

BALDOR® • RELIANCE 

Product Information Packet

CEM4400T-5

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A40WG0665	CD Diagram:	416820-036	Mfg Plant:	
Mech. Spec:		Layout:	611740-003-SH1	Poles:	04	Created Date:	08-08-2014
Base:		Eff. Date:	05-08-2017	Leads:	3#2		

Specs			
Catalog Number:	CEM4400T-5	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	405TC	IP Rating:	NONE
Frame Material:	Iron	KVA Code:	G
Output @ Frequency:	100.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 2 AWG
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Type:	A40064M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	87
Agency Approvals:	CCSA US	Product Family:	General Industrial
	CSA EEV	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Current @ Voltage:	89.600 A @ 575.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line

Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Heater Indicator:	No Heater	Thermal Device - Winding:	None

Nameplate NP2496L

MOBIL POLYREX EM

Nameplate NP2383L									
CAT.NO.	CEM4400T-5			SPEC NO.	A40-6213-0665				
HP	100	AMPS	89.6	VOLTS	575	DESIGN	B		
FRAME	405TC	RPM	1785	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	87	NEMA-NOM-EFFICIENCY	95.4		
NEMA NOM/CSA QUOTED EFF				MAX CORR KVAR	18	GUARANTEED EFFICIENCY	94.5		
				MOTOR WEIGHT	1326				

Parts List		
Part Number	Description	Quantity
SA285082	SA A40-6213-0665	1.000 EA
RA271339	RA A40-6213-0665	1.000 EA
421948051	LABEL, MYLAR	1.000 EA
NP2496L	MOTOR LUBE NAMEPLATE	1.000 EA
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
NP2383L	SUPER-E ,SS, CC, CSA-C US, CSA EEV	1.000 EA
089412051B	BRKT 400 089412051WCD	1.000 EA
415072001B	CLAMP	1.000 EA
083198036A	FANCV BLKT 400	1.000 EA
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 EA
078548001R	FAN KB 234/150 (84) 400	1.000 EA
004824015A	GREASE POLYREX EM	0.880 LB
032018016EK	HHCS 5/8-11X2 PLATED	4.000 EA
032018010CK	HHCS 3/8-16X1-1/4 PLTD.	4.000 EA
032018030CK	HHCS 3/8-16X3-3/4 PLATED	3.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
410700000DA	WAVY SPRING WASHER	1.000 EA
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 EA
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 EA
034000014AB	WSH ID.406 OD.812 TH.065	4.000 EA
034530060AB	P/NIP 1/8X7-1/2 GALV.	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
034690001AB	1/8" NPT SQHDPLG	1.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA
089412062A	BRKT 400 089416053WCD	1.000 EA
032018016EK	HHCS 5/8-11X2 PLATED	4.000 EA
032018032CK	HHCS 3/8-16X4 PLATED	3.000 EA
077176000L	C/BOX, 360-400	1.000 EA
077176001A	CBOXC, PAINTED 360-400	1.000 EA
043292000AJ	GASK 320-400	1.000 EA
402731001A	GASK 360-440	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.375 GA
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 EA
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 EA
406099000A	PLUG - FAN COVER 320-440	1.000 EA
033512004LB	HHTTS 1/4-20X1/2 PLTD.	1.000 EA
048977006C	GRFTG - XP	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 EA
604797045	STD. 400 FRAME SKID	1.000 EA
032510024D	CARRIAGE BOLT - 444	2.000 EA

Product Information Packet: CEM4400T-5 - 100HP,1785RPM,3PH,60HZ,405TC,TEFC,F1

034001014AB	FLAT WASHER 3/8"PLATED	2.000 EA
034001016AB	WSHR .562ID 1.375OD .109	2.000 EA
033300014AC	HEX NUT, SHIPPING - 400	2.000 EA
604799003C	SHIPPING BAG -Replaced by 604799003C	1.000 EA

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405LP	100	P	3/60	1785	575
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
89.6	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
496079	418142-33-RE	---	---	.0770		

PERFORMANCE

LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	22.9	1800	5.49	0
1/4	25.0	31.3	1796	64.3	93.0
2/4	50.0	47.6	1792	82.5	95.4
3/4	75.0	67.7	1788	86.7	95.7
4/4	100	89.8	1783	87.4	95.4
5/4	125	113	1778	87.3	94.9

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	151	445	580
PULL UP	360	136	400	565
BREAKDOWN	1721	250	735	306
FULL LOAD	1783	100	295	89.8

AMPERES SHOWN FOR 575. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

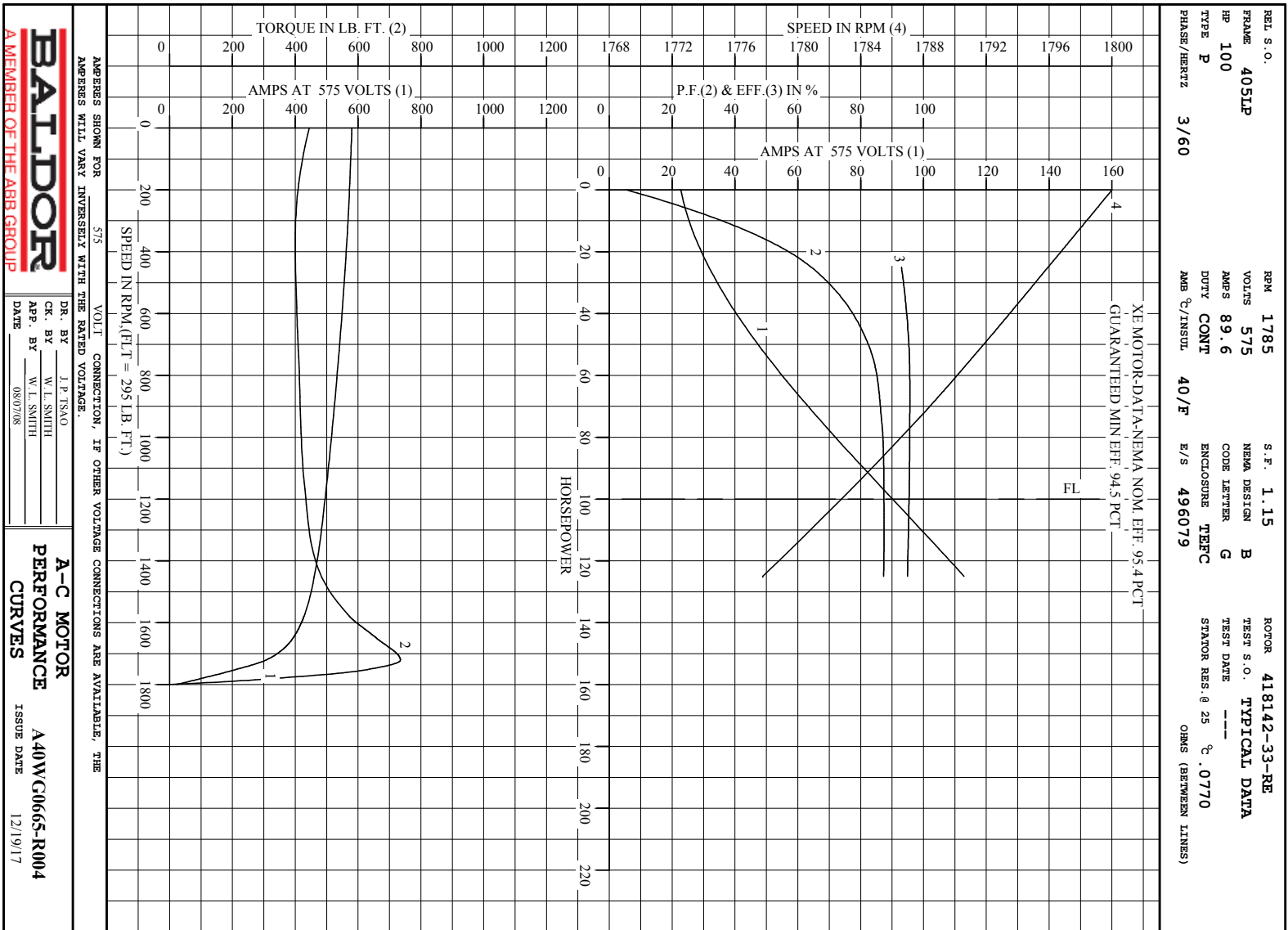
REMARKS: TYPICAL DATA
 XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT
 GUARANTEED MIN EFF. 94.5 PCT



DR. BY J. P. TSANO
 CK. BY W. I. SMITH
 APP. BY W. I. SMITH
 DATE 08/07/08

A-C MOTOR PERFORMANCE DATA
 A40WG0665-R004
 ISSUE DATE 12/19/17

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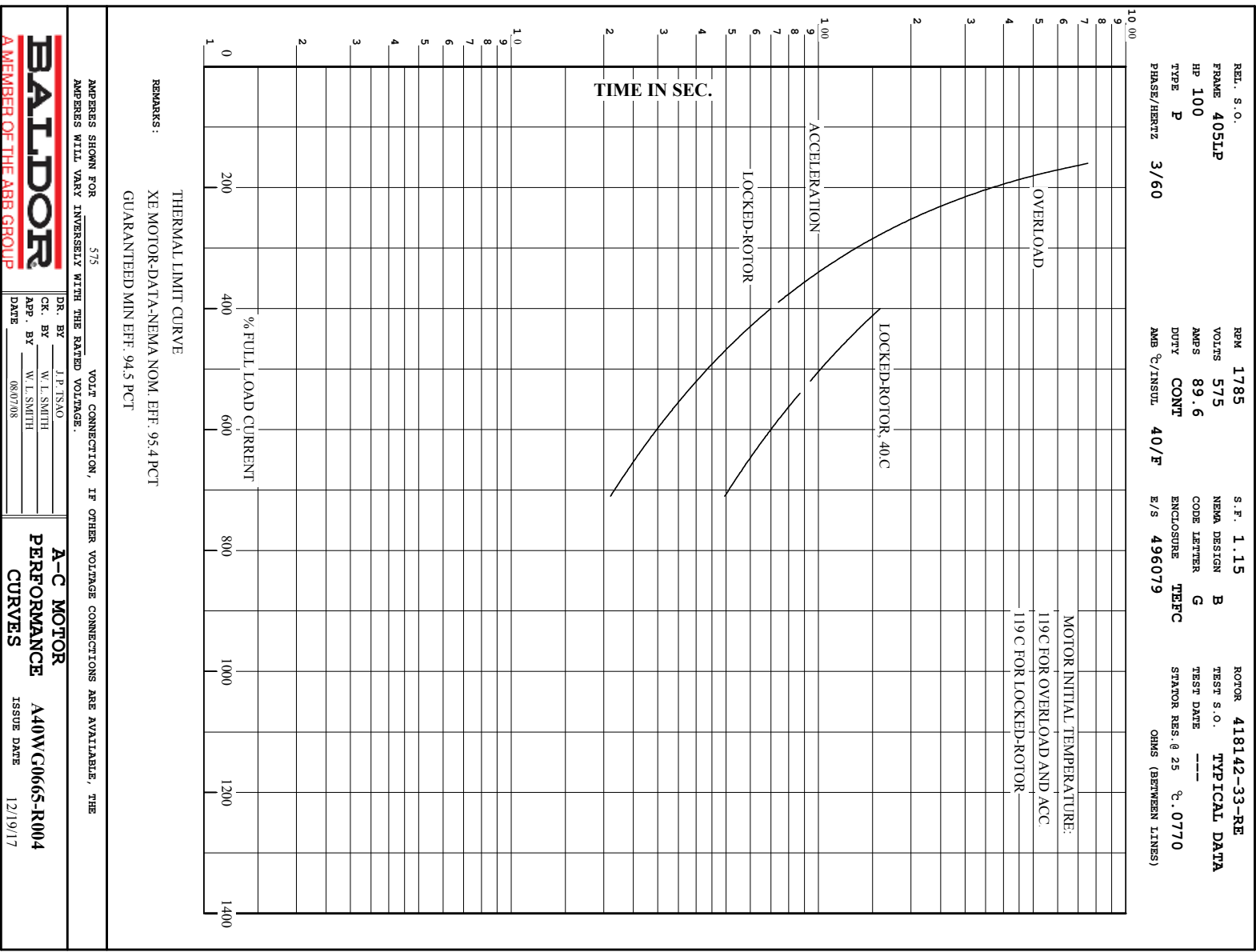


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DR. BY J. P. TSAO
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 08/07/08

A-C MOTOR
PERFORMANCE
CURVES
A40WC0665-R004
ISSUE DATE 12/19/17

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APP. BY W.L. SMITH
DATE 08/27/08

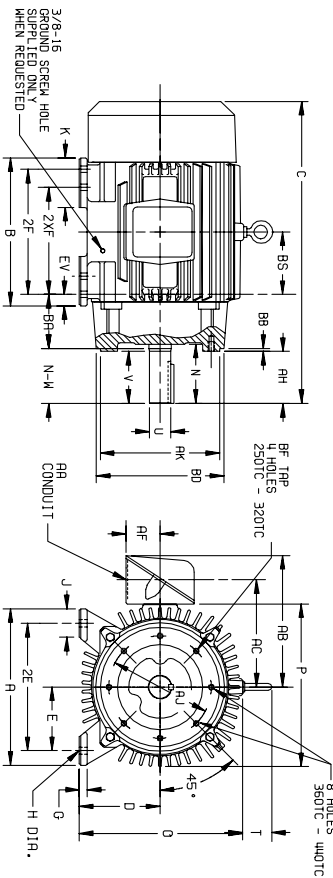
A-C MOTOR
PERFORMANCE
CURVES

A40W/C0665-R004
ISSUE DATE 12/19/17

611740-003-SHI

DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT, NEMA "C" FACE
SQUIREL-CAGE INDUCTION
FRAMES 250TC THRU 440TC
COOLING: FAN COOLED



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

FRAME	A	D(2)	E	G	H	J	K	EV	O	P	T	AA	AB	AC	AF	BA	BB	BD	BF	WTS	(6)	
												STEEL	TERMINAL	BOX						INCH	LB.	
254TC-256TC	12.50	6.25	5.00	.75	1.56	2.50	---	1.00	13.25	13.25	4.44	1-7/16	0.75	8.75	2.50	4.75	2.5	9.00	1/2-13	.75	7.25	8.500
254TC-266TC	13.75	7.00	5.50	.75	1.56	2.50	---	1.00	14.75	14.88	2.44	1-7/16	1.00	9.19	4.75	2.5	11.25	11/2-13	.75	9.00	10.500	
324TC-326TC	15.50	8.00	6.25	.88	1.69	2.75	4.50	---	14.75	16.69	17.00	2.44	2	15.19	11.44	4.28	5.25	13.12	5/8-11	.94	11.00	12.500
324TC-365TC	17.00	9.00	7.00	.88	1.69	2.75	3.88	1.38	18.50	19.50	2.94	3	18.06	14.00	5.38	5.88	25.13	13.12	5/8-11	.94	11.00	12.500
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	15.28	5.38	6.62	25.13	13.12	5/8-11	.94	11.00	12.500
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	7/8-11	.94	14.00	16.000	

FRAME	SIZE	C	BS	B	ZF	(4)	N	AH	N-W7	U(3)	V	SO.	LGTH.	WEIGHT
						2XF	N							(5)
254TC	25.06	5.00	12.00	---	8.25	4.06	3.75	4.00	1.625	3.75	3.75	2.88	3.15	3.25
256TC	25.06	5.00	12.00	10.00	---	4.06	3.75	4.00	1.625	3.75	3.75	2.88	3.25	3.25
284TC	27.44	5.50	13.00	---	9.50	5.00	4.38	4.62	1.875	4.38	5.00	3.25	4.45	4.45
284TC	26.06	5.50	13.00	---	9.50	5.00	3.25	1.625	3.00	3.75	1.88	4.45	4.45	4.45
286TC	27.44	5.50	13.00	11.00	---	5.00	4.38	4.62	1.875	4.38	5.00	3.25	4.60	4.60
286TC	26.06	5.50	13.00	11.00	---	5.00	3.25	1.625	3.00	3.75	1.88	4.60	4.60	4.60
324TC	30.44	6.00	14.75	---	10.50	5.62	5.00	5.25	2.125	5.00	5.00	3.88	5.55	5.55
324TC	30.44	6.00	14.75	---	10.50	5.62	5.00	5.25	2.125	5.00	5.00	3.88	5.55	5.55
326TC	30.44	6.00	14.75	12.00	---	5.62	5.00	5.25	2.125	5.00	5.00	3.88	5.95	5.95
326TC	28.94	6.00	14.75	12.00	---	5.62	5.00	5.25	2.125	5.00	5.00	3.88	5.95	5.95
364TC	33.44	6.12	15.00	---	11.25	6.25	5.88	2.375	2.375	5.62	6.25	4.25	8.15	8.15
364TC	31.71	6.12	15.00	---	11.25	6.25	5.88	2.375	2.375	5.62	6.25	4.25	8.15	8.15
365TC	33.44	6.12	15.00	12.25	---	6.25	5.88	2.375	2.375	5.62	6.25	4.25	8.15	8.15
365TC	31.71	6.12	15.00	12.25	---	6.25	5.88	2.375	2.375	5.62	6.25	4.25	8.15	8.15
404TC	35.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	5.00	3.75	11.66	11.66
404TC	35.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	5.00	3.75	11.66	11.66
405TC	35.31	6.88	16.00	13.75	---	4.50	4.00	4.25	2.125	4.00	5.00	3.75	11.66	11.66
405TC	35.31	6.88	16.00	13.75	---	4.50	4.00	4.25	2.125	4.00	5.00	3.75	11.66	11.66
444TC	44.62	8.25	19.00	---	14.50	5.19	4.50	4.75	2.375	4.50	6.25	6.88	16.08	16.08
444TC	44.62	8.25	19.00	---	14.50	5.19	4.50	4.75	2.375	4.50	6.25	6.88	16.08	16.08
445TC	44.62	8.25	19.00	16.50	---	6.94	6.25	6.50	3.375	6.25	8.75	6.88	17.98	17.98
445TC	40.88	8.25	19.00	16.50	---	6.94	6.25	6.50	3.375	6.25	8.75	6.88	17.98	17.98

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES
250TC - 320TC +.00, -.03
360TC - 440TC +.00, -.06
HP TO 1.625 DIA. +.000, -.0005
- (3) "U" VARIES
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) "AK" 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-300-0471119

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

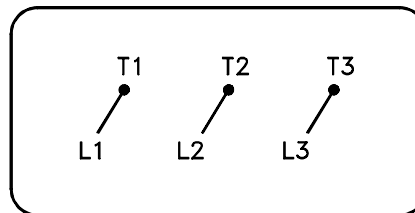
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MTL: -		

Baldor • Dodge • Reliance

DIM SHEET 250TC THRU 440TC

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11:54:06 04/30/2010	
MTL: -	BY: RAGRA	

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CONN DIAG - STANDARD 3 LEAD

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