

# Actulux



Brandventilation

Smoke vent

Åbningssystemer

Savunpoisto

24V - 48V - 230V

RWA

Opening systems

Exutoire de fumee

Öffnungssysteme

Systèmes d'ouverture

Elektrisk

Avausjärjestelmät

Electrical

Kædemotorer

Elektrisch

Chain drives

Kettenantrieben

Opérateurs de la chaîne

**Opening Systems & Control Panels**

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# Actulux Products

## Opening Systems

### Traverse mounted (EN 12101-2 prepared)



### Side mounted 24V/230V



### Door mounted 24VDC



## Control Panels EN 12101-10 Certified



# Electrical Opening System - SA Power Mini

maximum stability and minimum need for space

EN12101-2



**Actulux**



## MAXIMUM STABILITY AND POWER

SA Power Mini is based on a flexible unique geometrical movement by means of an electrical actuator.

The SA Power Mini gives a maximum stability and power performance for opening and closing. The traverse length is 100% adjustable.

The opening system is especially designed for small and medium size skylights, domes and smoke hatches in buildings, staircases etc.

The opening system has an elegant design and takes no space in the room under the skylight or smoke hatch.

Model	Product no.	Power supply	Traverse length (build-in dimen.)	Opening angle (fire)	Opening force 24VDC (cover weight incl. snow)	Opening force 48VDC (cover weight incl. snow)	Max. cover weight (closing force after full fire opening)	Temperature
SA Power Mini 160°	221000	24VDC / 2.5 A 48VDC / 1.25A	70-110 cm (adjustable)	160° (*)	70-100 cm: 130 kg 101-110 cm: 110 kg		70-100 cm: 30 kg 101-110 cm: 25 kg	-25°C - +55°C (+75°C)**
SA Power Mini 130°	221100			130° (*)				
SA Power Mini+ 160°	221400	24VDC / 4A 48VDC / 2A	70-110 cm (adjustable)	160° (*)	70-100 cm: 190 kg 101-110 cm: 170 kg	70-100 cm: 200 kg 101-110 cm: 180 kg	70-100 cm: 70 kg 101-110 cm: 65 kg	-25°C - +55°C (+75°C)**
SA Power Mini+ 130°	221500			130° (*)				

(\*) As option a special "actuator stop kit" can easily be post mounted to reduce the max. opening angle in any angle  
 \*\* Requires special lubrication

## FEATURES

Very easy and flexible mounting

Input voltage: 24V - max. 2.5A or 48V - max. 1.25A (Mini)      24V - max. 4A or 48V - max. 2A (Mini+)

Size: Length 70-110 cm / Width 15 cm / Height 20 cm

Opening angle for fire position: 90° - 160°

Opening time: max. 60 seconds

Designed for min. 10.000 comfort openings and min. 1.000 fire openings

Degree of protection: IP54      Operation mode: S3 25% duty cycle

Meets the demands acc. to EU standard EN12101-2

Unique and elegant design (takes no space in the room under the upstand)

Incl. overload protection

Options: Tandem operation or Synchro operation

Galvanized or white colour

No maintenance required, only yearly inspection acc. to local legislation

# Electrical Opening System - SA Power Single

maximum stability and minimum need of space

EN12101-2



**Actulux**



The opening system sets new standards within the electrical opening and closing of skylight, smoke hatch, glass roof and façade solutions etc. where there is a need for fire and comfort ventilation, according to the European Standard EN 12101-2.

### MAXIMUM STABILITY AND POWER

The opening system is based on a unique geometrical movement by means of an electrical actuator, which is fitted in a system for which a patent is applied. This system gives a maximum stability and power exploitation both for opening and closing.

The opening system is especially suitable for medium and large skylights.

### SINGLE AND COMPACT OPENING PRINCIPLE

The opening system has an elegant design, which with its single and compact opening principle demands a minimum of space in closed position as well as in operation (It does not take space in the room under the skylight or smoke hatch). This gives the possibility to pre-install the opening system.

### BUILT-IN ELECTRONIC CURRENT LIMITER

The electrical actuator is connected with a built-in electronic current limiter (type LIP) that works as an overload protector by end stop and locking. At the same time, it gives the possibility to determine the current consumption as well as the opening time.

Model	Power supply	Traverse length (build-in dimen.)	Opening angle (fire)*	Opening force (cover weight incl. snow)** Traverse length: kg	Max. cover weight (closing force after full fire opening)*** Traverse length: kg	Temperature
SA Power Single	24VDC / 4A 48VDC / 2A	88-200 cm	Up to 160°	88-120 cm: up to 450 kg 130-150 cm: up to 300 kg 160-180 cm: up to 260 kg 190-200 cm: up to 240 kg	88-120 cm: 55 kg 130-150 cm: 40 kg 160-180 cm: 35 kg 190-200 cm: 30 kg	-25°C - +55°C (+75°C)****

(\*) As option a special "actuator stop kit" can easily be post mounted to reduce the max. opening angle in any angle

(\*\*) Depending on geometry and construction

(\*\*\*) Special "closing kit" can be mounted to improve closing power

(\*\*\*\*) Requires special lubrication

Note: 2 pcs. of opening systems can be mounted in the same window/skylight - then figures in above table can be approx. doubled

## FEATURES

For comfort and smoke ventilation in domes, skylights and smoke hatches

Very easy and flexible mounting

Opening angle: 0° to 160°

Extremely low noise level

Opening time: max. 60 seconds

Designed for min. 10.000 comfort openings and min. 1.000 fire openings

Degree of protection: IP54

Corrosionclass: C2 (pregalvanized)

Operation mode: S3 25% duty cycle

Meets the demands acc. to EU standard EN12101-2

Unique and elegant design (takes no space in the room under the upstand)

Incl. overload protection

Galvanized

No maintenance required, only yearly inspection acc. to local legislation

Patented opening system



# Electrical Opening System - SA Power Double

maximum stability and minimum need of space

EN12101-2



**Actulux**



The opening system sets new standards within the electrical opening and closing of skylight, smoke hatch and glass roof etc. where there is a need for fire and comfort ventilation, according to the European standard EN 12101-2.

### MAXIMUM STABILITY AND POWER

The opening system is based on a unique geometrical movement by means of an electrical actuator, which is fitted in a system for which a patent is applied. This system gives a maximum stability and power exploitation both for opening and closing.

The opening system is especially suitable for medium and large skylights with double flap.

### UNIQUE DESIGN DEMANDS LESS SPACE

The opening system has an elegant design, which with its single and compact opening principle demands a minimum of space in closed position as well as in operation (It does not take space in the room under the skylight or smoke hatch). This gives the possibility to pre-install the opening system.

### BUILT-IN ELECTRONIC CURRENT LIMITER

The electrical actuator is connected with a built-in electronic current limiter (type LIP) that works as an overload protector by end stop and locking. At the same time, it gives the possibility to determine the current consumption as well as the opening time.

## FEATURES

Input: 48V DC or 24V DC

Low current consumption with intelligent adjustment by current limiter type LIP (48V = max. 2x2A / 24V = max. 2x4A)

For skylight sizes: Width 160-300 cm and length (hinge side) up to 250 cm

Lifting power up to 300 kgs each lid incl. snow load

Opening angle: 0° to 95°

Temperature: -25°C - +55°C (+75°C Requires special lubrication)

Opening time: max. 60 sec.

Degree of protection: IP54

Operation mode: S3 25% duty cycle

Meets the demands according to EU Standard EN12101-2

Extremely low noise level

No maintenance, only min. one yearly inspection according to the legislation in force

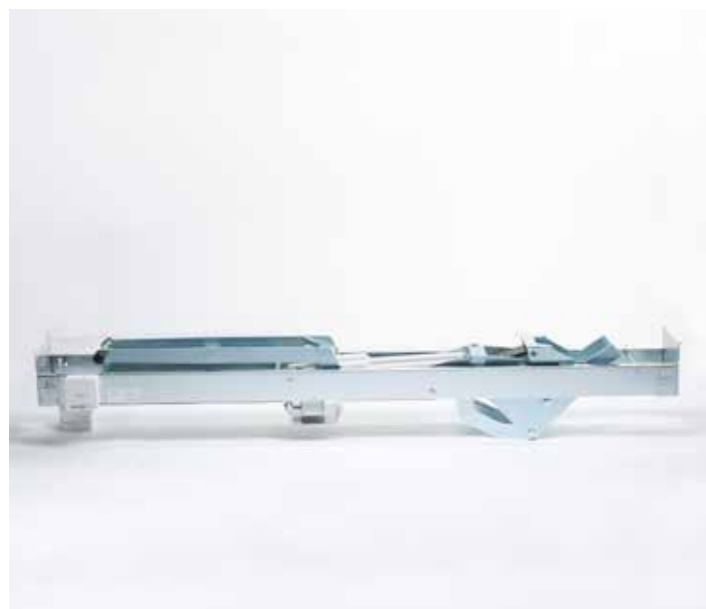
Patented opening system

Unique design with small space requirement, which gives the possibility to pre-install

# Electrical Opening System - SA Power Large

maximum stability and minimum need of space

EN12101-2



**Actulux**



With the SA Power Large Actulux is again raising the standard within the electrical opening and closing of skylights, smoke hatches and glass roofs where there is a need for fire and comfort ventilation, according to the European standard EN 12101-2.

### UNIQUE GEOMETRICAL MOVEMENT

The opening system is based on a unique geometrical movement by means of two electrical actuators, which are fitted in a system for which a patent is applied. This system gives a maximum stability and power exploitation both for opening and closing.

The opening system is especially suitable for large single flap skylights up to 250 cm width.

### ELEGANT DESIGN AND COMPACT OPENING PRINCIPLE

The opening system has an elegant design, which with its single and compact opening principle demands a minimum of space in closed position as well as in operation (It does not take space in the room under the skylight or smoke hatch). This gives the possibility to pre-install the opening system.

### BUILT-IN ELECTRONIC CURRENT LIMITER

The electrical actuators are connected with a built-in electronic current limiter (type LIP) that works as an overload protector by end stop and locking. At the same time, it gives the possibility to determine the current consumption as well as the opening time.

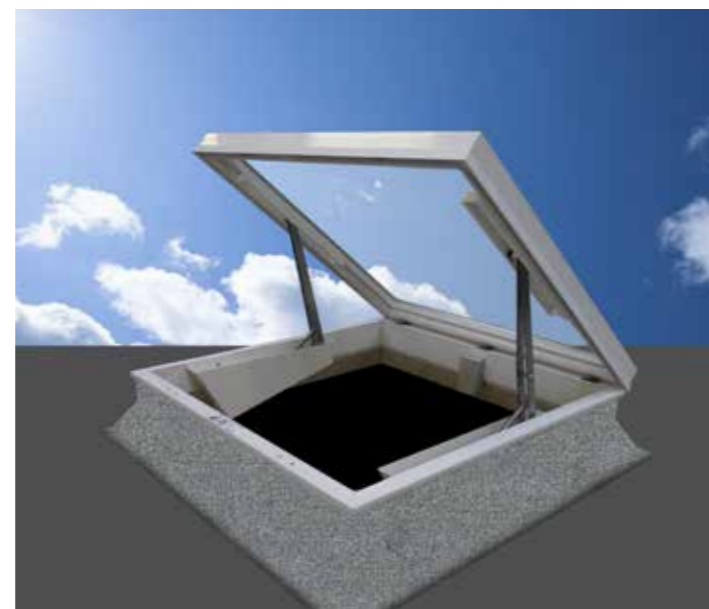
## FEATURES

Input: 48V DC or 24V DC
Low current consumption with intelligent adjustment by current limiter type LIP (48V=max. 4A / 24V=max. 8A)
For skylight sizes: Width 150-250 cm and length (hinge side) up to 250 cm
Lifting power up to 320 kgs lid weight incl. snow load
Opening angle: 0° to 160°
Temperature: -25°C - +55°C (+75°C Requires special lubrication)
Opening time: max. 60 seconds
Degree of protection: IP54      Operation mode: S3 25% duty cycle
Meet the demands according to EU Standard EN12101-2
Extremely low noise level
No maintenance, only min. one yearly inspection according to the legislation in force
Unique design with small space requirement, which gives the possibility to pre-install



# Electrical Opening System - SA Roof Access

maximum stability and minimum need of space



**Actulux**



## FOR ROOF ACCESS

The opening system is developed for roof hatch & domes to make easy access to the roof.

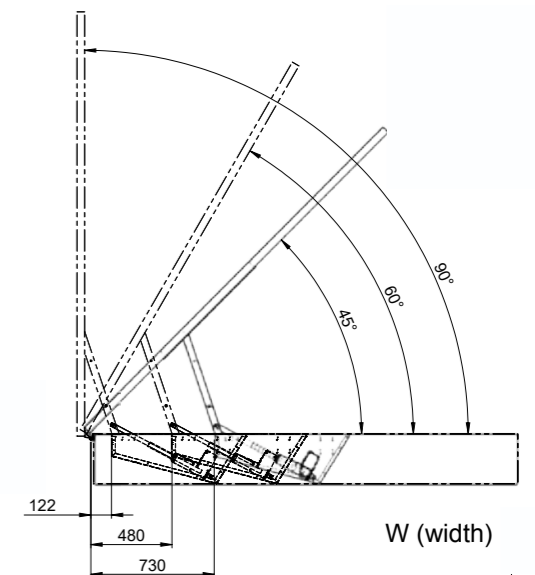
## ELEGANT DESIGN AND COMPACT OPENING PRINCIPLE

The opening system has an elegant design. With its single and compact opening principle it demands a minimum of space, and possibility for pre-installation or retrofit on an existing hatch.

## MAXIMUM STABILITY AND POWER

The opening system is based on a unique geometric movement by means of an electrical actuator mounted in both sides of the upstand.

This system gives maximum stability and power exploitation both for opening and closing.



Model	Product no.	Power Supply	Cover size (W) examples	Opening angle	Maximum weight (at 140 cm width)	Temperature
SA Roof Access 24V/48V	222239	24V - 2x2.5A (5A) 48V - 2x1.25A (2.5A)	85 - 240 cm	45° - 90°	160 kg (210 kg)	-25°C - +55°C (*+75°C)*
SA Roof Access RU 24V/48V (approved for smoke ventilation)	222234 222235					
SA Roof Access 230V	222223 222226	160 kg 210 kg				
SA Roof Access 230V incl. remote control	222233 222236	160 kg 210 kg				

\*Requires special lubrication

## FEATURES

For roof access - painted in RAL 9016 WHITE

Very easy and flexible mounting

Opening angle: 45° to 90°

Extremely low noise level

Degree of protection: IP54

Operation mode: S3 25% duty cycle

From motor unit: 200 cm (Max. cable length from motor to Lip control box overload unit)

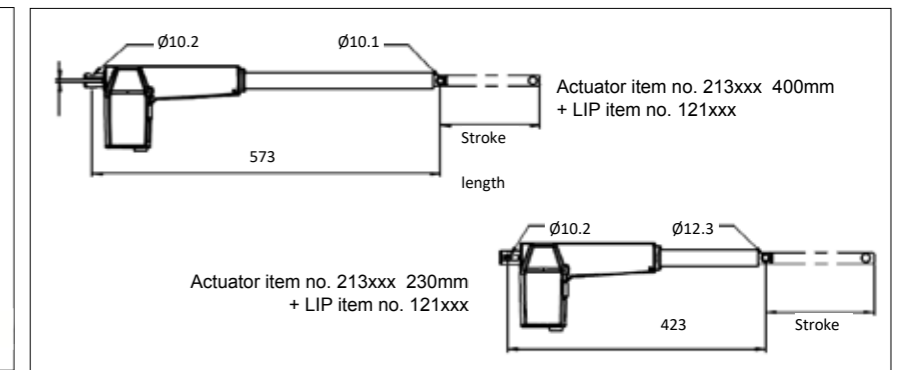
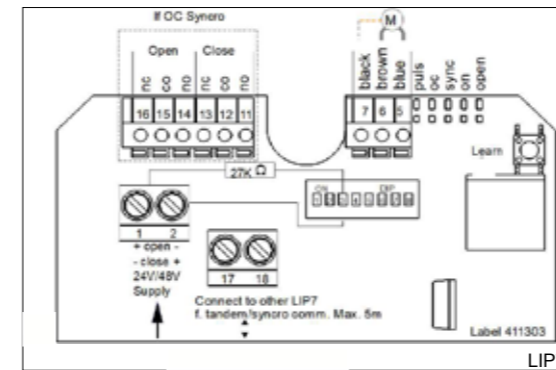
Dimensions (l x h x w): 800 x 355 x 100 mm

Incl. overload protection

No maintenance required

# Electrical Opening System - SA Basic Set

## 24/36/48VDC Intelligent LIP + High Performance Actuator



### INTELLIGENT ELECTRONIC UNIT

The SA Basic set consist of an electrical high performance actuator and an Intelligent Overload unit (LIP). The LIP is a separate intelligent electronic unit, mounted in a small junction box to be connected between the actuator and the supply (24/36/48VDC).

The LIP is needed in any application to avoid damage of the actuator and to get full benefit of the intelligent features (overload unit and current limiter in the same unit).

Model	Power supply VDC / Max. A	Push force (Max. N)	Pull force (Max. N)	Self-locking (Min. N)	Temperature	Stroke length (mm)	LIP Setting DIP Set 1-2
SA Basic Set – 7000N (Actuator+LIP7 BA) # 213206	24VDC 36VDC 48VDC	7000	4000	2000	-25°C - +55°C (+75°C)*	Max. 400 Std. 400	OFF – ON
	4A 3A 2A						
SA Basic Set – 7000N (Actuator+LIP7 TA) # 213207	24VDC 36VDC 48VDC	7000	4000	2000	-25°C - +55°C (+75°C)*	Max. 400 Std. 400	OFF – ON
	4A 3A 2A						
SA Basic Set – 7000N (Actuator+LIP7 BA) # 213208	24VDC 36VDC 48VDC	7000	4000	2000	-25°C - +55°C (+75°C)*	Max. 330 Std. 330	ON – OFF
	3A 2,3A 1,5A						
SA Basic Set – 7000N (Actuator+LIP7 TA) # 213209	24VDC 36VDC 48VDC	7000	4000	2000	-25°C - +55°C (+75°C)*	Max. 330 Std. 330	ON – OFF
	3A 2,3A 1,5A						
SA Basic Set – 7000N (Actuator+LIP7 BA) # 213211	24VDC 36VDC 48VDC	7000	4000	4000	-25°C - +55°C (+75°C)*	Max. 230 Std. 230	ON – ON
	2,5A 1,9A 1,25A						
SA Basic Set – 7000N (Actuator+LIP7 TA) # 213212	24VDC 36VDC 48VDC	7000	4000	4000	-25°C - +55°C (+75°C)*	Max. 230 Std. 230	ON – ON
	2,5A 1,9A 1,25A						
SA Basic Set – 1600N (Actuator+LIP7 TA) # 213213	24VDC 36VDC 48VDC	1600	1600	4000	-25°C - +55°C (+75°C)*	Max. 230 Std. 230	ON – OFF
	1,0A 0,75A 0,5A						
SA Basic Set – 1300N (Actuator+LIP7 TA) # 213214	24VDC 36VDC 48VDC	1300	1300	2000	-25°C - +55°C (+75°C)*	Max. 400 Std. 330	OFF – ON
	1,0A 0,75A 0,5A						
SA Basic Set – 2600N (Actuator+LIP7 TA) # 213215	24VDC 36VDC 48VDC	2600	2600	2000	-25°C - +55°C (+75°C)*	Max. 400 Std. 330	ON – ON
	1,5A 1,13A 0,75A						

As option a special "actuator stop kit" can easily be post mounted to reduce the stroke length in any length  
\*Requires special lubrication

### FEATURES

- Input voltage: 24VDC or 48VDC (automatically detected by LIP)
- Input current consumption (max. A) - see specification table
- Electronic overload protection + mechanical end stop switches
- Opening time to full stroke length = max. 60 seconds (for EN12101-2 approval)
- Special Actulux 300°C heat solution in the actuator (for EN 12101-2 approval)
- Designed for min. 10.000 comfort openings and min. 1.000 fire openings
- Degree of protection: IP54      Operation mode: S3 25% duty cycle
- Extremely silent operation
- "Actuator stop kit" as option for post mounting for free stroke length reduction
- No maintenance required



# Electrical Window Opener - Chain Drive

HCV 24/48VDC - HCVA 230VAC - HCVAR 230VAC



## Key Features:

- Universal power supply 24/48VDC (HCV)
- 230VAC Power supply (HCVA / HCVAR)
- Integrated receiver + external remote control (HCVAR)
- Programmable functions
- 2500N locking force
- Extremely silent

## FEATURES:

- For roof, facade and skylight
- Compact and elegant design
- Power supply voltage:
  - 24/48VDC (HCV)
  - 230VAC (HCVA / HCVAR)
- Programmable options:
  - Synchro mode (up to 4 drives)
  - Force (push, pull, soft close)
  - Speed
  - Stroke length
  - Soft close length
- 2 wire line monitoring (HCV)
- Soft close function
- Stroke length: 350/600/800/1000mm as standard (can be reduced by programming)

- Pushing/pulling force: 500N as standard (can be reduced by programming)
- Built-in intelligent overload protection
- Low noise level
- Tested to min. 11,000 cycles
- Two different speeds - comfort ventilation / fire
- 2.5m Silicone cable
- Aluminum Housing - White (RAL 9010)
- Tested according to EN12101-2 (HCV / HCVA)
- Automatic self adjusting zero-point

### Key accessories:

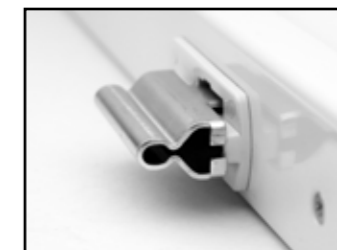
- HOC electronic module for extended features
- Wind & Rain Sensor

Item no.	Model	Push force (N)	Pull force (N)	Power supply	Soft Close	Locking force (N)	Protection	Temperature (°C)	Speed (mm/s)		Size LxWxH (mm)		
									Comfort	Fire			
					Factory setting								
31010100	HCV 500N / 350mm	500	500	24VDC / 1.40A 48VDC / 0.70A							7	436 x 52 x 42	
31010200	HCV 500N / 600mm										7	10	561 x 52 x 42
31010300	HCV 500N / 800mm										**	14	661 x 52 x 42
31010400	HCV 500N / 1000mm										**	17	766 x 52 x 42
31020100	HCVA 500N / 350mm	500	500	230VAC / 30W	200N 50mm	2500	IP32	-25 - +75			7	586 x 52 x 42	
31020200	HCVA 500N / 600mm										7	***10	711 x 52 x 42
31020300	HCVA 500N / 800mm										**	***14	811 x 52 x 42
31020400	HCVA 500N / 1000mm										**	***17	916 x 52 x 42
31030100	*HCVAR 500N / 350mm	500									7	586 x 52 x 42	
31030200	*HCVAR 500N / 600mm										7		711 x 52 x 42
31030300	*HCVAR 500N / 800mm										**	10	811 x 52 x 42
31030400	*HCVAR 500N / 1000mm										**	10	916 x 52 x 42

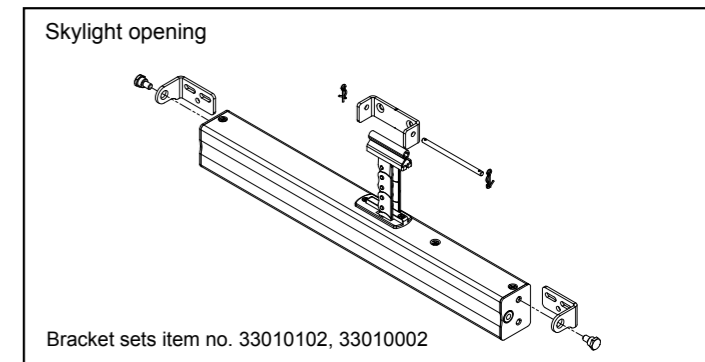
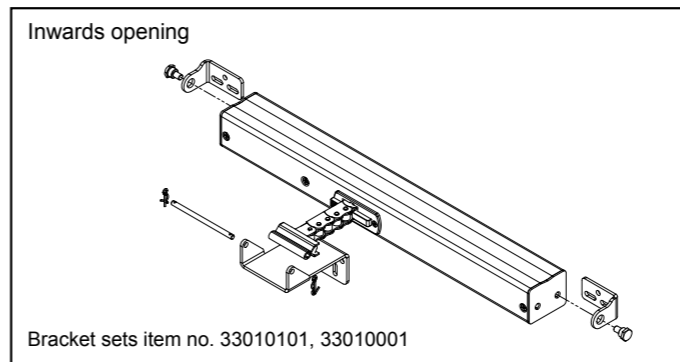
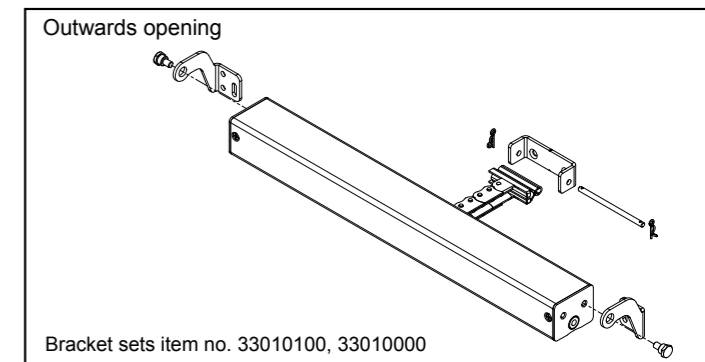
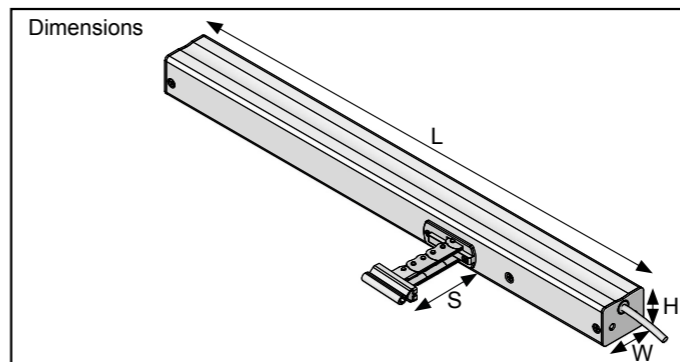
\*Integrated receiver + external remote control

\*\*Use only for bottom and side hung window (If other uses are considered, contact your supplier)

\*\*\*FIRE Speed requires programming by Actulux or by use of PMD-Tool



Bracket sets - stainless steel		Bracket sets - white (RAL 9010)	
Item no.	Use	Item no.	Use
33010100	Outwards opening	33010000	Outwards opening
33010101	Inwards opening	33010001	Inwards opening
33010102	Skylight opening	33010002	Skylight opening



# Electrical Door Drive - Chain Drive

HCV-Door 24/48VDC

EN12101-2



# 318061



## FEATURES:

- For all doors
- Compact and elegant design
- Built-in electronic overload protection
- Power supply 24/48VDC
- 2 wire line monitoring
- Up to 500N force at chain entrance point
- 600 mm chain length
- Soft Close function (reduced closing speed)
- 2.5 m Silicone cable
- Housing made of anodized aluminium
- Tested according to EN12101-2



# 318062

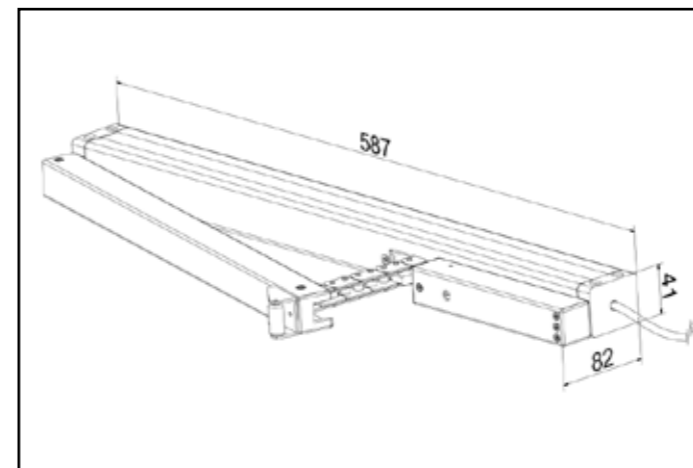
## DOOR DRIVE WITH SLIDER

The door drive is also available in an edition, where the moving arm is fixed to a slider, allowing you to keep the door/window in a certain position.

The slider is mounted on the doorplate or the window frame. This enables the door/window to remain unaffected by wind and ensures the door/window stays in the same position as the arm. When the door drive returns to the closed position, it will also bring the door/window back. The door drives can be mounted in synchro, for example one at the top and one at the bottom of the door/window.

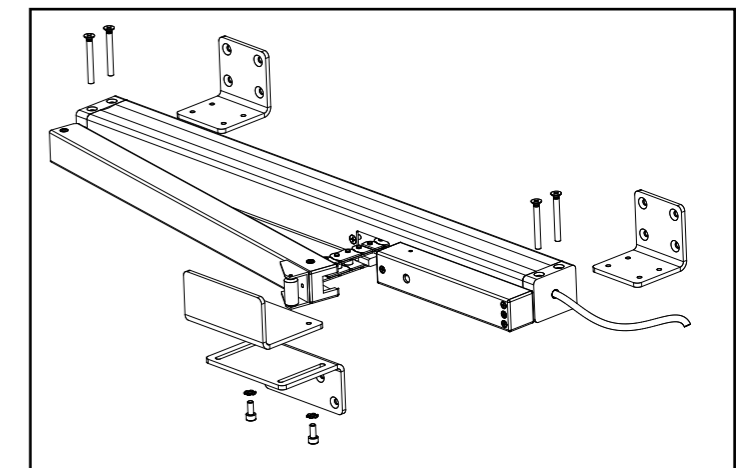
Model	Power supply	Pushing/pulling force (N)	Opening angle	Locking pressure	Protection	Temperature	Speed (mm/sec.)		Size (mm) (LxWxH)
Door Drive							Natural	Smoke & Heat	
HCV 500/600mm	24VDC / 1.4A 48VDC / 0.7A	500 / 500 N	90°	2000 N	IP 32	-25° C - +75° C	7	10	587 x 82 x 41

## Dimensions

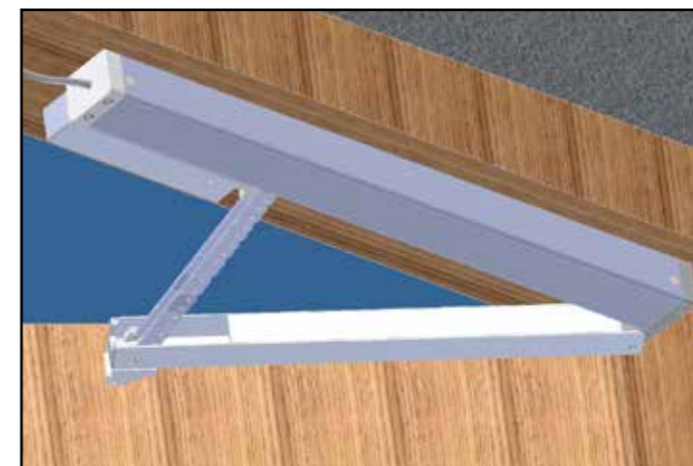


## Bracket set for Inwards opening

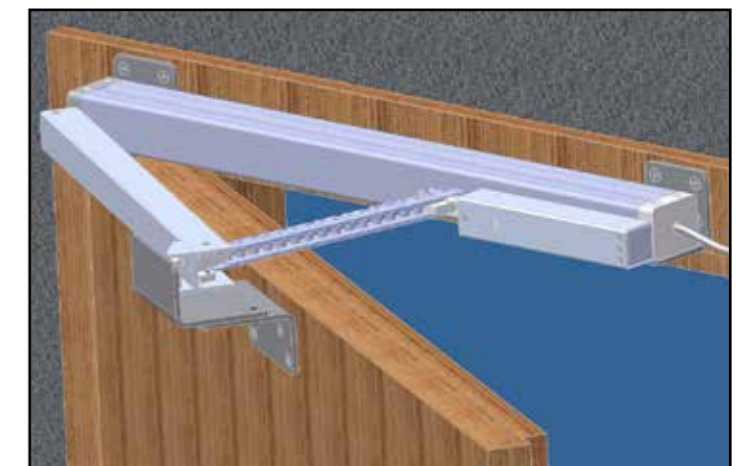
item no.390061



## Outwards opening



## Inwards opening

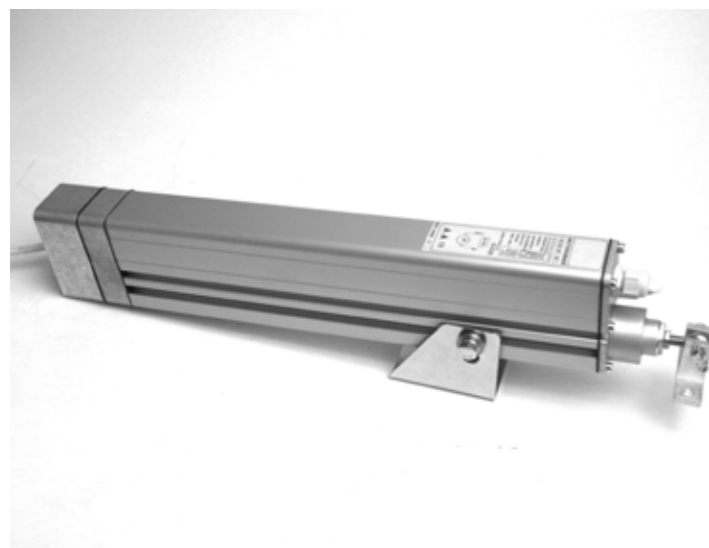




# Electrical Window Opener - Spindle Drive

JM-DC3 24 VDC

EN12101-2



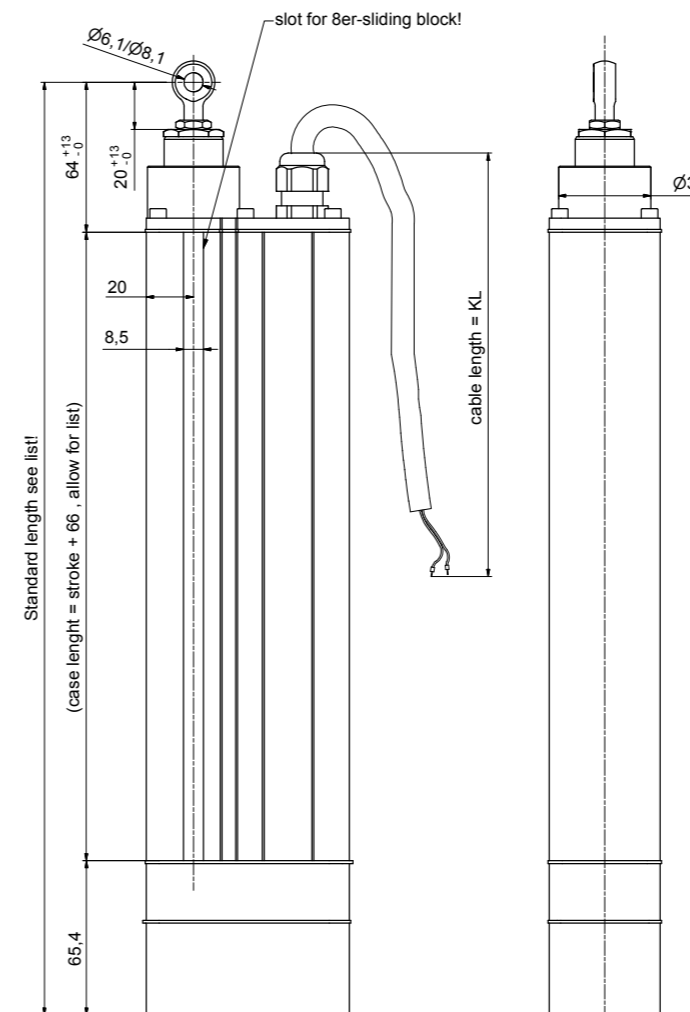
## FEATURES:

- For all windows and skylights
- Built-in end switch
- Electronic protection against overload
- Spindle drive is permanent lubricated
- Stroke from 300mm to 1000mm
- 800mm opening within < 60 sek.
- Push- / pulling force 900N or 1600N
- Locking force 3500N
- Power supply 24VDC
- 3,5 m Silicon cable
- Tube made of anodized aluminium
- Input voltage according to EN 61558-2-6 (24VDC +30% / - 20%)
- Requirements according to EN 12101-2

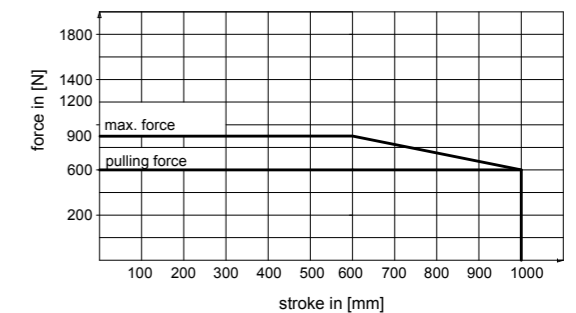
**Actulux**

Model	Power supply*	Push / pulling force	Stroke length (mm)	Locking force	Protection	Temperature	Speed (mm/sec.)	Size (mm) (LxWxH)
JM-DC3 900N-300mm	24 VDC / 2,0A (2,5A)	900N/900N	300	3500N	IP 65	-15° C - 75° C	13,6	495 x 86 x 47
JM-DC3 900N-500mm			500					695 x 86 x 47
JM-DC3 900N-800mm			800					995 x 86 x 47
JM-DC3 900N-1000mm			1000					1195 x 86 x 47
JM-DC3 1600N-500mm	24 VDC / 4,0A (5,0A)	1600N/1600N	500	3500N	IP 65	-15° C - 75° C	13,6	695 x 86 x 47
JM-DC3 1600N-800mm			800					995 x 86 x 47
JM-DC3 1600N-1000mm			1000					1195 x 86 x 47

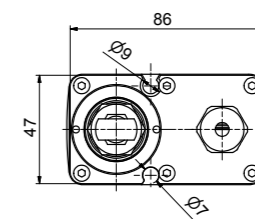
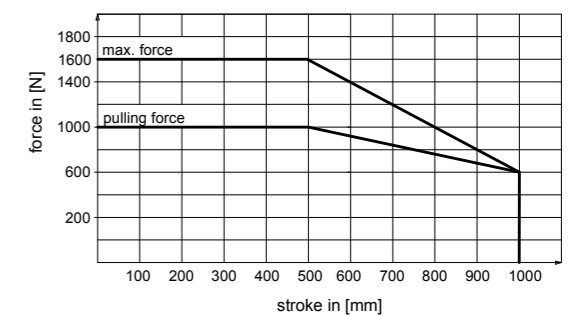
## Dimensions



## Max. pushing force at 900N motor



## Max. pushing force at 1600N motor



## FEATURES

\* Max. ripple 5%

Max. current with overload:	2,5A (900N)	5,0A (1600N)
Operation mode:	S3 30% duty cycle	
Weight w/1000mm stroke:	3,3 kg (900N)	3,5 kg (1600N)
Max. current and time when blocked until interruption by overload:	8A for 200 ms (900N)	13A for 180 ms (1600N)
Accessories for mounting:	Top bracket FB8: #99250111	Motor bracket KB10: #99250110

# Control Panels - Type SVM 24V

5A or 8A / 1 fire-/comfort group

EN12101-10



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### FOR BOTH COMFORT- AND FIRE VENTILATION

SVM "Mini" control panels are constructed to provide and control the operation of the opening systems for comfort and fire ventilation with 24V DC electrical opening units.

The SVM control panel is equipped with connection terminals for external signals (comfort- and fire switches, weather sensor/close all, detectors etc.), and it is also possible to connect more control panels in the same

"Bus" connection. The SVM control panel has a compact and elegant design and is certified according to EN12101-10 class A (double supply).

Incl. battery back-up.

Possibility for built-in fire- and comfort switches in the front.



Specifications	24V Control Panels Mini Type SVM 24V-5A / SVM 24V-8A (VdS approval)
Power supply	230V AC - max. 1.5A
Output supply	24V DC
Motor outputs	1 pc. (line detection: 1-4 lines)
Max. total load	5A / 8A
Operating temperature	-15°C - +40°C
Density	IP 54
Battery back-up (72h)	Yes
Dimensions WxDxH / Weight incl. batteries	238 x 113 x 286 mm / 7,5 kg
Colour	White front - black indication label
Batteries	2 pcs. 12V/7.2AH
Fire groups	1 pc. with line detection. Max. power consumption for fire switches (LED+buzzer) = 17.6mA ≈ approx. 8 fire switches
Comfort groups	1 pc. - unlimited no. of comfort switches
Detector (smoke/heat) inputs	1 pc. with line detection. Max. power consumption for detectors = 2.2mA ≈ approx. 22 pcs. detectors
Weather sensor input / close all	Yes
Alarm output	Yes - potential free contact, max. 48V / 0.5A
Failure output	Yes - potential free contact, max. 48V / 0.5A
24V DC for external use	24V DC / max. 0.5A - at 230V AC operation
Bus communication	Yes - connection of 2 - 35 pcs. control panels - line detection
Visual (LED) indication in front panel	"OK" / "AC fault" / "Low battery" / "Line fault" / "Alarm" / "Comfort open"
DIP switch features (standard)	Possibility of setting different functions
Approvals / Conforms	EN12101-10:2005 approved and certified - class A (double supply) - envir. class 1 (to -15°C) According to ISO 21927-9:2012 (except Buzzer) VdS Certifikat G 518001 (ONLY 8A-edition) VdS 2581:2002-09(02) Umweltklasse III / VdS 2593:2002-09(02) Umweltklasse III



# Control Panels - Type SVM EI 24V

5A, 8A or 10A - 1 fire-/comfort group

EN12101-10

**SVM EI**  
-Now available in Magnet,  
Fire Curtain and PSU  
version

SMOKE VENT

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## Additional Features compared to SVM:

- Direct connection for Fireman's Priority Switch
- Auto reset built-in
- Roof access mode - on request
- Battery protection
- Event log
- Open / Close Indicator on Control Switch
- Lock-Out Mode for the UK market

## FOR BOTH COMFORT- AND FIRE VENTILATION

SVM "Mini" control panels are constructed to provide and control the operation of the opening systems for comfort and fire ventilation with 24V DC electrical opening units.

The SVM EI control panel is in addition equipped with:

- fireman's priority switch is an override switch, which makes it possible for the fireman to control the panel regardless of sensor inputs
- after alarm mode, the control panel can be automatically reset
- special roof access mode to secure entrance
- deep discharge protection
- event logging allows you to log 170 files before wrapping around overwriting old files
- window position indication (opened or closed) on eg. control switch
- smoke control for multi-storey building (UK only)

## VERSIONS:

Model	Feature
SVM EI-FC 24V-5A/8A/10A	Fire curtain with emergency opening (the curtain is released in case of fire)
SVM EI-PSU 24V-5A/8A/10A	Keeps constant voltage on output. EN12101-10 approved as a power supply for other controls.
SVM EI-M 24V-5A/8A/10A	Holding magnet – magnet is released in case of fire. The switching time between 230V and battery operation is 0 mS.

Specifications	24V Control Panels Mini Type SVM EI 24V-5A / SVM EI 24V-8A / SVM EI 24V-10A
Power supply	230V AC - max. 1.8A
Output supply	24V DC
Motor outputs	1 pcs. (line detection: 1-4 lines)
Max. total load	5A / 8A / 10A
Operating temperature	-15°C - +40°C
Density	IP54
Battery back-up (72h)	Yes
Dimensions WxDxH / Weight incl. batteries	238 x 113 x 286 mm / 7,5kg
Colour	White front - black indication label
Batteries	2 pcs. 12V/7Ah
Fire groups	1 pcs. with line detection. Max.power consumption for fire switches (LED+buzzer)=17.6mA ≈approx.10 fire switches
Comfort groups	1 pcs. - unlimited no. of comfort switches with open indicator
Detector (smoke/heat) inputs	1 pcs. with line detection. Max.power consumption for detectors = 2.2mA ≈ approx. 22 pcs. detectors
Firemans Priority Switch	Yes (except SVM EI-M / PSU / FC)
Weather sensor input / close all	Yes
Interruption time	SVM EI 1.5 sec. (SVM EI-M / PSU / FC 0 m sec.)
Alarm output	Yes - potential free contact, max. 230VAC / 3A, 24VDC / 3A
Failure output	Yes - potential free contact, max. 230VAC / 3A, 24VDC / 3A
24V DC for external use	24V DC / max. 0.5A - at 230V AC operation
Bus communication	Yes - connection of 2-35 pcs. control panels - line detection
Visual (LED) indication in front panel	"OK" / "AC fault" / "Low battery" / "Line fault" / "Alarm" / "Comfort open"
DIP switch features (standard)	Possibility of setting different functions
Approvals / Conforms	EN12101-10:2005 approved and certified - class A (double supply) - envir. class 1 (to -15°C) SVM EI-M / PSU / FC - class B According to ISO 21927-9:2012 (except Buzzer)



# Control Panels - Type SV 24V/48V

8A, 24A, 30A or 32A - 2 fire-/comfort groups

EN12101-10



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## FOR BOTH FIRE- AND COMFORT VENTILATION

SV control panels are constructed to provide and control the operation of the opening systems for comfort and fire ventilation with 24V or 48VDC electrical opening units.

The SV control panel is equipped with connection terminals for external signals (comfort- and fire switches, weather sensor/close all, detectors etc.), and it is also

possible to connect more control panels in the same "bus" connection.

The SV control panel has a compact and elegant design and in the "ds" version it is certified according to EN12101-10 class A (double supply). Incl. battery back-up.

Specifications	SV 24V-xx Control Panels	SV 48V-xx Control Panels
	SV 24V-24A / SV 24V-32A 24V-8A-ds / 24V-24A-ds / 24V-30A-ds / 24V-32A-ds	48V-24A / 48V-32A 48V-8A-ds / 48V-24A-ds / 48V-30A-ds / 48V-32A-ds
Note / Approvals / Conforms	"-ds" = EN12101-10:2005 approved / certified - class A (double supply) - envir. class 1 (to -15°C) // Conform EN12101-9	
Power supply	230VAC / max. 1.5A ("ds" = max. 5A)	230VAC / max. 1.5A ("ds" = max. 10A)
Output supply	24VDC	48VDC
Motor outputs	2 pcs. (line detection: 1-10 lines)	2 pcs. (line detection: 1-10 lines)
Max. total load	8A / 24A / 30A / 32A	8A / 24A / 30A / 32A
Max. load each motor output	16A	16A
Operating temperature	-15°C - +40°C	-15°C - +40°C
Density	IP 54	IP 54
Battery back-up (72h) / Batteries	Yes / 8A-24A = 2 pcs. 12V/7.2Ah 30A-32A = 2 pcs. 12V/12Ah	Yes / 8A-24A = 4 pcs. 12V/7.2Ah 30A = 2 pcs. 12V/7.2Ah + 2 pcs. 12V/12Ah 32A = 4 pcs. 12V/12Ah
Dimensions (WxDxH) / Weight incl. batteries	343 x 178 x 450 mm / max. 22 kgs	343 x 178 x 450 mm / max. 32 kgs
Colour	White front / Black chassis	White front / Black chassis
Fire groups	1 or 2 pcs. (by dip switch) with line detect. / Max. power consumption for fire switches (LED+buzzer)=14mA=approx. 6 fire switches	
Comfort groups	1 or 2 pcs. (by dip switch) - Unlimited number of comfort switches	
Detector (smoke/heat) input	2 pcs. with line detection / Max. power consumption for detectors = 4.4 mA = approx. 2x22 = 44 detectors	
Weather sensor input / close all	Yes	Yes
Alarm output	Yes - potential free contact, max. 48V / 0.5A	Yes - potential free contact, max. 48V / 0.5A
Failure output	Yes - potential free contact, max. 48V / 0.5A	Yes - potential free contact, max. 48V / 0.5A
24V DC for external use	24VDC / max. 0.5A - at 230VAC operation	24VDC / max. 0.5A - at 230VAC operation
Bus communication	Yes - connection of 2-10 control panels - line detection	
Visual (LED) indication in front panel	"OK" / "AC fault" / "Low battery" / "Line fault" / "Alarm"	
Dip switch features (standard)	"Service hours (LED's flash in front panel)" / "Comfort opening interval" / "Temperature detection via motor output" / "Extra line detection via 3 wire motor output" / Fail safe (alarm by line failure)" / "Sprinkler (close by alarm)" / "Bus comm. settings (react on Bus comm.)"	
Options	Possibility to connect "Add-on" PCB with relay contacts for "comfort open" signal	



# Control Panels - Type SVL 24V/48V

10A / 15A / 20A / 32A / 40A / 50A with 2-6 motor outputs EN12101-10

## Special Features:

- Multi Zone: Up to 6 zones / motor groups for fire- and comfort ventilation (modular build).
- 2-wire CAN Bus for communication between other SVL Control Panels - up to 10 pcs.
- 2-wire Powerline connection for intelligent Fire Switches (iMCP - intelligent Manual Control Point and iFPS - intelligent Firemans Priority Switch)
- "Ring" connection for intelligent Fire Switches and other SVL Control Panels in the bus communication, to ensure high operations safety in case of cable fault.
- Easy setup from Smart Phone - Android and iOS.
- 24V or 48V output editions - Up to 50A in total for one Control Panel, max. 25A per motor group.
- Separate control per motor output for:
  - Fire, comfort and detector
  - Alarm and fail relay
  - Reset input
  - Extra fail monitoring input (to be used for variety of features)
- Top and bottom cable entries and possibility for cable trunking inside the Control Panel.
- Event logging - read out via App.
- EN12101-10 class A (double supply) certified.



## FOR BOTH FIRE- AND COMFORT VENTILATION

SVL control panels are constructed to provide and control the operation of the opening systems for comfort and fire ventilation with 24V/48V DC electrical opening units.

The SVL is a Multi Zone Control Panel, delivered with 2 motor groups as standard but can be expanded up to 6 motor groups with 4 additional modules. All groups can be configured with individual input for fire- and comfort opening, reset, smoke/heat detectors, and an extra line monitored input from eg. open indication.

Alarm and fail relay with potential free NO/NC contact per motor group is standard.

Common input for weather sensor / close all is standard.

The 2-wire powerline connection for intelligent Fire Switches / intelligent Manual Control Point (iMCP), intelligent Firemans Priority Switch (iFPS) and the CAN Bus Communications for connecting with more SVL Control Panels, is very functional in the event of cable faults. It ensures easy installation and very high operational safety, due to the "ring" connection principle.

Top and Bottom cable entries in FL21 flange makes it easier to install the Control Panel in relation to cabling.

The SVL Control Panel has a compact and elegant design and is certified according to EN12101-10 class A (double supply).

All Control Panels are delivered incl. battery back-up.



Specifications	SVL 24V-xx Control Panels 24V-15A / 24V-20A / 24V-32A / 24V-40A / 24V-50A	SVL 48V-xx Control Panels 48V-10A / 48V-15A / 48V-20A / 48V-32A / 48V-50A
Note / Approvals / Conforms	EN12101-10:2005 approved / certified - class A (double supply) - envir. class 1 (to -5°C) // According to ISO 21927-9:2012	
Power supply	230VAC / max. 8A / min. 10A net fuse	230VAC / max. 14A / min. 13A net fuse for 10-32A panels / min. 16A net fuse for 50A panels.
Output	24VDC	48VDC
Motor outputs	2 pcs. as standard (with 10 mm2 terminals for motor output). 4 pcs. more can be installed (with 6 mm2 terminals for motor output). Line detection: 1-15 lines per output)	2 pcs. as standard (with 10 mm2 terminals for motor output). 4 pcs. more can be installed (with 6 mm2 terminals for motor output). Line detection: 1-15 lines per output)
Max. total load DC	15A / 20A / 32A / 40A / 50A	10A / 15A / 20A / 32A / 50A
Max. load each motor output	25A	25A
Operating temperature	-15°C — +40°C	-15°C — +40°C
IP rating	IP 54	IP 54
Battery back-up (72h) / Batteries	Yes / 15A-20A = 2 pcs. 12V/12Ah 32A-50A = 2 pcs. 12V/18Ah	Yes / 10A-32A = 4 pcs. 12V/12Ah 50A = 4 pcs. 12V/18Ah
Dimensions (WxDxH) / Weight incl. batteries	516 x 215 x 660 mm / max. 34 kgs	516 x 215 x 660 mm / max. 48 kgs
Color	White front / Black chassis	White front / Black chassis
Fire groups	Max. 12 pcs. intelligent Fire Switches / intelligent Manual Control Point (iMCP) or Fireman's Priority Switch (iFPS) per panel. Up to 60 fire groups if connected with more SVL Control Panels in CAN bus (set by rotary switch).	
Comfort groups	Unlimited number of mechanical comfort switches - max. 50 mA if power output for open indication.	
Detector (smoke/heat) input	2-6 lines max. 44 pcs. per panel. Max. summarized quiescent current 2.2 mA ~ 22 detectors of 100 µA per line. Min. alarm current 15 mA. Supply voltage min. 18 V and max. 29 V. To fulfill ISO21927-9 detectors shall conform to ISO 7240	
Weather sensor input / close all	Yes	Yes
Alarm output	1 pcs. per motor output potential free contact, max. 48V / 0.5A	1 pcs. per motor output potential free contact, max. 48V / 0.5A
Failure output	1 pcs. per motor output potential free contact, max. 48V / 0.5A	1 pcs. per motor output potential free contact, max. 48V / 0.5A
24V DC for external use	24VDC / max. 0.5A - at 230VAC operation	24VDC / max. 0.5A - at 230VAC operation
Bus communication	Yes – ring connection of 2-10 control panels - line detection	
Visual (LED) indication in front panel	"OK" / "AC fault" / "Low battery" / "Line fault" / "Alarm" / "Open" / "Weather"	
App Setup	"Service indication (LED's flash in front panel)" / "Comfort opening interval" / "Temperature detection via motor output" / "Extra line detection via 3 wire motor output" / Fail safe (alarm by line failure)" / "Sprinkler (close by alarm)" / "Bus comm. settings (react on Bus comm.)"	
Options	Up to 4 motor group modules can be connected to main board. Internal panel trunking.	

Item no.	SVL 24V-xxA	Groups
228002xx / 3xx / 4xx / 5xx / 6xx	SVL 24V-15A	2 / 3 / 4 / 5 / 6 gr.
228102xx / 3xx / 4xx / 5xx / 6xx	SVL 24V-20A	2 / 3 / 4 / 5 / 6 gr.
228202xx / 3xx / 4xx / 5xx / 6xx	SVL 24V-32A	2 / 3 / 4 / 5 / 6 gr.
228302xx / 3xx / 4xx / 5xx / 6xx	SVL 24V-40A	2 / 3 / 4 / 5 / 6 gr.
228402xx / 3xx / 4xx / 5xx / 6xx	SVL 24V-50A	2 / 3 / 4 / 5 / 6 gr.

Item no.	SVL 48V-xxA	Groups
228502xx / 3xx / 4xx / 5xx / 6xx	SVL 48V-10A	2 / 3 / 4 / 5 / 6 gr.
228602xx / 3xx / 4xx / 5xx / 6xx	SVL 48V-15A	2 / 3 / 4 / 5 / 6 gr.
228702xx / 3xx / 4xx / 5xx / 6xx	SVL 48V-20A	2 / 3 / 4 / 5 / 6 gr.
228802xx / 3xx / 4xx / 5xx / 6xx	SVL 48V-32A	2 / 3 / 4 / 5 / 6 gr.
228902xx / 3xx / 4xx / 5xx / 6xx	SVL 48V-50A	2 / 3 / 4 / 5 / 6 gr.



