



SICLIMAT™ X

# SICLIMAT X

## Maximum demand control

**ZLXHLO**

**This maximum demand control software saves energy costs for the building services operator by ensuring that the energy-consumption level never exceeds the limit defined by the tariff.**

### Use

Utilities companies do not only bill major energy users for the amount of energy consumed (kilowatt-hour rate), but also charge a rate based on peak demand. For major users, the unit price is determined primarily by the power actually consumed. By limiting maximum demand to a contractually agreed level, the user can avoid excess charges and reduce power consumption.

The EMAX module in SICLIMAT X ensures that energy consumption does not exceed the maximum demand level defined by the tariff. It does this by monitoring energy consumption at regular intervals over a given measurement period, and extrapolating the demand to the end of the measurement period.

If the extrapolation indicates that the tariff limit will be exceeded, the maximum demand program will shed some of the electrical loads under its control.

However, as soon as an energy reserve is predicted, the disabled electrical loads will be re-enabled.

The EMAX module can also handle generators (e.g. emergency generators) in a similar way.

## Features

---

Optimization and parameter-setting procedures ensure that:

- Only as many electrical loads are shed as is actually necessary to avoid exceeding the maximum demand limit
- The number of switching operations, and hence, interruptions to the process, is kept as small as possible
- Action is taken as late as possible, but as early as necessary.
- Load-shedding based on priority is distributed evenly over 16 possible priority classes.
- Only as many electrical loads are enabled as are necessary to ensure that if the average power consumption remains constant, it will not be necessary to disable loads in the next measurement cycle.

Up to four different tariff limits are supported. It is possible to switch from one to the other on a time basis or via pulse control.

With all switching operations, the maximum demand control program takes account of the current state of the electrical loads in the process:

- Switch state of electrical loads
- Operating state of the electrical loads (Fault, Manual, Automatic)
- Minimum and maximum switch-off times, minimum switch-on times and off periods, and maximum switch-off frequency per day, documented in the following reports:
- Report on deviations from capacity (consumption report)
- Prognosis
- Report on switching operations

and provides on-line statistics in graph form, showing the consumption characteristics.

The maximum demand control program can be used for all types of energy where the load can be controlled via SICLIMAT X, provided that the energy supply can be measured with sensors suitable for SIMATIC.

## Ordering

---

When ordering, please specify the quantity, product name and type code.

<i>Type</i>	<i>Order No.</i>	<i>Specification No.</i>
<b>Software package</b>	<b>6FL4214-4NC33</b>	<b>12/27201</b>
<b>Maximum demand control V3.1</b>		

## Technical data

---

	<b>Type</b>	<b>Max. demand control</b>
System requirements	Software	Standard SICLIMAT X Software Version 3.1 and higher
	Hardware	Standard SICLIMAT X hardware
	Limits	1 to 4 tariff limits per energy sector Maximum 4 energy sectors 16 priority classes per energy sector 512 electrical loads per energy sector