

ABB BALDOR RELIANCE III

Customer information packet

ECR9508TR

50HP, 900, 3PH, 60HZ, 404T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	404T
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	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Mobil SHC 220 (Athens Only)
Constant Torque Speed Range	6-60
Current @ Voltage	159.000 A @ 230.0 V 79.400 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	79.4 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Max Speed	3000 rpm

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5135
Layout	617429-501
Eff. date	06-17-2025
CD Diagram	416820-002
Poles	08
Leads	3#4,6#6
Proprietary	False
Created date	05-07-2015

Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	38.20 IN
Power Factor	64
Product Family	Crusher / Chipper
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
Service Factor	1.25
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	885 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

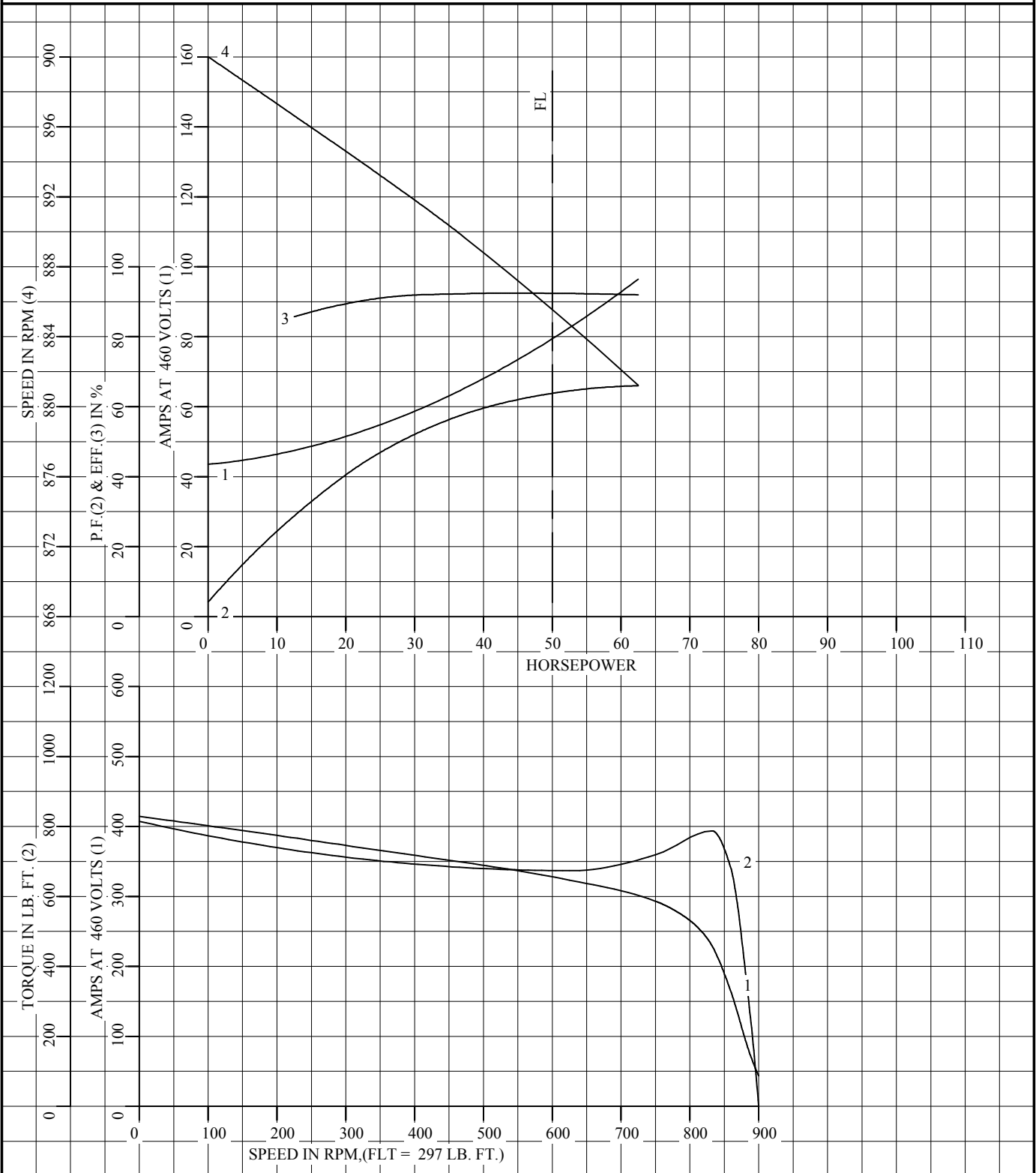
Nameplate

000613007PV																
CAT NO	ECR9508TR				SPEC NO.		P40G1706									
HP	50	AMPS		159/79.4		VOLTS		230/460		DESIGN		A				
RPM	885	RPM MAX		3000		HZ		60	AMB		40	SF		1.25		
D.E. BRG.DATA	NU316		O.D.E. BRG.DATA				6316		PH		3	DUTY		CONT	INSUL.CLASS	F
FRAME	404T		I.P.		55	TYPE		P	ENCL		TEFC	CODE		H		
POWER FACTOR	64		3/4 LOAD EFF.				92.3		NEMA NOM EFFICIENCY				92.4			
CHP HZ	60-90		CT HZ		6-60		VT HZ		6-60							
SER.NO.					MOTOR WEIGHT											
	1.25SF AMPS= 186/93.1															

NP2496L	
MOBIL SHC -220 GREASE	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS			
	404T	50	P	3/60	885	230/460			
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.			
159/79.4	CONT	40/F	1.25	A	H	TEFC			
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)					
-	418142072ME	---	---	.0234/.0939					
PERFORMANCE									
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY				
NO LOAD	0	43.5	900	4.19	0				
1/4	12.5	47.5	897	28.8	85.7				
2/4	25.0	54.8	893	46.9	91.0				
3/4	37.5	65.5	890	58.0	92.3				
4/4	50.0	79.4	886	63.8	92.4				
5/4	62.5	96.5	881	66.0	92.0				
SPEED TORQUE									
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES				
LOCKED ROTOR		0	275	815	414				
PULL UP		630	227	674	322				
BREAKDOWN		832	266	787	229				
FULL LOAD		886	100	297	79.4				
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: CALCULATED DATA									
		DR. BY CD		A-C MOTOR PERFORMANCE DATA					
		CK. BY T. KELATI							
		APP. BY T. KELATI							
		DATE 06/02/2015							
				A40WG5135-R001 ISSUE DATE 03/02/20					

REL S.O.	RPM 885	S.F. 1.25	ROTOR 418142072ME
FRAME 404T	VOLTS 230/460	NEMA DESIGN A	TEST S.O. CALCULATED DATA
HP 50	AMPS 159/79.4	CODE LETTER H	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0234/.0939
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S -	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 CD
CK. BY T. KELATI
APP. BY T. KELATI
DATE 06/02/2015

**A-C MOTOR
PERFORMANCE
CURVES** A40WG5135-R001
ISSUE DATE 03/02/2015

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

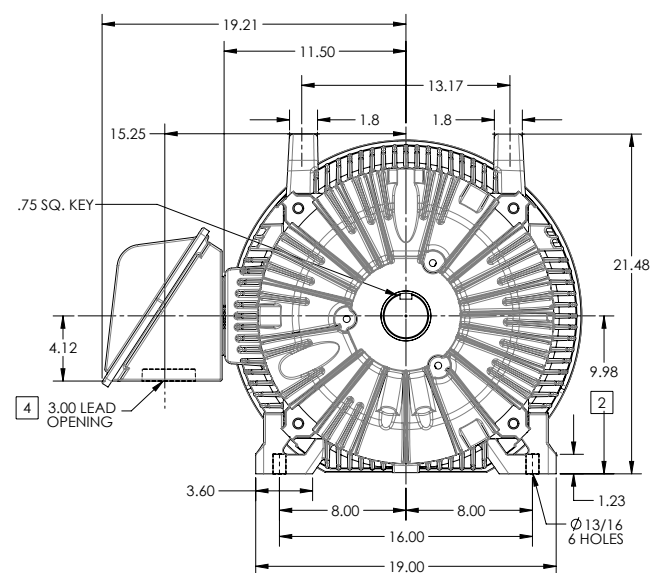
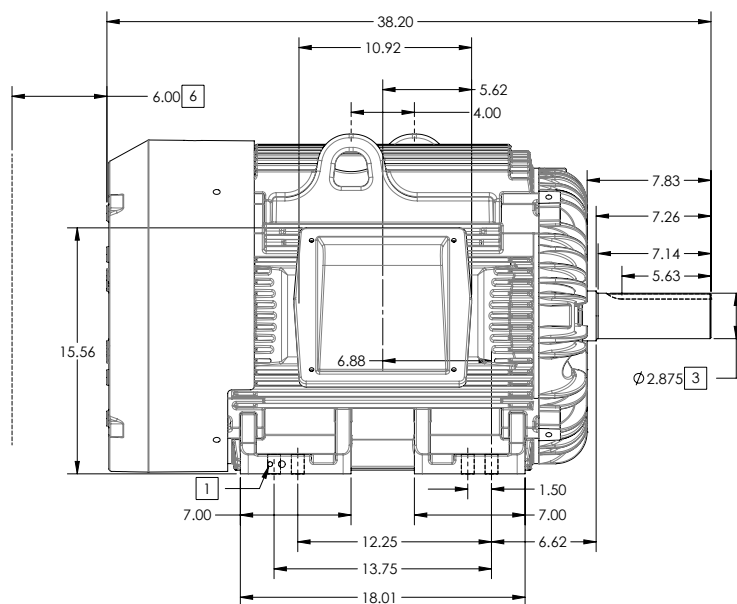
FRAME G405T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T FRAME MOUNTING HOLES

XT/ECP SEVERE DUTY ENCLOSURE



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
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. TO 5 INCH DIA.

[5] WEIGHT (LBS): 1370

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

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

 SHEET NUMBER
1 OF 2

105-627219

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 01-11-16 04/14/2014	TDR: 000000848770
MODEL NO. 617429-501		REF:	
BY: MGHUMZ2		Material:	

BALDOR

G405T/404T STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE

617429-501

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

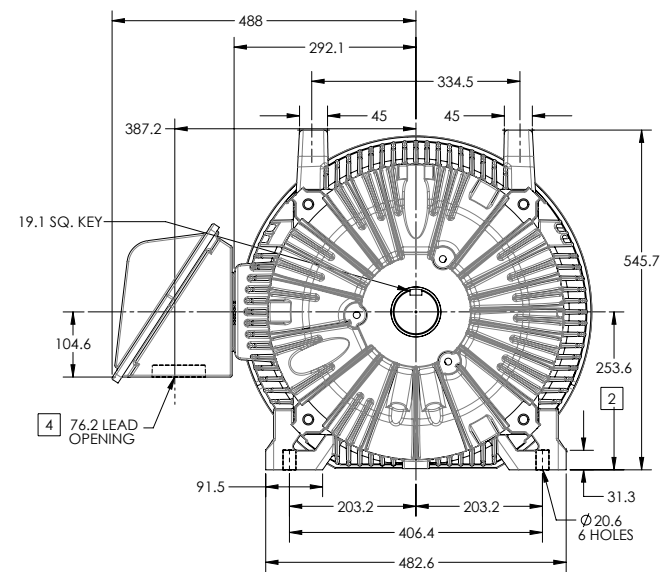
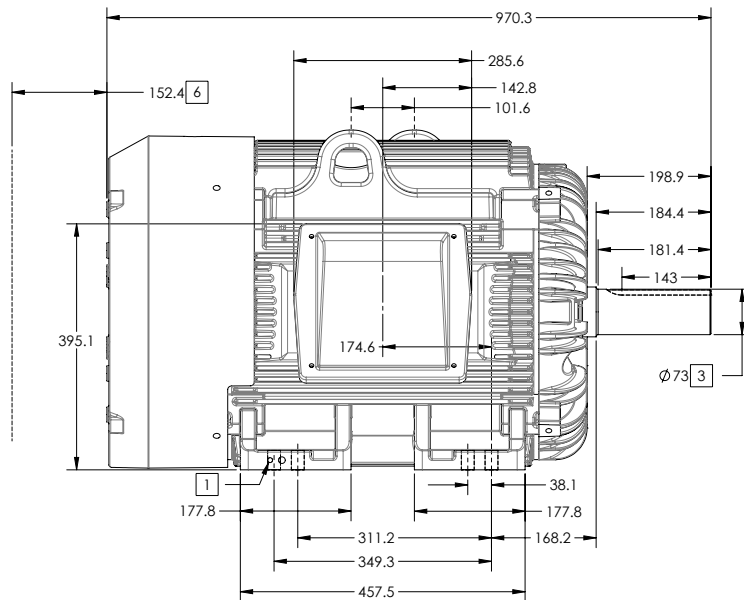
FRAME G405T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T FRAME MOUNTING HOLES

XT/ECP SEVERE DUTY ENCLOSURE



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +00,-.03
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 630

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

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

 SHEET NUMBER
2 OF 2

105-627219

REV. DESC: CHANGE BA FROM 6.76 TO 6.62	TDR: 000000848770
REV: B VERSION: 02	REVISED: 01-11-16 04/14/2014
MODEL NO. 617429-501	REF:
BY: MGHUMZ2	Material:

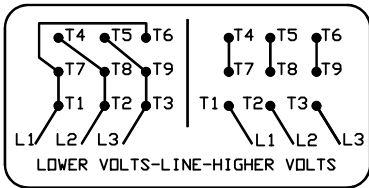
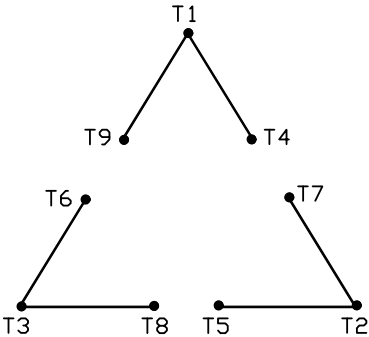
BALDOR

G405T/404T STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE

617429-501

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: -		



CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1