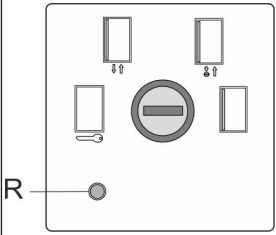# 1 Key-operated switch

	The operating modes LOCKED – AUTOMATIC – ONEWAY – CONTINUOUS can be set with the key-operated switch. The reset button (R) is also integrated in the key-operated switch, after pressing it the door control will be reinitialized.

1.1 Door operating modes

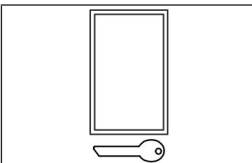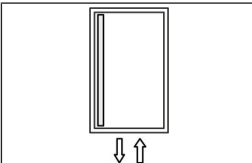|	**NOTICE**
	If the door hits an obstacle during the closing process, it will open / reverse immediately due to the integrated pressure control. **If the door hits an obstacle during the opening process, it will stop immediately. Once the obstacle is removed the opening process continues.**

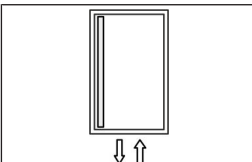|	**NOTICE**
	The door closes again when the hold-open time, adjustable from 0 to 10 seconds, has expired, as long a no one is within the detection range of the safety sensors. **On double wing doors with a closing sequence function, the wings do not close simultaneously. The hold-open times must be programmed at different intervals in order to avoid injuring individuals. One door wing is programmed to close first, once the hold-open time has expired. Only when the first door wing is completely closed, will the second door wing close.**

1.1.1 LOCKED operating mode

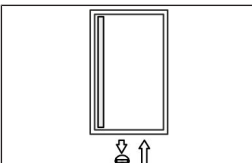|	The door drives are turned off and are locked electrically together with the electric door opener. If the operating mode is switched to LOCKED, while the door is closing, the rotational movement is maintained until the CLOSED position is reached.

1.1.2 AUTOMATIC operating mode "Single wing door"

	The door is unlocked. The door opens via an opening signal (i.e. radar, door open button, etc.).

1.1.3 AUTOMATIC "Double wing door"
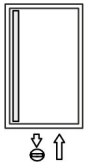
	The door is unlocked. Both door wings open simultaneously via an opening signal. The hold-open times must be programmed at different intervals in order to avoid injuring individuals.

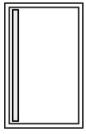### 1.1.4 ONEWAY operating mode "Single wing door"

	The door is unlocked. The door opens via an opening signal from the inside. The outside impulse generators are disabled in this operating mode.

1 Key-operated switch

1.1.5 ONEWAY operating mode "Double wing door"

	The door is unlocked. Both door wings open simultaneously via an opening signal from the inside. The outside impulse generators are disabled in this operating mode. The hold-open times must be programmed at different intervals in order to avoid injuring individuals.

1.1.6 CONTINUOUS operating mode

	The door opens immediately and remains in this position until a different operating mode is selected.

1.2 Initialization – normalization – calibration of the door

In order to commission, inspect and maintain or operate the door system, the electronic restart lock on the door control must be cancelled first through normalization.

This is required after the power is restored.

1.2.1 Normalization via the key-operated switch

Before the door can start, the restart lock must be removed by normalizing. To do this, turn the key-operated switch from AUTOMATIC position to LOCKED and back again. Then the door will start at slow speed and "search" for the CLOSED position. The direction of rotation must not be stopped! After that the system is operational again.

1.2.2 Calibration via the reset button (R)

The open and closed position on a C90 swing door can be set via the limit switches. These are only used by initialization and calibration of the door. Once the respective controller has detected the position of the limit switch, it calculates all the positions with the integrated incremental encoder. Pressing the reset button (R) (for longer than 6 sec.) will normalize the respective control.

Calibration will start afterwards automatically. As with the initialization process, the entire processor will be reset. In addition, the ON and OFF position of the respective control will be redefined, by opening and closing the door at slow speed.

The friction values of the door are also measured. To measure the motor current properly, that is required to overcome the friction, it is measured during initialization of the door, also in the CLOSED position.

Afterwards, acceleration, deceleration and maximum speeds are specifically optimized during the first 5 door openings.

	NOTICE **The reset button (R) is supported in all operating modes!**

	NOTICE **The door must not be stopped during the initialization or calibration process to avoid measuring false parameters. This would prevent an optimal operating performance!**