

ABB BALDOR RELIANCE III

Customer information packet

M4314TS

60HP, 1775RPM, 3PH, 60HZ, 364TS, 1454M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	364TS
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	60.000 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	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	73.400 A @ 460.0 V 146.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	73.4 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG


Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A36WG0776
Layout	611740-001-SH1
Eff. date	05-17-2022
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	10-19-2010

Motor Standards	NEMA
Motor Type	A36042M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	31.31 IN
Power Factor	82
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
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	None

Nameplate

NP2531L									
CAT.NO.	M4314TS	SPEC NO.	P36G4669			FRAME	364TS		
HP	60	PHASE	3	DESIGN	B	TYPE	P		
RPM	1780	HZ	60	AMB	40	SF	1.15		
VOLTS	230/460	DUTY	CONT		INSUL.CLASS	F			
AMPS	146/73.4	ENCL	TEFC	CODE	G				
DRIVE END BEARING	65BC03J30X		NEMA-NOM-EFFICIENCY			93.6			
OPP D.E. BEARING	65BC03J30X								
	SUIT FOR 208V AT 155 AMPS				NOT FOR USE IN THE US				
SER.NO.		MOTOR WEIGHT							

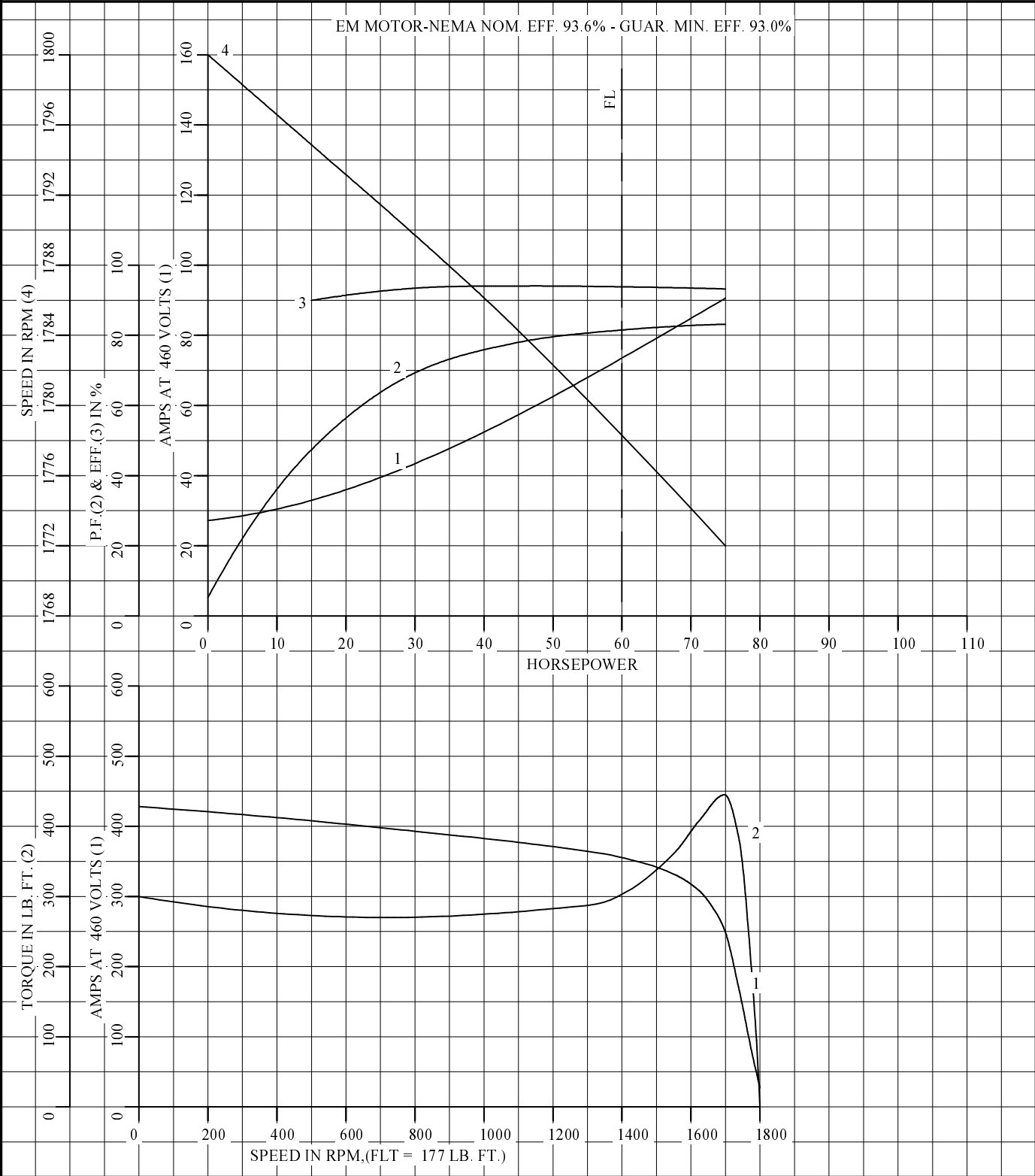
REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	364TS	60	P	3/60	1780	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
146/73.4	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
491013	418141038LE	---	---	.0289/.115		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	27.2	1800	5.26	0	
1/4	15.0	33.0	1795	47.5	89.9	
2/4	30.0	43.4	1790	69.3	93.4	
3/4	45.0	57.4	1784	78.0	94.0	
4/4	60.0	73.4	1778	81.5	93.8	
5/4	75.0	90.6	1772	83.1	93.2	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	169	300	428	
PULL UP		720	152	270	397	
BREAKDOWN		1698	251	445	252	
FULL LOAD		1778	100	177	73.4	
<p>AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE</p> <p>REMARKS: TYPICAL DATA EM MOTOR-NEMA NOM. EFF. 93.6% - GUAR. MIN. EFF. 93.0%</p>						
		DR. BY <u>D. F. DUNN</u> CK. BY <u>D. M. BYRD</u> APP. BY <u>D. M. BYRD</u> DATE <u>07-29-93</u>		A-C MOTOR PERFORMANCE A36WG0776-R001 DATA		
				ISSUE DATE 12/15/10		

FRAME 364TS
HP 60
TYPE P
PHASE/HERTZ 3/60

VOLTS 230/460
AMPS 146/73.4
DUTY CONT
AMB °C/INSUL 40/F

NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S 491013

TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25 °C .0289/.115
OHMS (BETWEEN LINES)



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



DR. BY D F DUNN
CK. BY D M BYRD
APP. BY D M BYRD
DATE 07-29-93

**A-C MOTOR
PERFORMANCE CURVES** A36WG0776-R001
ISSUE DATE 12/15/10

REL. S.O.

RPM 1780

S.F. 1.15

ROTOR 418141038LE

FRAME 364TS

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 60

AMPS 146/73.4

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

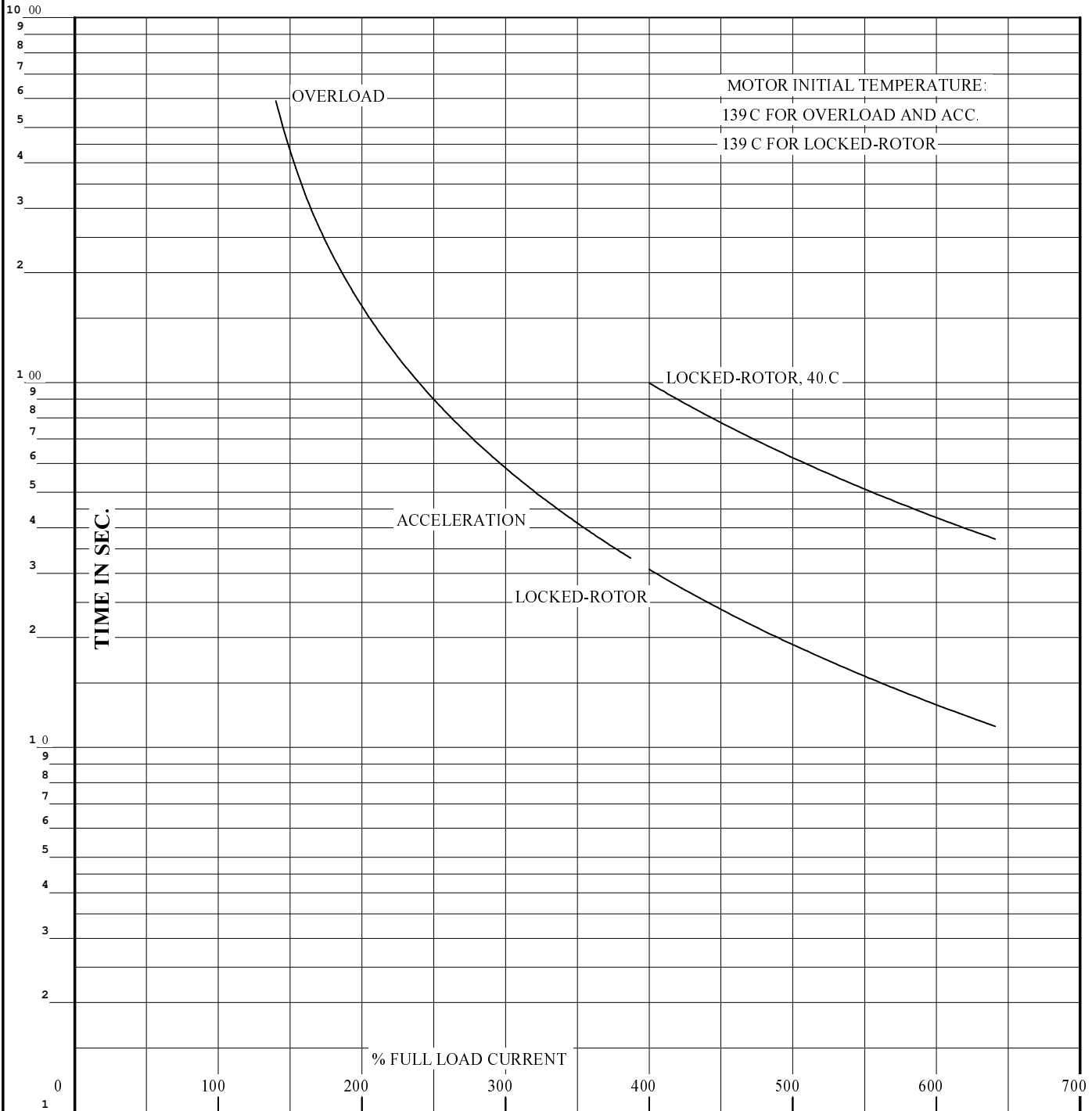
STATOR RES. @ 25 °C .0289/.115

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 491013

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: EM MOTOR-NEMA NOM. EFF. 93.6% - GUAR. MIN. EFF. 93.0%

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



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**A-C MOTOR
 PERFORMANCE CURVES** A36WG0776-R001
 ISSUE DATE 12/15/10

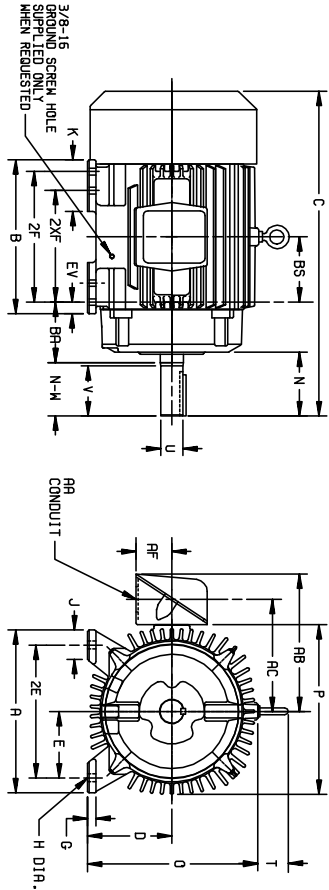
611740-001-SH1

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES 250T THRU 440T



DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

FRAME SIZE	A	D(2)	E	G	H	J	K	O	P	T	AA	AB	AC	AF	BA	EV
254T-256T	12.50	6.25	5.00	7.5	56	2.50	---	13.25	13.25	2.44	1-1/4	10.75	8.75	2.50	4.25	1.00
284T-296T5	13.75	7.00	5.50	7.5	56	2.50	---	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	1.00
324T-326T5	15.50	8.00	6.25	8.8	69	2.75	4.50	16.89	17.00	2.44	2	15.19	11.44	4.25	5.25	1.58
364T-365T5	17.00	9.00	7.00	8.8	69	2.75	3.88	18.50	19.50	2.94	3	18.08	14.00	5.38	5.88	1.58
404T-405T5	19.00	10.00	8.00	11.2	81	3.25	4.62	21.51	22.50	2.94	3	19.51	15.25	5.38	6.62	1.13
444T-445T5	21.00	11.00	9.00	11.2	81	3.25	5.25	23.58	25.25	3.25	3	23.58	18.12	6.50	7.50	1.25

FRAME SIZE	C	BS	B	2F	(4) 2XF	N	N-W(6)	U(3)	V	SO.	LGTH.	WEIGHT
254T	24.56	5.00	12.00	---	8.25	4.12	4.00	1.625	3.75	3.75	2.88	305
256T	24.56	5.00	12.00	10.00	---	4.12	4.00	1.625	3.75	3.75	2.88	315
284T	27.44	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	5.00	3.25	435
284T5	26.06	5.50	13.00	---	9.50	3.82	3.25	1.625	3.00	3.75	1.98	435
296T	27.44	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	5.00	3.25	450
296T5	26.06	5.50	13.00	11.00	---	3.82	3.25	1.625	3.00	3.75	1.98	450
324T	30.44	6.00	14.75	---	10.50	5.82	5.25	2.125	5.00	5.00	3.88	540
324T5	28.94	6.00	14.75	---	10.50	4.12	3.75	1.875	3.50	5.00	2.00	580
326T	28.94	6.00	14.75	12.00	---	4.12	3.75	1.875	3.50	5.00	2.00	580
326T5	28.94	6.00	14.75	12.00	---	5.82	5.25	2.125	5.00	5.00	3.88	580
364T	33.44	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	6.25	4.25	800
364T5	31.31	6.12	15.00	---	11.25	4.12	3.75	1.875	3.50	5.00	2.00	794
365T	33.44	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	6.25	4.25	840
365T5	31.31	6.12	15.00	12.25	---	4.12	3.75	1.875	3.50	5.00	2.00	834
404T	38.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	7.50	5.62	1120
404T5	35.31	6.88	16.00	---	12.25	4.12	3.75	1.875	3.50	5.00	2.75	1111
405T	38.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	7.50	5.62	1160
405T5	35.31	6.88	16.00	13.75	---	4.50	4.25	2.125	4.00	5.00	2.75	1151
444T	44.62	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	1540
444T5	40.88	8.25	19.00	---	14.50	5.19	4.75	2.375	4.50	6.25	3.00	1524
445T	44.62	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	8.75	6.88	1730
445T5	40.88	8.25	19.00	16.50	---	5.19	4.75	2.375	4.50	6.25	3.00	1714

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES — 250T - 320T +.00, -.03.
 360T - 440T +.00, -.06.
- (3) "U" VARIES — UP TO 1.625 DIA. +.0000, -.0005
 1.625 AND LARGER +.000, -.001.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 1% DEPENDING UPON RATING.
- (6) "N-W" VARIES +.00, -.25.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1,
W-4-M-5-M-7, OR C-1 MOUNTING IS SPECIFIED.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT
FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED
AT END OF STD. SHAFT EXTENSION IS .002 T.I.R. UP TO
AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 DIA.
TO 5 INCH DIA.

FRAME _____ TYPE _____ CERTIFIED FOR _____
ORDER _____ ITEM _____ HP _____ RPM _____ APPROVED BY _____ PH _____ HZ _____ VOLTS _____
RELIANCE SALES ORDER _____ DATE _____

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE TITLE SHEET 2	VERSION: 02	TDR: 000000498266
REV. LTR: B	FILE: \RAG\00000\167	REVISED: 07: 05: 46 04/29/2009
MTL: -		BY: RAGEC

Baldor • Dodge • Reliance

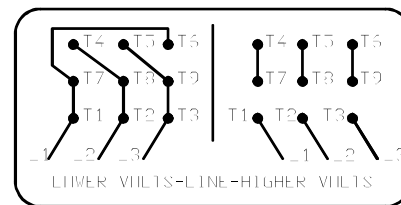
DIM SHEET 250T THRU 440T

SH 1 of 1

611740-001-SH1

416820-002

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



(N.P. 1575-B)

416820-002

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: -	© □	

BALDOR - RELIANCE®

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1