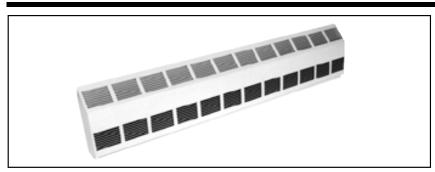


# TYPE ICST COMMERCIAL SLOPE TOP CONVECTORS



Provides total or supplemental heating for offices, corridors, lobbies, motels, apartments or similar facilities. Mounted under expanses of glass, they prevent cold down drafts.

With a range of heating capacities from 125 watts (426 BTU per hour) to 250 watts (852 BTU per hour) per foot length, these units can run from wall-to-wall or they can be mounted as discrete units in lengths of 28-inches t ten feet.

The attractive 45 degree sloped top discourages use of heater as a shelf or a "stepstool".

The unit is designed to mount on the wall at sill height (or lower) and can be positioned directly on the floor. The end of the unit can be positioned against adjacent sidewall if desired.

Standard finish is neutral grey. Also available in a spectrum of muted architectural colors in baked enamel

finishes which are compatible with all interior decors.

Front cover is fabricated from 16-gauge steel, While the back is constructed of 18-gauge steel. For service, all internal parts are accessible by removing cover. Top of front cover engages with back; bottom of cover locks into place with screws.

Elements are long life metal sheath, aluminum fin type anchored to allow for quiet expansion and contraction.

Thermal limit switch with linear type (full length) sensing bulb provides constant protection against overheating from any cause. The switch will automatically reset when normal operating temperatures are restored.

Units are prewired. Units without optional controls are designed for either right hand or left hand entry for easy connection of supply wiring from bottom,

rear or end, as well multiple wiring of adjacent heaters from one entry point.

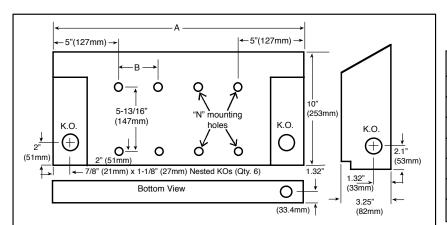
Accessories include a complete line of matching splice sections, inside and outside corners.

# Stainless Steel, NEMA 4X models available for washdown and corrosive applications. Contact Sales Rep.

The NEMA 4X series slope top convectors were specifically designed for use in wet or corrosive environments like those found in food processing areas, dairies, breweries, locker rooms, stadium dugouts, and other areas that are subject to high pressure hosing and / or constantly wet conditions. They are suitable for use in areas where severe corrosion problems exist from either salt spray or chemical exposure like a sewage treatment plant or indoor swimming pool.

- Rugged 16-gauge Stainless Steel front and back covers
- NEMA 4X rated for washdown and corrosive environments
- 250 Watts per foot
- · Automatic thermal cutout

Note: Optional built-in controls are not compatible with the NEMA 4X series of slope top convectors.



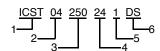


	DIMENSIONS				
WATTAGE	Α	В	N Holes		
500	28"	-	-		
	709 mm	-	-		
750	36"	-	-		
	912 mm	-	-		
1000	48"	19"	2		
	1216 mm	481 mm			
1250	60"	16.68"	4		
	1520 mm	423 mm			
1500	72"	20.63"	4		
	1842 mm	823 mm			
2000	96"	21.5"	6		
	2432 mm	545 mm			
2500	120"	27.5"	6		
	3040 mm	697 mm			

ZBL-BICST (03-02)

#### How to order the ST convectors:

Ex. 4', 250 W/ft., 240V, 1 phase unit with a built-in disconnect switch.



- 1. Prefix: ST designates 3" x 10" slope top convector
- 2. Cabinet length: 02=28", 03=36", 04=48", 05=60",06=72", 08=96", 10=120"
- 3. Watt Density: 125 W/ft., 188 W/ft., 250 W/ft.
- 4. Voltages: 12=120V, 20=208V, 24=240V, 27=277V, 34=347V, 60=600V
- 5. Phase: 1=1Ph
- Optional built-in controls:
   2T-double pole thermostat
   T-single pole thermostat
   DS-disconnect switch
   PR-power relay
   TR-transformer relay

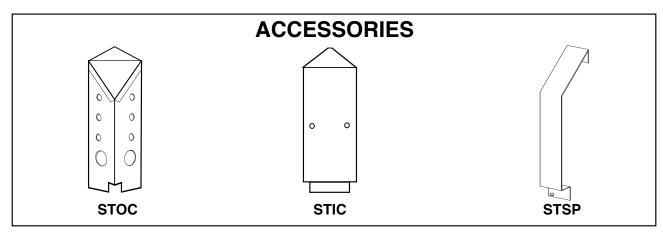
#### **SELECTION CHART**

CATALOG		NOMINAL	TOTAL HEATING CAPACITY		AMPERAGE			SHIP WEIGHT	
NUMBER	LENGTH	WATTS/FT.	WATTS	BTU/HR.	120V	208V	240V	277V	(lbs.)
		125	250	753	2.1	1.2	1.0	0.9	
ICST02	28"	188	375	1280	3.1	1.8	1.6	1.4	12
		250	500	1706	4.2	2.4	2.1	1.8	
		125	375	1280	3.1	1.8	1.6	1.4	
ICST03	36"	188	546	1925	4.7	2.7	2.4	2.0	15
		250	750	2560	6.2	3.6	3.1	2.7	
		125	500	1706	4.2	2.4	2.1	1.8	
ICST04	48"	188	750	2560	6.2	3.6	3.1	2.7	19
		250	1000	3412	8.3	4.8	4.2	3.6	
		125	625	2133	5.2	3.0	2.6	2.3	
ICST05	60"	188	940	3208	7.8	4.5	3.9	3.4	24
		250	1250	4266	10.4	6.0	5.3	4.5	
		125	750	2560	6.2	3.6	3.1	2.7	
ICST06	72"	188	1125	3840	9.4	5.4	4.7	4.1	26
		250	1500	5120	12.5	7.2	6.3	5.4	
		125	1000	3412	-	4.8	4.2	3.6	
ICST08	96"	188	1500	5120	-	7.2	6.3	5.4	37
		250	2000	6824	-	9.6	8.3	7.2	
		125	1250	4266	-	6.0	5.2	4.5	
ICST10	120"	188	1875	6400	-	9.0	7.8	6.8	45
		250	2500	8532	-	12.0	10.4	9.0	

#### **Optional Built-In Controls & Optional Accessories**

CATALOG	SHIP	DECORIDATION
NUMBER	WT.(Ibs)	DESCRIPTION
T*	1	Single pole thermostat rated 24A @ 120-240 VAC. Pilot duty rating of 125VA (all voltages).
		60°F-120°F temperature range.
2T*	1	Double pole thermostat rated 24A @ 120-240 VAC. Pilot duty rating of 125VA (all voltages).
		60°F-120°F temperature range.
DS*	1	Double-pole disconnect switch, rated 20A @ 120-277 VAC.
TR*	1	Single-pole, low voltage relay with relay with built-in transformer (24 VAC control), rated
		25A @ 120-240 VAC, 17A @ 347V, 12A @ 600V.
PR*	1	Single-pole magnetic relay, rated 18A @ 120-600 VAC. Specify control voltage (24, 120, 240).
ICSTIC	2	Inside corner (requires additional wall space).
ICSTOC	2	Outside corner (requires additional wall space).
ICSTSP	1	Splice plate wide, coverage gap up to 1/2".

<sup>\*</sup> Factory built-in. Add suffix to heater catalog number.



### SUGGESTED ENGINEERING SPECIFICATIONS

Heaters shall be slim profile  $(3.25" \times 10")$  and available in lengths from 28 inches through 10 feet.

Front cover shall be 16 gauge, and the back shall be 18 gauge furniture quality steel with reinforced, all welded construction; designed to withstand heavy-duty commercial and institutional use.

Enclosures shall be chemically-treated to resist corrosion. Finish shall be mar and temperature-resistant to retain contemporary appearance throughout years of rough use.

The enclosure shall have end caps integral to the design, eliminating the

need for accessory end cap.

For safety, the electric heating bank shall consist of metal sheath heating elements. The elements shall have a a copper clad steel sheath for strength and corrosion resistance, and aluminum fins for faster heat transfer.

Element shall be center-anchored and shall float freely on each end through nylon bushings for quietness.

Units shall be wall mounted and have a 0" mounting clearance to the floor and adjacent side wall.

Intake and discharge louvers shall be closely spaced to prevent insertion of foreign objects. The louver configuration shall be front intake and top discharge.

Optional built-in controls shall include

single-pole, and double-pole thermostat, disconnect switch, transformer relay and power relay. The thermostat shall be capable of controlling multiple units on a pilot duty circuit. (Observe the control limitations indicated.) Thermostat adjustment shall be with a thin bladed screwdriver through the intake louvers and shall be considered tamper-resistant.

Heaters shall be designed so they can be butted together with use of splice plates.

All heaters and electrical accessories shall be labeled by Underwriters' Laboratories, Inc.

Accessories shall include inside and outside corners and splice plates.

### APPLICATION LIMITATIONS AND PRECAUTIONS

- A. Hazardous Atmosphere Because the possibility of a concealed spark can exist from the built-in over-head cutout, heaters should not be used in potentially explosive atmospheres.
- B. Corrosive Atmosphere The high quality finish and steel sheet internal metal parts will give excellent service under most operating conditions, including coastal salt air and industrial atmospheres. However, the finish is not intended for direct salt spray exposure in marine application or highly corrosive atmospheres like green houses, swimming pools or chemical storage areas.
- C. Cleanliness Although specifically designed for mounting below window areas, heaters can be installed on plaster, wood paneled, metal, masonry or composition wall surfaces with reasonable expectation of clean wall operation. Should some soiling occur, after a period of years, smooth walls may be cleaned with standard maintenance materials. For deep textured walls, consideration should be given to choice of watt per foot capacity generally, the enclosure with lowest surface temperature will have the least soiling tendency.
- . Comfort Optimum room comfort results when heater is mounted just below the window sill, since cold down draft is eliminated and maximum convection air distribution without stratification is maintained throughout the room. Because of the tendency for warm air to stratify, installing heaters close to the ceiling is not recommended. If it should be necessary, at least 18" clearance above the air discharge must be maintained. bottom of heaters are not intended for attractive appearance when mounted above eye level.
- E. Air Throw Since heaters provide only natural convection air throw, they are not recommended for combatting cold outside air blast through high traffic, main entry ways and vestibules. Heaters will maintain satisfactory comfort conditions in low traffic, side entry ways and vestibules, but for most entry ways, faster response fan driven heaters would be preferred.
- F. Curtains, drapes or blinds should clear the top of the heater by at least six inches. Never permit draperies to completely cover the unit. Furniture - should be placed so it does not touch the heater and so it does not completely block the air vents. Allow at least four inches free

- space between furniture and the heaters.
- Recess mounting UL labeled for free standing wall surface mounting only. Not recommended for mounting behind built-in book shelves, storage cabinets, window seats, etc.
- H. In institutional applications such as hospitals, nursing homes, child day care centers and clinics, it is recommended that low-watt density convectors be used to provide optimum comfort at lowest case temperatures.
- Due to variations in vinyl compositions and their potential to discolor, the use of a lower watt density unit may be required when installing on vinyl wall coverings or under vinyl window dressings. Prior to setting specifications, consult factory for installation recommendations.

