

## LeyboldTD400 Tango Cpp Class

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### **LeyboldTD400 Class Identification :**

Contact : at desy.de - johannes.blume  
Class Family : Vacuum  
Platform : Unix Like  
Bus : Not Applicable  
Manufacturer : Leybold  
Manufacturer :  
ref. [https://leyboldproducts.oerlikon.com/products/produktkatalog\\_04.aspx?cid=1975](https://leyboldproducts.oerlikon.com/products/produktkatalog_04.aspx?cid=1975)

### **LeyboldTD400 Class Inheritance :**

- [Tango::DeviceImpl](#)
  - LeyboldTD400

### **LeyboldTD400 Class Description :**

Tango device server to control Leybold TURBO.DRIVE 300/400 frequency converter

### **LeyboldTD400 Properties :**

**There is no class properties**

Device Properties			
Name	Description	Type	Default Value
HostName	Hostname of terminal server	String	""
PortNumber	port number on terminal server	String	""
ConnectType	either `serial` or `net`	String	""
BaudRate	baud rate when connecting via serial line	int	0
DeviceFile	device file name when connecting via serial line	String	""
SimulationMode	if true, run without connected hardware	boolean	true

LeiboldTD400 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="#">GetValue</a>	DEVVAR_USHORTARRAY	DEV_ULONG	EXPERT	test function

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

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### **Command GetValue :**

test function

<b>GetValue Definition</b>		
Input Argument	Tango::DEVVAR_USHORTARRAY	parameter number, index (0 for no indexed readout)
Output Argument	Tango::DEV_ULONG	parameter value
DisplayLevel	EXPERT	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• FAULT	..

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<b>LeiboldTD400 Class Attributes</b>							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
<a href="#">RotorFrequency</a>	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	
<a href="#">ConverterTemperature</a>	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	
<a href="#">BearingTemperature</a>	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	

<a href="#">SupplyVoltage</a>	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	
<a href="#">MotorTemperature</a>	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	
<a href="#">PumpCurrent</a>	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	
<a href="#">PumpType</a>	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	
<a href="#">ConverterType</a>	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	

**There is no dynamic attribute defined.**

**Attribute RotorFrequency :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>FAULT</li> </ul>

Attribute Properties	
label	RotorFrequency
unit	Hz
standard unit	Hz
display unit	Hz
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 ConverterTemperature :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>• FAULT</li> </ul>

Attribute Properties	
label	ConverterTemperature
unit	Â°C
standard unit	Â°C
display unit	Â°C
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 BearingTemperature :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>• FAULT</li> </ul>

Attribute Properties	
label	BearingTemperature
unit	Â°C
standard unit	Â°C
display unit	Â°C
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	

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	false

delta\_val

code	
Push Archive event by user code	false
Push DataReady event by user code	false

**Attribute SupplyVoltage :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>• FAULT</li> </ul>

Attribute Properties	
label	SupplyVoltage
unit	V
standard unit	V
display unit	V
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 MotorTemperature :**

Attribute Definition	

Attribute Properties	

Attribute Event Criteria	
Periodic	Not set

Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>• FAULT</li> </ul>

label	MotorTemperature
unit	Â°C
standard unit	Â°C
display unit	Â°C
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

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 PumpCurrent :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>• FAULT</li> </ul>

Attribute Properties	
label	PumpCurrent
unit	A
standard unit	A
display unit	A
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 PumpType :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> <li>• FAULT</li> </ul>

Attribute Properties	
label	
unit	
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 ConverterType :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
Display Level	OPERATOR
Inherited	false
Abstract	false

Attribute Properties	
label	ConverterType
unit	
standard unit	
display unit	
format	
max_value	
min_value	

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



Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

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

**LeyboldTD400 Class States**

Name	Description
ON	
FAULT	