ABB BALDOR RELIANCE

Customer information packet

EWDM4458T

50HP, 890RPM, 3PH, 60HZ, 405T, TEFC, F1
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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	129.000 A @ 230.0 V
	64.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	64.3 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP55
KVA Code	F

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0784
Layout	617429-533
Eff. date	10-22-2021
CD Diagram	416820-002
Poles	08
Leads	3#4,6#6
Proprietary	False
Created date	09-11-2019

Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	38.19 IN
Power Factor	78
Product Family	Washdown Features
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	Shaft Slinger
Speed	890 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L
MOBIL POLYREX EM

NP2428L										
SPEC NO.	A40-7122-0784	**CAT.NO.**	EWDM4458T					**FRAME**	405T	
HP	50	**VOLTS**	230/460	**PHASE**	3	**DESIGN**	B	**TYPE**	P	
RPM	890	**AMPS**	129/64.3	**HZ**	60	**AMB**	40	**SF**	1.15	
DRIVE END BEARING	80BC03JPP30A	**DUTY**	CONT	**INSUL.CLASS**	F					
OPP D.E. BEARING	80BC03JPP30A	**ENCL**	TEFC	**CODE**	F					
SER.NO.		**POWER FACTOR**	78			**NEMA-NOM-EFFICIENCY**	92.4			
						MAX CORR KVAR	17	**GUARANTEED EFFICIENCY**	91	
	IP55					**NEMA NOM/CSA QUOTED EFF**				
	4:1CT AND 4:1VT ON VPWM INVERT			ER, 1.00SF				**MOTOR WEIGHT**		

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	50	P	3/60	890	230/460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
129/64.3	CONT	40/F	1.15	B	F	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)
400784	418142-71-BE	---	---	.0347/.139

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	29.4	900	4.62	0
1/4	12.5	32.8	897	40.3	88.7
2/4	25.0	40.8	895	62.0	92.6
3/4	37.5	51.6	892	73.0	93.2
4/4	50.0	64.3	889	78.3	92.9
5/4	62.5	78.7	885	80.6	92.2

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	140	415	346
PULL UP	335	125	368	311
BREAKDOWN	845	218	645	198
FULL LOAD	889	100	296	64.3

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

REMARKS: TYPICAL DATA
TYPICAL DATA-NEMA NOM. EFF. 92.4%

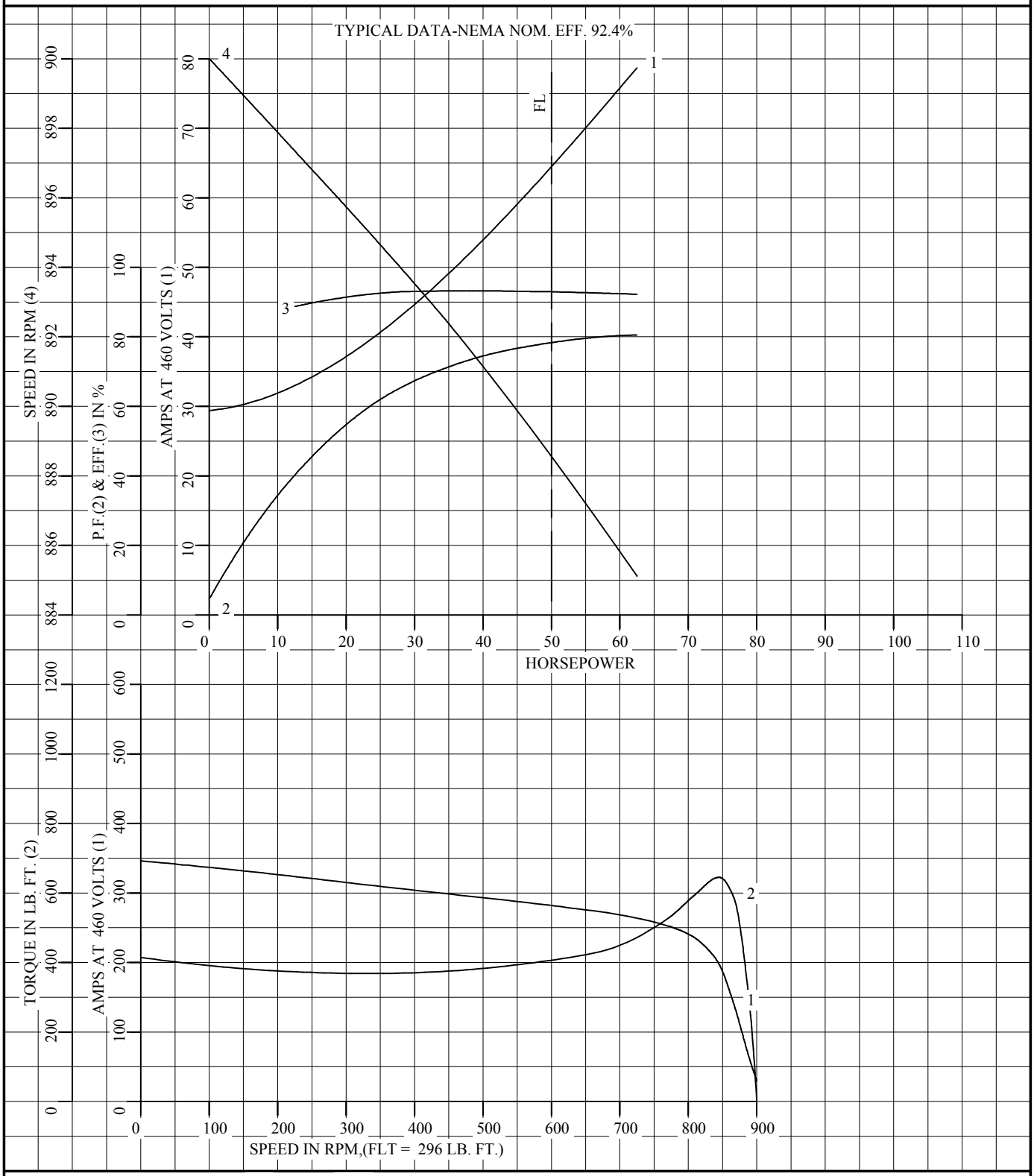
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY P.B. GREENE
CK. BY K.W. KANOUFF
APP. BY E.J.CHRISTIAN
DATE 08/11/89

A-C MOTOR PERFORMANCE DATA

A40WG0784-R005
ISSUE DATE 09/11/19

REL S.O.	RPM 890	S.F. 1.15	ROTOR 418142-71-BE
FRAME 405T	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 50	AMPS 129/64.3	CODE LETTER F	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES.@ 25 °C .0347/.139
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 400784	OHMS (BETWEEN LINES)



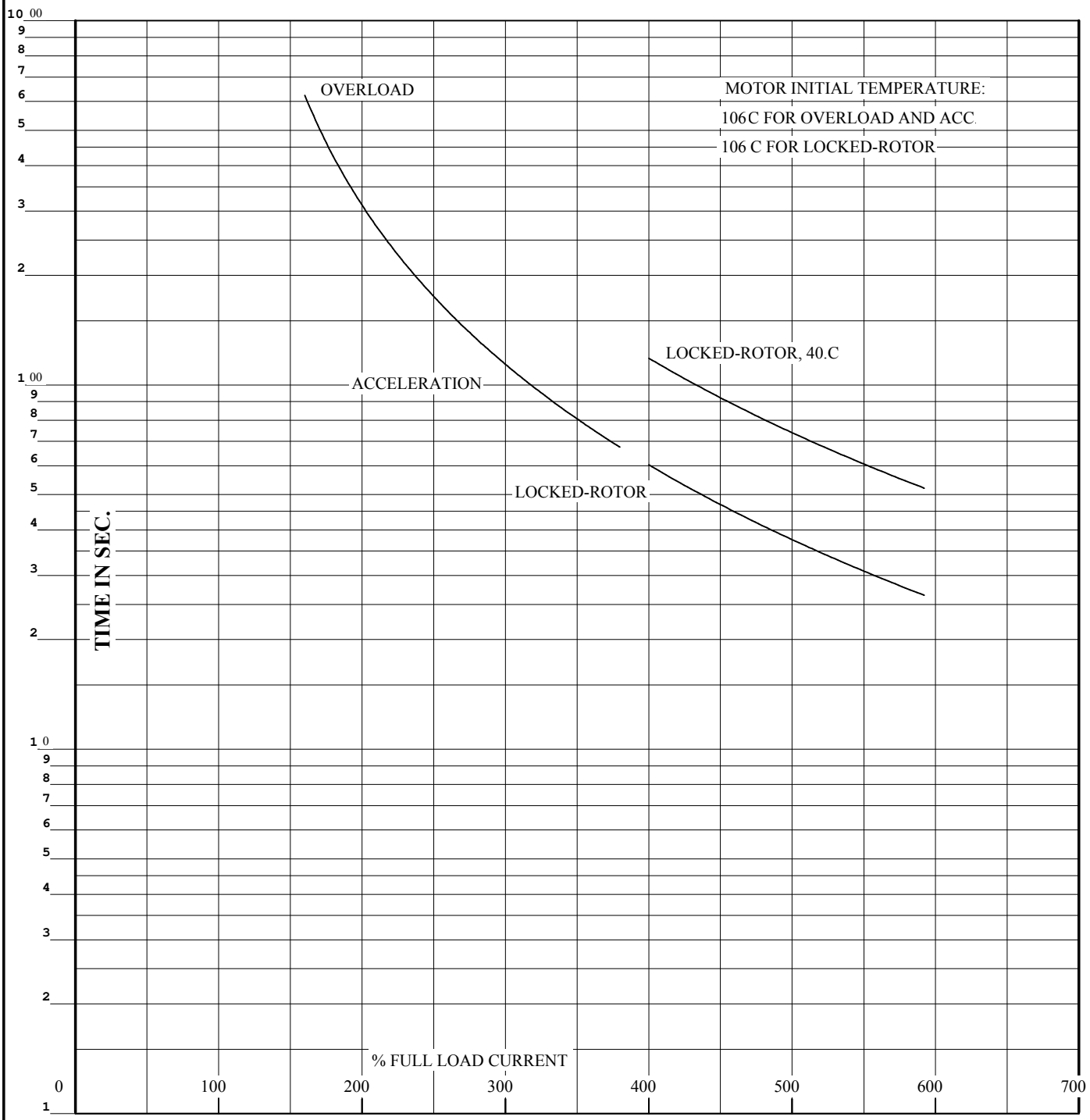
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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A MEMBER OF THE ABB GROUP

DR. BY	P.B. GREENE
CK. BY	K.W. KANOUFF
APP. BY	E.J.CHRISTIAN
DATE	08/11/89

A-C MOTOR PERFORMANCE CURVES A40WG0784-R005 ISSUE DATE 09/11/19

REL. S.O.	RPM 890	S.F. 1.15	ROTOR 418142-71-BE
FRAME 405T	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 50	AMPS 129/64.3	CODE LETTER F	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES.@ 25 ℃.0347/.139
PHASE/HERTZ 3/60	AMB ℃/INSUL 40/F	E/S 400784	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: TYPICAL DATA-NEMA NOM. EFF. 92.4%

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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A-C MOTOR PERFORMANCE CURVES A40WG0784-R005 ISSUE DATE 09/11/19

DUTY MASTER ALTERNATING CURRENT MOTORS

617429-533

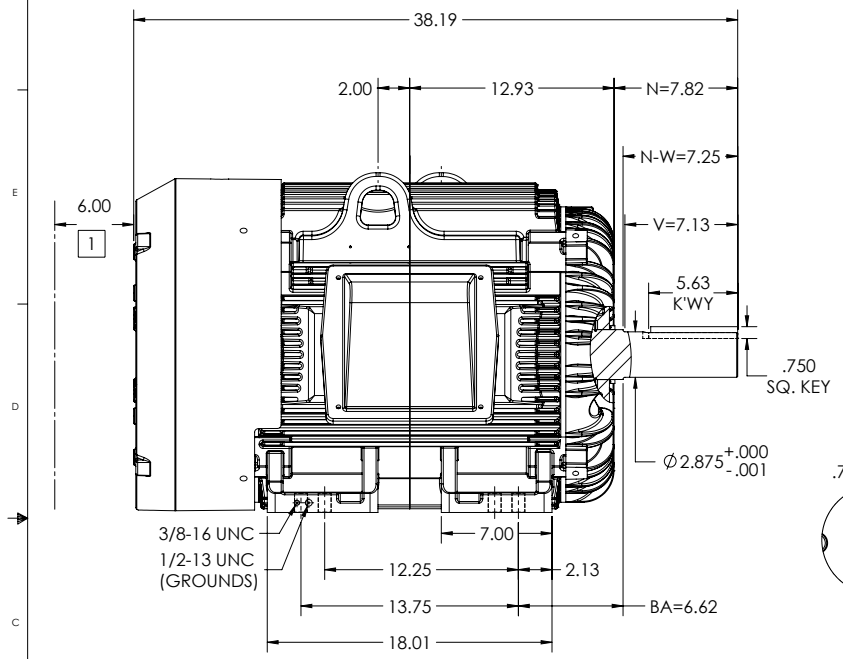
ENCLOSURE: TOTALLY ENCLOSED

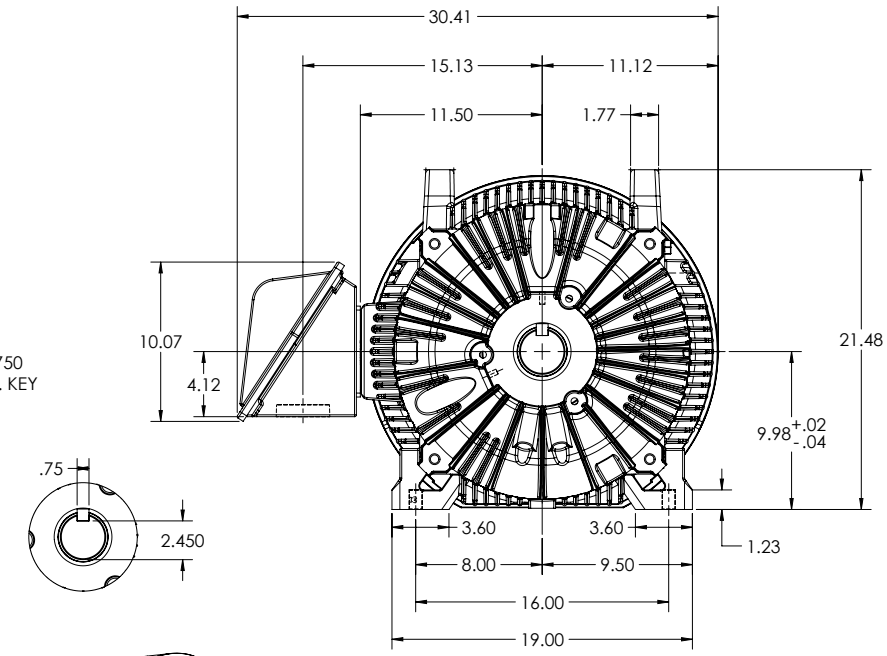
SQUIRREL-CAGE INDUCTION

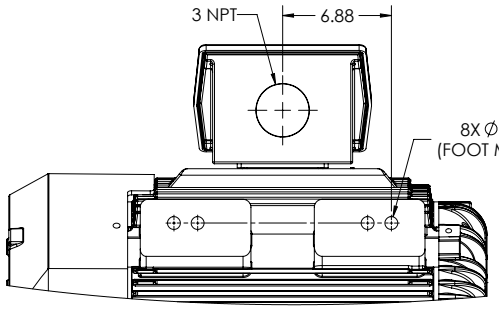
MOUNTING: FOOT, F-1 SIDE

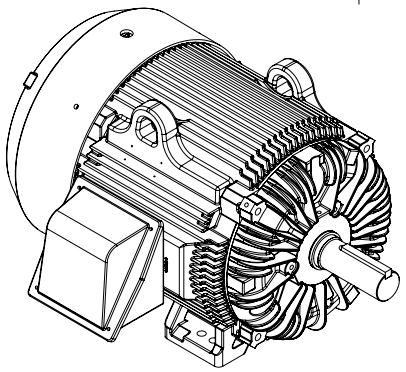
G404T/G405T FRAME MOUNTING HOLES

COOLING: FAN COOLED









DIMENSIONS ARE IN INCHES.
WEIGHT (LBS): 1160, MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

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.

SHEET NUMBER 1 OF 2

617429-533

REV. DESC: CORRECT SH2 LBS TO KG			
REV: C	VERSION: 03	REVISED: 01:28:40 05/30/2023	TDR: 000001209710
MODEL NO. 617429-533			REF:
BY: USJEDIL	Material:	C	

BALDOR

G404/405T TEFC F1 FOOT MOUNT/CAST IRON CONDUIT BOX

617429-533

DUTY MASTER ALTERNATING CURRENT MOTORS

617429-533

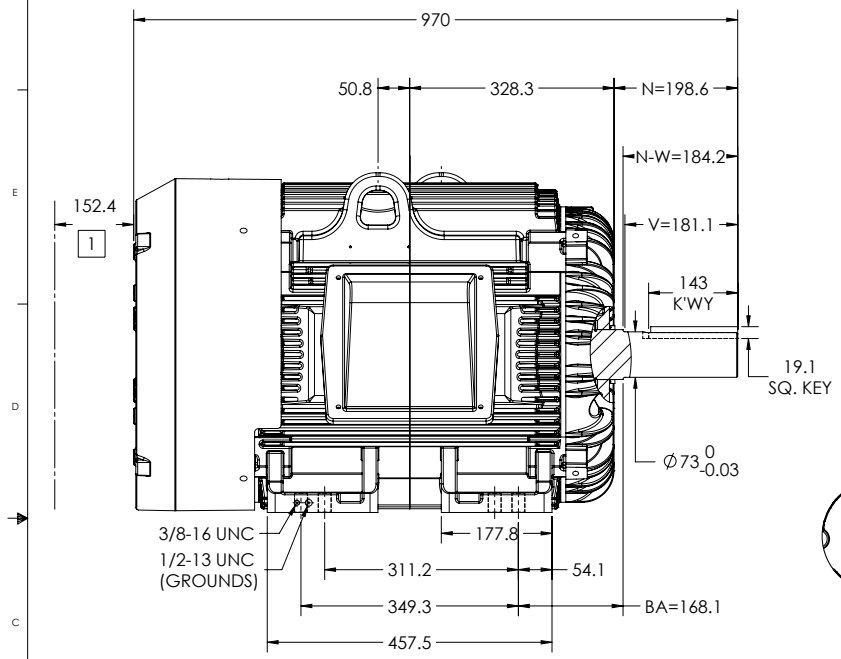
ENCLOSURE: TOTALLY ENCLOSED

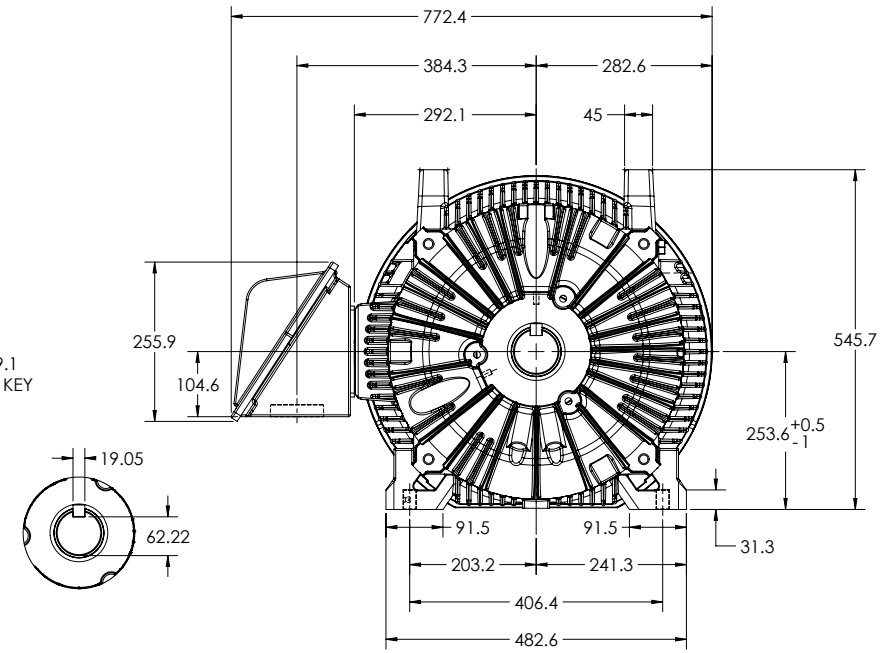
SQUIRREL-CAGE INDUCTION

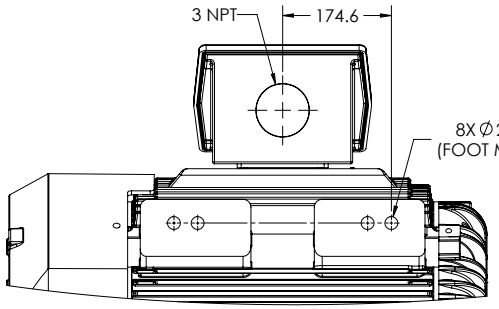
MOUNTING: FOOT, F-1 SIDE

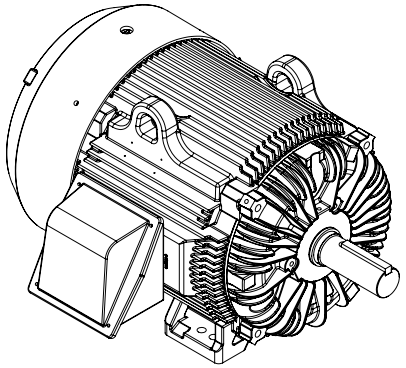
G404T/G405T FRAME MOUNTING HOLES

COOLING: FAN COOLED









DIMENSIONS ARE IN MILLIMETERS.
WEIGHT (KG): 526, MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

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.

SHEET NUMBER 2 OF 2

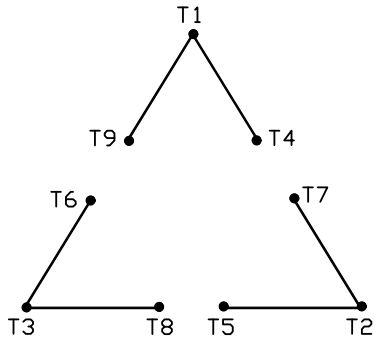
617429-533

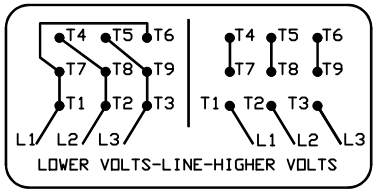
REV. DESC: CORRECT SH2 LBS TO KG			
REV: C	VERSION: 03	REVISED: 01:28:40 05/30/2023	TDR: 000001209710
MODEL NO. 617429-533			REF:
BY: USJEDIL	Material:	C	BALDOR
			G404/405T TEFC F1 FOOT MOUNT/CAST IRON CONDUIT BOX

617429-533

416820-002

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





(N. P. 1575-B)

416820-002

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