

ABB BALDOR RELIANCE III

Customer information packet

M4400T-12

100HP, 1775RPM, 3PH, 60HZ, 405T, 1480M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405T
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	100.000 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	232.000 A @ 230.0 V 116.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	116.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	12 @ 6 AWG

Part Detail


Revision	H
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A40WG0569
Layout	611740-001-SH1
Eff. date	05-17-2022
CD Diagram	416820-020
Poles	04
Leads	12#6
Proprietary	False
Created date	10-19-2010

Motor Standards	NEMA
Motor Type	A40054M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.31 IN
Power Factor	85
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	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2498L

CAT.NO.	M4400T-12	SPEC NO.	P40G4668						
HP	100	AMPS	232/116	VOLTS	230/460	DESIGN	B		
FRAME	405T	RPM	1780	HZ	60	AMB	40	SF	1.15
DRIVE END BEARING	80BC03J30X	PHASE	3	DUTY	CONT	INSUL.CLASS	F		
OPP D.E. BEARING	80BC03J30X	TYPE	P	ENCL	TEFC	CODE	G		
SER.NO.		POWER FACTOR	85.3	NEMA-NOM-EFFICIENCY	94.5				
	FOR EXPORT ONLY	MAX CORR KVAR	22.0	GUARANTEED EFFICIENCY	94.1				
		NEMA NOM/CSA QUOTED EFF							
		MOTOR WEIGHT							

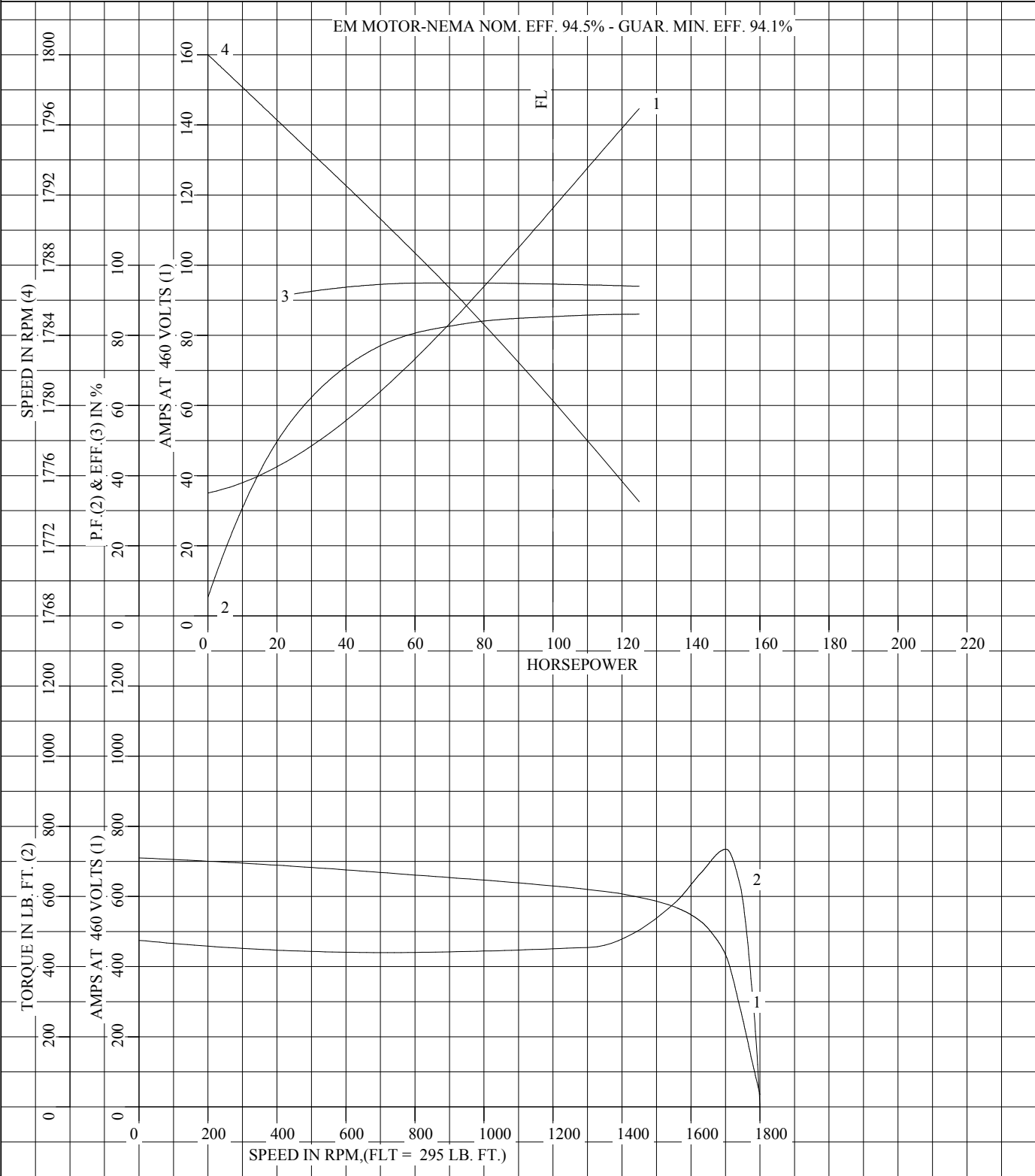
REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	100	P	3/60	1780	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
232/116	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
496562	418142033SE	---	---	.0168/.0673		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	35.1	1800	5.34	0	
1/4	25.0	45.0	1795	56.7	91.8	
2/4	50.0	64.3	1791	77.0	94.5	
3/4	74.9	88.7	1786	83.4	94.9	
4/4	100	116	1780	85.3	94.6	
5/4	125	145	1775	86.0	94.0	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	161	475	710	
PULL UP		720	149	440	667	
BREAKDOWN		1702	249	735	430	
FULL LOAD		1780	100	295	116	
<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. 94.5% - GUAR. MIN. EFF. 94.1%</p>						
		DR. BY J.J.HARRISON CK. BY G.R.WEBB APP. BY W.L.SMITH DATE 08/10/02		A-C MOTOR PERFORMANCE A40WG0569-R001 DATA		
				ISSUE DATE 12/16/10		

FRAME 405T
HP 100
TYPE P
PHASE/HERTZ 3/60

VOLTS 230/460
AMPS 232/116
DUTY CONT
AMB °C/INSUL 40/F

NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S 496562

TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25 °C .0168/.0673
OHMS (BETWEEN LINES)



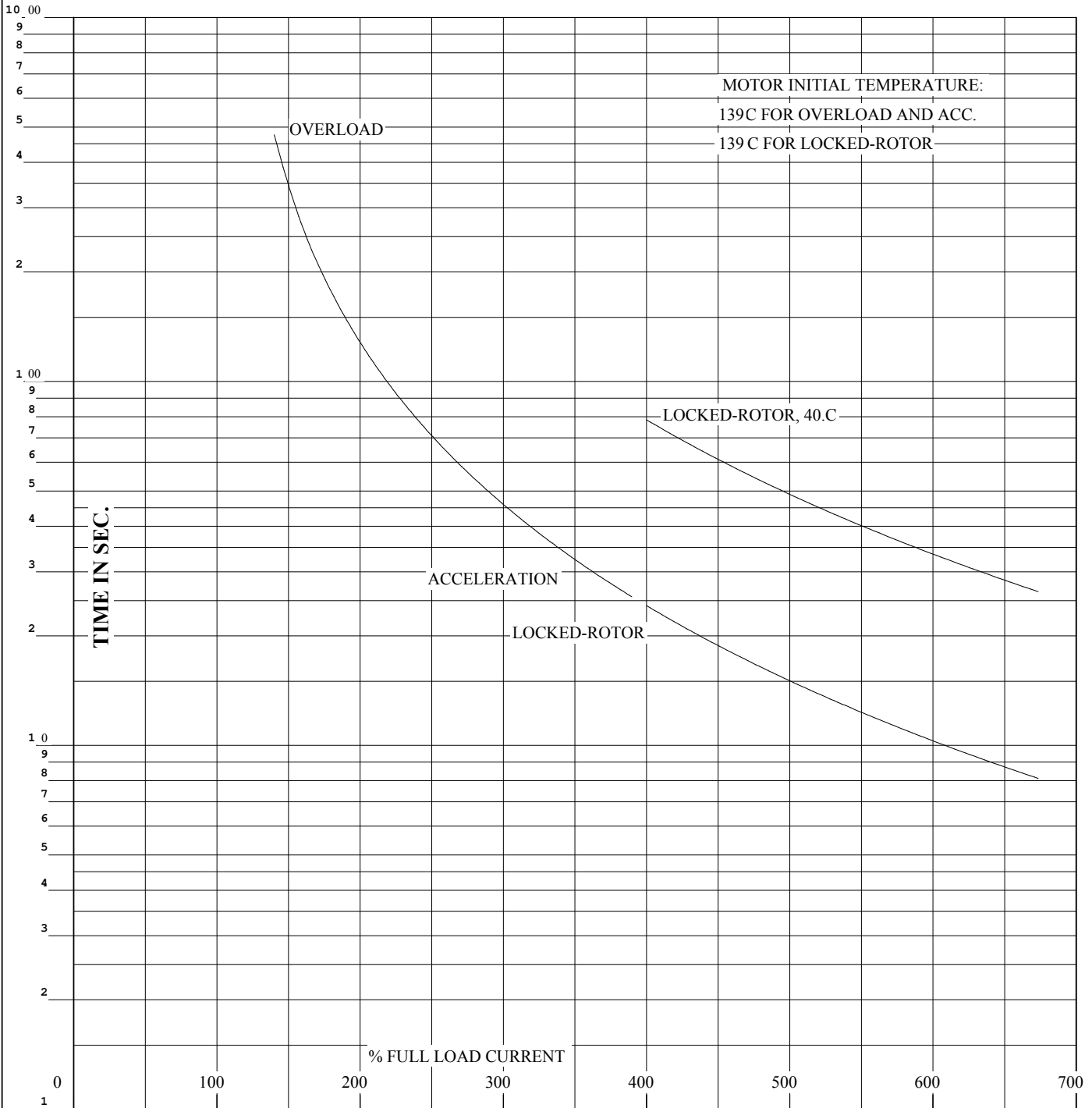
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY J.J.HARRISON
CK. BY G.R.WEBB
APP. BY W.L.SMITH
DATE 08/10/02

**A-C MOTOR
PERFORMANCE CURVES** A40WG0569-R001
ISSUE DATE 12/16/10

REL. S.O.	RPM 1780	S.F. 1.15	ROTOR 418142033SE
FRAME 405T	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 100	AMPS 232/116	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0168 / .0673
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 496562	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: EM MOTOR-NEMA NOM. EFF. 94.5% - GUAR. MIN. EFF. 94.1%

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 A40WG0569-R001
CURVES** ISSUE DATE 12/16/10

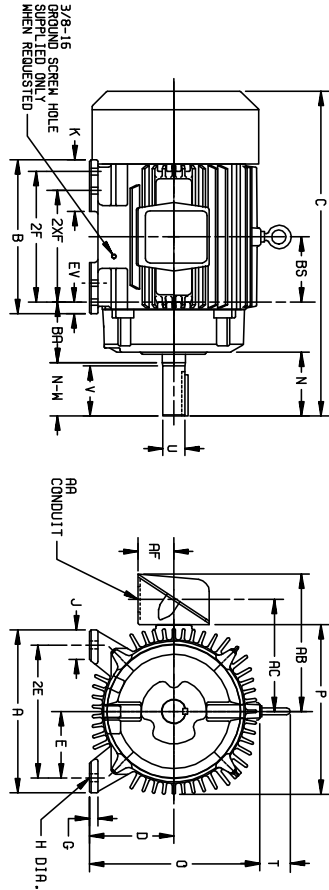
611740-001-SH1

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 $\begin{cases} 250T - 320T +.00, -.03. \\ 360T - 440T +.00, -.06. \end{cases}$
- (3) "U" VARIES $\begin{cases} \text{UP TO 1.625 DIA.} +.0000, -.0005 \\ 1.625 \text{ AND LARGER} +.000, -.001. \end{cases}$
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% 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	TDR: 000000498266
REV. LTR: B	VERSION: 02
FILE: \RAG\00000\167	REVISED: 07: 05: 46 04/29/2009
MTL: -	BY: RAGEC

Baldor • Dodge • Reliance

DIM SHEET 250T THRU 440T

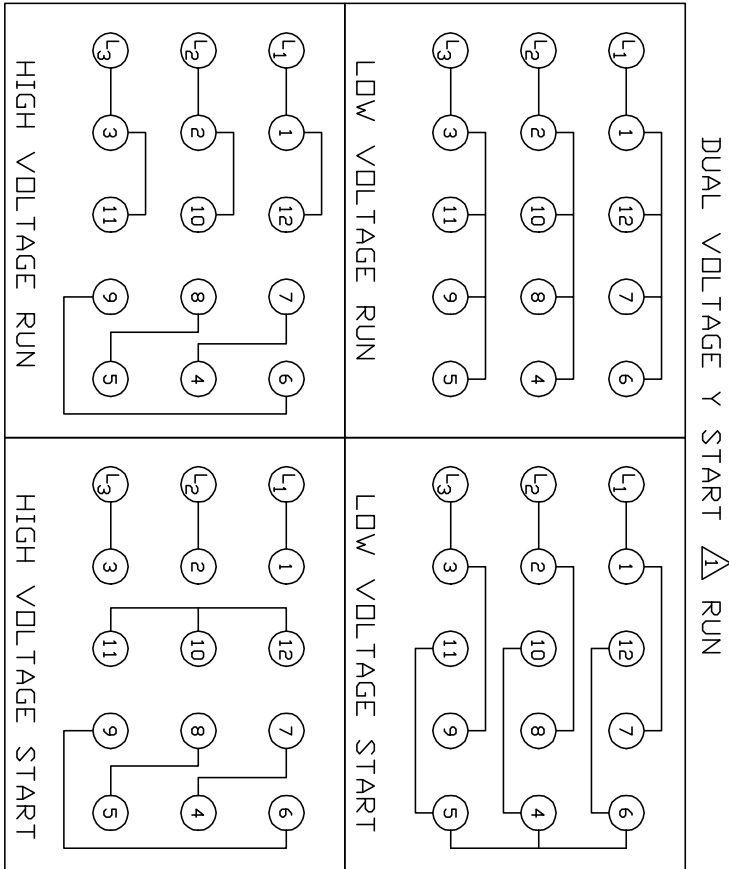
SH 1 of 1

611740-001-SH1

416820-020

**A-C MOTOR
CONNECTION DIAGRAM**

416820-020



<410961-39 / 1575-AC>

CUSTOMER _____

CUSTOMER
ORDER NO. _____

S. D. NO. _____

REV. DESC: LOADED TO BUS		
REV. LTR: A	VERSION: 01	TDR: 00000553773
FILE: \RAG\00011\270	REVISED: 01:15:19 08/12/2010	
MTL: -	BY: RAGMTC	

BALDOR

A-C MOTOR CONNECTION DIAGRAM

SH 1 of 1