## 922BC SERIES

# **ARCHITECT'S AND ENGINEER'S SPECIFICATIONS\***

The electric cabinet unit heaters shall be as manufactured by Brasch. Heaters shall be UL/cUL Listed, designed for mounting in any position, including on-end, fully recessed, semi-recessed or surface mounted. All capacities, voltages, physical sizes should be as specified in the heater schedule. All three phase heaters shall have a balanced heating load. Control voltage is to be internally generated by 24 VAC (Optional 120 VAC).

**CABINET**: The cabinet shall be of heavy duty cold-rolled steel. The heater front covers shall be securely attached to the cabinet with a maximum of two slotted head style spring latches (optional Toolhead Key Lock) and easily removable for access to elements, filters and control panel. Cabinet shall be finished in Beige (Optional - Color by Architect) polyester powder coated.

**HEATING ELEMENTS:** The heating elements shall be warranted for five years and shall be of non-glowing design consisting of 80/20 NiChi resistance wire enclosed in a steel sheath to which steel plate fins are brazed. The heating element shall be located directly in front of the blower discharge air for uniform heating.

**SAFETY THERMAL CUTOUTS**: Thermal safety cutouts shall be built into the system to automatically shut off heater in event of overheating due to any cause. The safety cutouts shall directly interrupt power to the elements and not depend on relays to interrupt the power. (Optional backup manual reset thermal safety cutout in the control circuit shall prevent heater reenergizing until cause of overheating has been cleared by a qualified service technician).

MOTOR AND BLOWER ASSEMBLY: The motor(s) and blower(s) shall be direct drive and resiliently mounted on a rigid heavy duty frame for quiet operation and long life. The motor(s) shall be two speed 1/8 H.P. with automatic reset overload protection. The motor shall be vented and mounted in the air stream to provide maximum cooling of the motor(s). Motor(s) fuse protection shall be provided to meet UL, cUL and NEC requirements. The blower(s) shall be forward curved, double inlet, centrifugal type with discharge directly on the full length of the elements to provide uniform discharge air temperatures.

**AIR FILTERS**: The filter shall be located ahead of the motor and blower assembly to ensure clean air circulation. The filter shall filter both the returning room or the

outside air if the optional outside air damper assembly is provided. Filter shall be easily removed for changing or cleaning by removing the front panel and pulling on the filter. A disposable filter is standard and a permanent washable filter is optional.

**FRONT COVER INTERLOCK**: Heater shall be provided with an electrical interlock to shut down the heater when the front cover is opened to provide safety to the maintenance personnel during filter cleaning (replacement) or other maintenance.

FAN DELAY CONTROL: Fan control shall delay start up of the fan motor(s) until the heating elements have warmed up. It shall maintain motor operation after heating elements have been de-energized to dissipate residual heat.

**TEMPERATURE CONTROL**: Thermostat shall be built-in, snap-action single stage with remote bulb sensor located in the return air stream. (Optional - built-in two stage remote bulb snap action thermostat, remote mounted single stage wall thermostat, remote mounted two stage wall). Terminals shall be provided in the control panel for direct connection of the remote wall mounted thermostats. Silent time delay relays shall be provided, rather than contactors, to eliminate the noise of contactor opening and closing.

**TERMINALS FOR REMOTE INTERLOCK**: Terminals shall be provided in the control panel for connection to Building Automation or Energy Management Systems.

HEAT SELECTION/FAN SPEED: Two fan speeds and high-low heat ranges shall be selectable by means of a single rocker switch located behind the front cover.

**CIRCUIT BREAKERS**: Circuit breakers shall be provided for branch circuit protection where required by UL, cUL and NEC (Optional - Circuit breakers shall be supplied on all heaters).

**INTERCHANGEABLE INTAKE AND DISCHARGE LOUVERS**: Heater shall be provided with intake louver that can be changed from front to bottom by removing a maximum of two screws. Discharge louvers shall be able to be changed from front to top by removing a maximum of two screws.

\*Brasch reserves the right to change specifications without prior notice.

## Pre-Configured Cabinet Unit Heaters: Models & Specifications:

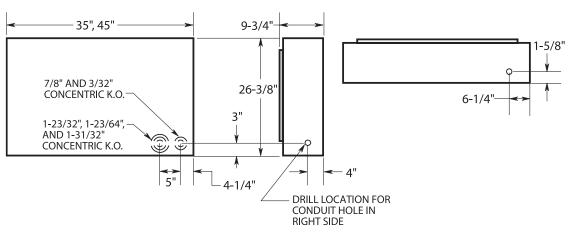
Convertible Models							
		DIMENSIONAL DATA					
CATALOG NO.	СҒМ		VOLTS/PH.	AMPS	WATTAGE	DIM	SHIP WT.
	н	LO	VOLTS/PH.	AMPS	(KW)	DIM	SHIP WI.
922BC350583SLW	250	200	208V/3Ø	14	5	35" W	120 lbs
922BC350523SLW	250	200	240V/3Ø	12	5	26 ⅔″ H	120 lbs
922BC350543SLW	250	200	480V/3Ø	6	5	9 1⁄8″ D	120 lbs
922BC451083SLW	500	400	208V/3Ø	34	10	45″ W	120 lbs
922BC451023SLW	500	400	240V/3Ø	15	10	26 ⅔″ H	120 lbs
922BC451043SLW	500	400	480V/3Ø	12	10	9 1⁄8″ D	120 lbs

\*Factory supplied 208V or 240V, 3PH field convertible to 1 PH, 480V 3 PH convertible to 277V 1 PH, 600V 3 PH convertible to 347V 1 PH. \*\*Amps shown are 3 PH, High heat operation. Field Convertible to 1PH.

#### Standard Factory Accessories:

ACCESSORY	DESCRIPTION
Built-In Thermostat	Built-in single stage thermostat with adjustable knob to have heater run until demand is satisfied.
Manual Reset	Manual Reset over temperature cutout wired into control circuit. Supplied in addition to auto-reset cutout.
Dead Front Disconnect Switch	A three pole non-fused disconnect switch disconnects power to the heater. Design prevents entry into the control compartment until disconnect switch is turned to the OFF position.
Fan/Heat High/Low Switch	Allows user to select whether the heater will run in low mode (2/3 output) or high (full output).
ON/OFF Switch	Allows the user to turn off the unit so it will not run during warm months or when not needed.

## Dimensions and Clearances:



## Clearances:

#### Heater Wall Mounted:

- Front Discharge, No obstruction within 24" of discharge.
- Top Discharge, No obstruction within 24" of discharge.
- Front Intake, Zero or greater to base of heater.
- Bottom Intake, No obstruction within 24" of discharge.

## Heater Ceiling Mounted:

- Front Discharge, No obstruction within 24" of discharge.
- Top Discharge,
  No obstruction within 24" of discharge.
- Front Intake, Zero or greater to base of heater.
- Bottom Intake, No obstruction within 24" of discharge.
- Minimum 2" to side wall.

## Multiple Air Flow Combinations

	FRONT INLET FRONT OUTLET (FIFO)	FRONT INLET TOP OUTLET (FITO)	BOTTOM INLET FRONT OUTLET (BIFO)	BOTTOM INLET TOP OUTLET (BITO)
WALL				
WALL INVERTED				
CEILING			T T T	
ON END				

## **Optional Field Accessories:**

CATALOG NO.	DESCRIPTION	COMPATIBLE WITH	FUNCTION	SHIP WT.
CIK-35RTK-A		922BC-35	Provides a neat finish to semi-recessed or full recessed application.	3 lbs
CIK-45RTK-A	Ceiling or Wall Recess Trim Kit	922BC-45	Provides a near linish to semi-recessed or full recessed application.	4 lbs
CIK-35BK-A	Floor/Toe-Space Base Kit	922BC-35	16 gauge, muted black base is recessed from the heater front and sides	9 lbs
CIK-45BK-A	FIGOR/TOE-Space Base Kit	922BC-45	to provide an attractive and practical floor mounting application.	10 lbs
CIK-35WF-X	Dermanent Devechie Weehele Filter	922BC-35	Depleces stondard filter Weshels filter oon he slopped and replaced	4 lbs
CIK-45WF-X	Permanent, Reusable Washable Filter	922BC-45	Replaces standard filter Washable filter can be cleaned and replaced.	6 lbs

No matter the industry or application, Brasch has a robust portfolio of innovative, reliable, high-performance comfort heating and ventilation solutions for all your heating needs.