

## Danfysik9000Mch Tango Cpp Class

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### Danfysik9000Mch Class Identification :

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

### Danfysik9000Mch Class Inheritance :

- [Tango::DeviceImpl](#)
  - Danfysik9000Mch

### Danfysik9000Mch Class Description :

This class will control several Danfysik system 9000 channels.  
(several channels per device).

## Danfysik9000Mch Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
Channels_list	List of the channels device names	String[]	none
Channels_timeout	Timeout in milliseconds of the group of Tango devices.	int	3000

Danfysik9000Mch 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 <i>device_state</i> 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 <i>device_status</i> data member) and returns it to the caller.
<a href="#">On</a>	DEV_VOID	DEV_VOID	OPERATOR	This command will switch all the channels controlled on.
<a href="#">Off</a>	DEV_VOID	DEV_VOID	OPERATOR	This command will switch all the channels controlled off.
<a href="#">Reset</a>	DEV_VOID	DEV_VOID	OPERATOR	This command will reset all the channels controlled.
<a href="#">SetCurrent</a>	DEV_VOID	DEV_VOID	OPERATOR	This command will apply the setpoint of the Current Attribute of each channel controlled.
<a href="#">ZeroCurrent</a>	DEV_VOID	DEV_VOID	OPERATOR	Set the Current to 0 on each channel. If the power supply is OFF or FAULT, do nothing.
				This command will read all

<a href="#">GetCurrentSetPoints</a>	DEV_VOID	DEVVAR_DOUBLEARRAY	OPERATOR	the current set points on the single channel devices. This command will return
<a href="#">GetChannelsList</a>	DEV_VOID	DEVVAR_STRINGARRAY	EXPERT	the list of channels controlled by this multichannels device.

### **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	true	..

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

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### **Command On :**

This command will switch all the channels controlled on.

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

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### **Command Off :**

This command will switch all the channels controlled off.

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

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### **Command Reset :**

This command will reset all the channels controlled.

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

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### **Command SetCurrent :**

This command will apply the setpoint of the Current Attribute of each channel controlled.

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

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## **Command ZeroCurrent :**

Set the Current to 0 on each channel.  
If the power supply is OFF or FAULT, do nothing.

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

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## **Command GetCurrentSetPoints :**

This command will read all the current set points on the single channel devices.

<b>GetCurrentSetPoints Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEVVAR_DOUBLEARRAY	current set points
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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## **Command GetChannelsList :**

This command will return the list of channels controlled by this multichannels device.

<b>GetChannelsList Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEVVAR_STRINGARRAY	channels list
DisplayLevel	EXPERT	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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<b>Danfysik9000Mch 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="#">Current</a>	false	false	Spectrum	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Current of the channels controlled.

**There is no dynamic attribute defined.**

## **Attribute Current :**

Current of the channels controlled.



Attribute Definition	
Attribute Type	Spectrum ( 18 )
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	Current
unit	A
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

Danfysik9000Mch Class States	
Name	Description
ON	All the channels are ON.
OFF	At least one channel is OFF and there is no FAULT nor UNKNOWN channel.
FAULT	At least one channel is in FAULT.
UNKNOWN	At least one channel is not responding or is in Unknown state. There is no fault.
ALARM	At least one channel is in ALARM state. All the single channels power supplies are ON, there is no fault and no unknown channel.
DISABLE	At least one of the channels is in LOCAL mode and the others channels are in OFF,ON or DISABLE state.