

BALDOR® • RELIANCE™

Customer information packet

CEM4400TS

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

Class - None

Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	405TSC
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	112.000 A @ 460.0 V 224.000 A @ 230.0 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	112.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WGO692
Layout	611740-003-SH1
Eff. date	11-01-2021
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	08-08-2014

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	35.31 IN
Power Factor	87
Product Family	General Industrial
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	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

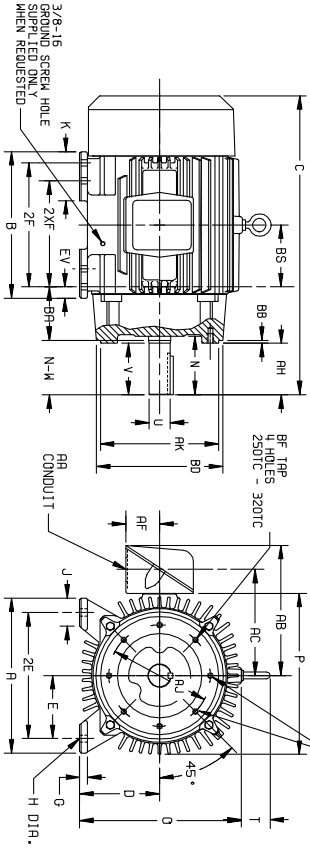
Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2383L

CAT.NO.	CEM4400TS	SPEC NO.	A40-6214-0692						
HP	100	AMPS	224/112	VOLTS	230/460	DESIGN	B		
FRAME	405TSC	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							

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						MIN. TYP. DEPTH	AL	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	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	11.00	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	3.12	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	3/4-10	1.12	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	3/4-10	1.12	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	5/8-11	.94	14.00	16.000	

FRAME	SIZE	C	BS	B	ZF	N	AH	SHAFT AND KEY		WGHT (LBS.)			
								V	SO.				
254TC	25.06	5.00	12.00	---	8.25	4.06	3.75	4.00	1.625	3.75	2.88	3.75	
294TC	27.44	5.50	12.00	10.00	---	4.06	3.75	4.00	1.625	3.75	2.88	3.75	
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
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
404TC	27.44	6.50	13.00	---	9.50	3.62	3.38	4.62	1.875	4.38	5.00	3.25	4.60
444TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.60
250TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.60
280TC	26.06	6.50	13.00	---	9.50	3.62	3.00	2.25	1.625	3.00	3.75	1.88	4.60
320TC	28.94	6.00	14.75	---	10.50	4.75	3.50	4.25	2.125	3.50	4.00	2.00	5.82
360TC	30.44	6.00	14.75	---	10.50	4.75	3.50	4.25	2.125	3.50	4.00	2.00	5.82
400TC	30.44	6.00	14.75	---	10.50	4.75	3.50	4.25	2.125	3.50	4.00	2.00	5.82
440TC	33.44	6.12	15.00	---	11.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	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
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
364TSC	33.44	6.12	15.00	---	12.25	6.25	5.62	5.88	2.375	5.62	6.25	4.25	8.55
365TSC	31.31	6.12	15.00	---	12.25	4.12	3.50	3.75	1.875	3.50	5.00	2.00	8.49
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
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
404TSC	38.31	6.88	16.00	---	12.25	4.50	4.00	4.25	2.125	4.00	5.00	2.75	11.56
409TSC	38.31	6.88	16.00	---	12.25	7.00	7.25	2.875	7.00	7.50	5.82	12.05	
409TSC	35.31	6.88	16.00	---	13.75	4.50	4.00	4.25	2.125	4.00	5.00	2.75	11.96
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
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
445TC	44.62	8.25	19.00	---	16.50	8.94	8.25	8.50	3.375	8.25	8.75	6.88	17.98
445TSC	40.88	8.25	19.00	---	16.50	5.19	4.50	4.75	2.375	4.50	6.25	3.00	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.
- (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 +.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: _____

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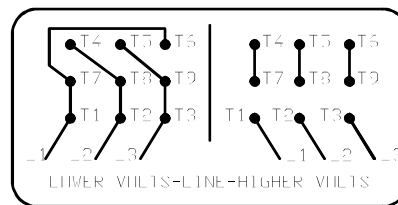
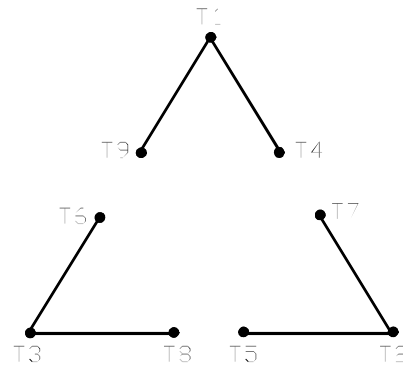
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

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Baldor • Dodge • Reliance
 DIM SHEET 250TC THRU 440TC

416820-002

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



(N.P. 1575-B)

416820-002

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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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