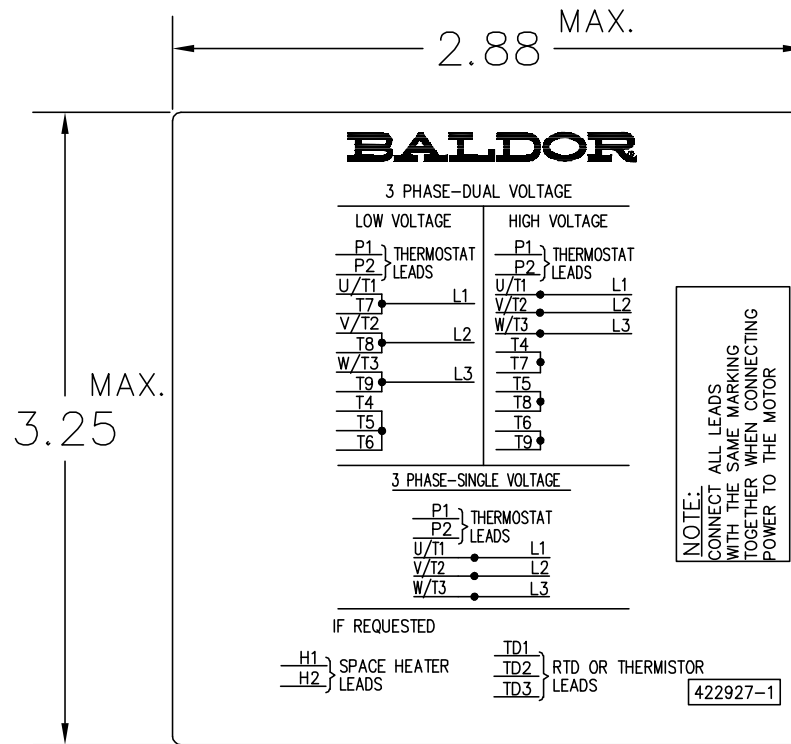
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: FIX TEXT ERROR IN NOTES	VERSION: 01	TDR: 00000556360
REV. LTR: A	REVISED: 01:24:52 08/31/2010	BY: RGGWT
FILE: \RGG\00003\085		
MTL: -		

BALDOR
DIM SHT RPMAC TEBC/FC FL2162Z FT MT PROV FOR TACH
SH 1 of 1

617517-001

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 GOLD BACKGROUND.

NOTE:
CONNECT ALL LEADS
WITH THE SAME MARKING
TOGETHER WHEN CONNECTING
POWER TO THE MOTOR

422927-1

422927-001

REV. DESC: CHANGE LOGO TO BALDOR		
REV. LTR: A	VERSION: 01	TDR: 000000556744
FILE: \RGG\00000\203	REVISED: 02:51:59 09/02/2010	
MTL: -	BY: RGGWT	

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EXTERNAL CONNECTION LABEL

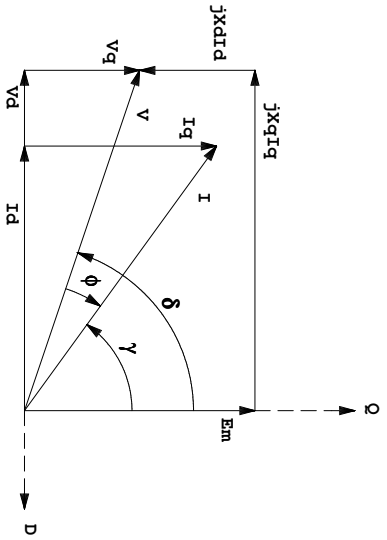
SH 1 of 1

S.O. 0	VOLTS 460	TYPE IPM	STATOR RES. @ 25 °C .2423
FRAME FL2162	AMPS 43	ENCLOSURE TEBC	OHMS (BETWEEN LINES)
HP 40	DUTY CONT	MAX SAFE RPM 5000	
BASE SPEED 1800	S.F. 1.0	WK ² (Lb-Ft ²) 2.14	
PHASE/HERTZ 3/60	AMB °C/INSUL 40/H	MAX INSTANTANEOUS OVERLOAD AMPS 129	

VARIABLE SPEED PERFORMANCE

HP	AMPS (rms)	RPM	GAMMA*	POWER FACT.	EFF.	VOLTS (L-L) (rms)	Em (L-N) (rms)	Iq (mH)	Ld (mH)
OpenCkt**	N/A	1800	5.0	N/A	N/A	N/A	187	N/A	N/A
OpenCkt, hot	N/A	1800	5.0	N/A	N/A	N/A	161	N/A	N/A
8.40	10.8	1800	30.6	95.8	93.3	375	161	45.3	7.60
18.7	21.5	1800	39.8	94.7	94.4	418	161	32.6	7.30
29.0	32.2	1800	44.4	93.3	94.7	439	161	26.1	7.10
40.0	43.0	1800	49.0	92.1	94.5	460	161	23.2	6.80

Remarks: TYPICAL DATA
 CONSTANT TORQUE 0-1800 RPM, CONSTANT POWER 1800-3000 RPM
 200% OVERLOAD BELOW BASE SPEED TAPERED TO 100% AT 3000 RPM



*Gamma is the current angle relative to counter emf, defined to be positive when current leads counter emf.
 Equivalently, Gamma is positive when Id is negative.
 **Data at 25°C - all other data at rated temperature

BALDOR A MEMBER OF THE ABB GROUP	DR. BY _____	CD _____	IPM MOTOR PERFORMANCE DATA
	CK. BY _____	RM _____	
	APP. BY _____	RM _____	
	DATE 5/3/10		ISSUE DATE 5/3/10

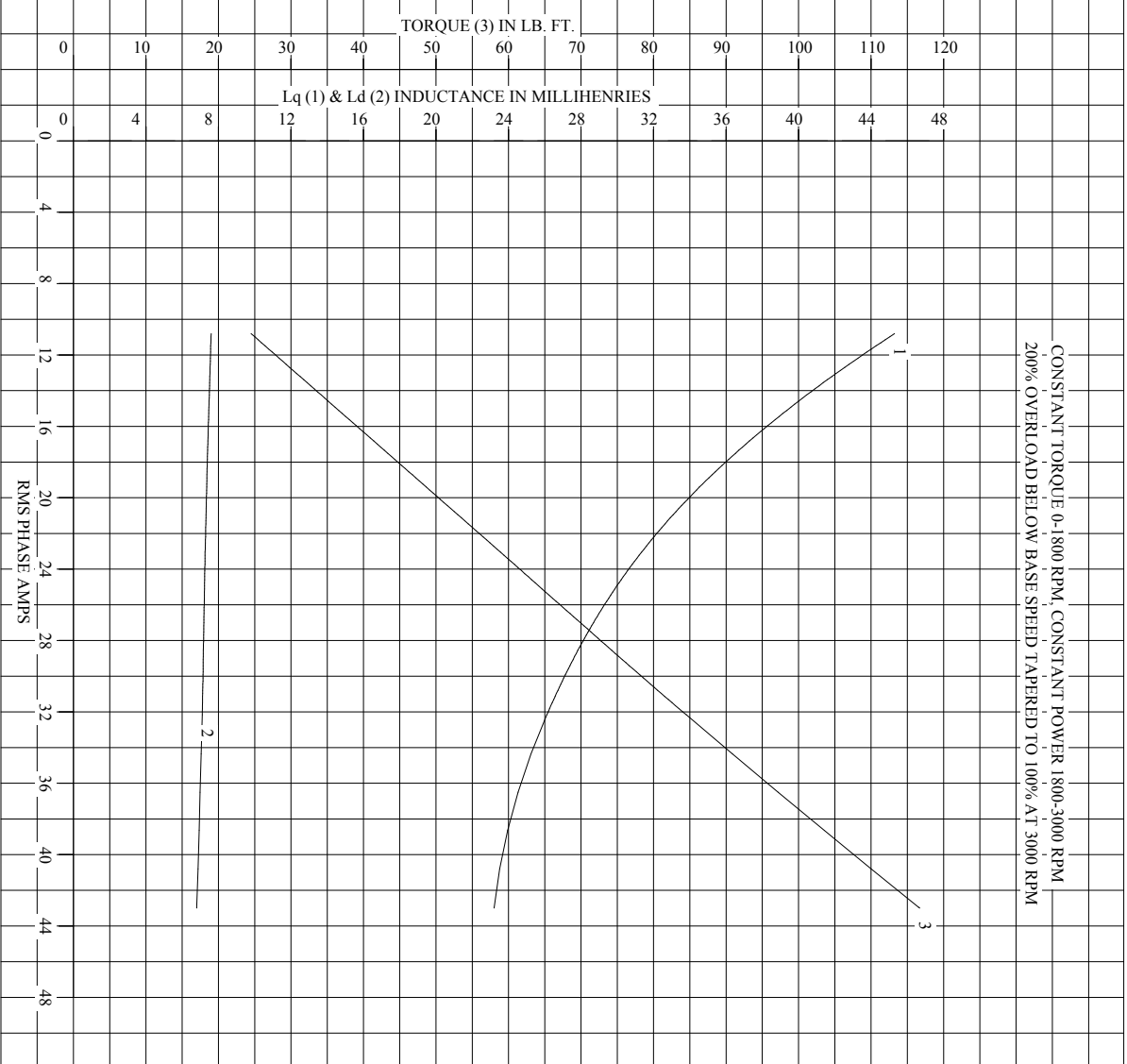
S.O. 0
 FRAME FL2162
 HP 40
 BASE SPEED 1800
 PHASE/HERTZ 3/60

VOLTS 460
 AMPS 43
 DUTY CONT
 S.F. 1.0
 AMB °C/INSUL 40/H

TYPE IPM
 ENCLOSURE TEBC
 MAX SAFE RPM 5000
 WK² (Lb-Ft²) 2.14
 MAX INSTANTANEOUS OVERLOAD AMPS 129

STATOR RES. @ 25 °C .2423
 OHMS (BETWEEN LINES)

Lq, Ld, & Torque vs. RMS Phase Amps



REMARKS: TYPICAL DATA

BALDOR
 A MEMBER OF THE ABB GROUP

DR. BY _____ CD _____
 CK. BY RM
 APP. BY RM
 DATE 5/3/10

IPM MOTOR PERFORMANCE DATA
 PM3927A
 ISSUE DATE 5/3/10