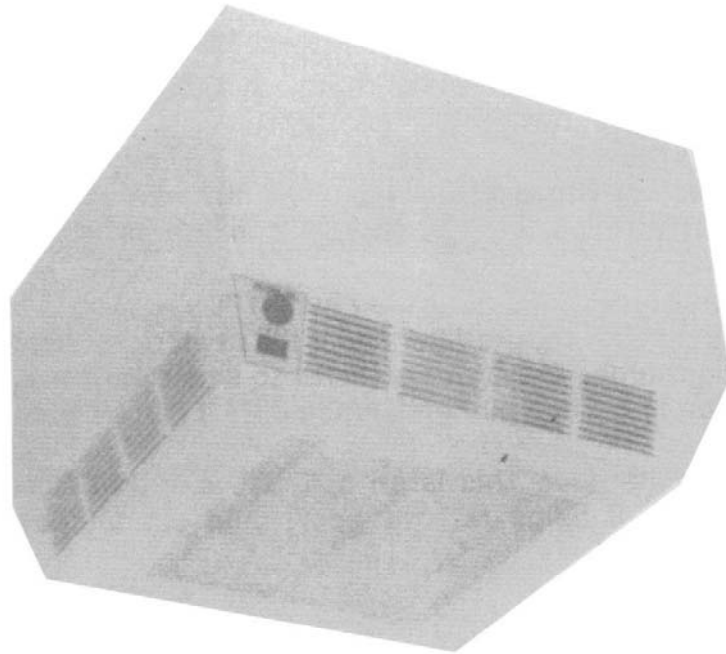


# Model CAC 1000



Installation Operation Maintenance  
Installation Fonctionnement Entretien  
Installation Inbetriebnahme Wartung  
*Installazione Uso Manutenzione*  
Instalacion Funcionamiento Mantenimiento  
Installation Drift Underhall  
Installerig Bediening Onderhoud

**TRION<sup>®</sup>**

# ENGLISH

## WARNING

**This equipment must be grounded (earthed). It is the installer's responsibility to ensure that all local laws and by-laws are obeyed when installing Trion equipment, and that the equipment can be isolated electrically.**

## INTRODUCTION

The CAC 1000 is a ceiling mounted or suspended air-cleaner, and has been particularly designed to give a low profile appearance through a suspended ceiling. Operation and speed control is from a remote control.

## THE FILTER SYSTEM

Your unit contains the following filters:

- A) The Pre-Filter (18). This is the 3/4 inch (19 mm) thick foam pad that lays in the hinged tray. It removes the large dust and can be washed many times before replacement. An aluminum mesh filter is also provided as an alternate to the foam prefilter.
- B) The Electronic Filter (12). This is the 7 inch (175 mm) deep aluminum assembly immediately over the pre-filter and is the heart of your air cleaner. It uses electrostatic charges to remove particles so small that it would take a pile of 10,000 million to cover a pinhead. When dirty it can be washed and reused indefinitely.
- C) The Carbon Filter (19). This is an optional filter that slots on top of the electronic filter. It helps remove odors and cannot be cleaned when exhausted.

## FILTER REMOVAL

To remove the filter proceed as follows:

- a) Turn unit off.
- b) Press the two cell access latches (15) and the hinged tray will hinge down. Note position of pre-filter in tray.
- c) Wait five seconds to ensure cell has discharged completely.
- d) Remove the foam pre-filter.
- e) Unscrew the electronic cell retaining bolt (3).
- f) Slide the cell across about 1 inch (25 mm) and allow it to drop out of the unit. The cell weighs about 17 lb. (8 kg.), so this should be done with care.
- g) The carbon filter, if fitted, may now be unclipped from the top of the electronic filter.

### Controls

Your unit may be supplied with a remote mounted speed control (20), giving 3 separate speeds.

### Electrical Safety

A pin on the lower cover operates a safety switch (4) when the cover is opened. **DO NOT TRY TO DEFEAT OR INTERFERE WITH THIS SYSTEM IN ANY WAY.**

# **INSTALLATION**

## **Mechanical**

The unit has been designed so that it can fit either directly onto the ceiling or suspended from the ceiling. When installed with a T-bar suspended ceiling, NEVER support from the T-bars but only from the permanent ceiling.

## **SUSPENDED CEILING**

To hang the unit into a false ceiling, proceed as follows:

- a) Unpack the unit, open cell access door and remove the pre-filter and cell.
- b) Install eyebolts as shown in Sketch A.
- c) Install mounting angle using No. 8 self-drilling screws as shown in Sketch A.
- d) Select and remove a ceiling tile near the centre of the area to be cleaned by the unit.
- e) Attach a length of safety chain to each of the four eyebolts. Fasten securely.
- f) Lift unit into place and support unit while securing to permanent ceiling, ceiling joists, etc. See Sketch B.

**DO NOT ALLOW WEIGHT OF UNIT TO REST ON FALSE CEILING.**

- g) Make electrical connections as detailed in next section.
- h) If available clearance between permanent ceiling and T-bar ceiling is less than 10", mounting angles must be relocated on unit as required. This will result in further extension of the unit below the ceiling line.
- i) Remove charcoal filter (if fitted) from plastic bag and install in guide rails on back of cell.
- j) Re-install cell and pre-filter. The pre-filter lays centrally on the inlet grille against the cell location bracket.
- k) Close access door and unit is ready for operation.

## **FLUSH MOUNTING**

To mount the unit flush onto the ceiling proceed as follows:

- a) Unpack the unit, open cell access door and remove the pre-filter and cell.
- b) Select a location near the center of the area to be cleaned and locate the ceiling joists in that area.
- c) Locate four mounting points (each being at a joist) and pre-drill holes into the joist as shown in Sketch C.
- d) Drill corresponding holes into the unit housing.
- e) Lift unit to ceiling and secure using four ¼" x 2½" lag bolts as shown in Sketch C.
- f) Make electrical connections as detailed in next section.
- g) Remove charcoal filter (if fitted) from plastic bag and install in guide rails on back of cell.
- h) Re-install cell, pre-filter and charcoal filter.
- i) Close access door and unit is ready for operation.

## **Electrical**

Two sets of wires are required:for the unit viz:

Mains supply 220/240V 50Hz 1 Ph OR 120V 60Hz 1PH 5A Line Neutral and Ground (Earth) to the unit.

From the unit to the remote control, 6 core cable.

Run the 6 core cable and mainsupply to the unit through the cable entry holes into the input terminal block (10).The cable should be secured by the cable clamp. Remove the cover from the remote control and fix the base into the desired position. Connect the wires to the numbered connectors in the remote control and the terminal block, taking care to connect proper colours together (see wiring diagram).

## **SERVICING AND ARCING**

The units are designed to collect airborne dirt and from time to time will need routine servicing to remove the accumulation.

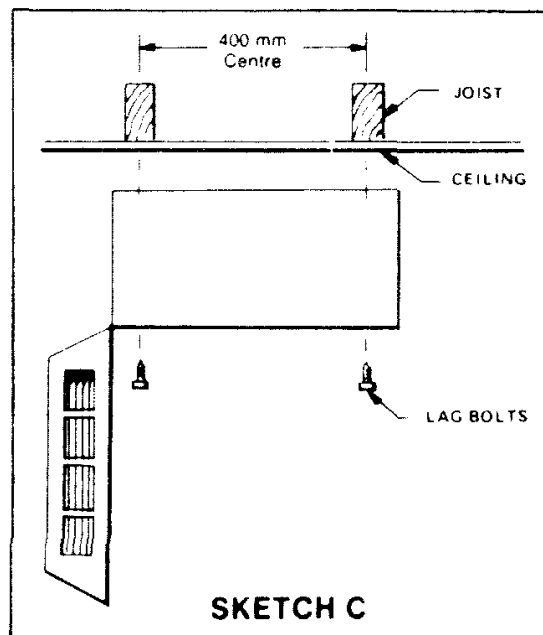
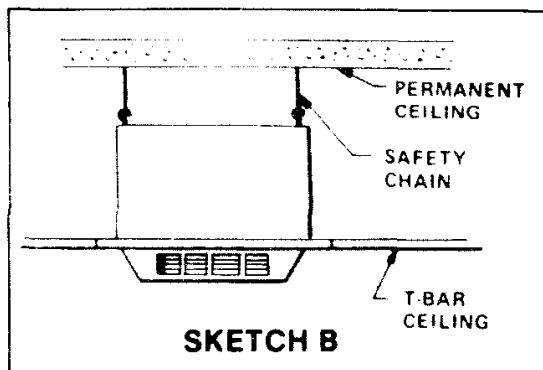
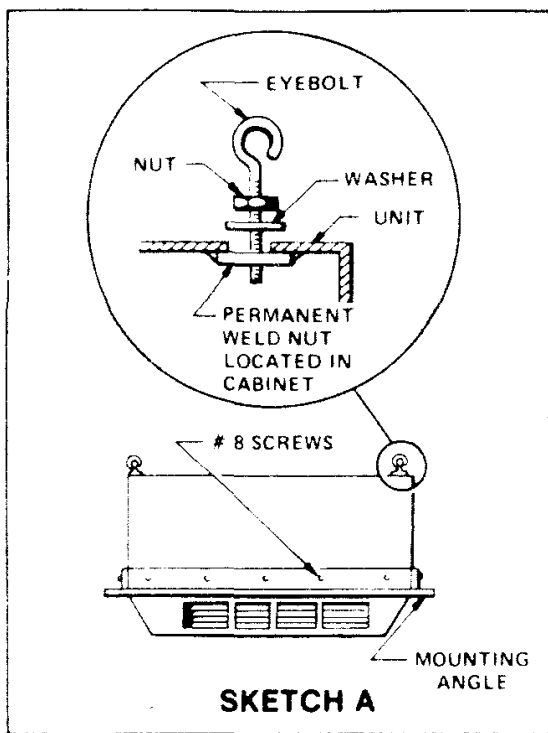
This service interval varies considerably between applications, but typically will range from a few weeks in a busy pub up to several months in a quiet office.

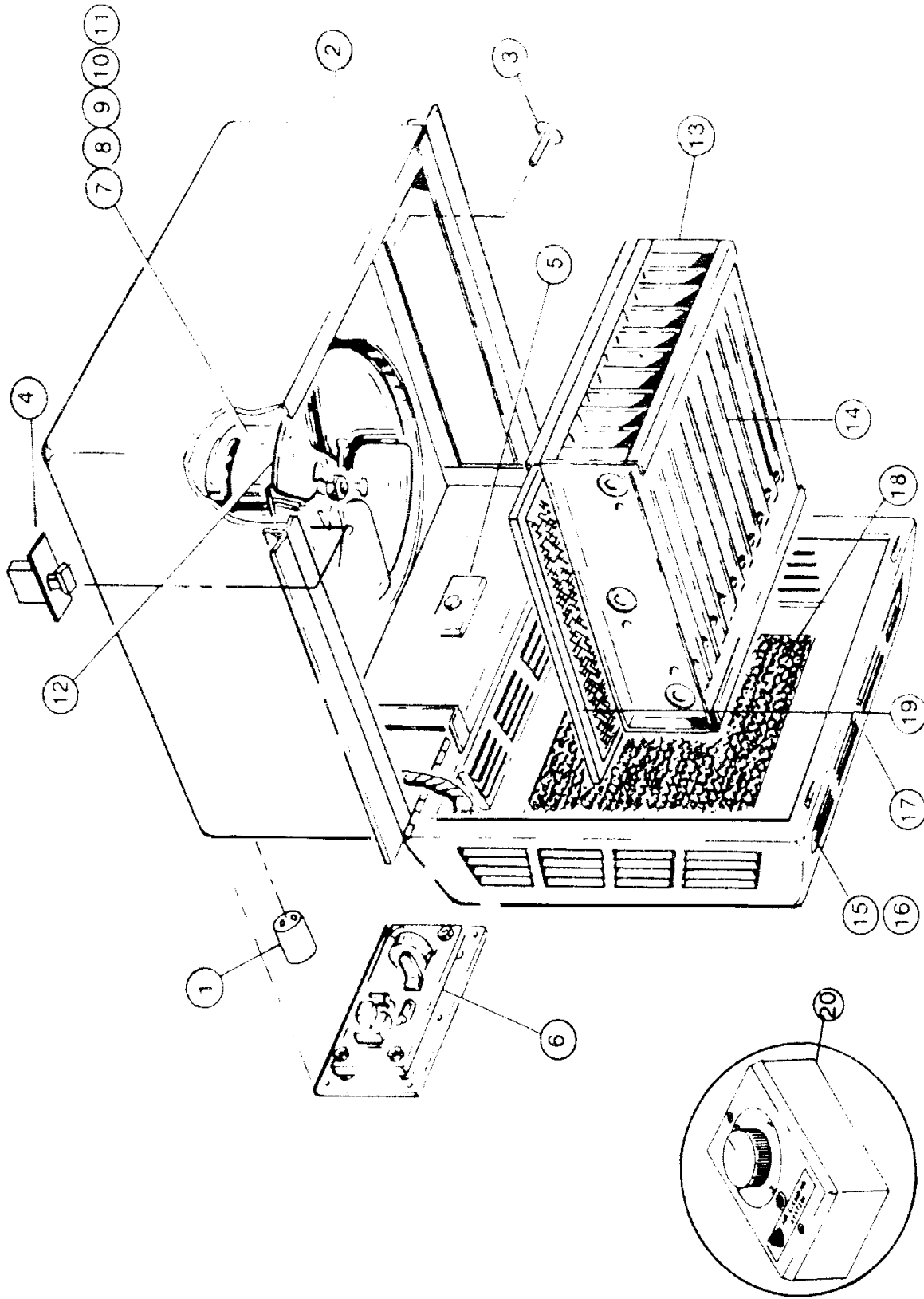
During normal operation the unit will make an occasional snapping noise. This is caused by large pieces of dirt accumulating on the electronic filter and is not dangerous. If, however, the arcing becomes ineffective, a service will be required.

Open the unit and examine the pre-filter and electronic filter. If the electronic filter has only a very thin covering of dirt it may be sufficient to clean only the pre-filter, which in very dusty areas may be quite frequent. To clean the filters proceed as follows.

- A. Remove pre-filter and either vacuum clean or wash as described below. Do not wring.
- B. If the electronic filter needs washing, soak it in a hot strong detergent solution - not caustic cleaner. A washing up machine does an excellent job and machine detergents are also ideal for hand washing.
- C. After several hours soak, remove the filter and rinse with the maximum water pressure available. Do not physically try to rub the dirt off since this can cause damage to both the filter and person.
- D. Allow the filter to dry thoroughly - preferably overnight - and replace into the unit.
- E. Close the filter tray and the unit will operate.
- F. Replace carbon filter when no longer effective. Rate of replacement will depend on specific applications.

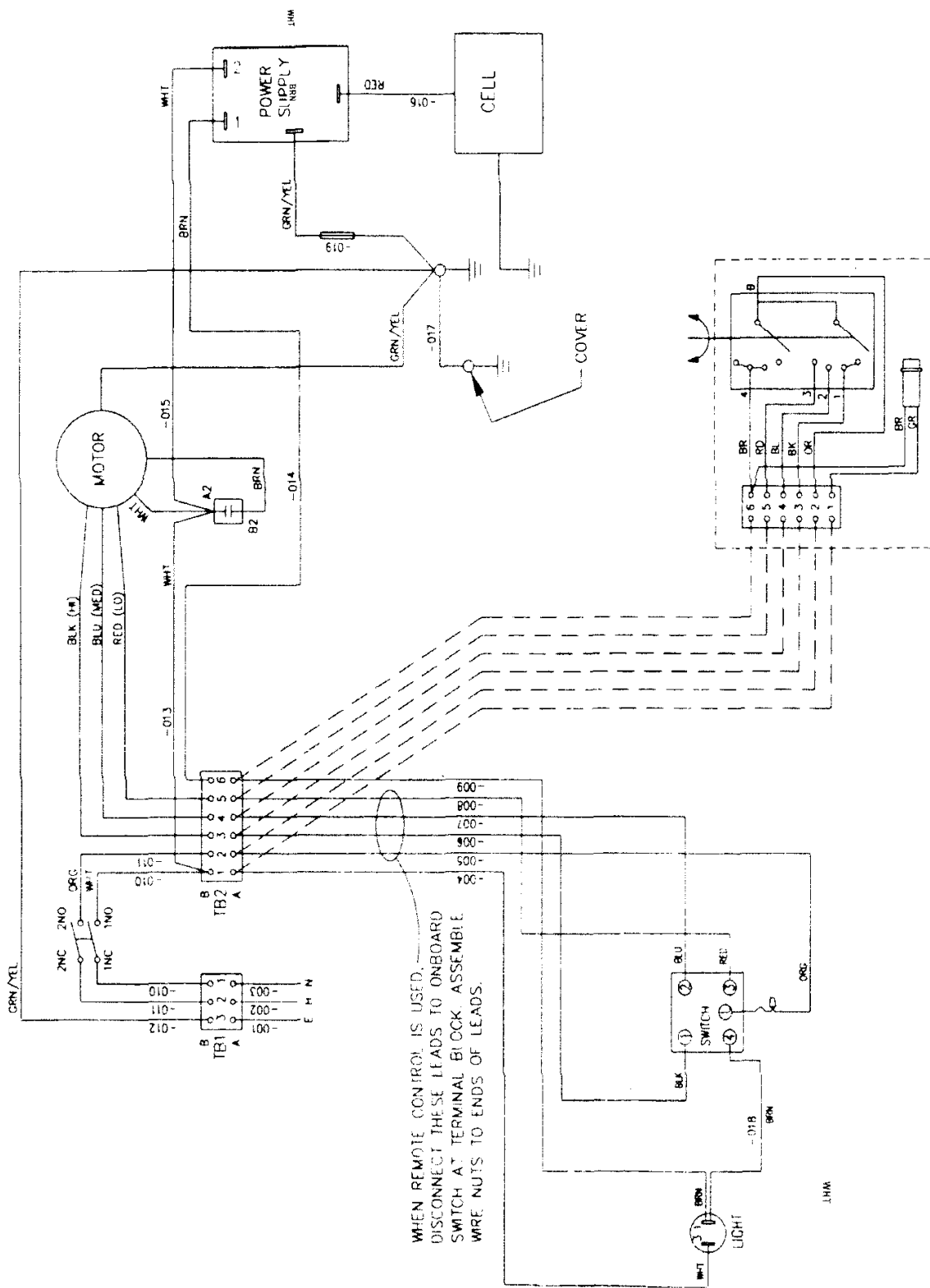
# INSTALLATION





EXPLODED PARTS VIEW OF CAC-1000

KEY	DESCRIPTION	DESIGNATION	BEZEICHNUNG	DESCRIZIONE	DESCRIPCION	BETECKNING	BESCHRIJVING	PART NO.	KEY
1	Capacitor (220/240V)	Condensateur	Kondensator	Condensatore	Condensador	Kondensator	Condensator	242283-002	1
2	Capacitor (120V)	Socle	Grundplatte	Base	Base	Underrede	Draagvlak	129040-001	1
3	Ccll Retaining Bolt	Verrouillage de securite	Verriegelung	Assevvimento	Interruptor de seguridad	Forregling	Vergrendeling	442955-001	2
4	Interlock	Panneau de contact	Kontakplaatte	Scheda dei contatti	Cuadro de contactos	Kontaktpanel	Contactplaat	134162-001	3
5	Contact Board	Bloc d'alimentation	Neitzteil	Alimentazione	Paquete de alimentacion	Natanslutningsaggregat	Stroomconverte	132311-001	4
6	Power Pack (220/240V)	Moteur electrique	Motor	Motore	Motor	Motor	Motor	220978-006	5
6	Power Pack (120V)	Montage resilient	Federbefestigung	Sostegno resiliente	Alsador montado en motor	Motor monteringsbuffersteg	Gesoleerde motorbevestiging	347155-104	6
7	Motor (220/240V)							347155-102	6
7	Motor (120V)							243185-001	7
8	Motor Mount Isolator							243155-001	7
9	Spacer							136411-001	8
9								123616-003	9
10	Elastic Stop Nut	Ecrou d'arret	Stop-Mutter	Dado elastico de arresto	Tuerca rigida de nylon	Styv mutter	Elastische aanslagmoer	123149-003	10
11	Washer	Rondelle	Unterlegscheibe	Rondella	Arandela	Bricka	Afsluiplaatlje	147394-001	11
12	Fan	Ventilateur	Ventilator	Ventilatore	Ventilador	Flakt	Ventilator	1366333-001	12
13	Ccll	Cellule electrostatique	Zelle	Cella	Elemento	Element	Cel	438719-002	13
14	Ionizing Wire	Fil ionisant	ionisierungsdraht	Filo ionizzante	Alambre ionizante	Joniserende kabel	Joniserend Draad	220111-920	14
15	Door Latch	Verrouillage du carter	Turkinke	Chiusura sportella	Cerradura	Dorr regel	Deurklink	134205-002	15
16	Latch Actuator	Resort de deverrouillage	Entriegelungsfeder	Chiusura Portello	Activador de la cerradura	Regel manoveringsorgan	Klinkbediener	134206-002	16
17	Tray	Carter	Untersatz	Vassoio	Bandeja abatible	Ladlack	Bak	446009-001	17
18	Prefilter (FOAM)	Prefiltre	Vorfilter	Prefiltro	Prefiltro	Fjarrkontroll	Voorfilter	243342-001	18
18								232167-001	18
19	Carbon Filter	Filtre au charbon	Kohlefilter	Filtro di carbone	Filtro de carbon	Kolfilter		132309-001	19
20	Remote Control (220/240V)	Commande a distance	Fernbedienung	Telecomando	Mando a distancia	Fjarrkontroll	Afstandsbediening	347493-001	20
20	Remote Control (120V)							347493-002	20



WHEN REMOTE CONTROL IS USED,  
DISCONNECT THESE LEADS TO ONBOARD  
SWITCH AT TERMINAL BLOCK ASSEMBLY  
WIRE NUTS TO ENDS OF LEADS.

WIRING FOR HARD-WIRE REMOTE CONTROL



**Installation instructions, wire diagrams and kit parts for the infrared remote control have been packed with the unit making it ready for the above components.**

**De installeringsinstructies, schakelschema's en reserve onderdelen voor de infraroodafstandsbediening zijn bij uw toestel verpakt, zodat het klaar is voor de hierboven afgebeelde onderdelen.**

**Montageanleitungen, Schaltpläne und Satzteile für die Infrarot-Fernbedienung wurden diesem Gerät beigelegt und ein Einsatz desselben in Verbindung mit den oben gezeigten Komponenten ist somit gegeben.**

**Le istruzioni per l'installazione, i diagrammi per il cablaggio e i componenti per il telecomando a raggi infrarossi sono inclusi nel pacco dell'unità sulla quale è previsto il montaggio di tali componenti.**

**Las instrucciones de instalación, los esquemas de conexionado y las piezas para la Tarjeta de Mando a Distancia I/R han estado empaquetado con la unidad preparandolo para los componentes serialados.**

**Installationsmanual, kopplingschema och behÖvliga delar finns med i förpackningen, och I/R fjärrkontrollen är klar tas i bruk.**

**Les instructions d'installation, les diagrammes de câblage et le jeu de pièces pour la commande à distance infrarouge ont été emballé avec l'unité en préparant pour la connexion avec les pièces indiquées ci-dessus.**

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Specification-Model CAC 1000

Weight/Poids/Gewicht/Peso/Peso/Gewicht/Vikt	77 lb.	35 kg.
Length	22.5"	572 mm
Width/Larheur/Breite/Larghezza/Anchura/ Breedte/Bredd	22.5"	572mm
Depth/Epaisseur/Tiefe/Profondita/Profundidad/ Diepte/Djup	14.9"	378 mm
Electrical Supply/Courant/Netzanschluss/ Alimentazione/Alimentacion Electrica/Stroomtoevoer/ Elstrom	220-240V,50Hz,1PH. 120V,60Hz,1PH.	
Power Consumption/Consumation/Stromverbrauch/ Assorbimento di Corrente/Consumo de Electricidad/ Stroomverbruik/Energiforbrukning	.80A, 183W. Max. (240V) 1.75A, 185W, Max (120V)	

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Trion, Inc  
101 McNeill Road  
Sanford, Nc27330, USA  
Phone:800-884-0002  
Fax:800-458-2379  
www.trioninc.com  
E-mail:sales@trioninc.com

Trion, Ltd  
The Cavendish Centre  
Winnall Close  
Winchester, Hampshire  
S023 OLB, UK  
Phone:+44(0)1962 840465  
Fax:+44(0)1962 828619  
www.trion.co.uk  
E-mail:sales@trion.co.uk

Fedders International  
No.728 Fuzhou Road  
RU.3003-3005  
Raffles City Office Tower  
Shanghai, P.R. China 200001  
Phone:(86-2)6340 3232  
Fax:(86-21)6340 3867/6340 3868  
E-mail:infochina@fedders.com

Fedders International Air  
Conditioning A-30.Chintels  
House Kailash Colorry  
New Delhi  
India 110048  
Phone:91 115173 0730  
Fax:91 11 5173 0743  
E-mail:infoindia@fedders.com

Fedders International, Inc.  
128 Joo Seng Road  
#05-01  
UP Computers Building  
Singapore 368 356  
Pione:(65)6286 0995  
Fax:(65)6286 0859  
E-mail:infoaxia@fedders.com

Trion Deutschland GmbH  
Boschestr.60  
D-50171 Kerpen  
Phone:+49(0)2237 922-103  
Fax:+49(0)2237 922-104  
E-mail:info@trion-deutschland.co.uk

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