

Danfysik9000 Tango Cpp Class

Contents :

- [Description](#)
- [Properties](#)
- [Commands](#)
 - [State](#)
 - [Status](#)
 - [On](#)
 - [Off](#)
 - [Reset](#)
 - [SetCurrent](#)
 - [ZeroCurrent](#)
 - [Remote](#)
 - [Local](#)
 - [WriteCmd](#)
 - [WriteSetupCommand](#)
- [Attributes](#)
 - [Current](#)
 - [Voltage](#)
 - [CurrentSetPoint](#)
 - [MaxCurrent](#)
- [States](#)

Danfysik9000 Class Identification :

Contact : at null - null
Class Family :
Platform :
Bus :
Manufacturer :
Manufacturer ref. :

Danfysik9000 Class Inheritance :

- [Tango::DeviceImpl](#)
 - PowerSupply
 - Danfysik9000

Danfysik9000 Class Description :

Device server to control Danfysik system 9000 power supplies.

Danfysik9000 Properties :

Class Properties			
Name	Description	Type	Default Value
Ext_itlk_0_description	Description of the EXTERNAL INTERLOCK 0. This message will be displayed when this interlock will happen.	String	CABINET WATER FLOW FAULT
Ext_itlk_1_description	Description of the EXTERNAL INTERLOCK 1. This message will be displayed when this interlock will happen.	String	DOOR OPEN
Ext_itlk_2_description	Description of the EXTERNAL INTERLOCK 2. This message will be displayed when this interlock will happen.	String	KLYSTRON FOC WATER TEMP FAULT
Ext_itlk_3_description	Description of the EXTERNAL INTERLOCK 3. This message will be displayed when this interlock will happen.	String	KLYSTRON FOC WATER FLOW FAULT

Device Properties			
Name	Description	Type	Default Value
Serial_name	Name of the serial line device	String	none
Address	address of the power supply unit when working RS422 multi drop mode.	short	-1
MaxCurrent	Maximum authorized (by the power supply) current in remote.	double	200.0
Ext_itlk_0_description	Description of the EXTERNAL INTERLOCK 0. This message will be displayed when this interlock will happen.	String	CABINET WATER FLOW FAULT
Ext_itlk_1_description	Description of the EXTERNAL INTERLOCK 1. This message will be displayed when this interlock will happen.	String	DOOR OPEN
Ext_itlk_2_description	Description of the EXTERNAL INTERLOCK 2. This message will be displayed when this interlock will happen.	String	KLYSTRON FOC WATER TEMP FAULT
Ext_itlk_3_description	Description of the EXTERNAL INTERLOCK 3. This message will be displayed when this interlock will happen.	String	KLYSTRON FOC WATER FLOW FAULT

Danfysik9000 Class Commands

Name	Input type	Output type	Level	Description
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.
On	DEV_VOID	DEV_VOID	OPERATOR	Switch powersupply ON.
Off	DEV_VOID	DEV_VOID	OPERATOR	Switch powersupply OFF.
Reset	DEV_VOID	DEV_VOID	OPERATOR	Reset the powersupply to a well known state.
SetCurrent	DEV_VOID	DEV_VOID	OPERATOR	This command will apply the setpoint of the Current Attribute on the channel.
ZeroCurrent	DEV_VOID	DEV_VOID	OPERATOR	This command will set the Current to 0 without losing the set point of the Current Attribute.
Remote	DEV_VOID	DEV_VOID	EXPERT	switches the line-in command to the remote operation.
Local	DEV_VOID	DEV_VOID	EXPERT	switches the line-in command to the local line.
WriteCmd	DEV_STRING	DEV_STRING	EXPERT	Write the command on the serial line and read the answer.
WriteSetupCommand	DEV_STRING	DEV_STRING	EXPERT	Write the setup command on the serial line and read the answer. The string given in parameter should be the setup command without the ESC< at the beginning and without the \r at the end.

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	State Code
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.

Status Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::CONST_DEV_STRING	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command On :

Switch powersupply ON.

On Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Off :

Switch powersupply OFF.

Off Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Reset :

Reset the powersupply to a well known state.

Reset Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command SetCurrent :

This command will apply the setpoint of the Current Attribute on the channel.

SetCurrent Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
		..
Command allowed for	All states	..

Command ZeroCurrent :

This command will set the Current to 0 without losing the set point of the Current Attribute.

ZeroCurrent Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
		..
Command allowed for	All states	..

Command Remote :

switches the line-in command to the remote operation.

Remote Definition		
Input Argument	Tango::DEV_VOID	

Output Argument	Tango::DEV_VOID	
DisplayLevel	EXPERT	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Local :

switches the line-in command to the local line.

Local Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	EXPERT	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command WriteCmd :

Write the command on the serial line and read the answer.

WriteCmd Definition		
Input Argument	Tango::DEV_STRING	Command to execute without the \r at the end
Output Argument	Tango::DEV_STRING	Response
DisplayLevel	EXPERT	..
Inherited	true	..
Abstract	false	..

Polling Period	Not polled	..
Command allowed for	All states	..

Command WriteSetupCommand :

Write the setup command on the serial line and read the answer.
The string given in parameter should be the setup command without the ESC< at the beginning and without the \r at the end.

WriteSetupCommand Definition		
Input Argument	Tango::DEV_STRING	Setup Command to execute without the ESC< at the beginning and without \r at the end
Output Argument	Tango::DEV_STRING	Response
DisplayLevel	EXPERT	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Danfysik9000 Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
Current	true	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	The powersupply current setting in amps.\nIf this attribute is written when the channel is ON or ALARM,\nit will apply the setpoint immiediately

							to the channel otherwise \nit will store the set point in a variable and will apply it when \nthe command SetCurrent will be called.
Voltage	true	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	EXPERT	The powersupply voltage in volts.
CurrentSetPoint	true	false	Scalar	READ	Tango::DEV_DOUBLE	EXPERT	The current set value as stored in the powersupply.
MaxCurrent	true	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	EXPERT	Maximum current authorized (by the power supply) in remote.

There is no dynamic attribute defined.

Attribute Current :

The powersupply current setting in amps.\nIf this attribute is written when the channel is ON or ALARM,\nit will apply the setpoint immendiately to the channel otherwise \nit will store the set point in a variable and will apply it when \nthe command SetCurrent will be called.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE

Attribute Properties	
label	Current
unit	A
standard unit	1
display unit	1

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not

Display Level	OPERATOR
Inherited	true
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

format	%4.1f
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

	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	Not set

Attribute Voltage :

The powersupply voltage in volts.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	EXPERT
Inherited	true
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	Voltage
unit	V
standard unit	1
display unit	1
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	Not set
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Attribute CurrentSetPoint :

The current set value as stored in the powersupply.

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

Attribute Properties	
label	Current Set Point
unit	A
standard unit	1
display unit	1
format	%4.1f
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	Not set

Attribute MaxCurrent :

Maximum current authorized (by the power supply) in remote.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	EXPERT
Inherited	true
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	Maximum current
unit	A
standard unit	1
display unit	1
format	%4.1f
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	Not set

Danfysik9000 Class States	
Name	Description
ON	The channel is On.
OFF	The channel is Off.
DISABLE	The power supply is in LOCAL mode
FAULT	The channel is in Fault.
UNKNOWN	Communication problem with the hardware.