ABB BALDOR RELIANCE

Customer information packet

EM4400T

100HP, 1785RPM, 3PH, 60HZ, 405T, A40064M, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	405T
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	224.000 A @ 230.0 V
	112.000 A @ 460.0 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	T
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0251
Layout	617429-001
Eff. date	09-04-2024
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	07-16-2013

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.19 IN
Power Factor	87
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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

NP2349L												
SPEC NO.	P40G3923		**CAT.NO.**	EM4400T					**FRAME**	405T		
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				

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
XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT
GUARANTEED MIN EFF. 95.0 PCT

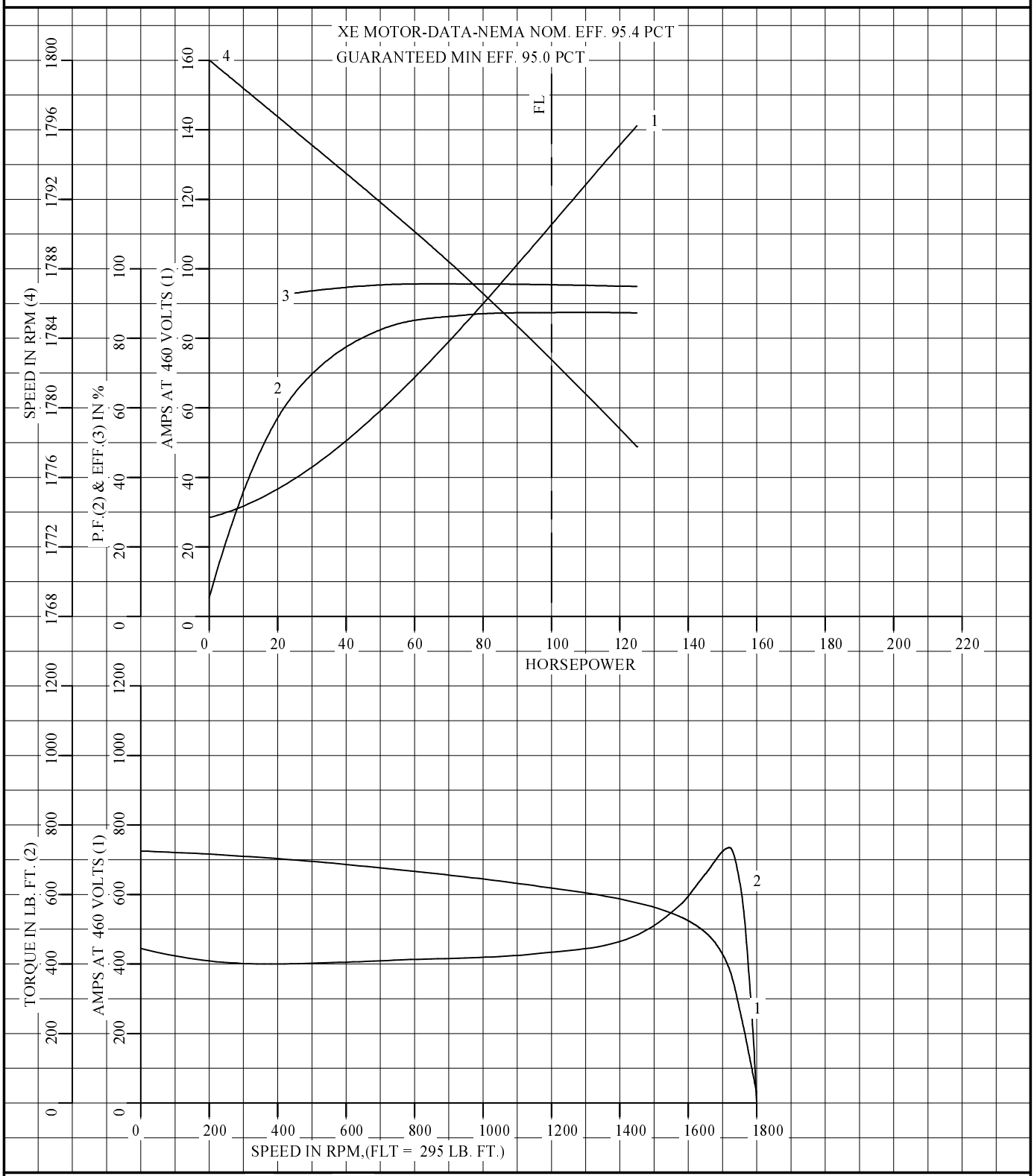
BALDOR

DR. BY J.J.HARRISON
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 07/26/04

A-C MOTOR PERFORMANCE DATA

A40WG0251-R001
ISSUE DATE 12/15/10

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

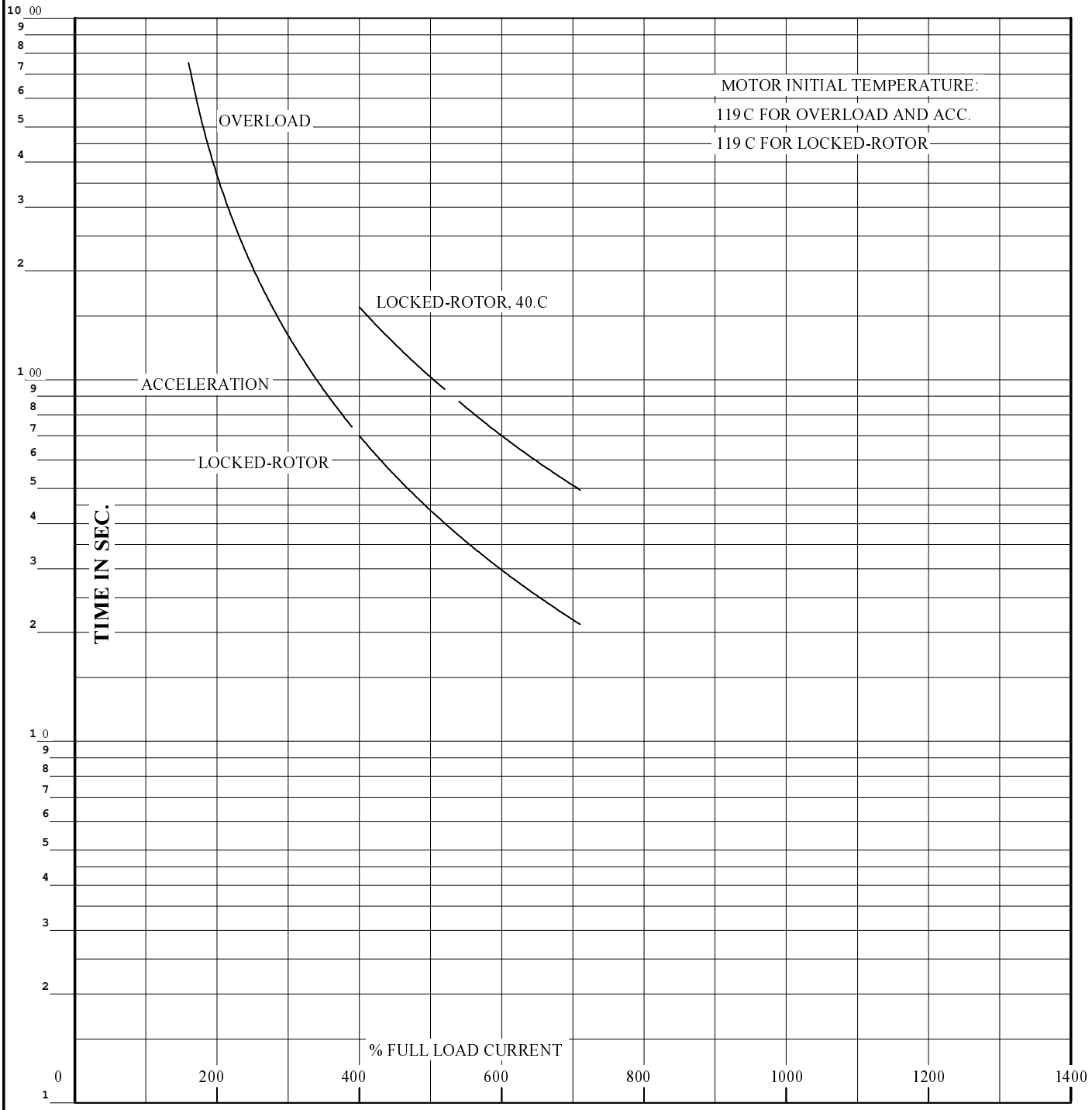
DR. BY J.J.HARRISON
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 07/26/04

A-C MOTOR PERFORMANCE CURVES

A40WG0251-R001

ISSUE DATE 12/15/10

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)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT

GUARANTEED MIN EFF. 95.0 PCT

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

BALDOR

DR. BY	J.J.HARRISON
CK. BY	W. L. SMITH
APP. BY	W. L. SMITH
DATE	07/26/04

A-C MOTOR PERFORMANCE CURVES A40WG0251-R001 ISSUE DATE 12/15/10

DUTY MASTER ALTERNATING CURRENT MOTORS

617429-001

ENCLOSURE: TOTALLY ENCLOSED

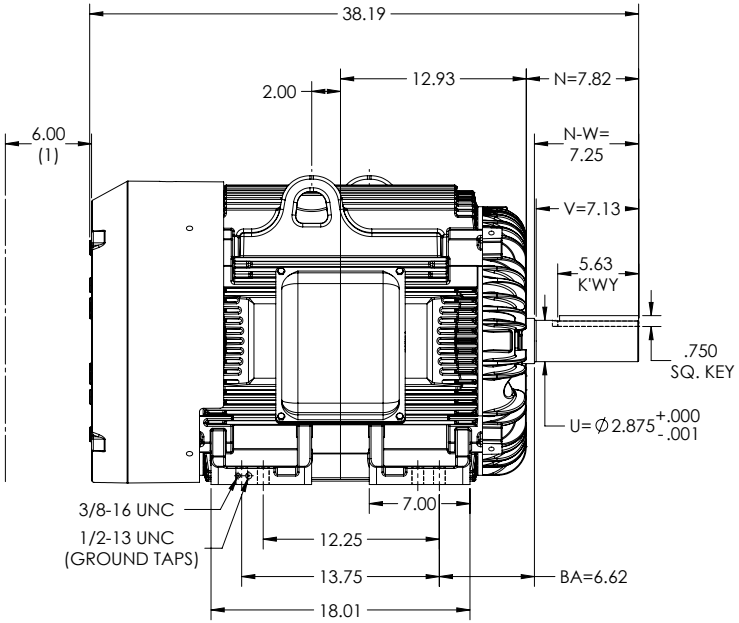
SQUIRREL-CAGE INDUCTION

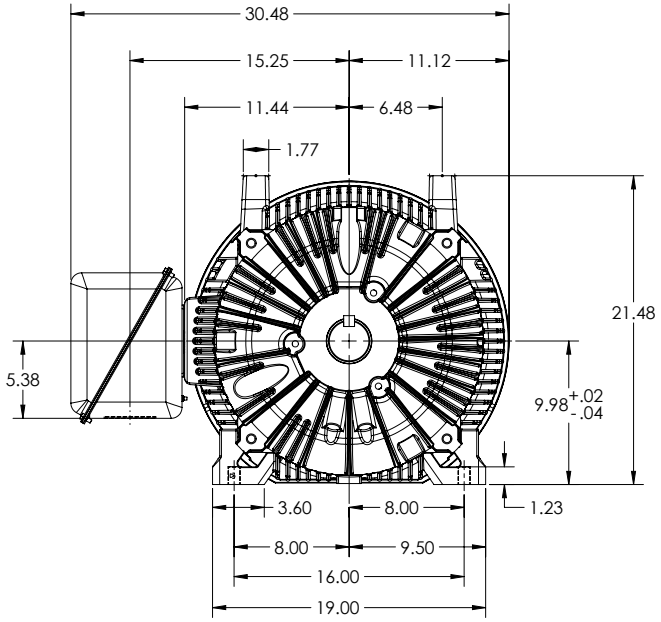
MOUNTING: FOOT, F1

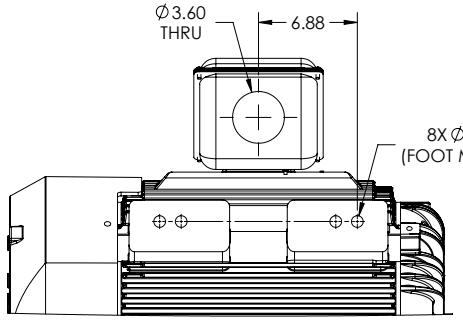
G405T/G404T FRAME MOUNTING HOLES

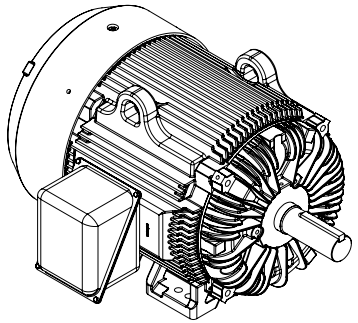
COOLING: FAN COOLED

STEEL CONDUIT BOX









(1) OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

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

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

SHEET NUMBER 1 OF 2	REV. DESC: CHG D.E. BRKT WITHOUT FACE DRAINS		
617429-001	REV: D	VERSION: 04	REVISED: 11:04:59 03/09/2022
	MODEL NO. 617429-001		REF:
	BY: RAGGDM	Material:	C

TDR: 000001187401

BALDOR

G405T/404T STD TEFC F1 FOOTED STEEL CONDUIT BOX

617429-001

DUTY MASTER ALTERNATING CURRENT MOTORS

617429-001

ENCLOSURE: TOTALLY ENCLOSED

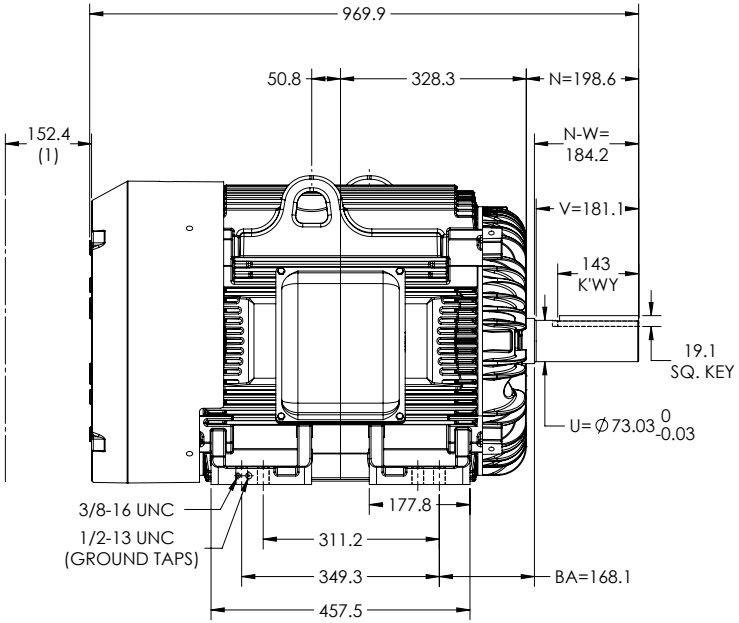
SQUIRREL-CAGE INDUCTION

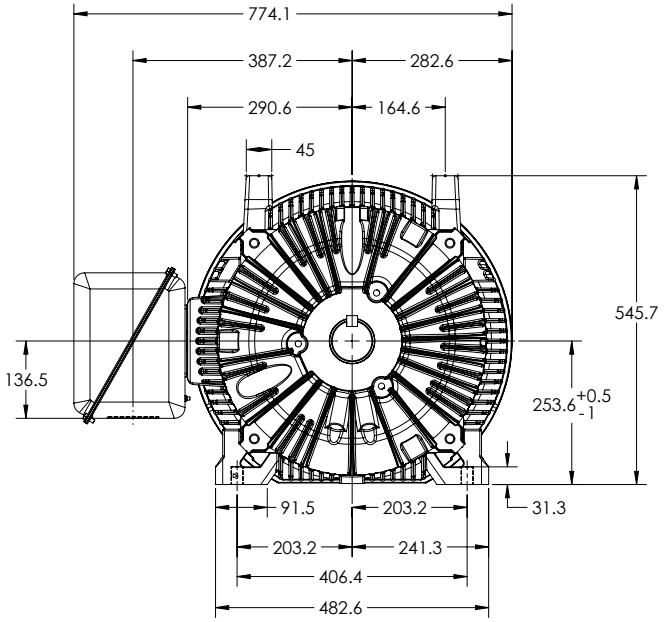
MOUNTING: FOOT, F1

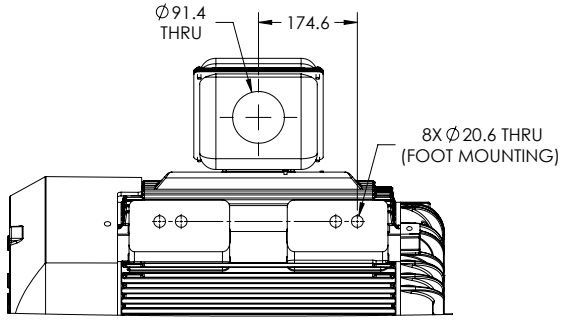
G405T/G404T FRAME MOUNTING HOLES

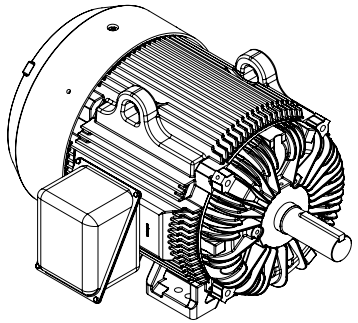
COOLING: FAN COOLED

STEEL CONDUIT BOX









(1) OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .08 T.I.R.

DIMENSIONS ARE IN MILLIMETERS.
MOTOR WEIGHT: 612, MAY VARY BY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER 2 OF 2

617429-001

REV. DESC: CHG D.E. BRKT WITHOUT FACE DRAINS			
REV: D	VERSION: 04	REVISED: 11:04:59 03/09/2022	TDR: 000001187401
MODEL NO. 617429-001			REF:
BY: RAGGDM	Material:		C

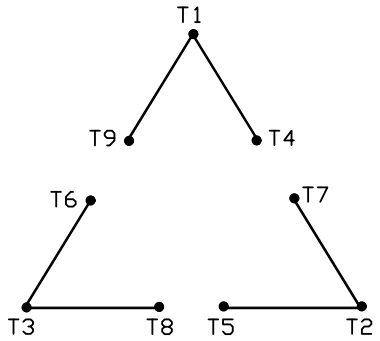
BALDOR

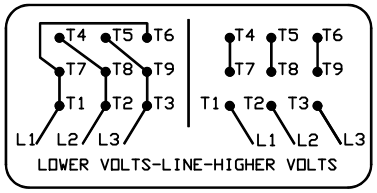
G405T/404T STD TEFC F1 FOOTED STEEL CONDUIT BOX

617429-001

416820-002

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





(N. P. 1575-B)

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: –		

ABB

CONN DIAG – STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1

416820-002