

ACH 550 Series Adjustable Frequency AC Drives

Submittal

Project: SOF Riverine & Combatant Craft Operations

Specification Section:15000

Architect:Dammon Engineering, Inc.

Submitted By:
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Contractor: Gallo Mechanical Contr

Engineer: Damien P Serauskas

Customer: Stennis Space Center

Date: April 13th, 2009



Submittal Schedule

This schedule includes the products supplied as part of this submittal.

Item	Schedule		Motor Data ¹			Drive Data			
	Qty	Tag / Equipment ID	HP	FLA	Voltage	Product ID	HP	Output Amps	Voltage
1	1	AHU-2	7.5	11	460 VAC	ACH550-BCR-012A-4+B055+F267	7.5	11.9	480 VAC
2	3	AHU-1 P-1 P-2	2	3.4	460 VAC	ACH550-BCR-04A1-4+B055+F267	2	4.1	480 VAC

Notes: 1. AC Motor Data is per National Electrical Code Table 430.250 for typical motors used in most applications and is provided as typical data only. DC motor data is per typical industry standards. Actual motor data may vary.

Clarifications and Exceptions to Specification and Terms

The comments and clarifications that follow are offered in response to the specification items identified below. Please refer to the specification section and paragraph indicated. Any contract executed based on this proposal is done based acceptance of the exceptions noted herein.

Item ID	Title	Clarifications and Exceptions
P-1, P-2		Field provided disconnect by division 16 shall include auxiliary contacts for field interlock wiring requirements. Auxiliary contact should be interlocked to VFD located in the mechanical room.

Submittal Schedule Details for AHU-2

Item	Tag / Equipment ID	Product ID
1	AHU-2	ACH550-BCR-012A-4+B055+F267

Item Description
Input Voltage: 480 VAC Rated Output Current: 11.9 AMPS Construction: E-clipse-Bypass, Circuit Breaker Enclosure: NEMA 12 UL Type 12 Nominal Horsepower: 7.5 Frame Size: R1 Input Disconnecting Means: Circuit Breaker Bypass: E-Clipse Bypass Input Impedance: 5% Short Circuit Current Rating: 100 kA Communication Protocols: Johnson Controls N2, Siemens Buildings Technologies FLN (P1), Modbus RTU, BACnet Other Options: Service Switch

Drive Input Fuse Ratings ¹	
(Note: Drive is UL approved without the need for input fuses. Fuse rating information provided for customer reference)	
Amps (600 V)	Bussmann Type
15	KTK-R-15

Wire Size Capacities of Power Terminals				
Circuit Breaker	Disconnect Switch	Terminal Block	Overload Relay	Ground Lug
#8 40 in-lbs	N/A N/A	#8 15 in-lbs	N/A N/A	#8 35 in-lbs

Dimensions and Weights				
Height in / mm	Width in / mm	Depth in / mm	Weight lbs / kg	Dimension Drawing
33.2 / 842	17.4 / 443	13.5 / 343	78 / 35.4	3AUA0000016376 1

Heat Dissipation & Airflow Requirements			
Power Losses		Airflow	
Watts	BTU/Hr	CFM	CM/Hr
172	587	26	44

Reference Drawings		
Power Wiring	Connection Diagram	Dimension Detail
BCVCR012PW-C	BCBDR018CC-A	3AUA0000016376

Submittal Schedule Details for AHU-1 P-1 P-2

Item	Tag / Equipment ID	Product ID
2	AHU-1 P-1 P-2	ACH550-BCR-04A1-4+B055+F267

Item Description
<p>Input Voltage: 480 VAC Rated Output Current: 4.1 AMPS Construction: E-clipse-Bypass, Circuit Breaker Enclosure: NEMA 12 UL Type 12 Nominal Horsepower: 2 Frame Size: R1 Input Disconnecting Means: Circuit Breaker Bypass: E-Clipse Bypass Input Impedance: 5% Short Circuit Current Rating: 100 kA Communication Protocols: Johnson Controls N2, Siemens Buildings Technologies FLN (P1), Modbus RTU, BACnet Other Options: Service Switch</p>

Drive Input Fuse Ratings ¹	
(Note: Drive is UL approved without the need for input fuses. Fuse rating information provided for customer reference)	
Amps (600 V)	Bussmann Type
15	KTK-R-15

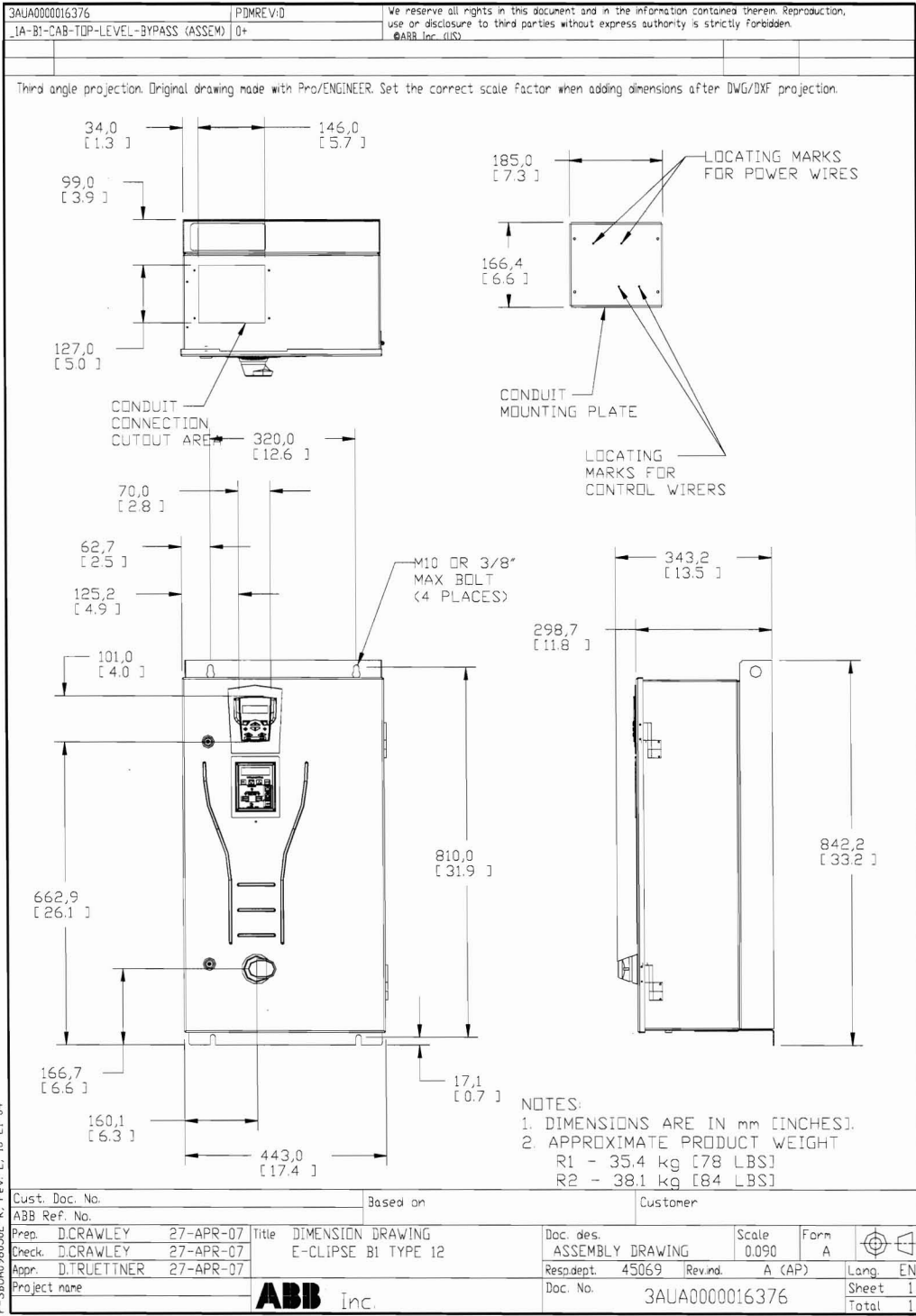
Wire Size Capacities of Power Terminals				
Circuit Breaker	Disconnect Switch	Terminal Block	Overload Relay	Ground Lug
#8 40 in-lbs	N/A N/A	#8 15 in-lbs	N/A N/A	#8 35 in-lbs

Dimensions and Weights				
Height in / mm	Width in / mm	Depth in / mm	Weight lbs / kg	Dimension Drawing
33.2 / 842	17.4 / 443	13.5 / 343	78 / 35.4	3AUA0000016376 1

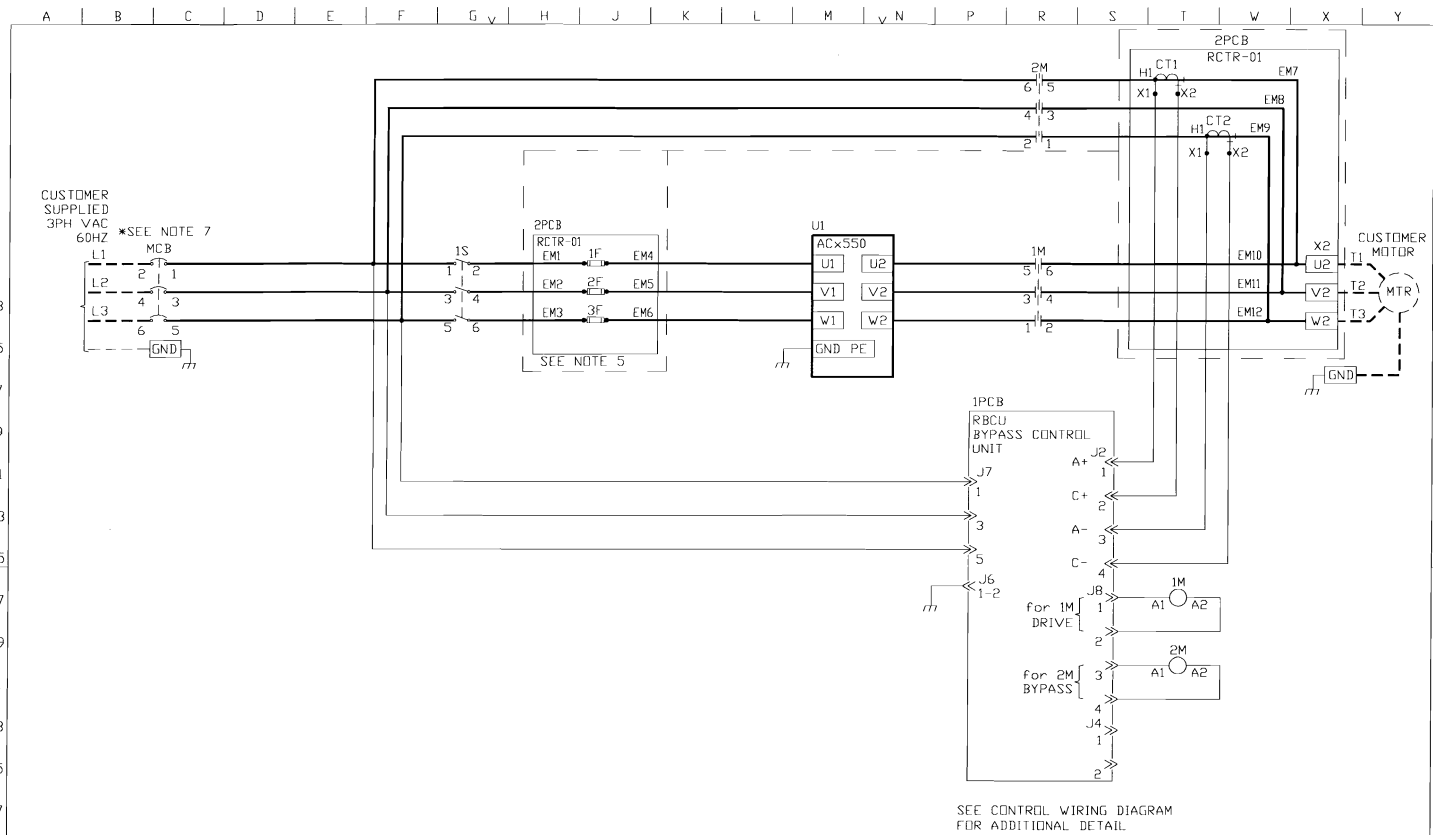
Heat Dissipation & Airflow Requirements			
Power Losses		Airflow	
Watts	BTU/Hr	CFM	CM/Hr
52	177	26	44

Reference Drawings		
Power Wiring	Connection Diagram	Dimension Detail
BCVCR012PW-C	BCBDR018CC-A	3AUA0000016376

Dimension Drawing for AHU-2, AHU-1 P-1 P-2



F-3BU0098502-k, rev. 2, 10-21-04

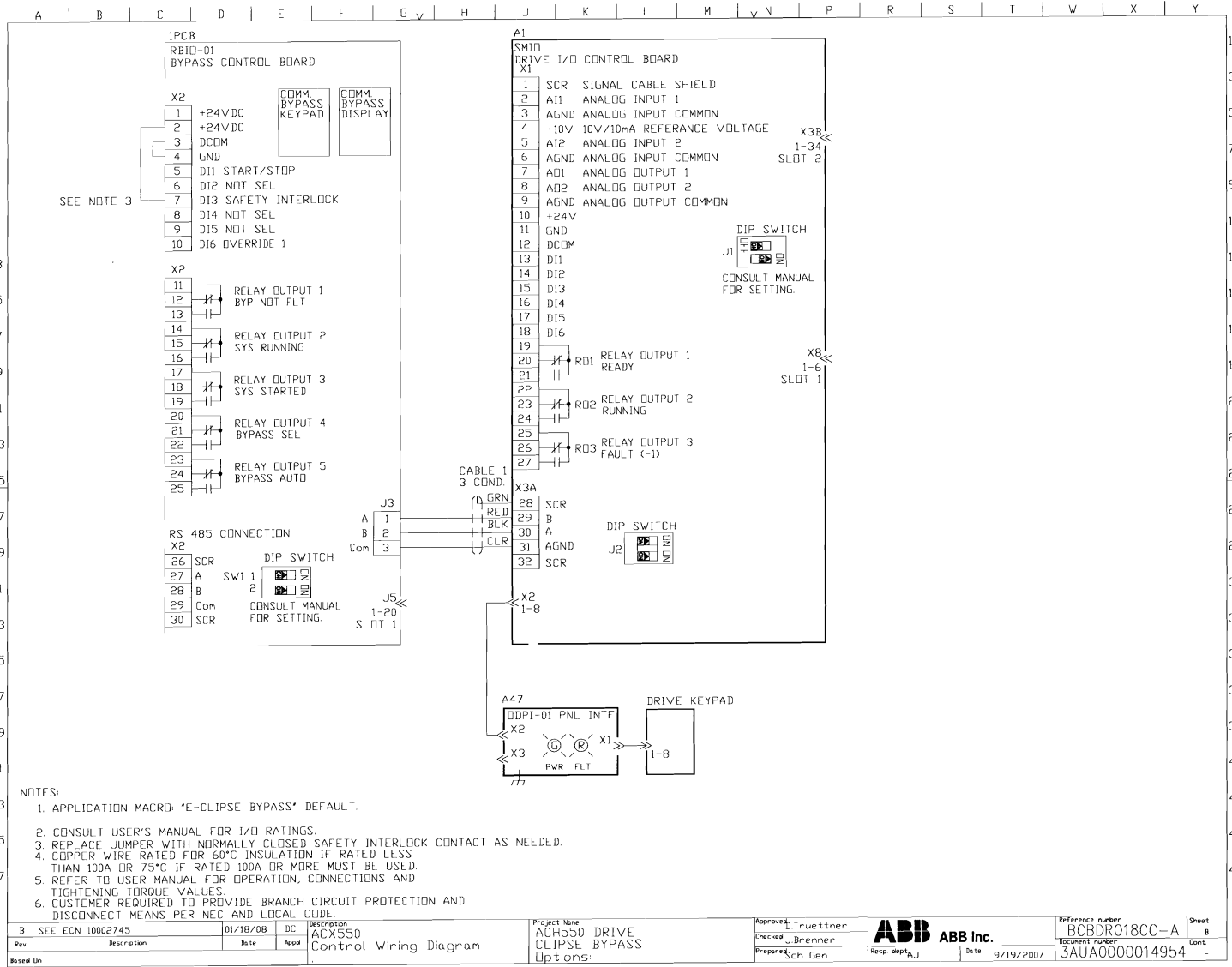


SEE CONTROL WIRING DIAGRAM FOR ADDITIONAL DETAIL

- NOTES:
1. PROGRAMMING:
DRIVE MACRO = E-CLIPSE, BYPASS MACRO = HVAC DEFAULT.
 2. DASH LINES INDICATE CUSTOMER INSTALLED DEVICES AND WIRING
 3. COPPER WIRE RATED FOR 60°C INSULATION IF RATED LESS THAN 100A OR 75°C IF RATED 100A OR MORE MUST BE USED.
 4. REFER TO USER MANUAL FOR OPERATION, CONNECTIONS AND TIGHTENING TORQUE VALUES.
 5. FUSE RATING LABEL IS NEAR DEVICE.
 6. CUSTOMER REQUIRED TO PROVIDE BRANCH CIRCUIT PROTECTION AND DISCONNECT MEANS PER NEC AND LOCAL CODE.
 7. SHORT CIRCUIT CURRENT: 100KA RMS SYMMETRICAL 480V MAXIMUM.

Rev	DESCRIPTION	DATE	APPROVAL	DESCRIPTION	PROJECT NAME	APPROVED	CHECKED	PREPARED	RESP. DEPT.	DATE	REFERENCE NUMBER	DOCUMENT NUMBER	SHEET
B	SEE ECN 10002745	01/18/08	DC	ACX550 Power Wiring Diagram	ACH550 DRIVE E-CLIPSE BYPASS Options:+F267	D. Truettner	J. Brenner	Sch Gen	A	9/19/2007	BCVCR012PW-C	3AUA0000014954	A
Based On													B

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Rev	Description	Date	Appr	Description	Project No	Approved	Reference number	Sheet
B	SEE ECN 10002745	01/18/08	DC	ACH550 Control Wiring Diagram	ACH550 DRIVE CLIPSE BYPASS Options:	D.Truttner	BCBDR018CC-A	B
Rev						J.Brenner	Document number	B
Based On						Sch Gen	3AUAA0000014954	Cont
							9/19/2007	-

