

ABB BALDOR RELIANCE III

Customer information packet

M43016TX-50

75HP, 1480RPM, 3PH, 50HZ, 365T, A36070M, TEFC

Class - None

Division - Division II

Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 460.0 V @ 50 HZ
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	106.000 A @ 380.0 V 90.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.5 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T2C
Heater Indicator	No Heater
High Voltage Full Load Amps	90.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	12 @ 2 AWG

Part Detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG0610
Layout	617431-546
Eff. date	06-21-2023
CD Diagram	CD0041
Poles	04
Leads	12#6
Proprietary	False
Created date	06-10-2016

Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.48 IN
Power Factor	85
Product Family	General Industrial
Pulley End Bearing Type	Ball
Service Factor	1.00
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1480 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None

Nameplate

NP3631L										
CAT.NO.	M43016TX-50	SPEC NO.	A36-7660-0610					FRAME	365T	
HP	75	PHASE	3	DESIGN		B	TYPE		P	
RPM	1480	HZ	50	AMB	40	SF	1.15			
VOLTS	380/460	DUTY	CONT				INSUL.CLASS		F	
AMPS	105/89		ENCL		TEFC	CODE	F			
DRIVE END BEARING	65BC03J30X			NOM.EFF.		93.5				
OPP D.E. BEARING	65BC03J30X			WK2	0.59		KG-M2			
	S1 DUTY // IP55									
SER.NO.				MOTOR WEIGHT		437 KG		KG		

NP2496L	
MOBIL POLYREX EM	

000692000VA			
KHZ	2		
TCODE	T2C	CL I DIV 2 GR	A B C D
CL II DIV 2 GR	X X X	CL.1,ZONE 2,GR	IICIIBIIA
MOTOR I.D. NO.			

NP2503L		
A36-7660-0610		
HP VOLT AMPS ALT/MAS	L LRC NOM EFF PF	
75 380 106 1750	657	93.5 85
60 380 88 3200	657	93.1 82
50 380 76 4400	657	92.7 79
50 380 76 5000	657	92.7 79
75 460 90 1750	596	93.5 83
60 460 75 3200	596	93.1 79

000901002AAA		
A36-7660-0610		
1.15 SF AT SINEWAVE/1.00 SF AT	VFD	
IE2 - 380V - 93.5 (100%) - 94.	7 (75%) - 94.3 (50%)	
IE2 - 460V - 93.5 (100%) - 94.	7 (75%) - 94.3 (50%)	
SUIT FOR 10:1VT, 2:1CT, AT 1.0	0 SF	
IE2 EFF PER IEC 60034-1;-5;-30		

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	364T	75	P	3/50	1480	380
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
106	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
360610	418141043EE	---	---	.0659		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	33.9	1500	4.99	0	
1/4	18.8	42.8	1495	54.3	91.7	
2/4	37.5	59.8	1490	75.4	94.3	
3/4	56.2	81.8	1484	82.4	94.5	
4/4	75.0	106	1478	84.9	94.1	
5/4	93.8	132	1472	86.2	93.3	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB. - FT.	AMPERES		
LOCKED ROTOR	0	197	525	635		
PULL UP	900	170	453	538		
BREAKDOWN	1393	249	663	357		
FULL LOAD	1478	100	266	106		
AMPERES SHOWN FOR 380. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: CALCULATED DATA IE2 MOTOR-NOM. EFF. 93.5 PCT.						
		DR. BY C.E. JAMISON CK. BY W.L. SMITH APP. BY W.L. SMITH DATE 05/25/16		A-C MOTOR PERFORMANCE DATA A36WG0610R001A ISSUE DATE 05/25/16		

REL S.O.

RPM **1480**

S.F. **1.15**

ROTOR **418141043EE**

FRAME **364T**

VOLTS **380**

NEMA DESIGN **B**

TEST S.O. **CALCULATED DATA**

HP **75**

AMPS **106**

CODE LETTER **G**

TEST DATE **---**

TYPE **P**

DUTY **CONT**

ENCLOSURE **TEFC**

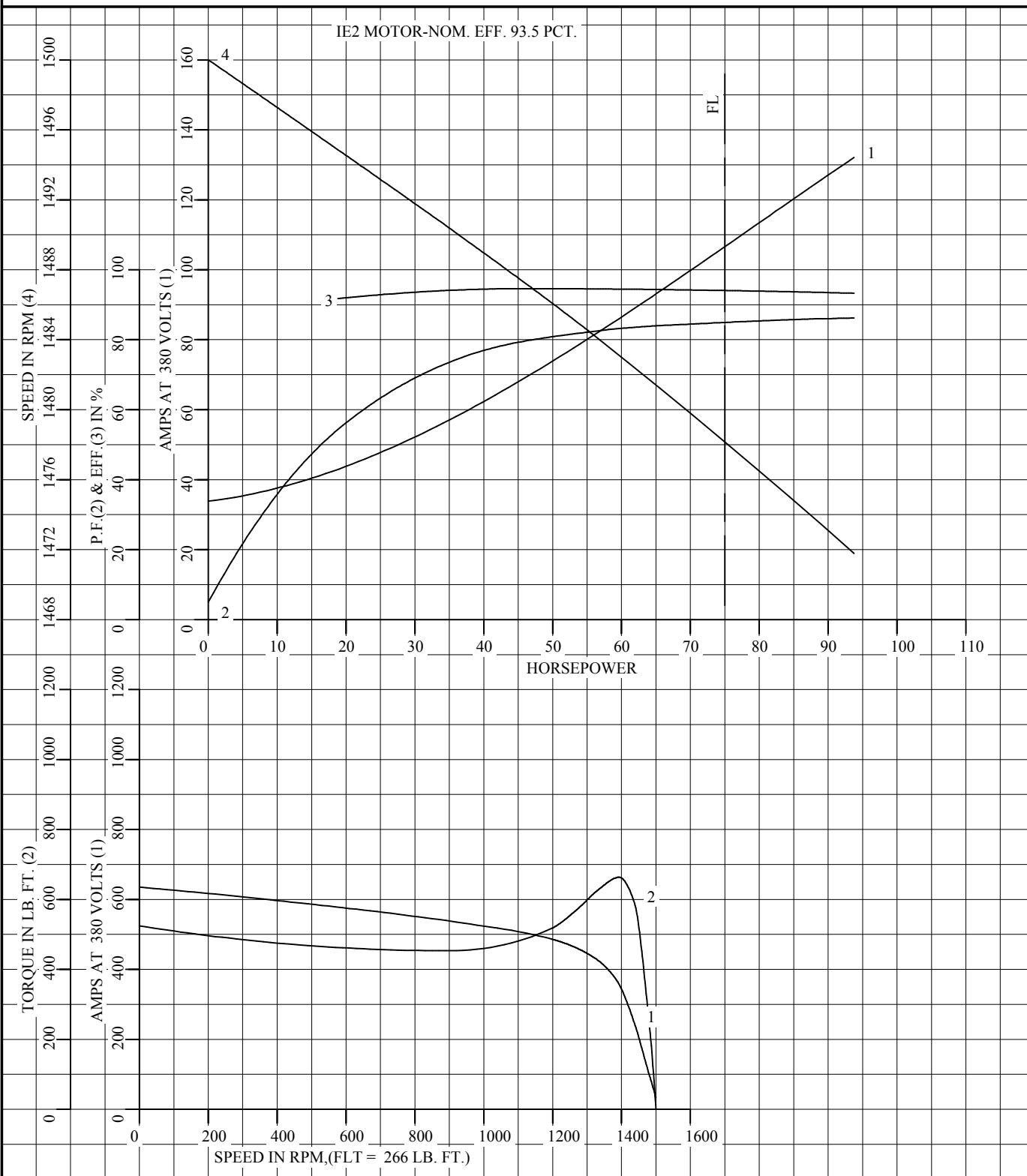
STATOR RES. @ 25 °C **.0659**

PHASE/HERTZ **3/50**

AMB °C/INSUL **40/F**

E/S **360610**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 380 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY C.E. JAMISON
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 05/25/16

**A-C MOTOR
PERFORMANCE
CURVES**

A36WG0610R001A
ISSUE DATE 05/25/16

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REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	364T	75	P	3/50	1480	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
90.0	CONT	40/F	1.15	B	H	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
360610	418141043EE	---	---	.0878		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	32.4	1500	4.93	0	
1/4	18.8	39.5	1495	49.0	90.9	
2/4	37.5	52.8	1491	70.8	94.0	
3/4	56.2	70.2	1486	79.5	94.4	
4/4	75.0	89.7	1480	83.1	94.1	
5/4	93.7	110	1475	85.2	93.5	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB. - FT.	AMPERES		
LOCKED ROTOR	0	219	581	596		
PULL UP	900	191	508	492		
BREAKDOWN	1393	275	731	327		
FULL LOAD	1480	100	266	89.7		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: CALCULATED DATA IE2 MOTOR- NOM. EFF. 93.5 PCT.						
		DR. BY C.E. JAMISON CK. BY W.L. SMITH APP. BY W.L. SMITH DATE 05/25/16		A-C MOTOR PERFORMANCE DATA A36WG0610R001B ISSUE DATE 05/25/16		

REL S.O.

RPM **1480**

S.F. **1.15**

ROTOR **418141043EE**

FRAME **364T**

VOLTS **460**

NEMA DESIGN **B**

TEST S.O. **CALCULATED DATA**

HP **75**

AMPS **90.0**

CODE LETTER **H**

TEST DATE **---**

TYPE **P**

DUTY **CONT**

ENCLOSURE **TEFC**

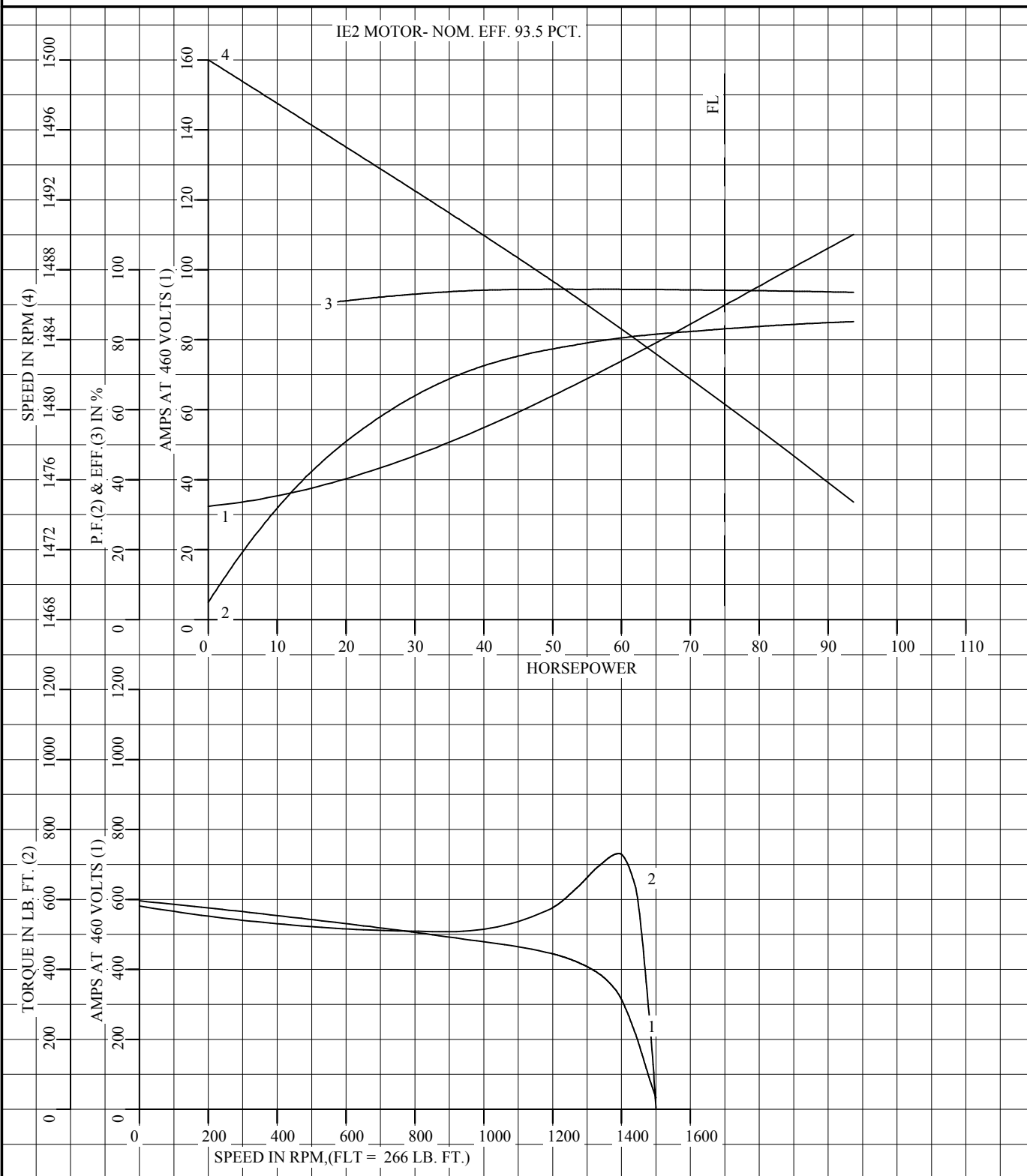
STATOR RES. @ 25 °C **.0878**

PHASE/HERTZ **3/50**

AMB °C/INSUL **40/F**

E/S **360610**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

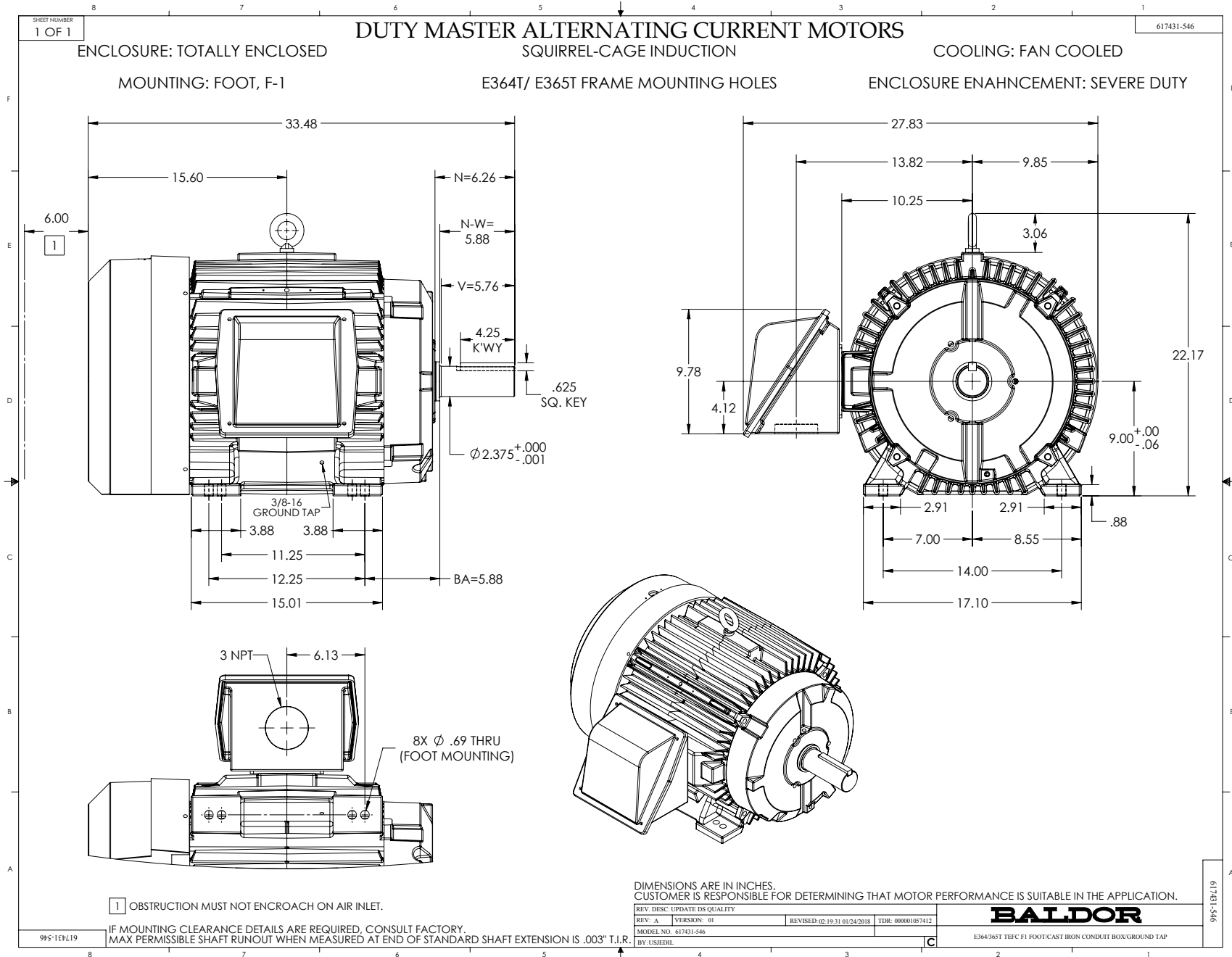
BALDOR
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DR. BY C.E. JAMISON
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 05/25/16

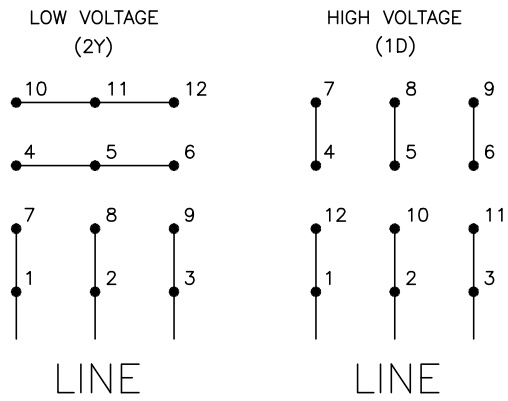
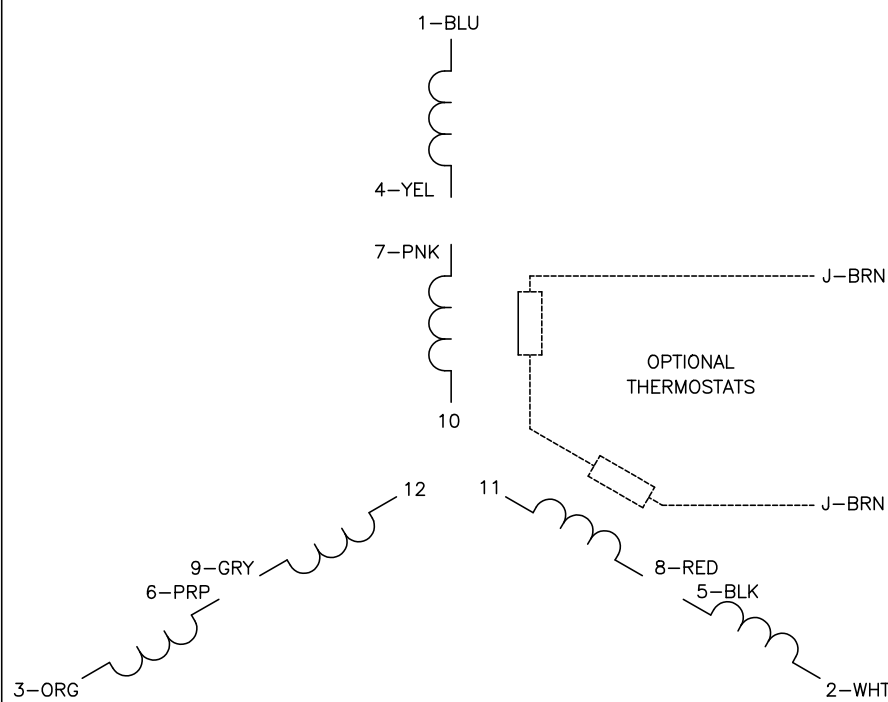
**A-C MOTOR
PERFORMANCE
CURVES**

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CD0041



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
 - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/19/99 4:08	TDR: 0171435
CD0041		FILE: AAA00008372	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 12 LEADS, 2Y/1D

CD0041