

- **ISTRUZIONI X REGOLAZIONE TEMPERATURA CONTROLLO INDIPENDENTE PER MODELLO SYNCHRO.**
- **INSTRUCTIONS FOR REGULATING INDEPENDENT TEMPERATURE CONTROL FOR SYNCHRO MODEL .**
- **INSTRUCTIONS POUR LA RÉGULATION DE LA TEMPERATURE CONTROL INDIPENDENT POUR MODÈLE SYNCHRO.**
- **INSTRUCCIONES PARA LA REGULACIÓN DE TEMPERATURA CONTROL INDEPENDIENTE PARA MODELO SYNCHRO.**
- **ANLEITUNG ZUM EINSTELLEN DER UNABHÄNGIGEN TEMPERATURANZEIGE FÜR MODELLE SYNCHRO .**

**TCI + ES**  
**TEMPERATURE CONTROL INDIPENDENT**  
**+ ENERGY SAVING**



**ATTENZIONE: LE OPERAZIONI CONTENUTE IN QUESTO MANUALE SONO CONSENTITE SOLO A PERSONALE TECNICO QUALIFICATO.**

**WARNING: THE OPERATIONS INTO THIS MANUAL ARE ALLOWED ONLY TO TECHNICAL QUALIFIED.**

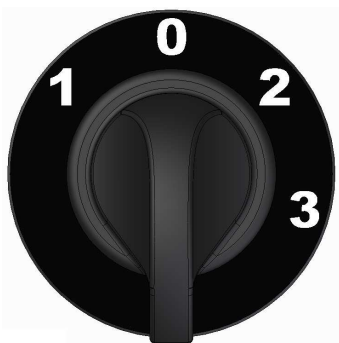
**ATTENTION: LES OPÈRATIONS CONTENU DANS LE MANUEL SONT CONSENTIES SEULERENT À TECHNICIENS QUALIFIÈS.**

**PRECAUCIÒN: LAS OPERACIONES CONTENIDAS EN ESTE MANUAL SON PERMITE SÓLO A PERSONAL TÉCNICO CUALIFICADO.**

**VORSICHT: DIE VERHALTENEN OPERATIONEN IN DIESES HANDBUCH ERLAUBTEN NUR ZU TECHNISCHEN QUALIFIZIERT.**

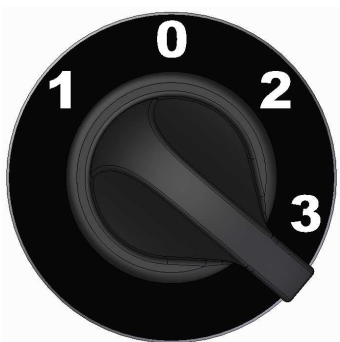
**TECNICO**  
**TECHNICIAN**  
**TECHNICIEN**  
**TÉCNICO**  
**TECHNIKER**

# POSIZIONE DI FUNZIONAMENTO COMMUTATORE



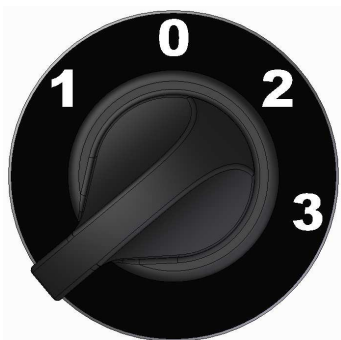
**0**

**MACCHINA SPENTA**



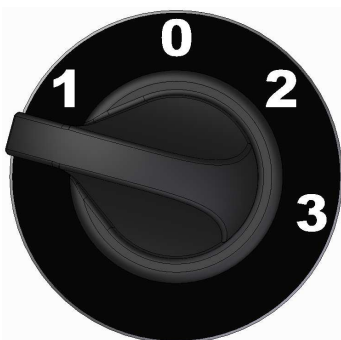
**1**

**CARICO ACQUA  
ED ALIMENTAZIONE  
SENZA RISCALDAMENTO**



**2**

**ALIMENTAZIONE E  
RISCALDAMENTO  
CALDAIA CON POTENZA  
DIMEZZATA**



**3**

**ALIMENTAZIONE E  
RISCALDAMENTO  
CALDAIA CON POTENZA  
MASSIMA**

# **INTERRUTTORE RESISTENZA CALDAIA GRUPPO**



**RISCALDAMENTO CALDAIA  
GRUPPO CON POTENZA  
DIMEZZATA**



**RISCALDAMENTO CALDAIA  
GRUPPO CON POTENZA  
MASSIMA**

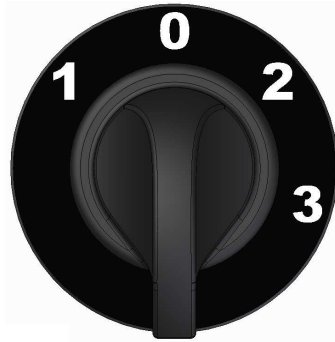
## TABELLA PARAMETRI REGOLAZIONE

PARAMETRI	DISPLAY	DESCRIZIONE
<b>F.03</b>	°F	Unità di misura gradi Fahrenheit
	°C	Unità di misura gradi Celsius
<b>P.</b>	<b>1</b>	Dove 1 indica il valore della costante proporzionale del controllo Pid, che ha la funzione di spegnere ed accendere la resistenza facendo in modo che più si avvicina al valore di temperatura impostato, più l'impulso rallenta (altrimenti il valore ottenuto andrebbe ad oltrepassare il valore impostato)
<b>I.</b>	<b>0.00</b>	Dove 0.00 indica il valore della costante integrativa del controllo Pid, che ha la funzione di calcolare l'accumulo di errore, cioè l'analisi del tempo che manca per arrivare all'impostazione predefinita.
<b>d.</b>	<b>1.6</b>	Dove 1.6 indica il valore della costante Derivata del controllo Pid, che ha la funzione di valutare il sistema di riscaldamento (cioè se la temperatura sta aumentando o diminuendo) ed in base a quest'analisi decide la durata dell'impulso della resistenza.
<b>F.04</b>	<b>22</b>	Dove 22 indica il valore che rappresenta la differenza tra la temperatura dell'acqua in caldaia e l'acqua che esce dal gruppo durante l'erogazione (Questo parametro vale per la temperatura impostata in gradi <b>Celsius</b> )
<b>F.05</b>	<b>40</b>	Dove 40 indica il valore che rappresenta la differenza tra la temperatura dell'acqua in caldaia e l'acqua che esce dal gruppo durante l'erogazione (Questo parametro vale per la temperatura impostata in gradi <b>Fahrenheit</b> )

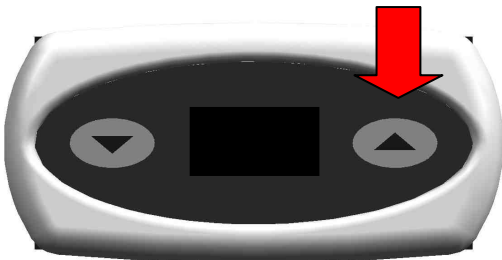
PER USCIRE DALLA PROGRAMMAZIONE PARAMETRI TOGLIERE ALIMENTAZIONE ALLA MACCHINA.

## AZZERAMENTO VALORI PROGRAMMATI

- SPEGNERE LA MACCHINA



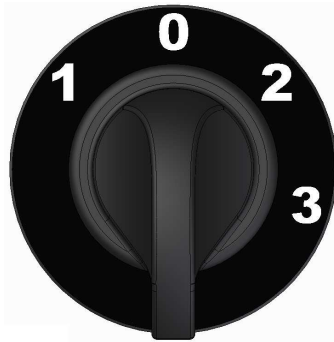
- ACCENDERE LA MACCHINA TENENDO PREMUTO IL TASTO INDICATO DEL REGOLATORE FINCHE' SUL DISPLAY APPARE LA SCRITTA **PrS**.



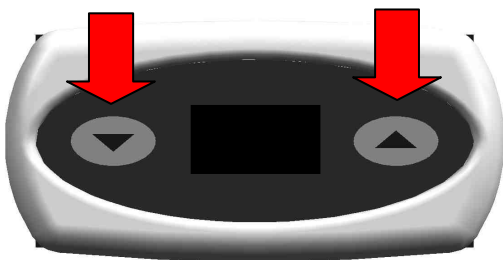
ALL'ACCENSIONE DELLA MACCHINA IL REGOLATORE TORNA CON I VALORI IMPOSTATI DALLA FABBRICA .

# IMPOSTAZIONE VALORI DI PROGRAMMAZIONE

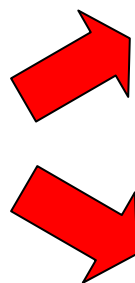
- SPEGNERE LA MACCHINA



- ACCENDERE LA MACCHINA TENENDO PREMUTO CONTEMPORANEAMENTE ENTRAMBI I TASTI DEL REGOLATORE COME INDICATO , FINCHE' SUL DISPLAY APPARE LA SCRITTA **F.03** .



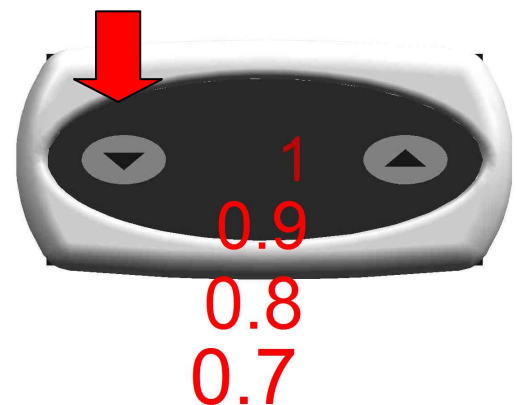
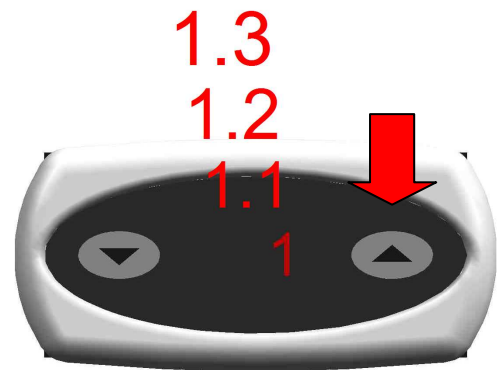
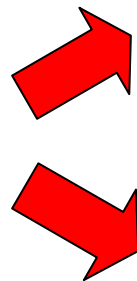
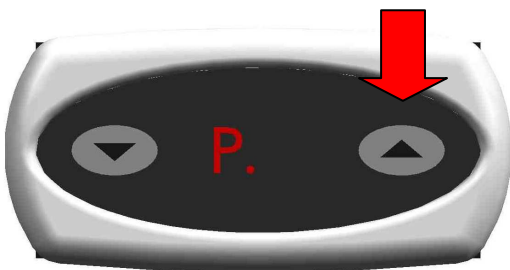
- PREMERE IL TASTO INDICATO PER SCEGLIERE L'UNITA' DI MISURA DELLA TEMPERATURA **°C** .CELSIUS O **°F** FAHRENHEIT .



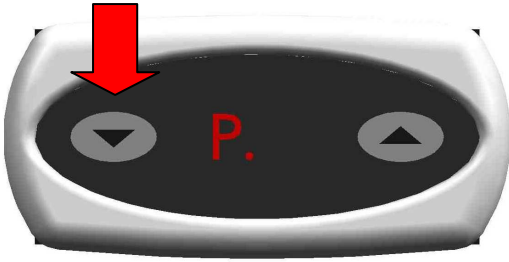
- CONTINUANDO A PREMERE IL TASTO INDICATO APPARE SUL DISPLAY LA SCRITTA **P.**



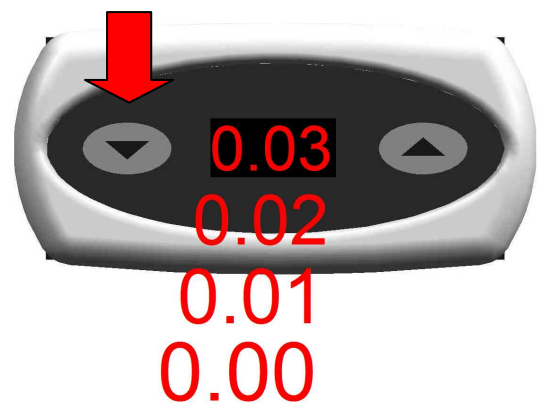
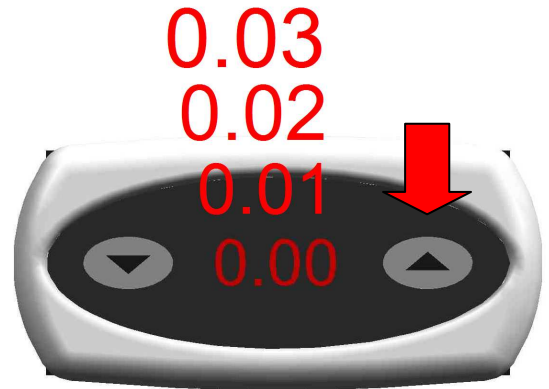
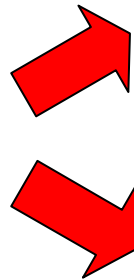
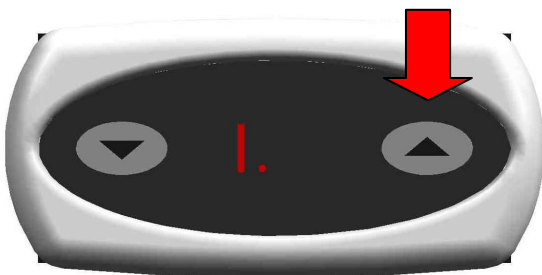
- PREMERE IL TASTO INDICATO PER IMPOSTARE IL VALORE CHE PER QUESTA MACCHINA DEVE ESSERE UGUALE A **1** .  
IL VALORE AUMENTA PREMENDO IL TASTO A DX E DIMINUISCE PREMENDO IL TASTO A SX .



- CONTINUANDO A PREMERE IL TASTO INDICATO APPARE SUL DISPLAY LA SCRITTA **I.**

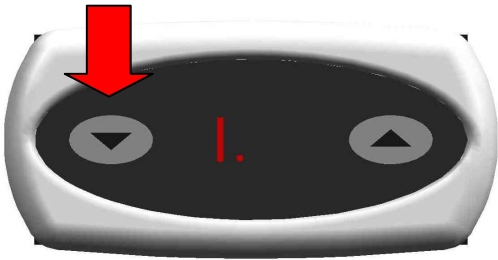


- PREMERE IL TASTO INDICATO PER IMPOSTARE IL VALORE CHE PER QUESTA MACCHINA DEVE ESSERE UGUALE A **0.00**.  
IL VALORE AUMENTA PREMENDO IL TASTO A DX E DIMINUISCE PREMENDO IL TASTO A SX.

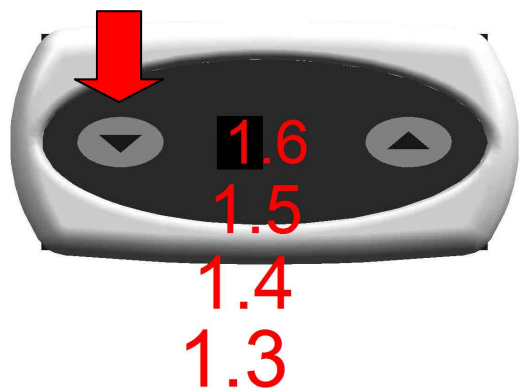
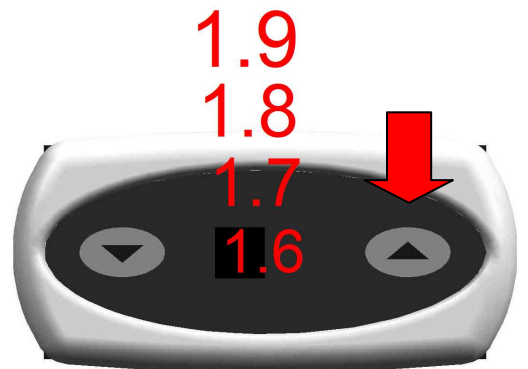
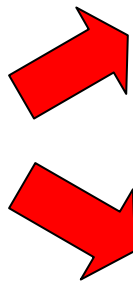
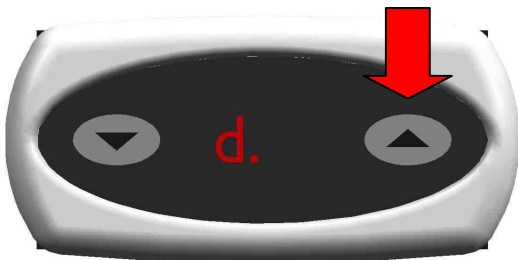




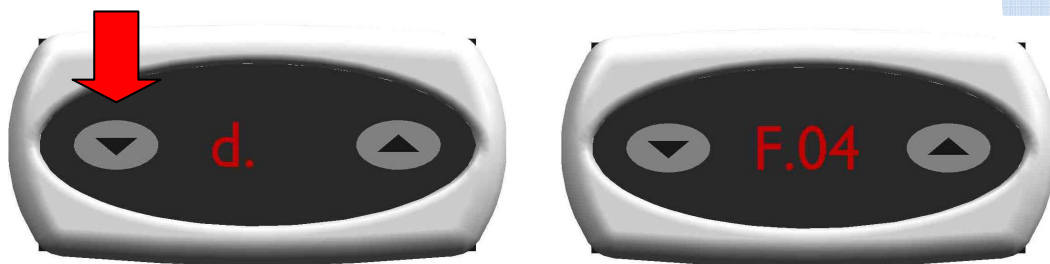
- CONTINUANDO A PREMERE IL TASTO INDICATO APPARE SUL DISPLAY LA SCRITTA **d.**



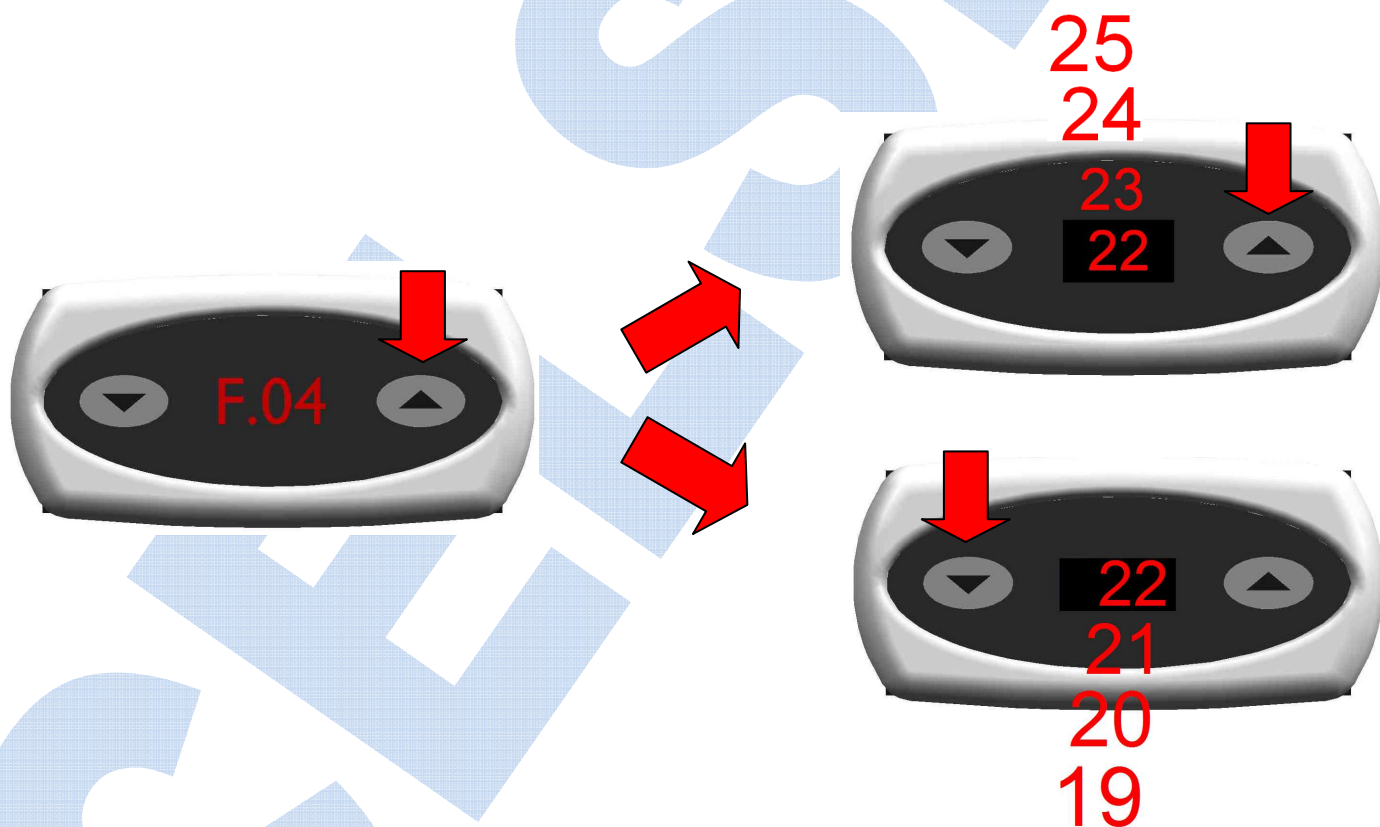
- PREMERE IL TASTO INDICATO PER IMPOSTARE IL VALORE CHE PER QUESTA MACCHINA DEVE ESSERE UGUALE A **1.6**. IL VALORE AUMENTA PREMENDO IL TASTO A DX E DIMINUISCE PREMENDO IL TASTO A SX.



- CONTINUANDO A PREMERE IL TASTO INDICATO APPARE SUL DISPLAY LA SCRITTA **F.04** (QUESTO PARAMETRO VALE PER TEMPERATURA IMPOSTATA IN GRADI **CELSIUS**)

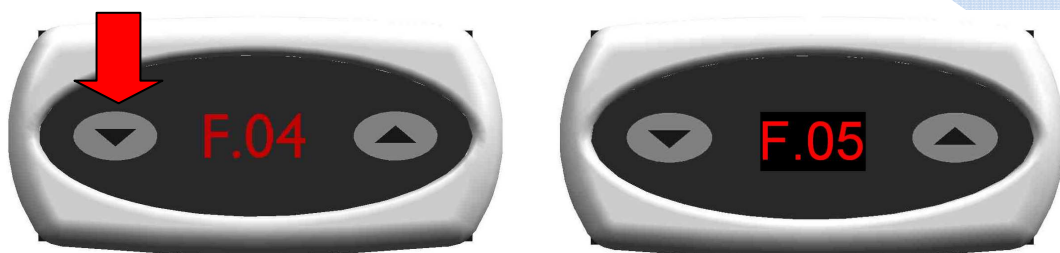


- PREMERE IL TASTO INDICATO PER IMPOSTARE IL VALORE CHE PER QUESTA MACCHINA DEVE ESSERE UGUALE A **22**. IL VALORE AUMENTA PREMENDO IL TASTO A DX E DIMINUISCE PREMENDO IL TASTO A SX.

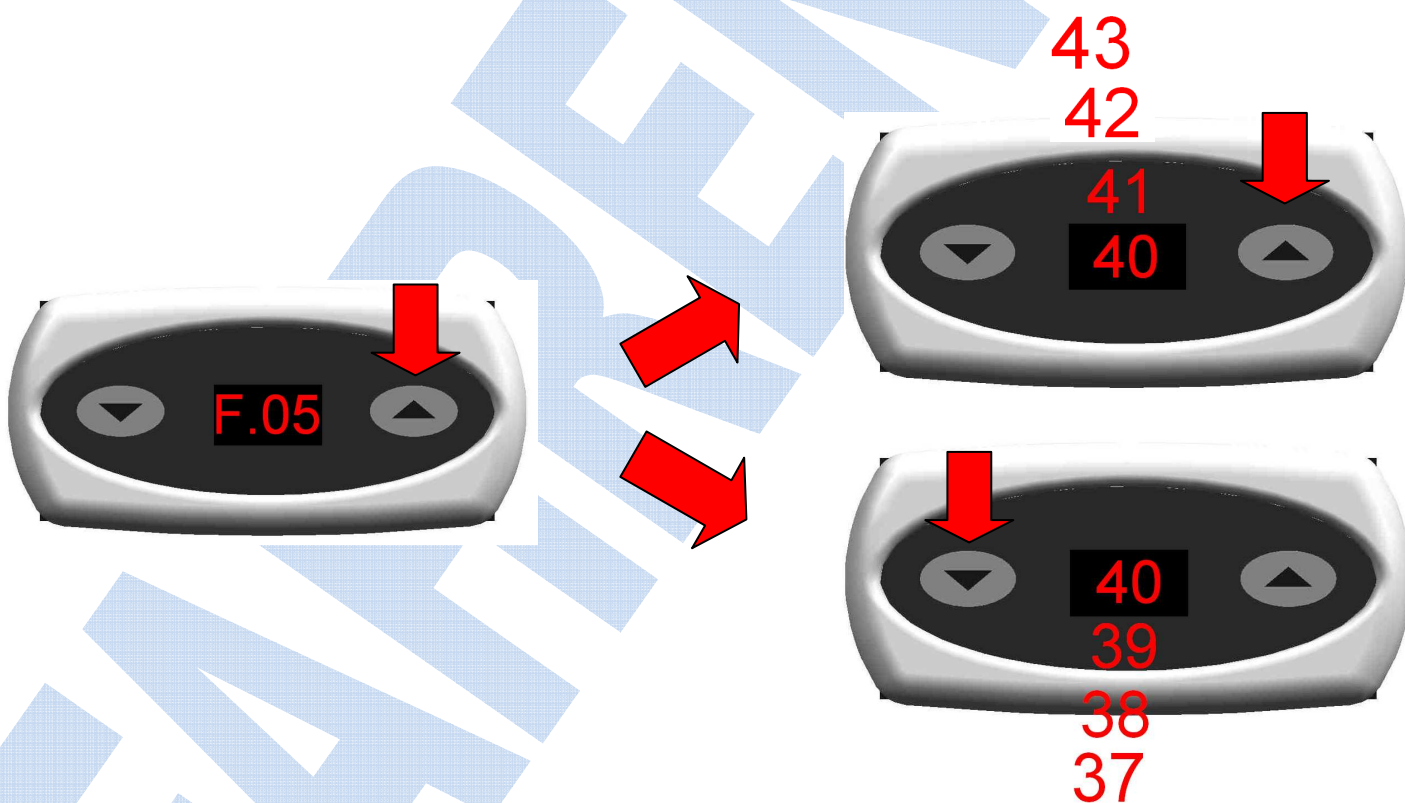


IL VALORE INSERITO RAPPRESENTA LA DIFFERENZA TRA LA TEMPERATURA DELL'ACQUA IN CALDAIA E L'ACQUA CHE ESCE DAL GRUPPO DURANTE L'EROGAZIONE.

- CONTINUANDO A PREMERE IL TASTO INDICATO APPARE SUL DISPLAY LA SCRITTA **F.05** (QUESTO PARAMETRO VALE PER TEMPERATURA IMPOSTATA IN GRADI **FAHRENHEIT**)



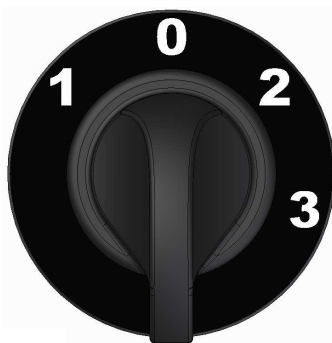
- PREMERE IL TASTO INDICATO PER IMPOSTARE IL VALORE CHE PER QUESTA MACCHINA DEVE ESSERE UGUALE A **40**. IL VALORE AUMENTA PREMENDO IL TASTO A DX E DIMINUISCE PREMENDO IL TASTO A SX.



IL VALORE INSERITO RAPPRESENTA LA DIFFERENZA TRA LA TEMPERATURA DELL'ACQUA IN CALDAIA E L'ACQUA CHE ESCE DAL GRUPPO DURANTE L'EROGAZIONE.

## SALVATAGGIO VALORI IMPOSTATI

- SPEGNERE LA MACCHINA E RIACCENDERLA SENZA PREMERE NESSUN TASTO SUL REGOLATORE .



## ALLARMI

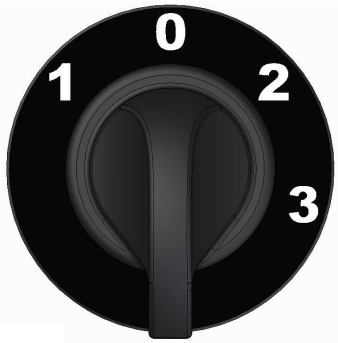
- IN CASO DI SONDA SCOLLEGATA IL DISPLAY VISUALIZZA LA SCRITTA **A1**, L'USCITA DI REGOLAZIONE E LA PROGRAMMAZIONE SONO DISABILITATI.



- IN CASO DI SONDA IN CORTO CIRCUITO IL DISPLAY VISUALIZZA LA SCRITTA **A2**, L'USCITA DI REGOLAZIONE E LA PROGRAMMAZIONE SONO DISABILITATI.

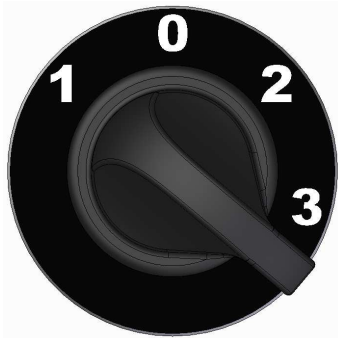


# MAIN SWITCH OPERATION POSITION



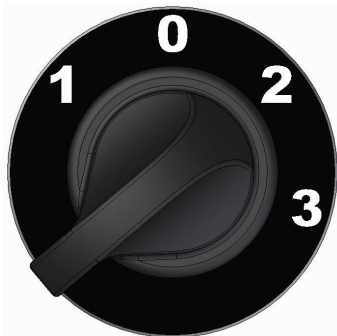
**0**

**SWITCH OFF MACHINE**



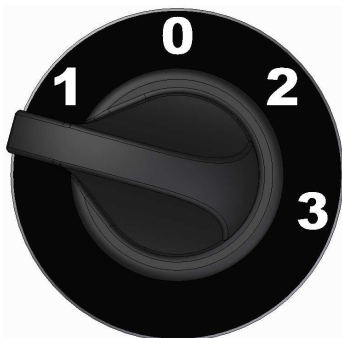
**1**

**WATER FILL AND  
CURRENT WITHOUT  
BOILER HEATING**



**2**

**HALF POWER BOILER  
HEATING AND CURRENT**



**3**

**FULL POWER BOILER  
HEATING AND CURRENT**

# SWITCH HEATING BOILER GROUP



**HALF POWER HEATING  
GROUP BOILER**



**FULL POWER BOILER  
GROUP HEATING**

## PARAMETERS SETTINGS

PARAMETER	DISPLAY	DESCRIPTION
<b>F.03</b>	°F	Measure unit Fahrenheit degree
	°C	Measure unit Celsius degree
<b>P.</b>	<b>1</b>	Where 1 is the value of the constant proportional pid control, which has the function to turn off and turn on the heating element so that most closely matches the set temperature value, more the impulse slows (otherwise the value obtained should be to exceed the set value).
<b>I.</b>	<b>0.00</b>	Where 0.00 is the value of the constant integral pid control, which has the function to calculate the accumulation of error (in the case of a coffee machine is very low), that is the analysis of the time remaining to reach default.
<b>d.</b>	<b>1.6</b>	Where 1.6 is the value of the constant derivative pid control, which has the function to evaluate the heating system (that is, if the temperature is increasing or decreasing) and based on this analysis decides the pulse duration of the heating element.
<b>F.04</b>	<b>22</b>	Where 22 show the value that represent the difference between the water temperature into the boiler and the water coming out from the group during the coffee dispensing ( This parameter is valid for the Temperature in <b>Celsius</b> degree).
<b>F.05</b>	<b>40</b>	Where 40 show the value that represent the difference between the water temperature into the boiler and the water coming out from the group during the coffee dispensing ( This parameter is valid for the Temperature in <b>Fahrenheit</b> degree).

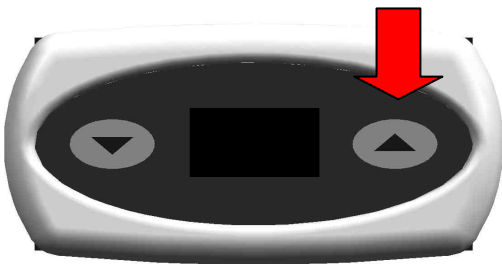
TO EXIT THE PARAMETER PROGRAMMING MODE TURN THE MACHINE OFF.

## TO RESET THE TEMPERATURE CONTROL UNIT

- SHUT DOWN THE MACHINE



- TURN ON THE MACHINE AND PRESS AND HOLD THE INDICATED BUTTON OF THE TEMPERATURE REGULATOR UNTIL THE WRITING **PrS** APPEARS ON THE DISPLAY

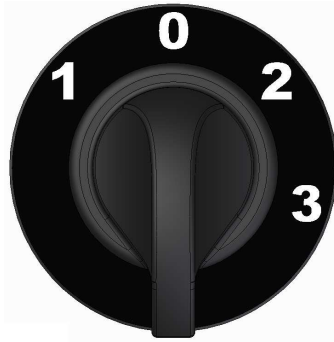


PLEASE NOTE: WHEN THE MACHINE IS FIRST TURNED ON, THE DISPLAY WILL SHOW THE ORIGINAL FACTORY SETTINGS.

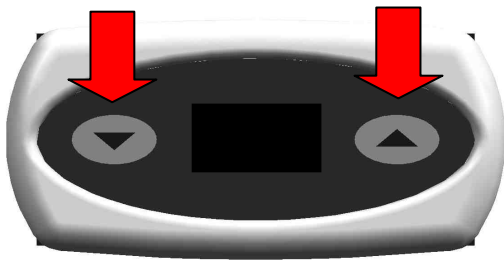


## TO PROGRAM THE DESIRED SETTINGS

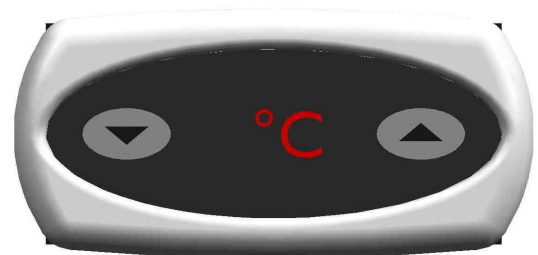
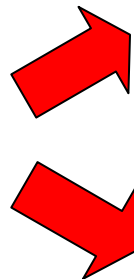
- SHUT OFF THE MACHINE



- TURN ON THE MACHINE AND CONTEMPORANEOUSLY PRESS AND HOLD THE BUTTONS OF THE TEMPERATURE REGULATOR, AS INDICATED, UNTIL THE DISPLAY SHOWS THE WRITING: **F.03**



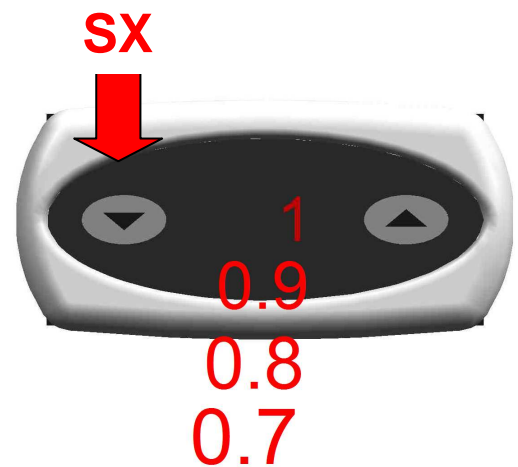
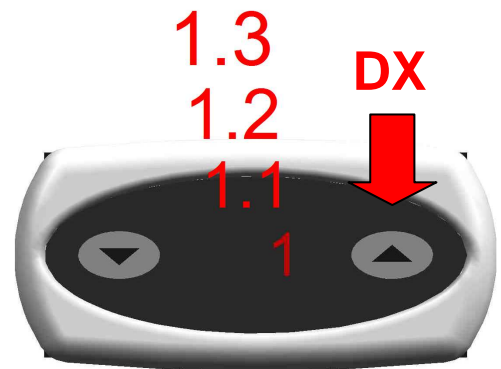
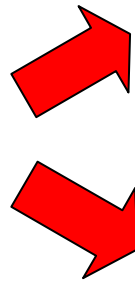
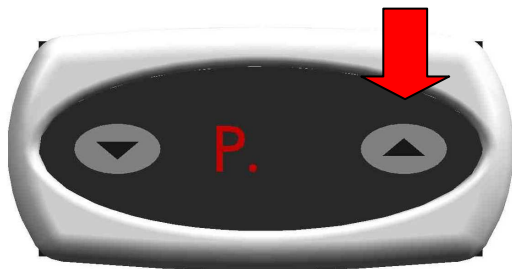
- PRESS THE INDICATED BUTTON TO CHOOSE THE DESIRED TEMPERATURE, EITHER IN **°C** CELSIUS OR IN **°F** FAHRENHEIT.



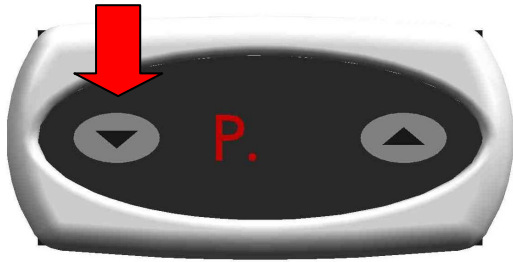
- BY CONTINUING TO PRESS ON THE INDICATED BUTTON, THE WRITING **P** WILL APPEAR ON THE DISPLAY.



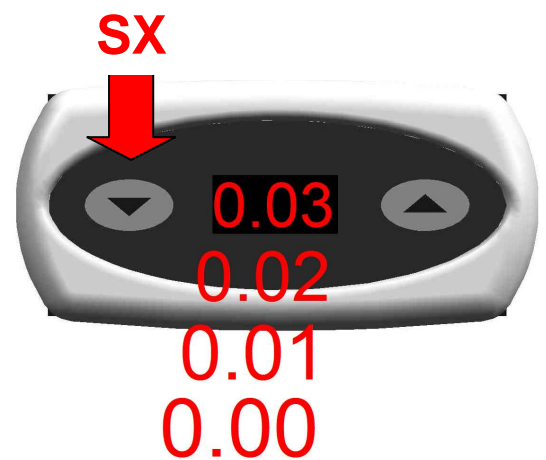
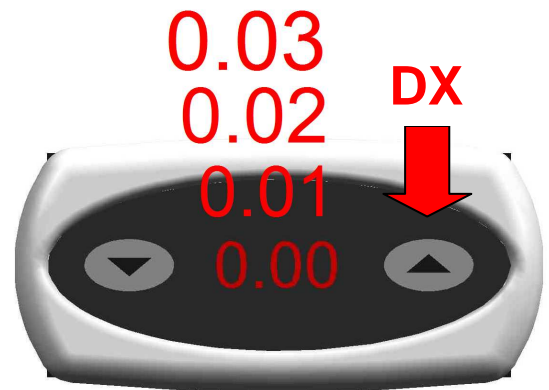
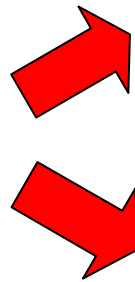
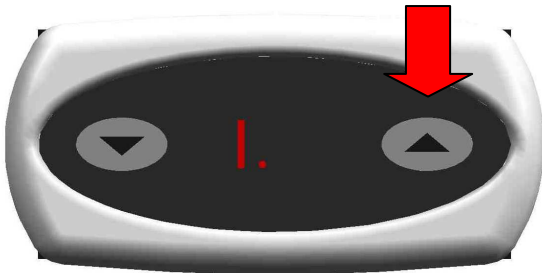
- PRESSING THE INDICATED BUTTON TO INPUT A NUMBER THAT FOR THIS MACHINE WOULD HAVE THE VALUE EQUAL TO **1** THE VALUE WILL INCREASE BY PRESSING THE BUTTON **DX** AND DIMINISH BY PRESSING THE BUTTON **SX**



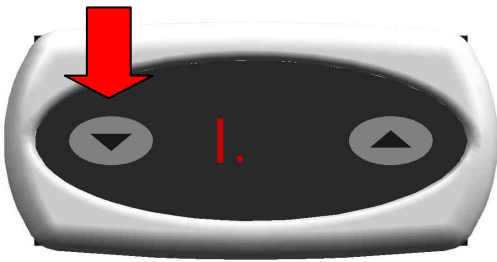
- CONTINUING TO PRESS ON THE INDICATED BUTTON, THE WRITING **I** WILL APPEAR ON THE DISPLAY.



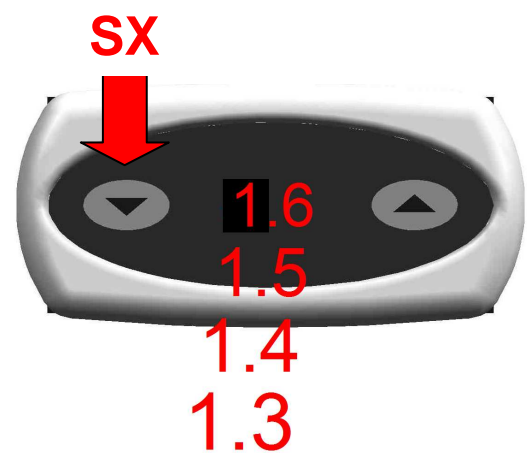
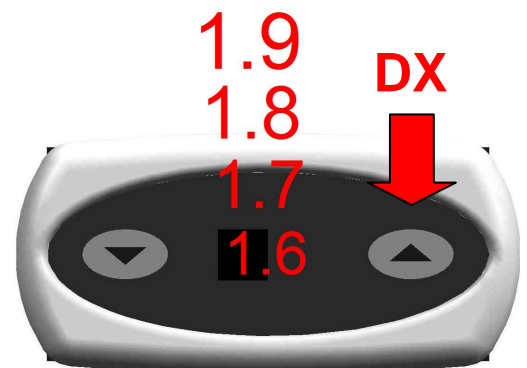
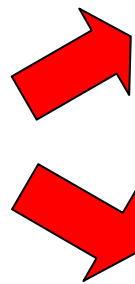
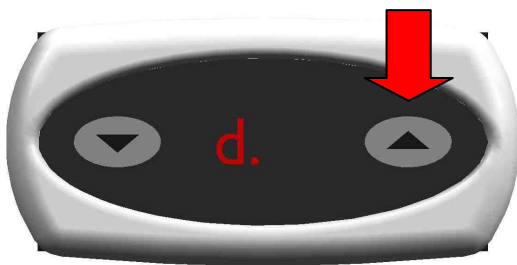
- PRESSING THE INDICATED BUTTON TO INPUT A NUMBER THAT FOR THIS MACHINE WOULD HAVE THE VALUE EQUAL TO **0.00** THE VALUE WILL INCREASE BY PRESSING THE BUTTON **DX** AND DIMINISH BY PRESSING THE BUTTON **SX**



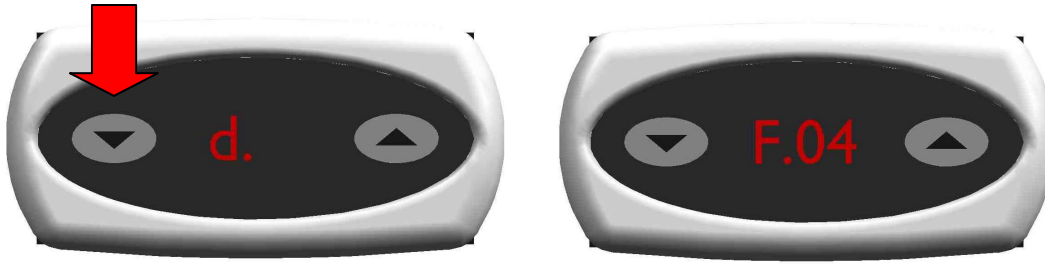
- CONTINUING TO PRESS THE INDICATED BUTTON, THE WRITING **D** WILL APPEAR IN THE DISPLAY.



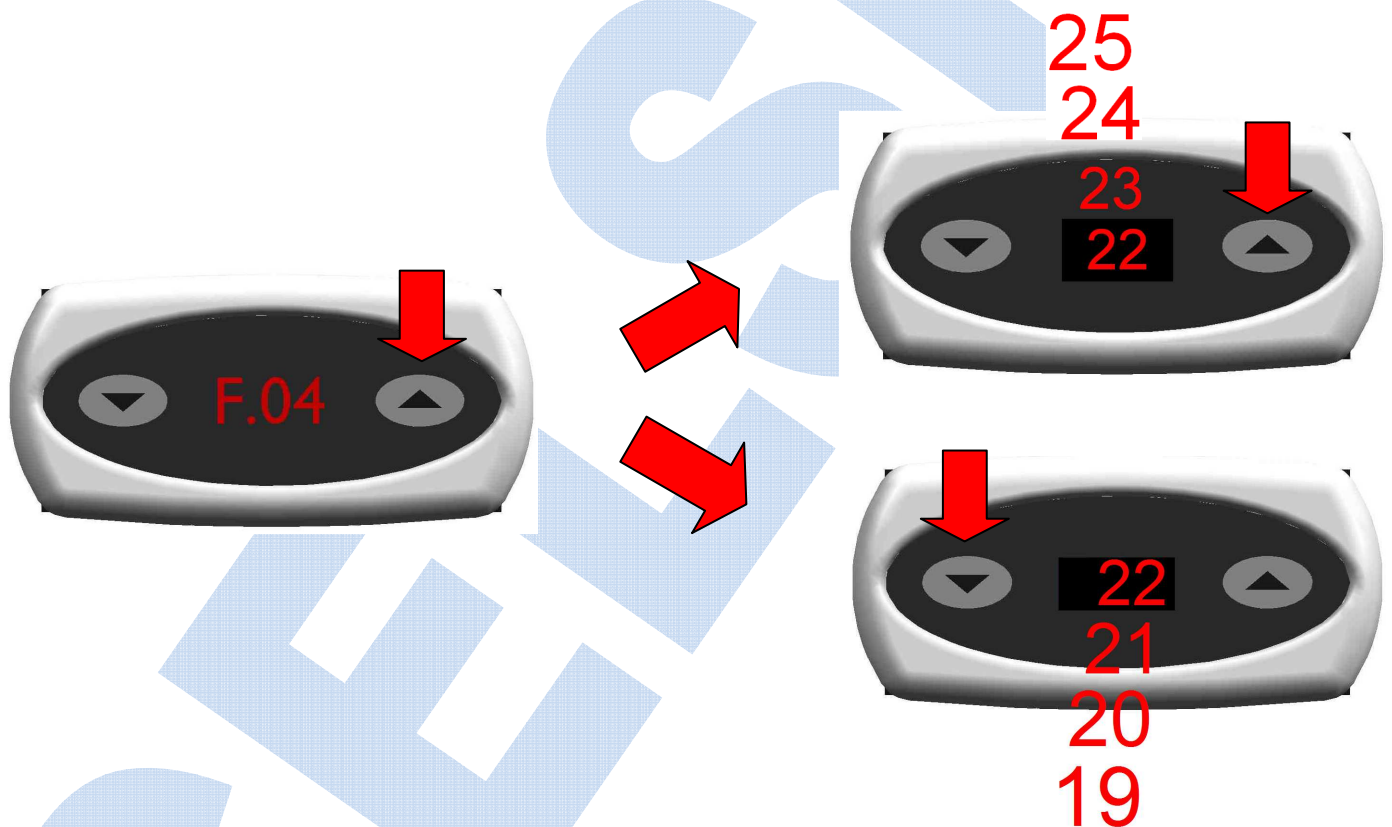
- PRESSING THE INDICATED BUTTON TO INPUT A NUMBER THAT FOR THIS MACHINE WOULD HAVE THE VALUE EQUAL TO **1.6** THE VALUE WILL INCREASE BY PRESSING THE BUTTON **DX** AND DIMINISH BY PRESSING THE BUTTON **SX**



- CONTINUING TO PRESS THE INDICATED BUTTON, THE WRITING **F.04** WILL APPEAR IN THE DISPLAY. (THIS PARAMETER APPLIES TO THE SET TEMPERATURE IN **CELSIUS** DEGREES)

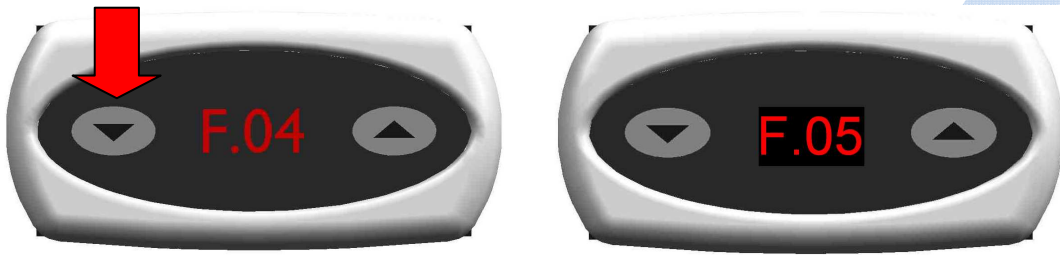


- PRESSING THE INDICATED BUTTON TO INPUT A NUMBER THAT FOR THIS MACHINE WOULD HAVE THE VALUE EQUAL TO **22** THE VALUE WILL INCREASE BY PRESSING THE BUTTON **DX** AND DIMINISH BY PRESSING THE BUTTON **SX**

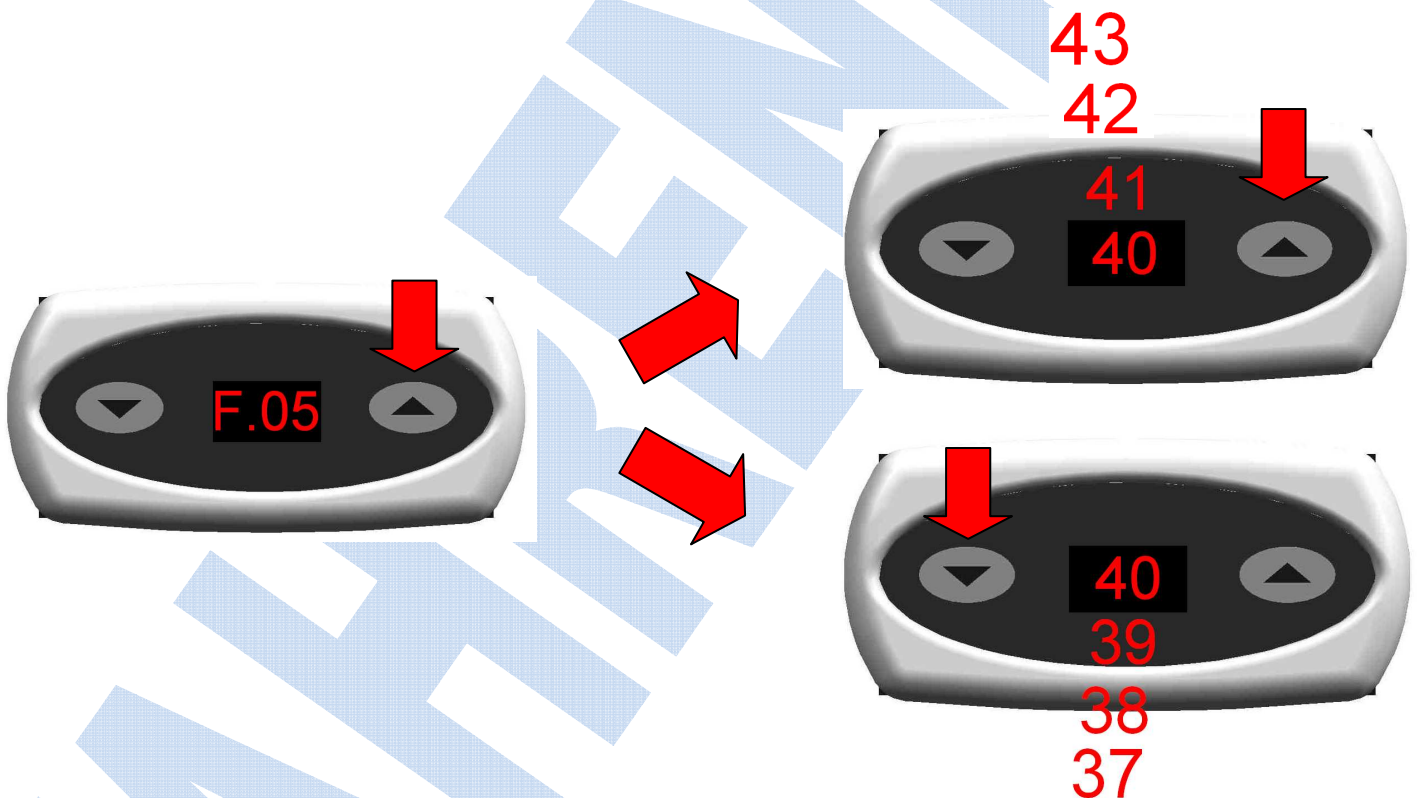


THE AMOUNT INSERTED (INCREASED OR DECREASED) REPRESENTS THE DIFFERENCE BETWEEN THE TEMPERATURE OF THE BOILER WATER AND THE WATER THAT IS EXTRACTED FROM THE GROUP HEAD.

- CONTINUING TO PRESS THE INDICATED BUTTON, THE WRITING **F.05** WILL APPEAR IN THE DISPLAY. (THIS PARAMETER APPLIES TO THE SET TEMPERATURE IN **FAHRENHEIT** DEGREES)



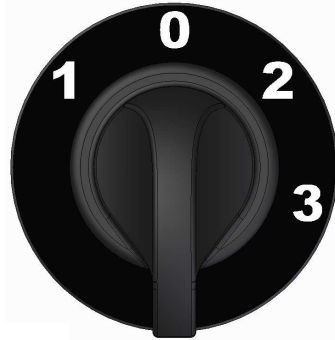
- PRESSING THE INDICATED BUTTON TO INPUT A NUMBER THAT FOR THIS MACHINE WOULD HAVE THE VALUE EQUAL TO **40** THE VALUE WILL INCREASE BY PRESSING THE BUTTON **DX** AND DIMINISH BY PRESSING THE BUTTON **SX**



THE AMOUNT INSERTED (INCREASED OR DECREASED) REPRESENTS THE DIFFERENCE BETWEEN THE TEMPERATURE OF THE BOILER WATER AND THE WATER THAT IS EXTRACTED FROM THE GROUP HEAD.

## TO SAVE THE PROGRAM

- SHUT OFF THE MACHINE AND RESTART IT WITHOUT PRESSING ANY BUTTONS ON THE TEMPERATURE REGULATOR.



## ALARMS

- IN CASE OF DISCONNECTED PROBE THE DISPLAY VISUALIZES THE WRITING **A1**, THE EXIT OF REGULATION AND THE PROGRAM SYSTEM ARE DISABLED.

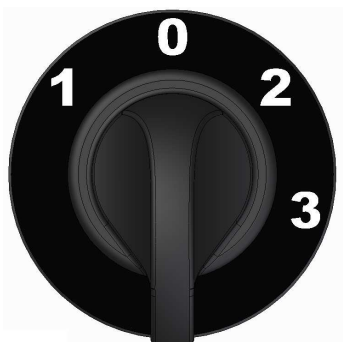


- IN CASE OF PROBE IN SHORT CIRCUIT THE DISPLAY VISUALIZES THE WRITING **A2**. THE EXIT OF REGULATION AND THE PROGRAM SYSTEM ARE DISABLED.

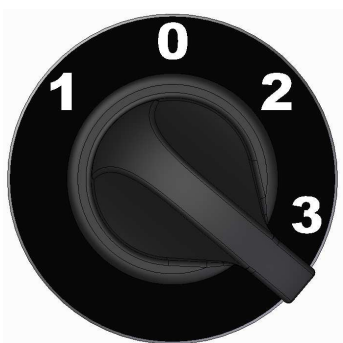




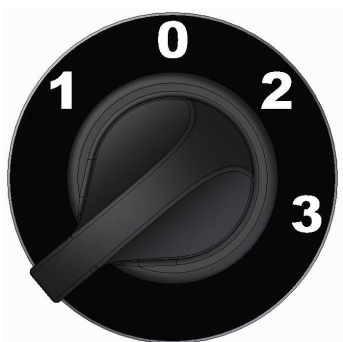
# POSITION DE FONCTIONNEMENT DU COMMUTATEUR



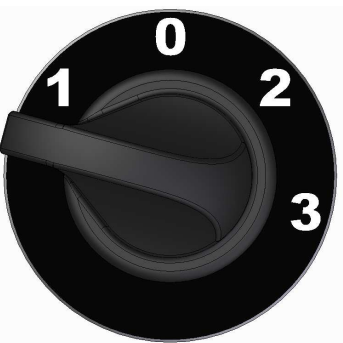
<b>0</b>	<b>MACHINE FERMÉ</b>
----------	----------------------



<b>1</b>	<b>CHARGÈ DE L'EAU ET ALIMENTATION SANS CHAUFFAGE</b>
----------	---



<b>2</b>	<b>ALIMENTATION ET CHAUFFAGE CHAUDIERE AVEC DEMI PUISSANCE</b>
----------	--



<b>3</b>	<b>ALIMENTATION ET CHAUFFAGE CHAUDIERE AVEC MAXIMAL PUISSANCE</b>
----------	---



# INTERRUPTEUR RESISTANCE CHAUDIERE GROUPE



**CHAUFFAGE CHAUDIERE  
GROUPE AVEC DEMI  
PUISSANCE**



**CHAUFFAGE CHAUDIERE  
GROUPE AVEC MAXIMAL  
PUISSANCE**

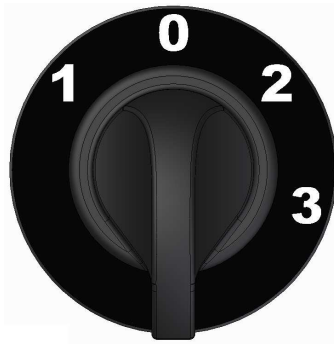
# TABLEAU PARAMÈTRES DE RÉGLAGE

PARAMÈTRES	ÉCRAN	DESCRIPTION
F.03	°F	Unité de mesure degrés Fahrenheit
	°C	Unité de mesure degrés Celsius
P.	1	Où 1 indique la valeur de la constante proportionnelle du contrôle PID ,qui a la fonction pour éteindre et allumer la résistance de sorte que correspond le mieux à la température de consigne, plus l'impulsion ralentit (sinon, la valeur obtenue doit être de dépasser la valeur de consigne).
I.	0.00	Où 0.00 indique la valeur de la constante intégrative du contrôle PID ,qui a pour fonction de calculer l'accumulation d'erreur (dans le cas d'une machine à café est très faible), c'est à dire l'analyse du temps restant pour atteindre défaut.
d.	1.6	Où 1.6 indique la valeur de la constante dérivée du contrôle PID ,qui a pour fonction d'évaluer le système de chauffage (c'est-à-dire, si la température augmente ou diminue) et sur la base de cette analyse détermine la durée d'impulsion de la résistance.
F.04	22	Où 22 indique la valeur qui représente la différence entre la température de l'eau dans la chaudière et l'eau qui sort du groupe pendant la distribution du café (Ce paramètre s'applique à la température de consigne en degrés <b>Celsius</b> )
F.05	40	Où 40 indique la valeur qui représente la différence entre la température de l'eau dans la chaudière et l'eau qui sort du groupe pendant la distribution du café (Ce paramètre s'applique à la température de consigne en degrés <b>Fahrenheit</b> )

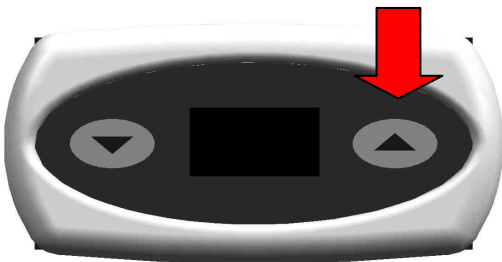
POUR QUITTER LE MODE DE PROGRAMMATION DES PARAMÈTRES, ÉTEINDRE LA MACHINE.

## REMISE A ZERO

- ETEINDRE LA MACHINE



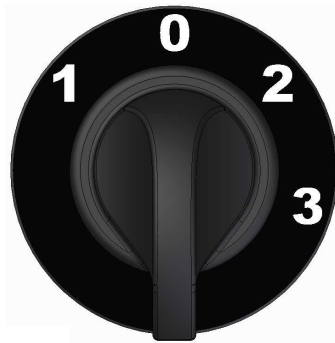
- ALLUMER LA MACHINE EN TENANT APPUYÉE LA TOUCHE INDICUÉE PAR LE RÉGULATEUR JUSQU'À CE QUE L'AFFICHEUR INDIQUE PRS.



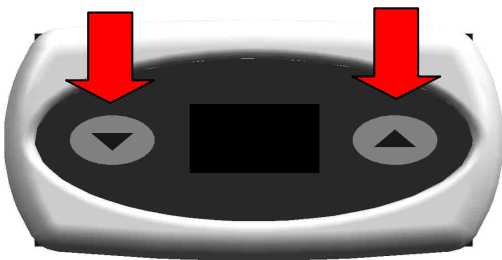
A L'ALLUMAGE DE LA MACHINE LE RÉGULATEUR REPREND LES VALEURS RÉGLÉES EN USINE.

# PROGRAMMATION

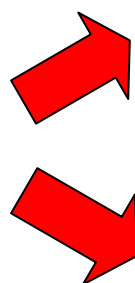
- ETEINDRE LA MACHINE



- ALLUMER LA MACHINE EN TEANT APPUYÉES SIMULTANÉMENT LES TOUCHES DU RÉGULATEUR COMME INDIQUÉ, JUSQU'À CE QUE SOIT AFFICHÉ **F.03**



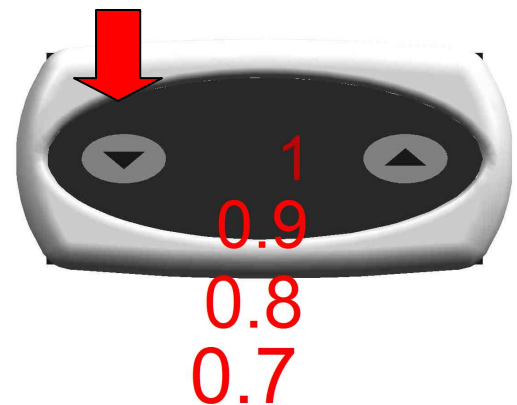
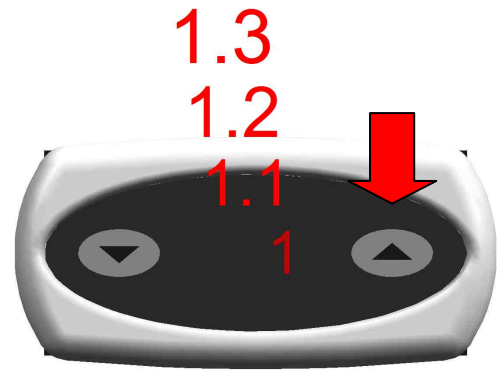
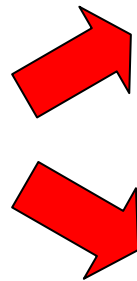
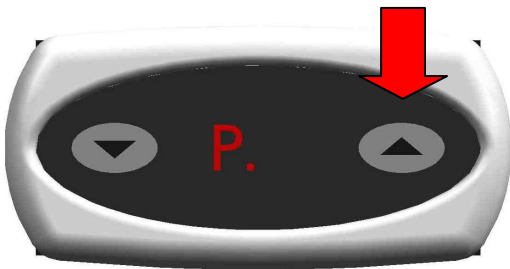
- APPUYER LA TOUCHE INDIQUÉE POUR CHOISIR L'UNITÉ DE TEMPÉRATURE **°C** CENTIGRADE OU **°F** FAHRENHEIT.



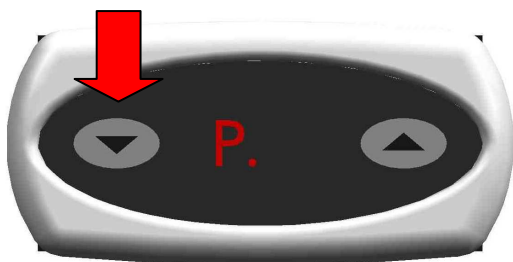
- EN CONTINUANT D'APPUYER, LA TOUCHE INDICUÉE APPARAÎT LA LETTRE **P**



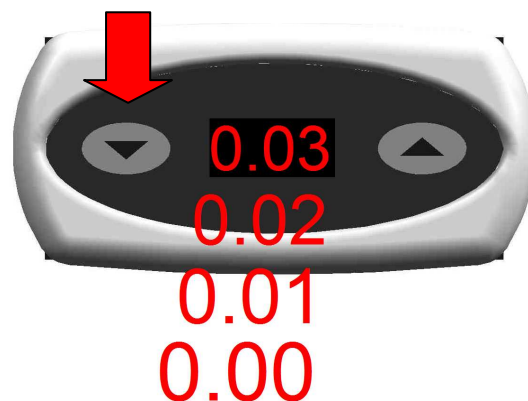
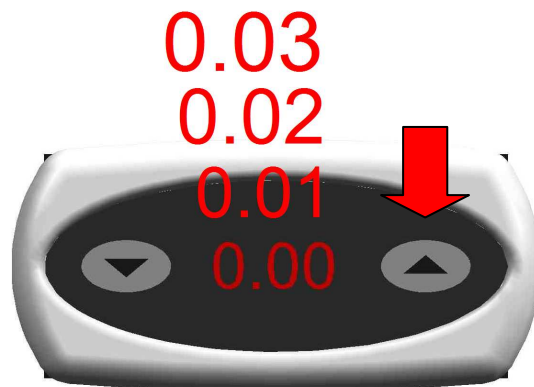
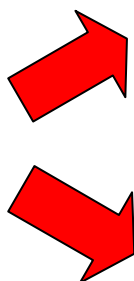
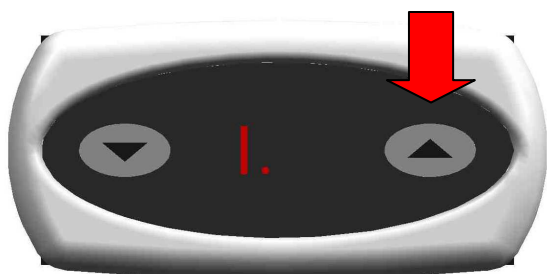
- APPUYER LA TOUCHE INDICUÉE POUR PROGRAMMER LA VALEUR QUI POUR CETTE MACHINE DOIT ÊTRE ÉGALE À **1**  
LA VALEUR AUGMENTE EN APPUYANT SUR LA TOUCHE DROITE ET DIMINUE PAR LA TOUCHE GAUCHE



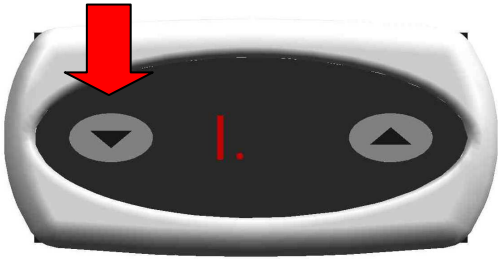
- EN CONTINUANT D'APPUYER SUR LA TOUCHE INDIQUÉE, LA LETTRE **I** APPARAÎT SUR L'AFFICHEUR.



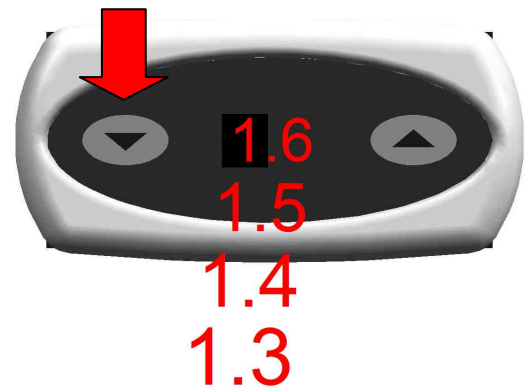
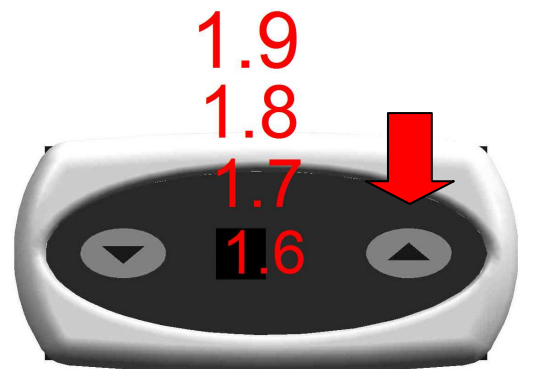
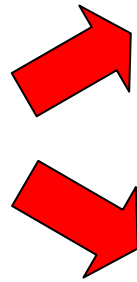
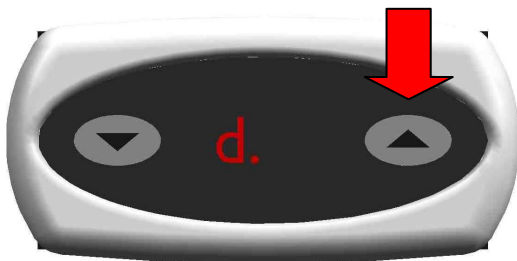
- APPUYER SUR LA TOUCHE INDIQUÉE POUR PROGRAMMER LA VALEUR QUI POUR CETTE MACHINE DOIT ÊTRE ÉGALE À **0.00**  
LA VALEUR AUGMENTE EN APPUYANT À DROITE ET DIMINUE EN APPUYANT À GAUCHE.



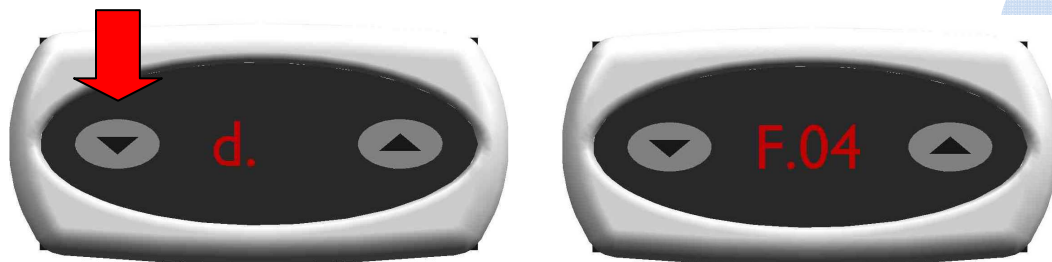
- EN CONTINUANT D'APPUYER LA TOUCHE, L'AFFICHEUR INDIQUERA **d**



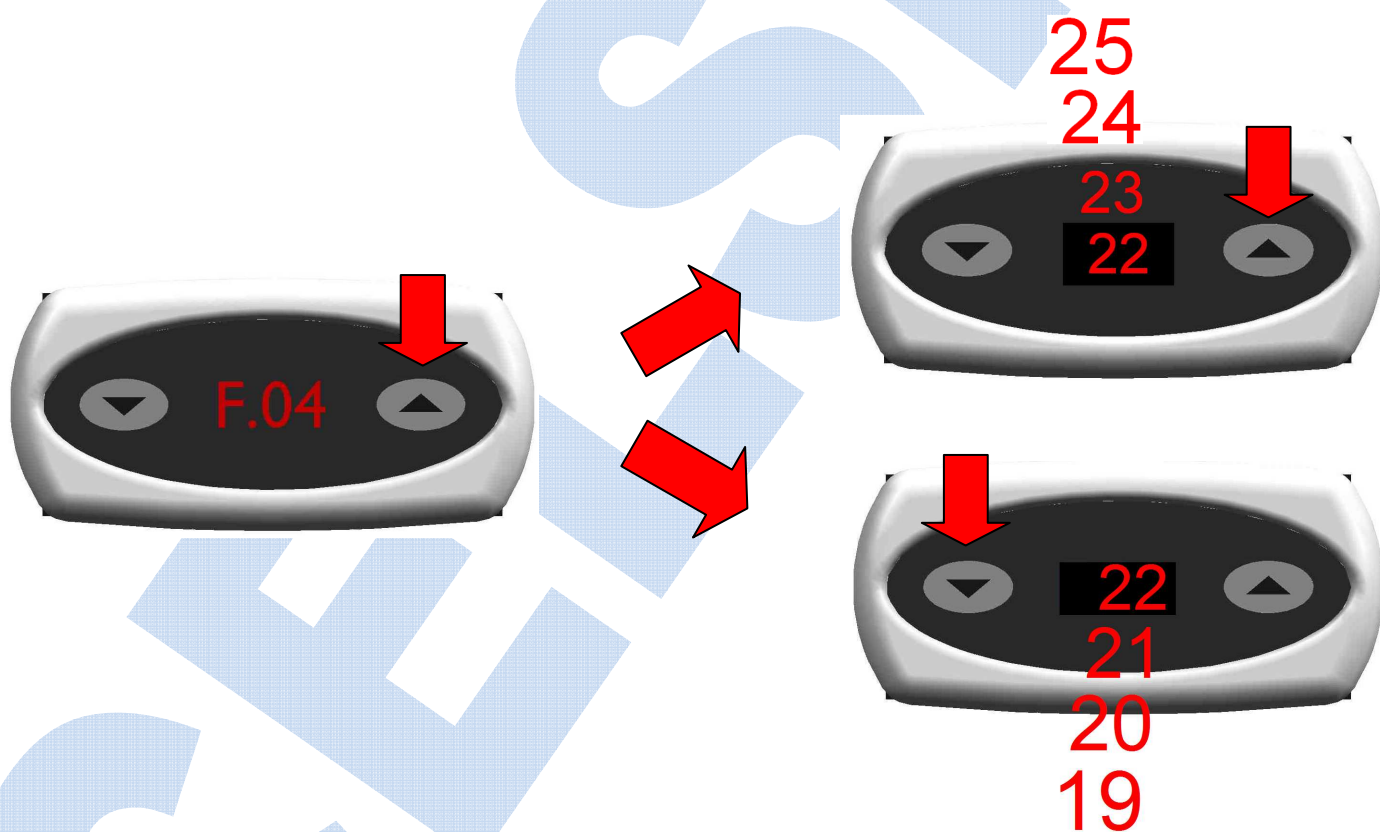
- APPUYER SUR LA TOUCHE INDIQUÉE POUR PROGRAMMER LA VALEUR QUI POUR CETTE MACHINE DOIT ÊTRE ÉGALE À **1.6**  
LA VALEUR AUGMENTE EN APPUYANT À DROITE ET DIMINUE EN APPUYANT À GAUCHE.



- EN CONTINUANT D'APPUYER LA TOUCHE, L'AFFICHEUR INDIQUERA **F.04.** ( CE PARAMÈTRE S'APPLIQUE À LA TEMPÉRATURE DE CONSIGNE EN DEGRÈS **CELSIUS**)



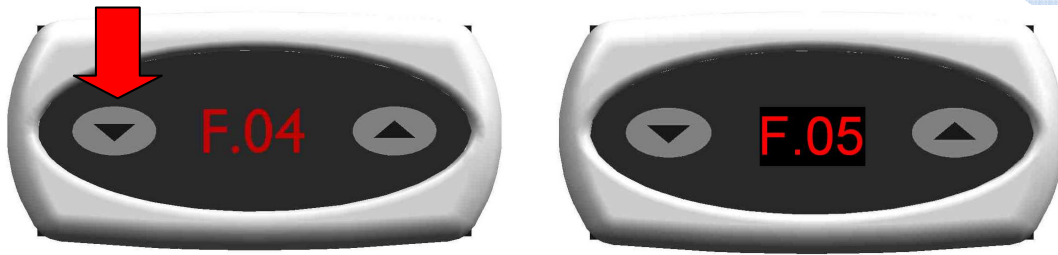
APPUYER SUR LA TOUCHE INDIQUÉE POUR PROGRAMMER LA VALEUR QUI POUR CETTE MACHINE DOIT ÊTRE ÉGALE À **22.**  
LA VALEUR AUGMENTE EN APPUYANT À DROITE ET DIMINUE EN APPUYANT À GAUCHE.



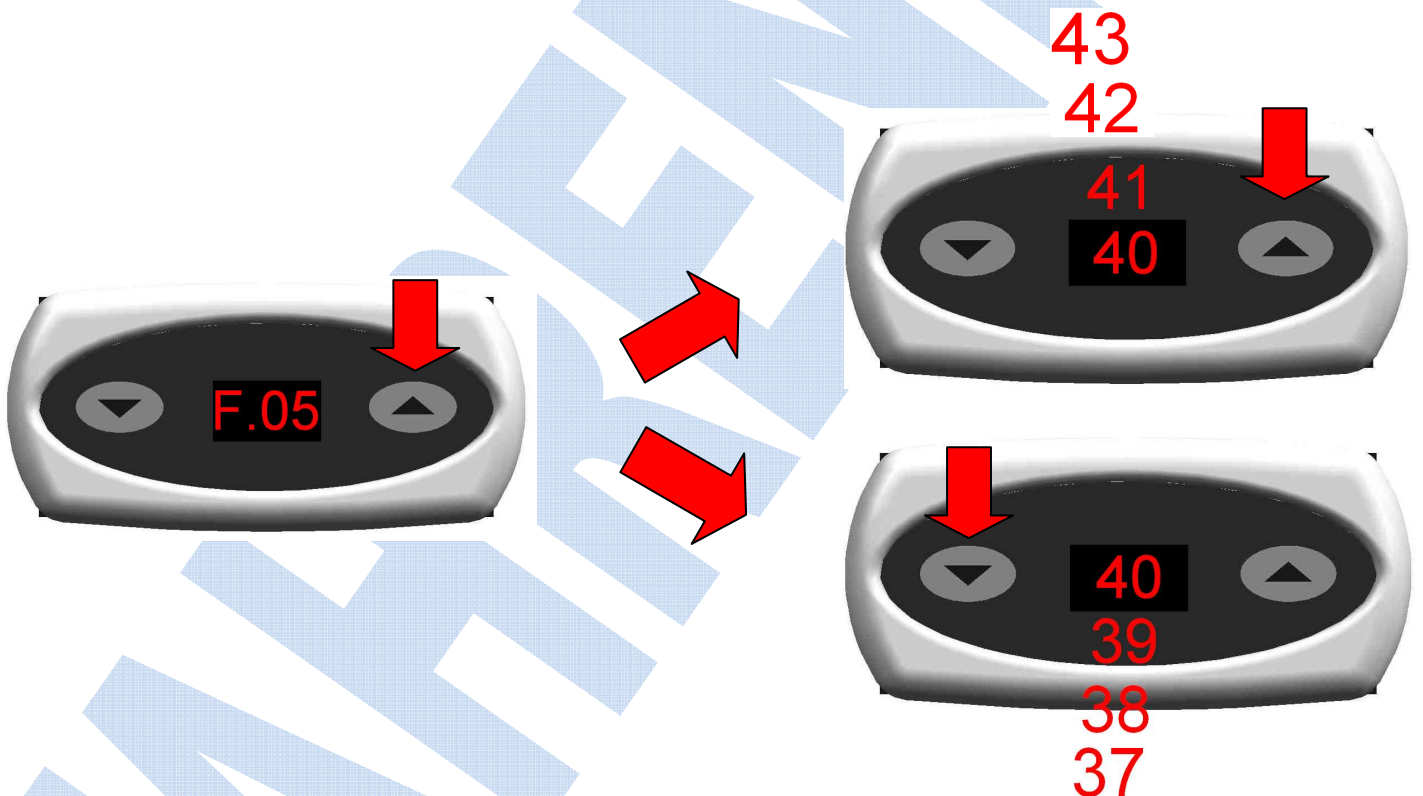
LA VALEUR INTRODUE REPRÉSENTE LA DIFFÉRENCE ENTRE LA TEMPÉRATURE DE L'EAU EN CHAUDIÈRE ET EN SORTIE GROUPE DURANT L'INFUSION.



- EN CONTINUANT D'APPUYER LA TOUCHE, L'AFFICHEUR INDIQUERA **F.05** ( CE PARAMÈTRE S'APPLIQUE À LA TEMPÉRATURE DE CONSIGNE EN DEGRÈS FAHRENHEIT)



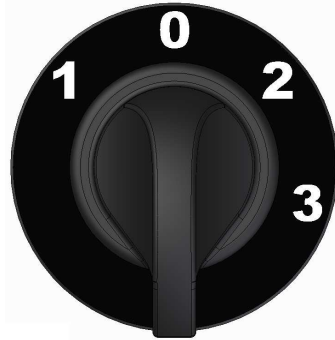
APPUYER SUR LA TOUCHE INDIQUÉE POUR PROGRAMMER LA VALEUR QUI POUR CETTE MACHINE DOIT ÊTRE ÉGALE À **40**  
LA VALEUR AUGMENTE EN APPUYANT À DROITE ET DIMINUE EN APPUYANT À GAUCHE.



LA VALEUR INTRODUCITE REPRÉSENTE LA DIFFÉRENCE ENTRE LA TEMPÉRATURE DE L'EAU EN CHAUDIÈRE ET EN SORTIE GROUPE DURANT L'INFUSION.

## SAUVEGARDER DES DONNEES PROGRAMMEES

- ETEINDRE LA MACHINE ET REDÉMARRER SANS APPUYER SUR AUCUN BOUTON DU RÉGULATEUR.



## ALARMES

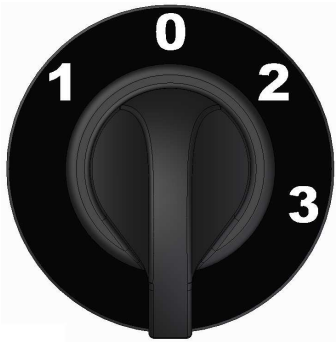
- EN CAS DE SONDE DECONNECTE LE DISPLAY VISUALISE L'INSCRIPTION **A1**, LA SONDE DE RÉGULATION ET LA PROGRAMMATION ILS SONT DÉSFFECTÉS.



- EN CAS DE SONDE EN COURT CIRCUIT LE DISPLAY VISUALISE L'INSCRIPTION **A2**, LA SONDE DE RÉGULATION ET LA PROGRAMMATION ILS SONT DÉSFFECTÉS.

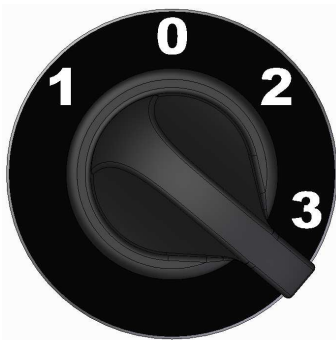


# POSICION DE FUNCIONAMIENTO COMMUTADOR



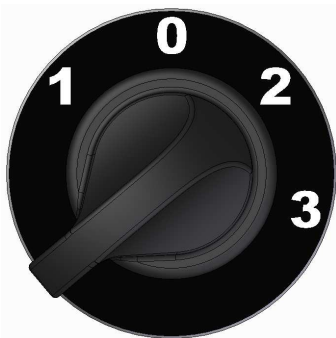
**0**

**MAQUINA APAGADA**



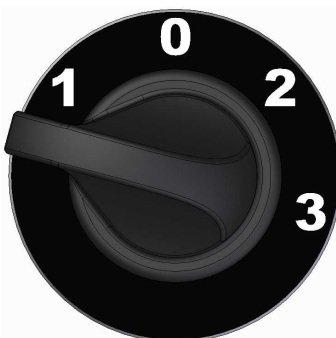
**1**

**CARGADA AGUA Y  
ALIMENTACION SIN  
CALEFACCION**



**2**

**ALIMENTACION Y  
CALEFACCION CALDERA  
CON POTENCIA  
DEMEDIADA**



**3**

**ALIMENTACION Y  
CALEFACCION CALDERA  
CON POTENCIA MAXIMA**

# INTERRUPTOR RESISTENCIA CALDERA GRUPO



**CALEFACCION CALDERA  
GRUPO CON POTENCIA  
DEMEDIADA**



**CALEFACCION CALDERA  
GRUPO CON POTENCIA  
MAXIMA**

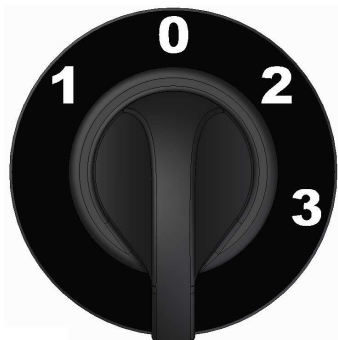
# TABLA DE LOS PARÁMETROS DE REGULACIÓN

PARÁMETROS	DISPLAY	DESCRIPCIÓN
<b>F.03</b>	°F	Unidad de medida grados Fahrenheit
	°C	Unidad de medida grados Celsius
<b>P.</b>	<b>1</b>	Donde 1 indica el valor de la constante proporcional del control PID, que tiene la función de apagar y encender la resistencia para que más coincide con el valor de la temperatura de consigna, más el impulso se ralentiza (de lo contrario el valor obtenido debe ser superior al valor ajustado).
<b>I.</b>	<b>0.00</b>	Donde 0.00 indica el valor de la constante integral del control PID, que tiene la función de calcular la acumulación de error (en el caso de una máquina de café es muy baja), es decir, el análisis del tiempo restante hasta llegar predeterminado.
<b>d.</b>	<b>1.6</b>	Donde 1.6 indica el valor de la constante derivativa del control PID, que tiene la función de evaluar el sistema de calentamiento (es decir, si la temperatura está aumentando o disminuyendo) y en base a este análisis decide la duración del impulso de la resistencia.
<b>F.04</b>	<b>22</b>	Donde 22 indica el valor que representa la diferencia entre la temperatura del agua en la caldera y el agua que viene del grupo durante la dispensación (Este parámetro se aplica a la temperatura fijada en grados <b>Celsius</b> )
<b>F.05</b>	<b>40</b>	Donde 40 indica el valor que representa la diferencia entre la temperatura del agua en la caldera y el agua que viene del grupo durante la dispensación (Este parámetro se aplica a la temperatura fijada en grados <b>Fahrenheit</b> )

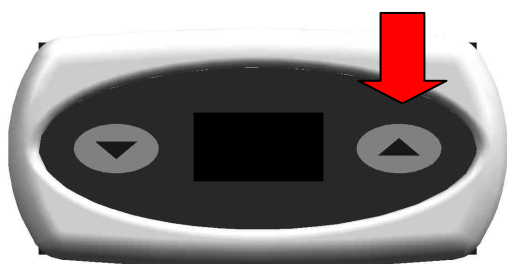
PASA SALIR DE LA PROGRAMACIÓN DE LOS PARÁMETROS, APAGAR LA MÁQUINA.

## PUESTA A CERO DE LOS VALORES PROGRAMADOS

- APAGAR LA MÁQUINA.



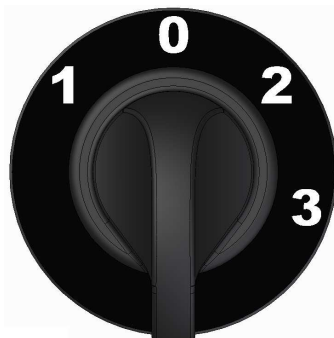
- ENDENDER LA MÁQUINA TENIENDO PULSADA LA TECLA INDICADA EN EL REGULADOR HASTA QUE EN EL DISPLAY APAREZCA **PrS**.



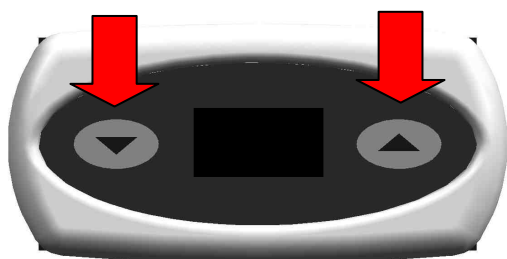
EN EL ENCENDIDO DE LA MÁQUINA EL REGULADOR VUELVE CON LOS VALORES CONFIGURADOS EN LA FÁBRICA.

## CONFIGURACIÓN DE LOS VALORES PROGRAMADOS

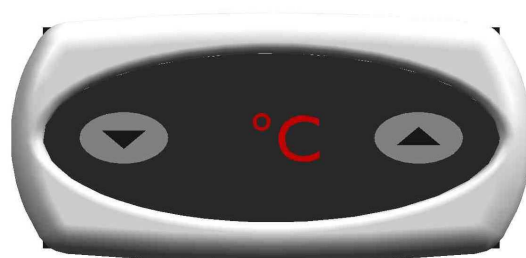
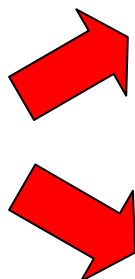
- APAGAR LA MÁQUINA.



- ENCENDER LA MÁQUINA TENIENDO PULSADAS SIMULTÁNEAMENTE AMBAS TECLAS DEL REGULADOR COMO SE INDICA, HASTA QUE EN EL DISPLAY APAREZCA ESCRITO **F.03**



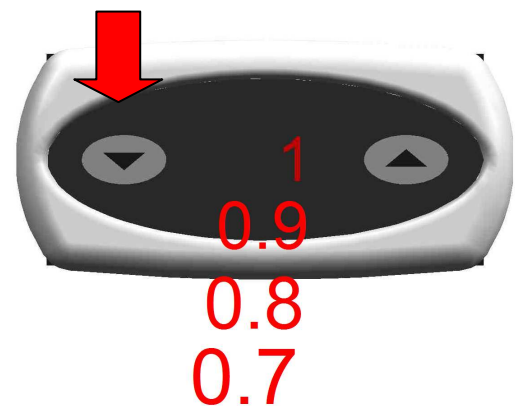
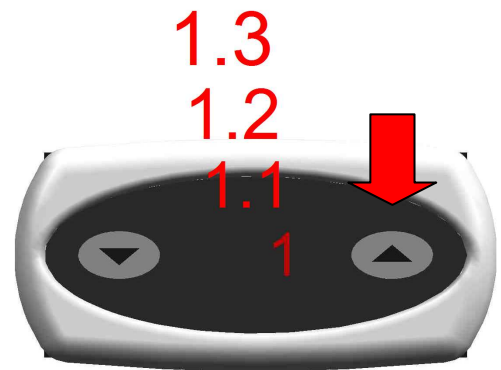
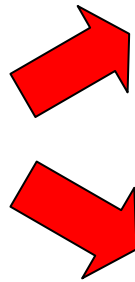
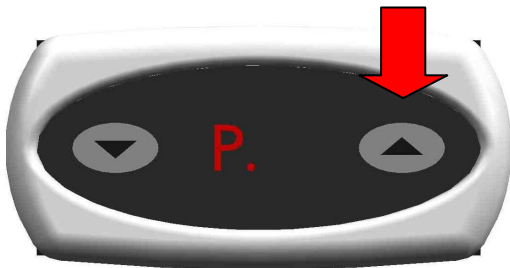
- PULSAR LA TECLA INDICADA PARA ELEGIR LA UNIDAD DE MEDIDA DE LA TEMPERATURA **°C** CELSIUS O **°F** FAHRENHEIT .



- CONTINUAR PULSANDO LA TECLA INDICADA HASTA QUE EN EL DISPLAY APAREZCA EL ESCRITO **P**

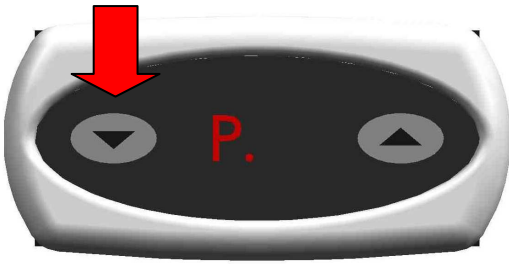


- PULSAR LA TECLA INDICADA PARA CONFIGURAR EL VALOR QUE PARA ESTA MÁQUINA DEBE SER IGUAL **1**  
EL VALOR AUMENTA PULSANDO LA TECLA A DX Y DISMINUYE PULSANDO LA TECLA A SX.

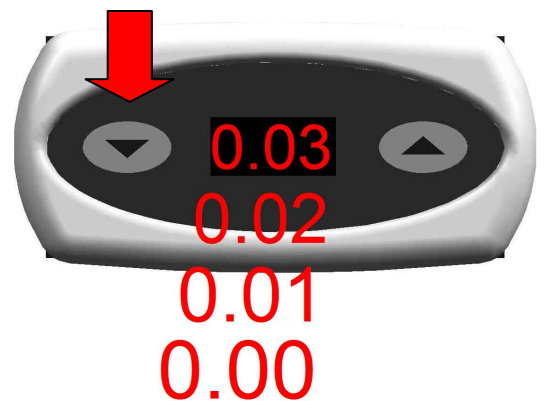
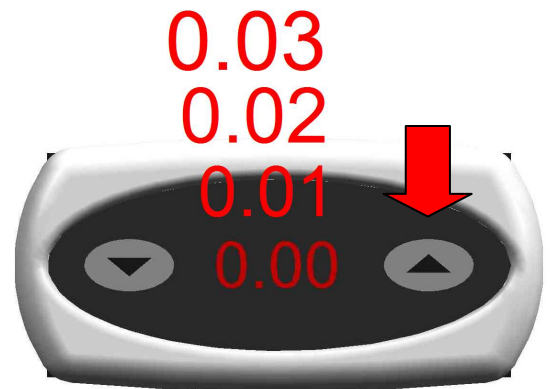
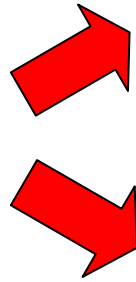
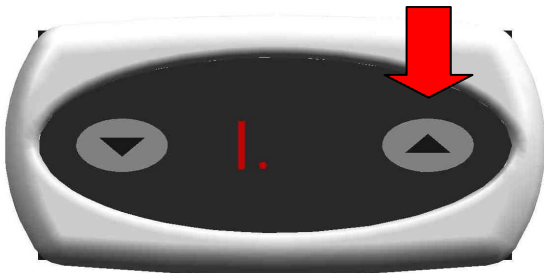




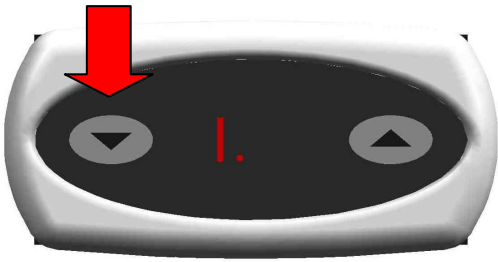
- CONTINUAR PULSANDO LA TECLA INDICADA HASTA QUE EN EL DISPLAY APAREZCA EL ESCRITO **I**



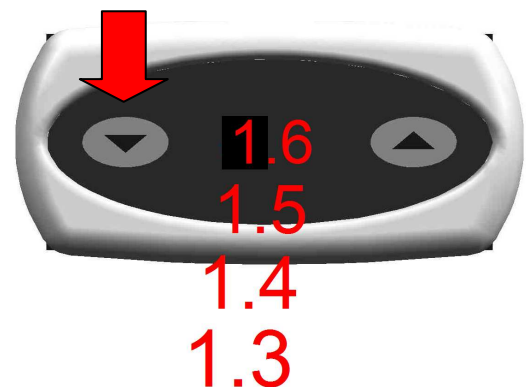
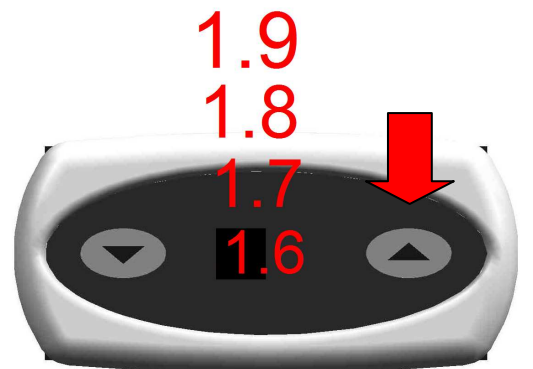
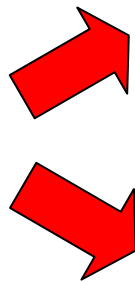
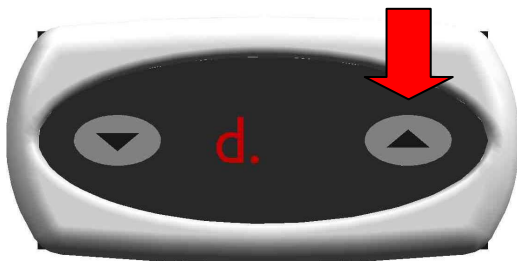
- PULSAR LA TECLA INDICADA PARA CONFIGURAR EL VALOR QUE PARA ESTA MÁQUINA DEBE SER IGUAL **0.00**  
EL VALOR AUMENTA PULSANDO LA TECLA A DX Y DISMINUYE PULSANDO LA TECLA A SX.



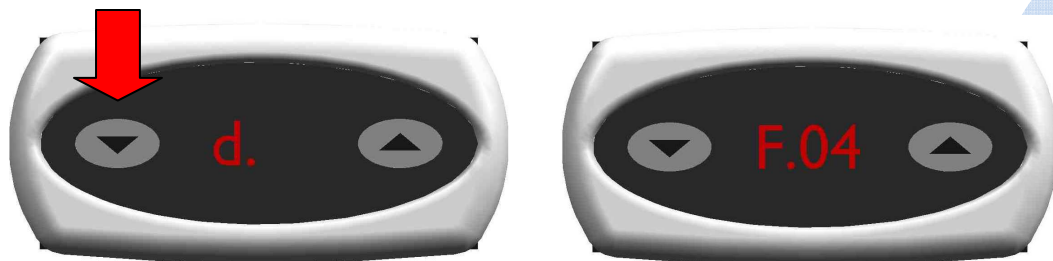
- CONTINUAR PULSANDO LA TECLA INDICADA HASTA QUE EN EL DISPLAY APAREZCA EL ESCRITO **d**



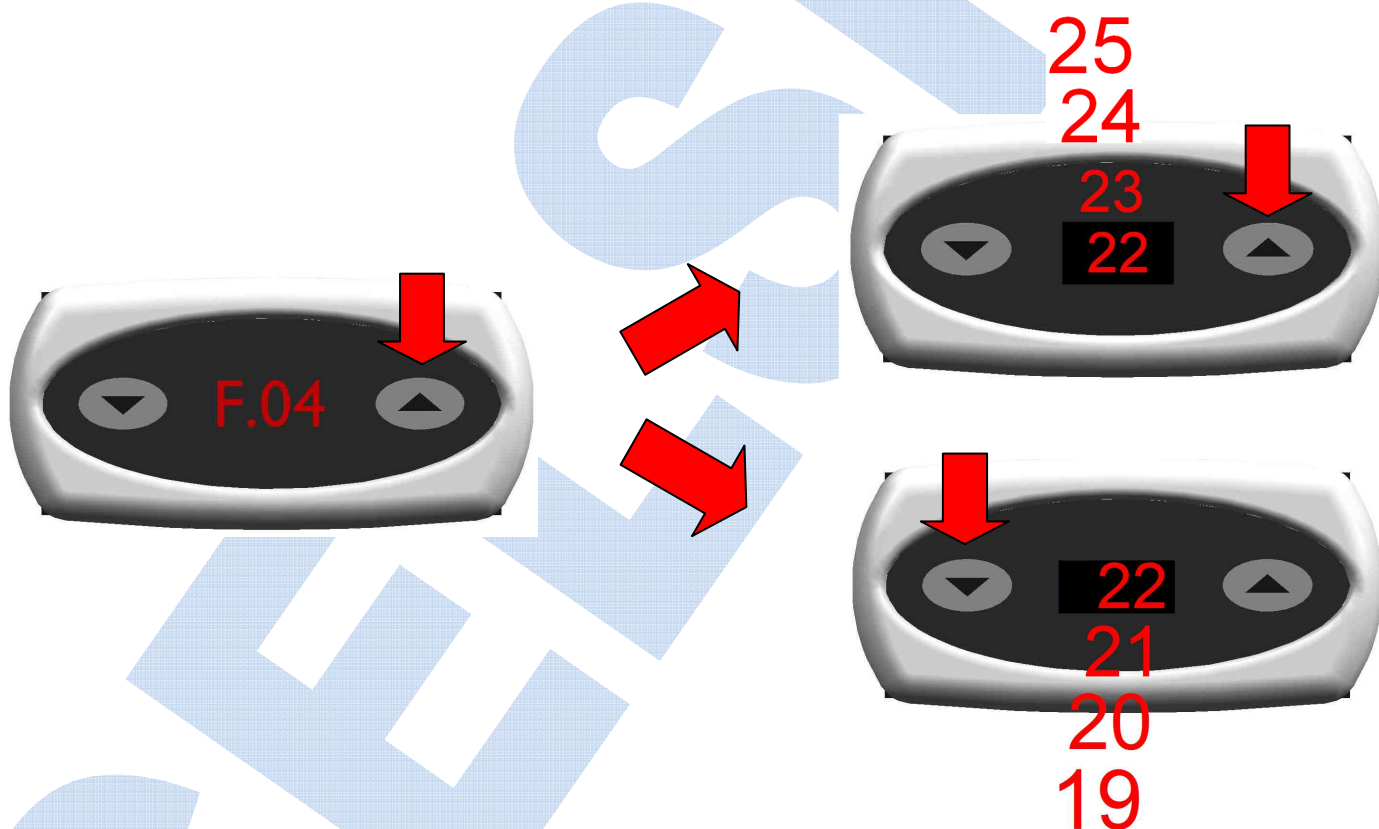
- PULSAR LA TECLA INDICADA PARA CONFIGURAR EL VALOR QUE PARA ESTA MÁQUINA DEBE SER IGUAL **1.6**  
EL VALOR AUMENTA PULSANDO LA TECLA A DX Y DISMINUYE PULSANDO LA TECLA A SX.



- CONTINUAR PULSANDO LA TECLA INDICADA HASTA QUE EN EL DISPLAY APAREZCA EL ESCRITO **F.04** ( ESTE PARÁMETRO SE APLICA A LA TEMPERATURA EN GRADOS **CENTÍGRADOS**)

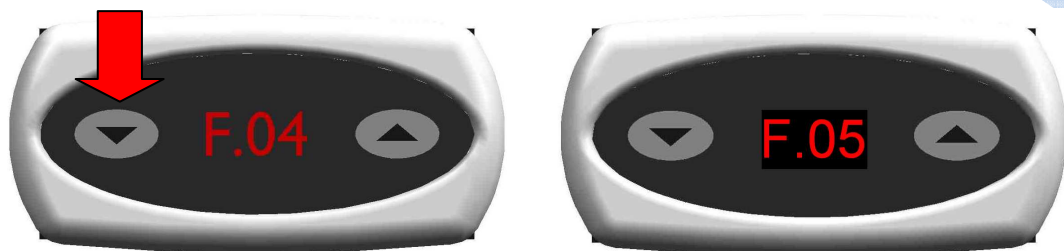


- PULSAR LA TECLA INDICADA PARA CONFIGURAR EL VALOR QUE PARA ESTA MÁQUINA DEBE SER IGUAL **22**  
EL VALOR AUMENTA PULSANDO LA TECLA A DX Y DISMINUYE PULSANDO LA TECLA A SX.

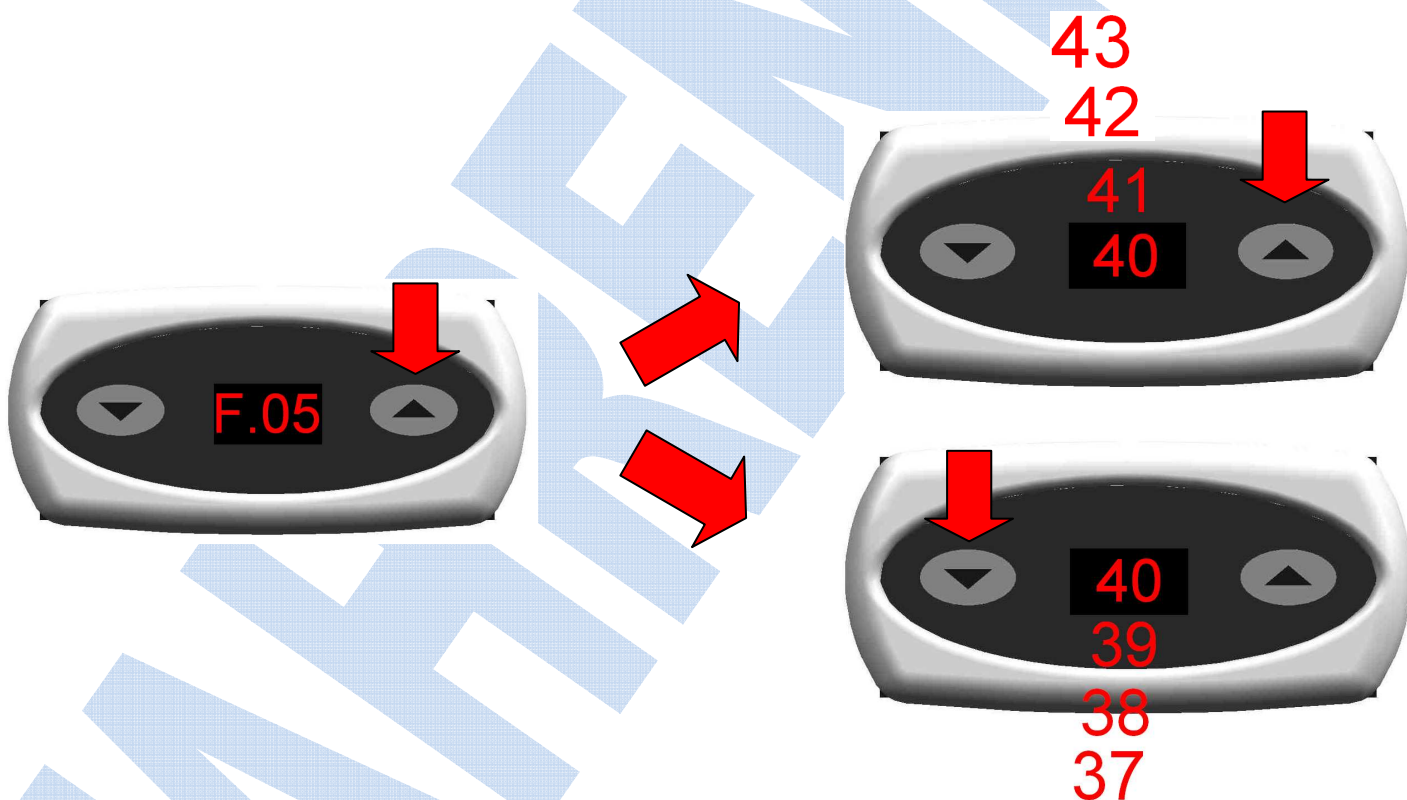


EL VALOR INCLUIDO REPRESENTA LA DIFERENCIA ENTRE LA TEMPERATURA DEL AGUA EN CALDERA E EL AGUA QUE SALE DEL GRUPO DURANTE LA CONCESIÓN.

- CONTINUAR PULSANDO LA TECLA INDICADA HASTA QUE EN EL DISPLAY APAREZCA EL ESCRITO **F.05** ( ESTE PARÁMETRO SE APLICA A LA TEMPERATURA EN GRADOS **FAHRENHEIT**)



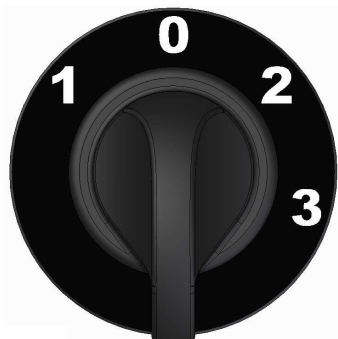
- PULSAR LA TECLA INDICADA PARA CONFIGURAR EL VALOR QUE PARA ESTA MÁQUINA DEBE SER IGUAL **40**  
EL VALOR AUMENTA PULSANDO LA TECLA A DX Y DISMINUYE PULSANDO LA TECLA A SX.



EL VALOR INCLUIDO REPRESENTA LA DIFERENCIA ENTRE LA TEMPERATURA DEL AGUA EN CALDERA E EL AGUA QUE SALE DEL GRUPO DURANTE LA CONCESIÓN.

## GUARDADO DE LOS VALORES CONFIGURADOS

- APAGAR LA MÁQUINA Y REENCENDERLA SIN PULSAR NINGUNA TECLA DEL REGULADOR.



## ALARMAS

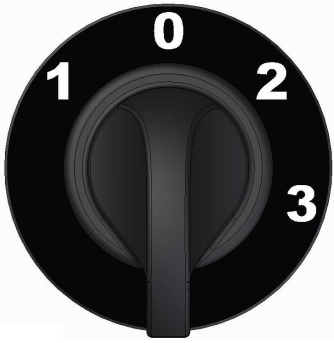
- EN EVENTO DE SONDA DESCONECTADO EN EL DISPLAY APARECERÀ LA ESCRITA **A1**, LA SALIDA DE AJUSTE Y LA PROGRAMACIÓN SON DESHABILITADO.



- EN EVENTO DE SONDA EN CORTO CIRCUITO EL DISPLAY APARECERÀ LA ESCRITA **A2**, LA SALIDA DE AJUSTE Y LA PROGRAMACIÓN SON DESHABILITADO.

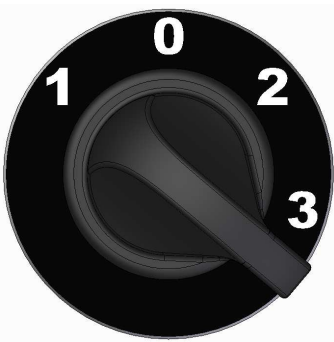


# FUNKTIONIEREN POSITION VON UMSCHALTER



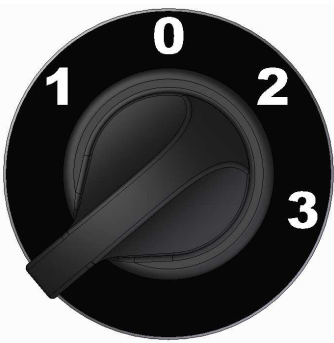
**0**

**KAFFEEMASCHINE LÖSCHT**



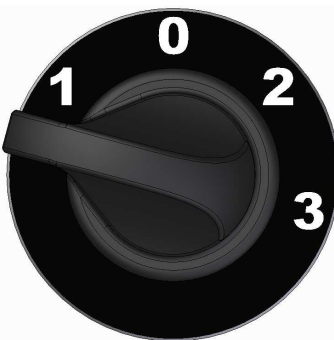
**1**

**WASSER LADEN UND  
ERNÄHRUNG OHNE  
ERWÄRMUNG**



**2**

**ERNÄHRUNG UND  
ERWÄRMUNG VON  
KESSEL MIT HALB MACHT**



**3**

**ERNÄHRUNG UND  
ERWÄRMUNG VON  
KESSEL MIT MAXIME  
MACHT**

# SCHALTER VON HEIZUNG KESSEL GRUPPE



**ERWÄRMUNG VON KESSEL  
GRUPPE MIT HALB MACHT**



**ERWÄRMUNG VON KESSEL  
GRUPPE MIT MAXIME MACHT**

# TABELLE EINSTELLPARAMETER

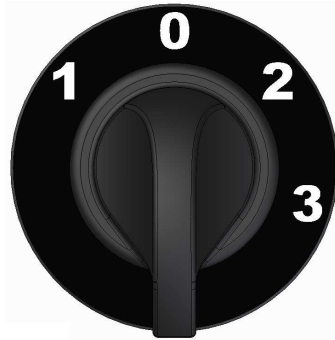
PARAMETER	DISPLAY	BESCHREIBUNG
<b>F.03</b>	°F	Maßeinheit Fahrenheit
	°C	Maßeinheit Celsius
<b>P.</b>	<b>1</b>	Wo 1 den Wert der proportionalen Konstante der Kontrolle Pid darstellt die die Funktion zu deaktivieren und schalten Sie der Heizung, so dass am ehesten die eingestellte Temperatur-Wert, desto mehr wird der Impuls verlangsamt (andernfalls wird der Wert erhalten sollte, um den eingestellten Wert überschreiten).
<b>I.</b>	<b>0.00</b>	Wo 0.00 den Wert der integrativen Konstante der Kontrolle Pid darstellt die die Funktion, um die Ansammlung von Fehlern (im Falle einer Kaffeemaschine ist sehr niedrig) zu berechnen hat, und zwar die Analyse der verbleibenden Zeit zum ursprünglichen erreichen.
<b>d.</b>	<b>1.6</b>	Wo 1.6 den Wert der abgeleiteten Konstante der Kontrolle Pid darstellt das die Funktion, die Heizungsanlage evaluieren (das heißt, wenn die Temperatur zunimmt oder abnimmt) hat und auf der Grundlage dieser Analyse bestimmt die Pulsdauer des Heizung.
<b>F.04</b>	<b>22</b>	Wo 22 zeigt den Wert, der den Unterschied zwischen der Wassertemperatur im Kessel und das Wasser, dass aus der Gruppe während der Abgabe kommt (Dieser Parameter gilt für die eingestellte Temperatur in Grad <b>Celsius</b> )
<b>F.05</b>	<b>40</b>	Wo 40 zeigt den Wert, der den Unterschied zwischen der Wassertemperatur im Kessel und das Wasser, dass aus der Gruppe während der Abgabe kommt (Dieser Parameter gilt für die eingestellte Temperatur in Grad <b>Fahrenheit</b> )

UM DIE PROGRAMMIERUNG DER PARAMETER ZU VERLASSEN, DIE STROMVERSORGUNG DER MASCHINE UNTERBRECHEN.

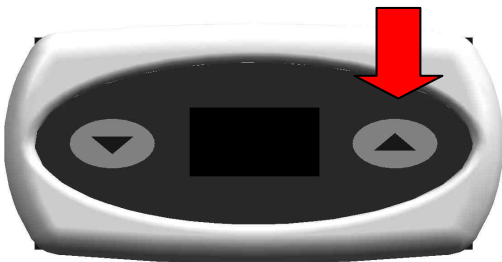


# RÜCKSETZEN EINGESTELLTER WERTE

- DIE MASCHINE AUSSCHALTEN



- DIE MARKIERTE TASTE DRÜCKEN UND DIE MASCHINE EINSCHALTEN, BIS IM DISPLAY **PrS** ERSCHEINT.



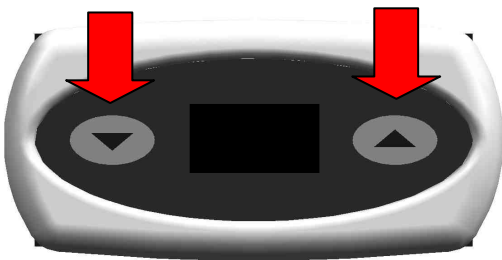
BEIM WIEDEREINSCHALTEN DER MASCHINE SIND DIE WERTE AUF DIE WERKSEINSTELLUNGEN ZURÜCKGESETZT.

# PROGRAMMIERUNG DER WERTE

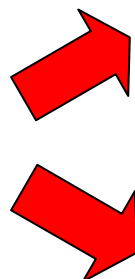
- DIE MASCHINE AUSSCHALTEN



- DIE BEIDEN MARKIERTEN TASTEN GEDRÜCKT HALTEN UND DIE MASCHINE EINSCHALTEN, BIS IM DISPLAY **F.03** ERSCHEINT.



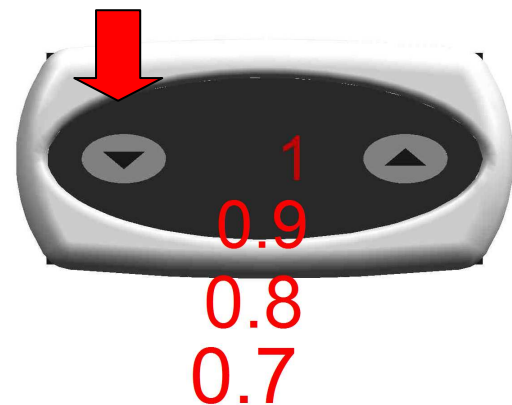
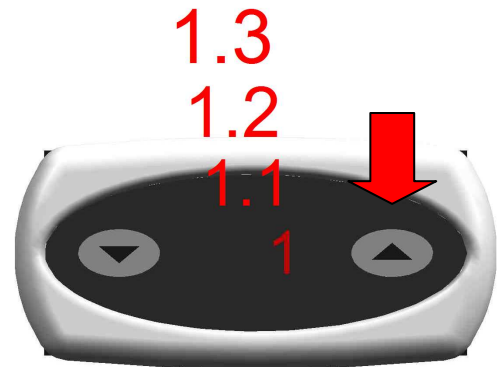
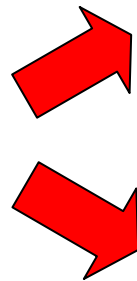
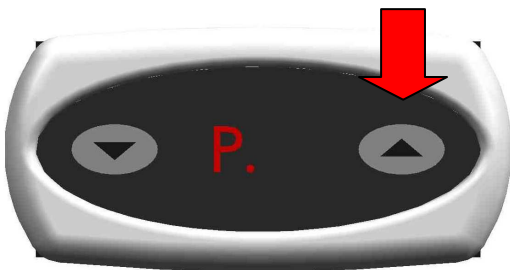
- DIE MARKIERTE TASTE DRÜCKEN, UM DIE TEMPERATUR AUF **°C** CELSIUS ODER **°F** FAHRENHEIT EINZUSTELLEN.



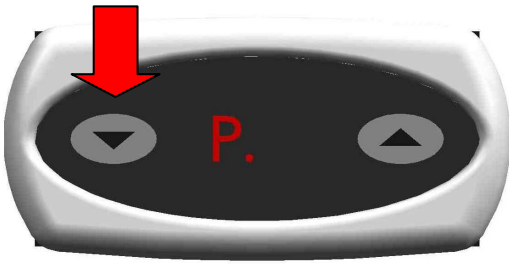
- DIE MARKIERTE TASTE DRÜCKEN, BIS IM DISPLAY **P.** ERSCHEINT.



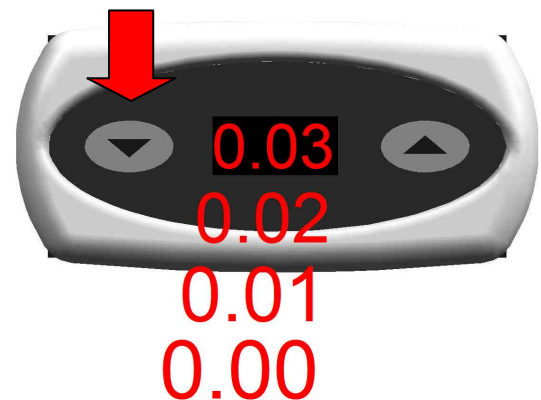
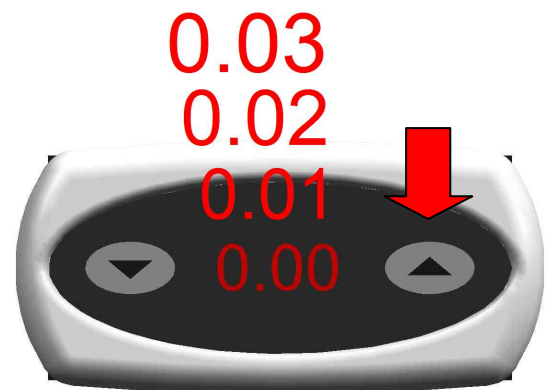
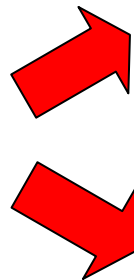
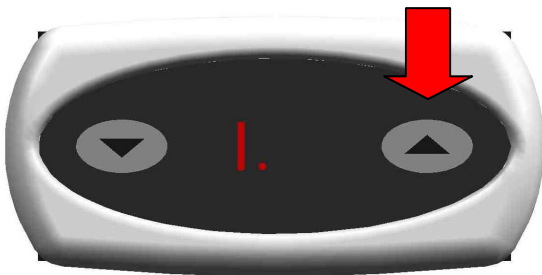
- DIE MARKIERTE TASTE DRÜCKEN, UM DEN WERT EINSTZUSTELLEN, DER BEI DIESER MASCHINE **1** SEIN MUSS.  
DER WERT ERHÖHT SICH DURCH DRÜCKEN DER RECHTEN UND VERRINGERT SICH DURCH DRÜCKEN DER LINKEN TASTE.



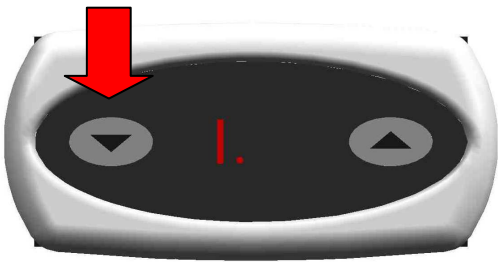
- DIE MARKIERTE TASTE DRÜCKEN BIS IM DISPLAY **I.** ERSCHEINT.



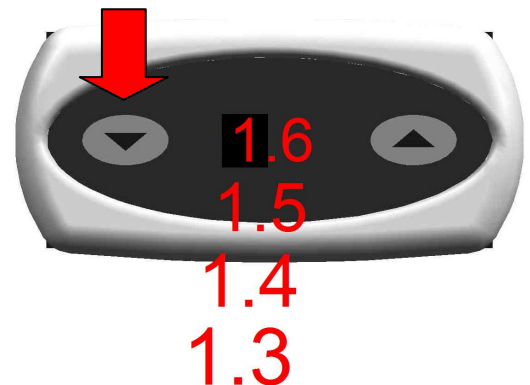
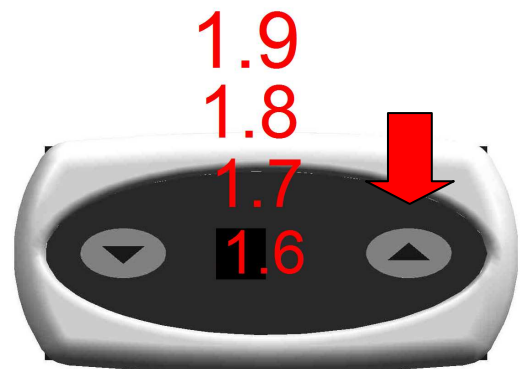
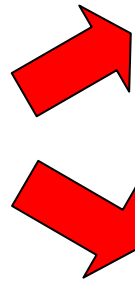
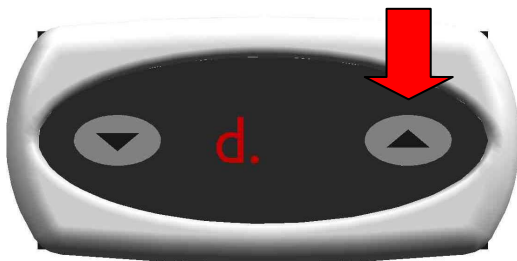
- DIE MARKIERTE TASTE DRÜCKEN, UM DEN WERT EINZUSTELLEN, DER BEI DIESER MASCHINE **0.00** SEIN MUSS.  
DER WERT ERHÖHT SICH DURCH DRÜCKEN DER RECHTEN UND VERRINGERT SICH DURCH DRÜCKEN DER LINKEN TASTE.



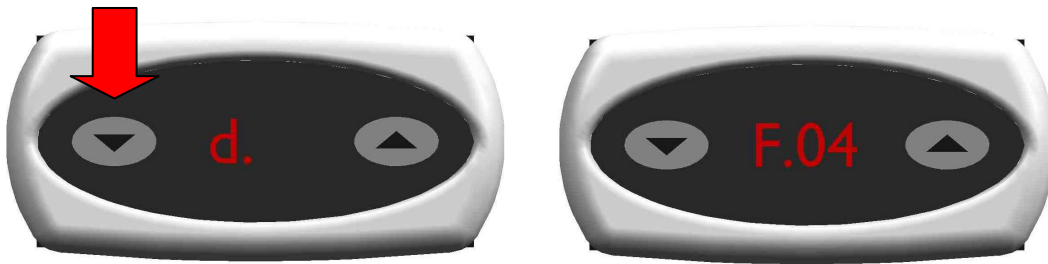
- DIE MARKIERTE TASTE DRÜCKEN BIS IM DISPLAY **d.** ERSCHEINT



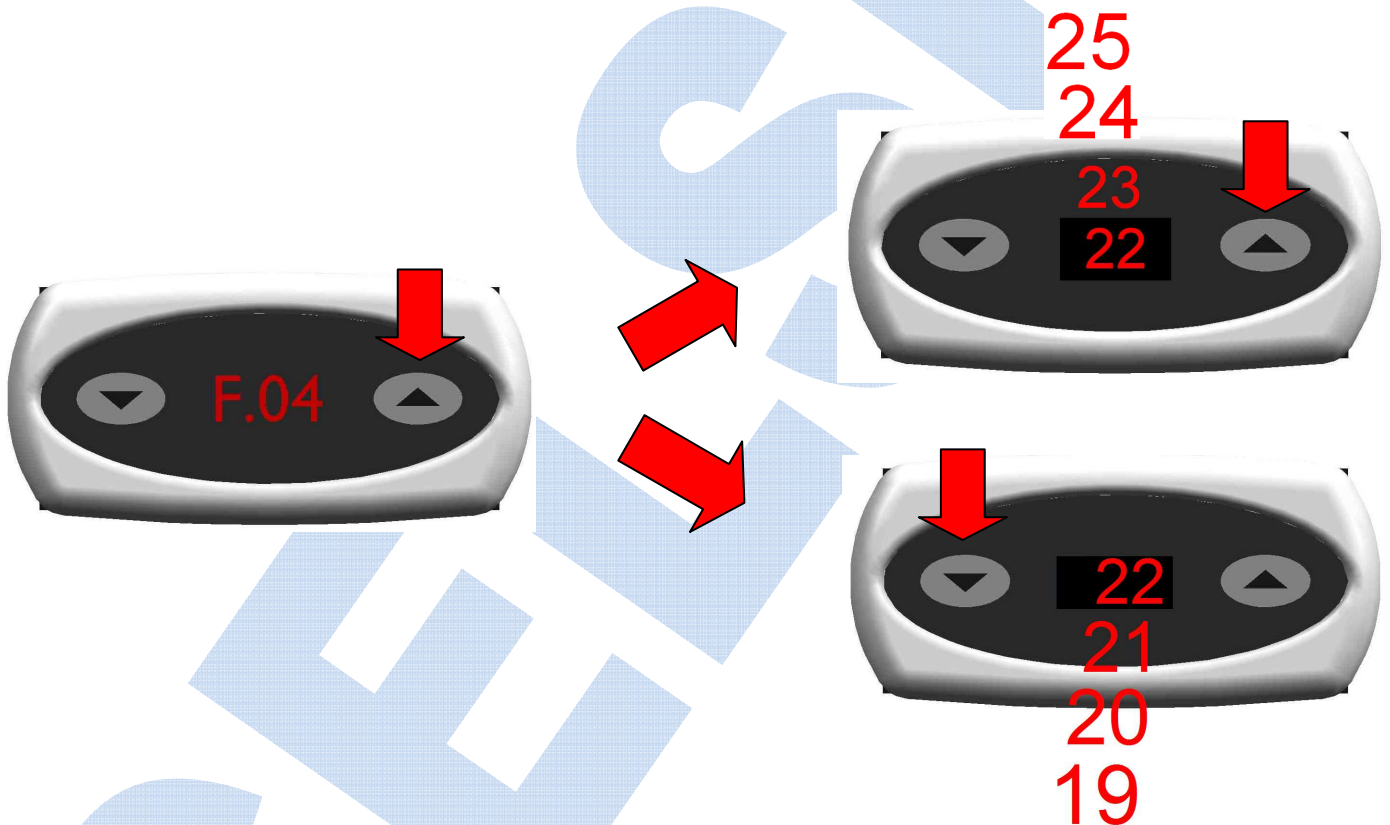
- DIE MARKIERTE TASTE DRÜCKEN, UM DEN WERT EINZUSTELLEN, DER BEI DIESER MASCHINE **1.6** SEIN MUSS.  
DER WERT ERHÖHT SICH DURCH DRÜCKEN DER RECHTEN UND VERRINGERT SICH DURCH DRÜCKEN DER LINKEN TASTE.



- DIE MARKIERTE TASTE DRÜCKEN BIS IM DISPLAY **F.04** ERSCHEINT. (DIESER PARAMETER GILT FÜR DIE EINGESTELLTE TEMPERATUR IN GRAD CELSIUS)

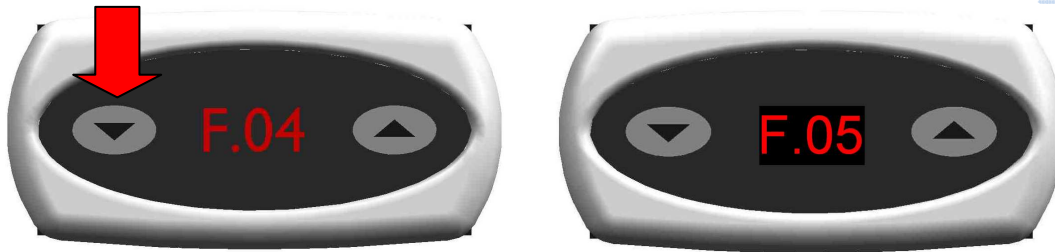


- DIE MARKIERTE TASTE DRÜCKEN, UM DEN WERT EINZUSTELLEN, DER BEI DIESER MASCHINE **22** SEIN MUSS. DER WERT ERHÖHT SICH DURCH DRÜCKEN DER RECHTEN UND VERRINGERT SICH DURCH DRÜCKEN DER LINKEN TASTE.

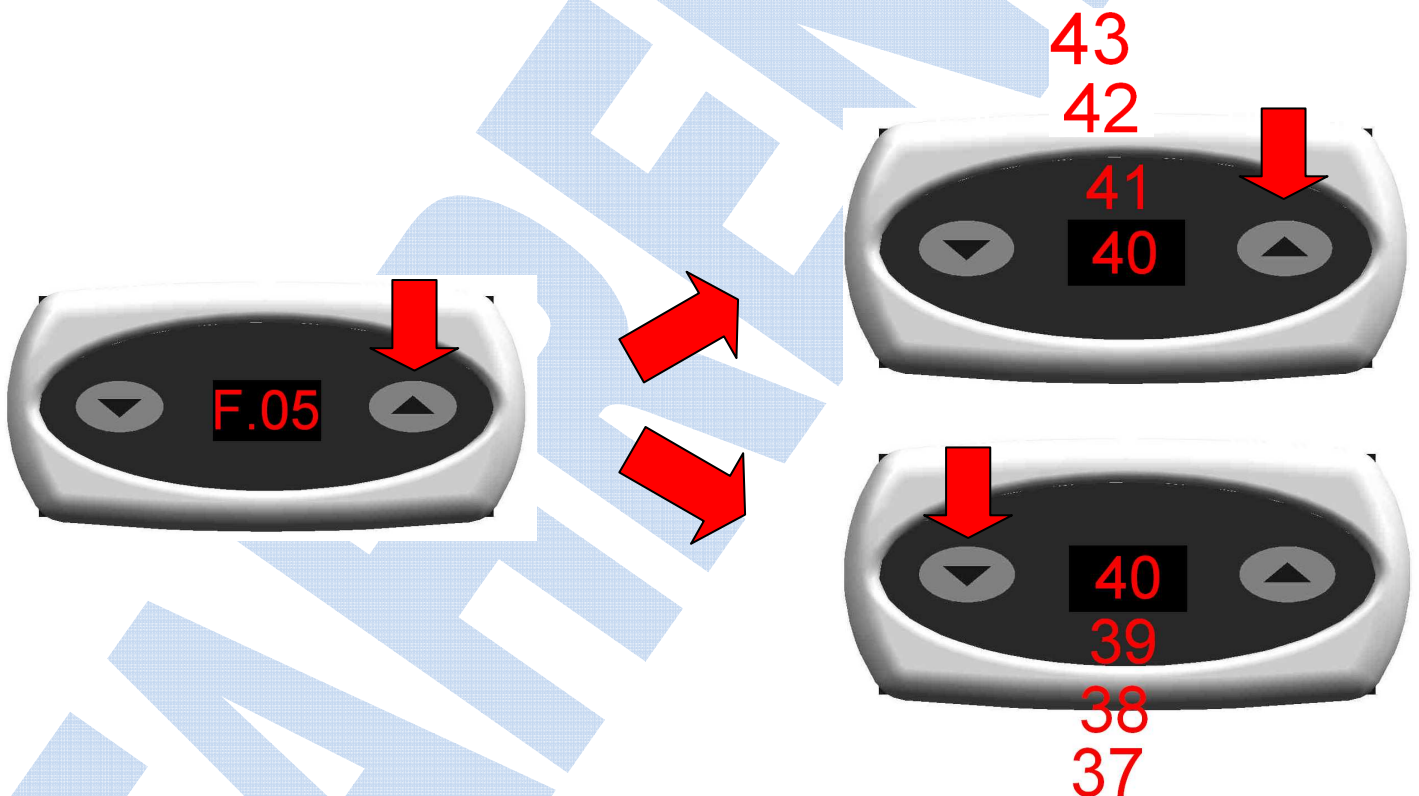


DER EINGEGEBENE WERT IST DIE DIFFERENZ ZWISCHEN DER KESSELTEMPERATUR UND DER TEMPERATUR DES WASSERS, DAS BEIM BEZUG AUS DER GRUPPE STRÖMT.

- DIE MARKIERTE TASTE DRÜCKEN BIS IM DISPLAY **F.05** ERSCHEINT. (DIESER PARAMETER GILT FÜR DIE EINGESTELLTE TEMPERATUR IN GRAD FAHRENHEIT)



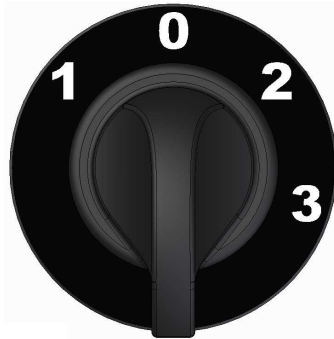
- DIE MARKIERTE TASTE DRÜCKEN, UM DEN WERT EINSTZUSTELLEN, DER BEI DIESER MASCHINE **40** SEIN MUSS. DER WERT ERHÖHT SICH DURCH DRÜCKEN DER RECHTEN UND VERRINGERT SICH DURCH DRÜCKEN DER LINKEN TASTE.



DER EINGEGEBENE WERT IST DIE DIFFERENZ ZWISCHEN DER KESSELTEMPERATUR UND DER TEMPERATUR DES WASSERS, DAS BEIM BEZUG AUS DER GRUPPE STRÖMT.

## ABSPEICHERN EINGESTELLTER WERTE

- DIE MASCHINE AUSSCHALTEN UND WIEDER EINSCHALTEN, OHNE IRGEND EINE TASTE ZU DRÜCKEN.



## ALARMANZEIGEN

- BEI NICHT VERBUNDENEM TEMPERATURFÜHLER ZEIGT DAS DISPLAY **A1**, DAS EINSTELLEN DER TEMPERATUR UND DIE PROGRAMMIERUNG DER EINHEIT SIND NICHT MÖGLICH.



- BEI KURZSCHLUSS DES TEMPERATURFÜHLERS ZEIGT DAS DISPLAY **A2**, DAS EINSTELLEN DER TEMPERATUR UND DIE PROGRAMMIERUNG DER EINHEIT SIND NICHT MÖGLICH.

