COLD AIR GUNS – FIXED AND ADJUSTABLE

It seems amazing that your workshop compressed air can be used to provide two very different air streams when passed through the Brauer Cold Air Gun or Vortex Tube

– one air stream at 38˚C below the workshop supply temperature
– the other at 39˚C above the workshop supply temperature
all by using a Brauer Cold Air Gun

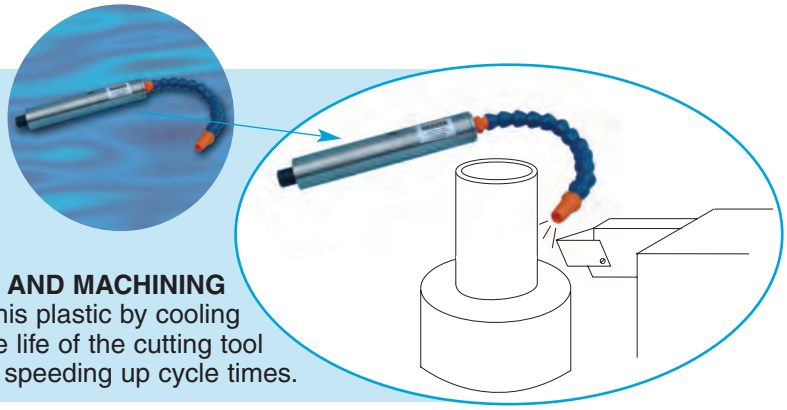
The uses for such a phenomenon are widespread:

– cool machining operations, removing the need for wet coolant
– cool electronic control cabinets
– setting hot formed plastics, sealants or solders

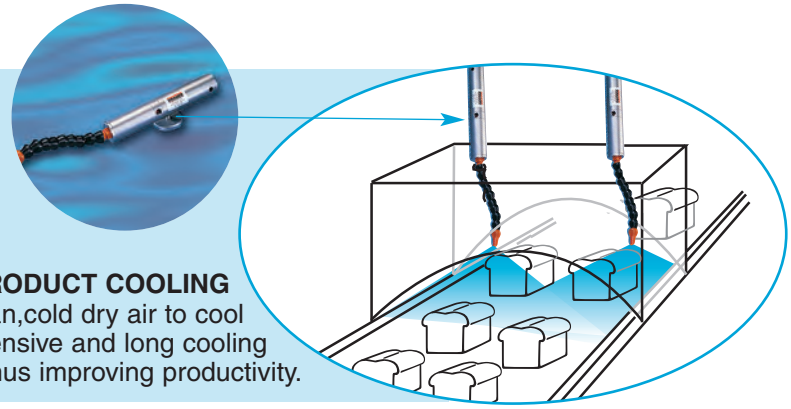
All are achieved with no electric power requirement and using a virtually maintenance free, stainless steel constructed Vortex Tube.

The Brauer adjustable cold air gun has incorporated a temperature control knob allowing you to set the optimum efficiency required for your application.

SOME TYPICAL APPLICATIONS - COLD AIR GUN

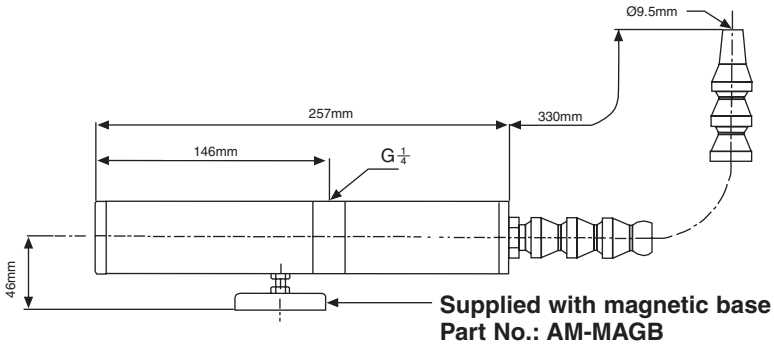


PLASTICS AND MACHINING
A Cold Air Gun improves the finish on this plastic by cooling the cutting tool thus increasing the life of the cutting tool and therefore speeding up cycle times.



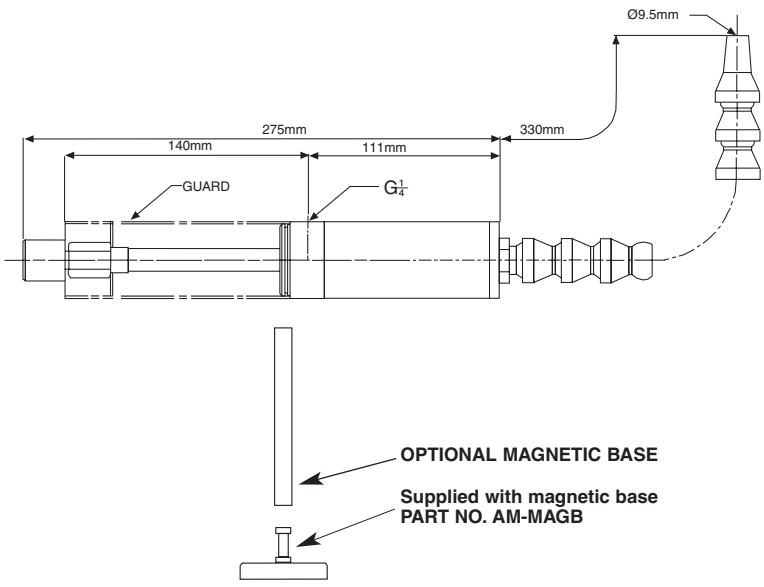
FOOD PROCESSING - PRODUCT COOLING
Two Cold Air Guns provide clean,cold dry air to cool bakery items eliminating expensive and long cooling conveyors, and thus improving productivity.

COLD AIR GUN CG4



Material: Stainless Steel
Weight: 1.7Kg
dB(A) at: 5.5 bar is 80
Standard Inlet Threads: G¼
Options: ¼" *NPT*
Please specify on order ¼" *NPTF*

ADJUSTABLE COLD AIR GUN CG4A



Material: Stainless Steel.
Weight: 1.7Kg
dB(A) at: 5.5 bar is 80
Standard Inlet Threads: G¼
Options: ¼" *NPT*
Please specify on order ¼" *NPTF*

Optional mounting rings are available (see page 22).

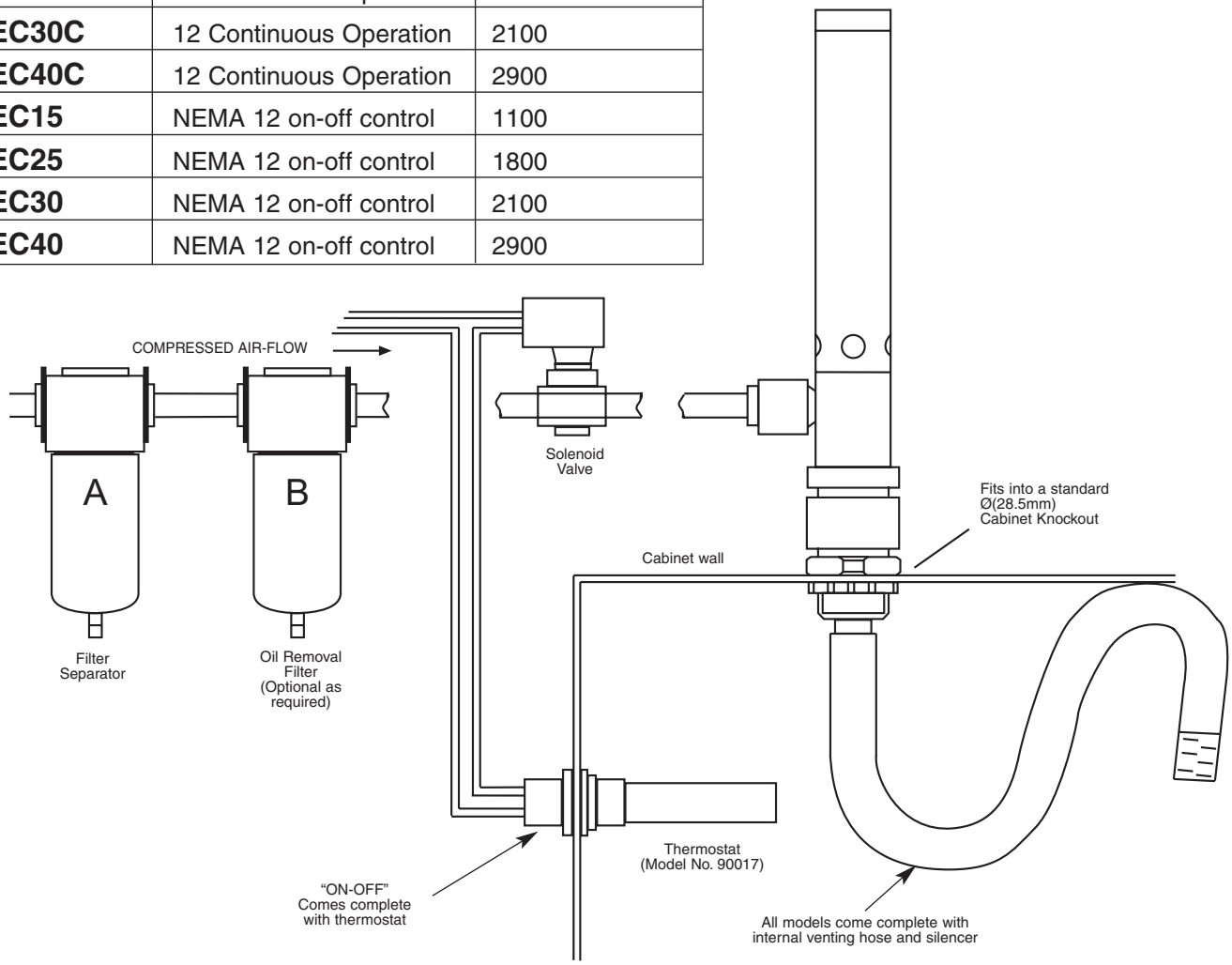
CABINET/ENCLOSURE COOLERS

Air Enclosure Cooler Conditioners for control panels provide a low cost method of both purging and cooling electrical and electronic control panels by using a stainless steel vortex tube to create cold air from ordinary compressed air.

There are virtually no moving parts. These units are compact and can be installed in minutes through a standard electrical cabinet knockout hole. These units are ideal for all NEMA 12 rated panels. Filtered, compressed air enters the Enclosure Cooler Electrical Panel Cabinet Cooling System Air Conditioner and through the vortex tube component. The air is split into two streams, one hot and one cold.

The muffled hot air from the vortex tube is expelled through the top of the air conditioner. The cold air is directed into the enclosure through the cold air distribution venting hose. Hot air inside the enclosure rises and exits to atmosphere via the air exhaust at a slight positive pressure. The enclosure is both purged and cooled with clean air. No outside air enters the enclosure.

MODEL NO.	VERSION	BTU/Hr. cooling*
EC15C	12 Continuous Operation	1100
EC25C	12 Continuous Operation	1800
EC30C	12 Continuous Operation	2100
EC40C	12 Continuous Operation	2900
EC15	NEMA 12 on-off control	1100
EC25	NEMA 12 on-off control	1800
EC30	NEMA 12 on-off control	2100
EC40	NEMA 12 on-off control	2900

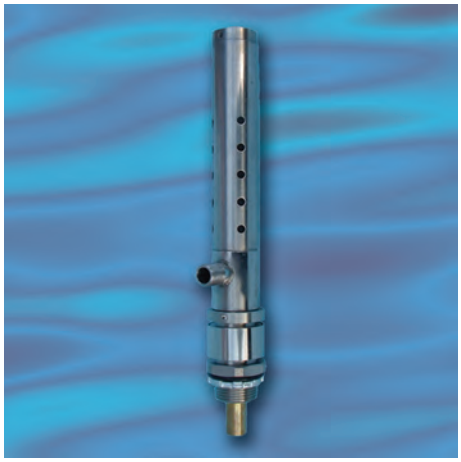


ALL 'CONTINUOUS" OPERATING MODELS INCLUDE: COLD AIR INTERNAL VENTING HOSE & SILENCER
ALL "ON-OFF" OPERATING MODELS INCLUDE: COLD AIR INTERNAL VENTING HOSE; SILENCER & THERMOSTAT

CABINET COOLER

Advantages

* Low in cost
* Compact
* No CFC's
* Fast installation
* Stabilize enclosure temperature and humidity
* Virtually maintenance free (No Moving Parts)
* Mounts in a standard electrical knockout
* Stops heat damage and nuisance tripping
* Eliminates fans and filters
* Prevents dirt contamination by keeping enclosure at positive pressure
* Units applicable to all environments including high temperature to 200ºF



Applications

* Computer Enclosures
* Frequency Drives
* CCTV Cameras
* NC/CNC Systems
* Scanners

Selection

Brauer's EC range of Cabinet Cooler Air Conditioning Systems uses a 5 micron filter with an automatic drain for the compressed air supply to insure clean, dry air and an air distribution kit to circulate the cold air inside the enclosure for even cooling.
The Brauer EC range is available with or without thermostat control.
When constant cooling and a constant positive purge is required we recommend the continuous operating version without the thermostat and solenoid valve. The cooling effect can be controlled by adding a regulator in line to reduce pressure for reduced cooling when it is not required and to conserve energy.
Systems utilizing a thermostat and solenoid valve saves air by activating the air conditioner only when the internal temperature reaches a critical level. The adjustable thermostat is factory set at 35°C but can be readjusted on site.
Thermostat and solenoid valve systems are recommended where the heat load can fluctuate (such as for frequency drives) and where a continual purge is not required. The thermostat and solenoid "package" can also be added at a later date to a continuous system.

Sizing Specifications

Sizing Specifications for the Brauer Enclosure Coolers.

* Cooling effect based on 35°C temperature inside cabinet, 6.8 Bar compressor inlet pressure, and 21°C inlet temperature. BTU/hr. figures rounded to nearest 100 BTU/hr.
* All Continuous Operation models include the cooling unit, and cold air distribution kit.
* All On-Off control units include the cooling unit, with cold air distribution kit, and thermostat.