

BALDOR® • RELIANCE 

Product Information Packet

ZDVSM4400T-4

100HP, 1785-2680RPM, 3PH, 60-90HZ, 405T, A400

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A40WG0296	CD Diagram:	416820-036	Mfg Plant:	
Mech. Spec:		Layout:	617429-200	Poles:	04	Created Date:	07-19-2013
Base:		Eff. Date:	09-07-2016	Leads:	3#1		

Specs			
Catalog Number:	ZDVSM4400T-4	Duty Rating:	CONT
Enclosure:	TEFC	Feedback Device:	ENCODER
Frame:	405T	Heater Indicator:	No Heater
Frame Material:	Iron	Insulation Class:	F
Output @ Frequency:	100.000 HP @ 90 HZ	Inverter Code:	Inverter Duty
	100.000 HP @ 60 HZ	KVA Code:	L
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 1 AWG
	460.0 V @ 90 HZ	Motor Type:	A40064M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	86
Agency Approvals:	CCSA US	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Base Indicator:	Rigid	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Constant Torque Speed Range:	1000:1	Shaft Slinger Indicator:	No Slinger
Current @ Voltage:	112.000 A @ 460.0 V	Speed Code:	Single Speed
	115.000 A @ 460.0 V	Motor Standards:	NEMA

Design Code:	A	Starting Method:	Direct on line
Drip Cover:	No Drip Cover	Thermal Device - Bearing:	None
		Thermal Device - Winding:	Normally Closed Thermostat

Nameplate 000613007HV									
CAT NO	ZDVSM4400T-4			SPEC NO.	P40G3941				
SER.NO.				FRAME	405T				
	HP		RPM		VOLTS		AMPS	HZ	TYPE P
BASE	100	1785	460	115	60	SF	1.00		
MAX	100	2680	460	112.	90			INSUL.CLASS F	
DRIVE END BEARING	80BC03J30X			CONSTANT TORQUE	DUTY CONT	AMB	40		
OPP D.E. BEARING	80BC03J30X			1000:1	ENCL TEFC	PHASE	3		
DESIGN NO.	A40WG0296-R002			FLUX AMPS	37.8				
MAX SPEED/RPM	3600			OVERTEMP PROT	2	WK2	26.07		POLES 4 WEIGHT 1326

Parts List		
Part Number	Description	Quantity
SA267731	SA P40G3941	1.000 EA
RA254401	RA P40G3941	1.000 EA
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 EA
000613007HV	N/P BALDOR VSMMASTER	1.000 EA
000692000FF	N/P	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
004824015A	GREASE POLYREX EM	0.884 LB
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 EA
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 EA
034000014AB	WSH ID.406 OD.812 TH.065	4.000 EA
034180008DA	KEY 1/4X1/4X1 L (shipping)	1.000 EA
034530052AB	P/NIP 1/8X6-1/2 GALV.	1.000 EA
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 EA
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
078549001DA	FAN 400 078549001F	1.000 EA
083198101A	G400 STD FAN COVER MACHINING	1.000 EA
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 EA
410700000DA	WAVY SPRING WASHER	1.000 EA
415072001B	CLAMP	1.000 EA
034692005AA	P PLUG 3/4"BLK.	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 EA
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
034690002AB	PPLG 1/4" PLTD.	1.000 EA
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 EA
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 EA
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
033512004LB	HHTTS 1/4-20X1/2 PLTD.	1.000 EA
043292000AJ	GASK 320-400	1.000 EA
077176000L	C/BOX, 360-400	1.000 EA
077176001A	CBOXC, PAINTED 360-400	1.000 EA
402731001A	GASK 360-440	1.000 EA
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 EA
611712053RY	TACH & HARDWARE KIT	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 EA
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 GA
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 GA
421948051	LABEL, MYLAR	1.000 EA
PK5004A02	WOOD BASE 40X32 STACK 2X4 RUNNER	1.000 EA

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE	CONN EQ	CKT OHMS	PER PHASE	
FRAME	405T	AMPS	115	MAX SAFE RPM	3600	(AT BASE RATING, 25 °C)	R1	.0193	X1	.194
HP	100	DUTY	CONT	IM (AMPS)	37.8	R2	.0142	X2	.185	
BASE SPEED	1785	S.F.	1.0	P.F. @NL/FL	9.5/86.4	XN	5.85			
PHASE/HERTZ	3/60	AMB °C/INSUL	40/F	WK ² (lb-ft ²)	26.07					


RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1786	100	294	460	60	115
MAX SPEED	2678	100	196	460	90	112
MIN SPEED	0	0	294	9.60	.460	115

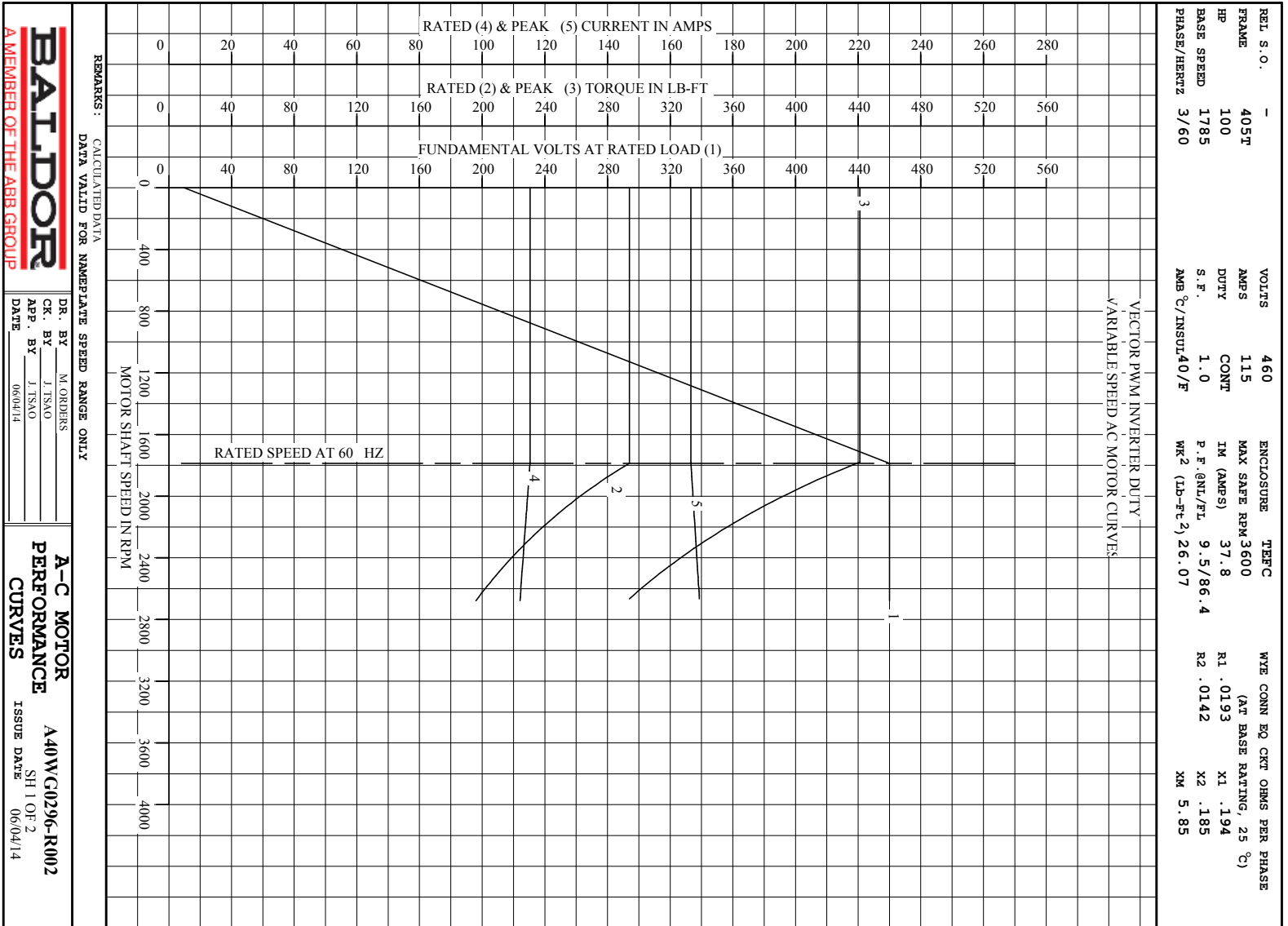
LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	37.8
1/4	1796	25.0	73	460	60	52.9
1/2	1793	50.1	147	460	60	70.5
3/4	1790	75.0	220	460	60	91.5
FULL LOAD	1786	100	294	460	60	115
O/L	1779	149	441	460	60	167

REMARKS : CALCULATED DATA
VECTOR PWM INVERTER DUTY

 A MEMBER OF THE ABB GROUP	DR. BY	M. ORDERS	A-C MOTOR PERFORMANCE DATA
	CR. BY	J. TSAO	
	APP. BY	J. TSAO	A40WG0296-R002
	DATE	06/04/14	ISSUE DATE 06/04/14

C/R 332319



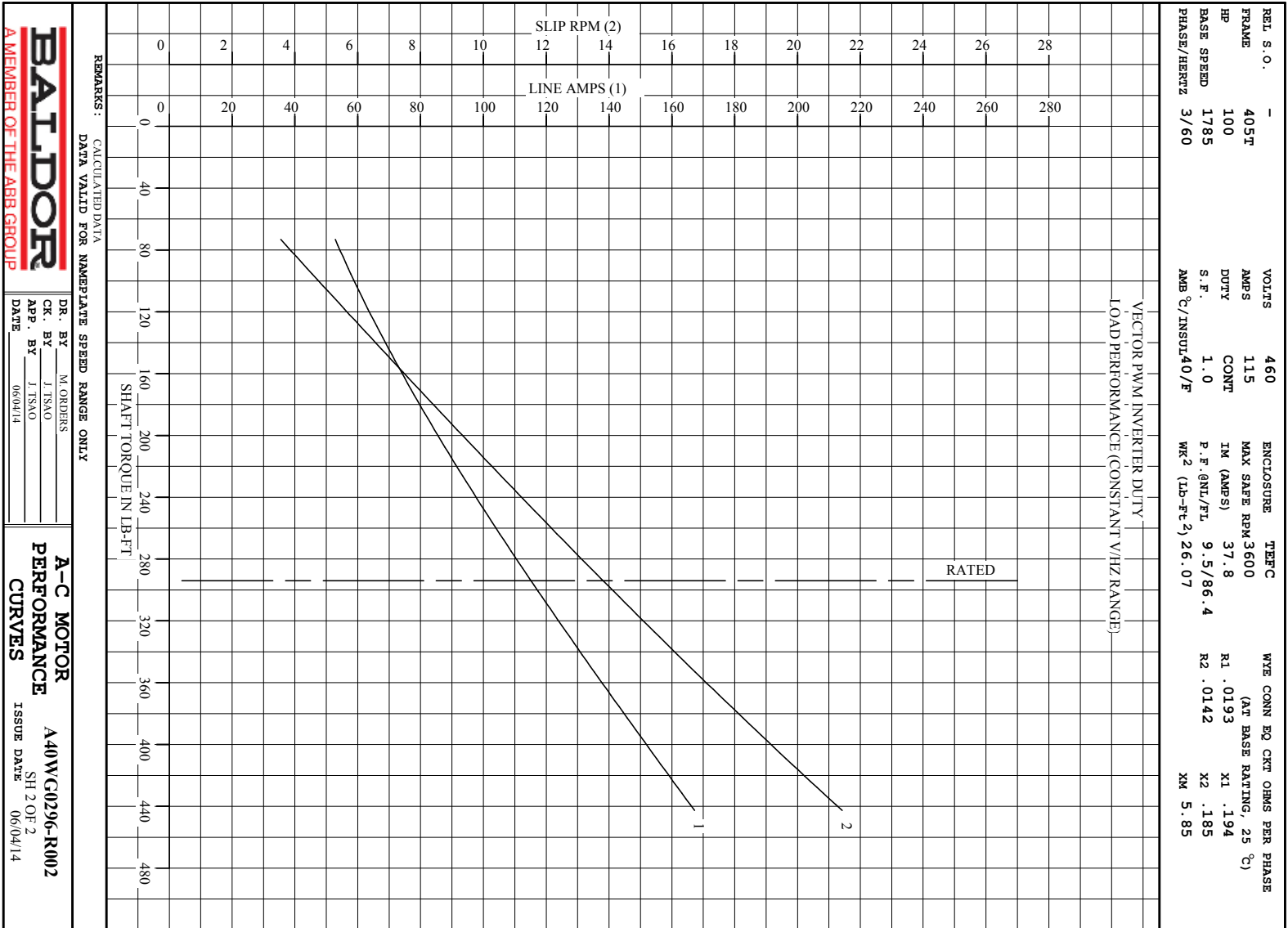
BALDOR
A MEMBER OF THE ABB GROUP

A-C MOTOR PERFORMANCE CURVES

DR. BY M. ORDERS
CR. BY J. TSJO
APP. BY J. TSJO
DATE 06/04/14

A40WC0296-R002
SH 1 OF 2
ISSUE DATE 06/04/14

C/R 322319



BALDOR
A MEMBER OF THE ABB GROUP

DR. BY M. ORDERS
CR. BY J. TSKO
APP. BY J. TSKO
DATE 06/04/14

A-C MOTOR
PERFORMANCE
CURVES

A40WC0296-R002
SH 2 OF 2
ISSUE DATE 06/04/14

C/R 322319

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

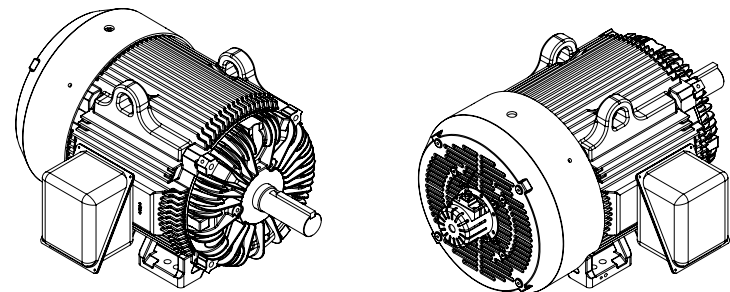
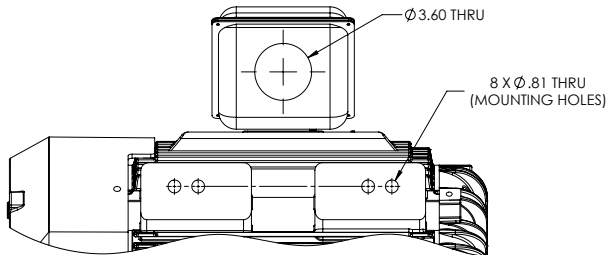
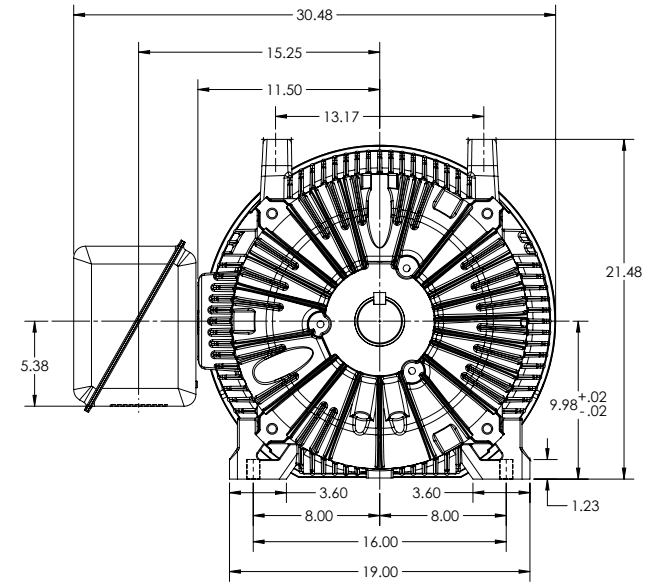
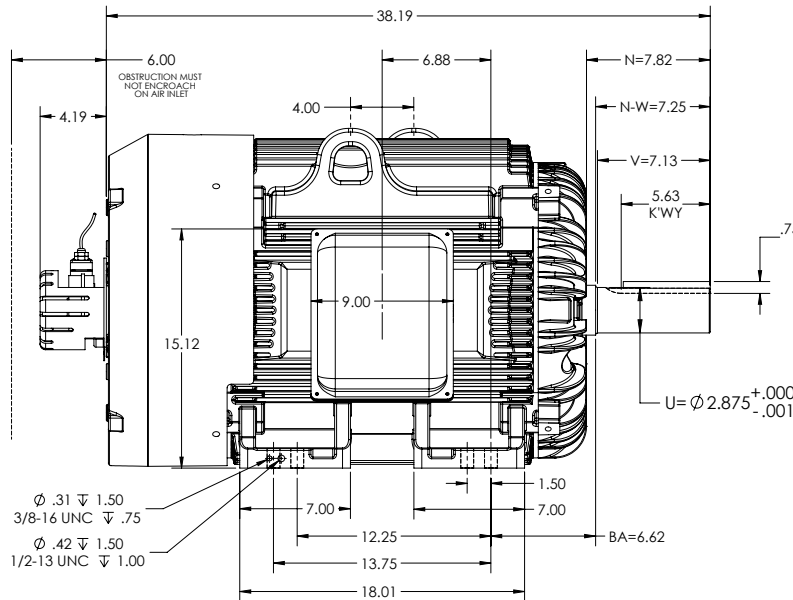
FRAME G405T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT F-1

INCLUDES 404T FRAME MOUNTING HOLES AND HS-35 ENCODER

STANDARD INDUSTRIAL/ ZDVSM ENCLOSURE



WEIGHT (LBS) : 1350 / WEIGHT MAY VARY 15% DEPENDING ON RATING
 DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS
 CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
1 OF 2
 00C-627219

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
 STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

REV. DESC: UPDATING FOOT HOLES FROM 6 TO 8			
REV: c	VERSION: 03	REVISED: 10-52-36 12/08/2017	TDR: 000001053673
MODEL NO. 617429-200		REF: -	
BY: RAGRA	Material: -		

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G405T-404T STD - FOOTED - STANDARD INDUSTRIAL/ ZDVSM - ENCODER

617429-200

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

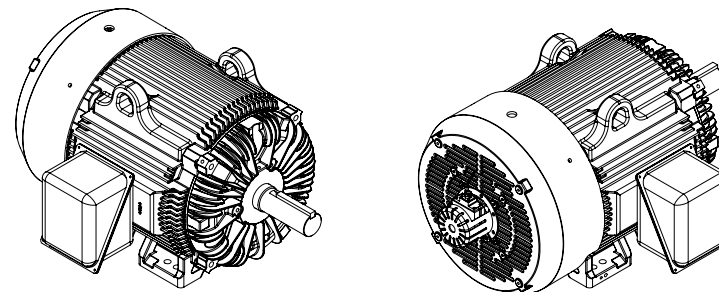
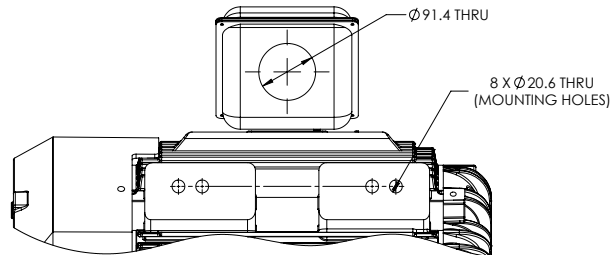
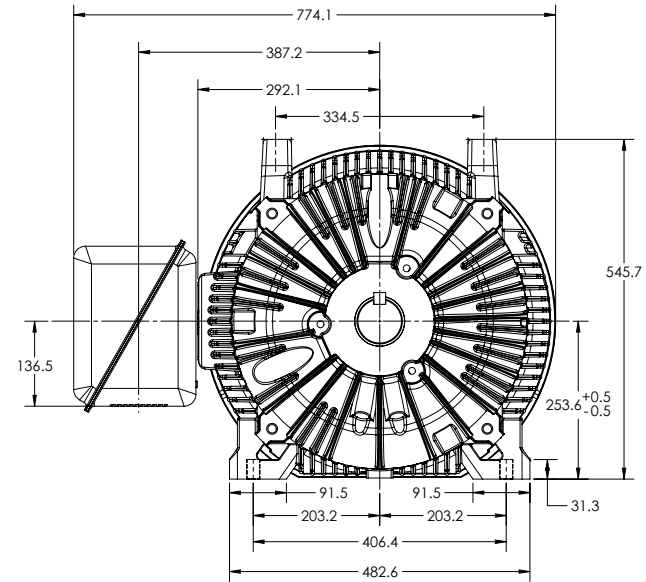
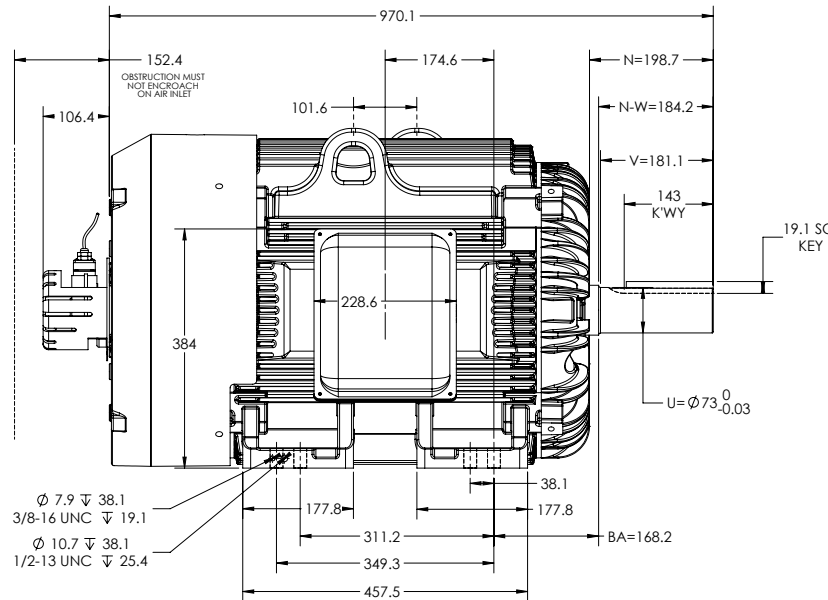
FRAME G405T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT F-1

INCLUDES 404T FRAME MOUNTING HOLES
AND HS-35 ENCODER

STANDARD INDUSTRIAL/ ZDVSM ENCLOSURE



WEIGHT (KGS) : 620 / WEIGHT MAY VARY 15% DEPENDING ON RATING
 DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES
 CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
2 OF 2
00C-627219

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
 STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

REV. DESC: UPDATING FOOT HOLES FROM 6 TO 8			
REV: C	VERSION: 03	REVISED: 10-52-36 12/08/2017	TDR: 000001053673
MODEL NO. 617429-200		REF: -	
BY: RAGRA	Material: -		

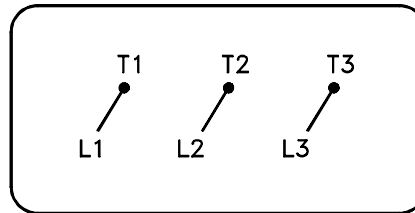
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G405T-404T STD - FOOTED - STANDARD INDUSTRIAL ZDVSM - ENCODER

617429-200

416820-036

A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11:54:06 04/30/2010	
MTL: -	BY: RAGRA	

BALDOR

CONN DIAG - STANDARD 3 LEAD

SH 1 of 1

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