

ABB BALDOR RELIANCE III

Customer information packet

P36G4671

60HP, 1780RPM, 3PH, 60HZ, 364T, A36042M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	364T
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	12 @ 6 AWG

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A36WG0845
Layout	611740-001-SH1
Eff. date	03-03-2021
CD Diagram	416820-020
Poles	04
Leads	12#6
Proprietary	False
Created date	10-19-2010

Motor Standards	NEMA
Motor Type	A36042M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.44 IN
Power Factor	82
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
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	None

Nameplate

NP2531L									
CAT.NO.				SPEC NO.	P36G4671			FRAME	364T
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
	364T	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)		
491111	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		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA EM MOTOR-NEMA NOM. EFF. 93.6% - GUAR. MIN. EFF. 93.0%						
		DR. BY <u>J.J. HARRISON</u> CK. BY <u>G.R. WEBB</u> APP. BY <u>W.L. SMITH</u> DATE <u>08/21/02</u>		A-C MOTOR PERFORMANCE DATA A36WG0845-R001 ISSUE DATE 12/15/10		

FRAME 364T

RPM 1780
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

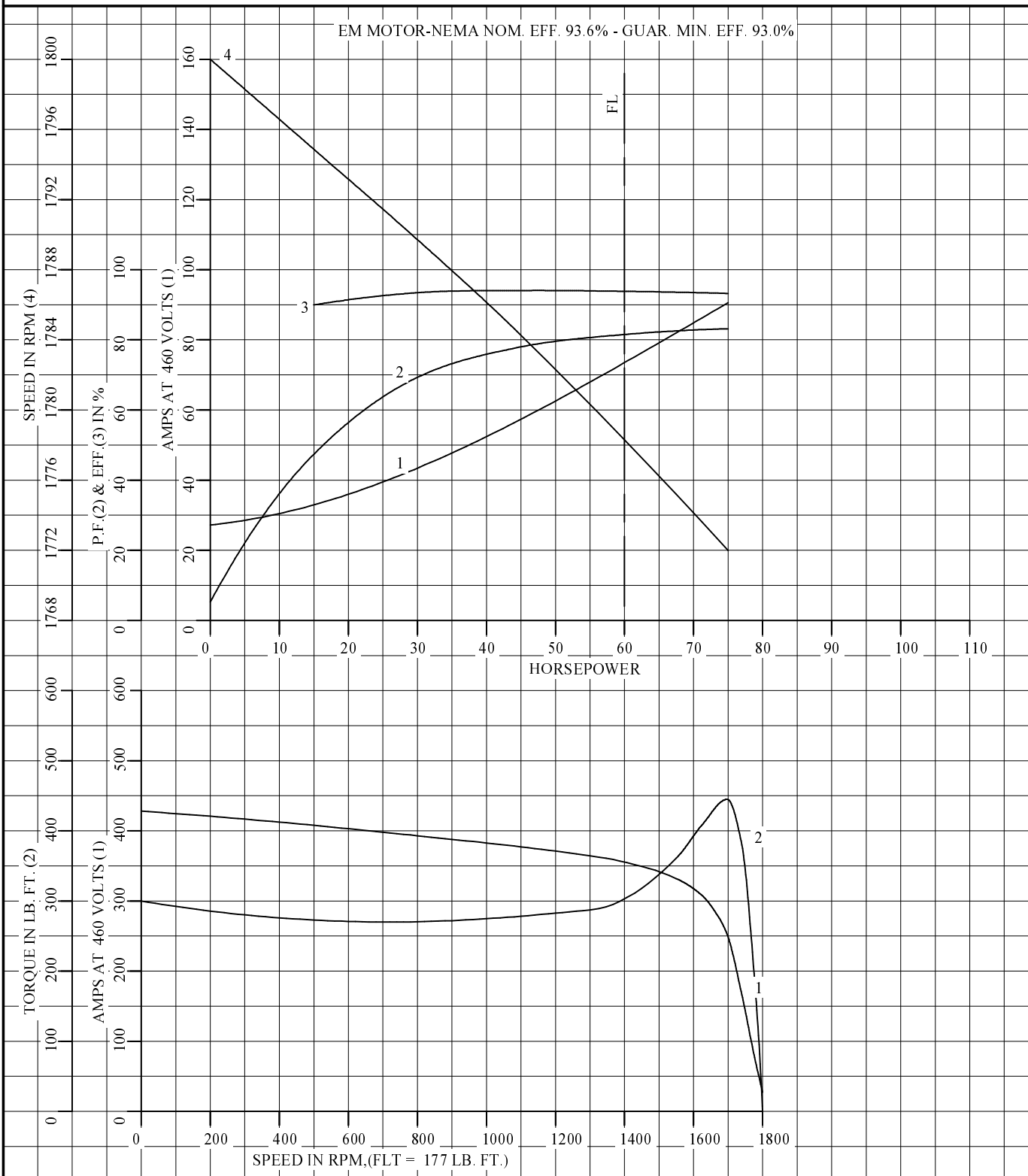
STATOR RES. @ 25 °C .0289/.115

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 491111

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

DR. BY J.J. HARRISON
CK. BY G.R. WEBB
APP. BY W.L. SMITH
DATE 08/21/02

**A-C MOTOR
PERFORMANCE
CURVES** A36WG0845-R001
ISSUE DATE 12/15/10

REL. S.O.

RPM 1780

S.F. 1.15

ROTOR 418141038LE

FRAME 364T

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

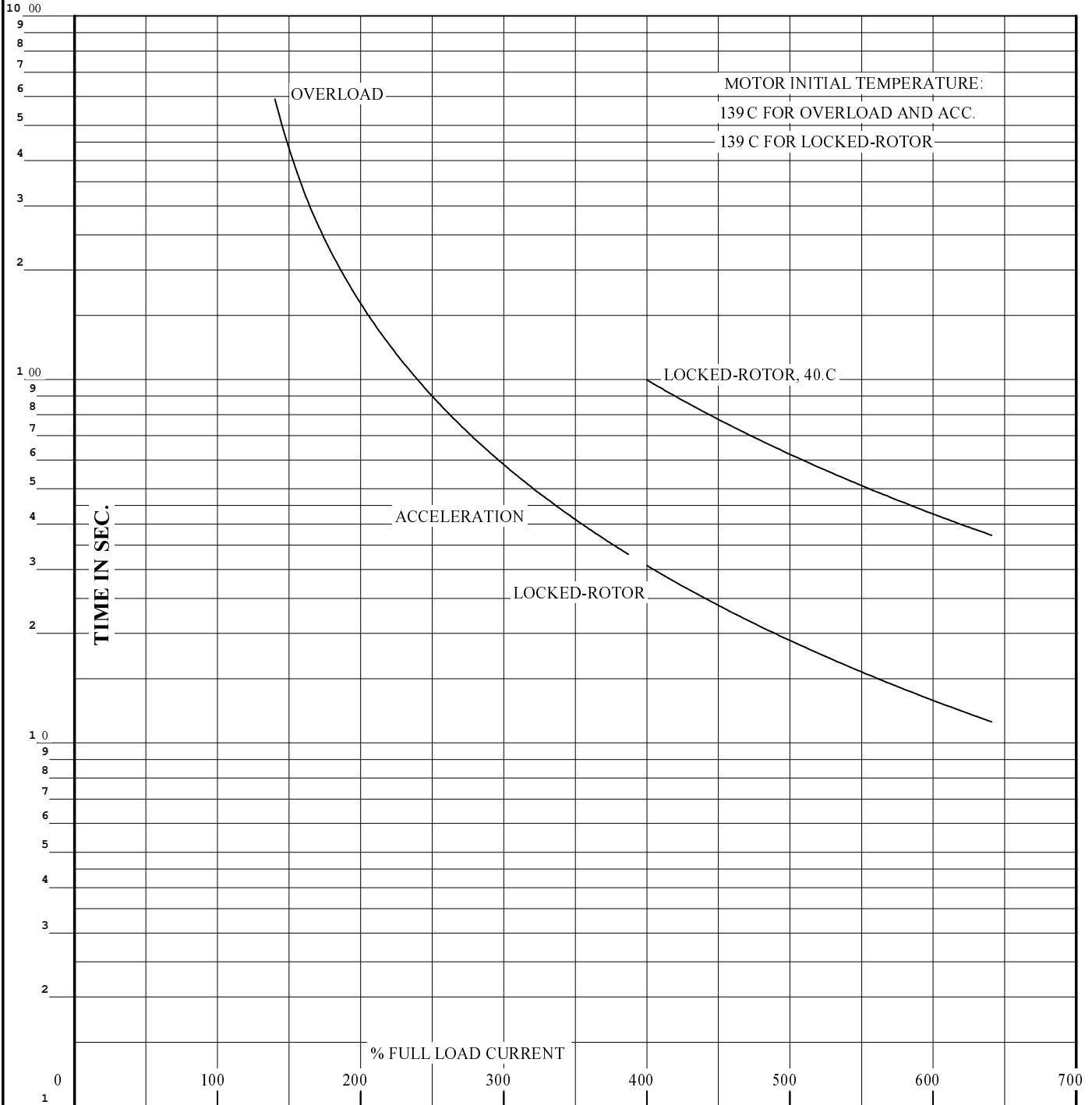
STATOR RES. @ 25 °C .0289/.115

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 491111

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.

BALDOR

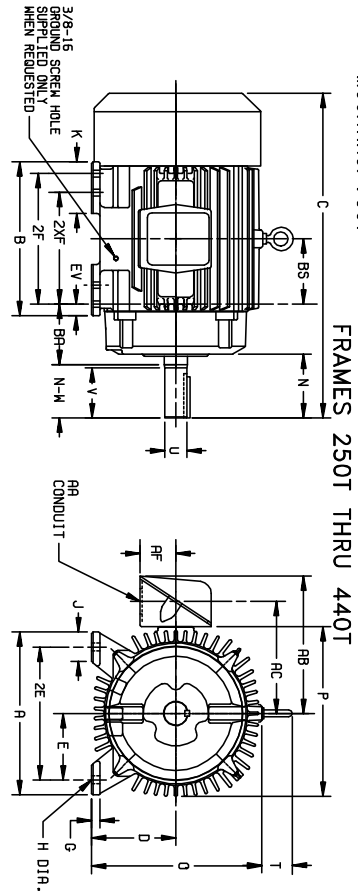
DR. BY J.J. HARRISON
CK. BY G.R. WEBB
APP. BY W.L. SMITH
DATE 08/21/02

**A-C MOTOR
PERFORMANCE CURVES** A36WG0845-R001
ISSUE DATE 12/15/10

611740-001-SH1

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTIONENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED



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	.75	.56	2.50	---	13.25	13.25	2.44	1-1/4	10.75	8.75	2.50	4.25	1.00
284T-296T	13.75	7.00	5.50	.75	.56	2.50	---	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	1.00
324T-326T	15.50	8.00	6.25	.88	.69	2.75	4.50	16.69	17.00	2.44	2	15.19	11.44	4.25	5.25	1.38
364T-365T	17.00	9.00	7.00	.88	.69	2.75	3.88	18.50	19.50	2.94	3	16.08	14.00	5.38	5.88	1.38
404T-405T	19.00	10.00	8.00	1.12	.81	3.25	4.62	21.31	22.50	2.94	3	19.31	15.25	5.38	6.62	1.13
444T-445T	21.00	11.00	9.00	1.12	.81	3.25	5.25	23.38	25.25	3.25	3	23.38	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	.375	2.88	305
256T	24.56	5.00	12.00	10.00	---	4.12	4.00	1.625	3.75	.375	2.88	315
284T	27.44	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	.500	3.25	435
284T	26.06	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	.500	3.25	435
286T	27.44	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	.500	3.25	450
286T	26.06	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	.500	3.25	450
324T	30.44	6.00	14.75	---	10.50	5.62	5.25	2.125	5.00	.500	3.88	540
324T	28.94	6.00	14.75	12.00	---	5.62	5.25	2.125	5.00	.500	3.88	540
326T	30.44	6.00	14.75	12.00	---	5.62	5.25	2.125	5.00	.500	3.88	580
326T	28.94	6.00	14.75	12.00	---	5.62	5.25	2.125	5.00	.500	3.88	580
364T	33.44	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	.625	4.25	800
364T	31.31	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	.625	4.25	800
365T	33.44	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	.625	4.25	840
365T	31.31	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	.625	4.25	840
404T	38.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	.750	5.62	1120
404T	35.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	.750	5.62	1120
405T	38.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	.750	5.62	1160
405T	35.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	.750	5.62	1160
444T	44.62	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	.875	6.88	1540
444T	40.88	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	.875	6.88	1540
445T	44.62	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	.875	6.88	1720
445T	40.88	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	.875	6.88	1720

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES $\begin{cases} 250T - 320T + .00, -.03. \\ 360T - 440T + .00, -.06. \end{cases}$ CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1, W-4-M-5-M-7, OR C-1 MOUNTING IS SPECIFIED.
- (3) "U" VARIES $\begin{cases} \text{UP TO 1.625 DIA.} + .0000, -.0005 \\ 1.625 \text{ AND LARGER} + .000, -.001. \end{cases}$ IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING. 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.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +.00, -.25.

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

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

REV. DESC: UPDATE TITLE SHEET 2

REV. LTR: B

VERSION: 02

TDR: 000000498266

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

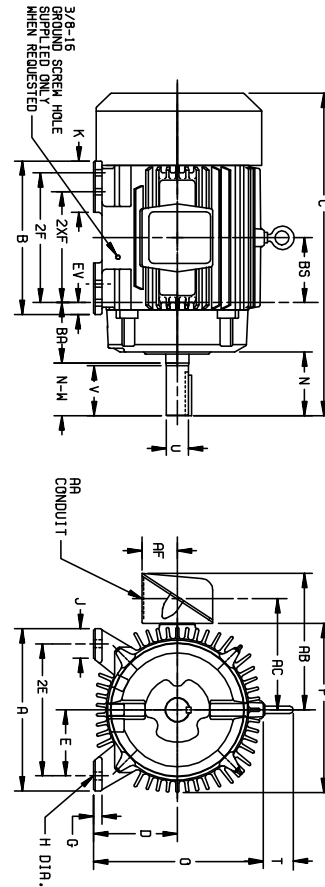
611740-001-SH1

611740-001-SH2

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIREL-CAGE INDUCTIONENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES 250T THRU 440T



DIMENSIONS ARE IN MILLIMETERS. SEE SHEET 1 FOR DIMENSIONS IN INCHES.																
STEEL TECHNICAL BOX										BA						
FRAME	A	D(2)	E	G	H	J	K	O	P	T	AA(7)	AB	AC	AE	EV	
254T-256T	317.5	158.8	127.0	19.0	14.2	63.5	---	336.5	336.5	62.0	1-1/4	273.0	222.3	63.5	108.0	25.4
264T-266T	349.2	177.8	139.7	19.0	14.2	63.5	---	374.6	378.0	62.0	1-1/2	332.8	254.0	81.0	120.7	25.4
324T-326T	393.7	203.2	158.8	22.4	17.5	69.9	114.3	423.9	431.8	62.0	2	385.8	290.6	108.0	133.3	35.1
364T-365T	431.8	228.6	177.8	22.4	17.5	69.9	98.6	469.9	495.3	74.7	3	458.7	355.6	136.7	149.4	35.1
404T-405T	482.6	254.0	203.2	28.4	20.6	82.5	117.3	541.3	571.5	74.7	3	490.5	387.3	136.7	168.1	28.7
444T-445T	533.4	279.4	228.6	28.4	20.6	82.5	133.3	593.9	641.3	82.5	3	593.9	460.2	165.1	190.5	31.7

(1)	FRAME	SIZE	C	BS	B	ZF	(4)				U(3)				LGTH.	WEIGHT KGS. (5)
							2X	N	N-W(6)	V	SO	LGTH.	WEIGHT KGS. (5)			
	254T		623.8	127.0	304.8	---	209.6	104.6	101.6	41.27	95.3	95.2	73.2	138		
	264T		623.8	127.0	304.8	254.0	---	104.6	101.6	41.27	95.3	95.2	73.2	142		
	284T		697.0	138.7	330.2	---	241.3	127.0	117.3	47.63	111.3	127.0	82.5	197		
	284T		661.9	138.7	330.2	---	241.3	91.9	82.5	41.27	76.2	95.2	47.8	197		
	286T		697.0	138.7	330.2	279.4	---	127.0	117.3	47.63	111.3	127.0	82.5	204		
	324T		761.9	139.7	337.6	---	286.7	142.7	133.3	53.97	127.0	127.0	96.6	244		
	324T		735.1	152.4	374.6	---	286.7	104.6	95.3	47.63	86.9	127.0	86.6	244		
	326T		773.2	152.4	374.6	304.8	---	142.7	133.3	53.97	127.0	127.0	96.6	263		
	326T		735.1	152.4	374.6	---	286.7	104.6	95.3	47.63	86.9	127.0	86.6	263		
	364T		849.4	155.4	381.0	---	285.7	158.8	149.4	60.33	142.7	158.8	108.0	362		
	364T		795.3	155.4	381.0	---	285.7	104.6	95.3	47.63	86.9	127.0	86.6	360		
	365T		849.4	155.4	381.0	311.1	---	158.8	149.4	60.33	142.7	158.8	108.0	381		
	365T		795.3	155.4	381.0	---	285.7	104.6	95.3	47.63	86.9	127.0	86.6	378		
	404T		973.1	174.8	406.4	---	311.1	190.5	184.1	73.02	177.8	190.5	142.7	508		
	404T		896.9	174.8	406.4	---	311.1	114.3	108.0	53.97	101.6	127.0	69.9	503		
	405T		973.1	174.8	406.4	349.2	---	190.5	184.1	73.02	177.8	190.5	142.7	526		
	405T		896.9	174.8	406.4	---	311.1	114.3	108.0	53.97	101.6	127.0	69.9	522		
	444T		1133.3	209.6	482.6	---	368.3	227.1	215.9	85.72	209.6	222.2	174.8	698		
	444T		1038.4	209.6	482.6	---	368.3	151.8	120.7	60.33	114.3	158.8	76.2	691		
	445T		1133.3	209.6	482.6	419.1	---	227.1	215.9	85.72	209.6	222.2	174.8	784		
	445T		1038.4	209.6	482.6	---	368.3	151.8	120.7	60.33	114.3	158.8	76.2	777		

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1,
W-4-W-5-W-7, OR C-1 MOUNTING IS SPECIFIED.
- (2) "D" VARIES — 250T - 320T +0, -8.
360T - 440T +0, -1.5.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT
FACTORY.
- (3) "U" VARIES — UP TO 41.27 DIA. +.000, -.013
41.27 AND LARGER +.00, -.03
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED
AT END OF STD. SHAFT EXTENSION IS .05 T.I.R. UP TO
AND INCLUDING 41.27 DIA. AND .08 T.I.R. 41.27 DIA.
TO 127.00 MILL. DIA.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL
MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +0, -6.4.
- (7) DIMENSIONS ARE IN INCHES.

FRAME- TYPE- CERTIFIED FOR-
ORDER- ITEM- HP- RPM- PH- HZ VOLTS
RELANCE SALES ORDER- APPROVED BY- DATE

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

REV. DESC: UPDATE TITLE

REV. LTR: B

VERSION: 02

TDR: 000000498266

FILE: \RAG\00000\168

REVISED: 14:03:30 04/28/2009

MTL: -

BY: RAGEC

Baldor • Dodge • Reliance

DIM SHEET 250T THRU 440T METRIC

SH 1 of 1

611740-001-SH2

