MARK	ITEM	VOLTAGE/Ø	MCA	LOAD KVA	MEANS OF DISCONNECT*	C/B TRIP (AMPS)	FEEDER Ø	FEEDER GND	FEEDER CONDUIT	SERVING PANEL	CONTROL
AC-1	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	25.8	9.3KVA	INTEGRAL TO UNIT BY MC	30	3#10	#10	3/4"C	2M1	LOCAL THERMOSTAT
AC-2	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	25.8	9.3KVA	INTEGRAL TO UNIT BY MC	30	3#10	#10	3/4"C	2M1	LOCAL THERMOSTAT
AC-3	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	25.8	9.3KVA	INTEGRAL TO UNIT BY MC	30	3#10	#10	3/4"C	2M1	LOCAL THERMOSTAT
AC-4	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	25.8	9.3KVA	INTEGRAL TO UNIT BY MC	30	3#10	#10	3/4"C	2M1	LOCAL THERMOSTAT
AC-5	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M1	LOCAL THERMOSTAT
AC-6	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-7	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M1	LOCAL THERMOSTAT
AC-8	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-9	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-10	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-11	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-12	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-13	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-14	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-15	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-16	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
AC-17	PACKAGE WALL MOUNTED CLASSROOM HEAT PUMP	208/3	26.2	1/2HP	INTEGRAL TO UNIT BY MC	35	3#10	#10	3/4"C	2M2	LOCAL THERMOSTAT
RTU-1	PACKAGED DX HEAT PUMP RTU	208/1	36	7.5KKVA	60/3 N3RFSS	40	3#8	#10	3/4"C	2M1	LOCAL THERMOSTAT
RTU-2	PACKAGED DX HEAT PUMP RTU	208/3	235	84.7KVA	250/3N3RECB	250	3#250	#4	3"C	2M1	LOCAL THERMOSTAT
RTU-3	PACKAGED DX HEAT PUMP RTU	208/3	62.00	24.5KVA	100/3N3RSS	80	3#4	#8	1 1/4"C	2M2	LOCAL THERMOSTAT
DSS-1	DUCTLESS SPLIT SYSTEM AHU	208/1	15.80	3.3KVA	30/3N3RSS	20	3#12	#12	3/4"C	2M2	LOCAL THERMOSTAT
EF-1	EXHAUST FAN 1	208/1	2.3	1/6HP	20/2 ECB DISCONNECT	20	3#12	#12	3/4"C		LINE
EF-2	EXHAUST FAN 3	208/1	2.3	1/6HP	60/2 N3RSS	45	2#12	#10	3/4"C		LINE
EF-3	EXHAUST FAN 3	208/1	2.3	1/6HP	30/3 N3RSS	30	3#12	#10	3/4"C		LINE
EF-4	EXHAUST FAN 4	208/1	2.3	1/6HP	CIRCUIT BREAKER	15	3#12	#12	3/4"C		LINE
EF-5	EXHAST FA 5	208/1	2.3	1/6HP	CIRCUIT BREAKER	15	3#12	#12	3/4"C		LINE
UH-1	UNIT HEATER	208/1	24	5KW	MR TOGGLE SWITCH	30	2#10	#10	3/4"C	2M2	
		50					#N/A	#N/A	#N/A		
							#N/A	#N/A	#N/A		
							#N/A	#N/A	#N/A		
							#N/A	#N/A	#N/A		
							#N/A	#N/A	#N/A		
							#N/A	#N/A	#N/A		

NOTES * N1SS=NEMA 1 SAFETY SWITCH, N3RSS=NEMA 3R SAFETY SWITCH, C/B=SERVING C/B IS DISCONNECT. N1FSS & N3RFSS=FUSED SWITCHES, NEMA 1 & NEMA 3R RESPECTIVELY.

1 TOGGLE SWITCH DISCONNECTS FOR ALL EXTERIOR MOUNTED DEVICES SHALL BE RATED NEMA 3R.

2 PROVIDE MOTOR RATED CONTROL POWER RELAY FOR ALL EXHAUST FANS & SUPPLY FANS NOT INTERLOCKED WITH LIGHTING CIRCUIT.

FIGURE 2

Dimensions of Basic Unit for Architectural and Installation Requirements (Nominal)

MODEL WIDTH (W) DEPTH (D) HEIGHT (H) SUPPLY RETURN

S T
12.00 6.00
4 19 12.00 5.00
16.00 1.88

PANELBOARD 2MSB

LOCATION: KITCHEN
VOLTAGE: 208 Y / 120V 3PH 4W MOUNTING: IN CABINET TYPE: BRANCH CIRCUIT

CKT	LOAD DESCRIPTION	LTG	REC	MTR	H/C	OTH	KIT	WIRE SIZE	C (IN)	BRKR TRIP/POLE	BRKR TRIP/POLE	WIRE SIZE	C (IN)	LTG	REC	MTR	H/C	OTH	KIT	LOAD DESCRIPTION	CKT
1					24.50			SEE				SEE W**A					44.30				2
3	PANEL 2M1				24.50			SCHEDULE		400/3	400/3	SCHEDULE RIGHT					41.80			PANEL 2M2	4
5					24.50							UNIT					47.10				6
7						6.50		SEE				SEE					0.20				8
9	PANEL 2P1					7.10		SCHEDULE		225/3	225/3	SCHEDULE					0.20			PANEL 2P2	10
11						56.00											0.20				12
13								SEE				SEE					2.50				14
15	PANEL 2K							SCHEDULE		1503	40/4	SCHEDULE					2.50			RTU-1	16
17																	2.50				18
19					25.80							SEE					8.20				20
21	RTU-2				25.80					250/3	80/3	SCJED;E					8.20			RTU-3	22
23					25.80												0.20				24
25																					26
27																					28
29																					30
31																					32
33																					34
35																					36
37												W**L									38
39												LEFT									40
41		1.70	2.67									UNIT							11.60		42

¡ Optional top outlet (factory installed only) for W30A and W36A models only.

CONNECTED LOAD	KVA	AMPS
PHASE A	112.0	933
PHASE B	110.1	917
PHASE C	172.3	1435
TOTAL	394.4	[illegible]

AMPS MIN. INTERRUPTING CAPACITY (RMS SYM. AMPS)

	CONNECTED (KVA)	DEMAND (KVA)
LIGHTING/CONTINUOUS	1.7	2.1
RECEPTACLES	2.7	[illegible]
MOTORS	0.0	[illegible]
HVAC	308.8	308.[illegible]
OTHER	69.6	69.6
KITCHEN	11.6	7.5

TOTAL DEMAND LOAD 391.[illegible] KVA
DEMAND AMPS 108[illegible] AMPS

[illegible] LARGEST MOTOR (KVA)

NOTES:
A. NEUTRAL CONDUCTOR SHALL NOT BE SHARED BETWEEN DEVICES. PROVIDE SEPARATE NEUTRAL FOR EACH DEVICE.
B. LOADS SHOWN FOR PREFERRED SOURCE ONLY FOR CLARITY, PANELS C AND D SUPPORT DUAL-CORDED EQUIPMENT.

Page 7 of 26

PANELBOARD 2M1

LOCATION: KITCHEN
VOLTAGE: 208 Y / 120V 3PH 4W MOUNTING: IN CABINET TYPE: BRANCH CIRCUIT

CKT	LOAD DESCRIPTION	LTG	REC	MTR	H/C	OTH	KIT	WIRE SIZE	C (IN)	BRKR TRIP/POLE	BRKR TRIP/POLE	WIRE SIZE	C (IN)	LTG	REC	MTR	H/C	OTH	KIT	LOAD DESCRIPTION	CKT
1					3.10			SEE				SEE					3.10				2
3	AC-1				3.10			SCHEDULE		30/3	30/3	SCHEDULE					3.10			AC-2	4
5					3.10												3.10				6
7					3.10			SEE				SEE					3.10				8
9	AC-3				3.10			SCHEDULE		30/3	30/3	SCHEDULE					3.10			AC-4	10
11					3.10												3.10				12
13					3.20			SEE			40/2	SEE					2.50				14
15	AC-5				3.20			SCHEDULE		35/3		SCHEDULE					2.50			RTU-1	16
17					3.20												2.50				18
19					3.20			SEE													20
21	AC-7				3.20			SCHEDULE		35/3											22
23					3.20																24
25					3.20			SEE													26
27	AC-2				3.20			SCHEDULE		35/3											28
29					3.20																30
31																					32
33																					34
35																					36
37																					38
39																					40
41																					42

CONNECTED LOAD	KVA	AMPS
PHASE A	24.5	204
PHASE B	24.5	204
PHASE C	24.5	204
TOTAL	73.5	204

AMPS MIN. INTERRUPTING CAPACITY (RMS SYM. AMPS)

	CONNECTED (KVA)	DEMAND (KVA)
LIGHTING/CONTINUOUS	0.0	0.0
RECEPTACLES	0.0	0.0
MOTORS	0.0	0.7
HVAC	73.5	73.5
OTHER	0.0	0.0
KITCHEN	0.0	0.0

TOTAL DEMAND LOAD 74.2 KVA
DEMAND AMPS 206 AMPS

2.7 LARGEST MOTOR (KVA)

NOTES:
A. NEUTRAL CONDUCTOR SHALL NOT BE SHARED BETWEEN DEVICES. PROVIDE SEPARATE NEUTRAL FOR EACH DEVICE.
B. LOADS SHOWN FOR PREFERRED SOURCE ONLY FOR CLARITY, PANELS C AND D SUPPORT DUAL-CORDED EQUIPMENT.

PANELBOARD 2M2

LOCATION: KITCHEN
VOLTAGE: 208 Y / 120V 3PH 4W MOUNTING: IN CABINET TYPE: BRANCH CIRCUIT

CKT	LOAD DESCRIPTION	LTG	REC	MTR	H/C	OTH	KIT	WIRE SIZE	C (IN)	BRKR TRIP/POLE	BRKR TRIP/POLE	WIRE SIZE	C (IN)	LTG	REC	MTR	H/C	OTH	KIT	LOAD DESCRIPTION	CKT
1					3.20			SEE				SEE					3.20				2
3	AC-10				3.20			SCHEDULE		35/3	35/3	SCHEDULE					3.20			AC-15	4
5					3.20												3.20				6
7					3.20			SEE				SEE					3.20				8
9	AC-12				3.20			SCHEDULE		35/3	35/3	SCHEDULE					3.20			AC-13	10
11					3.20												3.20				12
13					3.20			SEE				SEE					3.20				14
15	AC-14				3.20			SCHEDULE		35/3	35/3	SCHEDULE					3.20			AC-11	16
17					3.20												3.20				18
19					3.20			SEE				SEE					3.20				20
21	AC-16				3.20			SCHEDULE		35/3	35/3	SCHEDULE					3.20			AC-9	22
23					3.20												3.20				24
25					3.20			SEE				SEE					3.20				26
27	AC-17				3.20			SCHEDULE		35/3	35/3	SCHEDULE					3.20			AC-8	28
29					3.20												3.20				30
31	DSS-1				1.60			SEE		20/2											32
33					1.60			SCHEDULE													34
35	UH-1				2.50			SEE		30/2											36
37					2.50			SCHEDULE													38
39																					40
41		1.70	2.67																		42

CONNECTED LOAD	KVA	AMPS
PHASE A	36.1	301
PHASE B	33.6	280
PHASE C	38.9	324
TOTAL	108.6	301

AMPS MIN. INTERRUPTING CAPACITY (RMS SYM. AMPS)

	CONNECTED (KVA)	DEMAND (KVA)
LIGHTING/CONTINUOUS	1.7	2.1
RECEPTACLES	2.7	2.7
MOTORS	0.0	0.4
HVAC	104.2	104.2
OTHER	0.0	0.0
KITCHEN	0.0	0.0

TOTAL DEMAND LOAD 109.4 KVA
DEMAND AMPS 304 AMPS

1.4 LARGEST MOTOR (KVA)

NOTES:
A. NEUTRAL CONDUCTOR SHALL NOT BE SHARED BETWEEN DEVICES. PROVIDE SEPARATE NEUTRAL FOR EACH DEVICE.
B. LOADS SHOWN FOR PREFERRED SOURCE ONLY FOR CLARITY, PANELS C AND D SUPPORT DUAL-CORDED EQUIPMENT.

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SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER 30469 BERRY L. VENEY 06.05.20

SOUTH CAROLINA BLV ELECTRICAL ENGINEERS INC No. 5062 CERTIFICATE OF AUTHORIZATION 06.05.20

Client
ALLENDALE-FAIRFAX COUNTY SCHOOL DISTRICT

Project
ALLENDALE PRIMARY SCHOOL

Issued For
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E-401

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