

# ABB BALDOR RELIANCE III

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## Customer information packet

### IDVSM4406T-4

150HP, 1790-2685RPM, 3PH, 60-90HZ, 445T, A440

Class - None

Division - Not Applicable

**Specifications**

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

**Part Detail**

<b>Revision</b>	S
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A44WG0183
<b>Layout</b>	617435-164
<b>Eff. date</b>	09-25-2025
<b>CD Diagram</b>	416820-036
<b>Poles</b>	04
<b>Leads</b>	3#2/0
<b>Proprietary</b>	False
<b>Created date</b>	08-23-2012

<b>Max Speed</b>	3600 rpm
<b>Motor Lead Quantity/Wire Size</b>	3 @ 2/0 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A44078M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	44.75 IN
<b>Product Family</b>	Other
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.00
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1790 rpm 2685 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	Normally Closed Thermostat

**Nameplate**

**000613007HV**

<b>CAT NO</b>	IDVSM4406T-4	<b>SPEC NO.</b>	P44G4009					
<b>SER.NO.</b>		<b>FRAME</b>	445T					
	<b>HP</b>	<b>RPM</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>HZ</b>	<b>TYPE</b>	<b>P</b>	
<b>BASE</b>	150	1790	460	177	60	SF	1.00	
<b>MAX</b>	150	2685	460	165	90	<b>INSUL.CLASS</b>	F	
<b>DRIVE END BEARING</b>	90BC03J30X	<b>CONSTANT TORQUE</b>		<b>DUTY</b>	CONT	<b>AMB</b>	40	
<b>OPP D.E. BEARING</b>	6318C3VL0241	1000:1	<b>ENCL</b>	TEFC	<b>PHASE</b>	3		
<b>DESIGN NO.</b>	A44WG0183-R001	<b>FLUX AMPS</b>	66.6		<b>VPWM INVERTER READY</b>			
<b>MAX SPEED/RPM</b>	3600	<b>OVERTEMP PROT</b>	2	<b>WK2</b>	51.57	<b>POLES</b>	4	<b>WEIGHT</b>

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 <sup>2</sup> (Lb-Ft <sup>2</sup> )	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

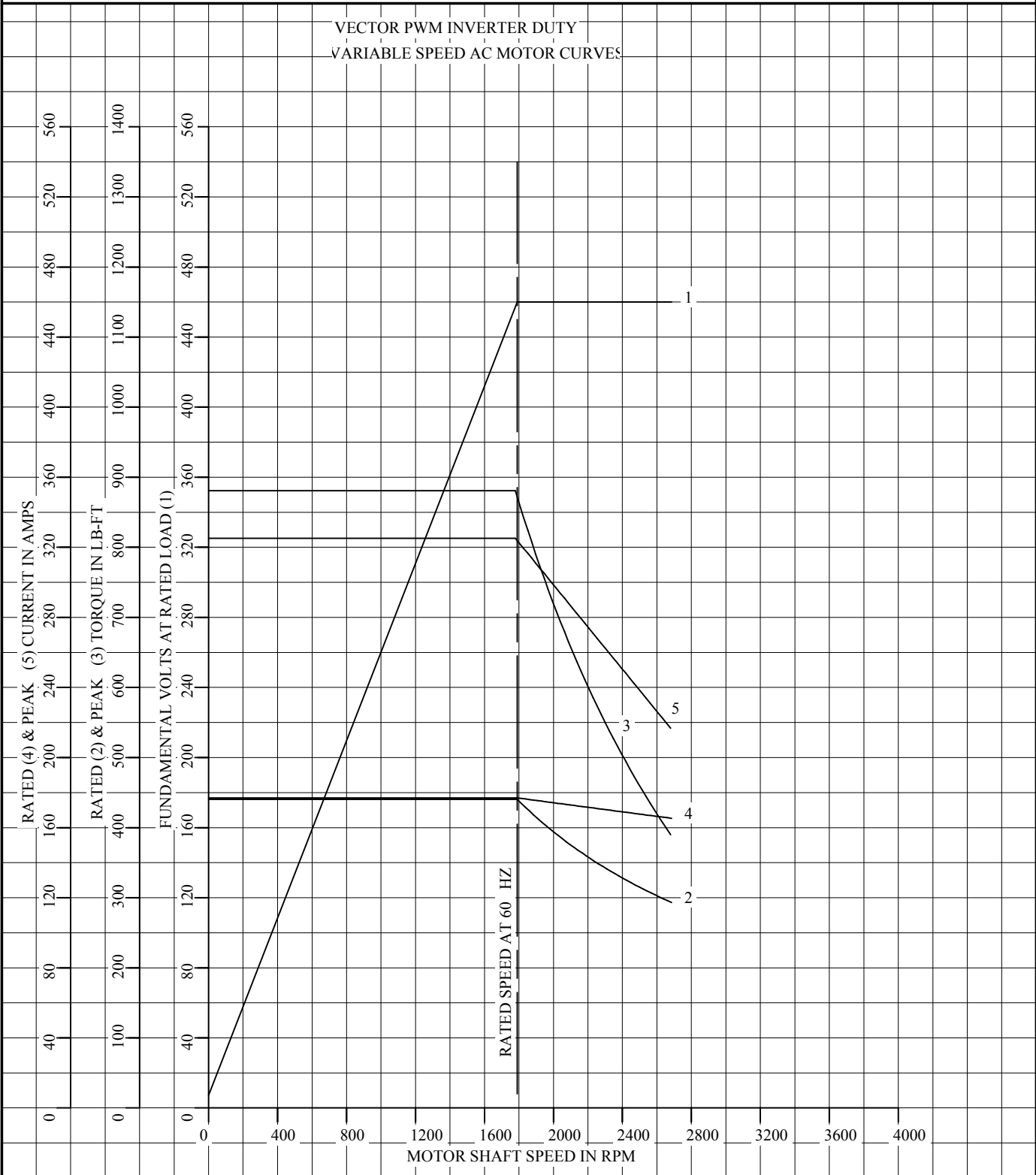


DR. BY M. ORDERS  
 CK. BY J. TSAO  
 APP. BY J. TSAO  
 DATE 10/27/00

**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 <sup>2</sup> (Lb-Ft <sup>2</sup> )	51.6		XM 3.14

VECTOR PWM INVERTER DUTY  
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA  
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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

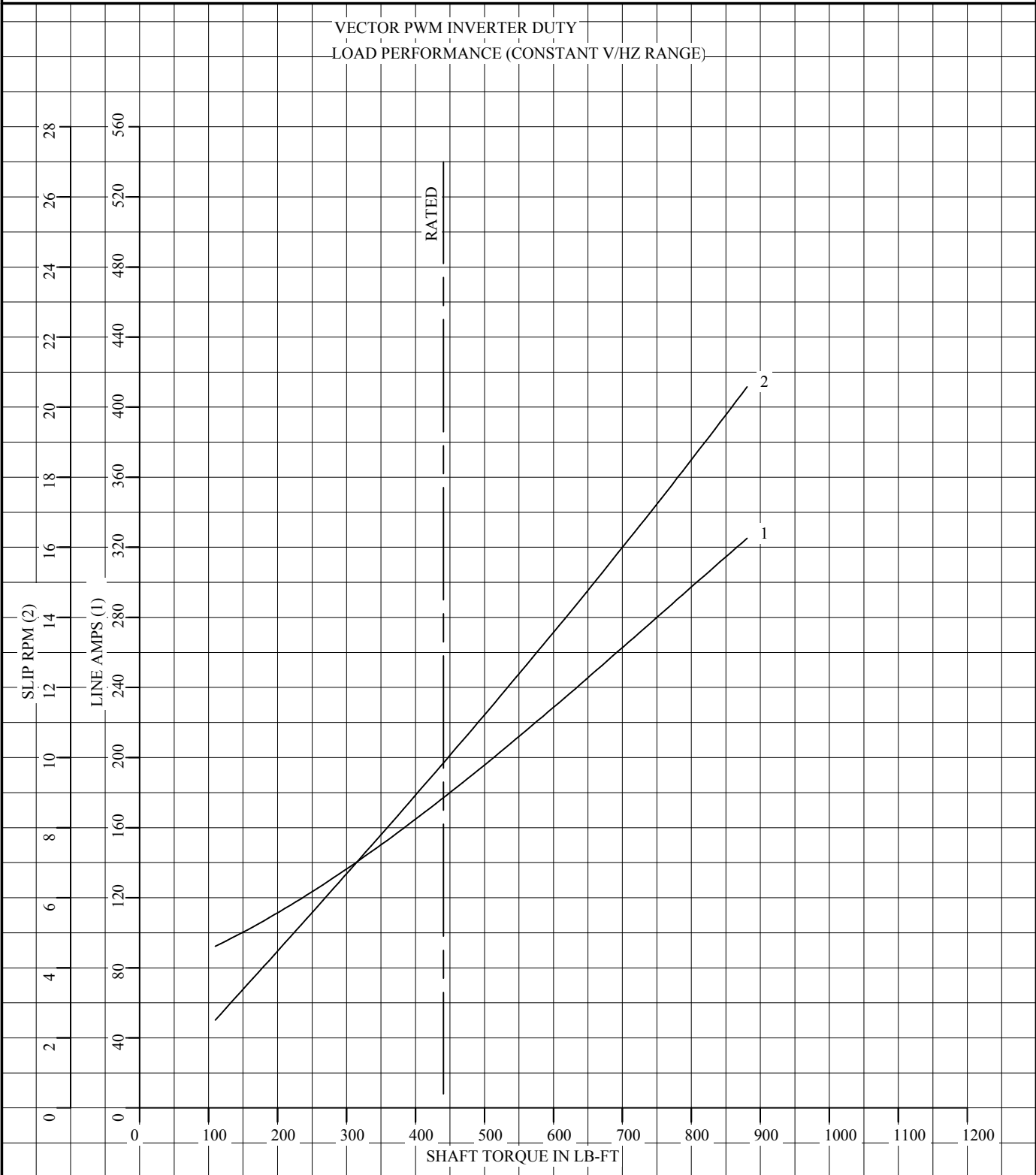
**A-C MOTOR  
PERFORMANCE  
CURVES**

A44WG0183-R001

SH 1 OF 2  
ISSUE DATE 06/05/13 Page 6 of 10

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
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PHASE/HERTZ	3/60	AMB °C/INSUL	40/F	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	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

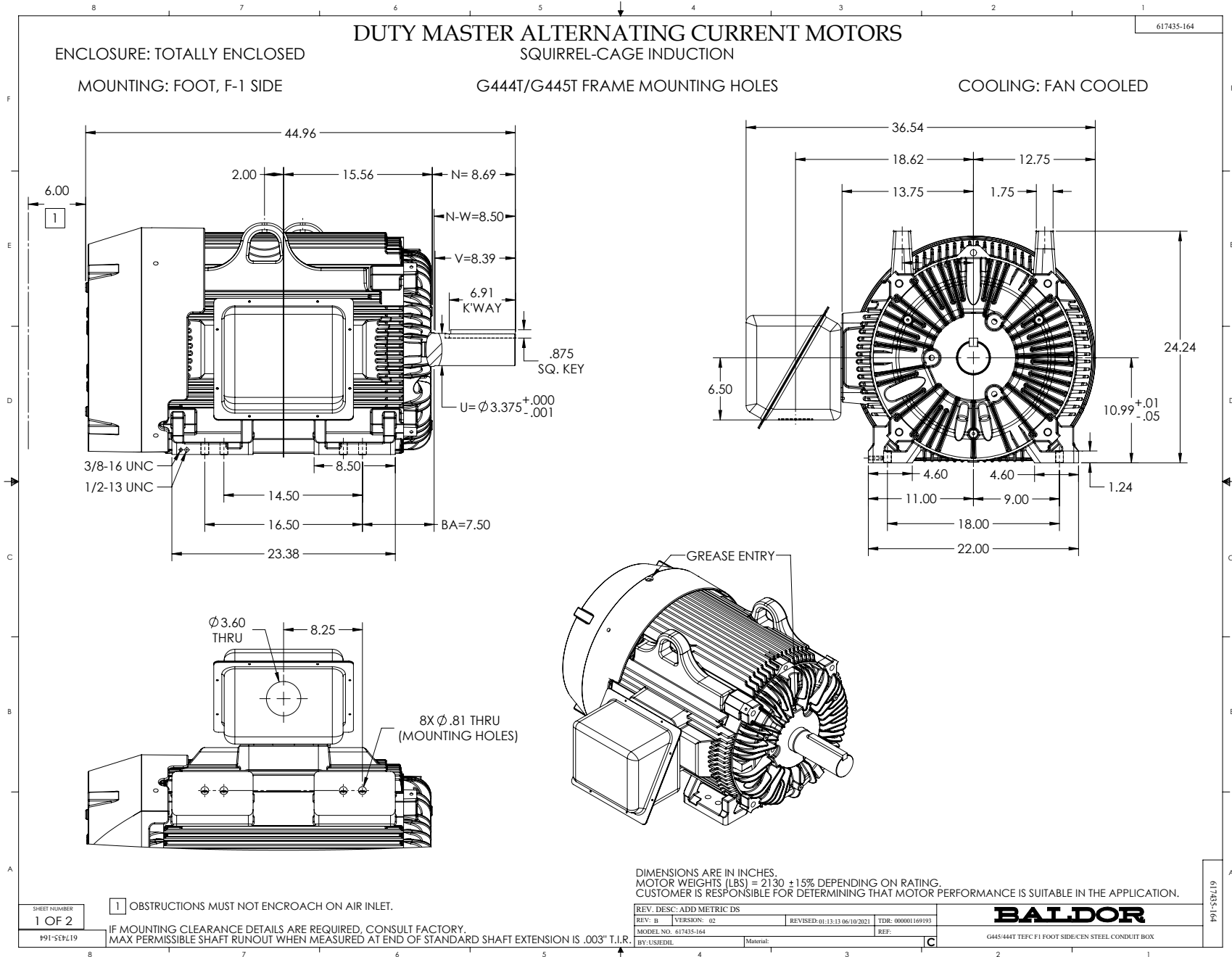


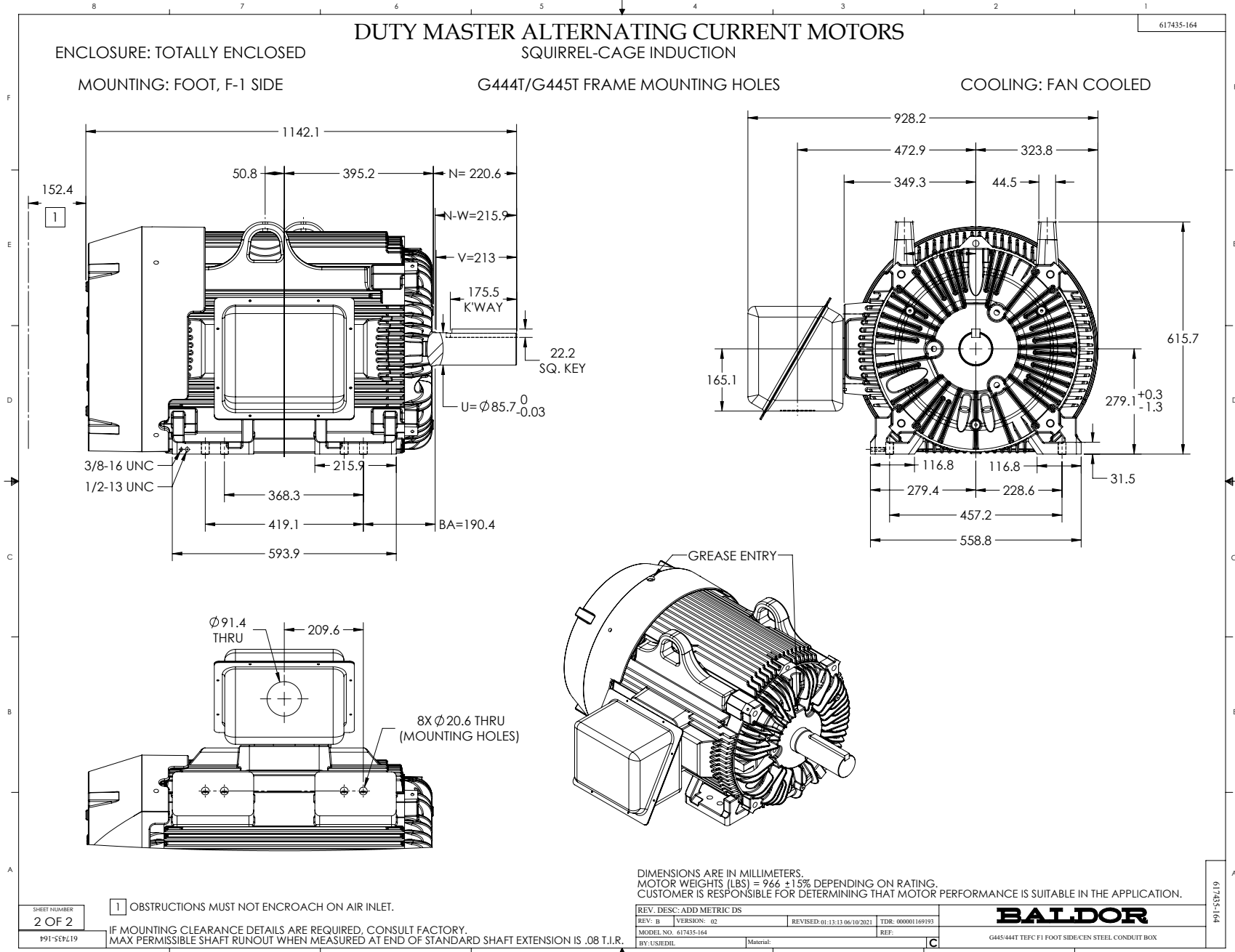
DR. BY M. ORDERS  
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DATE 10/27/00

**A-C MOTOR  
PERFORMANCE  
CURVES**

A44WG0183-R001

SH 2 OF 2  
ISSUE DATE 06/05/15 Page 7 of 10





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