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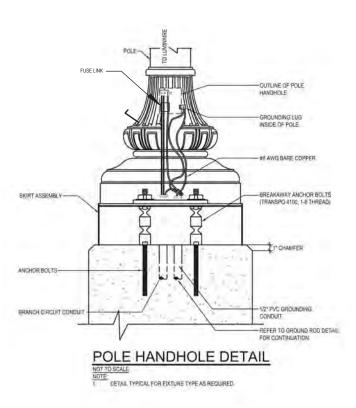
SCOPE OF WORK

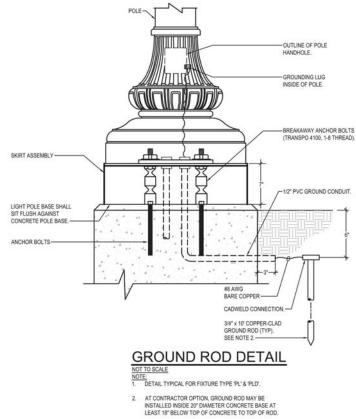
DEVELOPER REQUIREMENTS

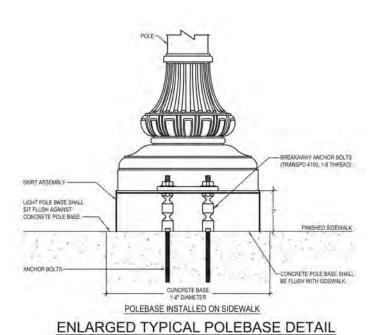
- 1. The developer will be responsible for the individual designs of each enclosure area or incorporating lighting into the existing enclosure area designs.
- 2. Provisions for future fixture locations assigned to the enclosure must be accommodated in the electrical design. This may in-clude but not be limited to, increased conduit size, spare conduit, increase wire size, spare wire, junction boxes, wire labels at all junctions, stub outs, and other miscellaneous accommodations.
- 3. Refer to section 5.6 "Street Lighting in the City of Auburn Public works Design and Construction Manual" for full requirements.
- 4. Developer must confirm if any of master plan work has been done at his specific location. Verify if panel enclosure has been installed and any pole lights that may be in place. Coordinate all new electrical work with owner representative.

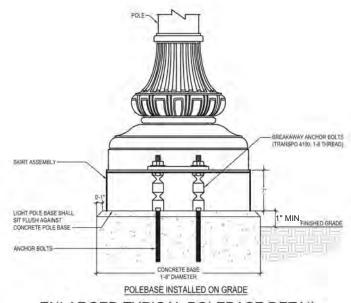
GENERAL ELECTRICAL REQUIREMENTS

- 1. All Electrical work and material shall conform to the latest edition of the N.E.C. and the requirements of the state and local authority having jurisdiction.
- 2. Wiring system shall consist of copper wiring installed in conduit. Minimum wire size shall be #8 AWG. Minimum con-duit size shall be 1 1/2". All underground conduits shall be minimum 36" deep.
- 3. All conductors shall be Type 'THHN'.
- 4. Conduit shall be sized in accordance with Table 1, Chapter 9 of N.E.C.
- 5. Contractor shall provide all materials necessary to finalize a neat, complete and properly working electrical system which conforms to all local codes and the National Electrical Code as per plans and specifications.
- 6. It shall be the responsibility of the contractor to visit the site and become thoroughly familiar with all existing conditions prior to construction, as he shall be responsible for the same.
- 7. Refer to civil plans for description of underground utilities.
- 8. Cutting of existing pavement is not allowed for routing new circuits/conduits. Provide directional horizontal boring, minimum 36" below grade as required.
- 9. Service voltage at each electrical enclosure shall be 120/240 Volt, 1 Phase, 3 Wire. Service shall be underground by Alabama Power Co.
- 10. Enclosure locations are general. Coordinate exact locations with owner representative and Alabama Power Co. prior to installation.
- 11. Contractor shall coordinate exact location of pedestrian lights with owner representative prior to installation.
- 12. Contractor shall schedule all inspections with owner repre-sentatives as required in the City of Auburn Public Works Design and Construction Manual.
- 13. Flag holder shall be installed 8'-0" above grade if required.
- 14. Required chamfer shall be constructed using chamfer strip. It may not be hand tooled.





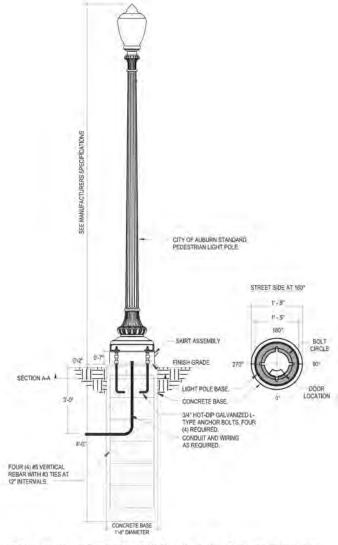




ENLARGED TYPICAL POLEBASE DETAIL

	LIGHTING FIXTURE SCHEDULE										
SYMBOL	MANUFACTURER & CATALOG NUMBER	LAMP	WATTS	MOUNTING	VOLTS	REMARKS					
PL	HOLOPHANE #GVD2-P30-40K-AS-S-BK-3NNU (LIGHT FIXTURE) #WDA-12-L4E-17-P07-ABG-BK-WDA17-BRKWY- KIT-BK (POLE)	LED 4000K	60	POLE	120	DECORATIVE LED LUMINAIRE WITH: CAST ALUMINUM HOUSING (BLACK FINISH); BOROSILICATE GLASS REFRACTOR; TYPE 3 DISTRIBUTION; INTEGRAL 400 MILLI-AMP LED DRIVER, MOUNT FIXTURE ON 12' STRAIGHT ALUMINUM, SITELINK POLE.					
₽В	HOLOPHANE #GVD2-P30-40K-AS-S-BZ-3NNU (LIGHT FIXTURE) #WDA-12-F13-17-P07-ABG-BZ-FGB-WDA17-BRKWY- KIT-BZ-R322A-FGIUS-S-DB (POLE) #FPH-3BO FLAG POLE HOLDER.	LED 4000K	60	POLE	120	DECORATIVE LED LUMINAIRE WITH: CAST ALUMINUM HOUSING (BRONZE FINISH); BOROSILICATE GLASS REFRACTOR; TYPE 3 DISTRIBUTION; INTEGRAL 400 MILLI-AMP LED DRIVER. MOUNT FIXTURE ON 12 CLASSIG TAPERED AND FLUTED ALUMINUM POLE WITH BRONZE FINISH, WITH RECEPTACLE INSIDE HANDHOLE AND ONE NEAR TOP OF POLE. FLAG POLE HOLDER AT 96" A.F.G.					
PLR	HOLOPHANE #GVD2-P30-40K-AS-S-BK-3NNU (LIGHT FIXTURE) #WDA-12-L4E-17-P07-ABG-BK-WDA17-BRKWY- KIT-BK-FGIUS-S-BK (POLE)	LED 4000K	60	POLE	120	DECORATIVE LED LUMINAIRE WITH: CAST ALUMINUM HOUSING (BLACK FINISH); BOROSILICATE GLASS REFRACTOR: TYPE 3 DISTRIBUTION; INTEGRAL 400 MILLI-AMP LED DRIVER: MOUNT FIXTURE ON 12 STRAIGHT ALUMINUM, STELLINK POLE WITH RECEPTACLE INSIDE HANDHOLE AND ONE AT 11-0" ABOVE BOTTOM OF POLE.					

Contact Brad Bradfield with Holophane for pricing.



TYPICAL PEDESTRIAN LIGHT POLE DETAIL

NOT TO SCALE NOTE: 1 DETAIL IS TYPICAL.

- CONTRACTOR SHALL COORDINATE ANCHOR BOLT ORIENTATION SO THAT ALL HANDHOLES ARE SAME AND "SITELINK" POLE SLOT IS EXACTLY ADJACENT AND PARALLEL TO STREET, 180" SHALL BE AT STREET SIDE AND HANDHOLE SHALL BE AT 0" OPPOSITE STREET. NO EXCEPTIONS TO THIS CORRECT POLE INSTALLATION.
- THE SKIRT ASSEMBLY SHALL CONSISTS OF 17' DIAMETER X 1/2' THICK STEEL PLATE WITH A 7' TALL ALUMINUM SKIRT ATTACHED WITH STAINLESS STEEL SCREWS. THE SKIRT PLATE SHALL HAVE HOLES CORRESPONDING TO THE ANCHOR PLATE WIREWAY AND ANCHOR BOLTS, THE 7' TALL SKIRT ASSEMBLY SHALL REST LIPON THE LEVEL BREAKAWAY ANCHOR BOLTS (TRANSPO 410). THE THE ASSEMBLY SHALL REST LIPON THE SKIRT PLATFORM FOR THE 17' DIAMETER CLAMSHELL BASE, THE SHAFT ANCHOR PLATE SHALL REST UPON THE SKIRT PLATE, PASTENED WITH THE ASPROPRIATE HARDWARE. THE CLAMSHELL BASE SHALL BE FITTED AROUND THE SHAFT AND REST UPON THE SKIRT ASSEMBLY.

STANDARD PEDESTRIAN POLE DETAILS



Wadsworth Aluminum Pole Granville® II LED 2 (GVD2)



POLE ATTRIBUTES:

Description The lighting post shall be all aluminum, one-piece construction, with a classic

Materials The base and extruded straight aluminum shaft shall be heavy wall, cast aluminum produced from certified ASTM 356.1 Ingot per ASTM B-179-95a or ASTM B26-95. The straight and tapered shafts shall be extruded from aluminum, ASTM 6061 and 6063 alloy respectively. Material heat treated to a T6 temper.

Construction The shaft shall be double welded to the base casting and shipped as one piece for maximum structural integrity. The shaft shall be welded inside the base casting at the top of the access door, and externally where the shaft exits the base. All welding shall be per ANSI/AWS.

Installation The post has an option to have four L-Type hot dip galvanized anchor bolts shipped with it. A door shall be provided in the base for anchorage and wiring access. A grounding screw shall be provided inside the base opposite the door.

FIXTURE ATTRIBUTES:

General The GranVille® II Classic LED 2 is designed for ease of maintenance with the electrical module common to Holophane's original GranVille Series. A percision optical system that maximizes post spacing while maintaining uniform illumination.

Features and Benefits

- Engineered LED system for maximum performance and reliability
- o Designed for use with original globes and housings maintaining familiar appearance
- Optimized to meet existing lighting standards
- · Asymmetric and Symmetric distributions offer application design flexibility
- Simple access to electronic driver and components for ease of maintenance

Typical Applications

- o City Streets
- o Parks
- Residential Areas
- Campuses
- o Walkways
- o Parking Lots

Finish/Material The luminaire is finished with polyester powder paint, and, the luminaire housing is cast of aluminum. Luminaire Mounts to P07 (3X3) Tenon Configure Entire Pole Package Assmembly For Pole and Arm Comb

Catalog #GVD2 P30 40K AS S BK 3 N N U WDA 12 L4E 17 P07 ABG BK WDA17-BRKWY-KIT BK

Dwg. # HLP-43801

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0	LOPHANE
ADERI	S MONTH SOUTH TONS
An SSA	culty Brands Company

Catalog Number GVD2 P30 40K AS S BK 3 N N U WDA 12 L4E 17 P07 ABG BK WDA17-BRKWY-KIT BK

SPECIFICATIONS

FIXTURE Granville® II LED 2 (GVD2) Prefix: GranVille® II LED 2 (GVD2)
Performance Package LED Performance Package 30 Color Temperature: 4000 Series CCT Voltage: Auto-Sensing Voltage (120-277) Housing: Simple Finish: Black Optics: Asymmetric Type III Trim: No Trim Finial: No Finial Trim Finish: No Trim and Clear or No Finial Covers: None Photocontrol Receptacle: None Prewired Leads: None NEMA Label: None
Adjustable Output: None
Factory Programmed Driver: None
Photocontrol: None Dimming: None ROAM Dimming Control: None Photocontrol Kit Accessory None Decorative Band Accessory: None House Side Shield Accessory: None Post Capital Accessory: None Luminaire EPA: 1.88 Luminaire Weight: 59

POLE

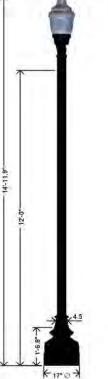
Prefix: Wadsworth Aluminum Pole
Height: 12 feet (Actual Height: 12*0") Shaft Style: SiteLink 4.5 inch Fluted, 156 wall Base: 17 inch Round Base Tenon: 3 X 3 Tenon Pole Mounting. Anchor bolts, galvanized steel Finish: Powder Coat Paint Finish, Black GFI Inside Base; None Breakaway Coupling, Nuts, Washers, Bearing Plate and Skirt Breakaway Kit. Ti Breakaway Kit F Base EPA: 1.62 Base Weight: 41

Your Assembly Wind Load status: Pass Passed for wind speed: 90 MPH For further details, review the Structural Analysis Report.

Anchor Bolt: AB-31-4

Customer Approval

Wadsworth Aluminum Pole Granville® II LED 2 (GVD2)



Anchorage/Orientation Plan Street Side @ 180°

Job Name: City Standard Client Name: City of Auburn, AL

Hand Hole is at 0 deg.

Created By: Norman Bradfield

Catalog #GVD2 P30 40K AS S BK 3 N N U WDA 12 L4E 17 P07 ABG BK WDA17-BRKWY-KIT BK

Dwg. # HLP-43801

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Date: 17-Nov-16

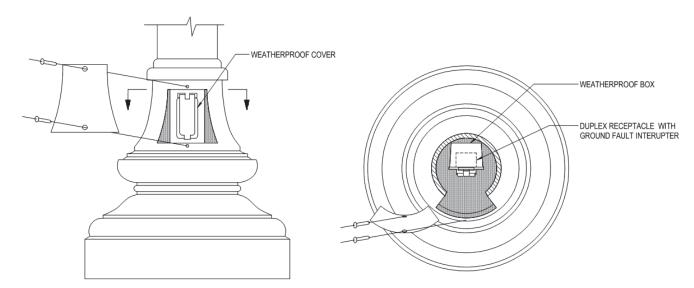
Brad Bradfield, LC Senior Sales Representative

Holophane Sales Channel Acuity Brands Lighting, Inc.

O 334.291.4643 | M 706.329.4527

BBradfield@Holophane.com

STANDARD PEDESTRIAN POLE REQUIREMENTS



SPECIFICATIONS

A 20 amp, 125 volt, ground fault circuit interrupter duplex receptacle shall be mounted inside the post base, facing toward the access door. The receptacle shall be UL Listed according to E-48380 and UL 943 Class A and UL 498. The receptacle shall be mounted in a cast aluminum box and cover that is suitable for wet locations while not in use. The receptacle and cover shall mount to a outlet box with a gasket and stainless steel screws. Holophane RB/GFI/WPC

NOTE: Internal receptacles are typically installed for use by authorized personnel for special events and owner maintenance purposes.

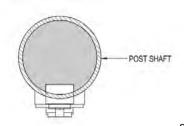
WEATHERPROOF RECEPTACLE - INTERNAL BASE LOCATION

NOT TO SCALE

NOTE:

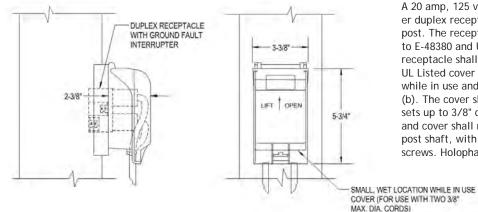
1. Receptacles must be wired on separate circuit from light.

NOTE: External receptacles are typically installed above pedestrian level for special event uses and decorative seasonal lighting. Mount 11'-0" above bottom of pole base.



SPECIFICATIONS A 60 105

A 20 amp, 125 volt, ground fault circuit interrupter duplex receptacle shall be mounted in the post. The receptacle shall be UL Listed according to E-48380 and UL 943 Class A and UL 498. The receptacle shall have a cast aluminum, lockable, UL Listed cover that is suitable for wet locations while in use and complies with NEC Article 410-57 (b). The cover shall accept most common cord sets up to 3/8" diameter (14/3). The receptacle and cover shall mount to an outlet opening, in the post shaft, with a gasket and stainless steel screws. Holophane FGIUS-SBKH



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WEATHERPROOF RECEPTACLE - EXTERNAL POST SHAFT LOCATION

NOT TO SCALE

NOTES:

- 1. This receptacle shall be mounted 11'-0" above bottom of pole base.
- 2. Receptacles must be wired on separate circuit from light.

		PANE	LBC	ARI	o s	CHE	EDULE	-	PANEL 'EQ'
DIRECTORY	LOAD (LOAD (VOLT*AMPS)		BRKR	BRKR	СКТ	LOAD (VOLT*AMPS)		DIRECTORY
	A		NO	AMPS	AMPS	NO -	A	В	
SPARE	0		1	20	20	2	0		SPARE
SPARE		0	3	20	20	4		0	SPARE.
SPARE	0		5	20	20	6	0		SPARE
SPARE		0	7	20	20	8		0	SPARE
SPARE	0		9	20		10		-	
SPARE		0	11	20		12			
			13			14			
	14		15			16			
			17			18			
			19	100		20			
			21			22			
			23	-		24			
SUB-TOTAL	0	0					0	0	SUB-TOTAL
VOLTAGE: 120/240V, 1PH, 3	W	PANEL TY	E: Loa	d Ctr.	1	OTAL	VA - A	0	LOCATION
MAIN BREAKER : MLO		MAIN BUS	125A		1	OTAL	VA - B	0	ENCLOSURE
MOUNTING: SURFACE		A.I.C. RATI	NG: 10	K		100		- 2	TOTAL CONNECTED LOAD
NOTES:		ENCLOSU	RE: NE	MA 1	1	TOTAL	- VA	0	0 A

	7.	PANE	LBC	ARI	o s	CHE	DULE		PANEL 'SL'
DIRECTORY	LOAD (V	LOAD (VOLT'AMPS)		BRKR	BRKR	CKT	LOAD (VOLT'AMPS)		DIRECTORY
3-01-61-61-0	A	В	NO	AMPS	AMPS	NO -	A	В	3.000
SPARE	0		1	20	1	2			
SPARE		0	3	20		4			
SPARE	0		5	20		6			
SPARE		0	7	20		8			
SPARE	0		9	20		10			J. Committee of the com
SPARE		0	11	20		12			
			13			14			
			15			16			
	1		17			18			
			19			20		-	
			21			22			
			23			24			
SUB-TOTAL	700	400					0	0	SUB-TOTAL
OLTAGE: 120/240V, 1PH.	3W	PANEL TYP	PE: Loa	d Ctr.	1	OTAL	A-A	0	LOCATION
MAIN BREAKER : MLO		MAIN BUS: 125A			1	OTAL	/A - B	0	ENCLOSURE
MOUNTING: SURFACE		A.I.C. RATI	NG: 10	IK.					TOTAL CONNECTED LOAD
NOTES:		ENCLOSUE	RE: NE	MA-1	-	TOTAL	VA	0	0 A

ENCLOSURE NOTES

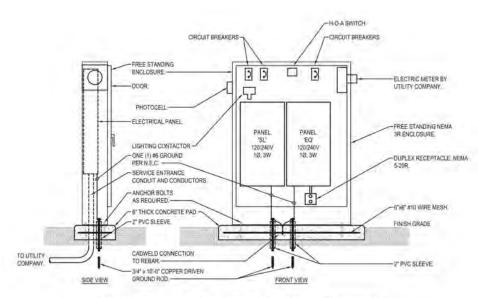
- #
- ENCLOSURE SHALL BE FREESTANDING ON CONCRETE PAD, RAINIPROOF-NEMA 3R, STEEL (G90), PAINTED BLACK (RAL 9017), HINGED AND LOCKABLE OUTSIDE DOOR, HINGED DEAD-FRONT INSIDE COVER. ALL INTERNAL WIRING AND CONNECTIONS SHALL BE BY MANUFACTURER MUST BE UL'SERVICE ENTRANCE" RATED. SIZE AS REQUIRED. ALL CIRCUIT BREAKERS (MAIN & BRANCH) AND H-O-A SWITCH SHALL BE ACCESSIBLE INSIDE ENCLOSURE WITH DEAD-FRONT COVER CLOSED. MILBANK OR APPROVED EQUIVALENT.
- CONTACTOR SHALL BE 100 AMP 2 POLE. ELECTRICALLY HELD WITH 120 VOLT COIL, OPEN TYPE. THIS CONTACTOR SHALL CONTROL "ON-OFF" OF ALL CIRCUITS IN PANEL 'SL'.
- AND-OFF-AUTO (H-O-A) SWITCH SHALL BE 120 VOLT 20 AMP RATED AND SHALL OPERATE AS FOLLOWS:

"HAND"- CONTACTOR IS CLOSED AND PANEL 'SL' IS ENERGIZED.

"OFF"-CONTACTOR IS OPEN AND PANEL 'SL' IS DEENERGIZED.

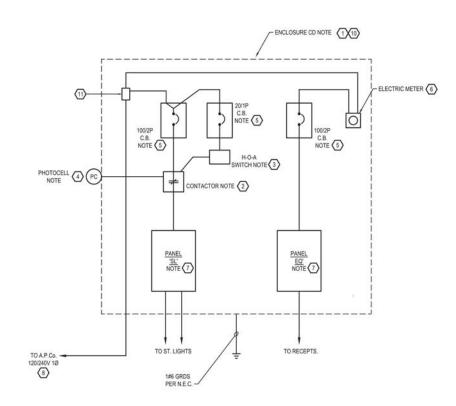
"AUTO"-PHOTOCELL CONTROLS CONTACTOR AND "ON-OFF" OF PANEL 'SL'.

- PHOTOCELL SHALL BE SPST 120 VOLT TO CONTROL CONTACTOR AND "ON-OFF" OF PANEL 'SL'. PHOTOCELL SHALL BE MOUNTED INSIDE OF ENCLOSURE WITH GLASS WINDOW TO DETECT OUTSIDE LIGHT.
- GIRCUIT BREAKER (SIZE AS NOTED), SEPARATE OPEN TYPE, 10K AIC. ACCESSIBLE ON INSIDE HINGED COVER WITH LABEL DESCRIBING FUNCTION.
- UTILITY COMPANY ELECTRIC METER, MOUNT SOCKET INSIDE ENCLOSURE WITH METER
 VISIBLE ON OUTSIDE, COORDINATE REQUIREMENTS WITH UTILITY COMPANY, METER MOUNTING HEIGHT SHALL BE BETWEEN 48" AND 60" ABOVE FINISH GRADE TO CENTER OF
- PANEL 120/240VOLT 1 PHASE 3 WIRE, CIRCUIT BREAKER LOAD CENTER TYPE. REFER TO PANELBOARD SCHEDULE FOR CIRCUIT BREAKERS. BREAKERS SHALL BE ACCESSIBLE ON INSIDE HINGED COVER. PROVIDE DIRECTORY OR LABELS.
- CONTRACTOR SHALL FURNISH AND INSTALL ONE (1) 3°c. 36° DEEP, ALABAMA POWER COMPANY WILL FURNISH AND INSTALL CONDUCTORS. COORDINATE CONNECTION
- ALL ENCLOSURE COMPONENTS AND INTERNAL WIRING BETWEEN COMPONENTS SHALL BE DONE BY ENCLOSURE MANUFACTURER.
- THIS IS A STANDARD ELECTRICAL ENCLOSURE FOR CITY OF AUBURN AND MAY INCLUDE EQUIPMENT NOT USED ON THIS PROJECT.
- SERVICE TERMINATION LUGS.



PANEL ENCLOSURE DETAIL - TYPICAL

1 REFER TO DETAIL 2 SHEET E3 FOR ADDITIONAL INFORMATION



EQUIPMENT INSIDE ENCLOSURE -TYPICAL

Catalog Number:

CP3B5212BRBKSL1

TYPE A

120/240 VAC, 1-phase, 3-wire; 200 Amps Maximum, (see Main circuit breaker rating) Rainproof - Type 3R, Galvanized (G90) steel Enclosure, painted BLACK (RAL 9017) Enclosed Industrial Control - Suitable ONLY for Use as Service Equipment

The short circuit current rating is 10,000 RMS symmetrical amperes maximum at 240volts maximum, in accordance with the table below, but is limited to the lowest short circuit rating of any installed circuit breaker. Watthour meter is not included in the short circuit rating. Replacement circuit breakers must be of the same type and rating.

METERED CIRCUIT DIRECTORY (PANEL EQ)

No	Аттр.	Poles	Circuit Description	No.	Amp.	Poles	Circuit Description	
1	20	1	RECEPTS	2	20	1	RECEPTS	_
3	20	-10	RECEPTS	4	20	1	RECEPTS	
5	20	1	RECEPTS	6	20	1	RECEPTS	
7	20	1	RECEPTS	В	20	30	RECEPTS	
9	20	i t	RECEPTS	10	20	i.	RECEPTS	
11	20	104	RECEPTS	12	20	1	RECEPTS	
13		1 2		14				
15				16				
17				18				
19.				20				
21		1		22				
23	1 4	11.74		24				

AIC RATING	MAIN (METERED)	BRANCHES (METERED)					
10	Siemens type BQ	Siemens type BQ, QP					

UNMETERED CIRCUIT DIRECTORY (PANEL SL)

No	Amp.	Poles	Circuit Description	No.	Amp	Pules	Gircuit Description
1	20	1	STREET LTS	2	20	140	STREETLIS
3	20	1	STREET LTS	- 4	20	21	STREETLTS
5	20	1	STREET LTS	6	20	1	STREET LTS
7	20	- 4	STREET LTS	B	20	4.	STREET LTS
9 -	20	4	STREETLIS	10	20	1	STREETLTS
11	20	-	STREET LTS	12	20	9-1	STREET LTS
13				14		1	
15.				16			
17				18			
19				20			
21				22			
23				24		1	

AIC RATING	MAIN (UNMETERED)	BRANCHES (UNMETERED)
22	Siemens type BQ	Siemens type BQ, QP

Circuit breaker handle trip position is between "ON" and "OFF". To reset breaker, move handle to the full "OFF" position, then to full "ON".

Terminal Information, Use AL/CU conductors

FIELD WIRED CONNECTORS					BUS CO	NNEC	TIONS	For Equipment Ground ONLY, multiple conductors in a single			
-			THREADFO	RMING	SCREWS	opening are permissable as					
Socket Size	Torque Lbin	AWG Wire Size	Torque Small Hote	Large Hole	SCREW	MAT'L	Torque. LbIn	AWG Small		Large	
5/161	275	5/161 275	#14-10	20	35	10-24	AL	30	Size	Hole	Hole
3/8"	375	#8	25	40	10-24	CU	50	#14-10	1-2	1-2	
1/2"	500	#6	35	45	1/4-20	AL	50	#10	3.1	3	
9/16/	600	#3-1/0	2	45 50	V-20	CU	72	#4 - 170	7	1	

Shipping may loosen electrical connections. CHECK TIGHTNESS BEFORE ENERGIZING

BONDED NEUTRAL — Remove neutral load conductors for test purposes only!

FIELD INSTALLED conductors shall be 60°C, 75°C, or 90°C, sized to 60°C rating for 110 amps or less, and 75°C or 90°C for 125 amps and above.

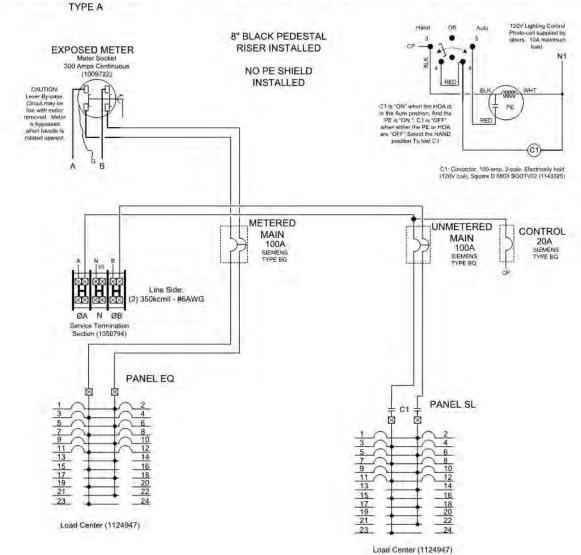


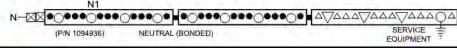
Sheet 1 of 2



Catalog Number: CP3B5212BRBKSL1

120/240 VAC, 1-phase, 3-wire; 200 Amps Maximum, (see Main circuit breaker rating)
Rainproof - Type 3R, 304 Galvanized (G90) steel Enclosure, painted BLACK (RAL 9017)
Enclosed Industrial Control - Suitable ONLY for Use as Service Equipment







Sheet 2 of 2



