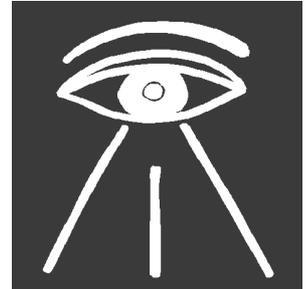


VISONIK®

## BPS monitoring functions

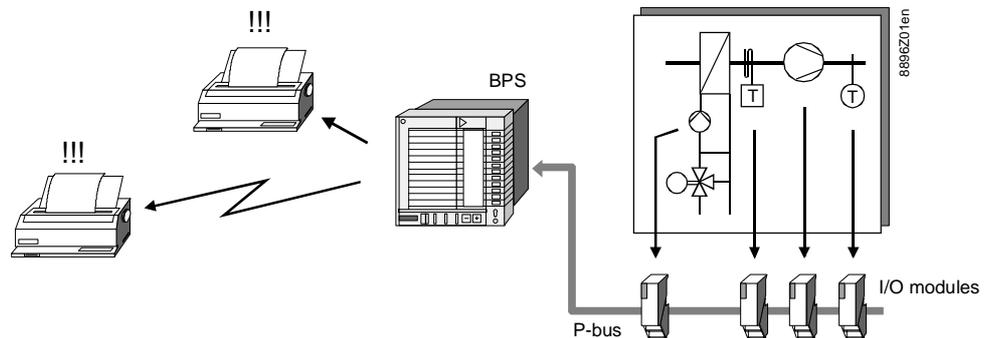
Function sheet



The VISONIK BPS monitoring functions control the execution of processes in the building services systems assigned to them and trigger reactions as well as acoustic and optical alarms in the event of irregularities.

### Use

The illustration below is a schematic diagram of a simple example: The VISONIK BPS—either connected locally or via telephone line—detects faults in the plant via the I/O module and generates appropriate messages on the printer.



### Operator elements

The following are the user elements contained in the monitoring functions:

Element	Description
Fault messages	Individual messages are output to the printer; acoustic alarms may also be output.
Alarm reports	All I/O points in the plant showing an unallowed point state are listed in an overview.
Local messages	Fault messages and alarm reports are output locally.
Remote alarming	A printer with modem connection (teleprinter) is set up at the workplace of the person responsible for the plant. In the event of a fault, a telephone connection is established and the fault message or alarm report is transmitted.

### Benefits

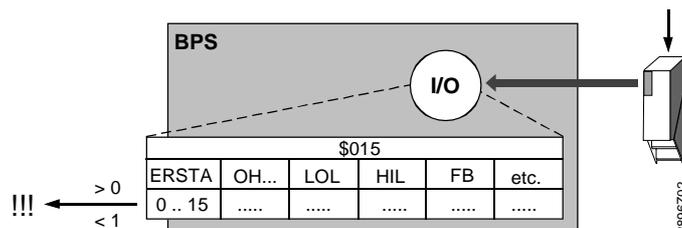
The benefits of monitoring with messages, reports, and alarms are dependable operation and cost reductions because:

- Measures are undertaken before a serious fault or plant damage occurs.
- The causes of any existing fault are quickly recognized.

## Functions

### Point-specific functions

In the VISONIK BPS, the I/O points have special parameters in which monitoring functions are activated or certain limit values set.



### Examples

Examples of these types of parameters, their functions, and possible reactions are:

Parameter	Functions / possible reactions
Feedback FB	Switching command points with feedback are monitored to see if the feedback is received within the defined time. If this is not the case, further switching may be blocked, a plant switched off, etc.
Limit value HIL/LOL	If the limit values are exceeded at measurement or counter value points, alarms may be triggered, safety functions started, plant elements turned on or off, etc.
Operating hours OH...	For signaling points and switching command points, the operating hours are cumulated with certain point states (OFF/ON, Stage 1, etc.). When a limit value has been reached, reports on the operating hours, maintenance messages, etc. can be triggered.
Fault state ERSTA	ERSTA has a value of 0, if the I/O point is not faulty, and 1 ..15 if there is a fault. The value provides information on the cause of the fault and its priority. ERSTA changes start reactions (if programmed).

### Functions with tasks

Tasks are program units in the VISONIK BPS used to implement the various plant and system functions. User-specific monitoring functions can be programmed in special tasks such as peak demand limiting and power restoration.

#### Power restoration task TSK 254

The VISONIK BPS operating system monitors power restoration. The behavior of the BPS itself is defined by parameters. The startup of the assigned plants can be programmed in TSK 254. The sequence in the event of a power restoration (default) is:

1. All tasks are stopped after which TSK 254 is started.
2. TSK 254 starts the other tasks according to the programmed instructions, for example those for step-by-step restart of the plants.

#### Peak demand limiting

The superposed VISONIK DCS usually carries out the peak demand limiting function. However, if necessary, the VISONIK BPS can monitor and control consumption of electrical energy of the building services systems connected. This takes place via the LSP peak demand limiting program whose tasks are programmed according to the required functions.

### System monitoring

The VISONIK BPS operating system and the plant operating program are continuously subjected to internal system tests. This way, the correct functioning of hardware and software and the I/O modules is constantly monitored.

Appropriate error messages are output when system faults occur. The operator is warned and can take measures to maintain plant operation, for example, manually.

#### Note

The monitoring functions are an integral part of the VISONIK BPS. Also refer to function sheet N8895.

#### Additional information

Also see sheet N8888 "BPS reports" for further information.