

ABB BALDOR RELIANCE III

Customer information packet

IDXM7568T-C

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC

Class - CLI GP C,D; CLII GP F,G

Division - Division I

Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	75.000 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	CSA CSA EEV UL CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
Current @ Voltage	171.800 A @ 230.0 V 85.900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	85.9 a
Insulation Class	B

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A36WG1512
Layout	616512-504
Eff. date	02-10-2021
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	11-26-2014

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.44 IN
Power Factor	86
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2496L	
MOBIL POLYREX EM	

000613006PC		
CLASS I GROUP	C D X	NO.
CLASS II GROUP	F G X	
OPERATING TEMP CODE	T3C	

000901002AAA	
SUITABLE FOR OPERATION ON VPWM	INVERTER
EQUIPPED WITH IGBT DEVICES AND	CAPABLE OF
CARRIER FREQUENCY OF 2 KHZ OR	HIGHER

NP3140L

SPEC NO.	A36-5945-1512			CAT.NO.							FRAME	365T
HP	75	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P		
RPM	1780	AMPS	172/85.9		HZ	60	AMB	40	SF	1.00		
DRIVE END BEARING	65BC03J30X		DUTY	CONT	INSUL.CLASS			F				
OPP D.E. BEARING	65BC03J30X		ENCL	TEFC	CODE	G						
SF	1.15	WK2	14.02	MAG CUR	61.3/30.6		RPM MAX	3600				
CT HZ	15-60	VT HZ	6-60	CHP HZ	60-90		NEMA-NOM-EFF			95.4		
	CL I,ZONE 1,GR IIA IIB,T3 VPW					M INVERTER						
SER.NO.				MOTOR WEIGHT								

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	365TS	75	P	3/60	1780	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
172/85.9	CONT	40/F	1.00	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
892008	418141043EE	---	---	.0210/.0843		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	26.1	1800	3.86	0	
1/4	18.8	33.4	1796	56.1	93.8	
2/4	37.5	47.7	1791	77.0	95.7	
3/4	56.2	65.8	1786	83.5	95.8	
4/4	75.0	85.9	1781	85.6	95.4	
5/4	93.8	107	1776	86.7	94.8	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	196	433	542	
PULL UP		1130	166	368	458	
BREAKDOWN		1699	252	557	293	
FULL LOAD		1781	100	221	85.9	
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-NEMA NOM. EFF. 95.4 PCT.						
		DR. BY J. J. HARRISON		A-C MOTOR PERFORMANCE A36WG1512-R002 DATA ISSUE DATE 04/23/19		
		CK. BY W. L. SMITH				
		APP. BY W. L. SMITH				
		DATE 08/11/10				
		Page 8 of 11				

REL S.O.

RPM 1780

S.F. 1.00

ROTOR 418141043EE

FRAME 365TS

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 75

AMPS 172/85.9

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

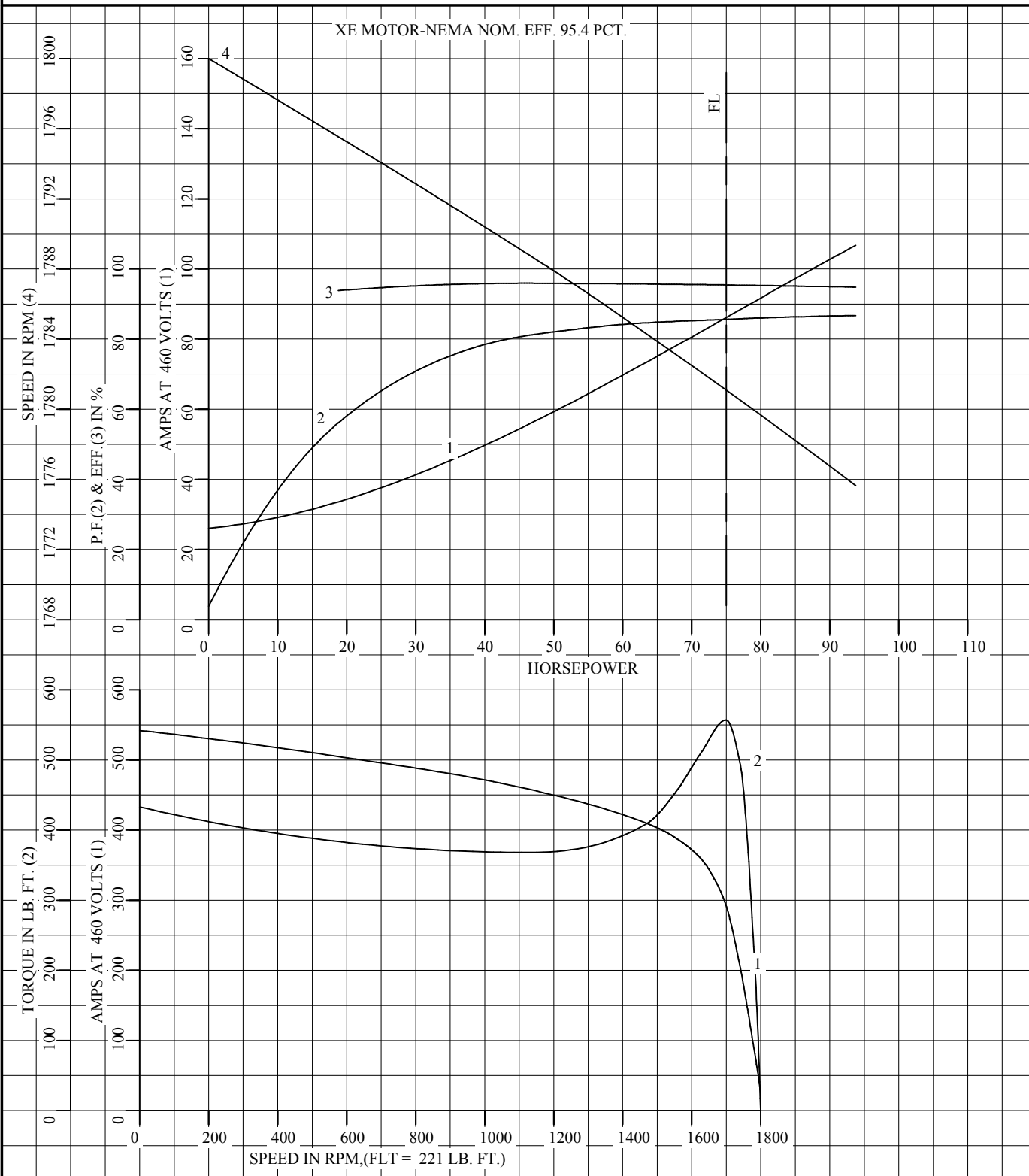
STATOR RES. @ 25 °C .0210/.0843

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 892008

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

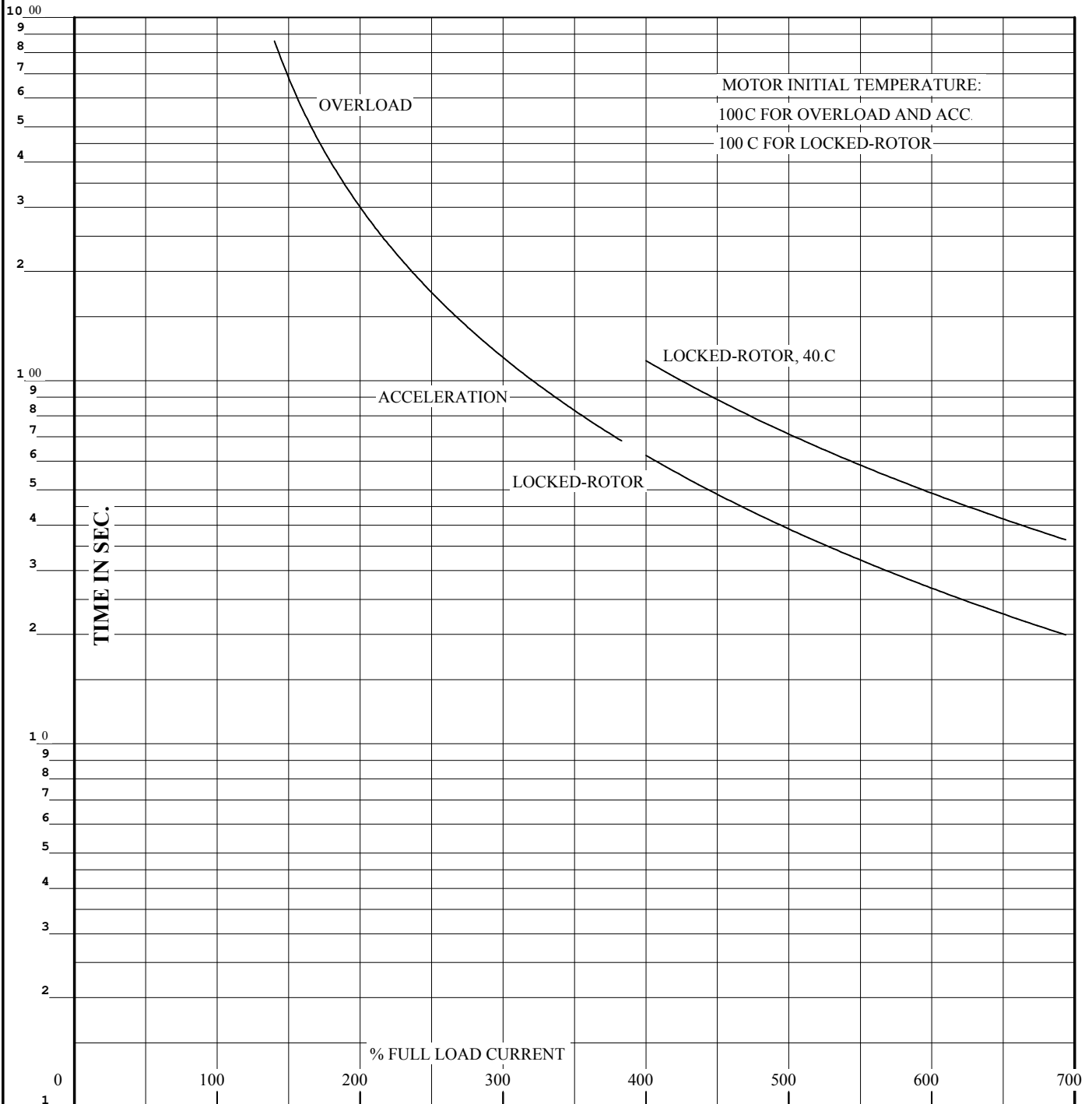
DR. BY J.J.HARRISON
CK. BY W.L.SMITH
APP. BY W. L. SMITH
DATE 08/11/10

**A-C MOTOR
PERFORMANCE
CURVES**

A36WG1512-R002

ISSUE DATE 04/23/19

REL. S.O.	RPM 1780	S.F. 1.00	ROTOR 418141043EE
FRAME 365TS	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 75	AMPS 172/85.9	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0210/.0843
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 892008	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

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

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



DR. BY	J.J.HARRISON
CK. BY	W.L.SMITH
APP. BY	W.L.SMITH
DATE	08/11/10

**A-C MOTOR
PERFORMANCE
CURVES**

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ISSUE DATE 04/23/19 Page 10 of 13

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

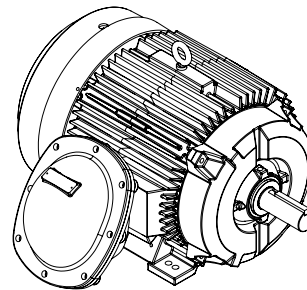
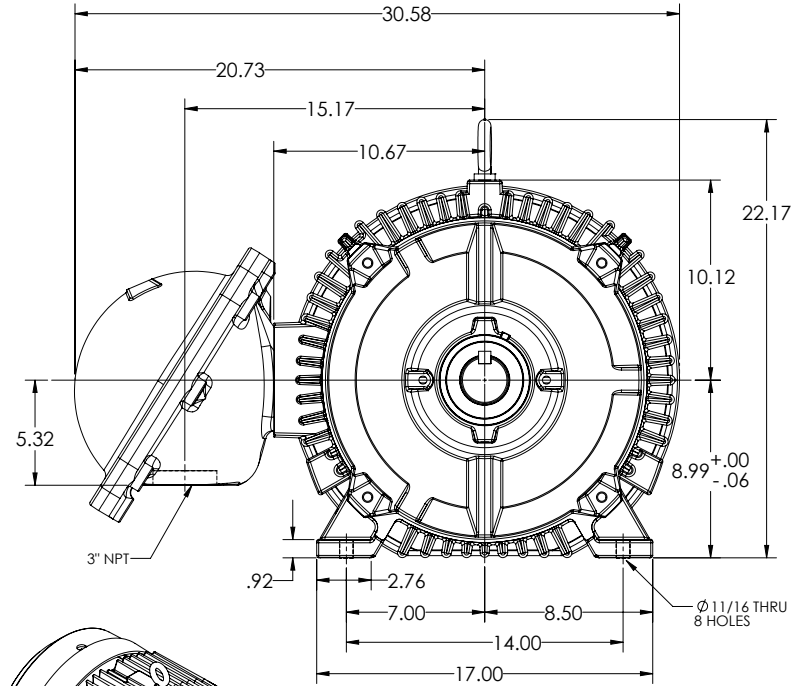
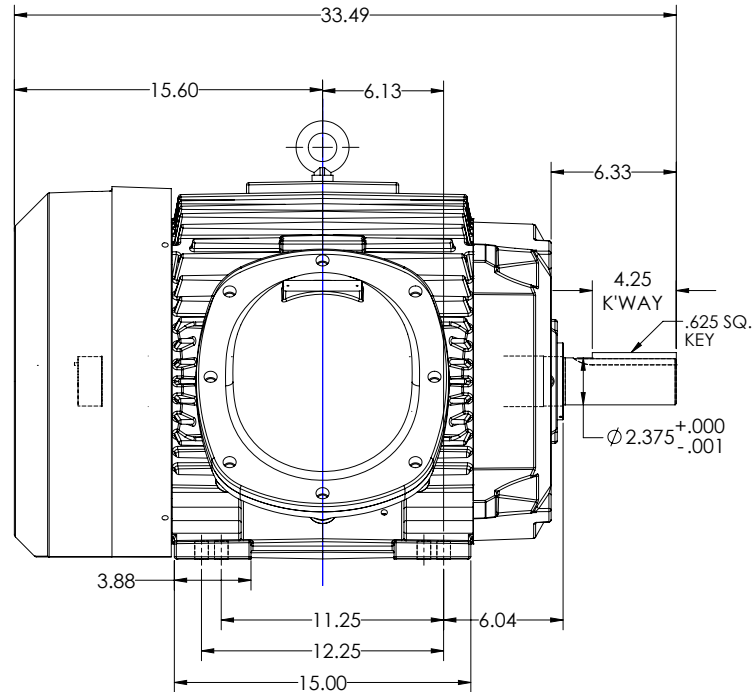
ENCLOSURE: TOTALLY ENCLOSED

FRAME 365T

COOLING: FAN-COOLED

MOUNTING: FOOT

INCLUDES 364T FRAME MOUNTING HOLES



DIMENSIONS ARE IN INCHES

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

SHEET NUMBER
1 OF 1

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .001" T.I.R.

REV. DESC: UPDATE D/S TO SHOW 3"NPT CALLOUT FOR C/B
REV: A VERSION: 01 REVISED: 08/14/59 11/18/2015 TDR: 00000953968
MODEL NO. 616512-504
BY: RAGISS1

BALDOR

E365T 6313 FCXP W/BOLT ON COND BOX CL 1 GR C.D CL 2 GR F.G

CONNECTION DIAGRAM
ACCESSORIES

MOTOR WINDING THERMOSTATS			
CONTACTS _____ @ _____ °C			
FIGURE NUMBER _____			
VOLTS		CONTACT RATING CONTINUOUS AMPERES	
110-120		3.0	30
220-240		1.5	15
440-480		0.75	7.5
550-600		0.60	6.0

THERMOSTATS	
NORMALLY CLOSED	NORMALLY OPEN
FIGURE 1	FIGURE 4
FIGURE 2	FIGURE 5
FIGURE 3	FIGURE 6
FIGURE 7	FIGURE 8

CUSTOMER _____ CUSTOMER ORDER NO. _____ S.O. NO. _____

418174-006

418174-006

REV. DESC: LOADED TO BUS		
REV. LTR: A	VERSION: 01	TDR: 000000570390
FILE: \RAG\00013\849	REVISED: 10:16:21 12/07/2010	BY: RAGDRF
MTL: -		

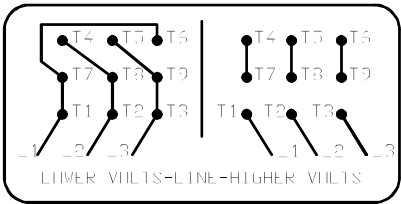
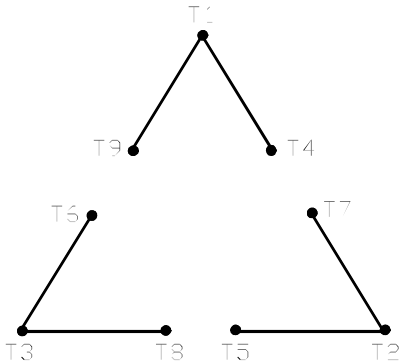
BALDOR

A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

416820-002

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



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —		

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002