# 2" PANEL AIR CLEANER, ELECTRICAL AND MECHANICAL TANDEM

Product Code: P-224T, P-224T-C, P-224T-2C

## Specifications

1.1 General: The air cleaner shall be a two inch wide (nominal) electronically enhanced polarized media air cleaner.

1.2 Certifications: The air cleaner shall be tested and meet CSA Standard C22.2 No.: 187-M1986 and UL Standard ANSI/UL Std No 867 (4th Ed.) for electrostatic air cleaners.

1.3 Operation: The air cleaner shall have an active electrostatic field that polarizes a dielectric media. It shall not ionize airborne particles or produce ozone.

1.4 Performance: The air cleaner shall be able to remove 97.8% of the airborne particulates 0.3 micron and greater in a re-circulating system. Pressure drop across the air cleaner will be no more than 0.2"w.g.@ 300fpm.

1.5 Construction: The construction of the air cleaner frame and screens shall be aluminum. Two miniaturized electronic power supplies (power head) shall be mounted in a channel on the frame of the air cleaner in a non-conductive housing. A folding glass fiber media that create two pads shall be placed between the outside grounded frame/screens and the center collector cushion carbon. The power heads shall impart a high DC voltage to the center conductive collector cushion activated carbon or the mesh. The air cleaner frames shall be hinged so as to allow easy access to the media pad for replacement. Further, each air cleaner shall be able to be connected both mechanically and electrically to an adjacent air cleaner. The frames of each air cleaner in the row will be latched together, so that all may be removed together. Neoprene foam strips will be used on the mating faces of the air cleaners in a row to block the flow of air between the air cleaners.

1.6 Electronics: The power heads shall be capable of converting 24VAC to the 7.2 KVDC and draw no more than two watts of power. The power head shall be insulated from the air cleaner frame and it shall transmit the 7.2 KVDC to the center collector cushion activated carbon of the media pad through a special copper filament. Each air cleaner shall have a "Power On" lamp and be equipped with a high-voltage resistor to de-energize the air cleaner when the power is shut off. Each power head shall have an input and an output so that the power head of each air cleaner may plug into the next. The power heads will be connected in parallel so that if one fails, it will have no effect on the other power heads in the row.

1.7 Power Supply: The 24VAC power supply must be a UL or CSA certified transformer, class "2" type, which shall permit one side of the secondary output (24V) to be attached to electrical ground.

1.8 Air Cleaner Media: Replaceable air cleaner media collector shall be individual, disposable glass fiber "collector cushion", which shall consist of a folded glass fiber media that create two ply of fiberglass with a conductive center activated carbon or aluminum mesh. This conductive center carbon or mesh shall be permanently enclosed between the folded media that makes two pieces of fiberglass and shall be disposed of when the media pad is changed. The glass fiber media must be fabricated from a constant filament so that any shed fibers are not enhanced. The glass fiber must have a minimum of a class "2" fire rating.

1.9 The air cleaner shall come with a media collector cushion pad in one of the following configurations: 1) an aluminum center in each pad (P-200TE); 2) one aluminum center with one activated carbon center; 3) Two activated carbon center (P200TE-2C).

***A Breeze of Fresh Air***