

ABB BALDOR RELIANCE III

Customer information packet

ECP84402T-4

100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	C UR US CCSA US CCSAUSEEV CURUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	10-60
Current @ Voltage	110.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	110.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG1242
Layout	617429-791
Eff. date	06-19-2025
CD Diagram	416820-036
Poles	02
Leads	3#2
Proprietary	False
Created date	05-14-2025

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	None
Motor Type	A40066M
Mounting Arrangement	F1
No Load Current	26.3 a
Number of Poles	2
Overall Length	35.19 IN
Power Factor	90
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3565 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4566													
CAT NO	ECP84402T-4			SPEC NO.		A40-0005-1242							
HP	100	AMPS	110		VOLTS		460		DESIGN	B			
FRAME SIZE	405TS	RPM	3565		HZ		60	AMB	40	SF	1.15		
D.E. BRG.DATA	6313		O.D.E. BRG.DATA			6313		PH	3	DUTY	CONT	INSUL.CLASS	F
D.E. BRG.	65BC03J30X		TYPE	ENCL	TEFC	CODE	G						
O.D.E. BRG.	65BC03J30X		POWER FACTOR			90		NEMA-NOM-EFFICIENCY			94.1		
3/4 LOAD EFF.	94.7	IP	56	MAX CORR KVAR			12		GUARANTEED EFFICIENCY			93	
TEMP CODE	T3	TEMP =	200										
CHP HZ	60-70	CT HZ	10-60	VT HZ	0-60								
INVERTER-TEMP-CODE	T3												
SER.NO.				MOTOR WEIGHT									

000613007EX				
CAT NO	ECP84402T-4	SPEC NO.	A40-0005-1242	
NO. ROTOR BARS	38	GREASE TYPE	POLYREX EM	
NO. SLOTS	48	NL AMPS AT RATED VOLTAGE		26.3
5 YEAR WARRANTY		WINDING RES @25 C	.0511	OHMS
MFG. DATE		SER.NO		

Parts List

Part number	Description	Quantity
SA438658	SA A40-0005-1242	1.000 ea
RA431029	RA A40-0005-1242	1.000 ea
NP4566	SS INV IEEE841-2021,CLI DIV2,CURUS-E,CSA	1.000 ea
000613007EX	SS IEEE 841 EMBOSSED AUXILIARY NAMEPLATE	1.000 ea
000692000FF	N/P	1.000 ea
000692000JP	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000692000VH	N/P (RELEASE 1000 PCS)	1.000 ea
412118006A	DRAIN	2.000 ea
004824015A	GREASE POLYREX EM	0.544 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034180008DA	KEY 1/4X1/4X1 L (shipping)	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034530056AB	1/8 X 7 PP NIPPLE	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
702675001D	FAN 250-440	1.000 ea
083198101A	G400 STD FAN COVER MACHINING	1.000 ea
034692005AB	3/4 PIPE PLUG	1.000 ea
089413501B	*MFC MOVE*G400 6313 FT MNT BRKT MCHG	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
410700004F	WSHR	1.000 ea
415028079E	INPRO SEAL,,625 WIDE,313 BRG	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
034530040AB	P/NIP 1/8X5 GALV.	1.000 ea

034530040BB	P/NIP 1/4X5	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
089413501B	*MFC MOVE*G400 6313 FT MNT BRKT MCHG	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
415028079E	INPRO SEAL,,625 WIDE,313 BRG	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053000B	GASK 320-400	1.000 ea
076708000BB	CONDUIT BOX-360	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
415039016A	TERBD, 360-400	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180022GA	KEY 1/2X1/2X2-3/4 L	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 ga
421948051	LABEL, MYLAR	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea

ECP84402T-4 - 100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF						
ABB BALDOR RELIANCE III S/O	CUSTOMER INFORMATION FRAME	PACKET HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405TS	100	P	3/60	3565	460
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
110	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
---	418142005XE	---	---	.0511		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	26.3	3600	8.33	0	
1/4	25.0	37.4	3591	69.0	90.8	
2/4	50.0	58.1	3583	85.7	94.0	
3/4	75.0	83.0	3574	89.3	94.7	
4/4	99.9	110	3565	90.1	94.6	
5/4	125	137	3555	90.6	94.2	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	213	314	725	
PULL UP		2385	181	267	650	
BREAKDOWN		3396	272	401	416	
FULL LOAD		3565	100	147	110	
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.						
TYPICAL DATA NEMA NOM. EFF. 94.1%						
		DRAWN BY: <u>C.E. JAMISON</u>		AC MOTOR PERFORMANCE DATA	A40WG1242-R007 DATE ISSUED 07/29/26	
		CHECKED BY: <u>W. L. SMITH</u>				
		APPROVED BY: <u>E.J. CHRISTIAN</u>				
		DATE: <u>07/24/18</u>				

FRAME 405TS

RPM 3565

S.F. 1.15

ROTOR 418142005XE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 110

CODE LETTER G

TEST DATE ---

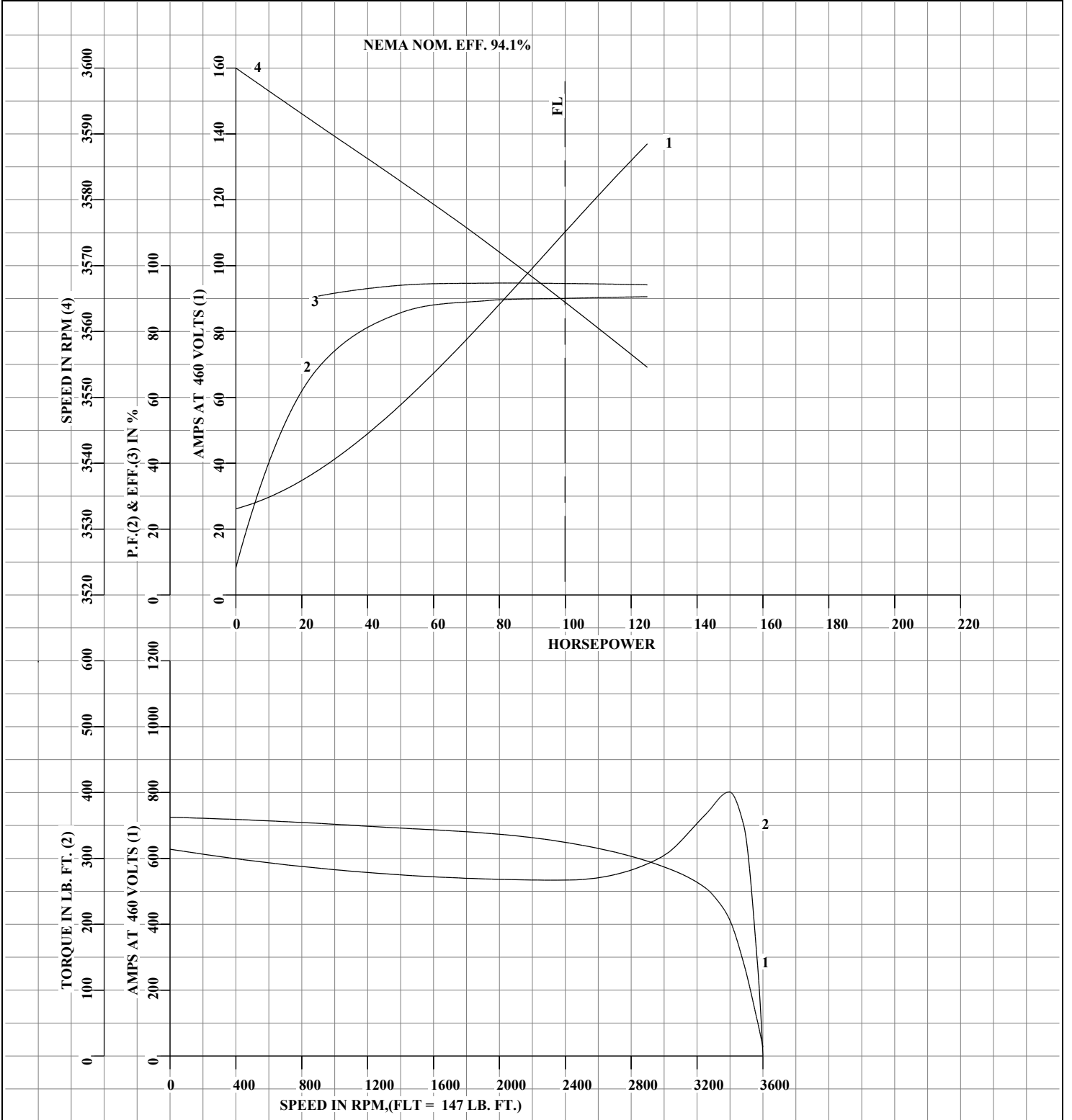
PHASE / HERTZ 3/60

DUTY CONT

ENCLOSURE TEFC

STATOR RES. @ 25°C .0511

OHMS (BETWEEN LINES)



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



DRAWN BY: C.E. JAMISON
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AC MOTOR
PERFORMANCE
DATA

A40WG1242-R007

ISSUE DATE 07/29/26

FRAME 405TS

RPM 3565

S.F. 1.15

ROTOR 418142005XE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 110

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

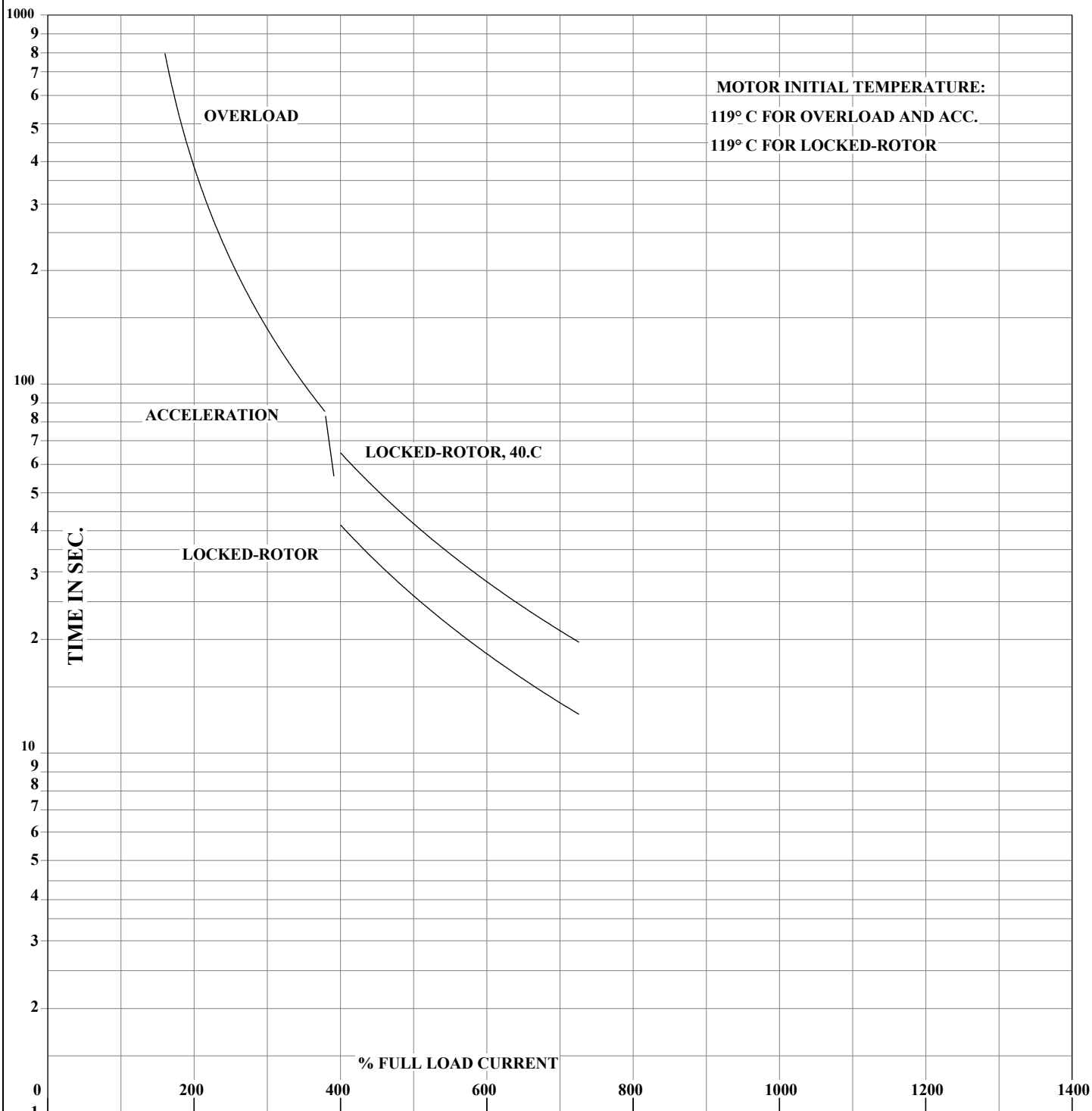
ENCLOSURE TEFC

STATOR RES. @ 25°C .0511

AMB °C / INSUL 40/F

E/S ---

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
NEMA NOM. EFF. 94.1%

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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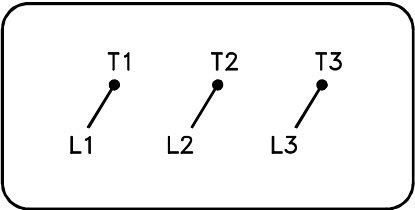
AC MOTOR
PERFORMANCE
DATA

A40WG1242-R007

ISSUE DATE 07/29/26

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1

416820-036