

## Julabo Tango Cpp Class

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### Julabo Class Identification :

Contact : at mail.desy.de - tnunez  
 Class Family : Instrumentation  
 Platform : Unix Like  
 Bus : Ethernet  
 Manufacturer : Julabo  
 Manufacturer ref. : F25-ME

### Julabo Class Inheritance :

- o [Tango::DeviceImpl](#)
  - Julabo

### Julabo Class Description :

Class for controlling the Refrigerated/Heating Circulator F25ME from Julabo

### Julabo Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
Hostname	Hostname of the thermostat	String	none

PortNb	Port number	int	0
SimulationMode	0-> real, 1->simulation	int	0
SerialPort	Name of the device in /dev (RS232 connection)	String	none

Julabo Class Commands				
Name	Input type	Output type	Level	Description
<a href="#">State</a>	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its device_state data member) and returns it to the caller.
<a href="#">Status</a>	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its device_status data member) and returns it to the caller.
<a href="#">WriteReadSocket</a>	DEV_STRING	DEV_STRING	OPERATOR	Send command to the socket and read the response

### **Command State :**

This command gets the device state (stored in its device\_state data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none
Output Argument	Tango::DEV_STATE	Device state
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

### **Command Status :**

This command gets the device status (stored in its device\_status data member) and returns it to the caller.



<b>Status Definition</b>		
Input Argument	Tango::DEV_VOID	none
Output Argument	Tango::CONST_DEV_STRING	Device status
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

### **Command WriteReadSocket :**

Send command to the socket and read the response

<b>WriteReadSocket Definition</b>		
Input Argument	Tango::DEV_STRING	Command to send
Output Argument	Tango::DEV_STRING	Response
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

<b>Julabo Class Attributes</b>							
<b>Name</b>	<b>Inherited</b>	<b>Abstract</b>	<b>Attr. type</b>	<b>R/W type</b>	<b>Data type</b>	<b>Level</b>	<b>Description</b>
<a href="#">IstTemperature</a>	false	false	Scalar	READ	Tango::DEV_FLOAT	OPERATOR	Ist Temperature
<a href="#">SollTemperature</a>	false	false	Scalar	READ_WRITE	Tango::DEV_FLOAT	OPERATOR	Soll temperature
<a href="#">ExternalSensorTemperature</a>	false	false	Scalar	READ	Tango::DEV_FLOAT	OPERATOR	Ist Temperature
<a href="#">ExternalSensorActive</a>	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	If 1 regulation with external pt100 sensor.

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**There is no dynamic attribute defined.**

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**Attribute IstTemperature :**

Ist Temperature

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_FLOAT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	
unit	C
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

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**Attribute SollTemperature :**

Soll temperature

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE

Attribute Properties	
label	
unit	C

Attribute Event Criteria	
Periodic	Not set
	Not

Data Type	Tango::DEV_FLOAT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Relative Change	set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

**Attribute ExternalSensorTemperature :**

Ist Temperature

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_FLOAT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	
unit	C
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

**Attribute ExternalSensorActive :**

If 1 regulation with external pt100 sensor.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	1
min_value	0
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

Julabo Class States	
Name	Description
ON	
ALARM	
FAULT	