ABB BALDOR RELIANCE

Customer information packet

CM4400T

100HP, 1775RPM, 3PH, 60HZ, 405TC, 1480M, TEFC
Class - None
Division - Not Applicable

7/8/2026 9:36:11 PM

Specifications

Enclosure	TEFC
Frame	405TC
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	3 @ 2 AWG

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A40WG0427
Layout	611740-003-SH1
Eff. date	05-17-2022
CD Diagram	416820-002
Poles	04
Leads	3#2,6#6
Proprietary	False
Created date	10-19-2010

Motor Standards	NEMA
Motor Type	A40054M
Mounting Arrangement	F1
Number of Poles	4
Power Factor	85
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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

NP2498L												
CAT.NO.	CM4400T			**SPEC NO.**	P40G740							
HP	100	**AMPS**	232/116			**VOLTS**	230/460			**DESIGN**	B	
FRAME	405TC	**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
	405TC	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)
496537	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

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. 94.5% - GUAR. MIN. EFF. 94.1%

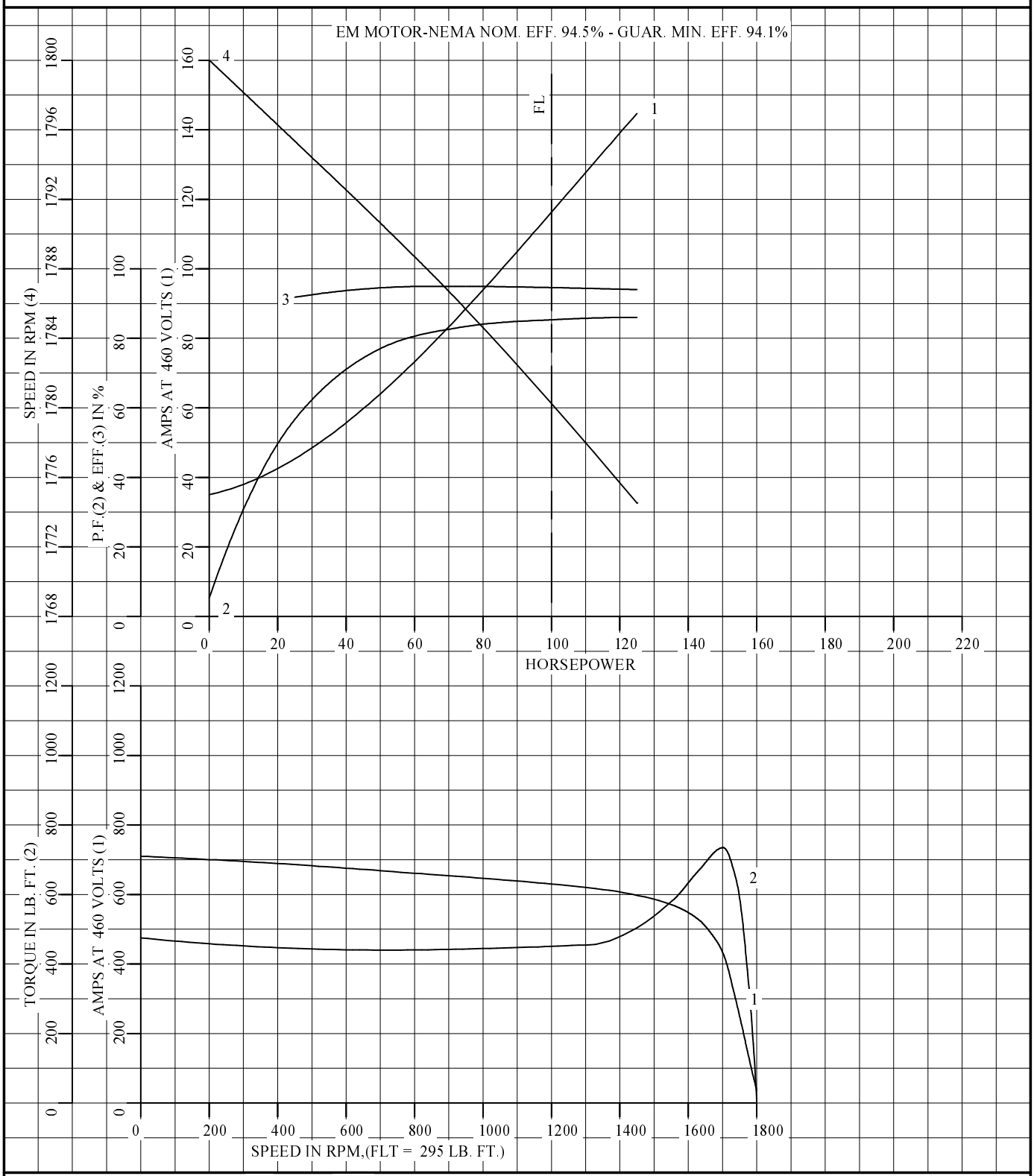
BALDOR

DR. BY D. F. DUNN
CK. BY D. M. BYRD
APP. BY D. M. BYRD
DATE 07-30-93

A-C MOTOR PERFORMANCE DATA

A40WG0427-R001
ISSUE DATE 12/15/10

FRAME 405TC	RPM 1780	S.F. 1.15	ROTOR 418142033SE
HP 100	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 232/116	CODE LETTER G	TEST DATE ---
PHASE/HERTZ 3/60	DUTY CONT	ENCLOSURE TEFC	STATOR RES.@ 25 ℃ .0168/.0673
	AMB ℃/INSUL 40/F	E/S 496537	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

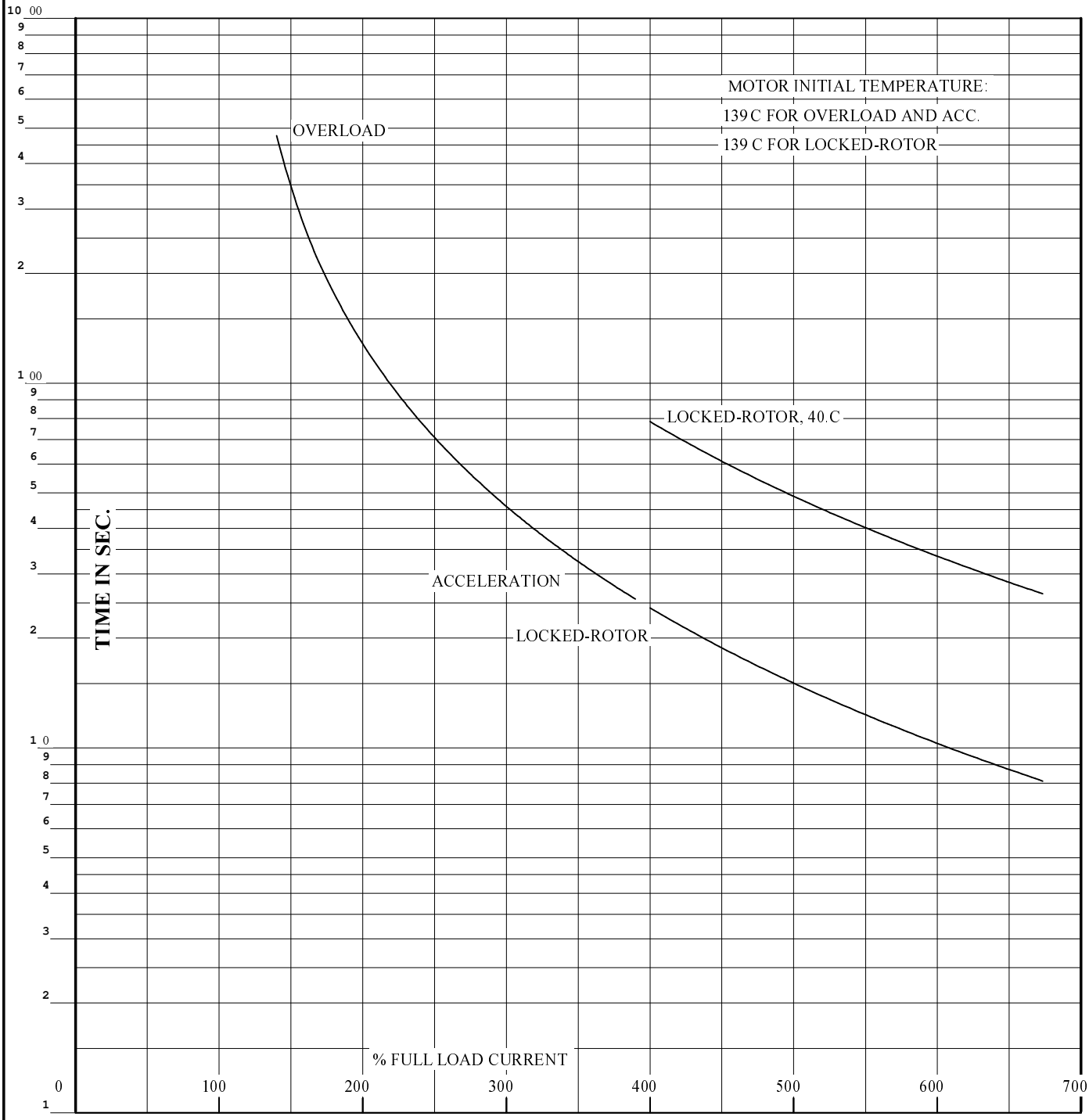
DR. BY D. F. DUNN
CK. BY D. M. BYRD
APP. BY D. M. BYRD
DATE 07-30-93

A-C MOTOR PERFORMANCE CURVES

A40WG0427-R001

ISSUE DATE 12/15/10

REL. S.O.	RPM 1780	S.F. 1.15	ROTOR 418142033SE
FRAME 405TC	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 ℃.0168/.0673
PHASE/HERTZ 3/60	AMB ℃/INSUL 40/F	E/S 496537	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.**

BALDOR

DR. BY	D. F. DUNN
CK. BY	D. M. BYRD
APP. BY	D. M. BYRD
DATE	07-30-93

A-C MOTOR PERFORMANCE CURVES A40WG0427-R001 ISSUE DATE 12/15/10

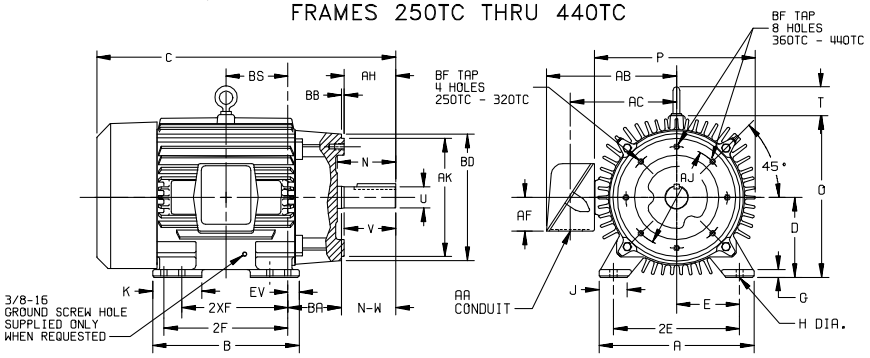
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED — 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 AA	AB	AC	AF	BA	BB	BD	BF	MIN. TAP DEPTH	AJ	(6) AK
254TC-256TC	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	7.25	8.500
284TC-286TSC	13.75	7.00	5.50	.75	.56	2.50	--	1.00	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	25	11.25	1/2-13	.75	9.00	10.500
324TC-326TSC	15.50	8.00	6.25	.88	.69	2.75	4.50	1.38	16.69	17.00	2.44	2	15.19	11.44	4.25	5.25	25	13.12	5/8-11	.94	11.00	12.500
364TC-365TSC	17.00	9.00	7.00	.88	.69	2.75	3.88	1.38	18.50	19.50	2.94	3	18.06	14.00	5.38	5.88	25	13.00	5/8-11	.94	11.00	12.500
404TC-405TSC	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	11.00	12.500
444TC-445TSC	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	14.00	16.000
(1)																						

FRAME SIZE	C	BS	B	2F	(4) 2XF	N	AH	SHAFT AND KEY N-W(7)	U(3)	V	SQ.	LGTH.	WEIGHT LBS. (5)
254TC	25.06	5.00	12.00	---	8.25	4.06	3.75	4.00	1.625	3.75	.375	2.88	315
256TC	25.06	5.00	12.00	10.00	---	4.06	3.75	4.00	1.625	3.75	.375	2.88	325
284TC	27.44	5.50	13.00	---	9.50	5.00	4.38	4.62	1.875	4.38	.500	3.25	445
284TSC	26.06	5.50	13.00	---	9.50	3.62	3.00	3.25	1.625	3.00	.375	1.88	445
286TC	27.44	5.50	13.00	11.00	---	5.00	4.38	4.62	1.875	4.38	.500	3.25	460
286TSC	26.06	5.50	13.00	11.00	---	3.62	3.00	3.25	1.625	3.00	.375	1.88	460
324TC	30.44	6.00	14.75	---	10.50	5.62	5.00	5.25	2.125	5.00	.500	3.88	555
324TSC	28.94	6.00	14.75	---	10.50	4.12	3.50	3.75	1.875	3.50	.500	2.00	555
326TC	30.44	6.00	14.75	12.00	---	5.62	5.00	5.25	2.125	5.00	.500	3.88	595
326TSC	28.94	6.00	14.75	12.00	---	4.12	3.50	3.75	1.875	3.50	.500	2.00	595
364TC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	.625	4.25	815
364TSC	31.31	6.12	15.00	---	11.25	4.12	3.50	3.75	1.875	3.50	.500	2.00	809
365TC	33.44	6.12	15.00	12.25	---	6.25	5.62	5.88	2.375	5.62	.625	4.25	855
365TSC	31.31	6.12	15.00	12.25	---	4.12	3.50	3.75	1.875	3.50	.500	2.00	849
404TC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	.750	5.62	1165
404TSC	35.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	.500	2.75	1156
405TC	38.31	6.88	16.00	13.75	---	7.50	7.00	7.25	2.875	7.00	.750	5.62	1205
405TSC	35.31	6.88	16.00	13.75	---	4.50	4.00	4.25	2.125	4.00	.500	2.75	1196
444TC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	.875	6.88	1608
444TSC	40.88	8.25	19.00	---	14.50	5.19	4.50	4.75	2.375	4.50	.625	3.00	1592
445TC	44.62	8.25	19.00	16.50	---	8.94	8.25	8.50	3.375	8.25	.875	6.88	1798
445TSC	40.88	8.25	19.00	16.50	---	5.19	4.50	4.75	2.375	4.50	.625	3.00	1782
(1)													

(1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.

(2) "D" VARIES — 250TC – 320TC +.00, –.03; 360TC – 440TC +.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 15% DEPENDING UPON RATING.

(6) "AK" VARIES — 250TC – 280TC +.000, –.003; 320TC – 440TC +.000, –.005

(7) "N-W" VARIES +.00, –.25.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2,W-1, W-4,W-5,W-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.

FACE RUNOUT AND ECCENTRICITY — 250TC – 280TC INCL. .004 MAX. T.I.R.; 320TC – 440TC INCL. .007 MAX. T.I.R.

FRAME–_____ TYPE–_____ CERTIFIED FOR– _____

ORDER–_____ ITEM–_____ HP–_____ RPM–_____ PH– _____ HZ _____VOLTS_____

RELIANCE SALES ORDER– _____ APPROVED BY–_____ DATE _____

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

Baldor • Dodge • Reliance

DIM SHEET 250TC THRU 440TC

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

611740-003-SH1

DUTY MASTER ALTERNATING CURRENT MOTORS

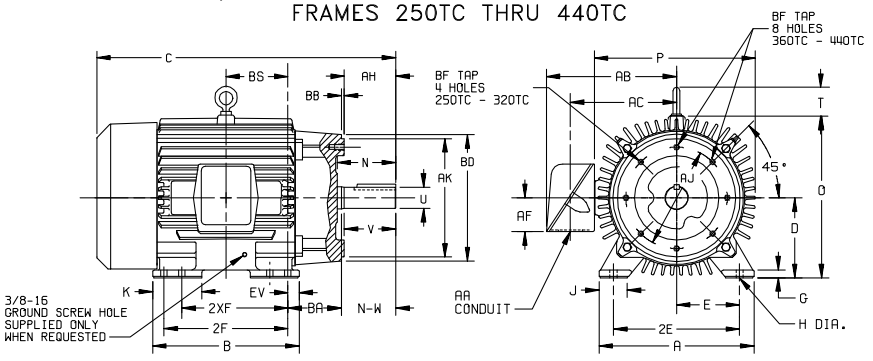
SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

COOLING: FAN COOLED

MOUNTING: FOOT, NEMA "C" FACE

FRAMES 250TC THRU 440TC



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 AA(8)	AB	AC	AF	BA	BB	BD	BF(8)	MIN. TAP DEPTH	AJ	(6) 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	273.0	222.3	63.5	120.7	6.4	228.6	1/2-13	19.0	184.1	215.90
284TC-286TSC	349.2	177.8	139.7	19.0	14.2	63.5	----	25.4	374.6	378.0	62.0	1-1/2	323.8	254.0	81.0	120.7	6.4	285.7	1/2-13	19.0	228.6	266.70
324TC-326TSC	393.7	203.2	158.8	22.4	17.5	69.9	114.3	35.1	423.9	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-365TSC	431.8	228.6	177.8	22.4	17.5	69.9	98.6	35.1	469.9	495.3	74.7	3	458.7	355.6	136.7	149.4	6.4	330.2	5/8-11	23.9	279.4	317.50
404TC-405TSC	482.6	254.0	203.2	28.4	20.6	82.5	117.3	28.7	541.3	571.5	74.7	3	490.5	387.3	136.7	168.1	6.4	333.2	5/8-11	23.9	279.4	317.50
444TC-445TSC	533.4	279.4	228.6	28.4	20.6	82.5	133.3	31.7	593.9	641.3	82.5	3	593.9	460.2	165.1	190.5	6.4	425.4	5/8-11	23.9	355.6	406.40
(1)																						

FRAME SIZE	C	BS	B	2F	(4) 2XF	N	AH	SHAFT AND KEY N-W(7)	U(3)	V	SQ.	LGTH.	WEIGHT KGS. (5)
254TC	636.5	127.0	304.8	---	209.6	103.1	95.3	101.6	41.27	95.3	9.52	73.2	142
256TC	636.5	127.0	304.8	254.0	---	103.1	95.3	101.6	41.27	95.3	9.52	73.2	147
284TC	697.0	139.7	330.2	---	241.3	127.0	111.3	117.3	47.63	111.3	12.70	82.5	201
284TSC	661.9	139.7	330.2	---	241.3	91.9	76.2	82.5	41.27	76.2	9.52	47.8	201
286TC	697.0	139.7	330.2	279.4	---	127.0	111.3	117.3	47.63	111.3	12.70	82.5	208
286TSC	661.9	139.7	330.2	279.4	---	91.9	76.2	82.5	41.27	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	98.6	251
324TSC	735.1	152.4	374.6	---	266.7	104.6	88.9	95.3	47.63	88.9	12.70	50.8	251
326TC	773.2	152.4	374.6	304.8	---	142.7	127.0	133.3	53.97	127.0	12.70	98.6	269
326TSC	735.1	152.4	374.6	304.8	---	104.6	88.9	95.3	47.63	88.9	12.70	50.8	269
364TC	849.4	155.4	381.0	---	285.7	158.8	142.7	149.4	60.33	142.7	15.88	108.0	369
364TSC	795.3	155.4	381.0	---	285.7	104.6	88.9	95.3	47.63	88.9	12.70	50.8	366
365TC	849.4	155.4	381.0	311.1	---	158.8	142.7	149.4	60.33	142.7	15.88	108.0	387
365TSC	795.3	155.4	381.0	311.1	---	104.6	88.9	95.3	47.63	88.9	12.70	50.8	385
404TC	973.1	174.8	406.4	---	311.1	190.5	177.8	184.1	73.02	177.8	19.05	142.7	528
404TSC	896.9	174.8	406.4	---	311.1	114.3	101.6	108.0	53.97	101.6	12.70	69.9	524
405TC	973.1	174.8	406.4	349.2	---	190.5	177.8	184.1	73.02	177.8	19.05	142.7	546
405TSC	896.9	174.8	406.4	349.2	---	114.3	101.6	108.0	53.97	101.6	12.70	69.9	542
444TC	1133.3	209.6	482.6	---	368.3	227.1	209.6	215.9	85.72	209.6	22.22	174.8	729
444TSC	1038.4	209.6	482.6	---	368.3	131.8	114.3	120.7	60.33	114.3	15.88	76.2	722
445TC	1133.3	209.6	482.6	419.1	---	227.1	209.6	215.9	85.72	209.6	22.22	174.8	815
445TSC	1038.4	209.6	482.6	419.1	---	131.8	114.3	120.7	60.33	114.3	15.88	76.2	808
(1)													

(1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.

(2) "D" VARIES — 250TC – 320TC +.0, –.8; 360TC – 440TC +.0, –1.5

(3) "U" VARIES — UP TO 41.27 DIA. +.000, –.013; 41.27 AND LARGER +.00, –.03

(4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.

(5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.

(6) "AK" VARIES — 250TC – 280TC +.00, –.08; 320TC – 440TC +.00, –.13

(7) "N–W" VARIES +.0, –6.4

(8) DIMENSIONS ARE IN INCHES.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F–2,W–1, W–4,W–5,W–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 .05 T.I.R. UP TO AND INCLUDING 41.27 DIA. AND .08 T.I.R. 41.27 DIA. TO 127.00 MILL DIA.

FACE RUNOUT AND ECCENTRICITY — 250TC – 280TC INCL. .10 MAX. T.I.R.; 320TC – 440TC INCL. .18 MAX. T.I.R.

FRAME–_____ TYPE–_____ CERTIFIED FOR– _____

ORDER–_____ ITEM– _____ HP–_____ RPM–_____ PH– _____ HZ _____ VOLTS _____

RELIANCE SALES ORDER– _____ APPROVED BY–_____ DATE _____

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

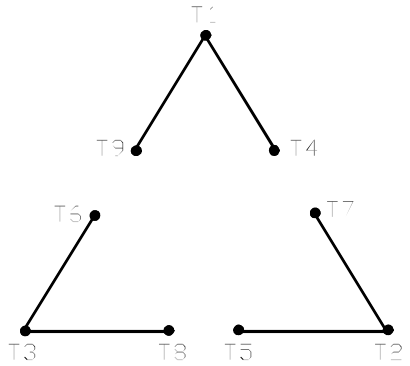
Baldor • Dodge • Reliance

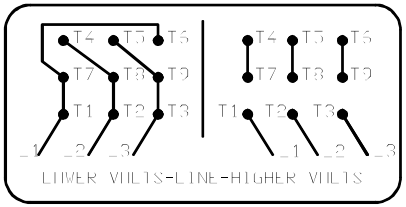
DIM SHEET 250TC THRU 440TC

REV. DESC: REMOVEING TITLE BLOCK		TDR: 000000441900
REV. LTR: A	VERSION: 01	
FILE: \RAG\00003\381	REVISED: 09:17:32 08/28/2007	BY: RAGRXH
MTL: –		

416820–002

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





(N. P. 1575-B)

416820–002

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REV. LTR: A	VERSION: 01	TDR: 000001009382
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