ABB BALDOR RELIANCE

Customer information packet

CEM4400T

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1
Class - None
Division - Not Applicable

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9/10/2026 9:08:31 AM

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	CURUSEEV
	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary 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
IP Rating	NONE
KVA Code	G
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0692
Layout	617429-739
Eff. date	09-04-2024
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	03-27-2017

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.19 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.15
Shaft Diameter	2.875 IN
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

NP2349L

SPEC NO.	A40-7234-0692		**CAT.NO.**	CEM4400T					**FRAME**	405TC		
HP	100	**VOLTS**	230/460	**PHASE**	3	**DESIGN**	B	**TYPE**	P			
RPM	1785	**AMPS**	224/112	**HZ**	60	**AMB**	40	**SF**	1.15			
DRIVE END BEARING	80BC03J30X		**DUTY**	CONT		**INSUL.CLASS**	F					
OPP D.E. BEARING	80BC03J30X		**ENCL**	TEFC	**CODE**	G						
SER.NO.			**POWER FACTOR**	87				**NEMA-NOM-EFFICIENCY**		95.4		
						MAX CORR KVAR	18	**GUARANTEED EFFICIENCY**		94.5		
						NEMA NOM/CSA QUOTED EFF						
								MOTOR WEIGHT				

Parts List

Part number	Description	Quantity
SA336254	SA A40-7234-0692	1.000 ea
RA324489	RA A40-7234-0692	1.000 ea
421948032	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
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
412118006A	DRAIN	2.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
415072001B	CLAMP	1.000 ea
083198127A	G400 MOLDED FAN COVER	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
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
089412504A	G400 STD C-FACE BRKT 089416507WCA	1.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018032CK	HHCS 3/8-16X4 PLATED	3.000 ea
077176000L	C/BOX, PAINTED 440	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea
043292000AJ	GASK 320-400	1.000 ea
402731001A	GASK 360-440	1.000 ea

032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.400 ga
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
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
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	PLASTIC BAG 42X32X46	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	100	P	3/60	1785	230/460

AMPS	DUTY	AMB°C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
224/112	CONT	40/F	1.15	B	G	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25°C OHMS (BETWEEN LINES)
596956	418142-33-RE	---	---	.0123/.0492

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	28.6	1800	5.49	0
1/4	25.0	39.2	1796	64.3	93.0
2/4	50.0	59.5	1792	82.5	95.4
3/4	75.0	84.6	1788	86.7	95.7
4/4	100	112	1783	87.4	95.4
5/4	125	141	1778	87.3	94.9

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	151	445	725
PULL UP	360	136	400	706
BREAKDOWN	1721	250	735	382
FULL LOAD	1783	100	295	112

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

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

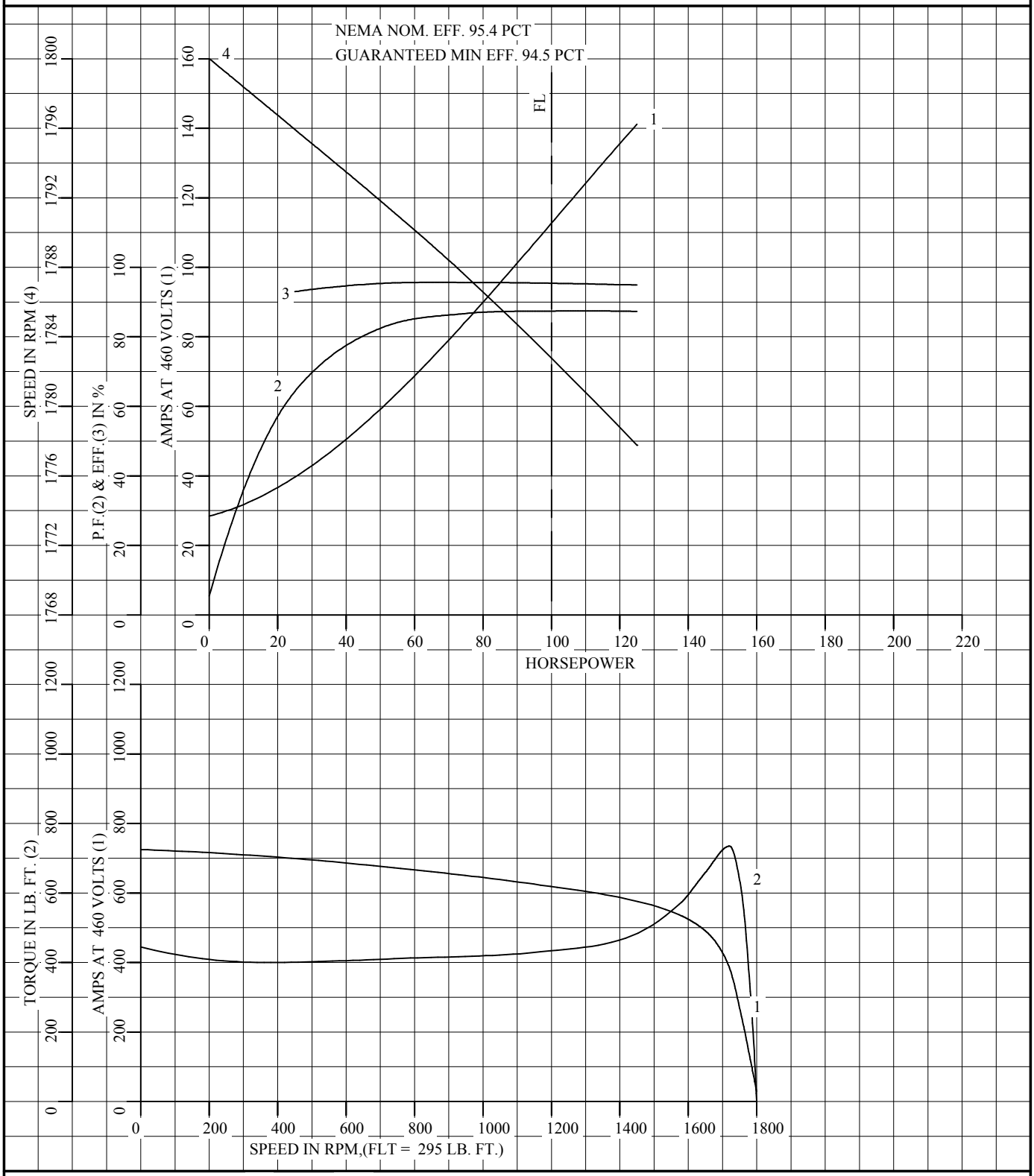
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY R.K. BRIDGES
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 05/14/14

A-C MOTOR PERFORMANCE DATA

A40WG0692-R001
ISSUE DATE 01/04/18

REL S.O.		RPM	1785	S.F.	1.15	ROTOR	418142-33-RE
FRAME	405T	VOLTS	230/460	NEMA DESIGN	B	TEST S.O.	TYPICAL DATA
HP	100	AMPS	224/112	CODE LETTER	G	TEST DATE	---
TYPE	P	DUTY	CONT	ENCLOSURE	TEFC	STATOR RES.@ 25 ℃	.0123/.0492
PHASE/HERTZ	3/60	AMB ℃/INSUL	40/F	E/S	596956		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
A MEMBER OF THE ABB GROUP

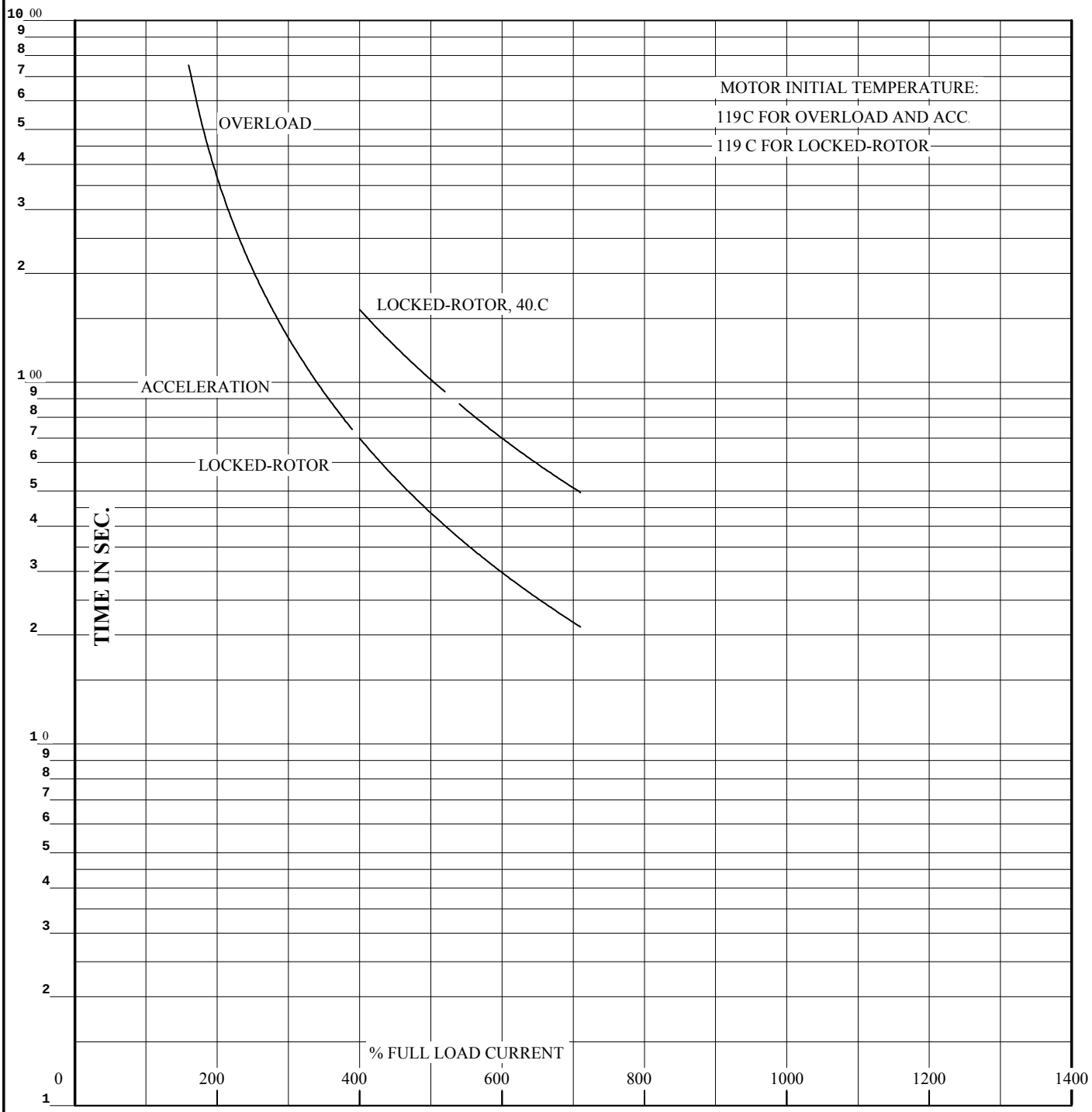
DR. BY	R.K. BRIDGES
CK. BY	W. L. SMITH
APP. BY	W. L. SMITH
DATE	05/14/14

A-C MOTOR PERFORMANCE CURVES

A40WG0692-R001

ISSUE DATE 01/04/18

REL. S.O.		RPM	1785	S.F.	1.15	ROTOR	418142-33-RE
FRAME	405T	VOLTS	230/460	NEMA DESIGN	B	TEST S.O.	TYPICAL DATA
HP	100	AMPS	224/112	CODE LETTER	G	TEST DATE	---
TYPE	P	DUTY	CONT	ENCLOSURE	TEFC	STATOR RES.@ 25 ℃	.0123/.0492
PHASE/HERTZ	3/60	AMB ℃/INSUL	40/F	E/S	596956		OHMS (BETWEEN LINES)



REMARKS:

THERMAL LIMIT CURVE

NEMA NOM. EFF. 95.4 PCT

GUARANTEED MIN EFF. 94.5 PCT

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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DR. BY	R.K. BRIDGES
CK. BY	W. L. SMITH
APP. BY	W. L. SMITH
DATE	05/14/14

A-C MOTOR PERFORMANCE CURVES

A40WG0692-R001

ISSUE DATE 01/04/18

DUTY MASTER ALTERNATING CURRENT MOTORS

617429-739

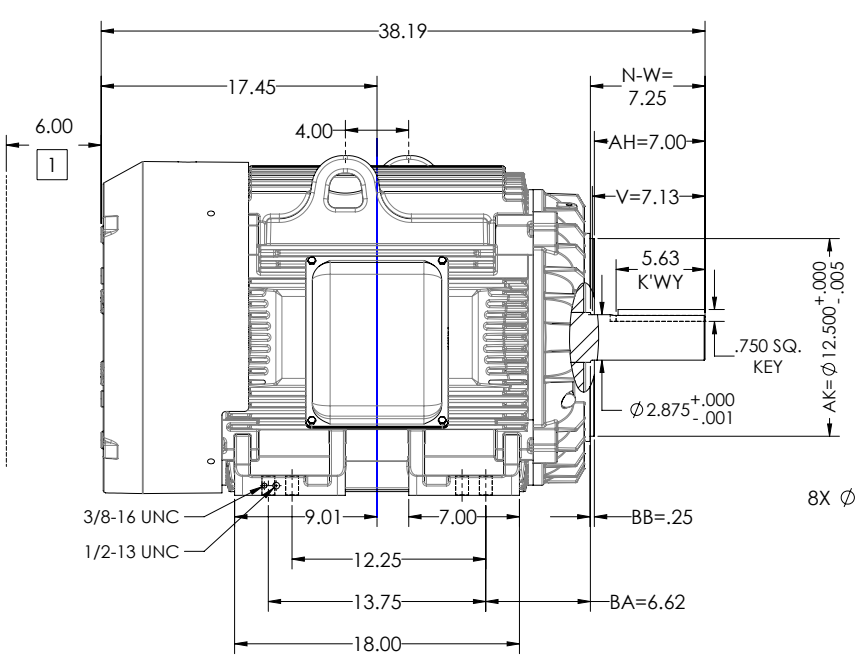
ENCLOSURE: TOTALLY ENCLOSED

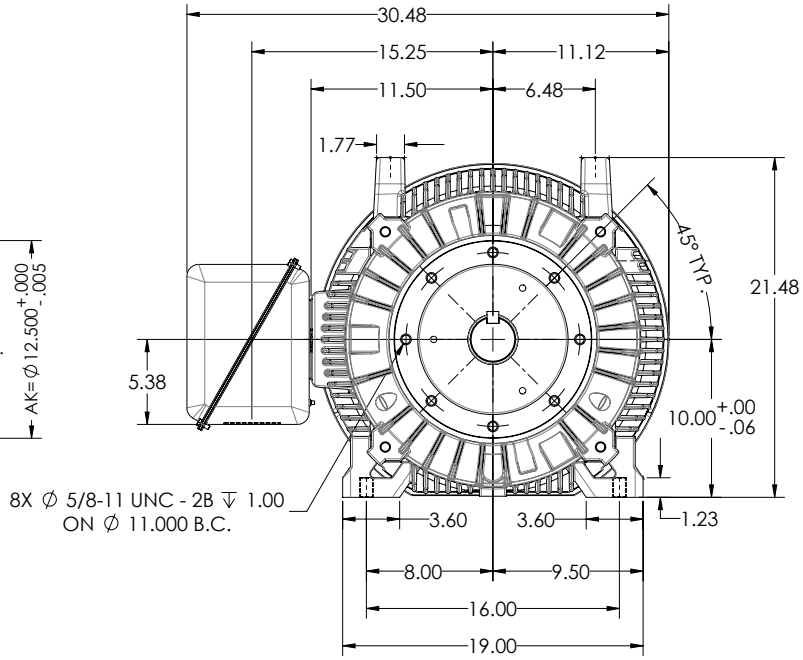
SQUIRREL-CAGE INDUCTION

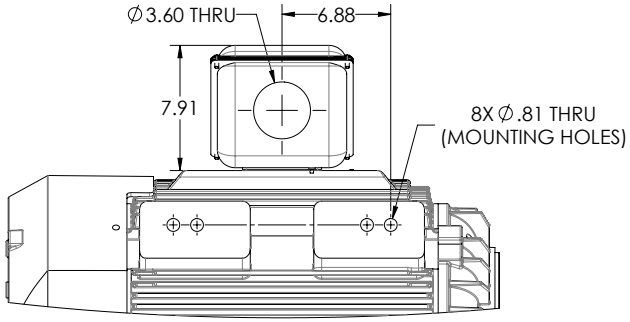
COOLING: FAN COOLED

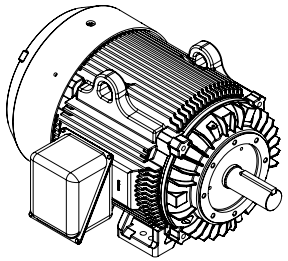
MOUNTING: FOOT, F-1

G405TC/G404TC FRAME MOUNTING HOLES









1 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

DIMENSIONS ARE IN INCHES.
WEIGHT (LBS): 1350, MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

MAX FACE RUNOUT AND FIT ECCENTRICITY = 0.007 T.I.R.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

SHEET NUMBER 1 OF 1

617429-739

REV. DESC: NEW DRAWING			
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MODEL NO. 617429-739			REF:
BY: USJEDIL	Material:		C

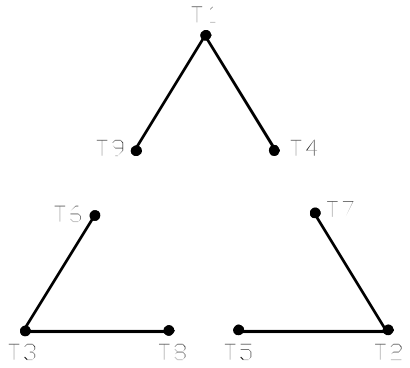
BALDOR

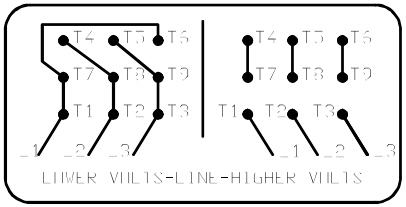
G405TC/404TC TEFC F1 FOOTED SIDE/CENTER STEEL C/BOX

617429-739

416820–002

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





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BALDOR - RELIANCE®

CONN DIAG – STANDARD 9 LEAD, DELTA–CONNECTED

SH 1 of 1