## **Alarm States (Values)**

## Alarm states (values)

For the needs of documentation of alarms and relating activities of D2000 system, a term "alarm status" has been established, although actually, it is "value of the object of Alarm type". Alarms can be in various states, i.e. objects of Alarm type may acquire various values. An overview of the states of system alarms is shown in the following table

Alarm status	Cause
A_Norm	Condition to start the alarm is not occurred.
A_Alarm	Condition to start the alarm occurred.
A_Kvit	Alarm acknowledged by an operator.
A_Block	Alarm was blocked by operator, or the option <b>Blocked alarm</b> is checked in the alarm configuration.
A_UnBlock	The process D2000 Alarm is not running and operator unblocked the alarm in the status A_Block (Blocked).
A_NoKvit	For the acknowledgement-required alarm, the condition to end the alarm was met before its acknowledgement.

The system responds only to changes of these states. Conditions of changes of alarm states and activities corresponding to these changes must be defined for each object of Alarm type.

## Changes of alarm states

Alarm status change	Condition to change
Normal -> Alarm	Condition to start the alarm must be met. The condition is represented by an object of BOOLEAN type. Change into the state Alarm is subject to the time filter.
Alarm -> Acknowledged	Operator acknowledged the alarm.
Alarm -> Normal	Condition of ending an alarm must be met. If the condition is not defined, the condition of starting an alarm has to finish. If the alarm is defined as an acknowledgment-required alarm, its status may not change from the state Alarm into the state Normal
Acknowledged -> Normal	Condition of ending an alarm must be met. If the condition is not defined, the condition of starting the alarm must finish.
Normal, Alarm, Acknowledged -> Blocked	Operator blocked the alarm.
Blocked -> Normal, Alarm	Operator unblocked the alarm. New alarm status (Normal or Alarm) depends on which state the alarm was raised in.
Alarm -> Unacknowledged	The condition of ending an alarm is met - for acknowledgment-required alarm.
Unacknowledged -> Normal	Operator acknowledged the acknowledgement-required alarm.
Unacknowledged -> Alarm	Condition of starting an alarm is met again - for acknowledgment-required alarm.

The changes of alarm states are shown in the following figure.



Related pages:

Alarms Alarms - configuration dialog box