



---

# Customer information packet

## CEM4400T-5

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

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	405TC
Frame Material	Iron
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	89.600 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	89.6 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A40064M

## Part detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WGO665
Layout	611740-003-SH1
Eff. date	11-01-2021
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	08-08-2014

<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	38.31 IN
<b>Power Factor</b>	87
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1785 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

---

NP2496L	
MOBIL POLYREX EM	

---

**NP2383L**

<b>CAT.NO.</b>	CEM4400T-5	<b>SPEC NO.</b>	A40-6213-0665						
<b>HP</b>	100	<b>AMPS</b>	89.6	<b>VOLTS</b>	575	<b>DESIGN</b>	B		
<b>FRAME</b>	405TC	<b>RPM</b>	1785	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>DRIVE END BEARING</b>	80BC03J30X	<b>PHASE</b>	3	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F		
<b>OPP D.E. BEARING</b>	80BC03J30X	<b>TYPE</b>	P	<b>ENCL</b>	TEFC	<b>CODE</b>	G		
<b>SER.NO.</b>		<b>POWER FACTOR</b>	87	<b>NEMA-NOM-EFFICIENCY</b>	95.4				
<b>NEMA NOM/CSA QUOTED EFF</b>		<b>MAX CORR KVAR</b>	18	<b>GUARANTEED EFFICIENCY</b>	94.5				
		<b>MOTOR WEIGHT</b>	1328						

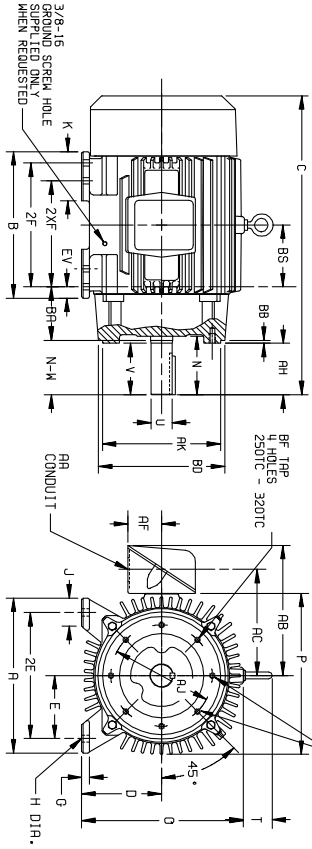








**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIRREL-CAGE INDUCTION COOLING: FAN COOLED  
 ENCLOSURE: TOTALLY ENCLOSED  
 MOUNTING: FOOT, NEMA "C" FACE  
 FRAMES 250TC THRU 440TC



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				BF TYP DEPTH	MIN AL AK					
												AA	AB	AC	AF							
254TC-250TC	12.50	6.25	5.00	.75	.56	2.50	---	1.00	13.25	5.44	1-1/4	10.75	8.75	2.50	4.75	2.50	9.00	1/2-13	.75	9.00	10.500	
294TC-280TC	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	2.50	11.25	1/2-13	.75	9.00	10.500
324TC-320TC	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	2.50	13.12	5/8-11	.94	11.00	12.500
364TC-360TC	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	2.50	13.00	5/8-11	.94	11.00	12.500
404TC-400TC	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	2.50	13.12	5/8-11	.94	11.00	12.500
444TC-440TC	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	2.50	16.75	5/8-11	.94	14.00	16.000

FRAME	SIZE	C	BS	B	ZF	(4)				SHAFT AND KEY				WEIGHT LBS. (5)
						ZF	N	AH	N-W(7)	V	U(3)	SO.	LGTH.	
254TC	25.06	5.00	12.00	---	8.25	4.06	3.75	4.00	1.625	3.75	3.75	2.88	3.75	3.25
294TC	27.44	5.50	12.00	10.00	---	4.06	3.75	4.00	1.625	3.75	3.75	2.88	3.75	3.25
324TC	27.44	6.50	13.00	---	9.50	5.00	4.38	4.62	1.875	4.38	5.00	3.25	4.45	4.45
364TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.45	4.45
404TC	27.44	6.50	13.00	11.00	---	3.62	3.38	4.62	1.875	4.38	5.00	3.25	4.60	4.60
444TC	26.06	6.50	13.00	11.00	---	3.62	3.00	4.25	1.625	3.00	3.75	1.88	4.60	4.60
324TSC	28.94	6.00	14.75	---	10.50	4.62	3.50	4.25	2.125	3.50	4.00	2.80	5.82	5.82
324TSC	30.44	6.00	14.75	12.00	---	4.62	3.50	4.25	2.125	3.50	4.00	2.80	5.82	5.82
324TSC	30.44	6.00	14.75	12.00	---	4.12	3.50	3.75	1.875	3.50	5.00	2.00	5.95	5.95
364TSC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	8.15	8.15
364TSC	31.31	6.12	15.00	---	11.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09	8.09
364TSC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	8.15	8.15
364TSC	31.31	6.12	15.00	---	11.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.09	8.09
365TSC	33.44	6.12	15.00	12.25	---	6.25	5.62	5.88	2.375	5.62	6.25	4.25	8.55	8.55
404TSC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.82	11.65	11.65
404TSC	38.31	6.88	16.00	---	12.25	7.50	7.00	7.25	2.875	7.00	7.50	5.82	11.65	11.65
404TSC	35.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	5.00	2.75	11.56	11.56
404TSC	38.31	6.88	16.00	13.75	---	7.50	7.00	7.25	2.875	7.00	7.50	5.82	12.05	12.05
440TSC	35.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	5.00	2.75	11.56	11.56
444TSC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	16.08	16.08
444TSC	40.88	8.25	19.00	---	14.50	5.19	4.50	4.75	2.375	4.50	6.25	3.00	15.92	15.92
445TSC	44.62	8.25	19.00	---	14.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	17.98	17.98
445TSC	40.88	8.25	19.00	---	14.50	5.19	4.50	4.75	2.375	4.50	6.25	3.00	17.82	17.82

- (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 [250TC - 320TC +.00, -.03] [360TC - 440TC +.00, -.06]. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- (3) "U" VARIES [625 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. FACE RUNOUT AND [250TC - 280TC INCL. .004 MAX. T.I.R. ECCENTRICITY] [320TC - 440TC INCL. .007 MAX. T.I.R.]
- (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) "K" 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-003-003-074/119

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

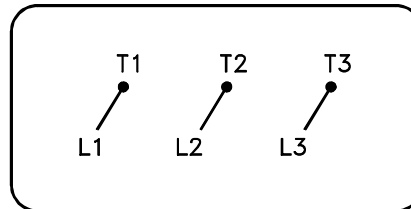
REV. DESC: REMOVING TITLE BLOCK	VERSION: 01	TDR: 000000441900
REV. LTR: A	REVISED: 09:15:38 08/28/2007	BY: RAGRKH
FILE: \RAG\00003\380		
MTL: -		

**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	

**BALDOR**

CONN DIAG - STANDARD 3 LEAD  
SH 1 of 1