

# **CLIMAVENETA**

CE MANUAL - C 0206101

**INSTRUCTIONS FOR USING THE  
ELECTRONIC CONTROL UNIT**

**CVM 20**

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**GB**

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The keyboard of the CVM 20 electronic control unit is represented in FIG. 1 on the last page of this manual.

## 1) PROCEDURE FOR SWITCHING ON AND OFF

### SWITCHING ON THE UNIT

**ATTENTION :** make sure that the unit has been live for at least 8 hours before switching it on (to heat the oil in the compressor casing and separate any coolant present)

- POWER LED (A) on
- REMOTE OFF LED (C) off
- press key 1 - LED on

**ATTENTION :** a lamp-test is performed automatically when the unit is switched on.

### SWITCHING ON SINGLE COMPRESSOR

- press the key of the compressor to be switched on (CI-C2) - SEL LED on

**ATTENTION :** the compressor may delay starting due to :

- timers set via the parameters
- no demand from the thermoregulator
- presence of an alarm

### SWITCHING OFF SINGLE COMPRESSOR

- press the key of the compressor to be switched off (CI-C2) - SEL LED off

**ATTENTION :** only use this function in an emergency (stopping with no pump-down could cause damage to the compressor that is not covered by guarantee)

### SWITCHING OFF THE UNIT

- press key 1 - SEL LED off

## 2) COMPRESSOR OPERATION CONTROL

### STATUS LED

- SEL off and ON off = compressor not selected
- SEL on and ON off = compressor selected, but delayed
- SEL on and ON on = compressor operating
- SEL flashing and ON off = compressor in alarm mode

## 3) TEMPERATURE READINGS

### EVAPORATOR INLET TEMPERATURE READINGS

- press key 4 - IN LED on
- read the value on the display

### EVAPORATOR OUTLET TEMPERATURE READINGS

- press key 4 - OUT LED on
- read the value on the display

## 4) REGULATION

### CHILLED WATER REGULATION

- press key **3** - LED on
- preset "set point" value appears on the display
- set the new "set point" value with key **6** to increase and key **7** to decrease
- press key **3** - LED off

The table below gives, according to the number of steps, the "set point" and proportional band values normally in use. The theoretic minimum and maximum values, for the outlet temperature, indicated in the table refer to operation with nominal flow rates and, therefore, with a thermal head at the evaporator of 5°C:

N° of Steps	Set Point (°C)	Proportional band (°C)	min. T (°C) Theoretic outlet	max. T (°C) Theoretic outlet
<b>1</b>	11	1	6	12
<b>2</b>	9.5	2.5	5.7	10.8
<b>3</b>	8	4	5.6	9.4
<b>4</b>	7	5	5.7	8.3

**ATTENTION :** regulation is made according to the temperature reading at the evaporator inlet.

**ATTENTION :** if key **2** is used without the consent of Climaveneta or an Authorised Service Centre, the guarantee shall become null and void.

## 5) ALARMS

There are two types of alarm: circuit / compressor alarms and unit alarms.

### CIRCUIT / COMPRESSOR ALARMS

Circuit / compressor alarms are signalled by the **SEL** LED flashing and the **B** LED switching on.

### UNIT ALARMS

Unit alarms are signalled by the **B** LED switching on.

To know the type of circuit /compressor or unit alarm:

- press key **5** - LED on: the alarm code appears on the display

To reset the circuit and compressor alarm:

- press the key of the relevant compressor (**CI-C2**)

To reset the unit alarm:

- press key **5** - LED off, press key **1**

**ATTENTION :** if manual alarms are reset without the consent of Climaveneta or an Authorised Service Centre the guarantee shall become null and void.

**TABLE OF ALARMS**

ALARM		TYPE OF RESET
E000	Antifreeze	M
E020	Wrong configuration of parameters	A
E101	Oil differential compressor 1	M
E103	Thermal cut-out compressor 1	M
E151	Oil differential compressor 2	M
E153	Thermal cut-out compressor 2	M
E201	High pressure circuit 1	M
E203	Pump-down pressure circuit 1	A
E204	Pump-down pressure during shut-down circuit 1	A
E206	Low pressure circuit 1	A / M
E251	High pressure circuit 2	M
E253	Pump-down pressure during start-up circuit 2	A
E254	Pump-down during shut-down circuit 2	A
E256	Low pressure circuit 2	A / M
E400	Chilled water inlet probe error	A
E401	Chilled water outlet probe error	A
E601	Maximum safety circuit 1	M
E651	Maximum safety circuit 2	M
E700	Flow switch	A
E901	Fan thermal cut-outs circuit 1	M
E951	Fan thermal cut-outs circuit 2	M

M = Alarm with manual reset.

A = Alarm with automatic reset.

AM = Minimum alarms are normally the automatic reset type, but become manual if they are triggered more than three times in one hour.

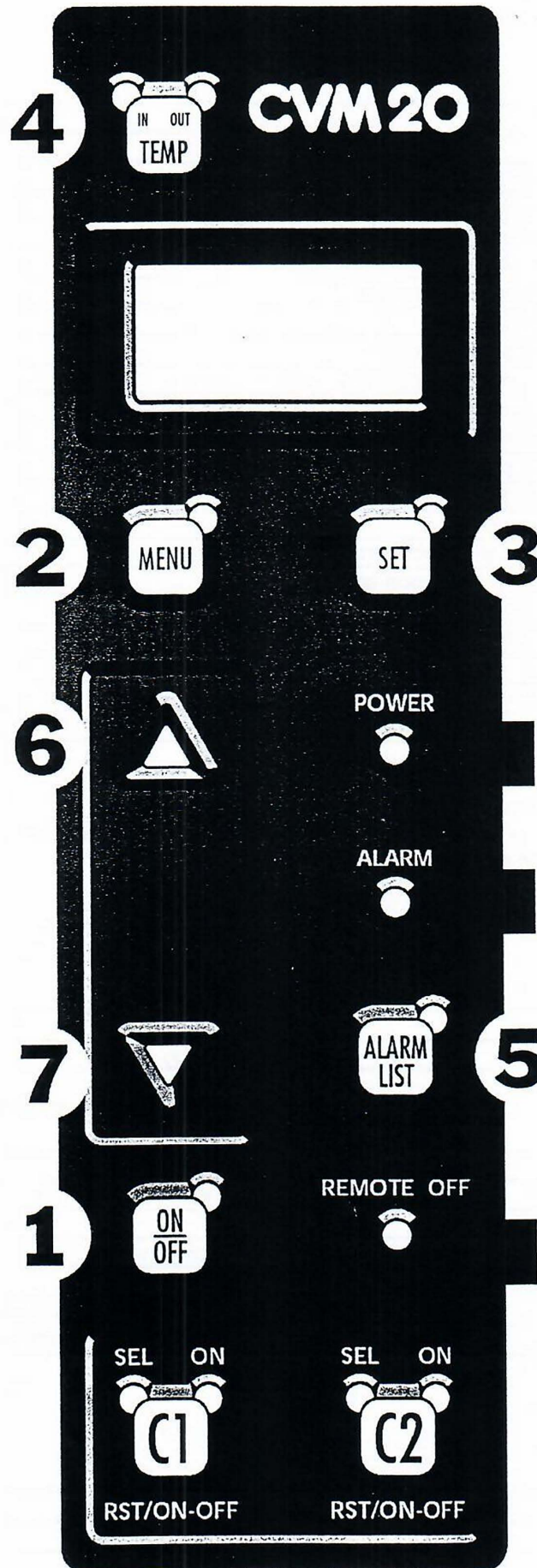
**TABLE OF KEYS**

KEYS		
1	ON - OFF	Unit On - Off key
2	MENU	Parameter selection <b>(Access consented to authorised service centres only)</b>
3	SET	Chilled water setting
4	TEMP	Evaporator water temperature
5	ALARM LIST	View alarms
6		Increase display values
7		Decrease display values
C1		Compressor 1 On - Off - reset alarms circuit 1
C2		Compressor 2 On - Off - reset alarms circuit 2

**TABLE OF LEDS**

LED		
A	POWER	Unit status LED
B		Alarms LED
C	REMOTE ON - OFF	Remote On - Off LED

FIG. 1





# CLIMAVENETA

I ELENCO ALLEGATI - D ANHANGULISTE - DK BILAGSFORTEGNEELSE - E LISTADO DE LOS ANEXOS - F LISTE DES PIECES JOINTES - GB DOCUMENTS ENCLOSED - GR KATALOGOS SUNHMMENWN - N LIJST BIJLAGEN - P LISTADO DE LOS ANEXOS - S BILAGSFORTECKNING - SF

ALLEGATO 1 n°	
I	Caratteristiche dell'unità
D	Kurzzeichen und Einheiten
DK	Maskindata
E	Características de la unidad
F	Caractéristiques de l'unité
GB	Characteristics of the unit
GR	
N	
P	Características da unidade
S	Maskindata
SF	Yksikön tekniset ominaisuudet

ALLEGATO 2 n°	
I	Disegni dimensionali e distribuzione pesi
D	Abmessungszeichnungen und Gewichtverteilung
DK	Dimensionsretninger og vægtdistribution
E	Dibujos dimensionales y distribución de los pesos
F	Dessins dimensionnels et répartition des poids
GB	Dimensional drawings and weight distribution
GR	
N	Dimensionale tekeningen en verdeling gewichten
P	Desenhos dimensionais e distribuição de pesos
S	Dimensionsritningar och viktdistribution
SF	Mitat ja painon jako

ALLEGATO 3 n°	
I	Schema di sollevamento
D	Anhebungsschema
DK	Løfteskema
E	Esquema de elevación
F	Schéma de levage
GB	Lifting scheme
GR	
N	Opheffingsschema
P	Esquema de suspensão
S	Lyftskema
SF	Nostokaavio

ALLEGATO 4 n°	
I	Schema frigorifero
D	Hebeplan
DK	Skema køleaggregat
E	Esquema frigorífico
F	Schéma frigorifique
GB	Refrigeration circuit diagram
GR	
N	Koelschema
P	Esquema frigorífico
S	Skema kylaggregat
SF	Jaahdytyskaavio

ALLEGATO 5 n°	
I	Schema elettrico
D	Elektro-Schaltplan
DK	El-skema
E	Diagrama eléctrico
F	Schéma électrique
GB	Wiring diagram
GR	
N	Elektrische schema
P	Esquema eléctrico
S	El-skema
SF	Sähkökaavio

ALLEGATO 6 n°	
I	Pezzi di ricambio consigliati
D	Empfohlene Ersatzteile
DK	Anbefalede reservedele
E	Piezas de repuesto aconsejadas
F	Pièces de rechange conseillées
GB	Recommended spare parts
GR	
N	angeraden vervangstukken
P	Peças de reposição aconselhadas
S	Rekommenderade utbytesdelar
SF	Suosittelut varaosat

ALLEGATO 7 n°	
I	Schema idraulico
D	Hydraulik-Schaltplan
DK	Hydraulisk skema
E	Esquema hidraulico
F	Schéma hydraulique
GB	Hydraulic diagram
GR	
N	Hydraulische schema
P	Esquema hidraulico
S	Hydrauliskt skema
SF	Hydraulinen kaavio

ALLEGATO 8 n°	
I	
D	
DK	
E	
F	
GB	
GR	
N	
P	
S	
SF	