DITEL

SW48

CONTROLADOR DIGITAL DE TEMPERATURA
REGULATEUR NUMÉRIQUE DE TEMPÉRATURE
DIGITAL TEMPERATURE CONTROLLER

GUIA RÁPIDA DE INSTALACIÓN
GUIDE RAPIDE D'INSTALLATION
QUICK INSTALLATION GUIDE

- UNIVERSAL INPUT (TC, RTD, Voltage, Current)
- EASY TO SEE CLEAR DISPLAY
- USER FRIENDLY INTERFACE
- MOST COMPACT DESIGN IN THE MARKET
- 64 STEPS RAMP/DOAK FUNCTION
- 8 PID SETTING PALLETS
- RS485 COMMUNICATION (OPTION)
- MOTORIZED VALVE CONTROL (**SW48S**)

3 Years Warranty



CE

MODELOS *MODÈLES* MODELS

	TYPE	SYROS									
	Front panel size L x H 48 x 48 mm	SW48				A	B	C	D	E	F	G
A	**CONTROL OUTPUT 1**											
	Relay contact (SPST) - Note 1					1						
	Relay contact (SPDT) - Note 1					2						
	SSR drive control					3						
	Current output (0-20 mADC / 4-20 mADC)					4						
	Voltage output (0-5 VDC / 1-5 VDC/ 0-10 VDC / 2-10 VDC)					5						
B	**CONTROL OUTPUT 2**											
	None						0					
	Relay contact (SPST)						1					
	SSR drive control						2					
	Current output (0-20 mADC / 4-20 mADC)						3					
	Voltage output (0-5 VDC / 1-5 VDC/ 0-10 VDC / 2-10 VDC)						4					
	Re-transmission output (current 0-20 mADC / 4-20 mADC)						5					
	Re-transmission output (Voltage 0-5 VDC / 1-5 VDC/ 0-10 VDC / 2-10 VDC)						6					
C	**ALARM OUTPUT**											
	None							0				
	1 point							1				
	2 points							2				
	3 points							3				
	2 points (independent common)							4				
D	**POWE SUPPLY**											
	100-240 VAC								1			
	24 VDC / 24 VAC								2			
E	**OPTIONS**											
	None									0		
	RS485 Communication									1		
	Digital input (DI1)									2		
	RS485 communication + Digital input (DI1)									3		
	RS485 communication + Remote SV input - Note 3									4		
	RS485 communication + CT input - Note 2									5		
F	**SPECIAL VERSION**										0	
G	**SPECIAL VERSION**											0

NOTES:
1- Not available for the (B) code "2", "3", "4", "5", "6". However, if you want to order (A) code "1" (SPST relay contact for the control output 1) and the (B) code "5" ou "6" (current/voltage output for the control output 2) specify the model as follows:
2- When using the CT input as heather burnout alarm, add one alarm output in the (C) code.
3- When using the current input for the remote SV input, add a 250 Ohm resistor to the input terminal.

	TYPE (MOTORIZED VALVE CONTROL)	SYROS										
	Front panel size L x H 48 x 48 mm	SW48				A	B	C	D	E	F	G
A	**CONTROL OUTPUT 1**											
	Motorized valve control output					S						
B	**CONTROL OUTPUT 2**											
	None						0					
C	**ALARM OUTPUT**											
	None							0				
	1 point							1				
	2 points							2				
	2 points (independent common)							3				
D	**POWER SUPPLY**											
	100 - 240 VAC								1			
	24 VDC / 24 VAC								2			
E	**OPTIONS**											
	None									0		
	Digital input (DI1, 2 & 3)									1		
	RS485 Communication + Digital input (DI1)									2		
F	**SPECIAL VERSION**										0	
G	**SPECIAL VERSION**											0

SPECIFICATIONS

POWER SUPPLY ..... 100(-15%)to 240(+10%) VAC
24(±10%) VDC/VAC
CONSUMPTION ..... 10VA max. (5VA max. @ 24V)

FUSES (recommended)
0.1A T 250VAC (for 100-240VAC)
1A T 400VAC/DC (for 24VAC/DC)

CONTROL OUTPUT :
RELAY.....1 x SPST 250VAC/30VDC 3A(res. load)
1 x SPDT 250VAC/30VDC 5A (res. load)
SSR/SSC
Drive output ..... ON voltage 12VDC (10.7 to 13.2V)
OFF voltage 0.5VDC or lower
Máximum current ..... 20 mADC
Load resistance ..... 600 Ω min.

CURRENT OUTPUT .....0/4 to 20mADC
Accuracy ..... ± 5% FS
Load resistance ..... 500 Ω max.

VOLTAGE OUTPUT ..... 0/1 to 5VDC, 0/2 to 10VDC
Accuracy ..... ± 5% FS
Load resistance ..... 10 kΩ min.

ALARM OUTPUT (AL1 to AL3)
RELAY.....1 x SPST 250VAC/30VDC 3A(res. load)

DIGITAL INPUT ..... 5VDC 2mA / DI
Input pulse width ..... 50 ms max.
ON judgement 2VDC or lower
OFF judgement 3VDC or higher

REMOTE SV input ..... 0/1 to 5VDC, 0/2 to 10VDC
(external 250Ω is required) ..... 0/4 to 20mA

MOTORIZED VALVE CONTROL OUTPUT
RELAY ..... 2 x SPST 250VAC/30VDC 3A(res. load)

DOWNLOAD
USER MANUAL

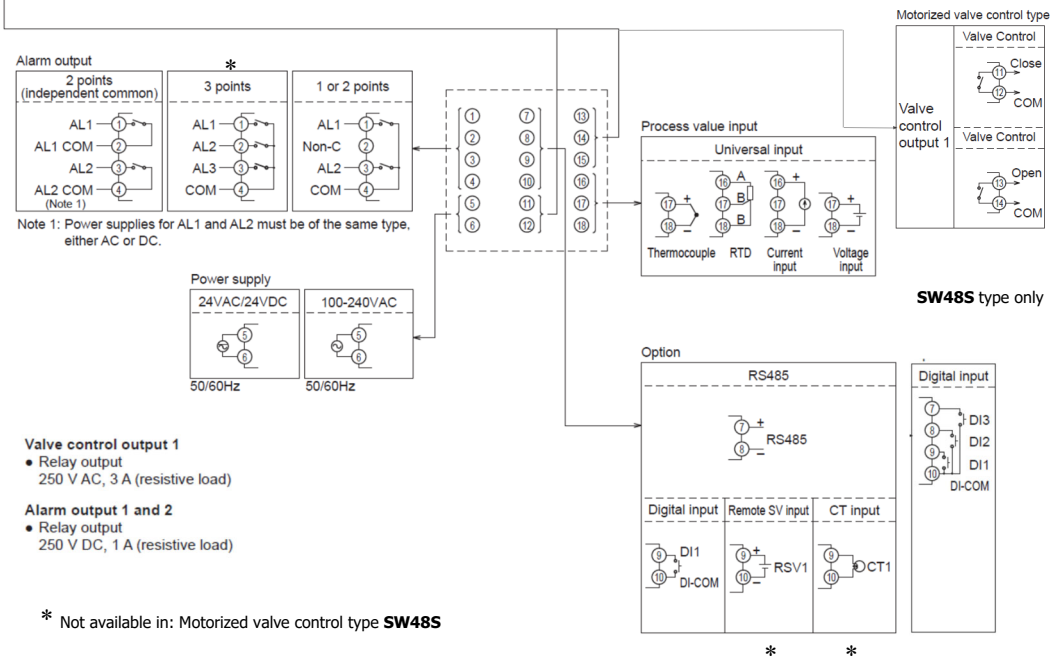
Para una información más completa por favor consulte el manual de instrucciones en nuestra web
Pour plus d'informations veuillez consultez le manuel complet dans nôtre site web
For complete instruccions please refer to the user manual in our website

Según la Directiva 2002/96/CE, no puede deshacerse de este aparato como un residuo urbano normal. Puede devolverlo, sin coste alguno, al lugar donde fue adquirido para que de esta forma se proceda a su tratamiento y reciclado controlados.
Selon la Directive 2002/96/CE, l'utilisateur ne pout se défaire de cet appareil comme d'un residu urbain courant. Vous pouvez le restituer, sans aucun coût, au lieu où il a eté acquis afin qu'il soit procédé à son traitement et recyclage contrôlés.
According to 2002/96/CE Directive, You cannot dispose of it at the end of its lifetime as unsorted municipal waste. You can give it back, without any cost, to the place where it was adquired to proceed to its controlled treatment and recycling.

CONEXIONADO RACCORDEMENT WIRING

Control output 1	Relay output (SPST)	Relay output (SPDT)	SSR	Current	Voltage	Relay output (SPST)	Relay output (SPDT)	SSR	Current	Voltage
Control output 2	None	None	None	None	None	Relay output (SPST)	Relay output (SPST)	Relay output (SPST)	Relay output (SPST)	Relay output (SPST)
*	OUT1	OUT1 NC COM NO	OUT1 COM	OUT1 COM	OUT1 COM	OUT1	OUT1 NC COM NO	OUT1 COM	OUT1 COM	OUT1 COM
						OUT2	OUT2	OUT2	OUT2	OUT2

Control output 1	SSR	Current	Voltage	SSR	Current	Voltage	SSR	Current	Voltage
Control output 2	SSR	SSR	SSR	Current or re-transmission output (current)	Current or re-transmission output (current)	Current or re-transmission output (current)	Voltage or re-transmission output (voltage)	Voltage or re-transmission output (voltage)	Voltage or re-transmission output (voltage)
*	OUT1 COM OUT2	OUT1 COM OUT2	OUT1 COM OUT2	OUT1 COM OUT2 or re-transmission output	OUT1 COM OUT2 or re-transmission output	OUT1 COM OUT2 or re-transmission output	OUT1 COM OUT2 or re-transmission output	OUT1 COM OUT2 or re-transmission output	OUT1 COM OUT2 or re-transmission output



Valve control output 1
- Relay output
  250 V AC, 3 A (resistive load)

Alarm output 1 and 2
- Relay output
  250 V DC, 1 A (resistive load)

* Not available in: Motorized valve control type **SW48S**

Control output 1
- Relay output (SPST)
  250 V AC, 3 A (resistive load)
- Relay output (SPDT)
  250 V AC, 5 A (resistive load)
- SSR output
  12 V DC, 20 mA
- Current output
  4 to 20 mA/0 to 20 mA (up to 500 Ω)
- Voltage output
  0 to 5 V/1 to 5 V/0 to 10 V/2 to 10 V (MIN. 10 kΩ)

Control output 2
- Relay output
  250 V AC, 3 A (resistive load)
- SSR output
  12 V DC, 20 mA
- Current output
  4 to 20 mA/0 to 20 mA (up to 500 Ω)
- Voltage output
  0 to 5 V/1 to 5 V/0 to 10 V/2 to 10 V (MIN. 10 kΩ)

Alarm output 1 and 3
- Relay output
  250 V DC, 1 A (resistive load)

Note) If you use SW as a substitute for SY or SZ which was used with SSR output, be careful about the control voltage of SSR, for it is different among SY, SZ, and SW.

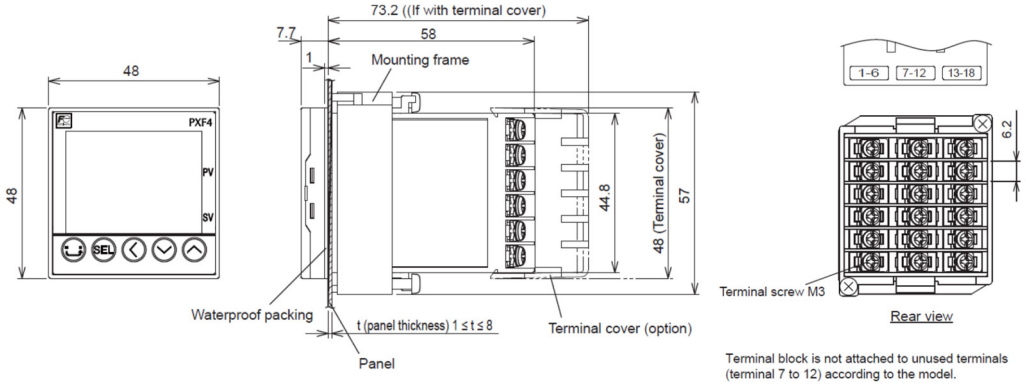
Model	Output voltage range [V]	
	min	max
SY	10.7	13.2
SZ	17.0	25.0
SW	18.0	24.0

Note) It is not necessary to make a mistake in the wiring for themeasurements input terminal. There is a possibility that theinput circuit breaks when it makes a mistake in wiring.

Dimensiones y montaje
Dimensions et montage
Dimensions and mounting

Estanqueidad frontal
Étanchéité du frontal
Frontal protection degree
IP65

Orificio en panel
Orifice dans le panneau
Panel cutout
45 x 45 mm



Terminal block is not attached to unused terminals (terminal 7 to 12) according to the model.

DISPLAY AND OPERATIONS



USER key
Press once switch SV/MV display

SEL key
Press in run mode to move to control mode.
Press+hold in run mode to move to channel selection mode.
Press in channel selection to move to setup mode.
Press+hold in setup mode to move to channel selction mode.
Press in parameter selection submode to enter in edition.
Press in parameter edition sub-mode to sabe the change.

< key
Use to select the digit when changing values.

ΛVkeys
Use to change SV value when in PV/SV screen.
Press to change parameters to be displayed.
Use to edit parameters.

USER + Λ key Press+hold in PV/SV display to start the assigned functions.

USER + V key
Press+hold in PV/SV display to start the assigned functions.

DISPLAY

(1)	Process value
(2)	Setpoint value
(3)	Screen No.
(4)	OUT 1
(5)	OUT 2
(6)	EV 1, EV 2, EV 3 ind.
(7)	STBY ind.
(8)	MANU ind.
(9)	Lock ind.
(10)	No. Ind.
(11)	RUN/HOLD/END ind.
(12)	AT ind.
(13)	MV ind.
(14)	TM ind.
(15)	RMN ind.
(16)	ºC/ºF ind.
(17)	A/%/kWh ind.

DITEL
DISEÑOS Y TECNOLOGÍA, S.A.
Xarol, 6-B P.I. Les Guixeres
08915 Badalona (Barcelona) - Spain.
Tel. +34 933 394 758
Fax +34 934 903 145
Email: comercial@ditel.es ; web: www.ditel.es

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