



Turning the Ordinary into the Extraordinary

www.PivotCorp.com



PVC10-SBUX-CAFE-MST1

Starbucks® Cart Series

Double Espresso Cart

Version 4.0

Product Guide

January 1, 2023



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Cart Overview

The PVC10-SBUX-CAFE-MST1 Cart manufactured by PIVOT measures approximately 34 inches wide by 108 inches in length (9 feet) by 96 inches in height (8 feet).

This Cart features a signature box canopy with a beautiful hardwood veneer.



This Cart is designed to be a rear-line unit and complemented with other Carts to form the Enhanced Starbucks Pop-Up Store.

The Double Espresso Cart is packed with features.

- Supports 2 Mastrenas
- Espresso Rinser
- Integrated Hutch Cock Pit for enhanced functionality
- Work Sink with Water Tower and Pitcher Rinser
- PIVOT's plumbed Drainboard
- Hand Sink
- 48-inch Undercounter Refrigerator
- LED Ceiling Lights
- Furniture-Grade Oak Veneer – Updatable
- 304-Stainless Steel Countertop with Marine Edge
- Complete electrical system with Load Center
- PIVOT's proven Utility Engine under the hood
- Premium powder coated metal construction
- UL Listed – US & Canada
- A Turnkey *plug 'n play* solution



Cart Construction

The PVC10-SBUX-CAFE-MST1 Cart is manufactured with a base construction of Steel and Aluminum. This is in comparison to many other Carts that are constructed of wood, steel frame or plastic.

PIVOT's base construction provides an optimal platform for durability, functionality, portability and product life. These materials also provide this Cart with a CLASS A Flame Spread rating and is perfect for all environments.



Another huge advantage of the PIVOT Cart base construction is that **100%** of the **WASTE** when manufacturing this Cart is **100% RECYCLABLE**. After a long product life cycle, this Cart can also be refurbished and re-deployed to enjoy another complete life cycle, saving our natural resources and your hard-earned dollars. When it eventually comes time to retire, 100% of the structure of this Cart can be recycled to offer great sustainability of our natural resources.

All steel and aluminum components are powder coated satin black for beauty and ease of maintenance. This type of base construction provides the best platform for durability, long lasting functionality and cleanliness in the wet, harsh and high-volume environment of a Starbucks® store.

The strong base construction is softened by beautiful *Furniture-Grade* natural Oak wood veneers to give this Cart the unmistakable premium Starbucks® look and feel. 304-Stainless Steel countertops with marine edge provides a durable and optimal work surface.

All PIVOT Carts come with premium, non-marking, industrial wheels designed to easily support the weight of the Cart as well as provide many years of maintenance free service. These wheels are affixed onto PIVOT's base structure comprised of 11-gauge steel to provide uncompromising performance in high volume commercial environments.

These Carts come pre-installed with all Utilities and undercounter equipment from the factory for a turn-key store package.



UL Certification

The PVC10-SBUX-CAFE-MST1 Cart is UL Listed in both the United States and Canada.



You can find our listing on the UL Directory under our file number KNNS.E475132 for the United States and KNNS7.E475132 for Canada, or by following these links (or copy and paste them into your favorite internet browser).

UNITED STATES

http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/showpage.html?name=KNNS.E475132&ccnshorttitle=Custom-built+Food+Service+Equipment&objid=1084945455&cfgid=1073741824&version=versionless&parent_id=1073989156&sequence=1

CANADA

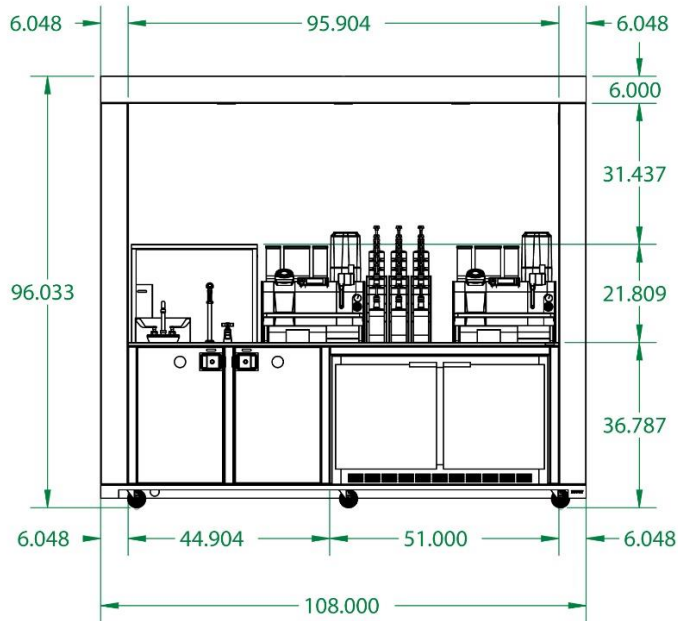
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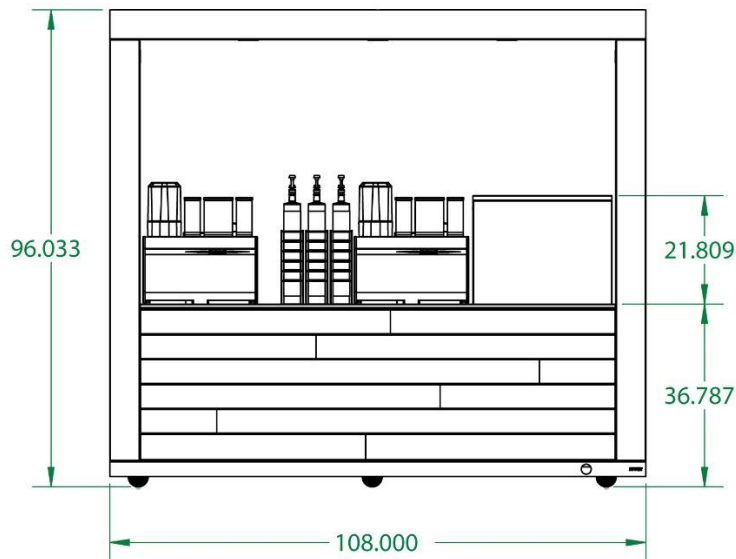
Specifications

The PVC10-SBUX-CAFE-MST1 Cart measures approximately 34 inches wide by 108 inches in length (9 feet) by 96 inches in height (8 feet). Exact dimensions are shown below.

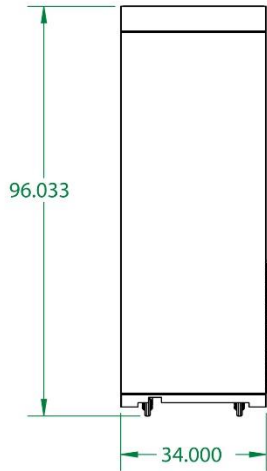
Front View



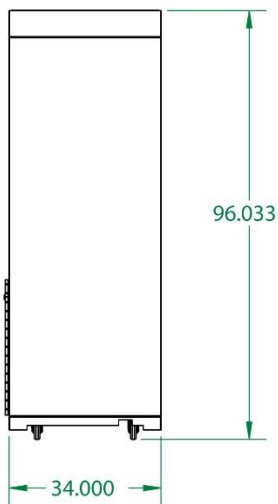
Rear View



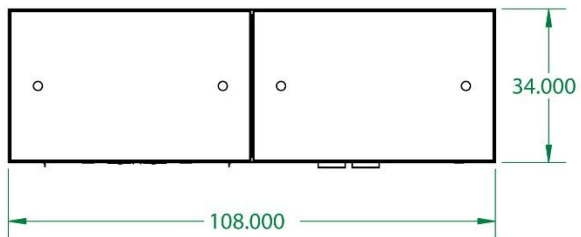
Left View



Right View



Top View

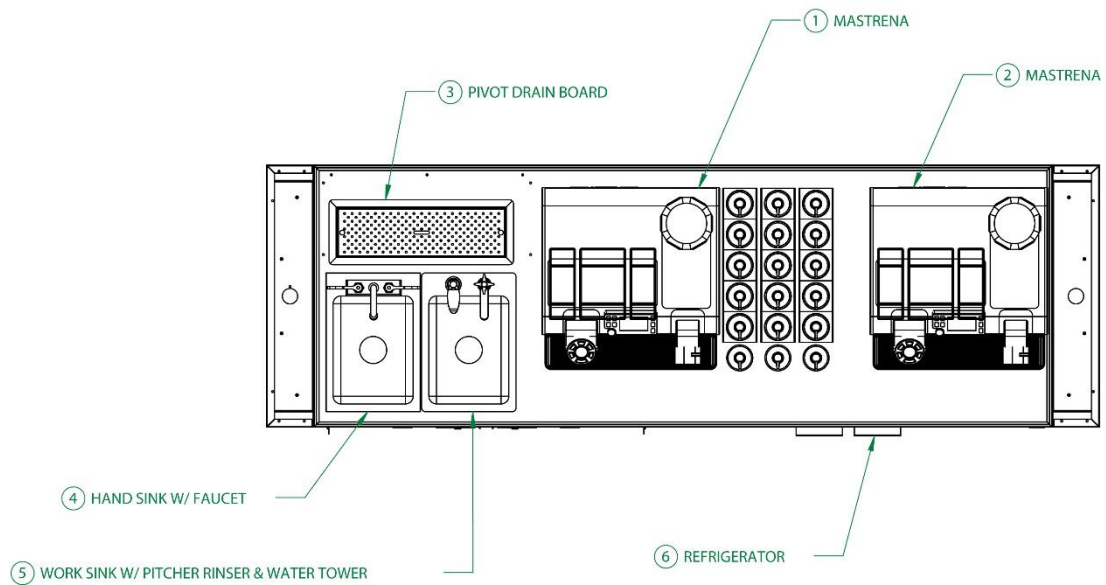


Equipment Plan

The PVC10-SBUX-CAFE-MST1 Cart is complemented with the best commercial equipment as required by Starbucks. This equipment includes:

- QTY 2 - Mastrena Espresso Machines
- PIVOT Drainboard
- Hand Sink with Faucet
- Work Sink with Pitcher Rinser and Water Tower
- 48-inch Beverage Air Refrigerator

EQUIPMENT PLAN	
①	Mastrena - SBUX DID#12694
②	Mastrena - SBUX DID#12694
③	PIVOT Drain Board
④	Hand Sink w/ Faucet - Krowne Model # HS-1225
⑤	Work Sink w/ Pitcher Rinser and Water Tower - Krowne Model # HS-1425
⑥	Refrigerator - Beverage Air UCR48AHC



Please note that all equipment cutsheets are located in Appendix A (Equipment Cutsheets) and Appendix C (Plumbing Equipment Cutsheets).



Summary Guide for Equipment

Outlined below is a Summary Guide for all equipment for the PVC10-SBUX-CAFE-MST1 Cart.

Please note the following:

- Included in Cart – This equipment comes included and installed in the PIVOT Cart.
- Included in Equipment Package – This equipment is required by the Starbucks® Cart and can be purchased in the Equipment Package through PIVOT.
- Starbucks® – This equipment must be purchased separately and is not included in either the Cart or the Equipment Package Price. This must be purchased and provided directly by Starbucks®.

Equipment	Category	DID#	Included in Cart	Included in Equip. Pkg.	Starbucks®
Mastrena	Coffee	12694			⊕
PIVOT Drain Board	Sink	PIVOT	✓		
Krowne Hand Sink	Sink	PIVOT	✓		
Krowne Work Sink	Sink	PIVOT	✓		
Pitcher Rinser	Sink	PIVOT	✓		
Water Tower	Sink	PIVOT	✓		
Beverage Air Refrigerator	Refrigeration	PIVOT	✓		

Note: ⊕ Customer must order this directly from Starbucks®. Please note that any equipment or option not explicitly listed above is not included with the Cart or Equipment Package.



Material Finishes

The PVC10-SBUX-CAFE-MST1 Cart incorporates the best material finishes in the industry to provide many years of beauty and performance. PIVOT Carts are well known for its low cost of maintenance and durability.

Powder Coat

PIVOT powder coats all metal surfaces to ensure a lasting and quality finish. Power coat is extremely durable, as well as washable, making it the perfect finish for high volume concession environments.

This Cart is powder coated with a high quality “Series 38-Super Durable” exterior grade satin finish. This powder coat is manufactured by Tiger Drylac.

Please find detailed Product Specifications in Appendix E (Material Finishes Documentation) of this Product Guide.

Countertops

This Cart comes standard with a 304-Stainless Steel Countertop with Marine Edge. This countertop is manufactured by PIVOT.

This countertop provides the ideal work surface for sanitary food/beverage preparation providing both strength and durability.

Veneers

PIVOT Carts are designed with an innovative Veneer system that adds beauty and value to your Cart. Veneers are set in an aluminum frame and affixed to the Cart with a proprietary hanging system. This hanging system utilizes a keyhole design to allow the Veneer frame to be easily removed and installed. An integrated locking system ensures the Veneer stays in place until you would like to remove it.

The Veneer that comes standard with this Cart is a beautiful Furniture-Grade natural Oak hardwood lightly stained and finished with lacquer to provide a beautiful yet durable surface.



Cart Utilities

The PVC10-SBUX-CAFE-MST1 Cart comes with utilities pre-installed at the factory. These utilities include: Electric, Water Supply and Sanitary.



The Utility Compartment (shown above) on the left side of this Cart contains all the utilities for this Cart and the combined Store that this Cart is integrated into. PIVOT has developed this engine over many iterations and years to provide this optimal performance.

Electrical

The Cart is outfitted with a SquareD load center Model # Q0324L125G (See attached cut sheet in Appendix B). This load center is rated for 120/208V 125AMP 3 PH.



SquareD Q0115, Q0120, Q0250 and Q0330 circuit breakers are used for all 120V 15AMP, 120V 20AMP, 208V 50AMP and 208V 3PH 30AMP circuits respectively (See attached cut sheets in Appendix B). Please note that these load center circuit breakers are not GFCI circuit breakers. GFCI receptacles are used in lieu of GFCI circuit breakers as a standard.



Electrical wiring for all circuits utilize appropriately sized MC Cable. All receptacle boxes are single or double gang metal boxes commonly referred to as J Boxes. Receptacles for non-GFCI applications utilize the Leviton CR20-W (see attached cut sheet in Appendix B) for all 120V 15AMP and 120V 20AMP circuits. PIVOT utilizes 20AMP receptacles and 12-gauge wiring (for 20 AMP) for our 15AMP receptacles so that any receptacle and circuit can be easily upgraded from 15AMP to 20AMP by simply upgrading the circuit breaker in the load center.



Levlok GFCI MGFN2-W (see attached cut sheet in Appendix B) receptacles are used for all 120V 15AMP and 120V 20AMP GFCI applications. As above, PIVOT utilizes 20AMP receptacles and 12-gauge wiring (for 20 AMP) for our 15AMP receptacles so that any receptacle and circuit can be easily upgraded from 15AMP to 20AMP by simply upgrading the circuit breaker in the load center.



A 4 Gauge/5 Wire SOOW power cord is used to supply power to the Cart's load center terminated by a Hubbell HBL560P9W 60AMP Male AC Connector. This connector is pre-installed on the Cart at PIVOT's factory. PIVOT provides approximately 10 feet of whip for this SOOW cord (from the outside of the Cart). If additional length is needed, alternative connector is required or a different electrical setup is needed, please communicate those changes during the ordering process. Please note that additional charges may apply. Once an order has been placed, PIVOT may or may not be able to accommodate those changes.

At the desired service location, the customer is responsible for providing and installing the appropriate receptacle for this Cart to plug into. The matching receptacle for the above male Hubbell connector is the Hubbell HBL560R9W 60AMP Female AC Receptacle shown to the right.



Alternatively, depending on the site and use needed, a SOOW cable can be used with the Hubbell HBL560C9W 60AMP Female AC Connector to connect the Cart.

Another option is using a Mechanical Interlock which offers the benefit of having a disconnect. The fused version is HBL560MIF9W and the unfused version is HBL560MI9W from Hubbell.



It is the customer's responsibility to meet local jurisdictional codes and to have the proper receiving receptacle/connector installed by a licensed electrician prior to the installation of the Cart. Changes to this standard setup must be communicated and agreed prior to ordering the Cart from PIVOT. PIVOT takes no responsibility for meeting local jurisdictional code requirements.





The SOOW cord exits the Cart from a 2-inch access hole in the Cart baseplate at the rear of the Cart as shown above. This elevated access hole prevents the cord from hitting the ground and dragging during transport.

Please note that load center can accommodate up to 125AMPS. The cord and connector are rated at 60AMPS.

PIVOT Jockey Box



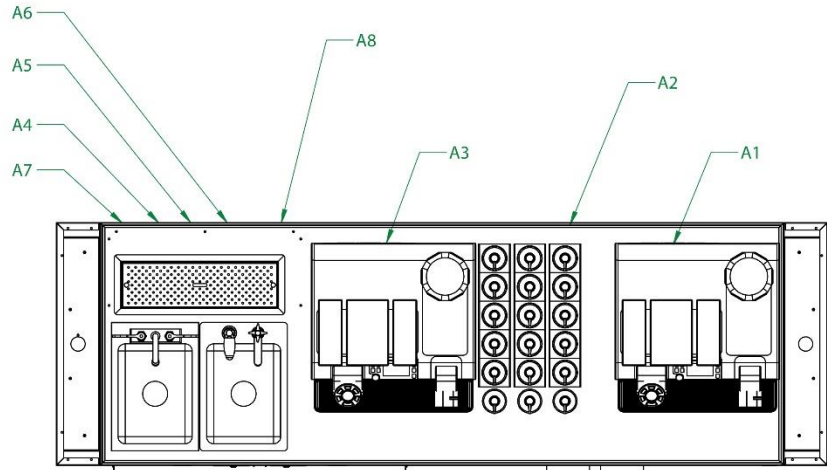
PIVOT does have an optional accessory that can be purchased to make the installation of the on-site electrical even easier – the PIVOT Jockey Box.

This Jockey Box is a pre-configured junction box with unistrut for mounting. This box contains the Hubbell receptacle mounted to the bottom and wired to a terminal block installed inside of the box. This Jockey Box is designed specifically for this Cart providing 3 Phase 120/208V 60AMPS. This Jockey Box should be installed by a licensed and certified electrician.




Electrical Plan

ELECTRICAL PLAN	
LC	Load Center - SquareD - Model # QO324L125G 125AMP 245P - 120/208V 3PH 5WR 60AMP 4AWG SOOW
A1	Mastrena - SBUX DID#12694 - 30AMP - MC 10AWG 2G
A2	Refrigerator - Beverage Air UCR48 - 20AMP - MC 12AWG 2G
A3	Mastrena - SBUX DID#12694 - 30AMP - MC 10AWG 2G
A4	Drain Pump(Liberty Model# 405)- 20AMP - MC 12AWG 2G
A5	Bosch ES2.5 Hot Water Heater - 20AMP - MC 12AWG 2G
A6	Accessory Outlet - 20AMP - MC 12AWG 2G
A7	LED Lighting - 15AMP - MC 12AWG 2G
A8	SCW1 Cart - 30AMP - MC 12AWG 4G (5WR) - REC (HBL2810)



Load Schedule

The load schedule for the PVC10-SBUX-CAFE-MST1 Cart is shown below.

Load Schedule										
			Project:	PVC10-SBUX-CAFE-MST1			Main Breaker AMPs:	60 AMP		
			Panel:	Double Espresso Cart			Line Voltage:	120/208V 3PH 5 WR SOOW		
Load Name	Load AMPs	Breaker AMPs	CHK #	A Phase WATTS	B Phase WATTS	C Phase WATTS	CHK #	Breaker AMPs	Load AMPs	Load Name
A1 Mastrena	28.8	30	1	3100			2	20	5	A2 Refrigerator
				600						
			3		3100		4	30	28.8	A3 Mastrena
		3100								
A4 DPump	7.3	20	5			800	6	20	7.3	
						3100				
A5 HWH	12	20	7	1000			8	20	12	A6 Accessory
				1000						
A8 SCW1	20	30	9		2150		10	15	1	A7 Lights
					25					
			11			2150	12			
			13	220						
						14				
							15			
							16			
							17			
							18			
							19			
							20			
							21			
							22			
							23			
							24			
Total Watts Per Phase				5920	8375	6050				
Estimated Amperage				56.51						

The peak load of the Cart is estimated at 56.51AMPS at 3 Phase 120/208V. This Cart is rated at 60AMPS.



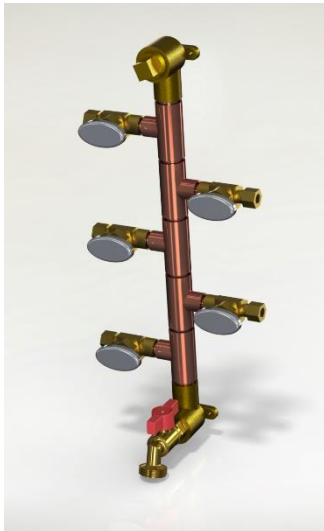
Water Supply

The PVC10-SBUX-CAFE-MST1 Cart is designed to accept Filtered Water supplied into PIVOT's integrated Water Manifold system. This Water Manifold is constructed of copper and is used to control the water supply to all equipment in the Cart which are individually connected using stop valves supporting 3/8-inch compression fittings. The Water Manifold in this Cart supports 5 connections.



As Carts offer a great portable and temporary store platform, PIVOT recommends the installation of a Hose Bibb (rated for potable water – lead free) as the water source to supply this Cart and a fresh water supply hose as the delivery mechanism for supplying water from the hose bibb to the Cart. Utilizing this technique can have the additional advantage of simplified permitting as the Carts would be viewed as a “large piece of equipment” that is UL Listed instead of a Store build.

Alternatively, this Water Manifold can be hard plumbed utilizing the water inlet on the TOP of the manifold (this connection is a dog ear elbow (3/4" FIP) – ships from the factory with a 3/4" brass plug) or through the valve on the bottom with the appropriate adapters (adapters not provided by PIVOT).

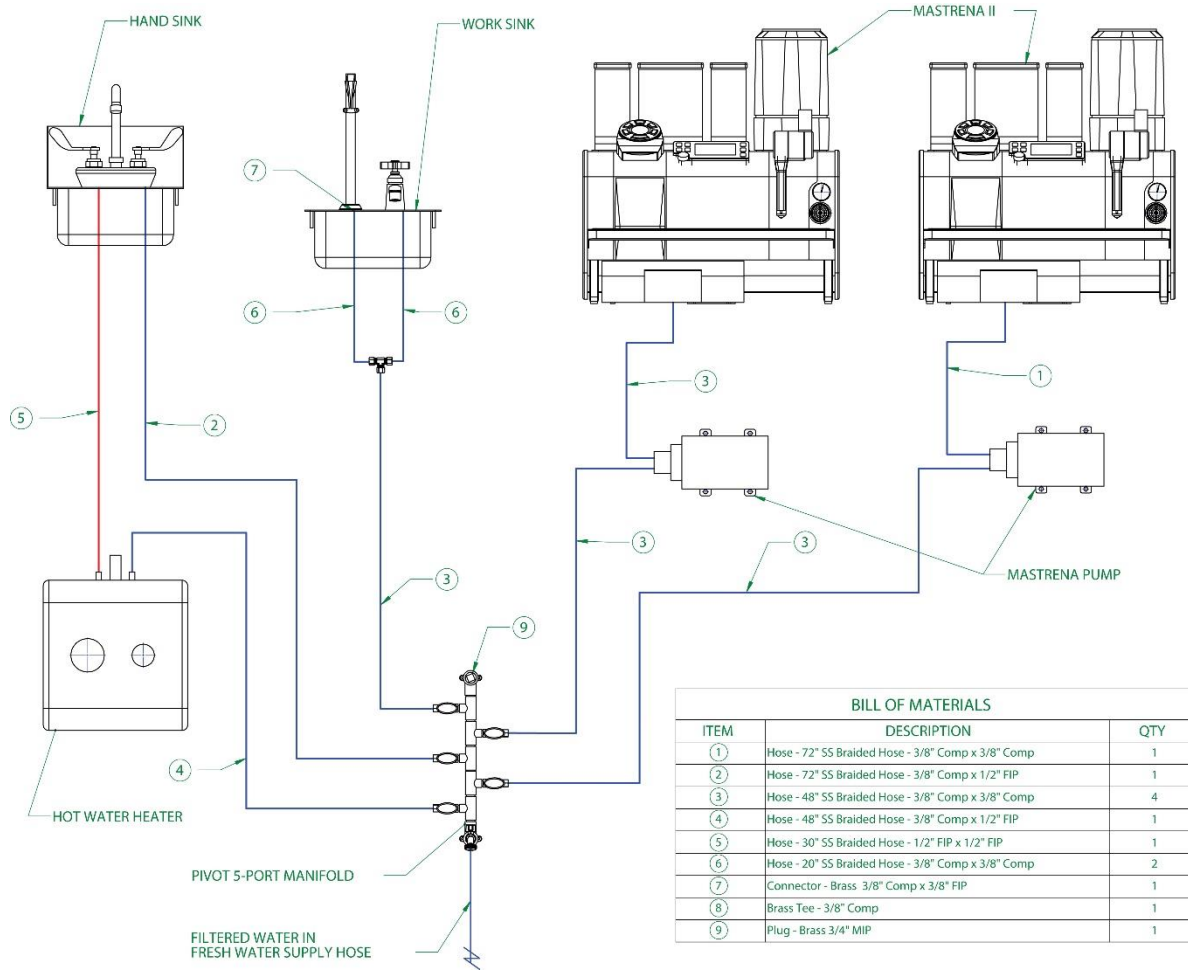


PIVOT provides and installs Stainless Steel braided hoses to all supported equipment (please refer to the Equipment Plan section of this document) from this Water Manifold to the location of each piece of equipment.

Please note that all plumbing equipment cutsheets are located in Appendix B – Utility Cutsheets.



Water Supply Diagram



Sanitary

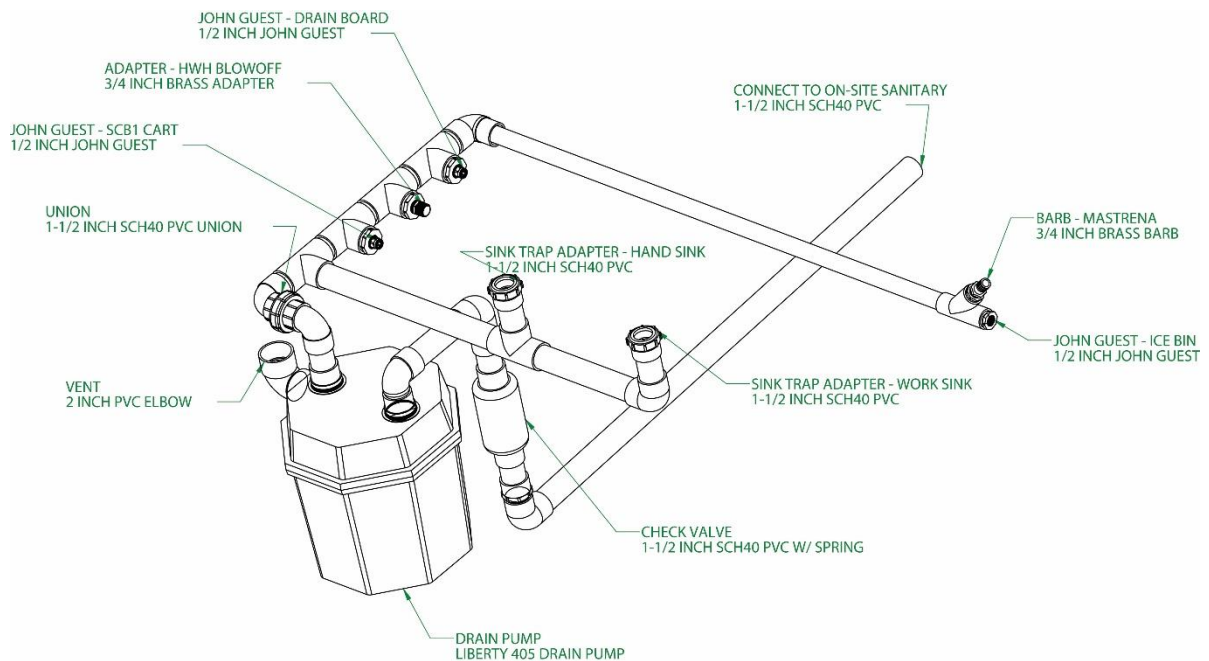
All sanitary lines, internal to this Cart, are pre-installed at PIVOT's factory. These lines consist of Schedule 40 PVC piping with the appropriate PVC, Brass and John Guest connection fittings.

This Cart comes standard with a Drain Pump system to easily pump, out and up, all Sanitary from the Cart. This system features a Liberty 405 Drain Pump (shown on the right - product cutsheet provided in Appendix B). This Drain Pump features a 1/2 HP motor and can move graywater to a maximum head height of almost 35 feet and a maximum liquid temperature of 180 degrees F.



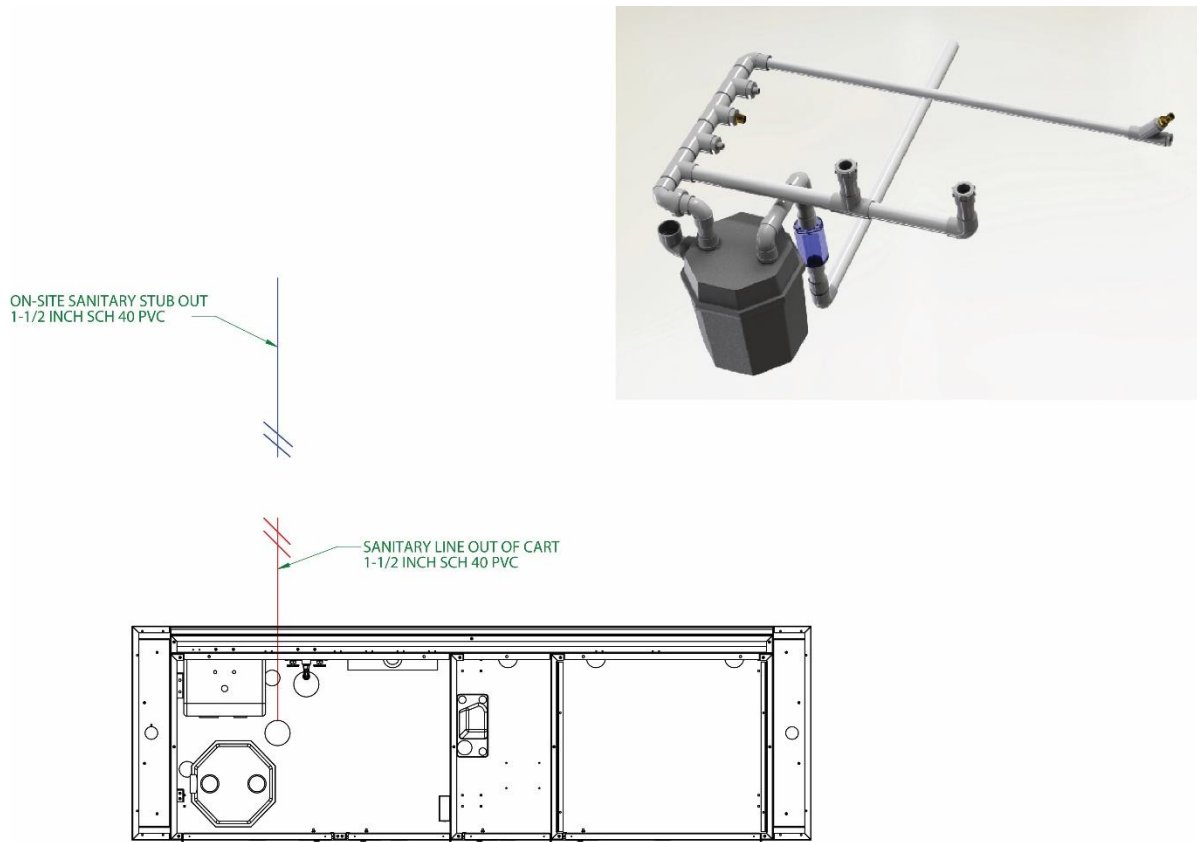
Due to the height of the 90lb Ice Bin, a Condensate Pump is used (Liberty LCU-15 show on the left) to pump the draining water from this Ice Bin into the main sanitary line as shown in the diagram below.

Sanitary Diagram



Sanitary - Site Preparation

When utilizing PIVOT's innovative Drain Pump system, site preparation is reduced to installing a Sanitary line to the store location from the closest available and applicable drain. The Drain Pump can pump up and out to this drain. The stub out connection needs to accept a 1 ½ inch SCH 40 PVC pipe from this Cart.



PIVOT includes one Check Valve located in the vertical PVC piping near the outlet of the Drain Pump. All other requirements downstream of that Check Valve must be supplied and installed by the customer.

Please note that all utilities (electric, water supply and sanitary) included in this Cart is UL Listed from the factory and is based on the National Standards of the United States. PIVOT makes no guarantees and takes no responsibility for meeting local jurisdictional code. It is the customer's responsibility to review this Cart with their local codes department and obtain approval.



Interior Layout



Shown above is an interior view of the Cart (Cart with the doors suppressed).

The interior of the Cart is divided into 2 compartments. The compartments from left to right are as follows.

- Main Utility
- Refrigerator



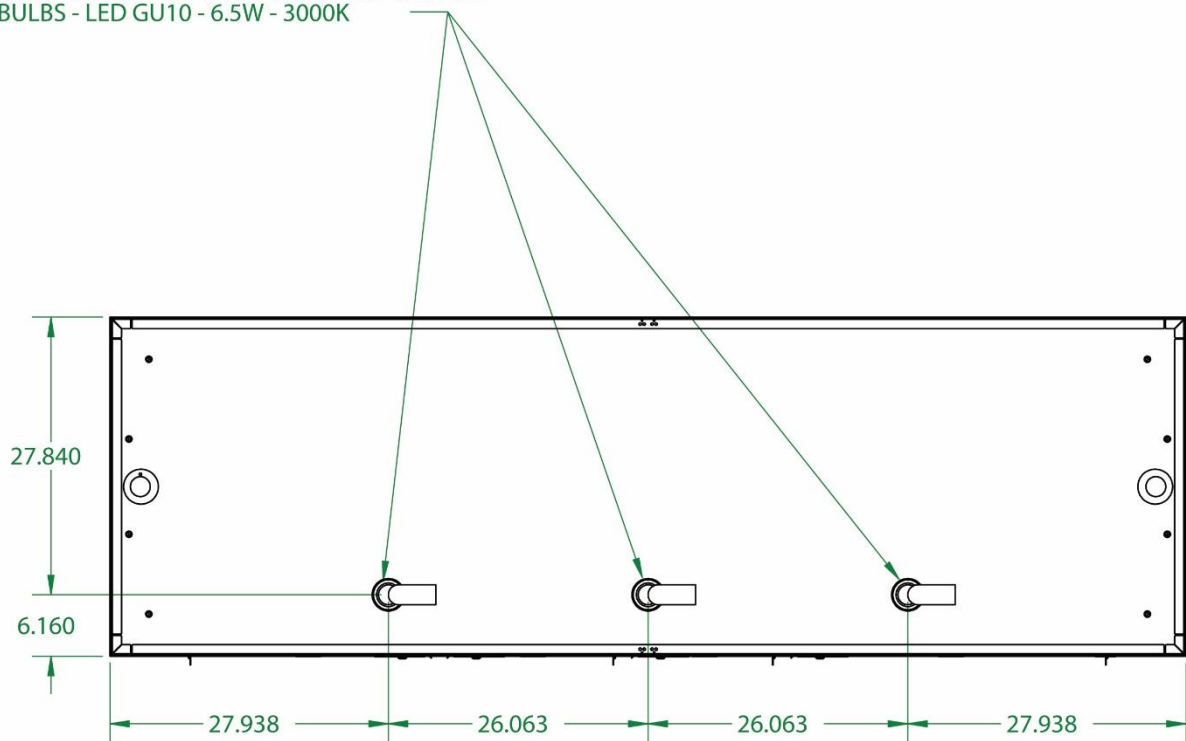
Lighting

The PVC10-SBUX-CAFE-MST1 Cart contains 3 recessed ceiling LED lights. These lights are 120V AC and accept GU10 bulbs. The bulbs supplied with this Cart are LED GU10 6.5W (60-Watt equivalent) 3000K.

The lighting in this Cart is extremely efficient with only a total of 19.5 Watts of energy consumption.

Lighting Plan

RECESSED CEILING LIGHT FIXTURES - 120V AC
BULBS - LED GU10 - 6.5W - 3000K



Maintenance Tool Box



The PVC10-SBUX-CAFE-MST1 Cart comes with a Maintenance Toolbox that contains spare parts that can be used for future maintenance of the Pop-Up Store.



Pre-Requisites & Site Preparation

The only pre-requisite and site preparation for the PVC10-SBUX-CAFE-MST1 Cart are as follows.

- Finished hard and mopable floor to pass health inspection
- Electrical feeder (3 Phase 120/208V 60AMP 4G – 5WR) terminating in a Hubbell receptacle or PIVOT Jockey Box
- Water supply terminating with a Hose Bibb rated for potable water
- Sanitary stub out terminating in a 1 ½-inch SCH 40 PVC connection



Shipping

PIVOT will provide shipping of the PVC10-SBUX-CAFE-MST1 Cart to the store location.

There are multiple shipping options available:

- Common Freight/FTL - Dock to Dock
- Common Freight/FTL - Installer Offload
- PIVOT Trailer Delivery

Please contact PIVOT for more information.



Installation

The PVC10-SBUX-CAFE-MST1 Cart comes in fully assembled components for an extremely easy installation. These components are listed below.

- Main Unit
- Left Support Wing
- Right Support Wing
- Canopy Top Crown

Installation time is less than 1 hour with 2 people.



LIMITED WARRANTY

PIVOT LLC (“PIVOT”) warrants to the original purchaser (“Purchaser”) that it will repair or replace components of the Products (as defined in the Master Product Sales Agreement) manufactured by PIVOT (except for components not warranted under “Exclusions”) that are defective in material or workmanship under normal interior use and service (“Defects”). PIVOT’s obligation under this warranty is limited to the repair or replacement, at PIVOT’s option, of the applicable components. This limited warranty shall only apply to Defects that are reported to PIVOT within the applicable warranty period and which, upon examination by PIVOT, prove to be defective. This warranty extends only to the first purchaser of a product, and is not transferable or assignable.

APPLICABLE WARRANTY PERIOD

The applicable warranty period, measured from the date of delivery to the original purchaser, shall be as follows:

- a) Two (2) years for all PIVOT Products and components (except for the products and components listed in (b), (c) and (d), and except for components not warranted under “Exclusions”), including baseplate structures, chassis structures, doors, locks, wheels and level glides.
- b) One (1) year for all LED components including LED Drivers, Strip Lights, Fixtures and Modules.
- c) One (1) year for all signage.
- d) One (1) year for all veneers.

In PIVOT’s reasonable discretion, PIVOT shall make the determination of how to correct any Defect covered by this Limited Warranty. If PIVOT opts to replace an item, replacement components will be substantially comparable to the items replaced, subject to availability (identical colors and other features may not be available.) If PIVOT elects to repair the defective item, PIVOT will correct the Defect in such a manner as to restore the item to substantially the same conditions, which would have existed had the Defect not been present. PIVOT shall have no liability for work performed by Purchaser or Purchaser’s agents or for the cost thereof. No action to correct any Defect shall extend the duration of this Limited Warranty.

TERMINATION OF WARRANTY

The limited warranty shall immediately terminate if the Product is removed from the original installation site.

OBTAINING WARRANTY SERVICE

Warranty service must be obtained through either PIVOT or an authorized dealer in the PIVOT product line for which warranty service is requested. PIVOT may be



contacted for warranty service inquiries or issues via email at warranty@pivotcorp.com, through the PIVOT website at www.pivotcorp.com, by phone at (404) 671-9326, by facsimile at (404) 671-9325, or by mail to PIVOT, ATT: WARRANTY DEPT, 851 Hickory Flat Hwy, Canton, Georgia 30115.

It is the purchaser's obligation to arrange for delivery of a Product to PIVOT or one of its authorized dealers for warranty service, which delivery shall be at purchaser's expense. It is also the purchaser's obligation to comply with the warranty service instructions provided either by PIVOT or its authorized dealer. If the Product was purchased from an authorized dealer and not directly from PIVOT, the purchaser must provide PIVOT with completed warranty registration information within thirty (30) days after purchase in order to obtain the benefits of this warranty.

EXCLUSIONS

This Limited Warranty does not cover third party equipment, sinks, faucets, and plumbing accessories. Any warranties on these items are extended directly by the manufacturer of these items to the original purchaser. Information on these manufacturers' warranties will be enclosed with the applicable products. Also, PIVOT will furnish copies of any of the warranties extended by any such manufacturers upon request.

This Limited Warranty does not cover and PIVOT shall not be liable for:

- 1) defects, damage, or other conditions caused, in whole or in part, by misuse, abuse, negligence, alteration, accident, freight damage, tampering, or failure to seek and obtain repair or replacement in a timely manner;
- 2) matching of color, grain, or texture except to commercially acceptable standards;
- 3) changes in color caused by natural or artificial light;
- 4) products which are not installed, used, and properly cleaned and maintained as required in the PIVOT "Installation" and/or "Installation/Operation" Manual for the applicable product;
- 5) products considered to be of a consumable nature, such as light bulbs and surge suppression products;
- 6) accessories or parts not manufactured by PIVOT;
- 7) charges by anyone (including PIVOT's authorized dealers) for adjustments, repairs, replacement parts, installation, or other work performed upon or in connection with such products which are not expressly authorized in writing in advance by PIVOT; and
- 8) costs and expenses of routine maintenance and cleaning; and
- 9) representations and warranties made by any person or entity other than PIVOT.
- 10) This Limited Warranty does not cover consumer products for the purpose of the Magnuson-Moss Warranty Act. 15 U.S.C. Sec. 2301 et seq. including without limitation, any refrigerator, freezer, range, oven, dishwasher, garbage disposal, exhaust fan, thermostat, equipment, doors, sinks, water heater, or



any of the appliances, equipment, fixtures, finishes, or similar items, except as may be required by any statutory warranty. All such items covered by a manufacturer's and supplier's warranties covering such consumer products are assigned to the Purchaser. PIVOT is not in any way, responsible or liable for the performance under any manufacturer's or supplier's warranties.

- 11) This Limited Warranty does not cover routine maintenance, normal wear and tear, or conditions resulting from unreasonable use, misuse, negligence, and/or failure to provide reasonable and necessary maintenance in a timely manner.
- 12) This Limited Warranty does not cover maintenance items, defects resulting from improper maintenance, failure to maintain, misuse, abuse or failure of PIVOT to follow operating or care instructions.
- 13) This Limited Warranty does not cover defects in workmanship or materials supplied during the construction phase by anyone other than the PIVOT, its agents, employees and subcontractors acting on behalf of PIVOT.
- 14) This Limited Warranty does not cover defects or damage resulting from fires, floods, storms, the elements, electrical malfunctions, power outages, accidents or acts of God.
- 15) Any damage as a result of shipping, loading, unloading, moving or installation.

EXCLUSIVE REMEDY; CONSEQUENTIAL DAMAGES DISCLAIMER

PIVOT'S ONLY OBLIGATION UNDER THIS LIMITED WARRANTY IS THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS. PIVOT SHALL NOT BE LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES OR DELAYS, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR INCOME, LOSS OF USE, DOWNTIME, COVER, AND EMPLOYEE OR INDEPENDENT PIVOT WAGES, PAYMENTS, AND BENEFITS.

NO AUTHORIZATION

No person or firm is authorized to create or approve for PIVOT any other obligation or liability in connection with the products.

WARRANTY DISCLAIMER

THIS LIMITED WARRANTY IS PIVOT'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. PIVOT MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS. ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE PERIOD OF THIS LIMITED WARRANTY



STATUTE OF LIMITATIONS

No Claim (defined below) may be brought against PIVOT for breach of this limited warranty, an implied warranty, if any, or for any other claim arising out of or relating to the products, more than ninety (90) following expiration of the limited warranty period. In the event multiple warranty periods exist with respect to a product, the ninety (90) day period provided for herein shall begin to run from expiration of the warranty period for the component to which the claim relates.

DISPUTE RESOLUTION AND LIMITATION OF LITIGATION

a. Agreement to Avoid Litigation. PIVOT and Purchaser agree to encourage the amicable resolution of disputes involving PIVOT's performance under this Limited Warranty, without the emotional and financial costs of litigation. Accordingly, each party hereto agrees that their claims, grievances or disputes (hereinafter referred to as "Claims" or "Claim") shall be resolved using the procedures set forth below. Any party having a Claim ("Claimant") against the other party ("Respondent") (collectively, the "Parties") shall notify the Respondent in writing (the "Notice") stating plainly and concisely; (1) the nature of the Claim, including the Persons involved and Respondents role in the Claim; (2) the legal basis of the Claim (i.e., the specific authority out of which the Claim arises); (3) the Claimant's proposed remedy; and that the Claimant will meet with the Respondent to discuss in good faith ways to resolve the Claim.

b. Negotiations and Mediations. The Parties shall make every reasonable effort to meet in person and confer for the purpose of resolving the Claim by good faith negotiation. If the Parties do not resolve the Claim within 60 days of the date of the Notice (or within such other period as may be agreed upon by the Parties)(the "Termination of Negotiations"), Claimant shall have 30 additional days to submit the Claim to mediation to JAMS (www.jamsadr.com), who is an independent agency performing dispute resolution services in the metropolitan Atlanta area. The Parties shall divide the cost of the mediation, with each party paying half of the costs. If Claimant does not submit the Claim to mediation within 30 days after Termination of Negotiations, or does not appear for mediation, Claimant shall be deemed to have waived the Claim, and Respondent shall be released and discharged from any and all liability to Claimant on account of such Claim. Any settlement of the Claim through mediation shall be documented in writing by the mediator. If the Parties do not settle the Claim within 30 days after submission of the matter to the mediation process, or within such time as determined by the mediator, the mediator shall issue a notice of termination of the mediation proceedings (the "Termination of Mediation"). The Termination of Mediation notice shall set forth that the Parties are at an impasse and the date that the mediation was terminated.

c. Final and Binding Arbitration. Claimant shall have 15 days after the Termination of Mediation to submit the Claim to arbitration in accordance with O.C.G.A. §9-9-1. et. Seq., and the arbitration shall take place in metropolitan Atlanta, Georgia. Claimant will pay the cost of any filing fees for the arbitration. The arbitration shall be conducted by and in accordance with the rules and procedures promulgated by the Construction Arbitration Associates, Ltd. ("CAA"). In the event the CAA is unavailable



of unable to arbitrate the Claim, the Parties may agree to another professional arbitrator appointed in accordance with O.C.G.A. § 9-9-1 et. seq. If the Claim is not timely submitted to arbitration or if the Claimant fails to appear for the arbitration proceeding, the Claim will be deemed abandoned, and Respondent shall be released and discharged from any and all liability to Claimant arising out of such Claim. This subsection (c) is an agreement to arbitrate and is specifically enforceable under the applicable arbitration laws of the State of Georgia. The arbitration award (the "Award") shall be final and binding, and judgment may be entered upon it in any court of competent jurisdiction to the fullest extent permitted under the laws of the State of Georgia.

d. Cost. The Claimant shall pay any filing fees for the arbitration. Each party shall pay the fees and expense of its own counsel.

MISCELLANEOUS

a. This Limited Warranty is not renewable. Purchaser's rights and obligations under the Limited Warranty are personal and not transferable. This Limited Warranty may not be assigned or transferred upon resale or lease of the Property.

b. Purchaser's sole remedy under this Limited Warranty is the repair or replacement of any Defect. In no event, shall PIVOT's total liability hereunder exceed the purchase price of the PIVOT deliverables. The liability of Purchaser hereunder is expressly limited to the repair and replacement of the Defects. No responsibility is assumed for any secondary or consequential damage resulting from or arising out of any defect and nothing in this warranty shall render the Purchaser liable in any respect for any injury or damage to any persons or property by reason of any defects to the PIVOT's Property.

c. This Limited Warranty constitutes the entire agreement between Purchaser and PIVOT with respect to the subject matter hereof, and no representations, inducements, promises or agreements, oral or otherwise, not expressly set forth herein shall be of any force of effect. This Limited Warranty shall be governed by the laws of the State of Georgia.



APPENDIX A

Equipment Cutsheets







BEVERAGE-AIR

Project: _____	AIA#
Item: _____	
Location: _____	SIS#
Approved: _____	

UCR UNDERCOUNTER
UCR48AHC Undercounter Refrigerator
Hydrocarbon Series

MODELS:
UCR48AHC

UCR48AHC Undercounter Refrigerator: Food Prep Series



UCR48AHC

3 Year Parts/Labor Warranty
Additional 2 Year Compressor Warranty

CABINET CONSTRUCTION

- Stainless steel front, sides, top, doors, (galvanized steel back & bottom)
- Interior liner is made of corrosion resistant aluminum
- Full electronic control
- Undercounter feature a 1/2" thick sub-top
- Interior thermometer is standard
- Self-closing doors with 120° stay-open feature, on cartridge style hinges
- Easy door removal for service and cleaning
- Magnetic gasket attached to each door for positive seal
- Painted aluminum door handles
- 6" Casters, 2 with brakes standard
- Four (4) epoxy-coated steel wire shelves standard
- Field reversible doors
- Maintains product temperature between 36°F and 38°F

OPTIONS & ACCESSORIES

- Stainless steel back and grille
- Stainless steel interior
- Right or left hinged door
- Locks (solid doors only)
- Bun rack
- Wire shelf divider
- Thermometer digital or stem type dial
- 3" Casters or 6" legs
- Low profile casters
- Remote option

REFRIGERATION SYSTEM

- Refrigeration system uses R290 refrigerant to comply with all environmental concerns
- Automatic, non-electric defrost
- Epoxy coated evaporator coil



3779 Champion Blvd., Winston-Salem, NC 27105
 1-888-845-9800 Fax: 1-336-245-6453
 Beverage-Air.com sales@bevalr.com

Specifications are subject to change without prior notice. Rev. 1/19





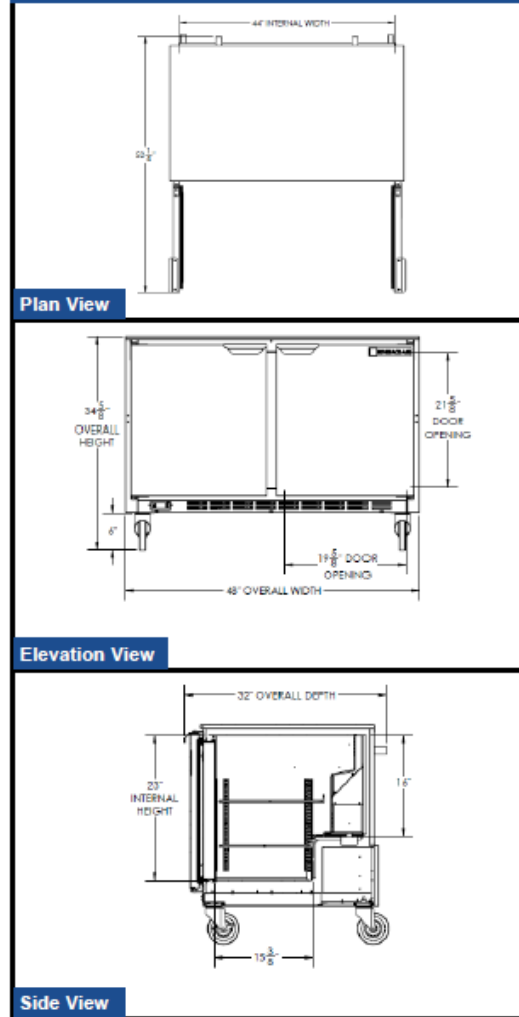
BEVERAGE-AIR

Undercounter Refrigerators

Models: UCR48AHC

MODEL	UCR48AHC
EXTERNAL DIMENSIONAL DATA	
Width Overall	48"
Depth Overall	32"
Height Overall with 6" casters	34 5/8"
Number of Doors	2
Depth with Door Open 90°	52 1/4"
Door Opening (In)	19 5/8" x 21 5/8"
INTERNAL DIMENSIONAL DATA	
NET Capacity (cubic ft.)	11.82
Internal Width Overall (In)	44"
Internal Depth Overall (In)	23 1/2"
Internal Depth Useable (In)	Upper 18 1/2" Lower 15 3/8"
Internal Height Overall (In)	23"
Internal Height Useable (In)	16"
Number of Shelves	4
ELECTRICAL DATA	
Full Load Amperes 115/60/1	2.2
REFRIGERATION DATA	
Horsepower	1/6
Capacity (BTU/Hr)*	1094
WEIGHT DATA	
Gross Weight (Crated lbs)	252 lbs
Height - Crated	36"
Width - Crated	51"
Depth - Crated	32"

Model Views



ELECTRICAL CONNECTION



115/60/1
NEMA-5-15P

Units pre-wired at factory and include 8' long cord and plug set.



an A3 Group Company

Rev. 10/18



The Spirit of Excellence

3779 Champlon Blvd., Winston-Salem, NC 27105
1-888-845-9800 Fax: 1-336-245-6453
Beverage-Air.com sales@bevaair.com



APPENDIX B

Utility Cutsheets





Product data sheet
Characteristics

QO324L125G

Load center, QO, 3 phase, 24 spaces, 24 circuits, 125A fixed main lugs, NEMA1, gnd bar, UL



Main

Marketing Trade Name	QO
Product Type	Load Center
Cover Type	Order separately

Complementary

Tightening Torque	Main lugs 50 lb.in, AWG 6...AWG 2/0, aluminium/copper Cover 20 lb.in
PoN Convertible Mains (lugs)	Fixed Mains (lugs)
Rated Current	125 A
Number of Spaces	24
Max Short Circuit Current Rating	65 kA
Maximum Number of Single Pole Circuits	24
Maximum Number of Tandem Breakers	0
Number of Phases	3 phase
Voltage Rating	208Y/120 V AC 240/120 V delta AC 240 V delta AC
Wire Size	AWG 6...AWG 2/0 aluminium/copper
Ground Bar	Grounding bar included (not installed)
Electrical Connection	Lugs
Wiring Configuration	3-wire 4-wire
Busbar Material	Tin plated copper busbar
Enclosure Material	Welded sheet steel
Surface Finish	Baked enamel Gray
Box Number	7
Height	20.91 in (531 mm)
Width	14.25 in (362 mm)

Environment

Enclosure Rating	NEMA 1 indoor
Ambient Air Temperature for Operation	23 °F (-5 °C) 104 °F (40 °C)
Product Certifications	UL Listed

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This information is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. The user shall be responsible for determining the suitability of these products for their intended application. The user shall be responsible for ensuring that the products are used in accordance with the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Feb 10, 2023

Life In On | Schneider Electric

1



Ordering and shipping details

Category	00011-QO 3PH LOAD CENTER,INDOOR
Discount Schedule	DE3
GTIN	785901295433
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.10 in (10.414 cm)
Package 1 Width	14.60 in (37.084 cm)
Package 1 Length	22.00 in (55.88 cm)
Package 1 Weight	13.29 lb(US) (6.028 kg)
Unit Type of Package 2	PAL
Number of Units in Package 2	45
Package 2 Height	40.00 in (101.6 cm)
Package 2 Width	40.00 in (101.6 cm)
Package 2 Length	48.00 in (121.92 cm)
Package 2 Weight	599.00 lb(US) (271.702 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile

Contractual warranty

Warranty	18 months
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Product data sheet

Specifications



Mini circuit breaker, QO, 15A, 1 pole, 120/240VAC, 10kA, plug in mount

QO115

Product availability : Stock - Normally stocked in distribution facility

Price* : 29.10 USD

Main

Product	Miniature circuit-breaker
Range	QO
Current Rating	15 A
Voltage Rating	120/240 V AC 120 V AC
Mounting Type	Plug-in
Number of Poles	1P
Circuit Breaker Type	Standard
Ratings	HACR and Switching Duty rated
Electrical Connection	Pressure plate

Complementary

Interrupt Rating	10 kA 120/240 V AC 50/60 Hz 10 kA 120 V AC 50/60 Hz
Number of Panel Spaces	1
Wire Size	AWG 14...AWG 8 copper or aluminium
Tightening Torque	44.25 lbf.in (5 N.m) 0.02...0.04 in ² (10...25 mm ²) (AWG 8...AWG 2)
Height	2.99 in (76 mm)
Width	0.75 in (19 mm)
Depth	2.91 in (74 mm)
Net Weight	0.30 lb(US) (0.136 kg)

Environment

Certifications	UL Listed CSA
Ambient Rating	104 °F (40 °C)

Ordering and shipping details

Category	05004-QO,QOT 10-30A 1P;10-80A 2P
Discount Schedule	DE2A

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Feb 6, 2023

Low voltage | Schneider

1

Disclaimer: This document is intended for informational purposes only and should not be used for determining suitability or reliability of these products for your specific application.



GTIN	785901400065
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.00 in (7.62 cm)
Package 1 Width	0.70 in (1.778 cm)
Package 1 Length	3.30 in (8.382 cm)
Package 1 Weight	4.80 oz (136.078 g)
Unit Type of Package 2	BS1
Number of Units in Package 2	10
Package 2 Height	3.30 in (8.382 cm)
Package 2 Width	0.70 in (1.778 cm)
Package 2 Length	7.70 in (19.558 cm)
Package 2 Weight	2.74 lb(US) (1.243 kg)
Unit Type of Package 3	CAR
Number of Units in Package 3	100
Package 3 Height	8.20 in (20.828 cm)
Package 3 Width	6.70 in (17.018 cm)
Package 3 Length	17.40 in (44.196 cm)
Package 3 Weight	28.60 lb(US) (12.973 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
RoHS exemption information	Yes
Halogen content performance	Halogen free product

Contractual warranty

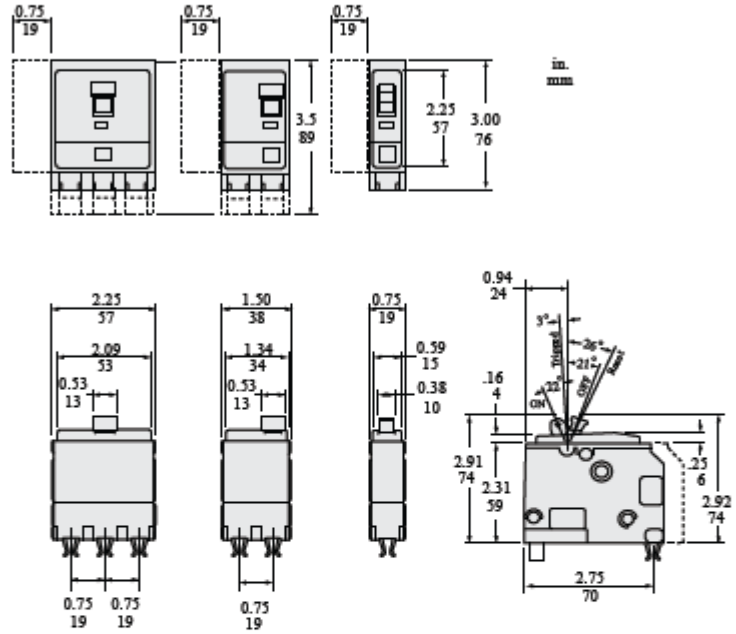
Warranty	18 months
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Product data sheet
 Technical Illustration

QO115

Dimensions



Dimensions are approximate. Refer to technical documentation, dimension drawings, and/or CAD for additional detail.

Recommended replacement(s)

Feb 6, 2023

Lennox | Schneider

2



SquareD Circuit Breaker QO120

Product data sheet

Specifications

SQUARE D

Green Premium



Mini circuit breaker, QO, 20A, 1 pole, 120/240VAC, 10kA, plug in mount

QO120

Product availability : Stock - Normally stocked in distribution facility

Price* : 29.10 USD

Main

Product	Miniature circuit-breaker
Range	QO
Current Rating	20 A
Voltage Rating	120/240 V AC 120 V AC
Mounting Type	Plug-in
Number of Poles	1P
Circuit Breaker Type	Standard
Ratings	HACR and Switching Duty rated
Electrical Connection	Pressure plate

Complementary

Interrupt Rating	10 kA 120/240 V AC 50/60 Hz 10 kA 120 V AC 50/60 Hz
Number of Panel Spaces	1
Wire Size	AWG 14...AWG 8 copper or aluminium
Tightening Torque	44.25 lbf.in (5 N.m) 0.02...0.04 in ² (10...25 mm ²) (AWG 8...AWG 2)
Height	2.99 in (76 mm)
Width	0.75 in (19 mm)
Depth	2.91 in (74 mm)
Net Weight	0.25 lb(US) (0.113 kg)

Environment

Certifications	UL Listed CSA
Ambient Rating	104 °F (40 °C)

Ordering and shipping details

Category	00004-QO,QOT 10-30A 1P;10-80A 2P
Discount Schedule	DE2A

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Feb 1, 2023

UL is a Schöco brand

1

Disclaimer: This document is intended as a guide for end users and should be used for determining suitability or liability of the product for specific user applications.



GTIN	785901400103
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.30 in (8.382 cm)
Package 1 Width	0.85 in (2.032 cm)
Package 1 Length	3.00 in (7.62 cm)
Package 1 Weight	4.32 oz (122.47 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.10 in (7.874 cm)
Package 2 Width	3.00 in (7.62 cm)
Package 2 Length	7.70 in (19.558 cm)
Package 2 Weight	2.83 lb(US) (1.284 kg)
Unit Type of Package 3	CAR
Number of Units in Package 3	100
Package 3 Height	8.50 in (21.59 cm)
Package 3 Width	7.20 in (18.288 cm)
Package 3 Length	17.40 in (44.196 cm)
Package 3 Weight	28.60 lb(US) (12.973 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
RoHS exemption information	Yes
Halogen content performance	Halogen free product

Contractual warranty

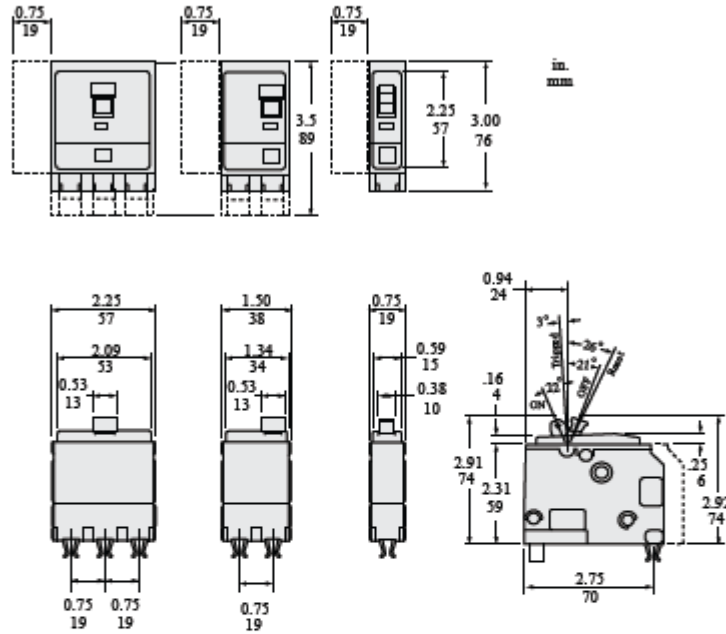
Warranty	18 months
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Product data sheet
 Technical Illustration

QO120

Dimensions



Dimensions are approximate. Refer to technical documentation, dimension drawings, and/or CAD for additional detail.

Recommended replacement(s)

Feb 1, 2023

LSI 620 | Schneider

3



Product data sheet

Specifications

SQUARE D

Green Premium



Mini circuit breaker, QO, 30A, 3 pole, 120/240VAC, 10kA, plug in mount

QO330

Product availability : Stock - Normally stocked in distribution facility

Price* : 248.00 USD

Main

Product	Miniature circuit-breaker
Range	QO
Current Rating	30 A
Voltage Rating	120/240 V AC 240 V AC 120 V AC
Mounting Type	Plug-in
Number of Poles	3P
Circuit Breaker Type	Standard
Rating	HACR rated
Electrical Connection	Pressure plate

Complementary

Interrupt Rating	10 kA 120/240 V AC 50/60 Hz 10 kA 240 V AC 50/60 Hz 10 kA 120 V AC 50/60 Hz
Number of Panel Spaces	3
Wire Size	AWG 14...AWG 8 copper or aluminium
Tightening Torque	44.25 lbf.in (5 N.m) 0.02...0.04 in ² (10...25 mm ²) (AWG 8...AWG 2)
Height	2.99 in (76 mm)
Width	2.34 in (57 mm)
Depth	2.91 in (74 mm)
Net Weight	0.90 lb(US) (0.408 kg)

Environment

Certifications	UL Listed CSA
Ambient Rating	104 °F (40 °C)

Ordering and shipping details

Category	00012-QO 3 POLE CIRCUIT BREAKER
Discount Schedule	DE2A

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Feb 3, 2023

UL 6189 | Schneider

1

Disclaimer: This document is not intended to be used for determining liability. It is provided for informational purposes only. The information is subject to change without notice.



GTIN	789901400721
Returnability	Yes
Country of origin	MX

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.00 in (7.62 cm)
Package 1 Width	2.20 in (5.56 cm)
Package 1 Length	3.30 in (8.382 cm)
Package 1 Weight	14.39 oz (408.0 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	3
Package 2 Height	3.70 in (9.396 cm)
Package 2 Width	2.20 in (5.56 cm)
Package 2 Length	7.10 in (18.034 cm)
Package 2 Weight	2.55 lb(US) (1.157 kg)
Unit Type of Package 3	CAR
Number of Units in Package 3	36
Package 3 Height	3.70 in (9.396 cm)
Package 3 Width	14.40 in (36.576 cm)
Package 3 Length	21.70 in (55.116 cm)
Package 3 Weight	30.70 lb(US) (13.925 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
RoHS exemption information	Yes
Halogen content performance	Halogen free product

Contractual warranty

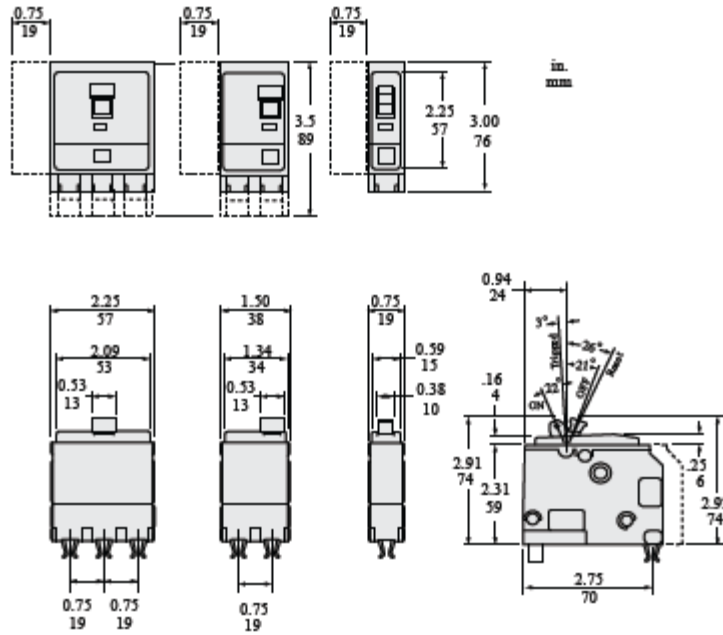
Warranty	18 months
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Product data sheet
 Technical Illustration

QO330

Dimensions



Dimensions are approximate. Refer to technical documentation, dimension drawings, and/or CAD for additional detail.

Recommended replacement(s)

Feb 5, 2023

Lennox | Schneider

8





CR20-W

Brand Features

Leviton's line of Heavy-Duty Specification Grade receptacles are designed and manufactured to withstand the most demanding environments. Available in a wide variety of configurations, including isolated ground, tamper-resistant, etc., these Commercial Grade devices are the electrical contractor's choice for use in hotels, schools, hospitals and commercial office buildings.

Item Description

20 Amp, 125 Volt, NEMA 5-20R, 2P, 3W, Narrow Body Duplex Receptacle, Straight Blade, Commercial Grade, Self Grounding, . . Side Wired, Steel Strap, - White

Technical Information

AC Horsepower Ratings

At Rated Voltage: 1 HP

Electrical Specifications

Grounding: Self-Grounding

Amperage: 20 Amp

Voltage: 125 Volt

Pole: 2-Pole

Wire: 3-Wire

Dielectric Voltage: Withstands 2000V per UL498

Current Limiting: Full Rated Current

Temperature Rise: Max 30C after 100 cycles OL at 150 percent rated current

Environmental Specifications

Flammability: Rated V-2 per UL94

Operating Temperature: -40C to 60C

Material Specifications

Face Material: Thermoplastic

Body Material: Thermoplastic

Line Contacts: Brass .031 Thick

Terminal Screws: Steel 8-32

Grounding Screw: Steel 8-32

Strap Material: Zinc-Plated Steel

Ground Clips: Brass

Mechanical Specifications

Terminal ID: Brass-Hot, Green-Ground, Silver-Neutral

Terminal Accom.: 14-10 AWG

Product ID: Ratings are permanently marked on device

Termination: Side Wire

Product Features

Color: White

NEMA: 5-20R

Device Type: Duplex Receptacle Outlet

Feature 4: Indented Face

Grade: Commercial Specification Grade

Standards and Certifications

NEMA: WD-1 & WD-6

ANSI: C-73

UL498: File E13399

CSA C22.2 No. 42: File 152105

NOM: 057

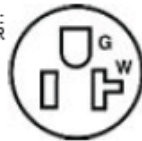
Warranty: 10 Year Limited

Color: White

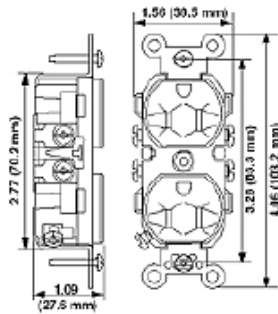
UPC Code: 07847781545

Country Of Origin: United States

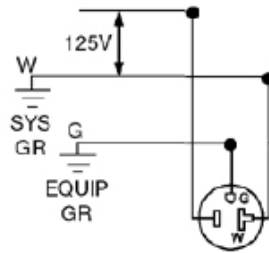
NEMA:
5-20R



Dimensional Diagram



Wiring Diagram



5-20R

SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:	
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JOB NUMBER:	<input type="text"/>	<input type="text"/>

Leviton Manufacturing Co., Inc.
 201 North Service Road, Melville, NY 11747
 Teléfono: +1-800-323-8920 · FAX: +1-800-832-9538 · Tech Line (8:30AM-7:30PM E.S.T. Monday-Friday): +1-800-824-3005

Leviton Manufacturing of Canada, Ltd.
 165 Hymus Boulevard, Pointe Claire, Quebec H8R 1E9 · Telephone: +1-800-469-7890 ·
 FAX: +1-800-824-3005 · www.leviton.com/canada

Leviton S. de R.L. de C.V.
 Lago Tana 43, Mexico DF, Mexico CP 11290 · Tel.: (+52)55-5082-1040 · FAX: (+52)5386-1797 · www.leviton.com.mx

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www.leviton.com/international/contacts/



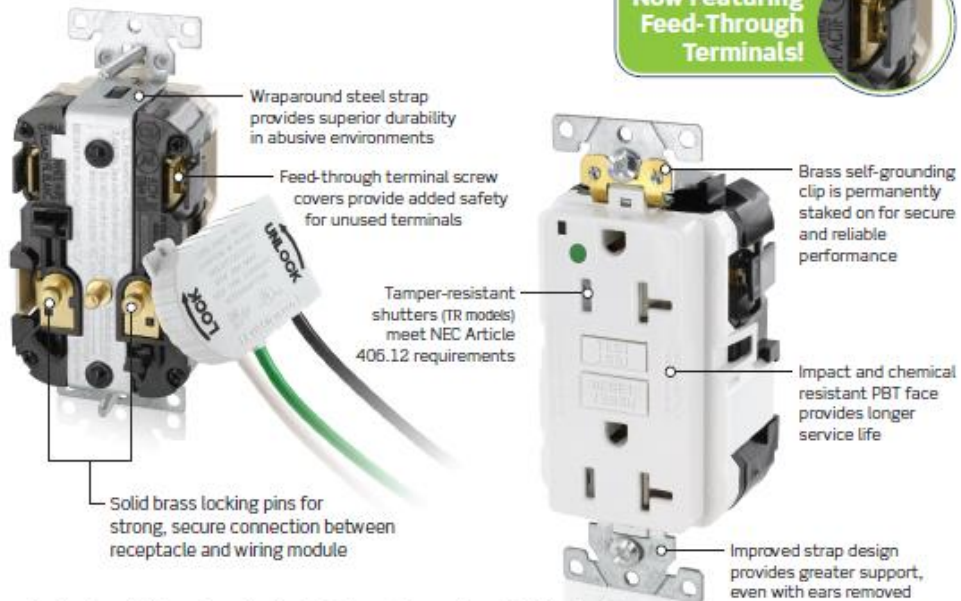
Levlok GFCI MGFN2-W Receptacle

Product Bulletin



lev-lok® GFCI Duplex Receptacles Industrial & Hospital Grade

Now Featuring
Feed-Through
Terminals!



Patented SmartlockPro® protection detects and prevents against line-load reversal miswiring, and prevents resetting when ground fault protection has been lost

Ordering Information

Lev-Lok Hospital Grade GFCI Receptacles		Standard		Tamper-Resistant	
		15A	20A	15A	20A
COLOR	Brown	MN759-HG	MN789-HG	MX759-HG	MX789-HG
	Ivory	MN759-HGI	MN789-HGI	MX759-HGI	MX789-HGI
	White	MN759-HGW	MN789-HGW	MX759-HGW	MX789-HGW
	Black	MN759-HGE	MN789-HGE	MX759-HGE	MX789-HGE
	Gray	MN759-HGG	MN789-HGG	MX759-HGG	MX789-HGG
	Lt. Almond	MN759-HGT	MN789-HGT	MX759-HGT	MX789-HGT
	Red	MN759-HGR	MN789-HGR	MX759-HGR	MX789-HGR
	Lev-Lok Industrial Grade GFCI Receptacles		Standard		Tamper-Resistant
		15A	20A	15A	20A
COLOR	Brown	MN759	MN789	MX759	MX789
	Ivory	MN759-I	MN789-I	MX759-I	MX789-I
	White	MN759-W	MN789-W	MX759-W	MX789-W
	Black	MN759-E	MN789-E	MX759-E	MX789-E
	Gray	MN759-GY	MN789-GY	MX759-GY	MX789-GY
	Lt. Almond	MN759-T	MN789-T	MX759-T	MX789-T
	Red	MN759-R	MN789-R	MX759-R	MX789-R

Common Applications

- Educational Facilities
- Office Environments
- Commercial/Retail Facilities
- Hospitals
- Day Care Centers
- MDUs
- Hospitality Facilities



Ordering Information (Continued)

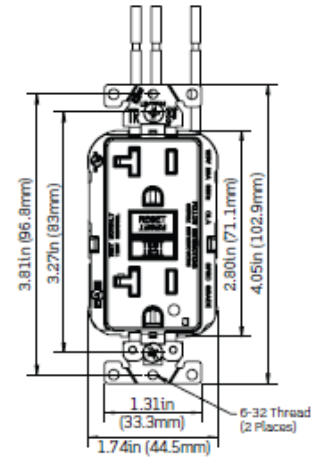
Lev-Lok Receptacle Modules, 20A, 125V	Module Color	Wire Type	Wire Colors	Catalog Numbers
Stranded Wire Leads	White	T1-HN	Black, White, Green	MSTWL-A
Stranded Wire Leads for Emergency Circuits	Red	T1-HN	Black, White, Green	MSTWL-R

Note: Solid Wire and Push Wire Connector Versions Available

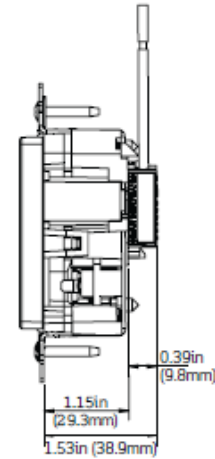
Specifications

Description	Lev-Lok GFCI Duplex Receptacles Hospital & Industrial Grade
Horsepower Rating	
At Rated Voltage	1 HP
Electrical Specifications	
Amperage	15A or 20A
Voltage	125VAC
NEMA	5-15R or 5-20R
Grounding	Self Grounding
Pole	2
Wire	3
Dielectric Voltage	Withstands 1250VAC per UL 943 and CSA-C22.2 No. 144.1-06
Short Circuit Current Rating	2kA
Trip Level	Class A, 5mA plus or minus 1mA
Temperature Rise	Max 30 °C after 250 cycles OL at 200 percent rated current
Environmental Specifications	
Flammability	Rated V-0 per UL94
Relative Humidity	20% to 90% non-condensing
Operating Temperature	-35 °C to 66 °C
Material Specifications	
Face Material	PBT
Body Material	Polycarbonate
Line Contacts	Brass
Mounting Screws	Plated Steel
Grounding Screw	Plated Steel
Strap Material	Galvanized Steel
Ground Clip	Brass
Locking Pin	Brass
Mechanical Specifications	
Product ID	Ratings permanently marked on device
Line Side Termination	Wiring Module
Load Side Termination	14-10AWG Solid or Stranded
Standards & Certifications	
NEMA	WD-1 & WD-6
Certification/Listing	UL, NOM-ANCE
Applicable Standards	UL 498 and 943, CSA C22.2 Nos. 42 and 144, FedSpec W-C-596
Guarantees	
Product Warranty	2 Year Limited

Dimensions



Front View



Side View

Visit our Website at:
www.leviton.com/industrial
 email: industrial@leviton.com
 Q-901

Leviton Manufacturing Co., Inc.
 201 N Service Rd, Melville, NY 11747
 Telephone: 1-800-323-8920 • FAX: 1-800-832-9538
 Tech Line (8:30AM-7:30PM E.S.T. Monday-Friday): 1-800-824-3005
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Pin and Sleeve
Watertight Devices Ordering Information
 60 and 100 Ampere – North American Ratings
 63 and 125 Ampere – International Ratings

UL	SFA	IP67 Suitability	Watertight Devices				Back Boxes		Replacement Interior Kits											
			Receptacle	Plug	Connector	Inlet	Non-Metallic	Metallic	Conn. Recep.	Plugs Inlets										
60	2P 3W										125	HBL360R4W	HBL360P4W	HBL360C4W	HBL360B4W	BB60N	BB601W BB602W	IN360AF	IN360AM	
											250	HBL360R6W	HBL360P6W	HBL360C6W	HBL360B6W	BB60N	BB601W BB602W	IN360BF	IN360BM	
	2P 3W										480	HBL360R7W	HBL360P7W	HBL360C7W	HBL360B7W	BB60N	BB601W BB602W	IN360BF	IN360BM	
											125/250	HBL460R12W	HBL460P12W	HBL460C12W	HBL460B12W	BB60N	BB601W BB602W	IN460CF	IN460CM	
	3P 4W										30/250	HBL460R9W	HBL460P9W	HBL460C9W	HBL460B9W	BB60N	BB601W BB602W	IN460DF	IN460DM	
											30/480	HBL460R7W	HBL460P7W	HBL460C7W	HBL460B7W	BB60N	BB601W BB602W	IN460DF	IN460DM	
	3P 4W										30/600	HBL460R5W	HBL460P5W	HBL460C5W	HBL460B5W	BB60N	BB601W BB602W	IN460DF	IN460DM	
											30Y120/208	HBL560R9W	HBL560P9W	HBL560C9W	HBL560B9W	BB60N	BB601W BB602W	IN560EF	IN560EM	
	4P 5W										30Y277/480	HBL560R7W	HBL560P7W	HBL560C7W	HBL560B7W	BB60N	BB601W BB602W	IN560EF	IN560EM	
											30Y347/600	HBL560R5W	HBL560P5W	HBL560C5W	HBL560B5W	BB60N	BB601W BB602W	IN560EF	IN560EM	
	63	2P 3W										220-240	HBL363R6W	HBL363P6W	HBL363C6W	HBL363B6W	BB60N	BB601W BB602W	IN360BFS	IN360BMS
												380-415	HBL463R6W	HBL463P6W	HBL463C6W	HBL463B6W	BB60N	BB601W BB602W	IN460DFS	IN460DMS
4P 5W											220/380 240/415	HBL563R6W	HBL563P6W	HBL563C6W	HBL563B6W	BB60N	BB601W BB602W	IN560EFS	IN560EMS	
100	2P 3W										125	HBL3100R4W	HBL3100P4W	HBL3100C4W	HBL3100B4W	BB100N	BB1001W BB1002W	IN3100AF	IN3100AM	
											250	HBL3100R6W	HBL3100P6W	HBL3100C6W	HBL3100B6W	BB100N	BB1001W BB1002W	IN3100BF	IN3100BM	
	2P 3W										480	HBL3100R7W	HBL3100P7W	HBL3100C7W	HBL3100B7W	BB100N	BB1001W BB1002W	IN3100BF	IN3100BM	
											125/250	HBL4100R12W	HBL4100P12W	HBL4100C12W	HBL4100B12W	BB100N	BB1001W BB1002W	IN4100CF	IN4100CM	
	3P 4W										30/250	HBL4100R9W	HBL4100P9W	HBL4100C9W	HBL4100B9W	BB100N	BB1001W BB1002W	IN4100DF	IN4100DM	
											30/480	HBL4100R7W	HBL4100P7W	HBL4100C7W	HBL4100B7W	BB100N	BB1001W BB1002W	IN4100DF	IN4100DM	
	3P 4W										30/600	HBL4100R5W	HBL4100P5W	HBL4100C5W	HBL4100B5W	BB100N	BB1001W BB1002W	IN4100DF	IN4100DM	
											30Y120/208	HBL5100R9W	HBL5100P9W	HBL5100C9W	HBL5100B9W	BB100N	BB1001W BB1002W	IN5100EF	IN5100EM	
	4P 5W										30Y277/480	HBL5100R7W	HBL5100P7W	HBL5100C7W	HBL5100B7W	BB100N	BB1001W BB1002W	IN5100EF	IN5100EM	
											30Y347/600	HBL5100R5W	HBL5100P5W	HBL5100C5W	HBL5100B5W	BB100N	BB1001W BB1002W	IN5100EF	IN5100EM	
	125	2P 3W										220-240	HBL3125R6W	HBL3125P6W	HBL3125C6W	HBL3125B6W	BB100N	BB1001W BB1002W	IN3100BFS	IN3100BMS
												380-415	HBL4125R6W	HBL4125P6W	HBL4125C6W	HBL4125B6W	BB100N	BB1001W BB1002W	IN4100DFS	IN4100DMS
4P 5W											220/380 240/415	HBL5125R6W	HBL5125P6W	HBL5125C6W	HBL5125B6W	BB100N	BB1001W BB1002W	IN5100EFS	IN5100EMS	

Notes: All 63A and all 125A devices have pilot pins or contacts.
 See page E-6, E-7 for accessories. See page E-8, E-9 for product dimensions. See page E-10, E-11 for product specifications.
 Closure caps purchased separately, see page E-7.
 † Consult factory.

Dimensions in inches (mm)

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E-5

Pin and Sleeve

Watertight Pin and Sleeve



Pin and Sleeve Watertight Device Dimensions

Plug Dimensions

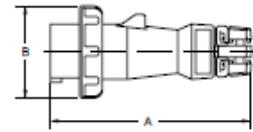
Type	A	B	Cord Grip Range
HBL320P	6.61" (167.8)	2.87" (73.0)	.330"- .830" (8.4-21.1)
HBL420P	7.00" (177.8)	3.19" (81.0)	.375"-1.250" (9.5-31.8)
HBL520P	7.65" (194.3)	3.50" (89.0)	.375"-1.250" (9.5-31.8)
HBL330P	8.05" (204.5)	3.74" (95.0)	.375"-1.250" (9.5-31.8)
HBL430P	8.05" (204.5)	3.74" (95.0)	.375"-1.250" (9.5-31.8)
HBL530P	8.54" (216.9)	4.02" (102.0)	.500"-1.450" (12.7-36.8)
HBL360P HBL460P HBL560P	10.15" (257.8)	4.49" (114.0)	.500"-1.450" (12.7-36.8)
HBL3100P HBL4100P HBL5100P	12.63" (320.8)	4.92" (125.0)	1.065"-1.940" (27.1-49.3)

Receptacle Dimensions

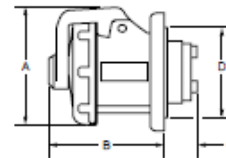
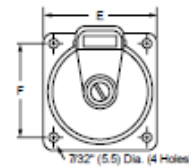
Type	A	B	C	D	E	F
HBL320R	3.33" (84.5)	2.78" (70.6)	1.02" (26.0)	2.72" (69.0)	3.75" (95.3)	3.13" (79.5)
HBL420R	3.66" (93.0)	2.78" (70.6)	1.02" (26.0)	2.72" (69.0)	3.75" (95.3)	3.13" (79.5)
HBL520R	3.94" (100.0)	2.78" (70.6)	1.02" (26.0)	2.72" (69.0)	3.75" (95.3)	3.13" (79.5)
HBL330R	4.27" (108.5)	3.09" (78.5)	1.16" (29.5)	2.72" (69.0)	3.75" (95.3)	3.13" (79.5)
HBL430R	4.27" (108.5)	3.09" (78.5)	1.16" (29.5)	2.72" (69.0)	3.75" (95.3)	3.13" (79.5)
HBL530R	4.70" (119.4)	3.09" (78.5)	1.16" (29.5)	2.83" (71.9)	3.75" (95.3)	3.13" (79.5)
HBL360R, HBL460R, HBL560R	5.71" (145)	4.23" (107.4)	1.69" (43.0)	3.46" (88.0)	4.50" (114.3)	3.88" (98.6)
HBL3100R, HBL4100R, HBL5100R	5.71" (145)	4.23" (107.4)	2.46" (62.5)	3.94" (100.0)	5.50" (139.7)	4.88" (123.9)

Note: 20, 30, 60 and 100A devices are dimensionally equivalent to 16, 32, 63 and 125A devices, respectively.

Plug



Receptacle



Dimensions in inches (mm)

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Wiring Device-Kellems

E-9



Pin and Sleeve Watertight Listings

IEC Pin and Sleeve Inlet, Connector Body, Plug and Receptacle

Listed to standard UL1682/CSA C22.2 No. 182.1, Plugs, Receptacles and cable connectors of the Pin and Sleeve Type.

UL Classified to IEC Standards 60309-1 and 60309-2 (Plugs, Socket Outlets, and Couplers for Industrial Purposes) for both Series I (European) and Series II (North American) rated voltages and services.

When used with cord, these devices require no further investigation by UL for equipment Classification to IEC 435 or IEC 380.

Watertight Materials

Part	Material
Inlet	
Housing	Zytel® 101 Nylon
Locking Ring	Rynite® SST35
Mounting Flange	Zytel 101 Nylon
Mounting Screws	Stainless Steel (300 Series)
Contact Carrier	High-Impact Thermoset
Retainer	High-Impact Thermoset
Ground, Phase Pins	Brass
Terminal Screws	Stainless Steel (300 Series)
Assembly Screws (2)	Stainless Steel (300 Series)
Gaskets	Solid Neoprene
Connector Body	
Housings	Zytel ST801 Nylon
Cord Clamps	Rynite SST35
Glands	Solid Neoprene
Cover Arms	Rynite SST35
Arm Springs	Stainless Steel (17-7 type)
Covers	Rynite SST35
Cover Screw	Nickel-plated brass
Rotating Sealing Disc	Polycarbonate
Gaskets	Solid Neoprene
Contact Carrier	High-Impact Thermoset
Retainer	High-Impact Thermoset
Phase, Ground Sleeves	Brass
Sleeve Spring	20A and 30A Stainless Steel (300 Series); others are Beryllium Copper multi-contact inserts w/silver plating
Terminal Screws	Stainless Steel (300 Series)
Assembly Screws	Stainless Steel (300 Series)
Plug	
Housing	Zytel ST801 Nylon
Locking Ring	Rynite SST35
Sealing Gasket	Solid Neoprene
Cord Clamp	Rynite SST35
Gland Cap	Rynite SST35
Gland	Solid Neoprene
Cord Clamp Screws	Stainless Steel (300 Series)
Clamp Nut	Nickel-plated Brass
Gland Clamp Screws	Stainless Steel (300 Series)
Contact Carrier	High-Impact Thermoset
Retainer	High-Impact Thermoset
Ground, Phase Pins	Brass
Terminal Screws	Stainless Steel (300 Series)
Assembly Screws	Stainless Steel (300 Series)
Receptacle	
Housings	Zytel 101 Nylon
Mounting Flange	Zytel 101 Nylon
Arm Spring	Stainless Steel (17-7 type)
Cover Arm	Rynite SST35
Cover	Rynite SST35
Cover Screw	Nickel-plated brass
Rotating Sealing Disc	Polycarbonate
Gaskets	Solid Neoprene
Mounting Screws	Stainless Steel (300 Series)
Terminal Screws	Stainless Steel (300 Series)
Phase, Ground Sleeves	Brass
Sleeve Spring	20A and 30A Stainless Steel (300 Series); others are Beryllium Copper multi-contact inserts w/silver plating

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E-10



Wiring Device-Kellems

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Dimensions in Inches (mm)



Pin and Sleeve Watertight Specification

Specifications

Typical Specification

Manufacturer's Identification	Hubbell HBL520P9W.
Description	Plug, Power Supply.
Type	3 Pole + Neutral + Earth.
Rating	20A, 120/208V AC, 3 Phase WYE.
Configuration	UL 1888 C2, IEC 60309-2, Clock Position 9, Watertight.
Certification	UL Listed, File E146032 Receptacles & Inlets, E146033 Plugs & Connectors, UL Standard UL 1682 & UL 1686C2, CSA Certified File LR280C for Plugs, Connectors Inlets and LR285C for Receptacle CSA Standard C22.2 No. 182.1, UL Classified to IEC 60309-1 IEC 60309-2.

Performance

Electrical

Dielectric Withstand Voltage	3000V AC.
Max. Working Voltage	600V RMS (i.e., minimum creepage distance 10 millimeters, minimum clearance 8 millimeters, per IEC 60309-1 for devices rated over 500V).
Current Interrupting	Certified for current interrupting at full rated current.
Temperature Rise	Max. 30°C temperature rise at full rated current after 50 cycles of overload at 150% of rated current at a power factor of 75%.
Endurance	5,000 connect and disconnect cycles with load for 16A and 20A, 1,000 cycles with load and 1,000 cycles w/o load for 30A, 32A, 60A and 63A, and 250 cycles with load and 250 cycles w/o load for 100A and 125A.

Mechanical

Impact Resistance	Per CSA C22.2 No. 182.1 / UL1682.
Cord Grip Cable Retention	Per CSA C22.2 No. 182.1 / UL1682.
Cord Accommodation	Round portable service cords of diameters commensurate with the device rating as defined in UL Standard 62, CSA C22.2 No. 49 and the harmonized <HAR> European Standards.
Terminal Identification	Terminals identified in accordance with North American and IEC conventions.
Product Identification	Identification and ratings are a permanent part of the device housing.

Environmental

Moisture Resistance	Watertight per IEC 60309-1.
Ingress Protection	IP67 Suitability
Flammability	HB or better per UL 94 or CSA C22.2 No. 0.17.
Operating Temperatures	Maximum Continuous 75° C; Minimum - 40°C w/o impact.

Materials

Housings	Nylon.
All other materials	Resistant to corrosion and chemical attack (per tabulation on this page).

Note: Specification sheets for all other Pin and Sleeve catalog numbers are available upon request.

Watertight Application Guide

Industry	Watertight
Agriculture	Outdoor for fans, heaters, pumps, etc.
Chemical Processing	Where subject to water, corrosion and rough use.
Construction	Outdoors subject to severe weather conditions.
Entertainment	Outdoors subject to severe weather.
Food Processing	Where subject to water, corrosion and rough use.
Food Service	Areas subject to wash downs & heavy cleaning.
Light Manufacturing	Subjected to cleaning, solvents & chemicals.
Manufacturing	Where subject to water, corrosion and rough use (i.e., mills).
Military	Outdoor construction or maintenance subject to severe weather.

Dimensions in Inches (mm)

www.hubbell-wiring.com



Wiring Device-Kellems

E-11



Bosch Tronic 3000 T | ES8, ES4, ES2.5 Point-of-Use Electric Mini-Tank Water Heaters

Hot Water Where You Need It

The Bosch Tronic 3000 T point-of-use electric mini-tanks are available in three sizes which can be wall-hung (bracket included) or floor-mounted.

Easy installation. Simply tap into the cold water line, provide electrical connection and install the water heater directly at the sink. Can be used alone to provide a small volume of water or installed inline with a central water heater near the point-of-use to eliminate the wait for hot water.



Note: Sold in U.S. Only



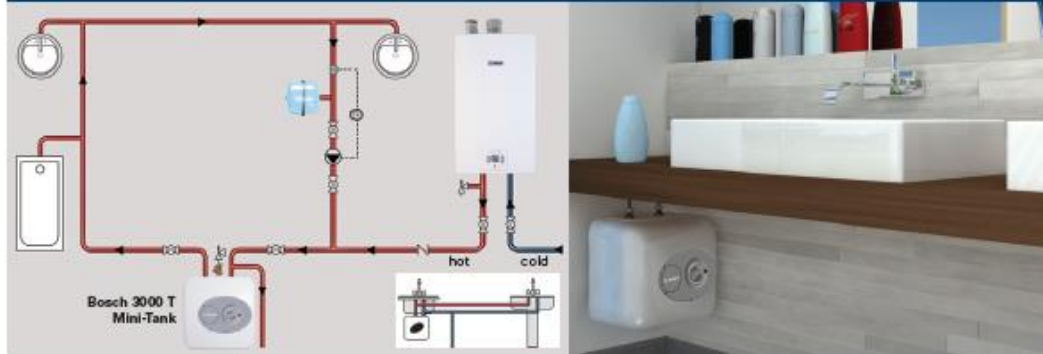
Technical Specifications	ES8	ES4	ES2.5
Part Number	7738004998	7738004997	7738004996
Thermal Efficiency	99%	99%	98%
Tank Volume (gal)	7	4	2.7
Heating Capacity, Watts	1440	1440	1440
Recovery Rate @ 90°F Rise, GPH	6.8	6.8	6.8
Temperature Range (°F)	65 - 145	65 - 145	65 - 145
Max Operating Pressure (psi)	150	150	150
Weight (lbs)	29.5	17.3	15.5
Dimensions (in)	17½ x 17½ x 14½	13½ x 13½ x 13½	13½ x 13½ x 10½
Water Fittings	¾" Male NPT	½" Male NPT	¾" Male NPT
Relief Valve	Included	Installed	Installed
Electrical Requirements			
Volts (VAC)	120	120	120
Amps	12	12	12
Connection Type	Hard Wired	Plug-In	Plug-In

Features

- ▶ Supplies up to 2 sinks at a time (ES8 model)
- ▶ Provides hot water quickly at point-of-use
- ▶ Compact, lightweight, space saving
- ▶ Thick CFC-free foam insulation maximizes energy efficiency
- ▶ Units can be wall / floor mounted (bracket included) with multi-directional mounting available (ES8 model only)
- ▶ Temperature / pressure relief valve included
- ▶ Glass-lined tank for long service life
- ▶ Models ES2.5 and ES4 have a simple 120 VAC plug-in connection
- ▶ 6 year limited warranty¹

¹ Copies of original warranties in their entirety are available at www.boschheatingandcooling.com

No more waiting for hot water. Ideal for stand-alone use or recirculation systems.



Relief valve is required; however it is not shown in above photo for clarity.

Bosch Thermotechnology Corp.
Londonderry, NH • Ft. Lauderdale, FL
General Inquiries: 1-866-642-3198
www.boschheatingandcooling.com

73H991001c 07-15
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Liberty Pumps®

LCU-Series



Model
Shallow Pan LCU-SP20S,
LCU-SP220S with Safety
Switch Feature 20' head,
115V or 230V



Model
LCU-20S, LCU220S
with Safety Switch Feature
20' head, 115V or 230V



Model
LCU-15,
LCU-15S
includes Safety Switch,
15' head, 115V

Condensate Pumps

For removal
of condensate
from high
efficiency furnaces,
A/C equipment,
ice machines,
drinking fountains,
beverage machines,
dehumidifiers and other
applications requiring
condensate removal.



innovate. evolve.



LCU-Series Condensate Pumps Specifications

Model	Volt	hp.	Amps	H _z	H	L	W	Wgt.	Capacity	Max hd	Safety Switch	20' Tubing
LCU-15	115	1/50	1.0	60	6.5"	11-1/8"	5"	4.5 lbs	2 US Qt.	15'	No	No
LCU-15S	115	1/50	1.0	60	6.5"	11-1/8"	5"	4.5 lbs	2 US Qt.	15'	Yes	No
LCU-15T	115	1/50	1.0	60	6.5"	11-1/8"	5"	5.5 lbs	2 US Qt.	15'	No	Yes
LCU-15ST	115	1/50	1.0	60	6.5"	11-1/8"	5"	5.5 lbs	2 US Qt.	15'	Yes	Yes
LCU-20S	115	1/30	1.5	60	6.5"	11-1/8"	5"	5.0 lbs	2 US Qt.	20'	Yes	No
LCU-20ST	115	1/30	1.5	60	6.5"	11-1/8"	5"	6.0 lbs	2 US Qt.	20'	Yes	Yes
LCU220S	230	1/30	0.7	60	6.5"	11-1/8"	5"	5.0 lbs	2 US Qt.	20'	Yes	No
LCU-SP20S	115	1/30	1.5	60	5"	11-1/8"	5"	4.5 lbs	1 US Qt.	20'	Yes	No
LCU-SP220S	230	1/30	.7	60	5"	11-1/8"	5"	4.5 lbs	1 US Qt.	20'	Yes	No

FEATURES:

- High impact ABS tank
- Wall mounts
- Three intake holes
- 3/8" O.D. outlet
- Barbed and threaded discharge connection
- Removable check valve
- Stainless steel shaft
- 6' power cord with ground
- Thermally protected
- Fully automatic
- Quiet operation
- Models with an "S" include built-in safety switch
- Isolation pads pre-installed on tank

Applications Include:

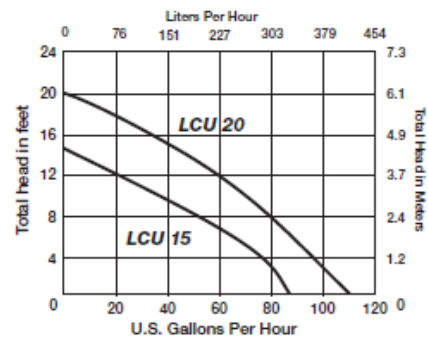
- High efficiency furnaces
- AC equipment, ice machine
- Drinking fountains
- Dehumidifiers
- And other applications requiring condensate removal

Maximum fluid temperature for LCU models: 150° F

Models with a "T" include 20' of tubing



Performance Curve:



Model LCU-15
Model LCU-15S



Model LCU-20S (115V)
Model LCU220S (230V)



Shallow Pan Models:
LCU-SP20S (115V)
LCU-SP220S (230V)



Specifications are subject to change without notice.

Liberty Pumps • 7000 Apple Tree Avenue • Bergen, New York 14416 • Phone 800-543-2550 Fax (585) 494-1839
www.libertypumps.com

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Liberty Pumps®

Model 405



**Commercial
Drain Pump
High-Head
High Temperature
1/2 hp
3/8" solids-handling**
*Featuring QuickTree®
technology for easy
switch access!*

Features:

- Factory pre-assembled, ready to install
- Fully automatic operation
- Handles fluid temperatures to 180 degrees F. (not designed for use with chemicals.)
- Separate access cover for easy switch inspection
 - 2" inlet and 2" vent
 - 2" discharge
- Integrally molded rubber gasket for a superior gas-tight seal
- Standard alarm and Wi-Fi alarmed models available

Applications Include:

Bar sinks, laundry trays, multi-compartment utility sinks, dehumidifiers, dishwashers and gray wastewater drainage below gravity lines

NEW!

NightEye®
Wireless Enabled
Models Available



innovate. evolve.



MODEL 405 & 405HV COMMERCIAL DRAIN PUMP

FEATURES:

- Factory pre-assembled.
- Fully automatic operation.
- QuickTree® technology allows quick inspection and removal of float switch without disconnecting the plumbing.
- Oil-filled motor with thermal-overload protection.
- Corrosion-resistant polyolefin basin with integrally molded rubber gasket for a superior gas-tight seal.
- Maintenance-free, permanently lubricated sealed bearings.
- 10' power cord with ground plug
- 3/8" Solids-Handling
- 1/2 hp

Maximum fluid temperature 180 degrees F.
Not intended for use with chemicals.

APPLICATIONS:

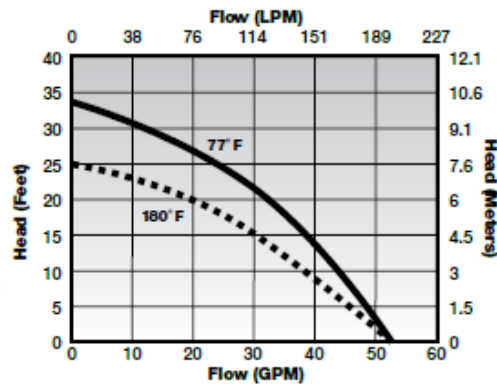
- Laundry Trays
- Commercial Sinks
- Bar Sinks
- Dishwashers
- Dehumidifiers
- Wherever gray wastewater drainage is needed below gravity lines.

Specifically designed for higher head applications such as commercial and industrial buildings.

DIMENSIONAL DATA:

Weight: 16 LBS.
Major Height: 14-1/8"
Major Width: 13-3/4"
Inlet Height (from bottom of basin): 12-5/8"
Total Capacity: 5.5 Gallons
Inlet Size: 2"
Discharge Size: 2"
Vent Size: 2"

PERFORMANCE CURVE 60 hz



MODEL	HP	Volts	Amps	Discharge, Inlet & Vent	Alarm
405	1/2	115	7.3	2"	No
405/A	1/2	115	7.3	2"	Standard Alarm
405/A-EYE	1/2	115	7.3	2"	NightEye® Wireless
405HV	1/2	230	3.5	2"	No

Alarmed models come with factory mounted alarm float in system. No assembly required.
See Alarm literature for ALM-2 standard alarm or NightEye® Wi-Fi alarm for complete alarm specifications.



QuickTree® technology allows easy removal of float without disconnecting plumbing or pulling the pump

Heavy-Duty integrally molded rubber gasket provides a superior seal. Meets 10' stack test requirements.



Specifications are subject to change without notice.

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www.libertypumps.com

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APPENDIX C

Plumbing Fixtures Cutsheets





Krowne Hand Sink (Model# HS-1425 & HS-1225)



Model: _____ Item #: _____ Date: _____
 Project: _____ Qty: _____ Approved By: _____

Drop-In Sinks with 3-1/2" Drains

DROP-IN SINKS

Standard Features (applies to all models)

- Fabrication: 20 gauge stainless steel. All seams tig welded and polished.
- Bowl: High quality deep drawn
- Faucet & drain included
- Drain: Stainless steel 3-1/2" drain
- NSF approved



Optional Accesories

Model	Description
H-100	Chrome plated 1-1/2" IPS P-Trap
H-103	Wrist Handle Kit
H-109	Upgrade: Royal Series Faucet
H-200	Upgrade: Silver Series Faucet

HS-1419
12" Drop-In Sink

Overall Size	12"W x 18"L
Bowl Size	10"W x 14"L x 10"D
Cutout (1-1/4" Radius)	11-1/4"W x 17-1/4"L
Weight	16 lbs.



HS-1425
12" Drop-In Sink w/ 5" Deep Bowl

Overall Size	12"W x 18"L
Bowl Size	10"W x 14"L x 5"D
Cutout (1-1/4" Radius)	11-1/4"W x 17-1/4"L
Weight	12 lbs.



HS-1220
12" Drop-In Sink w/ Side Splashes

Overall Size	12"W x 18"L x 15-1/2"D
Bowl Size	10"W x 14"L x 10"D
Cutout (1-1/4" Radius)	11-1/4"W x 17-1/4"L
Backsplash	5-1/2" high
Weight	20 lbs.



HS-1225
12" Drop-In Sink w/ Side Splashes
5" Deep Bowl

Overall Size	12"W x 18"L x 15-1/2"D
Bowl Size	10"W x 14"L x 5"D
Cutout (1-1/4" Radius)	11-1/4"W x 17-1/4"L
Backsplash	5-1/2" high
Weight	16 lbs.



HS-2619 26" x 18" Double Bowl Drop-In
Two Compartment Sink



Overall Size	26"W x 18"L x 10"D
Bowl Size	Two 10"W x 14"L x 10"D bowls
Cutout (1-1/4" Radius)	22-1/4"W x 16-3/4"L
Weight	30 lbs.

HS-3819 36" x 18" Triple Bowl Drop-In
Three Compartment Sink



Overall Size	36"W x 18"L x 10"D
Bowl Size	Three 10"W x 14"L x 10"D bowls
Cutout (1-1/4" Radius)	35-1/4"W x 17-1/4"L
Weight	40 lbs.

Krowne Metal Corporation • 100 Haul Rd. Wayne, NJ 07470 • Toll Free: (800) 631-0442 • Fax: (973) 872-1129 • sales@krowne.com • krowne.com
 Due to our commitment to continued product improvement, specifications are subject to change without notice. Rev. 6/2019 • No. 2.7





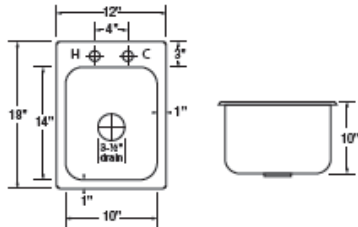
Model: _____ Item #: _____ Date: _____

Project: _____ Qty: _____ Approved By: _____

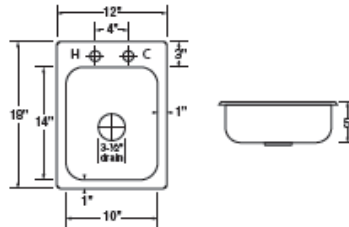
Drop-In Sinks with 3-1/2" Drains

DROP-IN SINKS

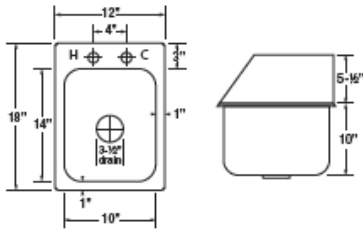
HS-1419



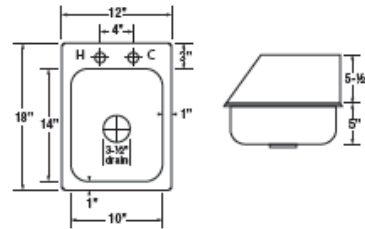
HS-1425



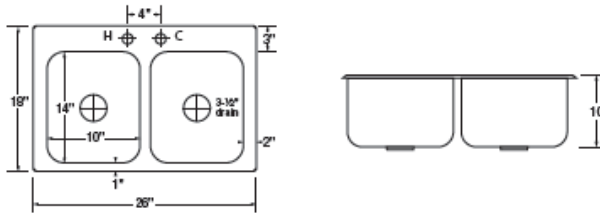
HS-1220



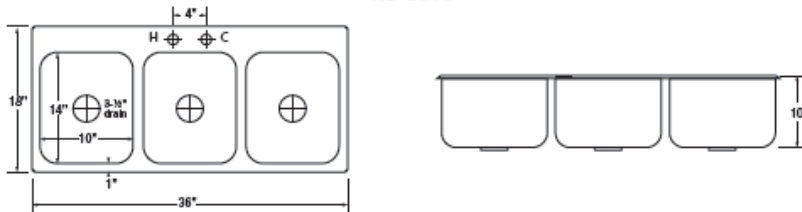
HS-1225



HS-2619



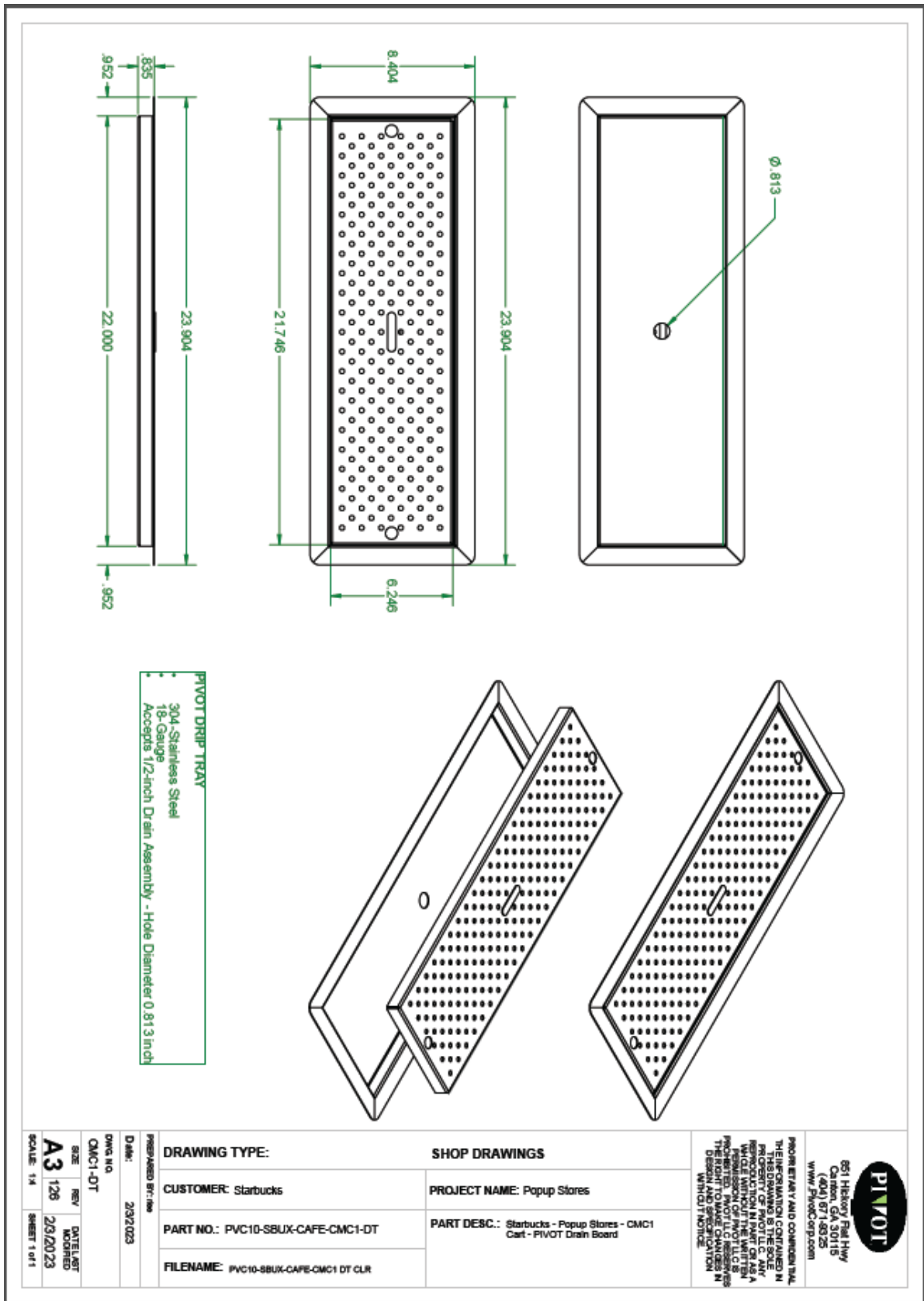
HS-3819



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PIVOT Drain Board



T&S Water Tower (Model# B-1210-12)



T&S BRASS AND BRONZE WORKS, INC.
 2 Saddleback Cove / P.O. Box 1088
 Travelers Rest, SC 29690

Model No.
B-1210-12

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com



ADA Compliant

This Space for Architect/Engineer Approval

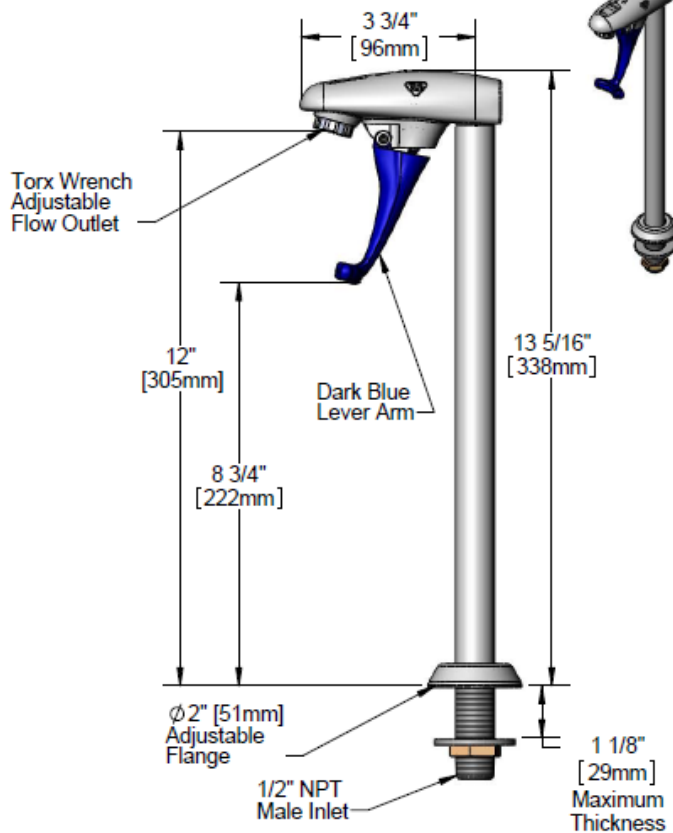
Job Name _____ Date _____

Model Specified _____ Quantity _____

Customer/Wholesaler _____

Contractor _____

Architect/Engineer _____



Rough-in Requirement:
 ϕ 1" [25mm] Mounting Hole

Product Specifications:
 12" Pedestal Type Glass Filler, Push Back Design, 1/2" NPT Male Shank,
 Adjustable Flange, Dark Blue Self-Closing Arm

Drawn	Checked	Approved
JRM	DMH	JHB

Scale:	Date:
1:3	01/24/13

Sheet: 1 of 2





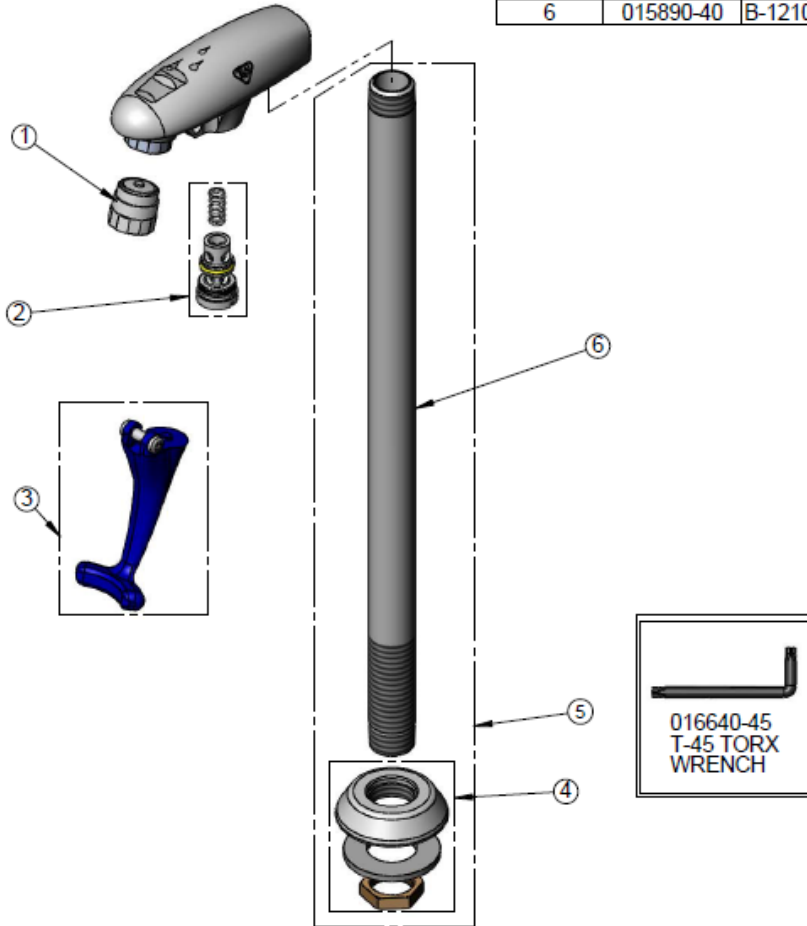
T&S BRASS AND BRONZE WORKS, INC.
 2 Saddleback Cove / P.O. Box 1088
 Travelers Rest, SC 29690

Model No.
B-1210-12

Item No.

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

ITEM NO.	SALES NO.	DESCRIPTION
1	015588-40	Adjustable Outlet w/ Torx Wrench
2	015589-40	Valve Assembly
3	015550-45	Lever Arm Repair Kit
4	016783-40	Adjustable Deck Flange Repair Kit
5	015891-40	Pedestal Assembly
6	015890-40	B-1210-12 Pedestal



Product Specifications:
 12" Pedestal Type Glass Filler, Push Back Design, 1/2" NPT Male Shank,
 Adjustable Flange, Dark Blue Self-Closing Arm

Drawn JRM	Checked DMH	Approved JHB
Scale: NTS		Date: 01/24/13

Sheet: 2 of 2





Single Sill Faucets

B-0710

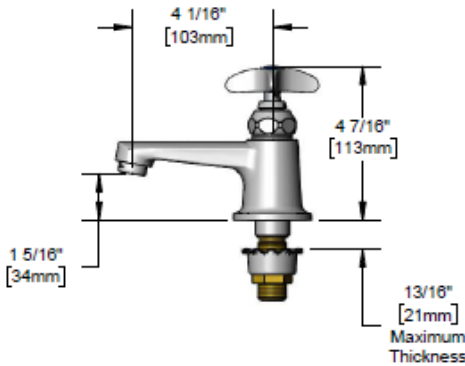
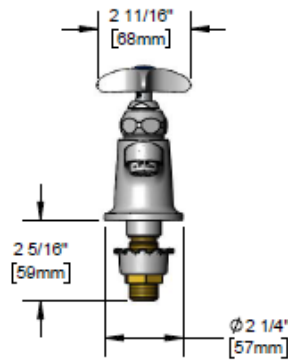
TAG:

Single Basin Faucet

Architect/Engineering Specifications:

Single hole, single temperature, deck mount faucet with polished chrome plated brass body, 2.2 GPM aerator, compression cartridge with spring check, 4-Arm handle and 1/2" NPSM male inlet. Certified to ASME A112.18.1/CSA B125.1, NSF 81-Section 9 and NSF 372. Meets ADA ANSI/ICC A117.1 requirements.

Job Name	
Model Specified	Quantity
Variations Specified	
Date	



Features & Benefits:

- Single hole, single temperature deck mount faucet w/ polished chrome plated brass body
- 2.2 GPM aerator, Series 3 (B-0199-03)
- Quarter-turn Eterna compression cartridge w/ spring check
- 4-Arm handle with color coded index
- 1/2" NPSM male inlet
- Tailpiece and nut for 1/4" NPT connection
- Material: Polished chrome plated brass body & chrome plated metal handle

Product Compliance:

- ASME A112.18.1 / CSA B125.1
- NSF 81 - Section 9
- NSF 372 (Low Lead Content)
- ANSI A117.1 (ADA)

Warranty: One Year (Limited)

Performance Data:

- Pressure: 20 - 125 psi
- Temperature: 40°F - 140°F
- Flow Rate: 2.2 GPM @ 80 psi



Optional Outlets (Series 3 / VR Series 8)

GPM	Aerated	Non-Aerated (Laminar)	VR Aerated	VR Non-Aerated (VR Laminar)
0.35	N/A	<input type="checkbox"/> B-0199-03-N035	N/A	<input type="checkbox"/> B-0199-08-N035
0.5	N/A	<input type="checkbox"/> B-0199-03-N05	N/A	<input type="checkbox"/> B-0199-08-N05
1.0	<input type="checkbox"/> B-0199-03-F10	N/A	<input type="checkbox"/> B-0199-08-F10	<input type="checkbox"/> B-0199-08-LF10
1.2	<input type="checkbox"/> B-0199-03-F12	N/A	<input type="checkbox"/> B-0199-08-F12	N/A
1.5	<input type="checkbox"/> B-0199-03-WS	N/A	<input type="checkbox"/> B-0199-08-WS	<input type="checkbox"/> B-0199-08-LF15
2.2	Standard	<input type="checkbox"/> B-0199-26	<input type="checkbox"/> B-0199-08	<input type="checkbox"/> B-0199-28

Optional Handles

- 4" Wrist Action
- Lever
- 4-Arm (Standard)

Optional Cartridges

- Quarter-Turn Cerama w/ Check Valve
- Quarter-Turn Eterna w/ Spring Check (Standard)
- Push Button Metering
- Pivot Action Metering
- Wrist Action Metering



T&S BRASS AND BRONZE WORKS, INC.



• 2 Saddleback Cove • Travelers Rest, SC 29690
 Ph 800-476-4103 • Fax 864-834-3518
 • Simi Valley, CA • Ph 800-423-0150 • www.tsbrass.com

Date: 04/08/20





STARBUCKS RINSE-O-MATIC®

Powerfully Rinses Blender Containers

No more rinsing containers by hand or letting the water run; the Rinse-o-matic is the more efficient way to rinse any blender container* in seconds! Just place the container upside down and the high water pressure rinses residue away, saving you time and money.

Smart Product Design

- Powerful spray forcefully removes stubborn residue
- Angled spray nozzles are designed to reach all the corners of the container and the top of the blade
- Only sprays when pressure is applied for ease-of-use
- Easy to operate plunger requires minimum force to activate
- Quick disconnect fittings for easy installation on any faucet
- Large suction cups for stable base
- Durable ABS plastic construction is virtually unbreakable and verified to perform more than 1,000,000 cycles

* 64 oz. containers or smaller from most manufacturers.



www.vitamix.com/foodservice



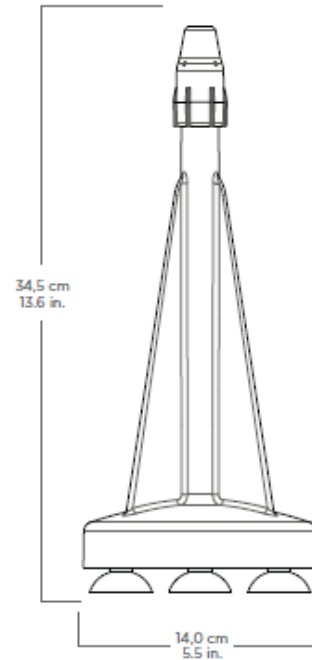
Product Specifications

Rinse-o-matic®

Item Number: 1416 Starbucks SKU: 183204
 Pack: Includes Rinse-o-matic blender container rinser, includes base, 2.5 ft. hose assembly, 2 faucet adapters, quick disconnect connector, and instructions.
 Net Weight: 1.6 lbs. (2.2 lbs. with box)
 Dimensions: 13.6 x 5.5 x 5.5 in. (H x W x D)

Made in the U.S.A. with a minimum of 70% U.S.A. content.
 FOR COMMERCIAL USE ONLY.

Warranty: The Rinse-o-matic is backed by a one-year limited warranty. For more information regarding this warranty, please call 1.440.235.0214 for customer service.



Also Available

Rinse-O-Matic (outside USA)

Item Number: 1456 Starbucks SKU: xxxxxx
 Pack: Includes Rinse-O-Matic blender container rinser, base, 2.5 ft. hose assembly, 5 faucet adapters, Y connector, quick disconnect connector and instructions.
 Net Weight: 2.1 lbs. (2.6 lbs. with box)
 Dimensions: 13.6 x 5.5 x 5.5 in. (H x W x D)

Item Number: xxxxxx Starbucks SKU: xxxxxx
 Pack: Includes a carton of 12 blender container rinsers, model #1456

Where applicable:



Contact Information

U.S.A., Canada & Latin America: www.vitamix.com/foodservice
 Tel: 800.4DRINK4 or 440.235.0214 Vita-Mix Corporation
 8615 Usher Road
 Cleveland, OH 44138-2103 U.S.A.
 E-mail: foodservice@vitamix.com

Outside of U.S.A., Canada & Latin America:
 Tel: +1.440.782.2450 For more information, contact your local foodservice distributor.
 E-mail: international@vitamix.com

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APPENDIX D

Other Equipment Cutsheets

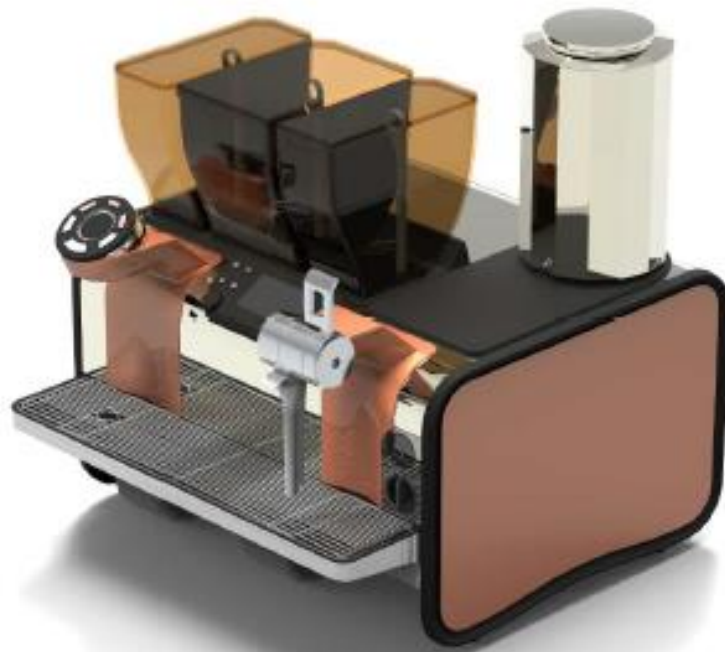






Technical Manual

CUT SHEETS

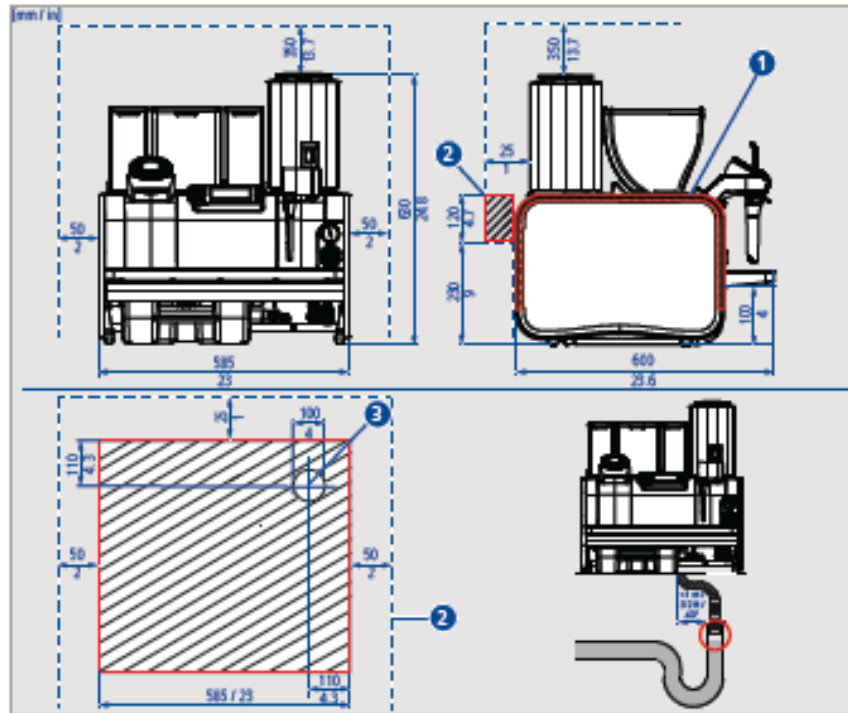


© Thermoplan AG | 1/17/2019

19742



3 M2-CS (208 V)



- 1 Do not cover more than 50% of the marked area.
- 2 Hole diameter 100 mm / 4 in for the water inlet and water drain, power cable, water pump cable and Ethernet cable.
- 3 Do not place objects on the marked area.

Drain

- Distance of machine to drain < 1 m / 3.2 ft at 40°.
- The drain line (pipe) must not sag.
- No back pressure in the drain line.
- The end of the line must not be submerged in water.

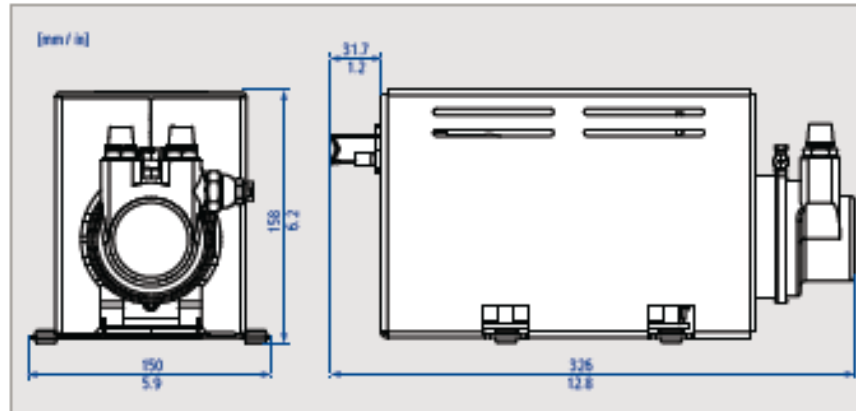


Machine parameters

Connection	208 VAC / 50/60 Hz
Active power	5800 W
Dimensions (W / D / H)	585 x 600 x 630 mm 23.03 x 36.62 x 24.8 in
Weight	95 kg / 209.43 lbs



6 Water pump US



Machine parameters

Connection	208 VAC / 50/60 Hz
Active power	150 W
Dimensions (W / D / H)	150 x 326 x 158 mm 5.9 x 12.8 x 6.2 in
Weight	7 kg



7 Water connection specifications

Water connection specifications	
Water connection	3/8" (CE) / 9/16" (US)
Water inlet pressure	2-4 bar / 30-60 psiG
Chlorine	None
TDS	70-200 ppm
Total hardness	5-8 °dH (8-14 °fH)
pH	6.8-7.4
Alkalinity	< 100 ppm
Iron	< 0.25 ppm
Water flow	2.0l/min / 0.54 gpm

Water hardness conversion table

Water hardness	German	French	English	Ppm	Mval/l
1° dH	1.0	1.79	1.25	17.8	0.357
1° fH	0.56	1.0	0.7	10.0	0.2
1° e	0.8	1.43	1.0	14.3	0.86
1° ppm	0.056	0.1	0.07	1.0	0.02
1 mval/l	2.8	5.0	3.5	50.0	1.0



APPENDIX E

Material Finishes Documentation





Product Data Sheet



TIGER Drylac U.S.A., Inc. | 3855 Swenson Avenue | St Charles, IL | T 800 243 8148 | F 877 928 8148 | office.us@tiger-coatings.us | www.tiger-coatings.us

SERIES 38 – SUPER DURABLE

Polyester TGIC super durable powder coating compliant to AAMA 2604 with excellent weather resistance properties for high performance architectural exterior applications.

Typical Applications

- Metal façades.
- Steel constructions.
- Stadium seating and railings.
- Residential windows and doors.
- Patio furniture and garden equipment.
- Railings.
- Playground equipment.
- Agriculture equipment.
- External ship components, communication towers, doors and railings.
- Military camouflage.

Standard Packaging 44 lb (20 kg) box.
5 lb (2.5 kg) minipack.

Specific Gravity (ASTM D792) approximately 1.2-1.8 g/cm³ depending on pigmentation.

Theoretical Coverage at 1.5 specific gravity and 2.5 mils (60 µm) film thickness: **30.2 ft²/lb (9.8 m²/kg).**

Refer also to the latest edition of "Theoretic Powder Coating Coverage Chart".
Version 00-1001 (imperial).
Version 00-1000 (metric).

Storage Stability 6 months at no more than 77 °F (25 °C).

Features

- Excellent weather resistance.
- Excellent UV-light resistance.
- AAMA 2604* compliant.
- 5 years South Florida exposure.
- Very smooth flow.
- Good storage stability.
- Good yellowing stability.

* AAMA 2604-10 compliance dependent upon the color and/or effect.

Finish and Color

- Smooth flow glossy, approximately 80-95*.
- Smooth flow semi gloss, approximately 60±5*.
- Smooth flow matte, approximately 20±5*.

* Gloss level according to ASTM 523 at 60° angle.

Available as stock product in smooth glossy, semi gloss and matte in 70 colors. It can be custom matched in limited colors (minimum order quantity and color limitation applies).



Series 38 - Super Durable



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Pretreatment (alternatives)

The following table reflects the common methods of pretreatment with regards to various substrates and applications. In selecting the proper type of pretreatment the suitability of the type of powder coating for a desired application according to the guidelines on page one of this Product Data Sheet should be observed.

	Aluminum	Galvanized Steel	Steel
Degreasing	○	○	○
¹⁾ Chromating	○	○	○
²⁾ Anodizing	○	○	○
²⁾ Chrome free	○	○	○
Iron Phosphating			○
Zinc Phosphating		○	○
Blasting		○	○
⁴⁾ Sweeping		○	○
	I E A	I E A S	I E S ⁴⁾

- Interior.
- Exterior.
- Architectural.
- Steel construction.

- 1) According to ASTM B 449.
- 2) According to GSB quality and test regulations.
- 3) Only for zinc coated parts >1.8 mils (>45 µm).
- 4) For a two-coat process/TIGER Shield®.

Processing

Corona

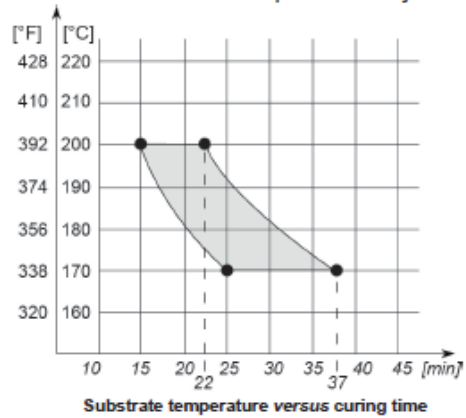
Tribo*

* For Tribo/Airstatic powder coatings please confirm before ordering. Suitability of metallic effects for Tribo processing must be verified prior to application. Please refer to the latest edition of the relevant Information Sheets.

Since not all powder coatings are suitable for recycling/reclaim, please verify before ordering.

Cure Parameters (substrate temperature)

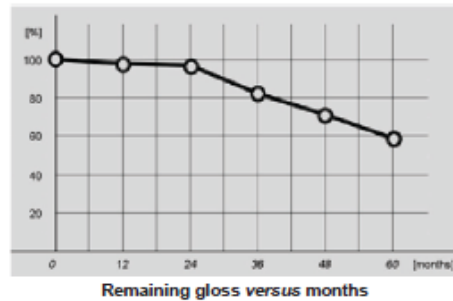
TIGER Drylac® Series 38
Cure Parameters | Smooth Glossy



To achieve a full cure and the desired mechanical properties and weatherability the time/temperature combination must fall within the cure window.

Weather Resistance

Florida exposure at 45° angle
Facing South - RAL 8014



The remaining gloss values that can be expected may vary depending on the original gloss level and color. A reasonable degree of gloss loss and color variation owing to long term UV exposure should be expected.



Series 38 - Super Durable



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Please Note

Top coating with a clear exterior grade powder coating over an interior grade powder coating does not result into a weather resistant coating system.

Post-bending properties of any part must be verified prior to application. Minor cracks in the coated surface may lead to corrosion.

Joint sealants and any other auxiliary products, such as glazing aids, gliding waxes, drilling and cutting lubricants, which come in contact with the coated surface must be pH-neutral and free of substances that may damage the finish. Therefore, a suitability test at the applicator's end, prior to coating, is highly recommended.

In general, colors in the red, orange and yellow range may require an increased film thickness to achieve full hiding.

Any post-mechanical processing of already coated parts, such as sawing, drilling, milling, cutting and bending will result in damage of the coated surface and will subsequently weaken the corrosion protection.

Please read and understand the Material Safety Data Sheet (MSDS) before use.

Test Results

Results are checked on 1/64 inch (0.7 mm) thick yellow chromated aluminum test panel. Cure conditions are according to the cure curves. When used as a two-coat system, the increase in film thickness will result in a decrease of mechanical properties.

Test results	Test method	Series 38 Smooth Glossy
Film thickness	ISO 2360	2.5-3.5 mils (60-90 µm)
Gloss - 60°	ASTM D523	80-95+
Cross hatch adhesion test	ASTM D3359 Method B	5B
Mandrel bending test	ASTM D522	1/8 inches (3 mm).
Impact test	ASTM D2794	Up to 80 in/lb. Cracking at the perimeter of the concave area but no cracking pick off.
Pencil hardness	ASTM D3363	2H minimum.
Weathering	EN 20105 - A02	≥4
Light fastness	EC ISO 105 - B02	≥Grade7
Humidity resistance 3,000 hours	ASTM D2247	Maximum undercutting 1/32 inches (1 mm).
Acid salt spray resistance 2,000 hours	ASTM G85 Annex A5	Maximum undercutting 1/32 inches (1 mm).
5 years Florida exposure		
Color change	ASTM D2244	≤Δε 5.0 (Hunter).
Gloss retention	ASTM D523	>80%

Cleaning recommendations: Refer to the latest edition of TIGER "Cleaning Recommendations" information sheet, Version 00-1005.



Series 38 - Super Durable



TIGER Drylac U.S.A., Inc. | 3855 Swenson Avenue | St. Charles, IL | T 800 243 8148 | F 877 926 8148 | office.us@tiger-coatings.us | www.tiger-coatings.us

Special Applications

Objects directly exposed to salt/fog conditions in a marine environment or need heavy corrosion protection must be coated with TIGER Shield® system. Refer to the latest editions of TIGER Drylac® Product Data Sheets.

Chemical Resistance

The required chemical resistance of a powder coating depends, among other things, on its formulation. Chemical resistance requirements must be considered according to processing conditions and final use of the finished product. This is best established during the product specification process. Agreement between all parties involved must be reached about the requirements for such chemical resistance as well as the test method, which may be performed in accordance with PCI test method #8 "Solvent Cure Test". Furthermore, the test duration and concentration of the test media need to be agreed upon.

As part of TIGER Drylac® product information program, Product Data Sheets are updated periodically. It is recommended to always check for the latest editions on TIGER's website. TIGER's verbal and written recommendations for the use of its products are based upon experience and in accordance with current technological standards. These are given in order to support the buyer or user. They are non-committal and do not create any additional commitments to the purchase agreement. They do not release the buyer from verifying the suitability of TIGER products for the intended application. This Product Data Sheet supersedes all previous Product Data Sheet versions and notes published in relation to this product.

Certified according to
ISO 9001 | 14001

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