

ABB BALDOR RELIANCE III

Customer information packet

ECP84402T-5

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	575.0 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	88.000 A @ 575.0 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	88.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5508
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	21.4 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-5			SPEC NO.		A40-0001-5508								
HP	100	AMPS	88		VOLTS		575			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	P
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.	94.5	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-5	SPEC NO.	A40-0001-5508	
NO. ROTOR BARS	38	GREASE TYPE	POLYREX EM	
NO. SLOTS	48	NL AMPS AT RATED VOLTAGE		21.4
5 YEAR WARRANTY		WINDING RES @25 C	.0799	OHMS
MFG. DATE		SER.NO		

Parts List

Part number	Description	Quantity
SA438659	SA A40-0001-5508	1.000 ea
RA431030	RA A40-0001-5508	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
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
032018020CK	HHCS 3/8-16X2-1/2 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
034530052AB	P/NIP 1/8X6-1/2 Zinc	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
032018020CK	HHCS 3/8-16X2-1/2 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
482403003BEF	RUST VETO 342	0.013 ga
MG1500G03-5	LACQUER PRIMER, GRAY	0.063 ga
421948051	LABEL, MYLAR	1.000 ea
PK5004A02	WOOD BASE 40X32 WITH STACKED 2X4 RUNNER	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
412118006A	DRAIN	2.000 ea

ECP84402T-5 - 100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF						
ABB BALDOR RELIANCE III S/O	CUSTOMER INFORMATION PACKET FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405TSC	100	P	3/60	3565	575
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
88	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
405508	418142005XE	---	---	.0799		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	21.4	3600	8.25	0	
1/4	25.0	30.2	3591	68.4	90.7	
2/4	50.0	46.8	3583	85.3	93.9	
3/4	75.0	66.7	3574	89.1	94.5	
4/4	99.9	88.2	3565	90.0	94.3	
5/4	125	110	3555	90.5	93.8	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	214	314	584		
PULL UP	2385	184	271	527		
BREAKDOWN	3396	273	403	337		
FULL LOAD	3565	100	147	88.2		
AMPERES SHOWN FOR 575 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> CHECKED BY: <u>C.E.JAMISON</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>05/03/19</u>		AC MOTOR PERFORMANCE DATA		A40WG5508-R003 DATE ISSUED 01/21/21

FRAME 405TSC

RPM 3565

S.F. 1.15

ROTOR 418142005XE

HP 100

VOLTS 575

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 88

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

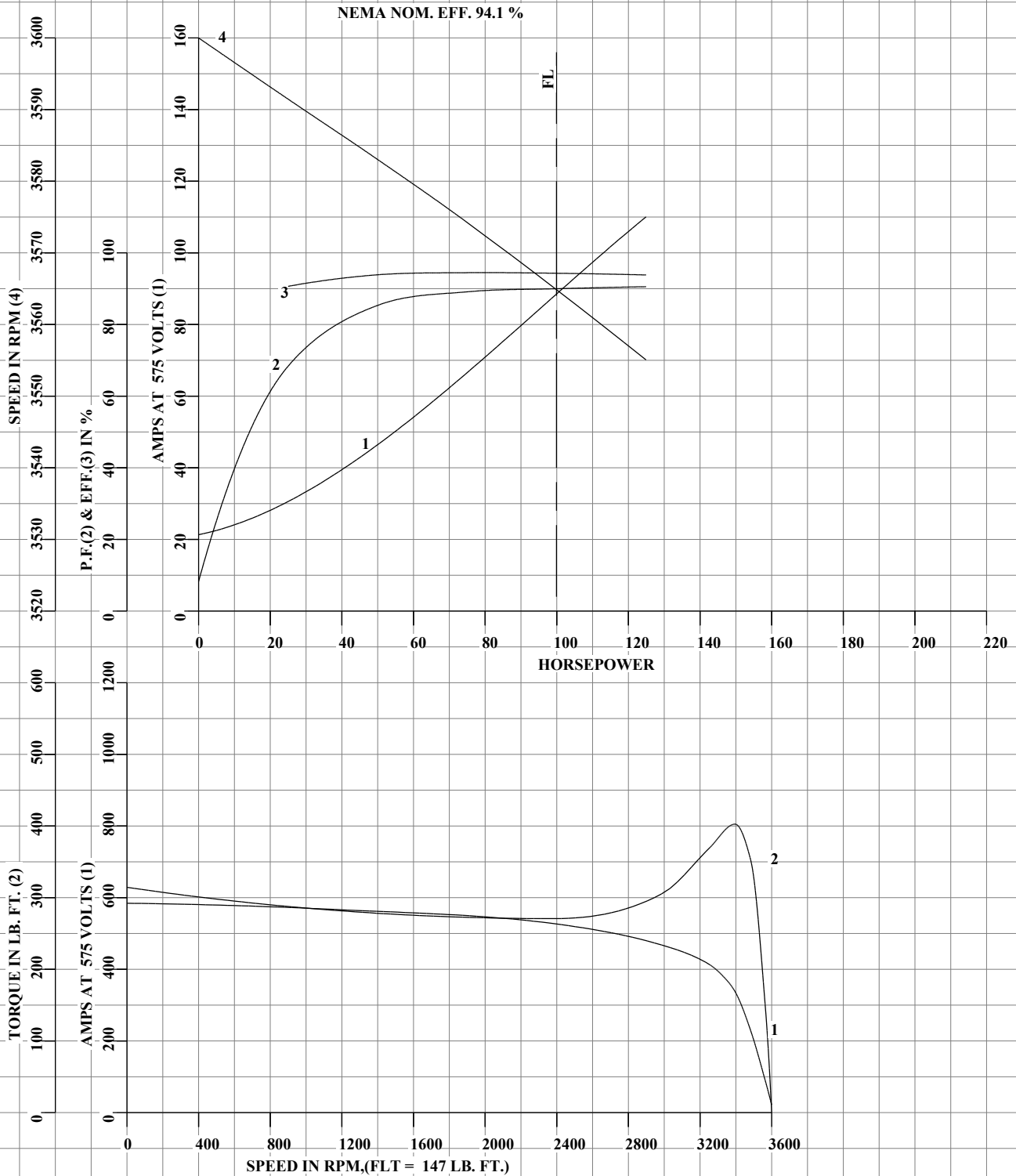
ENCLOSURE TEFC

STATOR RES. @ 25°C .0799

AMB °C / INSUL 40/F

E/S 405508

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 575 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

A40WG5508-R003

ISSUE DATE 01/21/21

FRAME 405TSC

RPM 3565

S.F. 1.15

ROTOR 418142005XE

HP 100

VOLTS 575

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

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DUTY CONT

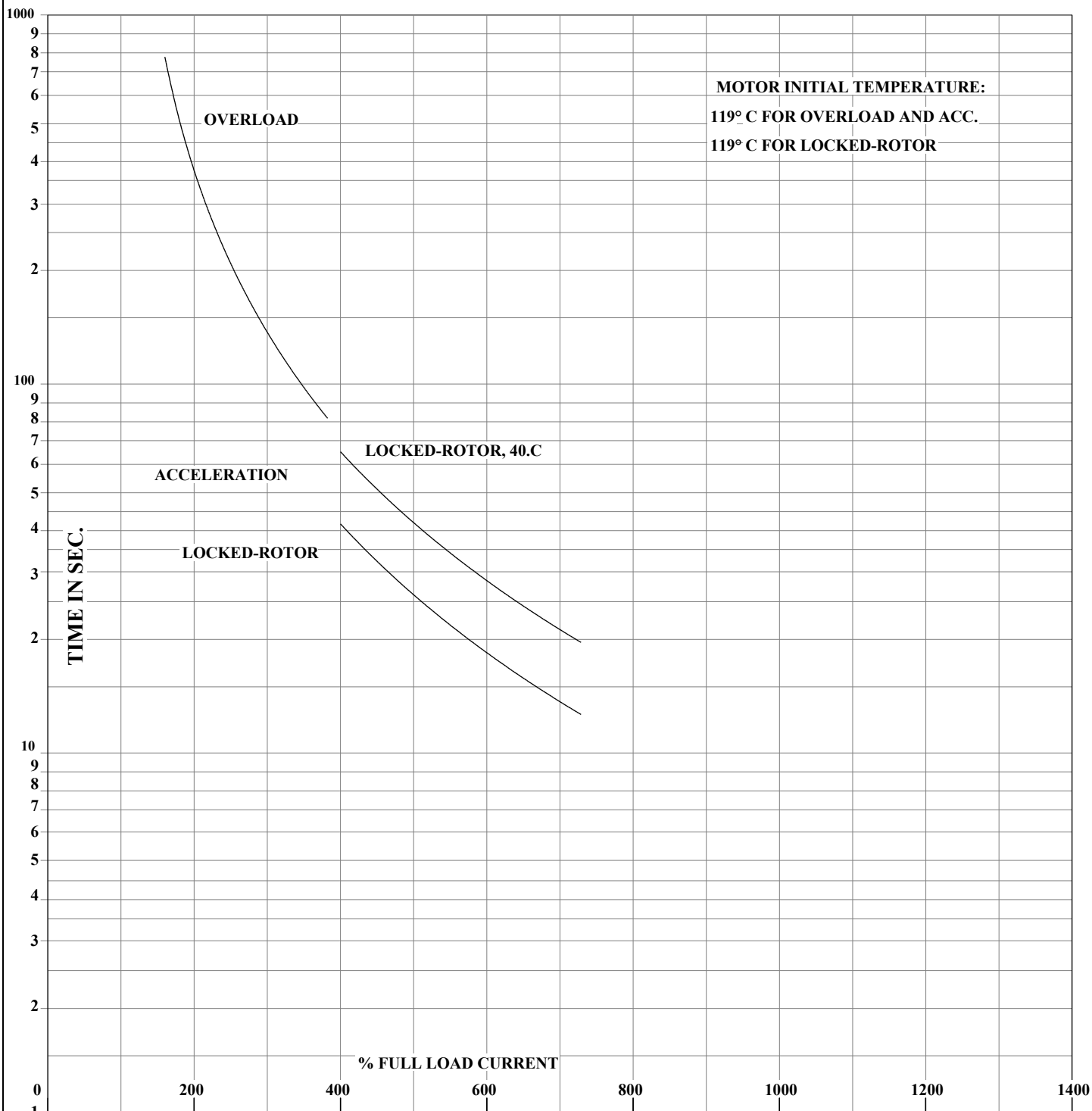
ENCLOSURE TEFC

STATOR RES. @ 25°C .0799

AMB °C / INSUL 40/F

E/S 405508

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
NEMA NOM. EFF. 94.1 %

AMPERES SHOWN FOR 575 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

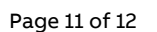


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AC MOTOR
PERFORMANCE
DATA

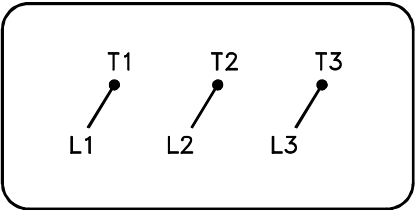
A40WG5508-R003

ISSUE DATE 01/21/21



416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

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