

# **ABB BALDOR RELIANCE III**

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## **Customer information packet**

CCPX40766T

75HP, 1185RPM, 3PH, 60HZ, 405TC, TEFC, F1

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

Division - Division I

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	405TC
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	CLI GP C,D; CLII GP E,F,G
<b>Haz Area Division</b>	Division I
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	75.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1200 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSAUSEEV CSA UL
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Constant Torque Speed Range</b>	6-60
<b>Current @ Voltage</b>	87.000 A @ 460.0 V 174.000 A @ 230.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	94.5 %
<b>Enclosure Modification</b>	Severe Duty Features
<b>Feedback Device</b>	NO FEEDBACK
<b>Haz Area Temp Code</b>	T3C
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	87.0 a
<b>Insulation Class</b>	F

**Part Detail**

<b>Revision</b>	B
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A40WG0770
<b>Layout</b>	617429-905
<b>Eff. date</b>	10-22-2021
<b>CD Diagram</b>	416820-002
<b>Poles</b>	06
<b>Leads</b>	3#2,6#4
<b>Proprietary</b>	False
<b>Created date</b>	04-15-2019

<b>Inverter Code</b>	Inverter Ready
<b>IP Rating</b>	IP55
<b>KVA Code</b>	G
<b>Max Speed</b>	3000 rpm
<b>Motor Lead Quantity/Wire Size</b>	3 @ 2 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A40064M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	6
<b>Overall Length</b>	38.22 IN
<b>Power Factor</b>	85
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	2.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	Shaft Slinger
<b>Speed</b>	1185 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	Normally Closed Thermostat

**Nameplate**

<b>NP2496L</b>
MOBIL POLYREX EM

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**000613006PC**

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<b>CLASS I GROUP</b>	C D X	<b>NO.</b>	
<b>CLASS II GROUP</b>	E F G		
<b>OPERATING TEMP CODE</b>	T3C		

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**000901002AAA**

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SUITABLE FOR 55C AMB AT 1.00 S

F AT SINEWAVE



**NP3140L**

<b>SPEC NO.</b>	A40-7200-0770		<b>CAT.NO.</b>	CCPX40766T			<b>FRAME</b>	405TC	
<b>HP</b>	75	<b>VOLTS</b>	230/460	<b>PHASE</b>	3	<b>DESIGN</b>	B	<b>TYPE</b>	P
<b>RPM</b>	1185	<b>AMPS</b>	174/87	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.00
<b>DRIVE END BEARING</b>	80BC03J30X		<b>DUTY</b>	CONT		<b>INSUL.CLASS</b>	F		
<b>OPP D.E. BEARING</b>	80BC03J30X		<b>ENCL</b>	TEFC		<b>CODE</b>	G		
<b>SF</b>	1.15	<b>WK2</b>	37.1071	<b>MAG CUR</b>	62/31		<b>RPM MAX</b>	3000	
<b>CT HZ</b>	6-60	<b>VT HZ</b>	6-60	<b>CHP HZ</b>	60-90		<b>NEMA-NOM-EFF</b>	94.5	
	IP66								
<b>SER.NO.</b>				<b>MOTOR WEIGHT</b>					

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	75	P	3/60	1185	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
174/87	CONT	40/F	1.00	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
496234	418142-71-EE	---	---	.0215/.0860		

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	31.0	1200	4.76	0
1/4	18.8	37.3	1197	51.5	91.5
2/4	37.5	50.9	1193	73.1	94.4
3/4	56.2	67.9	1190	81.7	94.9
4/4	75.0	87.2	1186	85.1	94.6
5/4	93.8	108	1182	86.2	94.1

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	166	552	537
PULL UP	400	158	524	506
BREAKDOWN	1128	243	808	302
FULL LOAD	1186	100	332	87.2

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

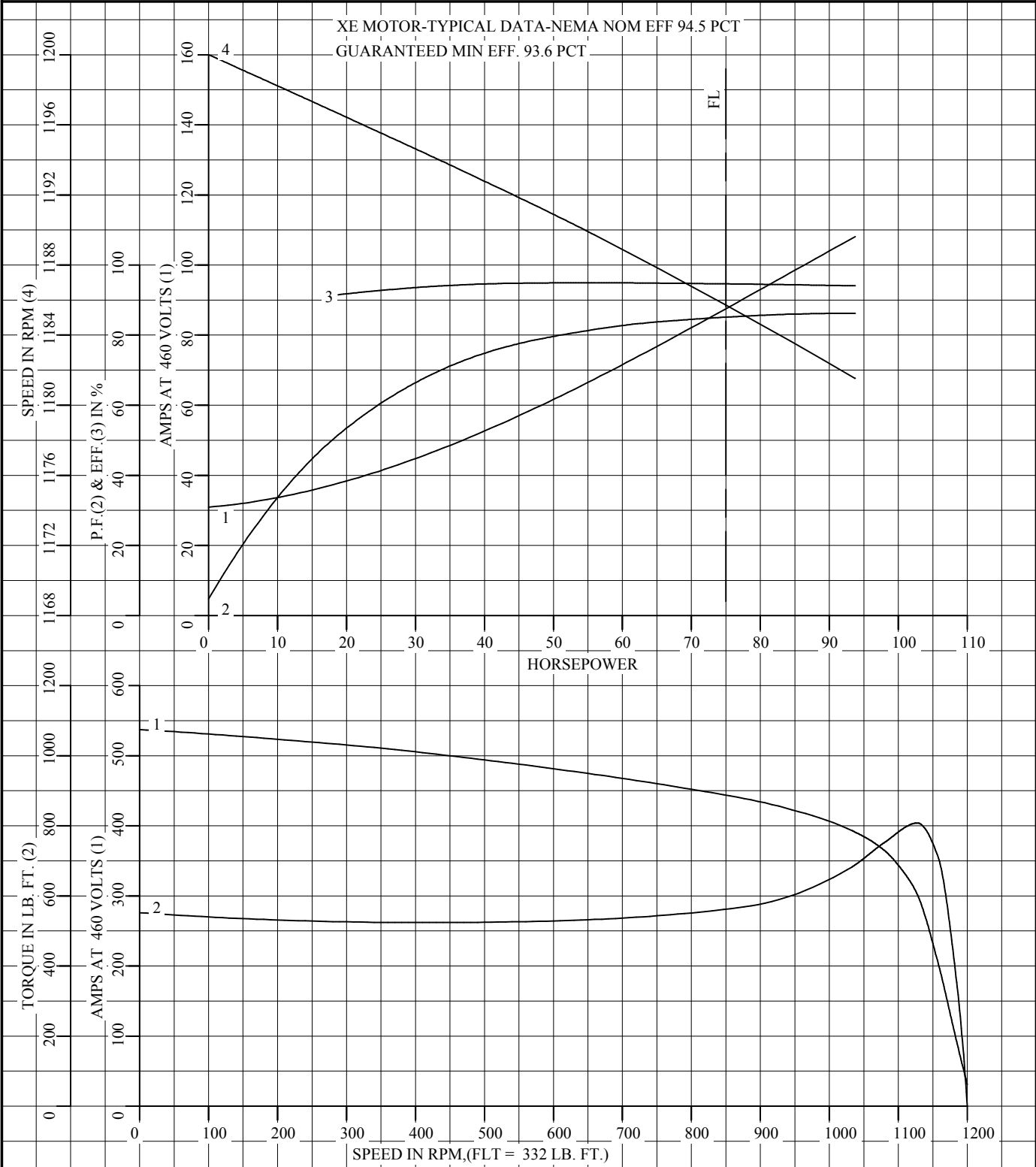
REMARKS: TYPICAL DATA  
 XE MOTOR-TYPICAL DATA-NEMA NOM EFF 94.5 PCT  
 GUARANTEED MIN EFF. 93.6 PCT



DR. BY C.E. JAMISON  
 CK. BY W.L. SMITH  
 APP. BY E.J. CHRISTIAN  
 DATE 11/04/16

**A-C MOTOR  
 PERFORMANCE A40WG0770-R016  
 DATA** ISSUE DATE 08/04/20

REL S.O.	RPM <b>1185</b>	S.F. <b>1.00</b>	ROTOR <b>418142-71-EE</b>
FRAME <b>405T</b>	VOLTS <b>230/460</b>	NEMA DESIGN <b>B</b>	TEST S.O. <b>TYPICAL DATA</b>
HP <b>75</b>	AMPS <b>174/87</b>	CODE LETTER <b>G</b>	TEST DATE <b>---</b>
TYPE <b>P</b>	DUTY <b>CONT</b>	ENCLOSURE <b>TEFC</b>	STATOR RES. @ 25 °C <b>.0215/.0860</b>
PHASE/HERTZ <b>3/60</b>	AMB °C/INSUL <b>40/F</b>	E/S <b>496234</b>	OHMS (BETWEEN LINES)



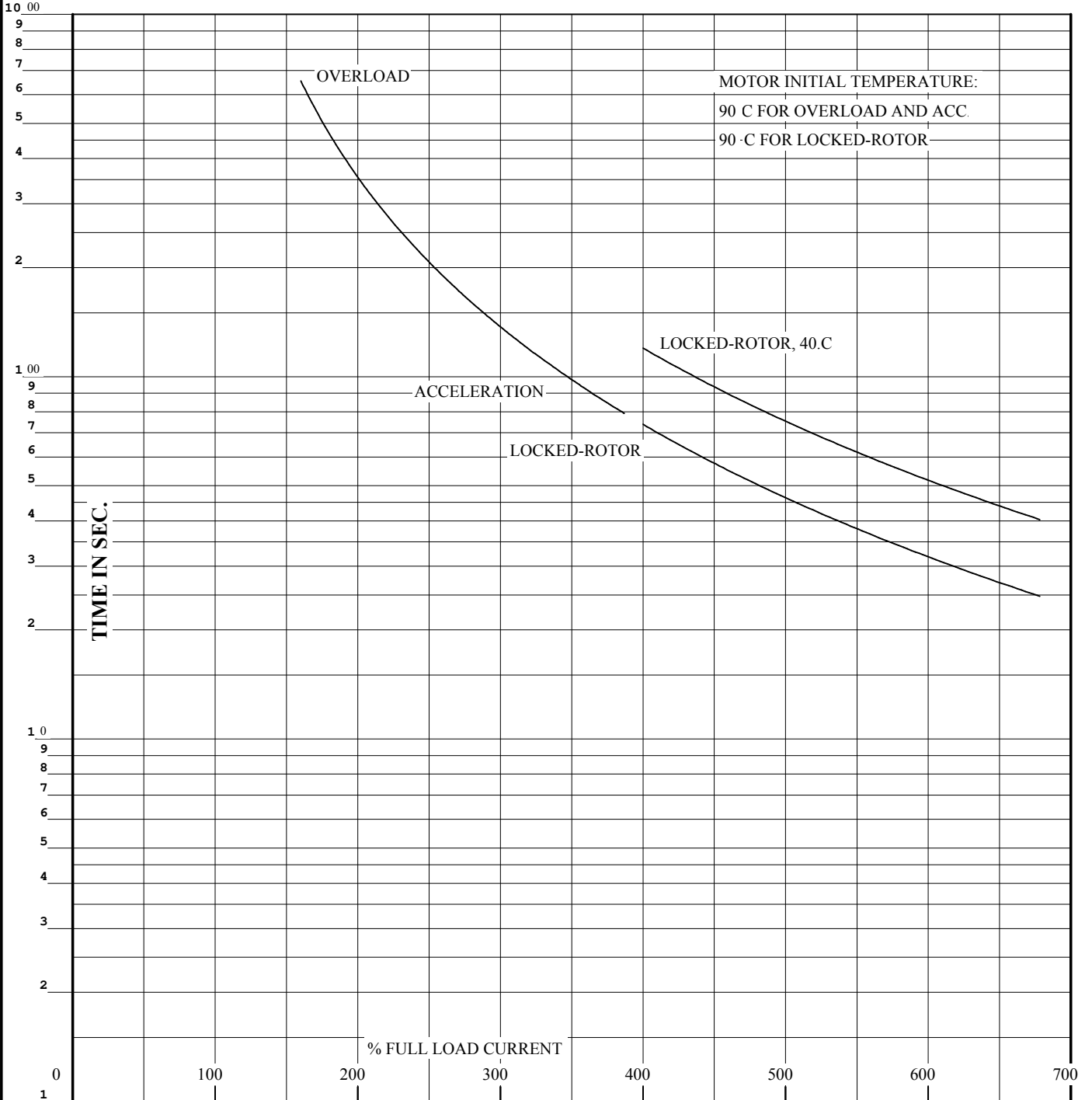
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



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 DATE 11/04/16

**A-C MOTOR  
 PERFORMANCE CURVES** **A40WG0770-R016**  
 ISSUE DATE 08/04/20

REL. S.O.	RPM <b>1185</b>	S.F. <b>1.00</b>	ROTOR <b>418142-71-EE</b>
FRAME <b>405T</b>	VOLTS <b>230/460</b>	NEMA DESIGN <b>B</b>	TEST S.O. <b>TYPICAL DATA</b>
HP <b>75</b>	AMPS <b>174/87</b>	CODE LETTER <b>G</b>	TEST DATE <b>---</b>
TYPE <b>P</b>	DUTY <b>CONT</b>	ENCLOSURE <b>TEFC</b>	STATOR RES. @ 25 °C <b>.0215/.0860</b>
PHASE/HERTZ <b>3/60</b>	AMB °C/INSUL <b>40/F</b>	E/S <b>496234</b>	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR-TYPICAL DATA-NEMA NOM EFF 94.5 PCT  
GUARANTEED MIN EFF. 93.6 PCT

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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CK. BY	W.L. SMITH
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DATE	11/04/16

**A-C MOTOR  
PERFORMANCE CURVES** **A40WG0770-R016**  
ISSUE DATE 08/04/20 Page 10 of 13



# CONNECTION DIAGRAM ACCESSORIES

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

NORMALLY CLOSED	THERMOSTATS	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

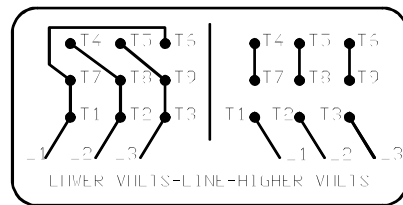
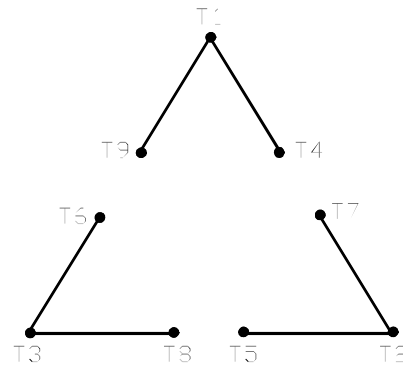
418174-006

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)

416820-002

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