

ABB BALDOR RELIANCE III

Customer information packet

P36G4668

75HP, 1780RPM, 3PH, 60HZ, 365TC, A36056M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365TC
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	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	87.000 A @ 460.0 V 174.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	87.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A36WG0731
Layout	611740-003-SH1
Eff. date	03-03-2021
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	10-19-2010

Motor Standards	NEMA
Motor Type	A36056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.44 IN
Power Factor	86
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
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.		P36G4668			FRAME	365TC
HP	75		PHASE	3		DESIGN	B	TYPE	P	
RPM	1780		HZ	60		AMB	40	SF	1.15	
VOLTS	230/460	DUTY	CONT			INSUL.CLASS		F		
AMPS	174/87		ENCL	TEFC	CODE	G				
DRIVE END BEARING	65BC03J30X		NEMA-NOM-EFFICIENCY					94.1		
OPP D.E. BEARING	65BC03J30X									
	SUIT FOR 208V AT 190 AMPS					NOT FOR USE IN THE US				
SER.NO.			MOTOR WEIGHT							

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS			
	365TC	75	P	3/60	1780	230/460			
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.			
174/87	CONT	40/F	1.15	B	G	TEFC			
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)					
492460	418141038ME	---	---	.0229/.0919					
PERFORMANCE									
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY				
NO LOAD	0	27.6	1800	5.06	0				
1/4	18.8	34.8	1795	55.0	91.8				
2/4	37.5	48.8	1790	76.3	94.5				
3/4	56.2	66.8	1785	83.2	94.7				
4/4	75.0	87.0	1779	85.5	94.4				
5/4	93.8	109	1772	86.3	93.7				
SPEED TORQUE									
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES					
LOCKED ROTOR	0	181	400	542					
PULL UP	720	156	345	498					
BREAKDOWN	1700	251	555	311					
FULL LOAD	1779	100	221	87.0					
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. 94.1% - GUAR. MIN. EFF. 93.6%									
		DR. BY D. F. DUNN CK. BY D. M. BYRD APP. BY D. M. BYRD DATE 07-29-93	A-C MOTOR PERFORMANCE A36WG0731-R001 DATA ISSUE DATE 12/15/10						

FRAME 365TC

RPM 1780 VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 75

AMPS 174/87

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

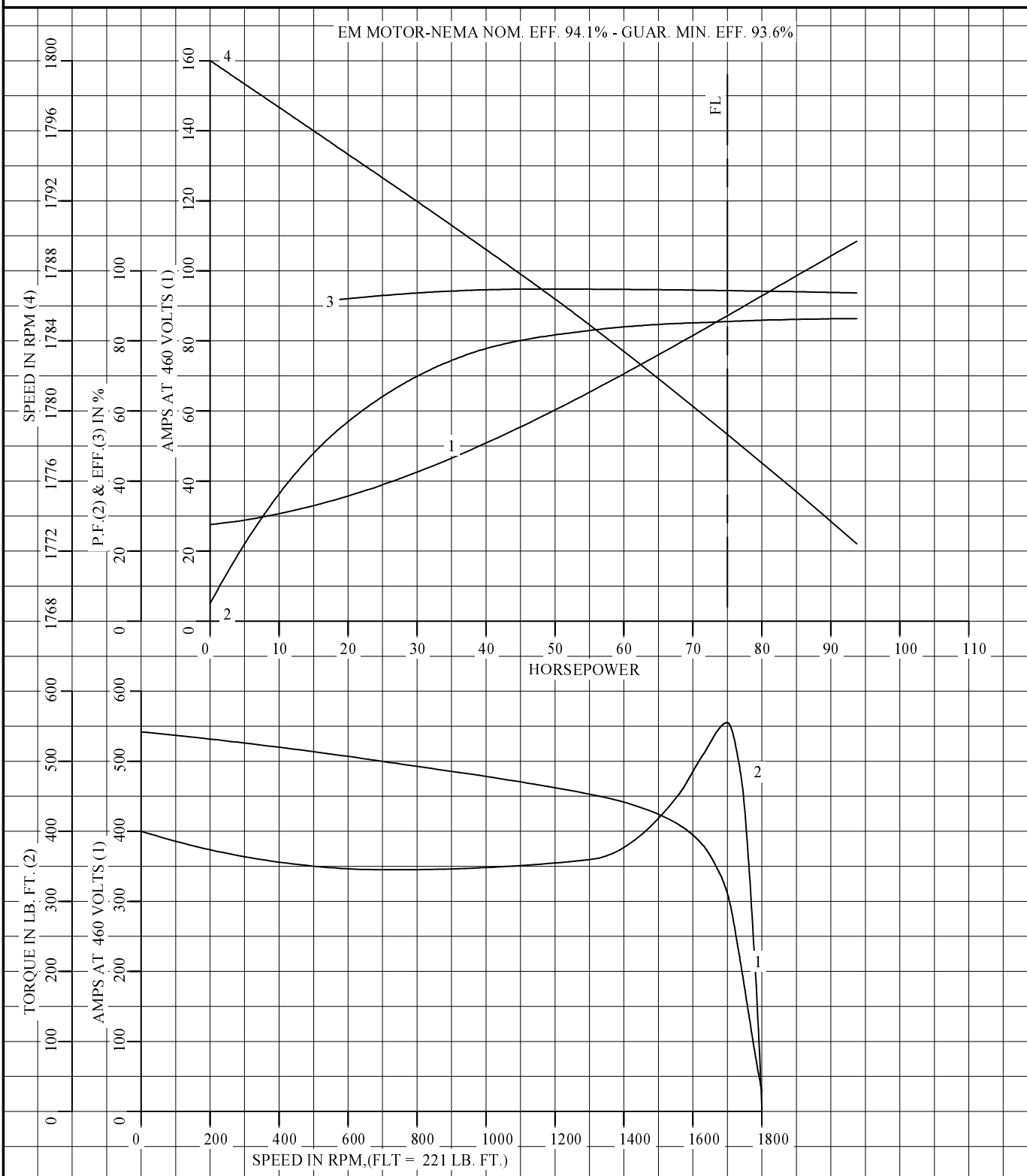
STATOR RES. @ 25 °C .0229/.0919

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 492460

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

**A-C MOTOR
PERFORMANCE CURVES** A36WG0731-R001
ISSUE DATE 12/15/10

REL. S.O.

RPM 1780

S.F. 1.15

ROTOR 418141038ME

FRAME 365TC

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 75

AMPS 174/87

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

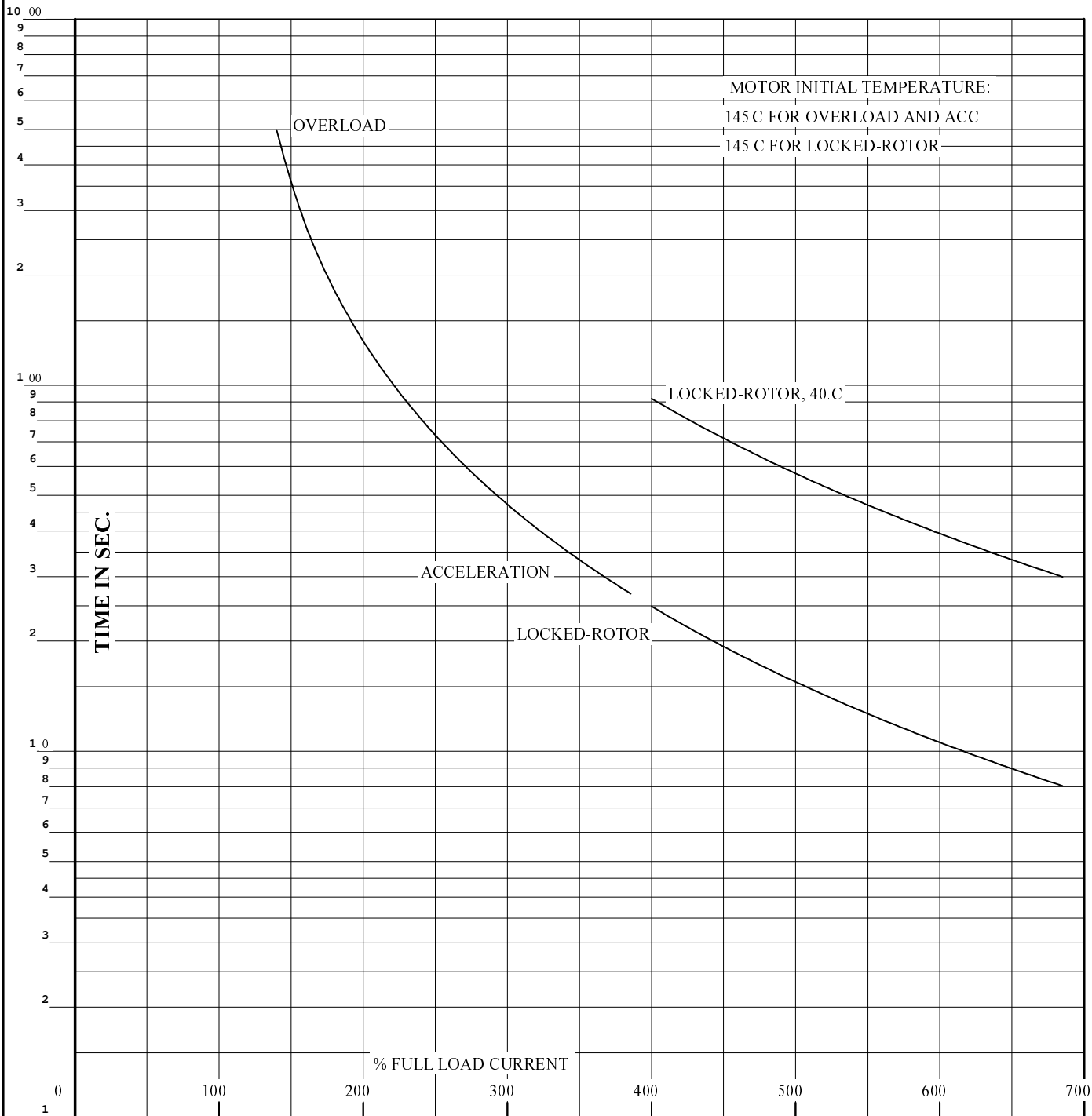
STATOR RES. @ 25 °C .0229/.0919

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 492460

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

EM MOTOR-NEMA NOM. EFF. 94.1% - GUAR. MIN. EFF. 93.6%

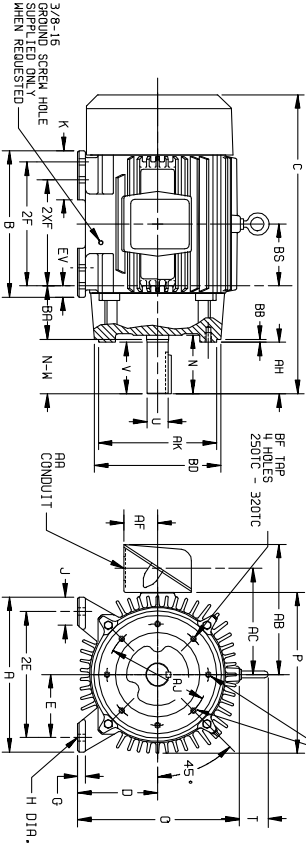
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BALDOR

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

**A-C MOTOR
PERFORMANCE CURVES** A36WG0731-R001
ISSUE DATE 12/15/10

DUTY MASTER ALTERNATING CURRENT MOTORS
ENCLOSURE: TOTALLY ENCLOSED SQUIRREL-CAGE INDUCTION COOLING: FAN COOLED
MOUNTING: FOOT, NEMA "C" FACE
FRAMES 250TC THRU 440TC



DIMENSIONS ARE IN INCHES. SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS.																					
FRAME	A D(2)	E	G	H	J	K	EV	O	P	T	STEEL TERMINAL BOX							MIN. TAP DEPTH	A.J.	AK	
											AA	AB	AC	AF	BA	BB	BD				BF
254TC-250TC	12.50	6.25	5.00	.75	.56	2.50	---	1.00	13.25	13.25	2.44	1-1/4	10.75	8.75	2.50	4.75	25	9.00	1/2-13	.75	8.500
254TC-280TC	13.75	7.00	5.50	.75	.56	2.50	---	1.00	14.75	14.88	2.44	1-1/4	12.75	10.00	3.19	4.75	25	11.25	1/2-13	.94	10.500
284TC-280TC	15.50	8.00	6.25	.88	.69	2.75	4.50	1.38	16.69	17.00	2.44	2	13.19	11.44	4.25	5.25	25	13.12	5/8-11	.94	11.0012
364TC-365TC	17.00	9.00	7.00	.88	.69	2.75	3.88	1.38	18.50	19.50	2.94	3	16.06	14.00	5.38	5.88	25	13.00	5/8-11	.94	11.0012
404TC-405TC	19.00	10.00	8.00	1.12	.81	3.25	4.62	1.13	21.31	22.50	2.94	3	19.31	15.25	5.38	6.62	25	13.12	5/8-11	.94	11.0012
444TC-445TC	21.00	11.00	9.00	1.12	.81	3.25	5.25	1.25	23.38	25.25	3.25	3	23.38	18.12	6.50	7.50	25	16.75	5/8-11	.94	14.0016

FRAME	SIZE	C	BS	B	ZF	(4)	N	AH	N-W(7)	U(3)	V	SO.	LGTH.	WEIGHT LBS. (5)
254TC	25.06	5.00	12.00	---	8.25	4.06	3.75	4.00	1.625	3.75	3.75	2.88	315	
256TC	25.06	5.00	12.00	10.00	---	4.06	3.75	4.00	1.625	3.75	3.75	2.88	325	
284TC	27.44	5.50	13.00	---	9.50	5.00	4.38	4.62	1.875	4.38	5.00	3.25	445	
286TC	26.06	5.50	13.00	---	9.50	3.62	3.00	3.25	1.625	3.00	3.75	1.88	445	
286TC	27.44	5.50	13.00	11.00	---	5.00	4.38	4.62	1.875	4.38	5.00	3.25	460	
286TSC	26.06	5.50	13.00	11.00	---	3.62	3.00	3.25	1.625	3.00	3.75	1.88	460	
324TC	30.44	6.00	14.75	---	10.50	6.02	5.00	5.25	2.125	5.00	5.00	3.88	555	
324TSC	28.84	6.00	14.75	---	10.50	4.12	3.50	3.75	1.875	3.50	5.00	2.00	555	
326TC	30.44	6.00	14.75	12.00	---	6.02	5.00	5.25	2.125	5.00	5.00	3.88	595	
326TSC	28.84	6.00	14.75	12.00	---	4.12	3.50	3.75	1.875	3.50	5.00	2.00	595	
364TC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	815	
364TSC	31.31	6.12	15.00	---	11.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	815	
366TC	33.44	6.12	15.00	12.25	---	6.25	5.62	5.88	2.375	5.62	6.25	4.25	855	
366TSC	31.31	6.12	15.00	12.25	---	4.12	3.50	3.75	1.875	3.50	5.00	2.00	849	
404TC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.62	1165	
404TSC	35.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	5.00	2.75	1156	
404TSC	38.31	6.88	16.00	13.75	---	7.50	7.00	7.25	2.875	7.00	7.50	5.62	1205	
405TSC	35.31	6.88	16.00	13.75	---	4.50	4.00	4.25	2.125	4.00	5.00	2.75	1196	
444TC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	1608	
444TSC	40.88	8.25	19.00	---	14.50	5.19	4.50	4.75	2.375	4.50	6.25	3.00	1592	
445TC	44.62	8.25	19.00	16.50	---	8.94	8.25	8.50	3.375	8.25	8.75	6.88	1782	
445TSC	40.88	8.25	19.00	16.50	---	5.19	4.50	4.75	2.375	4.50	6.25	3.00	1782	

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE. CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1, W-4-W, S-W-7, OR C-1 MOUNTING IS SPECIFIED.
- (2) "D" VARIES [250TC - 320TC + .00, - .03] IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- (3) "U" VARIES [6.25 AND LARGER + .000, - .001] 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.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING. FACE RUNOUT AND [250TC - 280TC INCL. .004 MAX. T.I.R. ECCENTRICITY [320TC - 440TC INCL. .007 MAX. T.I.R.
- (6) "A" VARIES [250TC - 280TC + .000, - .003] [320TC - 440TC + .000, - .005]
- (7) "N-W" VARIES + .00, - .25
- FRAME- TYPE- CERTIFIED FOR- ORDER- ITEM- HP- RPM- PH- HZ- VOLTS- RELIANCE SALES ORDER- APPROVED BY- DATE

LHS-003-004-1119

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: REMOVING TITLE BLOCK		
REV. LTR: A	VERSION: 01	TDR: 000000441900
FILE: \RAG\00003\380	REVISED: 09:15:38 08/28/2007	BY: RAGRKH
MTL: -		

Baldor • Dodge • Reliance

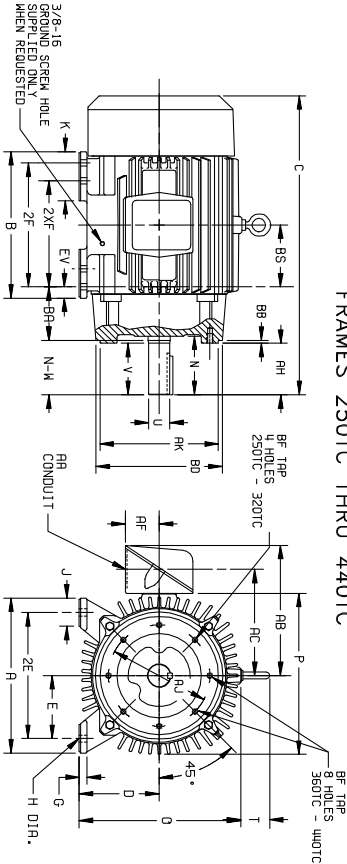
DIM SHEET 250TC THRU 440TC

DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT, NEMA "C" FACE
FRAMES 250TC THRU 440TC

SQUIREL-CAGE INDUCTION

COOLING: FAN COOLED



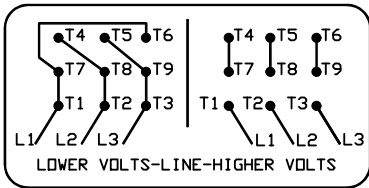
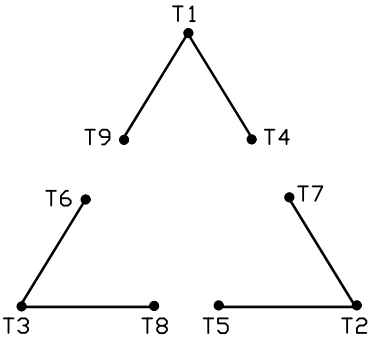
DIMENSIONS ARE IN MILLIMETERS. SEE SHEET 1 FOR DIMENSIONS IN INCHES

FRAME	A	D(2)	E	G	H	J	K	EV	O	P	T	STEEL TERMINAL BOX										(6)	
												AB	AC	AF	BA	BB	BD	BF(6)	UN	IN	AK		
254TC-256TC	317.5	158.8	127.0	19.0	14.2	63.5	---	---	25.4	336.5	336.5	62.0	1-1/4	42.3	222.3	63.5	120.7	6.4	228.6	1/2-13	19.0	184.1	215.90
284TC-286TC	349.2	177.8	139.7	19.0	14.2	63.5	---	---	25.4	374.6	378.0	62.0	1-1/4	42.3	254.0	81.0	120.7	6.4	286.7	1/2-13	19.0	228.6	266.70
324TC-326TC	393.7	203.3	158.8	22.4	17.5	69.9	11.4	35.1	42.9	431.8	62.0	2	385.8	290.6	108.0	133.3	6.4	333.2	5/8-11	23.9	279.4	317.50	
364TC-366TC	431.8	228.6	177.8	22.4	17.5	69.9	11.4	35.1	42.9	495.3	74.3	3	458.7	355.6	136.7	149.4	6.4	330.2	5/8-11	23.9	279.4	317.50	
404TC-406TC	482.6	254.0	203.2	28.4	20.6	82.5	11.7	31.7	54.1	571.5	74.3	4	490.5	387.3	168.1	168.1	6.4	333.2	5/8-11	23.9	279.4	317.50	
444TC-446TC	533.4	279.4	228.6	28.4	20.6	82.5	13.3	31.7	59.3	641.3	82.5	5	593.9	460.2	165.1	190.5	6.4	425.4	5/8-11	23.9	355.6	406.40	

FRAME	SIZE	C	BS	B	2F	(4)	N	AH	N-W(7)	SHAFT AND KEY		SO.	LGTH.	WGT.
										U(3)	V			
254TC	636.5	127.0	304.8	---	209.6	103.1	98.3	101.6	41.27	95.3	9.52	73.2	142	
256TC	636.5	127.0	304.8	254.0	---	103.1	98.3	101.6	41.27	95.3	9.52	73.2	147	
284TC	697.0	139.7	330.2	---	241.3	127.0	117.3	117.3	47.63	111.3	12.70	82.5	201	
286TC	697.0	139.7	330.2	---	241.3	127.0	117.3	117.3	47.63	111.3	12.70	82.5	208	
288TC	697.0	139.7	330.2	279.4	---	127.0	117.3	117.3	47.63	111.3	12.70	82.5	208	
296TC	661.9	139.7	330.2	329.4	---	91.9	76.2	82.5	47.63	76.2	9.52	47.8	208	
324TC	773.2	152.4	374.6	---	266.7	142.7	127.0	133.3	53.97	127.0	12.70	96.6	251	
326TC	773.2	152.4	374.6	304.8	---	142.7	127.0	133.3	53.97	127.0	12.70	96.6	251	
328TC	773.2	152.4	374.6	304.8	---	142.7	127.0	133.3	53.97	127.0	12.70	96.6	259	
364TC	849.4	152.4	381.0	---	285.7	158.8	142.7	149.4	60.33	142.7	15.88	108.0	369	
366TC	849.4	152.4	381.0	---	285.7	158.8	142.7	149.4	60.33	142.7	15.88	108.0	369	
368TC	849.4	152.4	381.0	311.1	---	158.8	142.7	149.4	60.33	142.7	15.88	108.0	387	
404TC	973.1	174.8	406.4	---	311.1	164.3	101.6	108.0	53.97	101.6	12.70	108.0	546	
406TC	973.1	174.8	406.4	---	311.1	164.3	101.6	108.0	53.97	101.6	12.70	108.0	546	
408TC	973.1	174.8	406.4	---	311.1	164.3	101.6	108.0	53.97	101.6	12.70	108.0	547	
410TC	973.1	174.8	406.4	---	311.1	164.3	101.6	108.0	53.97	101.6	12.70	108.0	547	
445TC	1036.4	209.6	482.6	---	368.3	131.8	114.3	120.7	60.33	114.3	15.88	144.3	808	
445TC	1036.4	209.6	482.6	419.1	---	227.1	209.6	215.9	85.72	209.6	22.22	176.8	815	
445TC	1036.4	209.6	482.6	419.1	---	131.8	114.3	120.7	60.33	114.3	15.88	144.3	808	

416820-002

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



(N. P. 1575-B)

416820-002

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: -		



CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED
SH1 of 1