

ABB BALDOR RELIANCE III

Customer information packet

ZDVSM4406T-4

150HP, 1790-2685RPM, 3PH, 60-90HZ, 444T, A440

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	445T
Frame Material	Iron
Frequency	60.00 Hz 90.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	150.000 HP @ 90 HZ 150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 460.0 V @ 90 HZ
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	1000:1
Current @ Voltage	165.000 A @ 460.0 V 177.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	ENCODER
Heater Indicator	No Heater
High Voltage Full Load Amps	165.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	S
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG0183
Layout	617436-909
Eff. date	03-02-2026
CD Diagram	416820-036
Poles	04
Leads	3#2/0
Proprietary	False
Created date	08-24-2012

Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 2/0 AWG
Motor Standards	NEMA
Motor Type	A44078M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	49.07 IN
Product Family	Other
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1790 rpm 2685 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007HV										
CAT NO	ZDVSM4406T-4			SPEC NO.	P44G4014					
SER.NO.				FRAME	445T					
	HP	RPM	VOLTS	AMPS		HZ	TYPE	P		
BASE	150	1790	460	177		60	SF	1.00		
MAX	150	2685	460	165		90	INSUL.CLASS		F	
DRIVE END BEARING	90BC03J30X		CONSTANT TORQUE			DUTY	CONT		AMB	40
OPP D.E. BEARING	6318C3VL0241		1000:1		ENCL	TEFC	PHASE	3		
DESIGN NO.	A44WG0183-R001		FLUX AMPS		66.6		VPWM INVERTER READY			
MAX SPEED/RPM	3600		OVERTEMP PROT		2		WK2	51.57	POLES	4 WEIGHT

Parts List

Part number	Description	Quantity
SA254360	SA P44G4014	1.000 ea
RA241168	RA P44G4014	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000613007HV	N/P BALDOR VSMaster, CURUS	1.000 ea
412118006A	DRAIN	2.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
415072001B	CLAMP	1.000 ea
083199082A	G28 FAN COVER MACHINING SHORT VERSION	1.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
702618004T	FAN KB 182/70 (112) 440	1.000 ea
004824015A	GREASE POLYREX EM	1.160 lb
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700004A	WSHR	1.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
702658001A	CONDUIT BOX, E440	1.000 ea
702658002A	+C/BOX CVR, PAINTED 440	1.000 ea
415915007G	GASK, LAC	1.000 ft
406056008A	GASKET, TERBD 440	1.000 ea
418153001A	GASK 440	1.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea

611712053RY	TACH & HARDWARE KIT	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034690005AB	PPLG 3/4 PLATED	2.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034530044AB	P/NIP 1/8X5-1/2L GALV.	1.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
000692000FF	N/P	1.000 ea
604797056	400-447 FRAME 60 X 42	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.440 ga

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE		
FRAME	445T	AMPS	177	MAX SAFE RPM	3600	(AT BASE RATING, 25 °C)		
HP	150	DUTY	CONT	IM (AMPS)	66.6	R1	.0101	X1 .100
BASE SPEED	1790	S.F.	1.00	P.F.@NL/FL	.071/.835	R2	.00736	X2 .0926
PHASE/HERTZ	3/60	AMB °C/INSUL	40/F	WK ² (Lb-Ft ²)	51.6			XM 3.14

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1790	150	440	460	60	177
MAX SPEED	2685	150	293	460	90	165
MIN SPEED	0	0	440	7.20	.328	177

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	66.6
1/4	1797	37.6	110	460	60	92.5
1/2	1795	75.1	220	460	60	115
3/4	1793	112	329	460	60	145
FULL LOAD	1790	150	440	460	60	177
O/L	1779	299	881	460	60	325

REMARKS: TYPICAL DATA
VECTOR PWM INVERTER DUTY

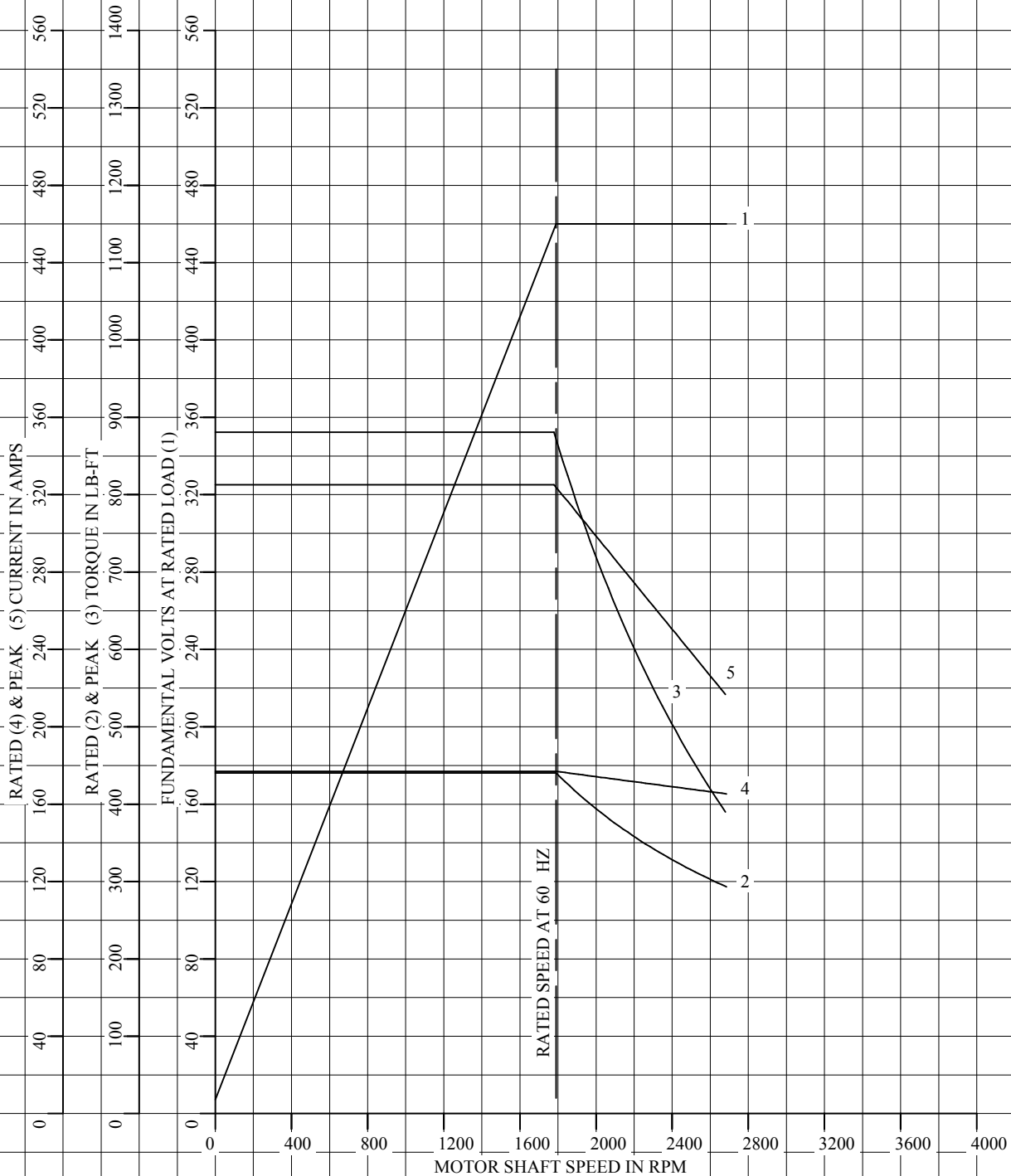


DR. BY M. ORDERS
CK. BY J. TSAO
APP. BY J. TSAO
DATE 10/27/00

**A-C MOTOR
PERFORMANCE DATA**
A44WG0183-R001
ISSUE DATE 06/05/15

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN	EQ	CKT	OHMS	PER PHASE
FRAME	445T	AMPS	177	MAX SAFE RPM	3600	(AT BASE RATING, 25 °C)				
HP	150	DUTY	CONT	IM (AMPS)	66.6	R1	.0101	X1	.100	
BASE SPEED	1790	S.F.	1.00	P.F. @NL/FL	.071/.835	R2	.00736	X2	.0926	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/F	WK ² (Lb-Ft ²)	51.6			XM	3.14	

VECTOR PWM INVERTER DUTY
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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DATE 10/27/00

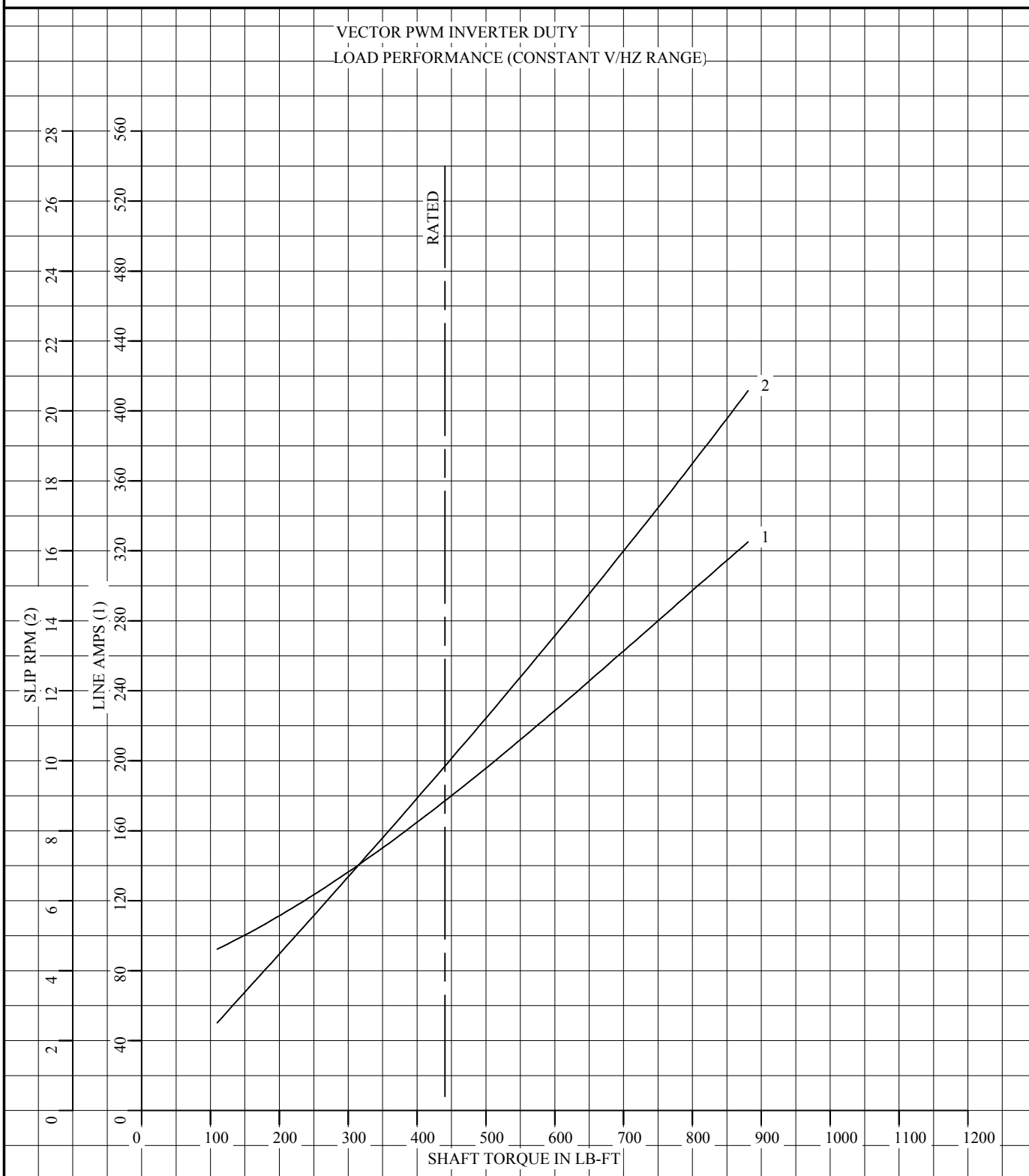
**A-C MOTOR
PERFORMANCE
CURVES**

A44WG0183-R001

SH 1 OF 2
ISSUE DATE 06/05/15 Page 8 of 12

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	445T	AMPS	177	MAX SAFE RPM	3600	(AT BASE RATING, 25 °C)	
HP	150	DUTY	CONT	IM (AMPS)	66.6	R1 .0101	X1 .100
BASE SPEED	1790	S.F.	1.00	P.F. @NL/FL	.071/.835	R2 .00736	X2 .0926
PHASE/HERTZ	3/60	AMB °C/INSUL	40/F	WK ² (Lb-Ft ²)	51.6	XM 3.14	

VECTOR PWM INVERTER DUTY
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

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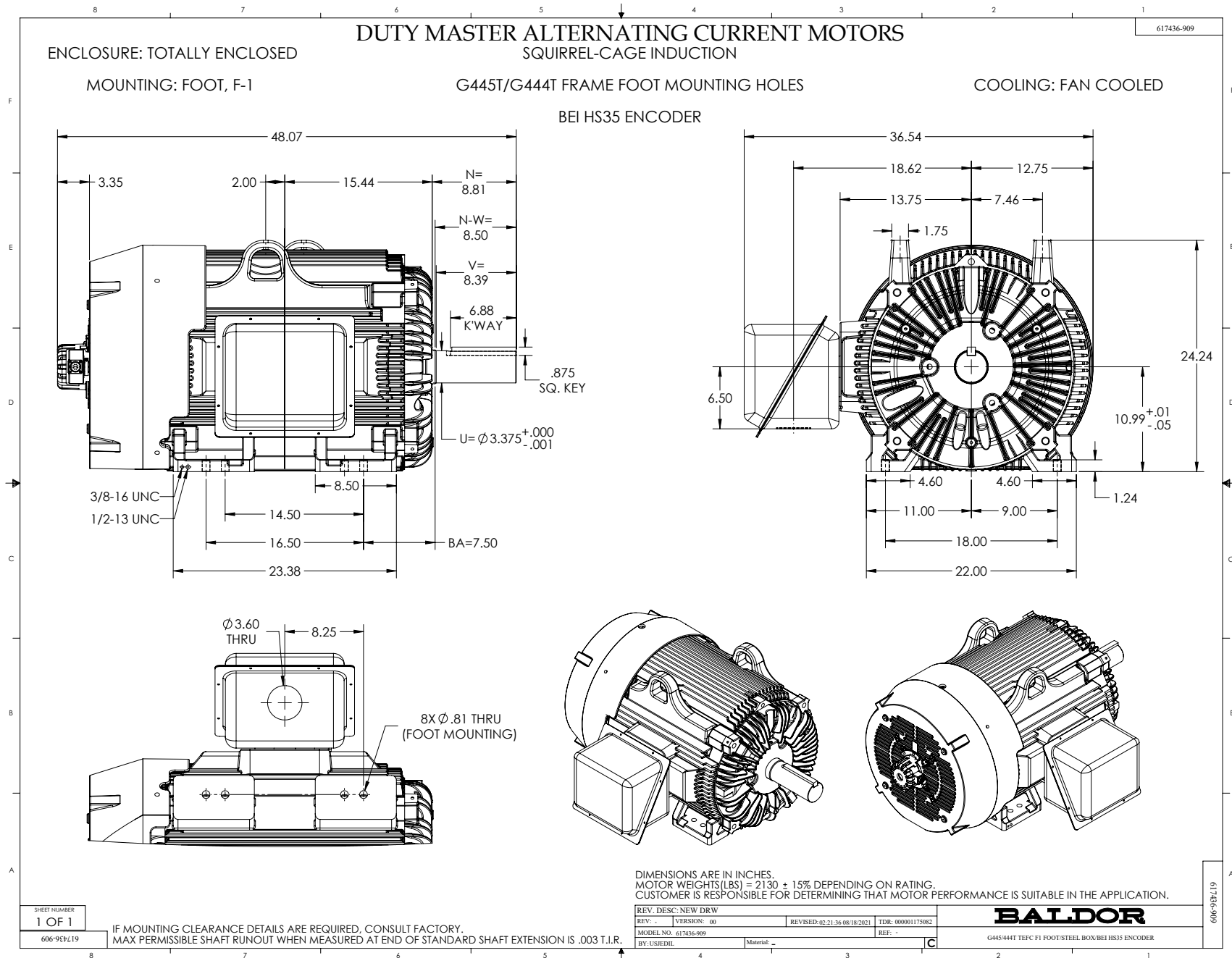
DR. BY M. ORDERS
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APP. BY J. TSAO
DATE 10/27/00

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG0183-R001

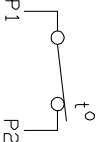
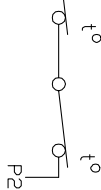
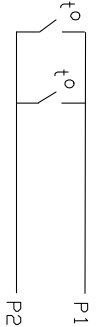
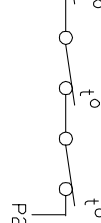
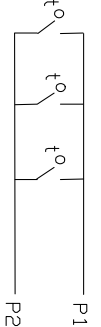
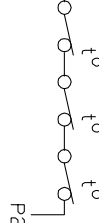
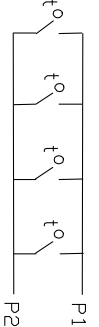
SH 2 OF 2
ISSUE DATE 06/05/15

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CONNECTION DIAGRAM
ACCESSORIES

MOTOR WINDING THERMOSTATS		
CONTACTS _____ @ _____ °C		
FIGURE NUMBER _____		
CONTACT RATING		
VOLTS	CONTINUOUS AMPERES	INRUSH AMPERES
110-120	3.0	30
220-240	1.5	15
440-480	0.75	7.5
550-600	0.60	6.0

THERMOSTATS	
NORMALLY CLOSED	NORMALLY OPEN
FIGURE 1 	FIGURE 4 
FIGURE 2 	FIGURE 5 
FIGURE 3 	FIGURE 6 
FIGURE 7 	FIGURE 8 

CUSTOMER _____ CUSTOMER ORDER NO. _____ S.O. NO. _____

418174-006

418174-006

REV. DESC: LOADED TO BUS		
REV. LTR: A	VERSION: 01	TDR: 000000570390
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MTL: -		

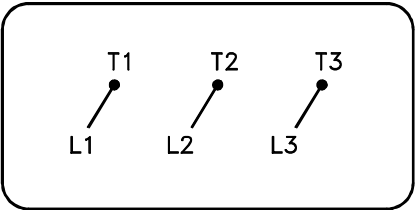
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A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

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