Title:	STX Clearances and Integration Hints	ID:
		0038

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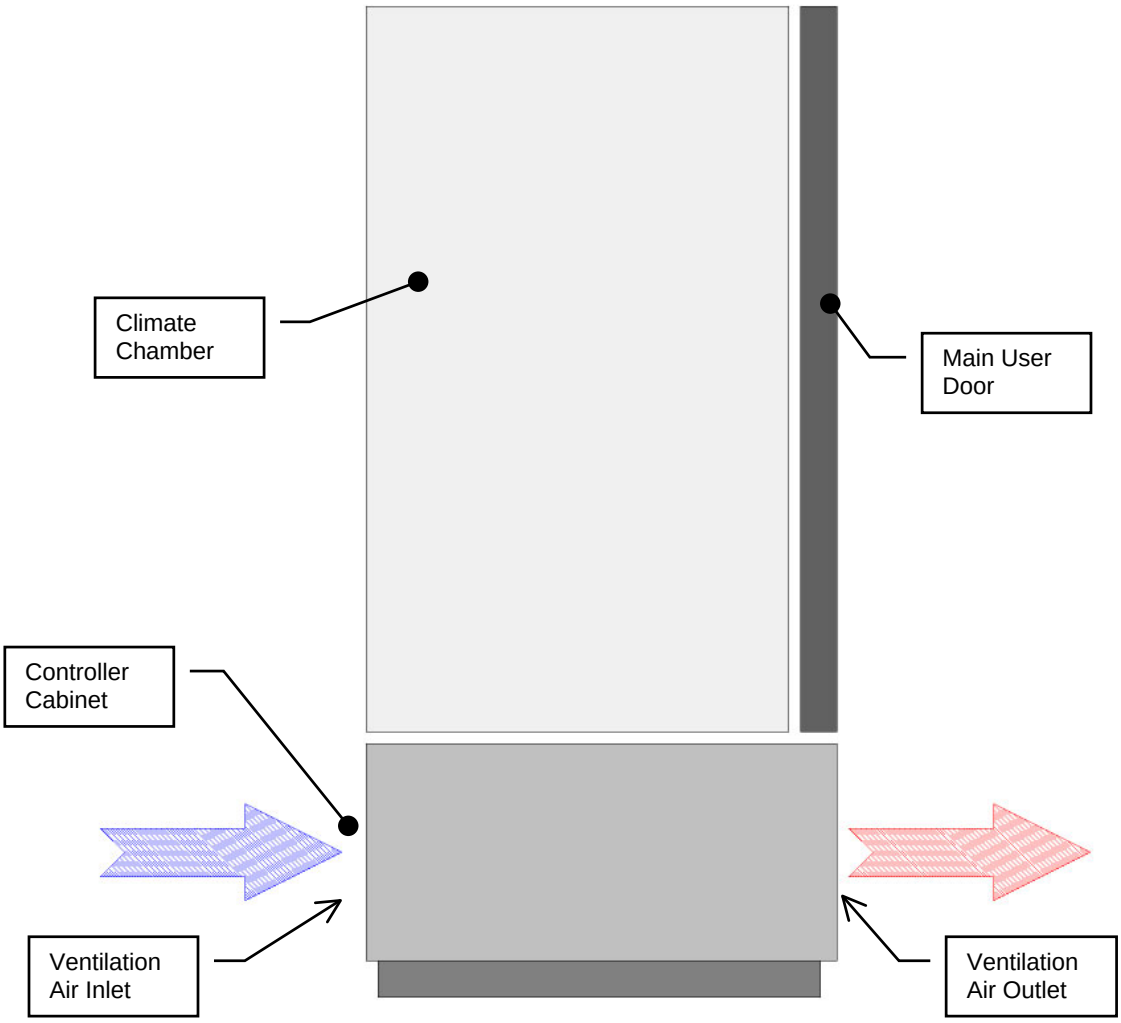
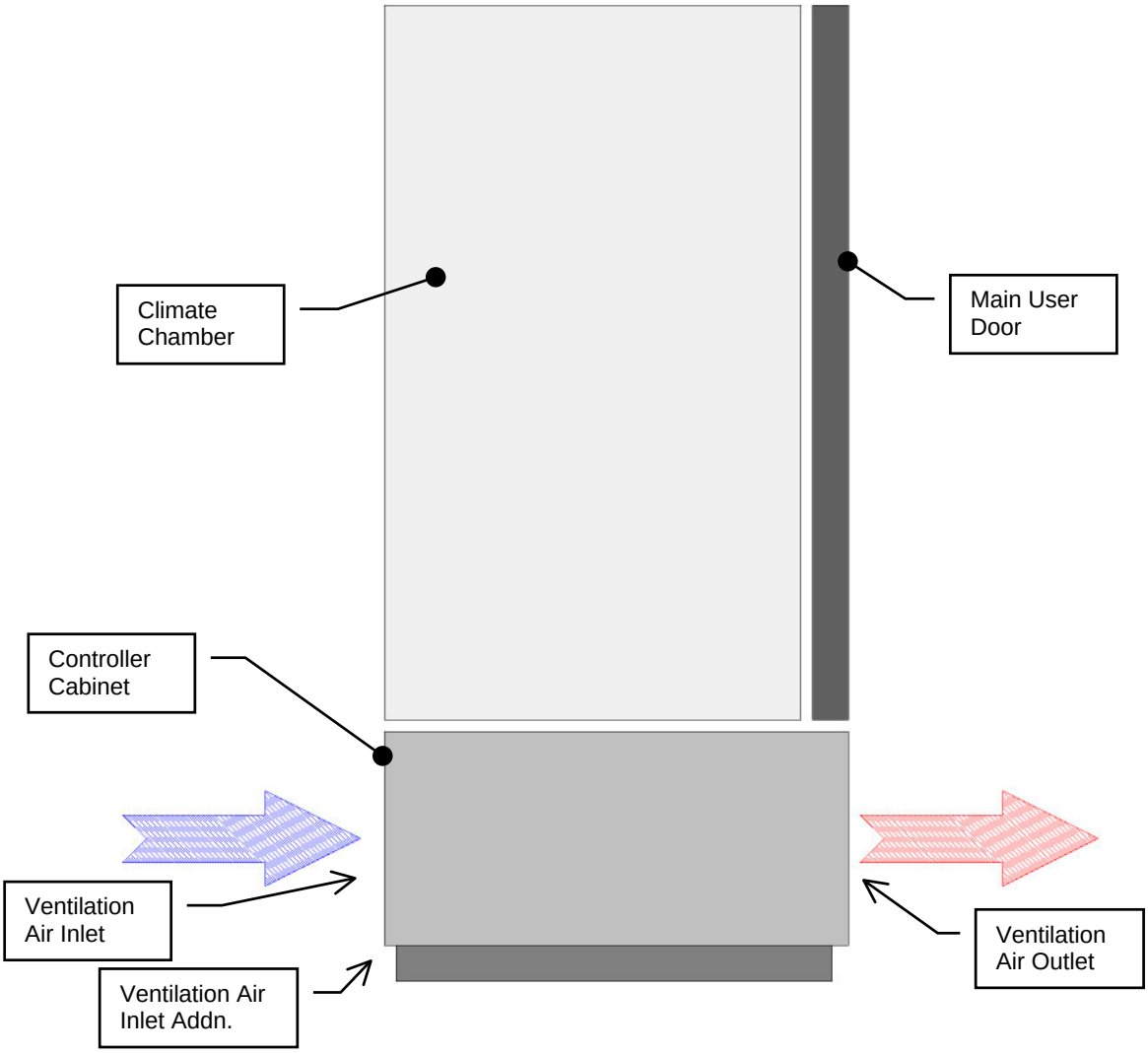
2007-07-23	2007-07-23	STX	CMa

STX Clearances

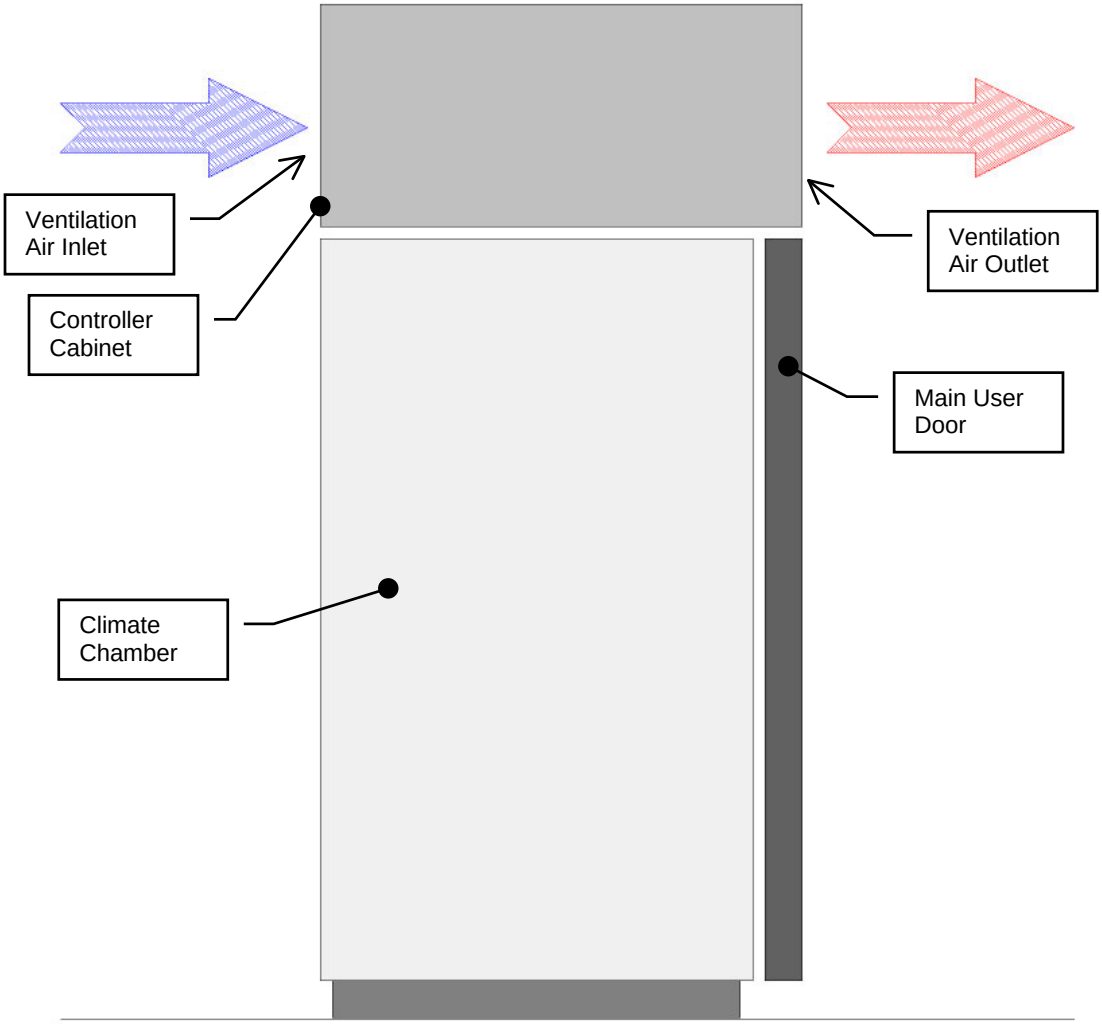
StoreX STX Series instruments equipped with active refrigeration have active ventilation located in the controller cabinet. The airflow of the ventilation on SA and BT type configuration models is back to front (seen when looking at user door) or front to back on STX40-BT models.



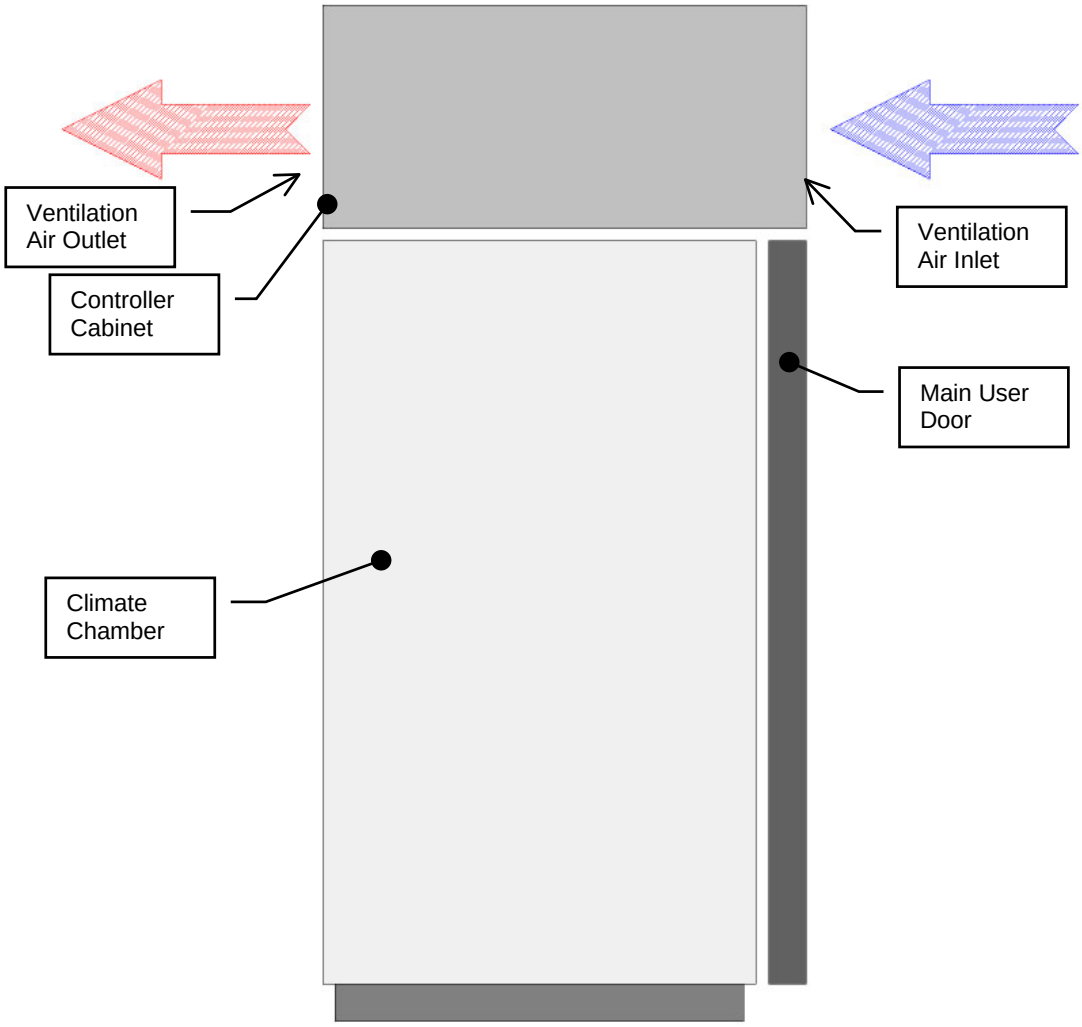
Model	Type	450 / 525 m3/h 265 / 309 cfm	925 / 1030 m3/h 544 / 606 cfm	1865 / 1970 m3/h 1098 / 1160 cfm
STX110	*SA*	*HC, HR, DC, DF*	*DF*	
STX220	*SA*	*HC, HR, DC, DR*	*DF*	
STX500	*SA*		*HC, HR, DC, DR*	*DF*
STX1000	*SA*		*HC, HR, DC, DR*	*DF*



Model	Type	450 / 525 m3/h 265 / 309 cfm	925 / 1030 m3/h 544 / 606 cfm	1865 / 1970 m3/h 1098 / 1160 cfm
STX40	*SA*	*HC, HR, DC, DF*	*DF*	-



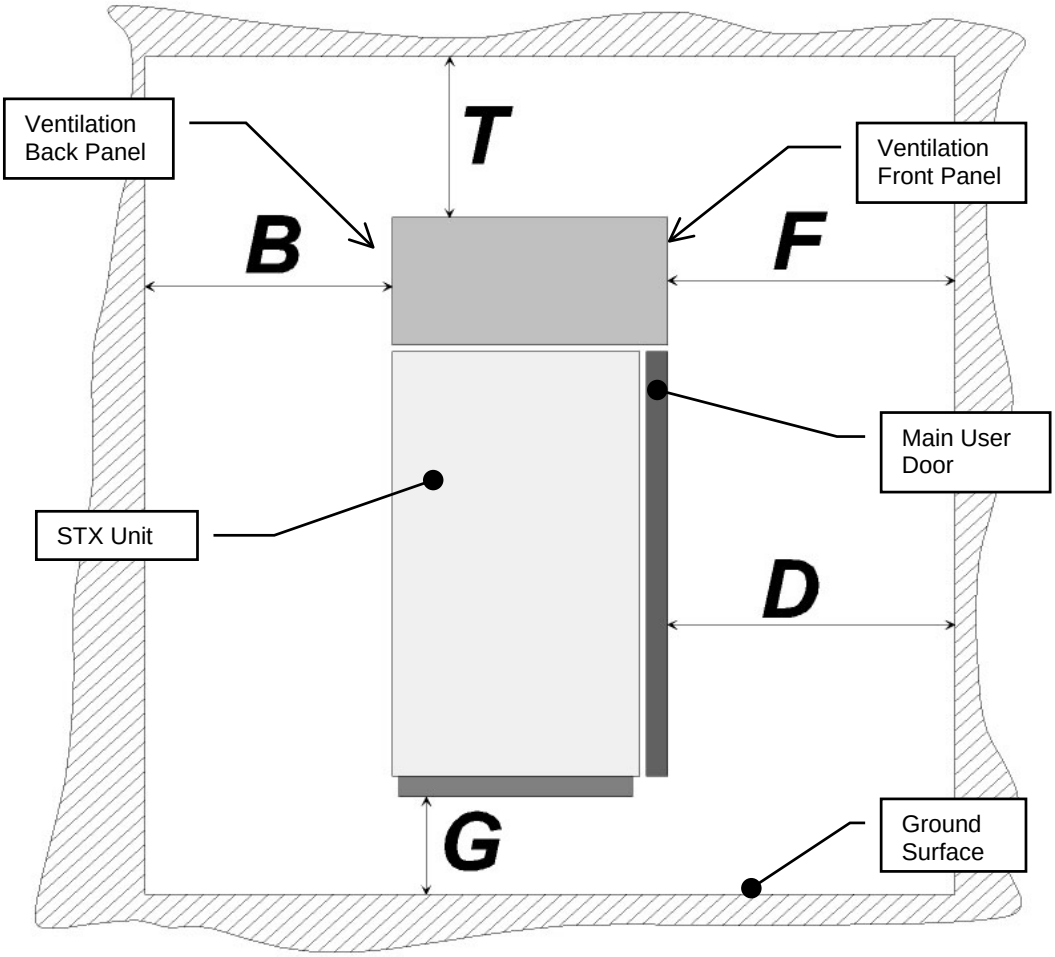
Model	Type	450 / 525 m3/h 265 / 309 cfm	925 / 1030 m3/h 544 / 606 cfm	1865 / 1970 m3/h 1098 / 1160 cfm
STX110	*BT*	*HC, HR, DC, DF*	*DF*	
STX220	*BT*	*HC, HR, DC, DR*	*DF*	
STX500	*BT*		*HC, HR, DC, DR*	*DF*



Model	Type	450 / 525 m3/h 265 / 309 cfm	925 / 1030 m3/h 544 / 606 cfm	1865 / 1970 m3/h 1098 / 1160 cfm
STX40	*BT*	*HC, HR, DC, DF*	*DF*	

The tables above show the air flow direction and the mass flow of the various instruments. The mass flow is given for 50 Hz / 60Hz AC mains power in cubic meters per hour (m3/h) and in cubic feet per minute (cfm).

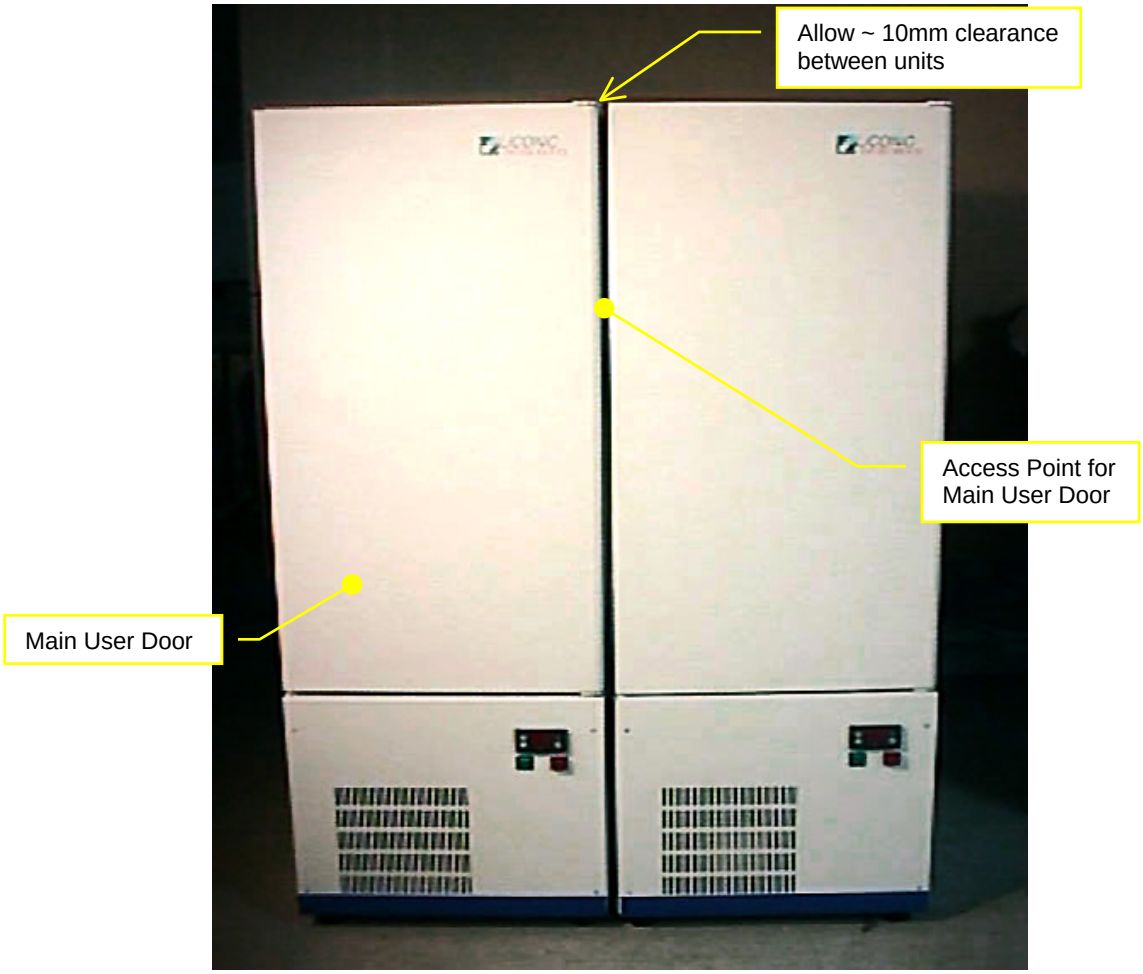
When installing an STX instrument sufficient clearance must be ensured. The following drawing and table show the recommended minimum distances for front and back clearance of the STX instrument.



Model	Type	Option	B > mm	D > mm	F > mm	G > mm	T > mm
STX40	*SA*	*All except IC [1)]*	*300*	*~500*	*300*	*0 [2)]*	*0 [3)]*
STX40	*BT*	*All except IC [1)]*	*100*	*~500*	*100*	*0*	*0 [3)]*
STX110	*SA / BT*	*All except IC [1)]*	*100*	*~500*	*300*	*0*	*0 [3)]*
STX220	*SA / BT*	*All except IC [1)]*	*100*	*~700*	*300*	*0*	*0 [3)]*
STX500	*SA / BT*	*All except IC [1)]*	*100*	*~700*	*300*	*0*	*0 [3)]*
STX1000	*SA*	*All except IC, DF*	*100*	*~600*	*300*	*0*	*0*
STX1000	*SA*	*DF*	*200*	*~600*	*500*	*0*	*0*

[1)] IC modes do require distances “F” and “B”
[2)] Do not remove Subframe
[3)] encounter clearance for service accessibility on BT models

Minimum distances to the sidewalls of the units must be maintained in order to allow accessibility to main user door and in order to avoid the main user door to interfere.



Model	Type	Option	L > mm	R > mm
STX40	*SA / BT*	*All*	*10* [1)]	*10*
STX110	*SA / BT*	*All*	*10* [1)]	*10*
STX220	*SA / BT*	*All*	*10* [1)]	*10*
STX500	*SA / BT*	*All*	*10* [1)]	*10*
STX1000	*SA*	*All*	*15*	*15*

[1)] Recommended for better accesibility

The main reason for recommended gaps to the sidewalls is therefore manual accessibility. On STX1000 model however, minimum clearance must be maintained for complete opening of main user door.

When operating the instrument within an enclosure, sufficient ventilation must be implemented. Power dissipation of the instruments highly depend on the climate settings. The tables below show some typical values to expected from various instruments. The first table lists units equipped with dual voltage 110/230 VAC selector.

Model	Type	<400W / 10A	400..700W / 10A	700..1.1kW / 15A	1..2kW / 15A
STX40	*SA / BT*	*IC*	*HC, HR, DC, DR*	*DF*	
STX110	*SA / BT*	*IC*	*HC, HR, DC, DR*	*DF*	
STX220	*SA / BT*	*IC*	*HC, HR, DC, DR*	*DF*	
STX500	*SA / BT*		*IC, HC, HR*	*DC, DR*	*DF*
STX1000	*SA*			*DC, HC*	*IC, HR, DR*

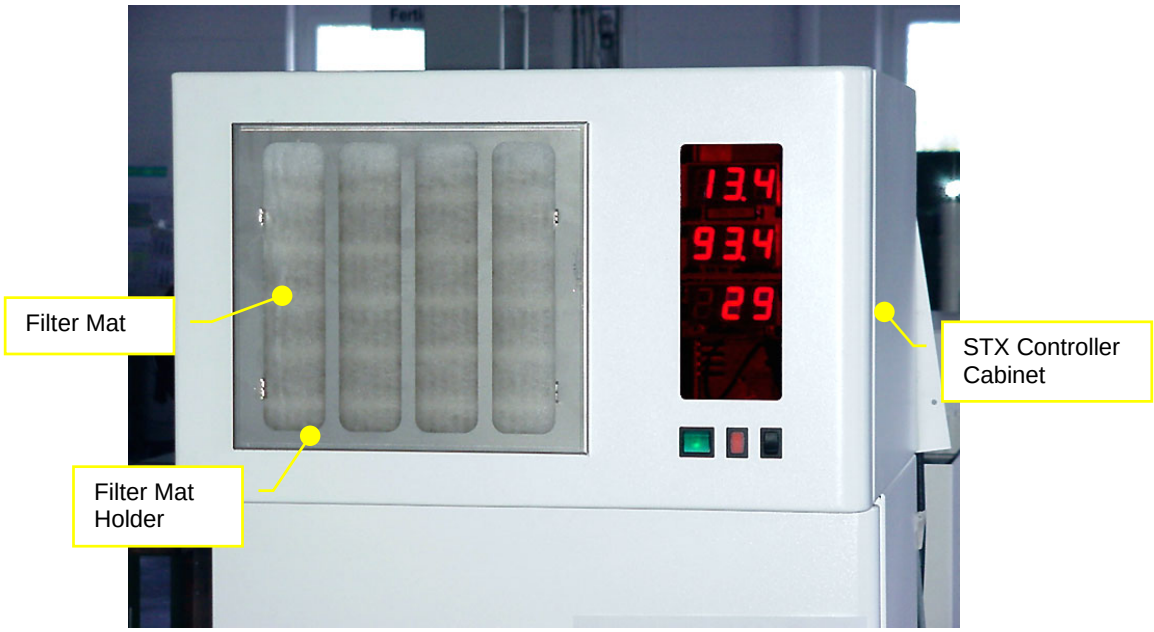
Larger units are designed for 208/230 V line voltage

Model	Type				1..2kW / 15A
STX1000	*SA*				*DF*

Above tables show typical power consumption for various STX units. Total power dissipation on units with refrigeration installed may be significantly higher at initial start-up. For details consult STX power consumption plots.

Current specification refers to recommended power cable ratings.

Unless installation provides filtered clean air, the use of filter mats is recommended. Liconic provides filer mat holders as accessory.



Filter mats are located at the air inlet of the instrument and are mounted on the outside of the unit for easy replacement.