

ABB BALDOR RELIANCE III

Customer information packet

IDVSM4316T

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 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	172.000 A @ 230.0 V 86.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	86.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4073
Layout	617431-412
Eff. date	02-13-2025
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	06-06-2019

Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.48 IN
Power Factor	83
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	2.374 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2496L	
MOBIL POLYREX EM	

000613007HV

CAT NO	IDVSM4316T		SPEC NO.	A36-5002-4073				
SER.NO.			FRAME	365T				
	HP	RPM	VOLTS	AMPS	HZ	TYPE	P	
BASE	75	1780	230/460	172/86.2	60	SF	1.00	
MAX	75	2675	230/460	169/84.5	90	INSUL.CLASS	F	
DRIVE END BEARING	65BC03J30X		CONSTANT TORQUE	DUTY	CONT	AMB	40	
OPP D.E. BEARING	65BC03J30X		1000:1	ENCL	TEFC	PHASE	3	
DESIGN NO.	A36WG4073-R002		FLUX AMPS	62/31	VPWM INVERTER READY			
MAX SPEED/RPM	3600		OVERTEMP PROT	2	WK2	13.7	POLES	4 WEIGHT

Parts List

Part number	Description	Quantity
SA370336	SA A36-5002-4073	1.000 ea
RA359984	RA A36-5002-4073	1.000 ea
421948032	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	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
085922073B	BRKT 360 085922072WCC KB	1.000 ea
415072001B	CLAMP	1.000 ea
078559001A	+FANCV - 360	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
702676001C	FAN 360	1.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018008AK	HHCS 1/4-20X1 PLATED	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700004F	WSHR	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
412118006A	DRAIN	1.000 ea
412118006A	DRAIN	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
077176000L	C/BOX, PAINTED 440	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea
043292000AJ	GASK 320-400	1.000 ea

402731001A	GASK 360-440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.250 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180034HA	KEY 5/8X5/8X4-1/4 L	1.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea
HW1000A32	5/16 FL WASHER WIDE,ID=.344,OD=1.125	3.000 ea
032509020C	CARRIAGE BOLT - 360	3.000 ea

NP VOLTS	230/460					WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
NP AMPS	172/86	Base Volt	460	R1	0.045	X1 0.239
HP	75	NL AMPS	30.80	R2	0.225	X2 0.110
BASE SPEED	1783	Slip (HZ)	0.57	R2B	0.021	X2B 0.339
PHASE/HZ	3/60	WK ² (lb-ft ²)	0.000	R2E	0.005	XM 7.820

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1782.8	74.9	220.5	460	60	86.2
Max Speed	2673	74.8	147.0	460	90	83.5
CT Min Speed	1.7828	0.075	220.5	0.46	0.06	86.2

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	30.8
1/4	1795.7	18.8	54.9	460	60	36.9
1/2	1791.7	37.5	109.8	460	60	50.3
3/4	1787.7	56.2	164.9	460	60	67.3
Full Load	1782.8	74.9	220.5	460	60	86.2
O/L	1762	149.7	446.0	460	60	179.0

Blower Data

Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data

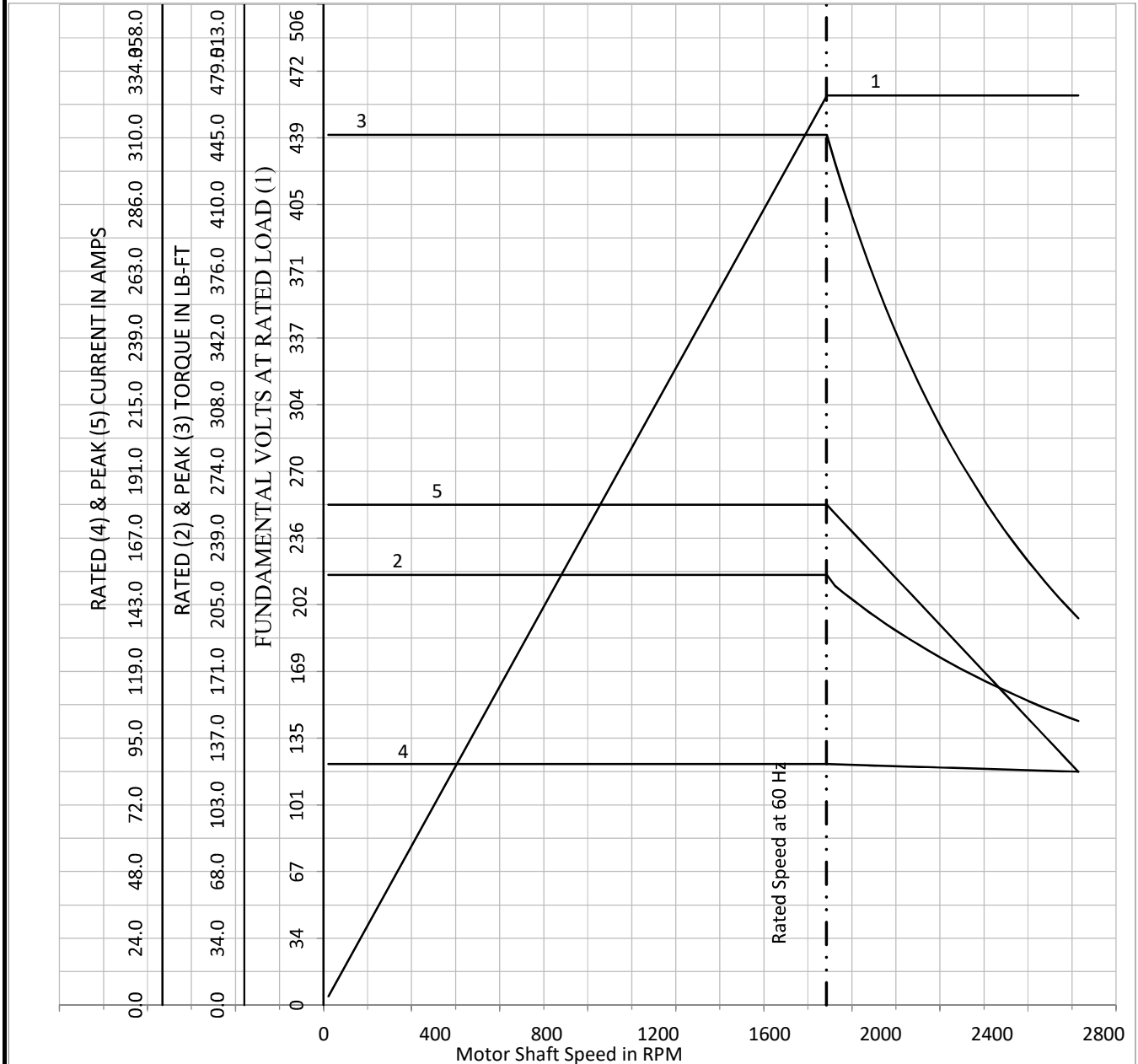
BALDOR • RELIANCE

DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 11/5/2024
**A-C MOTOR
PERFORMANCE
CURVES**
A36WG4073

Record: 76727

NP VOLTS	230/460	Base Volt	460	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	172/86	NL AMPS	30.80	R1	0.045	X1	0.239
HP	75	Slip (HZ)	0.57	R2	0.225	X2	0.110
BASE SPEED	1782.80005	WK ² (lb-ft ²)	0.000	R2B	0.021	X2B	0.339
PHASE/HZ	3/60			R2E	0.005	XM	7.820

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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CK BY CD

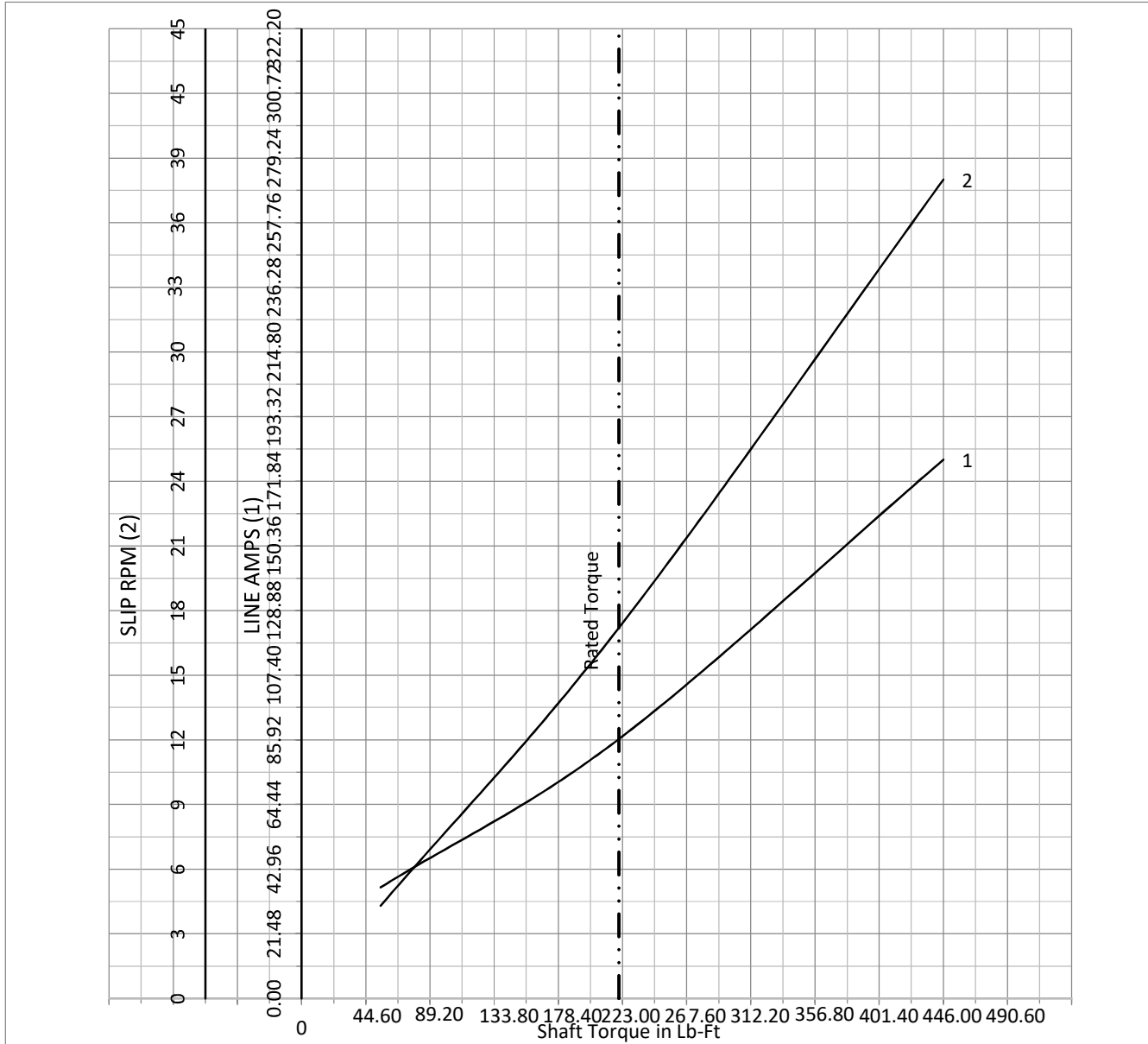
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DATE 11/5/2024
**A-C MOTOR
PERFORMANCE
CURVES**
A36WG4073

Record: 76727

NP VOLTS	230/460	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	172/86	Base Volt	460	R1	0.045	X1	0.239
HP	75	NL AMPS	30.80	R2	0.225	X2	0.110
BASE SPEED	1782.800049	Slip (HZ)	0.57	R2B	0.021	X2B	0.339
PHASE/HZ	3/60	WK2 (lb-ft2)	0.000	R2E	0.005	XM	7.820

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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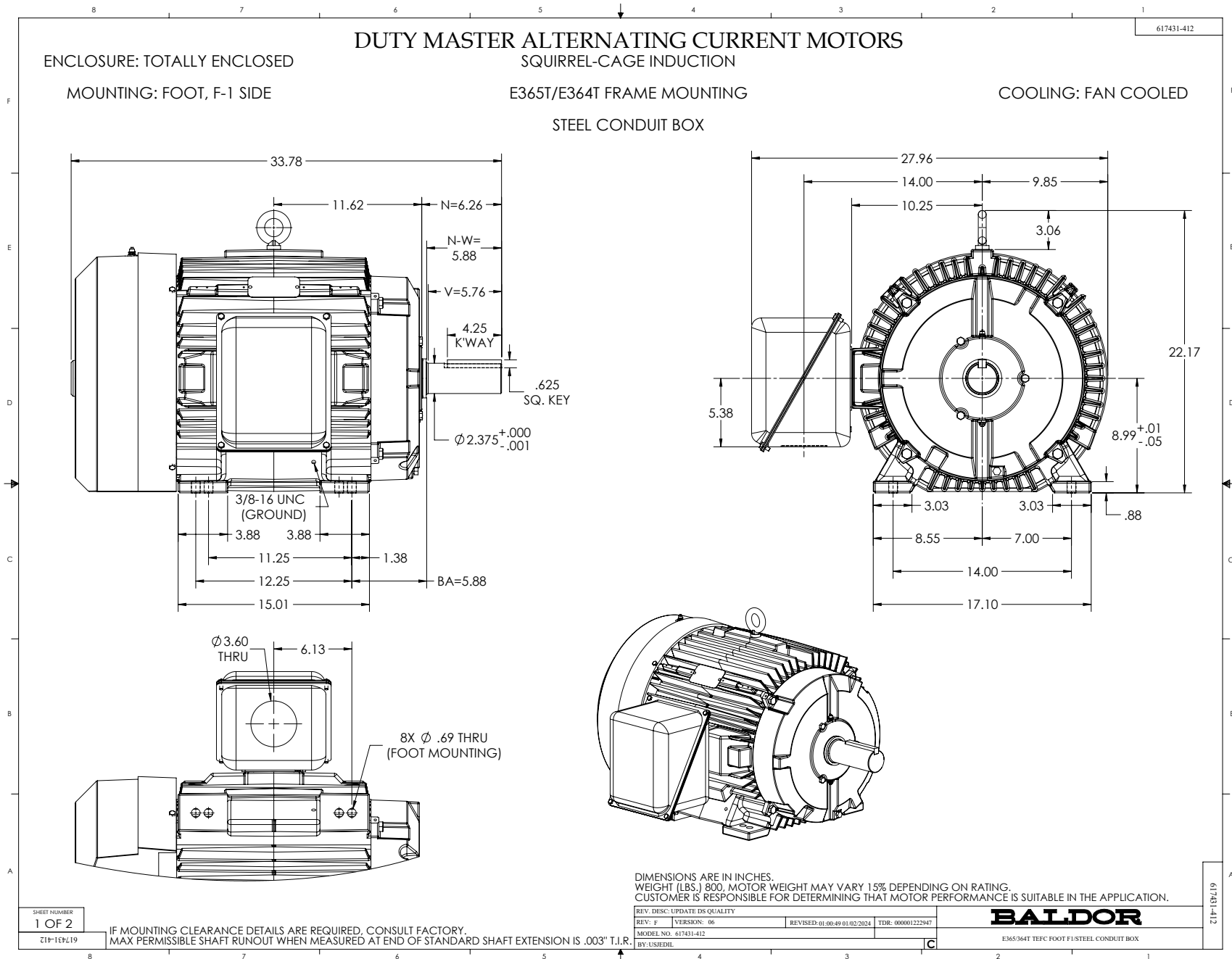
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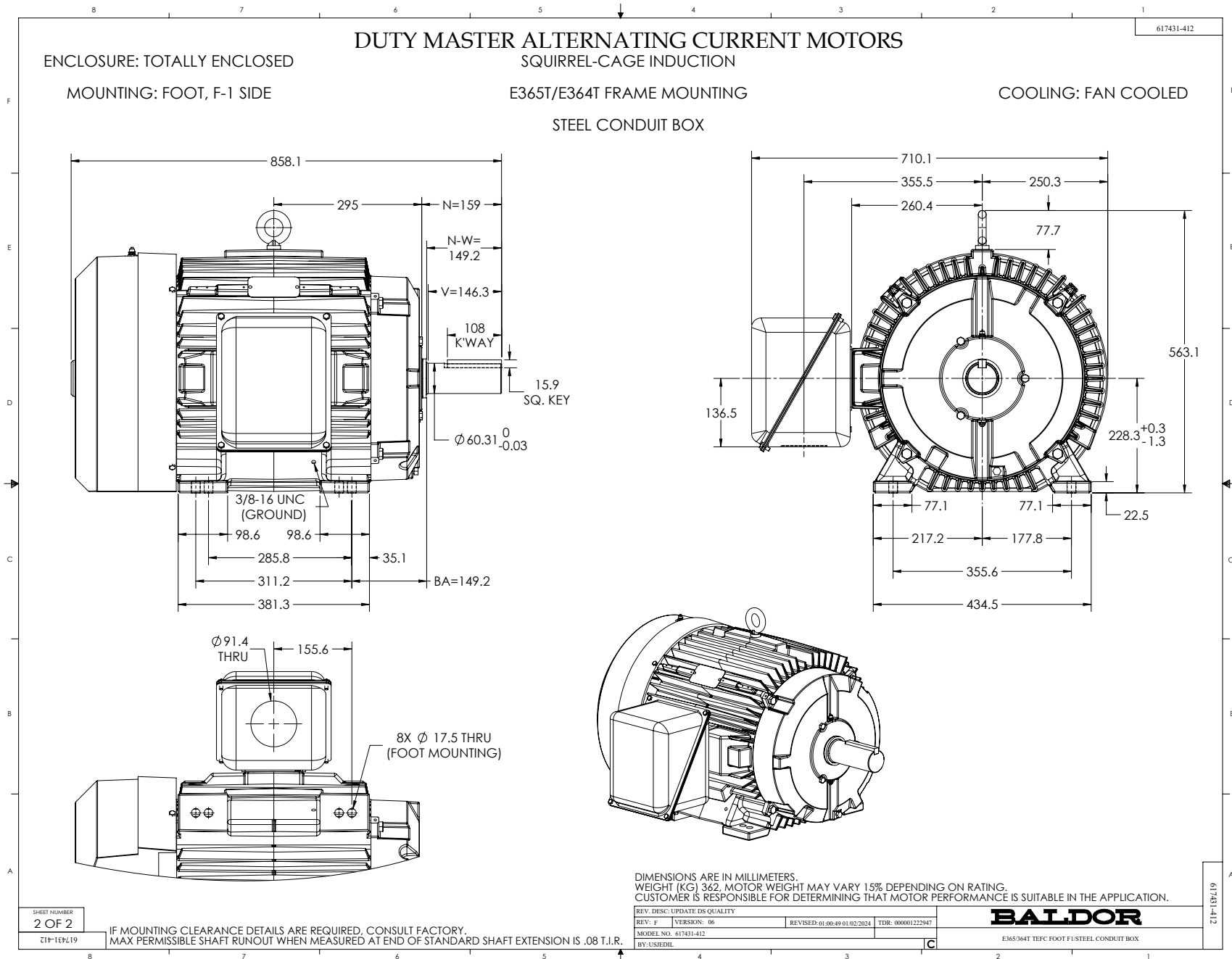
DATE 11/5/2024

**A-C MOTOR
PERFORMANCE
CURVES**

A36WG4073

Record: 76727





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

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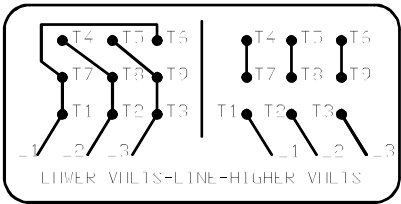
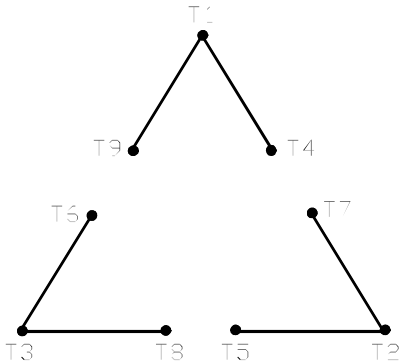
BALDOR

A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
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CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

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