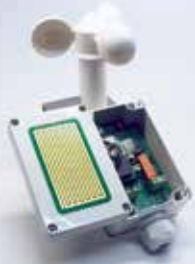


# Actulux



Brandventilation

Smoke vent

Åbningssystemer

Savunpoisto

24V - 48V - 230V

RWA

Opening systems

Exutoire de fumee

Öffnungssysteme

Systèmes d'ouverture

Elektrisk

Avasjärjestelmät

Electrical

Kædemotorer

Elektrisch

Chain drives

Kettenantrieben

Opérateurs de la chaîne

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Actulux offers a wide range of accessories for electrical control panels and opening systems. Accessories include among others Sensors, special fittings and expansion modules allowing for additional features.

## Accessories



## Fire Switch MCP, IP30 for Actulux smoke ventilation systems

### Special Features & Benefits:

- Key operated door
- Multiple cable entries
- Lots of cable space
- 2 mm<sup>2</sup> wire terminals



### EASY INSTALLATION AND OPERATION

The fire switch is developed to be used together with the Actulux smoke ventilation system.

Key operated door, and buzzer silent when door opens. Cable entry from top, bottom or back.

### OPERATION INSTRUCTIONS

**During fire:** Break the glass and activate the red button.

**During test:** Open the door and activate the red button.

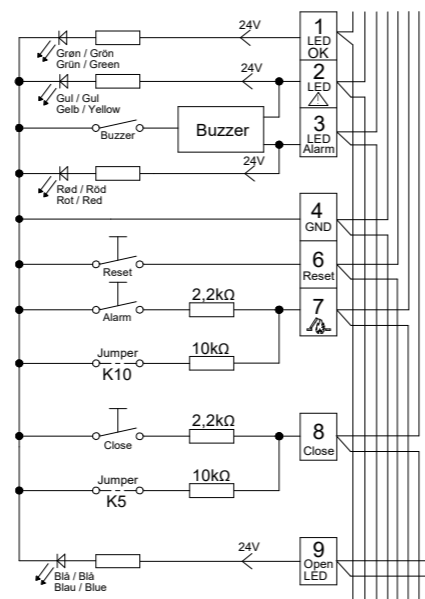
**Closing and alarm reset:** Open the door - activate the reset button, alarm is reset and skylights will close.

## Connection diagram for MCP

### Terminals (2 mm<sup>2</sup>):

1. Green LED, OK
2. Yellow LED, Failure
3. Red LED, ALARM
4. Ground (-)
6. Fire switch emergency closing (reset)
7. Fire switch emergency opening (fire)
9. Blue LED, OPEN indication

Jumper K10 must only be set in the last or only fire switch



## Intelligent Fire Switch iMCP, IP30 for Actulux SVL Control Panels

### Special Features & Benefits:

- Comfort Switch input
- Detector input
- Easy Fire Zone setup
- Built-in Buzzer
- 2-wire Powerline communication
- Output for open indication
- Thermostat function



### EASY INSTALLATION AND OPERATION

The fire switch is easy to install and operate.

It is developed to be used only together with Actulux SVL Control Panels on the Powerline communication.

### INDICATION ON FRONT PANEL (LED BOARD):

Green Ok LED = the actual zone is ok.

Yellow Fail LED = the actual zone is in fail.

Red Alarm LED = the actual zone is in alarm.

Blue LED = the smoke vent is open or closed.

Individual zone reset is possible directly at the Fire Switch.

### OPERATION INSTRUCTIONS

**During fire:** Break the glass and activate the red button.

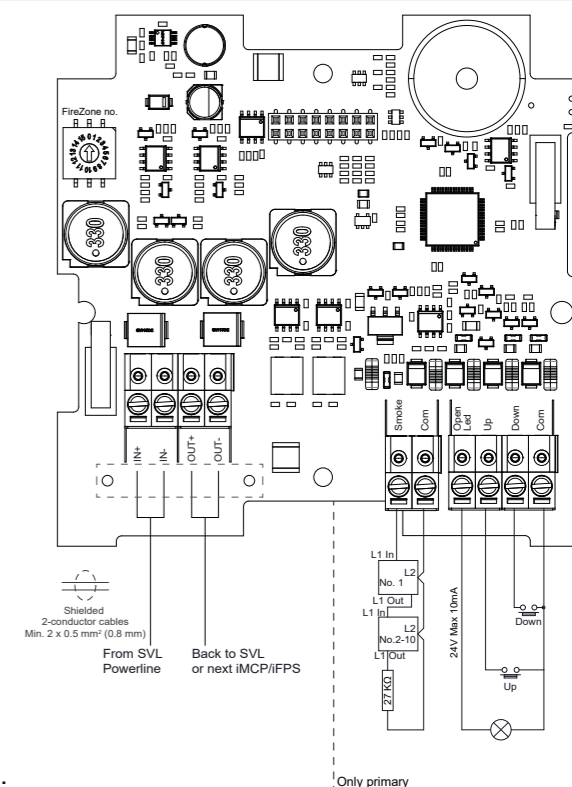
**During test:** Open the lid and activate the red button.

**Closing and alarm reset:** Open the lid - activate the reset button, alarm is reset and skylights will close.

The output for open indication can also be used with the comfort switch: Item no. 111943 - 1 zone w/blue LED.

The fire zone is set by a rotary switch inside the iMCP (max. 16 zones).

On Primary version, inputs for detector and comfort switch are available.



## SPECIFICATIONS

Approved according to ISO 21927-9:2012

Function: alarm, reset, buzzer

LED indication: "ok" (green), "error" (yellow), "alarm activated" (red), window open (blue)

Size: 125 mm x 125 mm x 38 mm (W x H x D)

Colours: Grey, Orange

Comfort: Unlimited number of mechanical comfort switches without LED indication - max. 10 pcs. with LED indication (max. 10 mA)

Detector (smoke/heat) input with line detection / Max. power consumption for detectors = 1 mA ≈ approx. 10 detectors

IP rating: IP30

Consumption on AC error: 5 mA

Item no.: 511889 (GREY) / 511890 (ORANGE) Primary with detector and comfort input

Item no.: 511989 (GREY) / 511990 (ORANGE) Secondary without detector and comfort input

# Firemans Priority Switch FPS, IP30 for Actulux smoke ventilation systems

## Special Features & Benefits:

- Key operated door
- Multiple cable entries
- Lots of cable space
- 2 mm<sup>2</sup> wire terminals



## EASY INSTALLATION AND OPERATION

The priority switch is developed to be used together with the Actulux smoke ventilation system. Key operated door, and buzzer silent when door opens. Cable entry from top, bottom or back.

## OPERATION INSTRUCTIONS

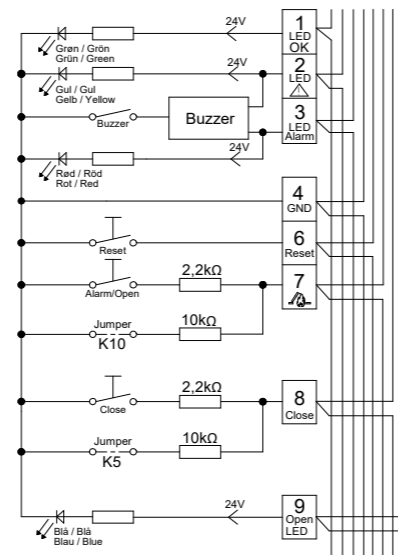
**During fire:** Break the glass and activate the red button.  
**During test:** Open the door and activate the red button.  
**Closing and alarm reset:** Open the door - activate the reset button, alarm is reset and skylights will close.

## Connection diagram for FPS

### Terminals (2 mm<sup>2</sup>):

1. Green LED, OK
2. Yellow LED, Failure
3. Red LED, ALARM
4. Ground (-)
6. Priority switch emergency reset
7. Priority switch emergency opening
8. Priority switch emergency closing
9. Blue LED, OPEN indication

Jumper K10 must only be set in the last or only fire switch



## SPECIFICATIONS

Approved according to ISO 21927-9:2012

Function: Manual override of alarm to open or close smoke vent, buzzer

LED indication: "ok" (green), "error" (yellow), "alarm activated" (red), "open" (blue)

Size: 125 mm x 125 mm x 38 mm (W x H x D)

Colour: Orange

IP rating: IP30

Consumption on error: 2.2 mA

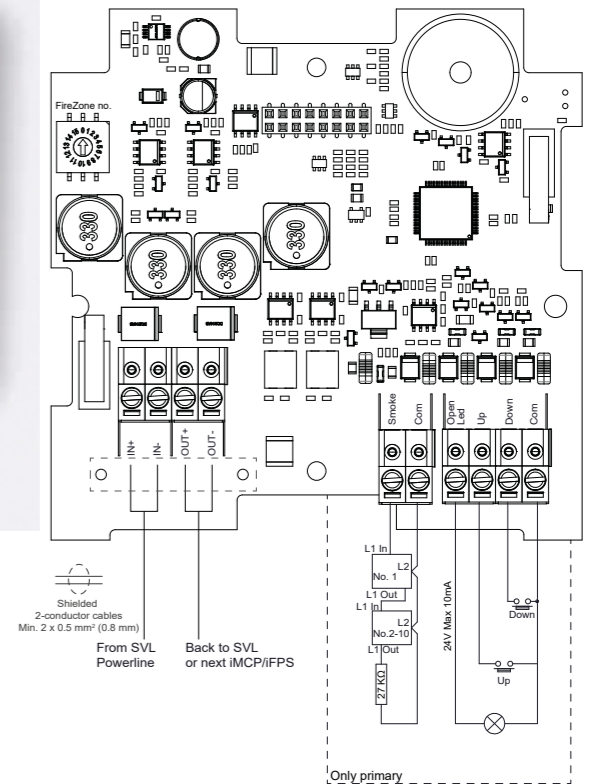
Item no.: 511729 (ORANGE)

# Intelligent Firemans Priority Switch iFPS, IP30 for Actulux SVL Control Panels

## Special

### Features & Benefits:

- Comfort Switch input
- Smoke detector input
- Easy Fire Zone setup
- Built-in Buzzer
- 2-wire Powerline connection
- Thermostat function



## EASY INSTALLATION AND OPERATION

Fireman's Priority Switch is easy to install and operate. It is developed to be used together only with Actulux SVL Control Panels.

The unit has highest priority and will allow firemen to override any other alarm activations.

## INDICATION ON FRONT PANEL (LED BOARD):

Green Ok LED = the actual zone is ok.  
 Yellow Fail LED = the actual zone is in fail.  
 Red Alarm LED = the actual zone is in alarm.  
 Blue LED = the smoke vent is open or closed.  
 The open / close indication can also be seen on comfort switch with built-in LED:  
 Item no. 111943 - 1 zone / Item no. 111944 - 2 zones

RESET is possible directly at the Firemans Priority Switch.

## OPERATION INSTRUCTIONS

The OPEN-switch sets the zone in open mode condition. If the control panel is not already in fire mode, it will enter fire mode condition after this activation. The CLOSE-switch sets the zone in closed mode condition for 180 seconds, and the zone remains in fire mode condition.

A rotary switch sets the fire zone of the iFPS. On the Primary version, input for Smoke/Heat sensor and comfort switch are available.

## SPECIFICATIONS

Function: Manual override of alarm to open or close smoke vent, buzzer

LED indication: "ok"(green), "error" (yellow), "alarm activated" (red), window open (blue)

Size: 125 mm x 125 mm x 38 mm (W x H x D)

Colours: Orange, Grey

Comfort: Unlimited number of mechanical comfort switches without LED indication - max. 10 pcs. with LED indication (max. 10 mA)

Detector (smoke/heat) input with line detection / Max. power consumption for detectors = 1 mA ≈ approx. 10 detectors

IP rating: IP30

Consumption on AC error: 5 mA

Item no.: 511939 (GREY) / 511940 (ORANGE) Primary with Smoke and Comfort input

Item no.: 511959 (GREY) / 511960 (ORANGE) Secondary without Smoke and Comfort input

## Firemans Priority Switch with Reset, IP40 for Actulux smoke ventilation systems



#111980



### EASY INSTALLATION AND OPERATION

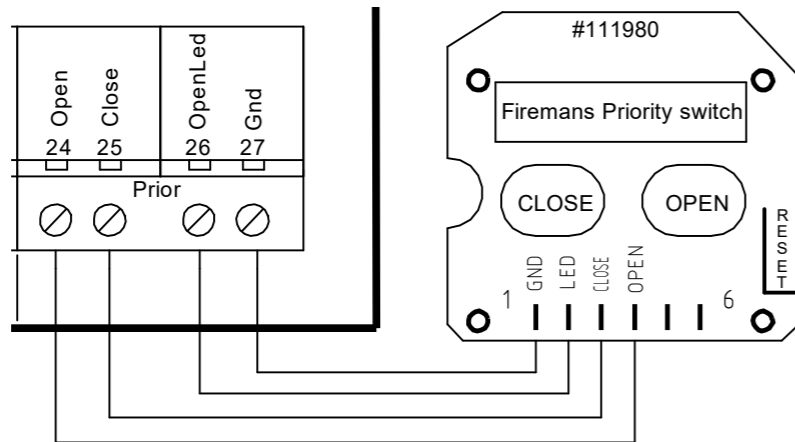
Fireman's Priority Switch is easy to install and operate. It is developed to be used together only with Actulux **SVM EI Control Panels**. The unit has highest priority and will allow firemen to override any other alarm activations.

Blue LED indicates status of the smoke vent open or closed. Only one unit can be fitted to each panel. Reset directly at the firemans priority switch.

### OPERATION INSTRUCTIONS

The CLOSE-switch activates the panel in close condition for 180 seconds, and the panel stays in fire mode. The OPEN-switch activates the panel in open condition if not in fire mode, and the panel enters fire mode. The LED output is activated in open condition (windows are open).

### Wiring diagram



### SPECIFICATIONS

Function: Manual override of alarm to open or close smoke vent
LED indication: Open / Close (blue)
Size: 125 mm x 125 mm x 36 mm (W x H x D)
Colour: Orange
IP rating: IP40
Consumption on error: 1 mA
Item no.: 111980

## Fire Switch BVT for Smoke Ventilation Systems, IP40 for Actulux smoke ventilation systems



#111789



#111790

### EASY INSTALLATION AND OPERATION

The fire switch is developed to be used together with the Actulux smoke ventilation system.

### OPERATION INSTRUCTIONS

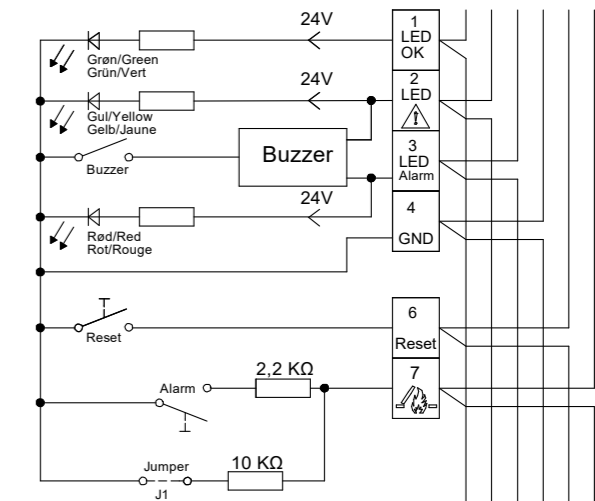
**During fire:** Break the glass and activate the red button. During test open the lid and activate the red button. **Closing and alarm reset:** Open the lid - activate the black reset button, alarm is reset and skylights are closed.

### Connection diagram for BVT

#### Terminals:

1. green LED OK, lights when closing
2. Yellow LED, lights on error
3. red LED alarm, lights on emergency opening
4. ground (-)
5. -
6. fire switch emergency closing (reset)
7. fire switch emergency opening (fire)

Jumper J1 must only be set in the last or only fire switch



### SPECIFICATIONS

Function: Alarm (open), reset and off, sound indicator
LED indication: "ok", "error" (yellow), "alarm activated" (red)
Size: 125 mm x 125 mm x 36 mm (W x H x D)
Colour: Grey (can be delivered in orange on request)
IP rating: IP40
Consumption on error: 2.2 mA
Product no.: 111789 (GREY) / 111790 (ORANGE)

## Fire Switch MCP for Smoke Ventilation Systems, IP65 for Actulux smoke ventilation systems



#511581

### EASY INSTALLATION AND OPERATION

The fire switch is developed to be used together with the Actulux smoke ventilation system.  
Buzzer silent when door opens.  
Cable entry from top, bottom or back.

### OPERATION INSTRUCTIONS

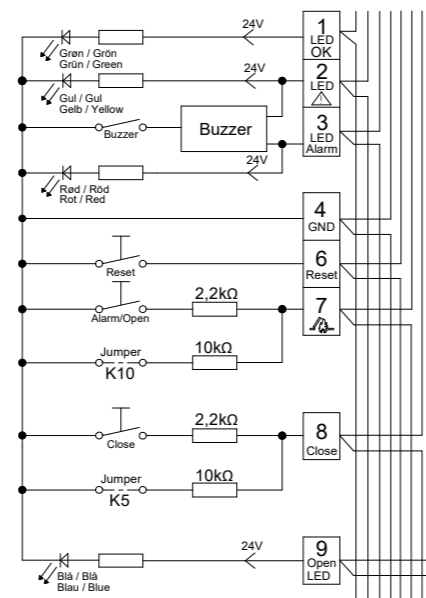
**During fire:** Break the glass and activate the red button.  
**During test:** Open the door and activate the red button.  
**Closing and alarm reset:** Open the door - activate the reset button, alarm is reset and skylights will close.

## Connection diagram for MCP

### Terminals (2 mm<sup>2</sup>):

1. Green LED, OK
2. Yellow LED, Failure
3. Red LED, ALARM
4. Ground (-)
6. Fire switch emergency closing (reset)
7. Fire switch emergency opening (fire)
8. Close
9. Blue LED, OPEN indication

Jumper K10 must only be set in the last or only fire switch



## SPECIFICATIONS

Function: Alarm (open), reset and buzzer off
LED indication: "ok" (green), "error" (yellow), "alarm activated" (red), "open" (blue)
Size: 125 mm x 125 mm x 75 mm (W x H x D)
Temperature range: (-25°C to +60°C)
Colour: Grey or Orange
IP rating: IP65
Consumption on error: 2.2 mA
Item no.: 511581 (GREY) / 511590 (ORANGE)

## Wind & Rain Sensor, type AR/AWR 24/250 automatic control of smoke, fire & comfort ventilation systems



#111961



#111960

### INTELLIGENT AND ADVANCED PRODUCT

Wind and Rain Sensor #111961 consists of a wind wheel and a rain sensor surface. It is developed for automatic control of smoke and comfort ventilation system.  
Rain Sensor #111960 consists a rain sensor surface.  
Both sensors are equipped with a potential free relay with a contact rating of 250VAC / 8A or 24VDC / 8A.

In case of wind and / or rain the relay is activated. The settings for the wind trigger point is adjusted using rotary switch on the main PCB.

### WIRELESS CONNECTION

It is possible to connect Actulux Weather Sensor wireless to Actulux SV/SVM Control Panel or to Actulux Flex1 ACDC using a RF-transmitter #111892 fitted into the sensor.

Range: Line of sight approx. 400 meters.

Actulux Control Panels have to be equipped with RF-receiver PCB:  
#111894 for SVM Control Panels  
#111895 for SV Control Panels

## SPECIFICATIONS

Power supply: 18V til 35VAC / 20V til 35VDC / 200V til 250VAC
Output contact: NO-NC 1 x potential free change-over contact
Contact rating: 250VAC / 8A or 24VDC / 8A
Dimensions: 80 x 160 x 55 mm (WxHxD / without wind wheel)
Weight: Approx. 0,7 kg
IP rating: IP65
Setting of the wind mode: Approx. 1 to 9 m / s (± 20%)
CE-marking: in accordance with the EMC-directive and low voltage directive
Connecting the controller has to be carried out by professionals
The sensor must be cleaned regularly, depending on soil degree, with a wet cloth with water - no abrasive
RF-Transmitter #111892 (optional)
Brackets for roof mounting #99600024
Brackets for wall mounting #99600025

## Remote Control wireless comfort control



### REMOTE FOR COMFORT

Enabling wireless comfort control of Actulux Control Panels and Actulux Flex1 ACDC.

Simply fit the RF-reciever PCB into the socket.

The remote control is paired with the RF-receiver PCB from factory, but it is possible to connect more remote controls.

### HOW TO PAIR

1) Press "program button" on the RF-receiver PCB and hold on for 3 sec. for confirmation the LED indicator illuminate.

2) Press the "UP-button" on the remote control and this LED-indicator will illuminate.

3) The LED indicator will be OFF after one blink = remote transmitter and receiver is now paired.

### WIRELESS CONNECTION OF SENSOR

It is possible to connect Actulux Weather Sensor wireless to Actulux SV/SVM Control Panel or to Actulux Flex1 ACDC, using a RF-transmitter #111892 fitted into the weather sensor.

Range: Line of sight approx. 400 meter.



RF-Transmitter #111892



Transmitter #111899

## SPECIFICATIONS

Battery: 12V/33 mAH type LRV08L

Battery lifetime: app. 2000 of 1 sec. operate function

One receiver can memorize maximum 20 transmitters / remote controls

Carrier frequency: 868.915 MHz

Range: Line of sight approx. 400 meters

Product no.: #111895 for SV Control Panel

Product no.: #111894 for SVM Control Panel and Flex1 ACDC

Product no.: #111892 RF-transmitter for weather sensor

Product no.: #111899 Transmitter for comfort (Ø50x13 mm)

Product no.: #111890 Remote control w/holder

Product no.: #111891 Reciever for SVM Control Panel and Flex1 ACDC

## Smoke Detector / Heat Detector detection of fire



#111740



#111735

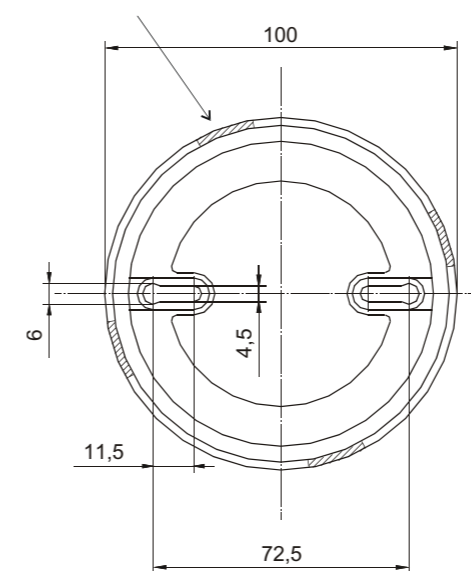
### SMOKE DETECTOR

Smoke detector for early fire detection with visual "release" display. The smoke detector is including mounting base and installation must always be horizontally beneath the ceiling.

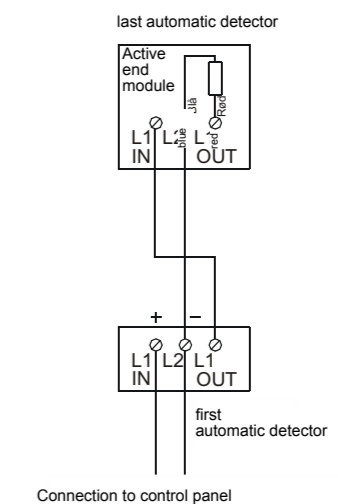
### THERMAL DIFFERENTIAL DETECTOR

Thermal Differential Detector for early fire detection. Alarm release in case of fast temperature increase and with maximum temperature of approx. 75° C with optical indicator on release, including mounting base.

### CABLE OUTLET



### ELECTRICAL CONNECTION



Approval no.: G200017

## SPECIFICATIONS

Connection voltage: 24VDC

Current consumption (rest): 0.1 mA

Cabinet: White plastic, round

Operating temperature: -20° to 60° C

Trigger current: 50mA

Item no.: 111740

## SPECIFICATIONS

Connection voltage: 24VDC

Current consumption (rest): 0.1 mA

Cabinet: White plastic, round

Operating temperature: -20° to 90° C

Trigger point: 75°C

Trigger current: 50mA

Item no.: 111735

## Room Thermostat

automatic opening and closing of skylights and windows



#111778

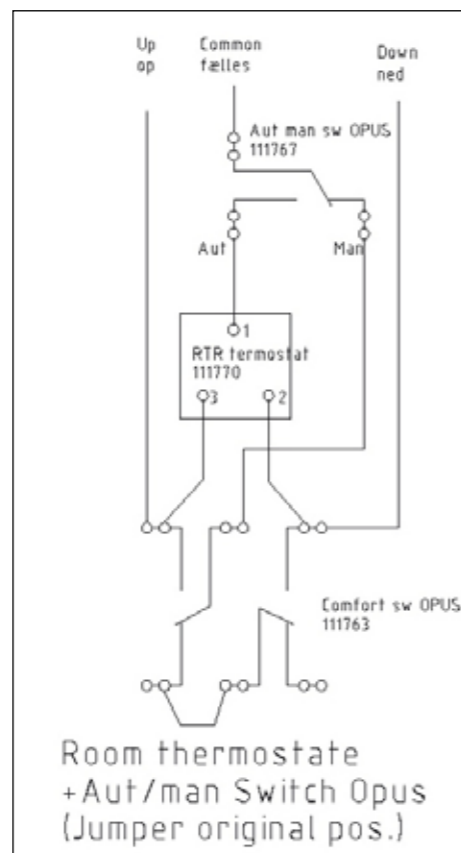
### AUTOMATIC OPENING AND CLOSING OF SKYLIGHTS

The room thermostat can be used for automatic opening and closing of skylights when the temperature in the room exceeds the set temperature. There is approx. 1 degree between the open and close limit.

The room thermostat is often connected with an AUT-MAN switch so the opening can be controlled automatically or manually.

The room thermostat can also be connected with a weekly timer which makes sure that the window is closed automatically, e.g. during the night. Should be used together with a weather sensor in order to protect against opening in bad weather.

Dimensions: 75 x 75 x 25 mm  
Colour: White



## Comfort Switches, Type OPUS / FUGA

manual control of comfort ventilation



#111753



#111758

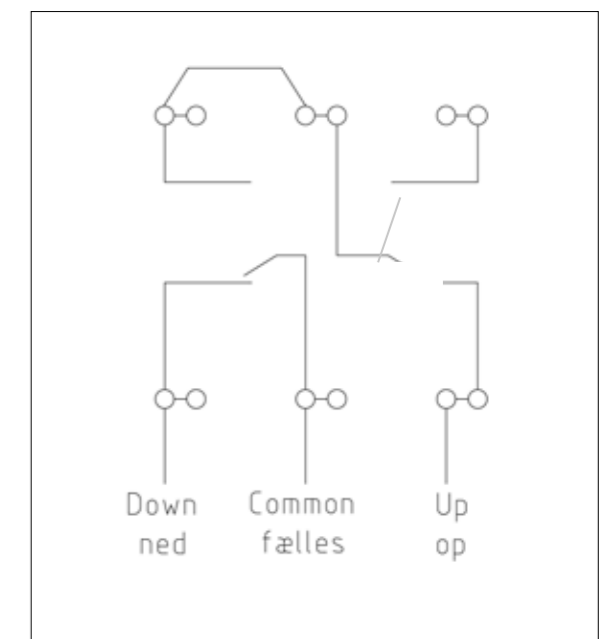
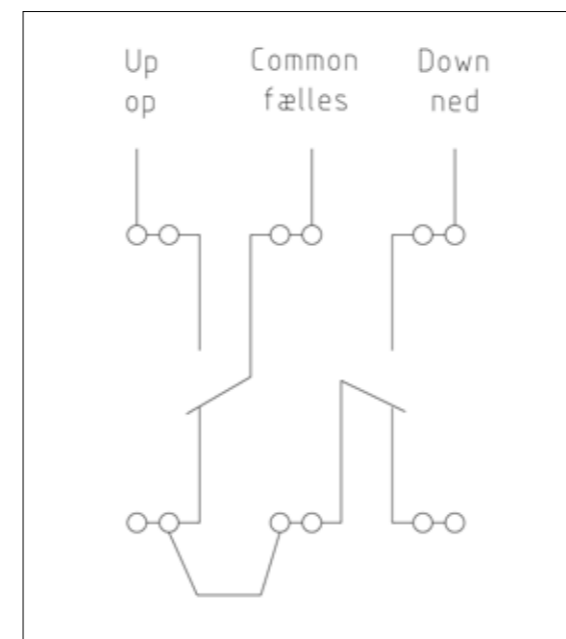
### MANUAL CONTROL OF COMFORT VENTILATION

Up/down switches for manual control of comfort ventilation, e.g. in connection with 24V fire and smoke ventilation systems. The up/down switch is delivered with housing for wall mounting.

Type OPUS Dimensions: 65 x 65 x 45 mm

Type FUGA Dimensions: 50 x 50 x 40 mm

Please remember to mount return springs behind both arrow keys!





# Comfort Switch, Type FUGA with open indication



#111943

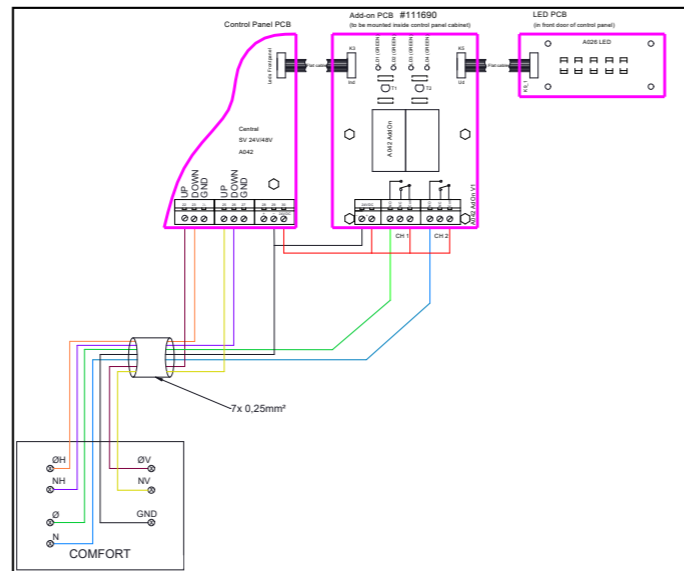
#111944

## MANUAL CONTROL OF COMFORT VENTILATION

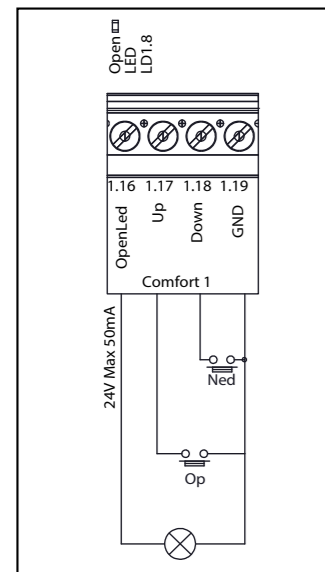
Comfort switch with open indication for manual operation of comfort ventilation, e.g. in connection with 24V fire and smoke ventilation systems.

The switch comes with a base for wall mounting as standard.  
Dimensions: 50x50x40mm

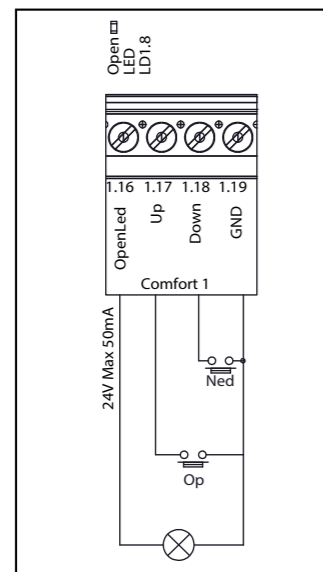
SV Control Panel



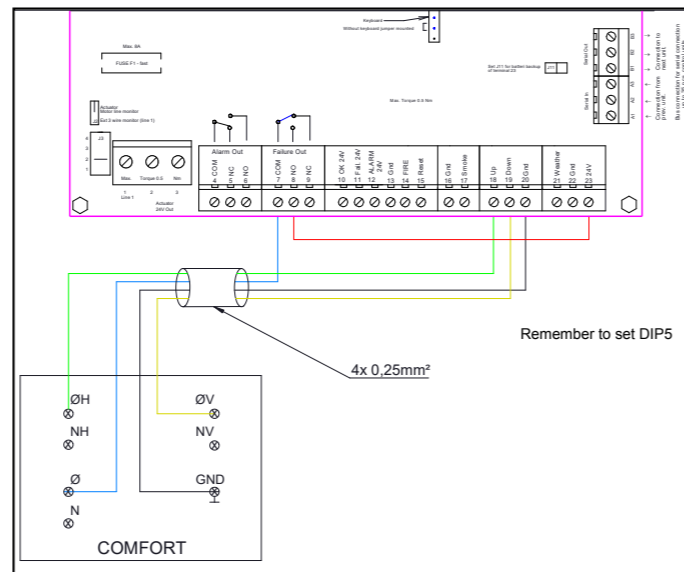
SVL Control Panel



SVM EI Control Panel



SVM Control Panel



# Extended features for chain drives - Type HOC compatible with Actulux series HCV

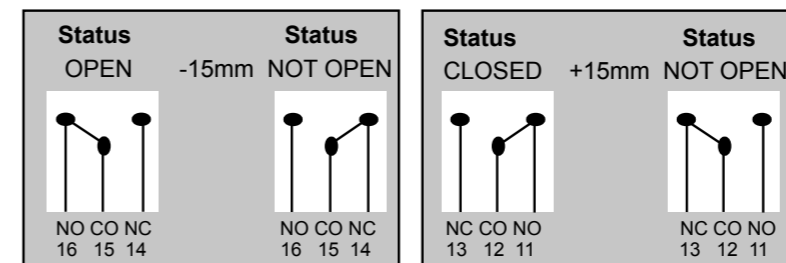


## EXTENDED FEATURES FOR CHAIN DRIVES

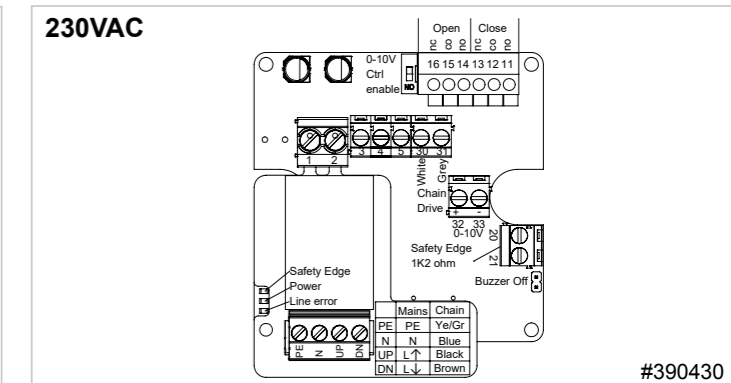
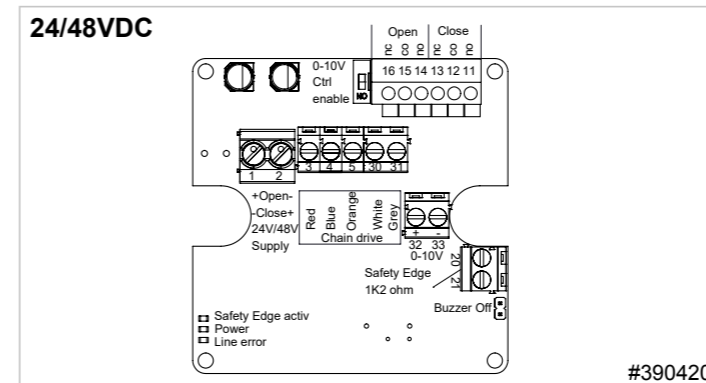
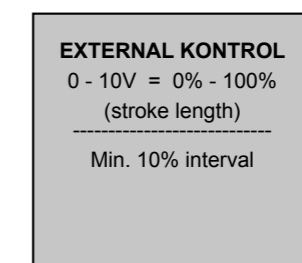
HOC is an advanced electronic product which is used to add features in new, but also already installed chain drives. HOC is compatible with 3. generation of Actulux chain drives.

- Open / Close indication (bistable relays)
- Building Management System (BMS) 0-10V control
- Interface for MAYSER Safety Edge (true Anti Pinch)

## INDICATION FOR OPEN / CLOSE



## INPUT = STROKE LENGTH

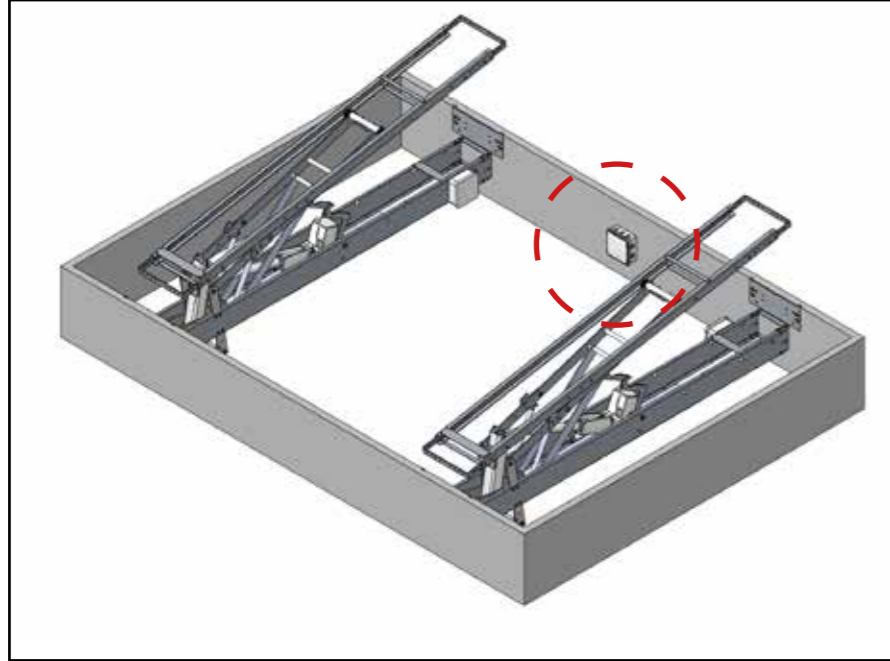


SPECIFICATIONS	
Power Supply: 24/48VDC +/- 15%	Max. Ripple: 2 Volt PP
Max. power in the position relay: 30VDC / 2A	
Dimensions (L x W x D): 86 x 86 x 39 mm	
Colour: White / IP rating: IP54	
Meets requirements: EN12101-2/EN60335-1/EN50130-4/Marking: CE	
Product number: 390420 (Standard) / 390421 (BMS 0-10V control)	

SPECIFICATIONS	
Power Supply: 230VAC +/- 15%	
Max. power in the position relay: 30VDC / 2A	
Dimensions (L x W x D): 100 x 100 x 50 mm	
Colour: White / IP rating: IP54	
Meets requirements: EN12101-2/EN60335-1/EN50130-4/Marking: CE	
Product number: 390430	

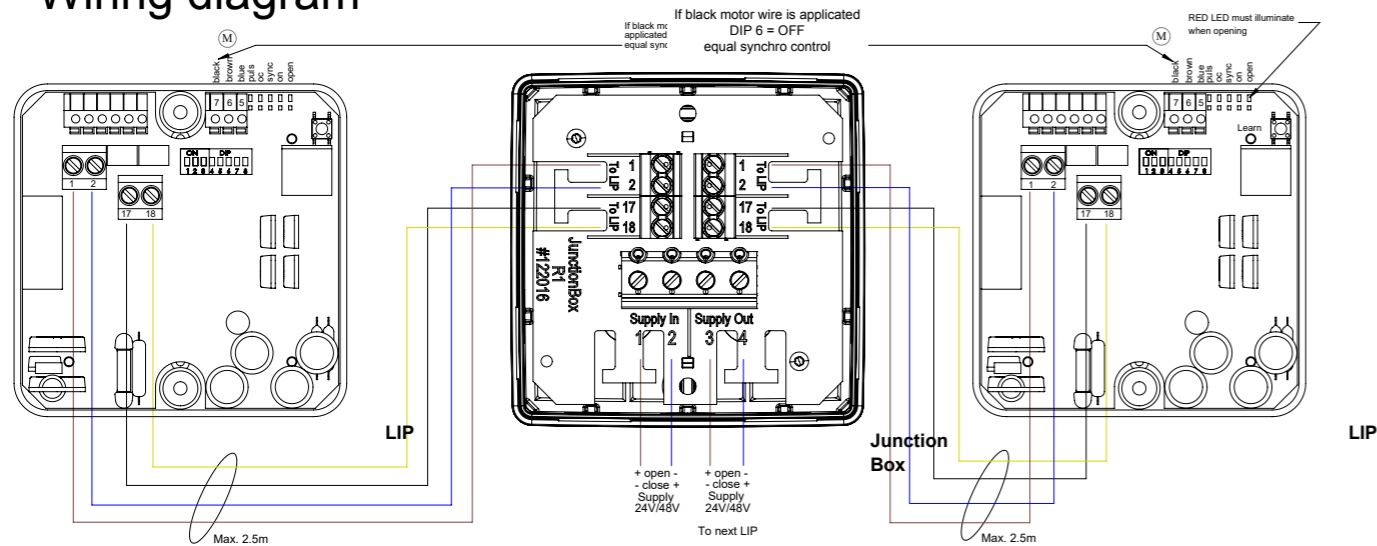
# Junction Box

easy assembly at upstand



**EASY INSTALLATION**  
**The Junction Box** is a product from Actulux, to join LIP cables from Actulux Opening System together with the fixed installation cable from the control panel. Soft membrane entries on all sides and bottom, and quick cable assembly through the embedded cable nipples.

## Wiring diagram

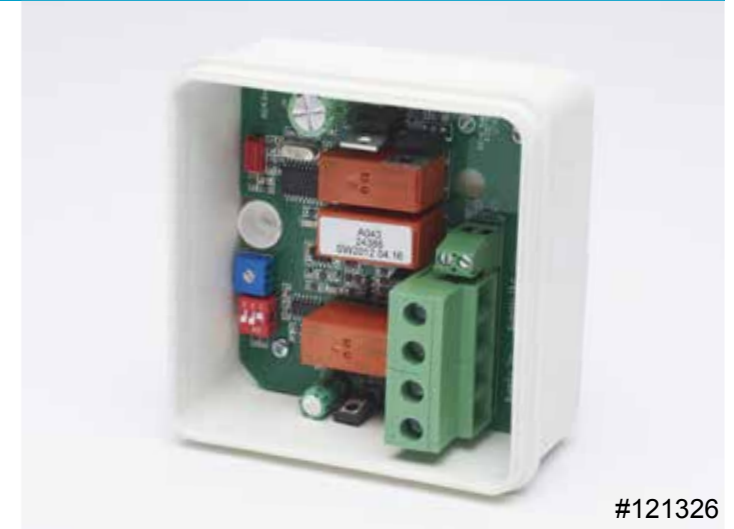


## SPECIFICATIONS

Input terminals: 10mm <sup>2</sup>
Loop through: max. 25A
Max to LIP: 8A
Size (LxWxH): 105,6x105,6x48,5mm
Colours: Orange (RAL 2011) / White (RAL 9010)
Material: Plastic box (PA, TPV)
IP rating: IP55
Cable entry: M16 membrane
Cable relief: internal with cable ties
Operating temperature: -25°C – +75°C
Meets requirements: EN12101-2 Annex G / EN60335-1 / EN50130-4      Marking: CE
Product number: 121033 (orange) / 121032 (white)

# Current Limiter and Overload Interrupter - Type LIP5

intelligent and electronic current limiter



**ADVANCED ELECTRONIC CURRENT LIMITER**  
 LIP5 is an advanced electronic product that is used as current limiter between a 24V DC or 48V DC supply and 1 actuator.

**BUILT IN ACTUATOR PROTECTOR**  
 LIP5 has a built in actuator protector. This means that the voltage will automatically be interrupted if the speed of the actuator gets relatively very low or stops completely because of a mechanic locking or end stop.

When the adjusted current limit is reached because of the load of the actuator, and the load of the actuator hereby increased further, the speed of the actuator will be automatically reduced. This way the consumption will not exceed the adjusted level, e.g. 4 amp. for 24V and 2 amp. for 48V.

LIP5 is delivered in a discreet plastic box, which also functions as a link between the supply and the actuator.

## CONNECTION & SETTINGS

SW	off		on		Function	Settings				
	1	2	3	4		5	6	7	8	
	■					OFF	ON	OFF	ON	
		4A			Max. current Motor output	24VDC supply	N/A	3A	4A	2,5A Rotary 100 / SA Mini
						48VDC supply	N/A	1,5A	2A	1,25A Rotary 100 / SA Mini
2			■			OFF	OFF	ON	ON	
3				■	Input resistance	on = 27Kohm connected / off = 27Kohm disconnected				

## SPECIFICATIONS

Supply: 24V DC eller 48V DC +/- 15%, Ripple 2 Volt PP		
Current limiter:	Adjustment possibilities for max. current consumption by means of a switch on the board:	
Type of opening system	24V	48V
SA Power	3,0A	1,5A
SA Power	4,0A	2,0A
SA Power Mini	2,5A	1,25A
Rotary 100	2,5A	1,25A
Input resistance: Possibility to connect a 27K ohm resistance over the input clamp connection for monitoring of the line		
Size (l x w x h): 100 x 100 x 50 mm		
Colour: White		
IP rating: IP54		
Terminals: 16 mm <sup>2</sup>		
Approved acc. to: EN60335-1		
Marking: CE		

# Current Limiter and Overload Interrupter - Type LIP6

intelligent and electronic current limiter



#121333

## ADVANCED ELECTRONIC CURRENT LIMITER

LIP6 is an advanced electronic product, which is used as a current limiter between a 24V DC or 48V DC supply and 1 or 2 actuators.

When the adjusted current limit is reached because of the load of the actuator(s), and the load of the actuator(s) hereby increased further, the speed of the actuator(s) will be automatically reduced. This way the consumption will not exceed the adjusted level, e.g. 3 amp. for 24V or 1,5 amp. for 48V

LIP6 can work both as single operation, i.e. connected to 1 actuator or as tandem operation i.e. connected to 2 actuators in parallel operation.

LIP6 has a built in actuator protector. This means that the voltage will automatically be interrupted if the speed of the actuator gets relatively very low or stops completely because of a mechanic locking or end stop. LIP6 is delivered in a discreet plastic box, which also functions as a link between the supply and the actuator(s).

## CONNECTION & SETTINGS

SW	Function		Settings				
	off	on					
1	■			OFF	ON	OFF	ON
	4A	Max. current Motor output	24VDC supply	N/A	3A	4A	2,5A Rotary 100 / SA Mini
			48VDC supply	N/A	1,5A	2A	2,5A Rotary 100 / SA Mini
2		■		OFF	OFF	ON	ON
3		■	No function				
4		■	Operation mode	on = 2 x Single / off = Tandem			
5		■	Input resistance	on = 27Kohm connected / off = 27Kohm disconnected			
6	■		Delay between M1 and M2	on = delay on / off = delay off			

## SPECIFICATIONS

Supply: 24VDC or 48VDC +/- 15%
Output: 2 outputs which can function independently (individually in single operation) or or in joint operation (tandem)
Current limiter: Adjustment possibilities for max. current consumption by means of a switch on the board:
Type of opening system: <b>24V</b> <b>48V</b>
SA Power: 3,0A 1,5A for each actuator output
SA Power: 4,0A 2,0A for each actuator output
2,5A Rotary 100 / SA Mini: 2,5A 1,25A for each actuator output
Tandem operation: If one actuator fails, the other one stops shortly after (maximum 3 seconds)
Input resistance: Possibility to connect a 27K ohm resistance over the input clamp connection for monitoring of the line
Dimensions (l x w x h): 100 x 100 x 50 mm
Colour: White RAL 9010 / IP rating: IP54
Approved according to: EN60335-1 / Marking: CE

# Current Limiter and Overload Unit - Type LIP7

intelligent and electronic current limiter



LIP7 BA (basis) #121305



LIP7 TA (tandem) #121306



LIP7 OC (open / close) #121308

## ADVANCED ELECTRONIC CURRENT LIMITER

LIP7 is an advanced electronic product that is used as current limiter and overload unit between a 24 -36 - 48 VDC supply and for 1 actuator (motor).

When setting for the current limiter is reached because of the actuator load, and the load on the actuator is further increased, then the actuator speed is automatically reduced, so that the current consumption does not exceed the set level.

A heat resistant silicone cable is mounted as supply line.

LIP7 is available in 3 versions:

LIP7 Basis, LIP7 Tandem and LIP7 Open / Close.

## LIP7 BASIS #121305

1 channel actuator protector - replaces LIP5.

## LIP7 TANDEM #121306

1 channel but now with the opportunity to operate in Tandem / Synchro mode with another LIP7 if 2 pcs. of opening systems are mounted in the same window or skylight to prevent damage to the window or skylight. The system stops if power to one motor disappears.

There is also an opportunity to operate in Synchro mode where both systems are running exactly with the same speed without delay. Synchro mode requires that the electrical actuators in the opening system is mounted with "reed switches" for speed / position indication.

## LIP7 OPEN/CLOSE #121308

Same features as the LIP Tandem but also with clamps for Open / Close indication of the window or skylight.

Open / Close indication and Synchro mode requires that the electrical actuators in the opening system is mounted with "reed switches" for speed / position indication.

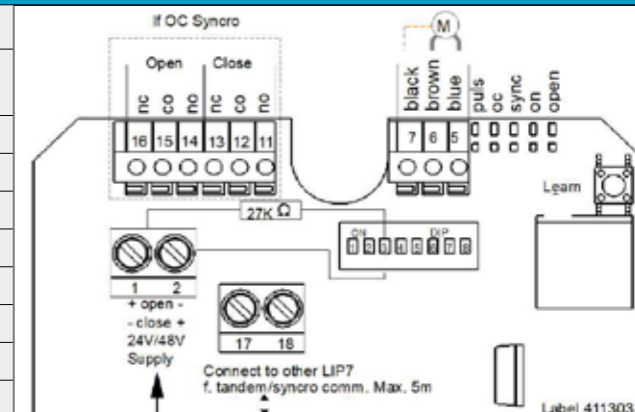
## CONNECTION AND SETTINGS

DIP switch	Function		Settings*				
	off	on					
1	■			OFF	ON	ON	OFF
	4A / 24VDC	Max. average current. (Please note this is only an example - may vary in diff. types of Opening Systems)	24V	2A	3A	2.5A	4A
			36V	1.5A	2.25A	1.9A	3A
			48V	1A	1.5A	1.25A	2A
2	■		OFF	OFF	ON	ON	
3	■	OFF = No 27kΩ for line detection	ON = 27kΩ for 2 wire line detection (terminal 1 and 2)				
↓ Only available in LIP7 TA and LIP7 OC ↓							
4	■	OFF = Stand Alone mode (only 1 system / LIP)	ON = Communication mode (set ON in both systems / LIPs)				
Used in case of Dip 7 is set on (Delay between operations of LIP's in tandem)							
5	■	OFF = First start at open direction	ON = First start on close direction				
6	■	OFF = Sync mode = 3 wire actuator (motor)	ON = Tandem mode = 2 wire actuator (motor)				
7	■	OFF = No delay between Master and Slave	ON = 7 seconds delay between Master and Slave				
8	■	OFF = No function	ON = Intelligent load				

(\*) Please note that the above power settings are standard - can also be customized to specific Actulux actuator types

## SPECIFICATIONS

Power supply: 24 - 36 - 48 VDC +/- 15%, Max. Ripple: 2 Volt PP
Input resistance: Using switch on the PCB a 27kΩ resistor can be engaged over the input terminals of the supply to the line monitoring
Max. power in the position relay: 30 VDC / 2A
Size (l x w x h): 100 x 100 x 50 mm
Material: White plastic box
Compatible with previous LIP editions
IP rating: IP54
Silicone cable length: Standard 85 cm
Meets requirements: EN12101-2 / EN60335-1 / EN50130-4 Marking: CE
Product no.: 121305 (Basis) / 121306 (Tandem) / 121308 (OC Open / Close)



# Flex1 ACDC

## AC Power Supply for LIP or Chain Motor



Flex1 ACDC as supply for built in overload protector  
ex. LIP7 OC #121308, Box size (LxWxH): 180 x 110 x 63 mm



Flex1 ACDC as supply for motors with own overload protector.  
(Chain & Rack Drives), Box size (LxWxH): 180 x 110 x 63 mm

### POWER SUPPLY FOR LIP OR CHAIN MOTOR

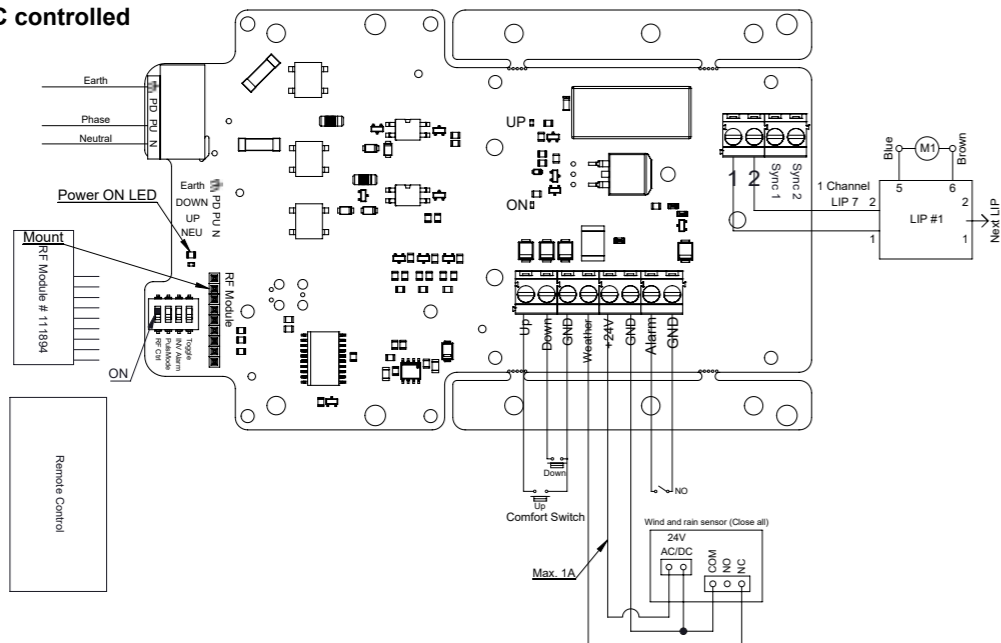
The Flex1 ACDC consists of an electrical high performance 110VAC 24VDC or 230VAC 24/48VDC Switch Mode Power Supply.

It is possible to mount LIP5, LIP6 or LIP7 from the traditional Actulux Opening System enabling them to be supplied by 110/230V.

As additional it can also be used as a 230VAC supply for ex. 24/48VDC Chain Drives HCV or Spindle Drives.

In both options it is possible to configure the Flex1 ACDC with a RF-receiver PCB #111894 to make remote control possible for comfort ventilation use and for the Actulux Weather Sensors.

### Flex1 ACDC - AC controlled



### FEATURES

Meets requirements: EN12101-2 Annex G				
Can be used with all kinds of 24VDC motors with own overload protection				
Max. operation time 120 sec. Duty cycle 10% 2 min. / 18 min.				
IP rating: IP66				
Operating temperature: -15°C - +40°C				
Wire range: 0,2- 2mm <sup>2</sup>				
Product no.	Output	Power supply	Inrush Current (cold start)	Leakage Current
#121370 3A / 65W	24VDC	230VAC - max. 1,5A	5A/230VAC	<2mA/240VAC
#121380 4A / 80W				<2mA/240VAC
#121390 6A / 150W				<2mA/240VAC
#121360 8A / 200W				<0.75mA/240VAC
#121230 6A / 300W	48VDC	230VAC - max. 2,5A	5A/110VAC	<500 µA/264VAC
#121283 3A / 65W	24VDC	110VAC - max. 1,8A		<2mA/240VAC
#121263 8A / 200W				<0.75mA/240VAC
Option: RF control by use of #111894				

# Flex 230VAC

## AC Controller for AC Motor



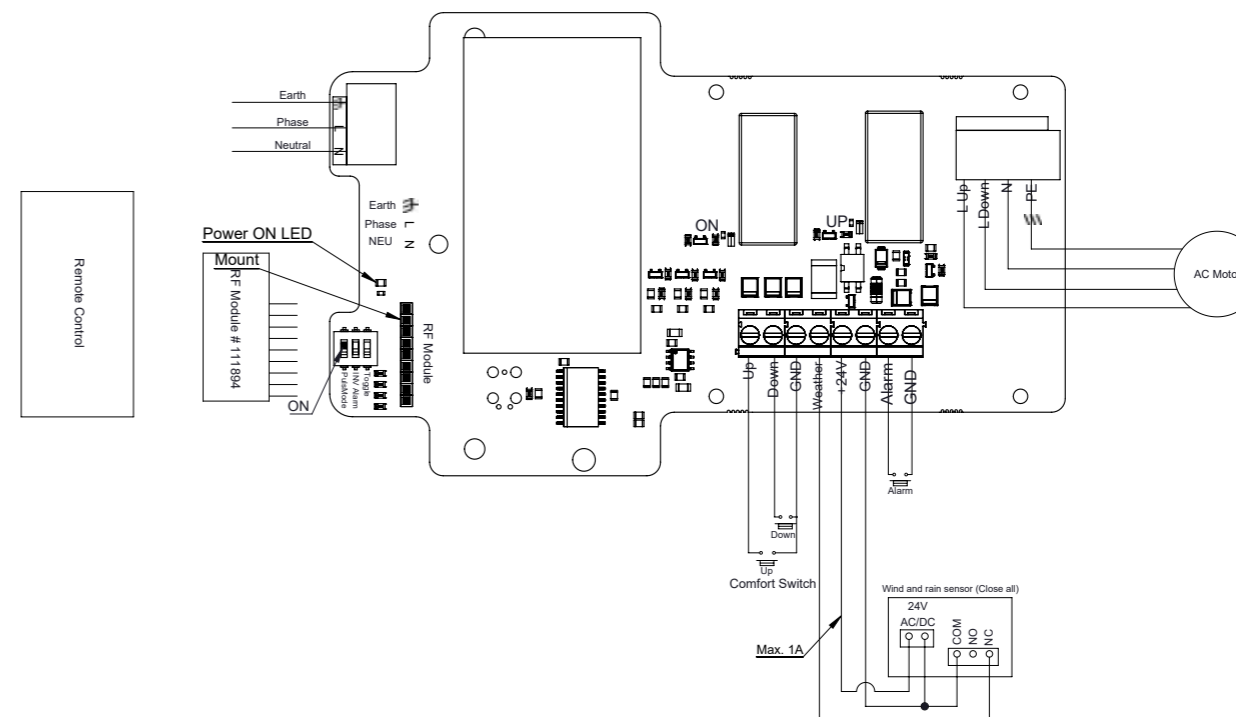
### POWER SUPPLY AC CONTROLLED MOTORS

The Flex 230VAC consists of an intelligent controller for controlling, which are constructed to provide and control the operation of the opening systems for comfort and fire ventilation with 230V AC electrical opening units.

The Flex 230VAC unit is equipped with connection terminals for external signals (comfort, weather sensor/close all, CMSI etc.)

In both options it is possible to configure the Flex 230VAC with a RF-receiver PCB #111894 to make remote control possible for comfort ventilation use and for the Actulux Weather Sensors.

### Flex 230VAC

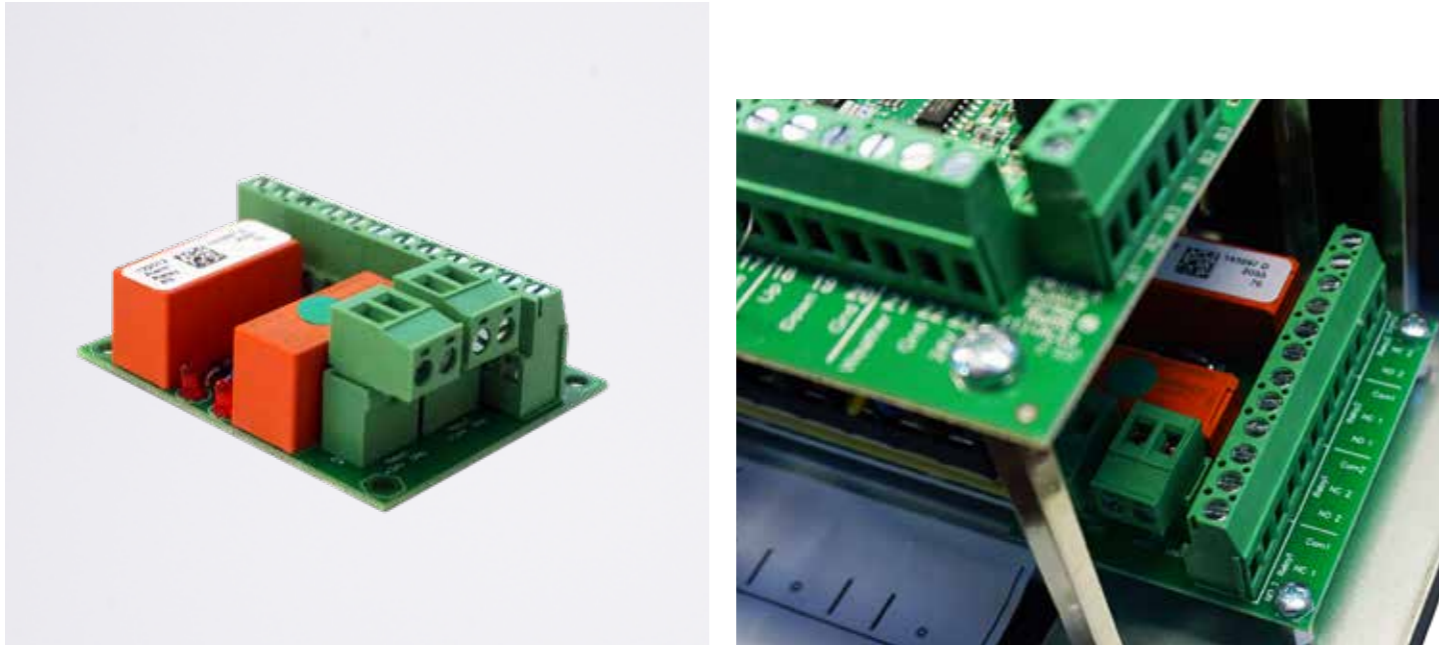


### FEATURES

Power supply: 230VAC - Max. 8A
Output: 230VAC Max. 8A
24V DC for external use 24V DC / Max. 1A
Can be used with all kinds of 230VAC motors with up and down wire.
Input for Alarm Auto Reset
IP rating: IP66
Operating temperature: -15°C - +40°C
Wire range: 0.2- 2mm <sup>2</sup>
Product no.: #121200 (8A)

# Alarm / Failure Add-on Relay PCB

extra potential free NO / NC contact for SVM control panels

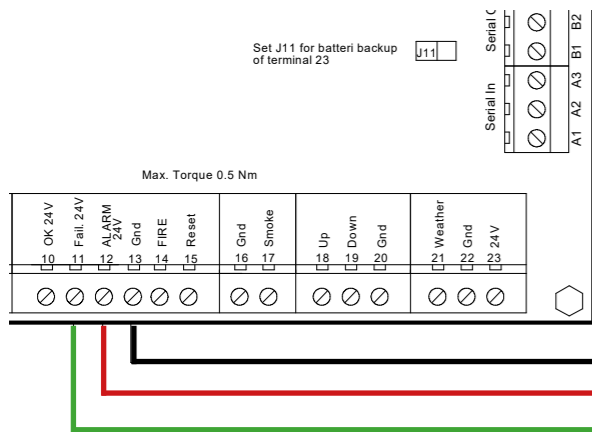


Placement of relay pcb

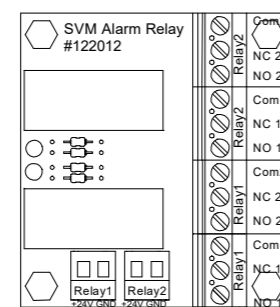
This "Add on" relay PCB can be used when more NO / NC contacts are needed.

Each relay has 2 potential free NO / NC contacts.

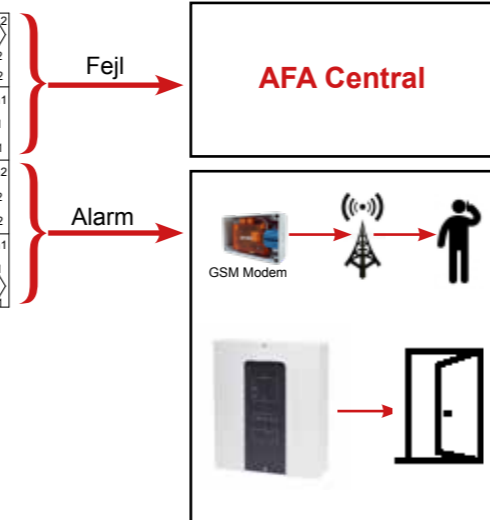
## SVM Control panel



### Add-on Relay



### Examples of Alarm/Failure

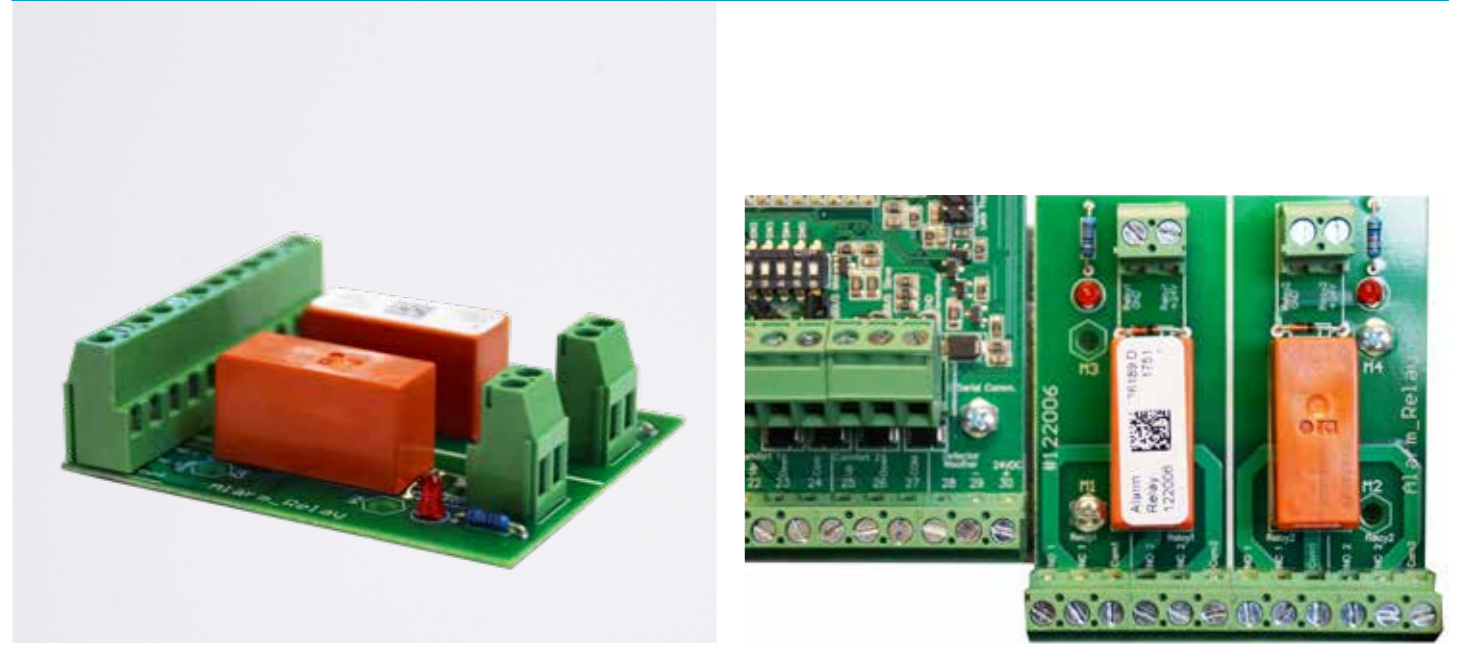


## SPECIFICATIONS

Supply: 24V DC
Contact function: 2x2 pcs. NO/NC contacts
Load on contacts: 230V / 2A
LED1 / LED2: Indication of relays ON / OFF
Part no.: 111933

# Alarm / Failure Add-on Relay PCB

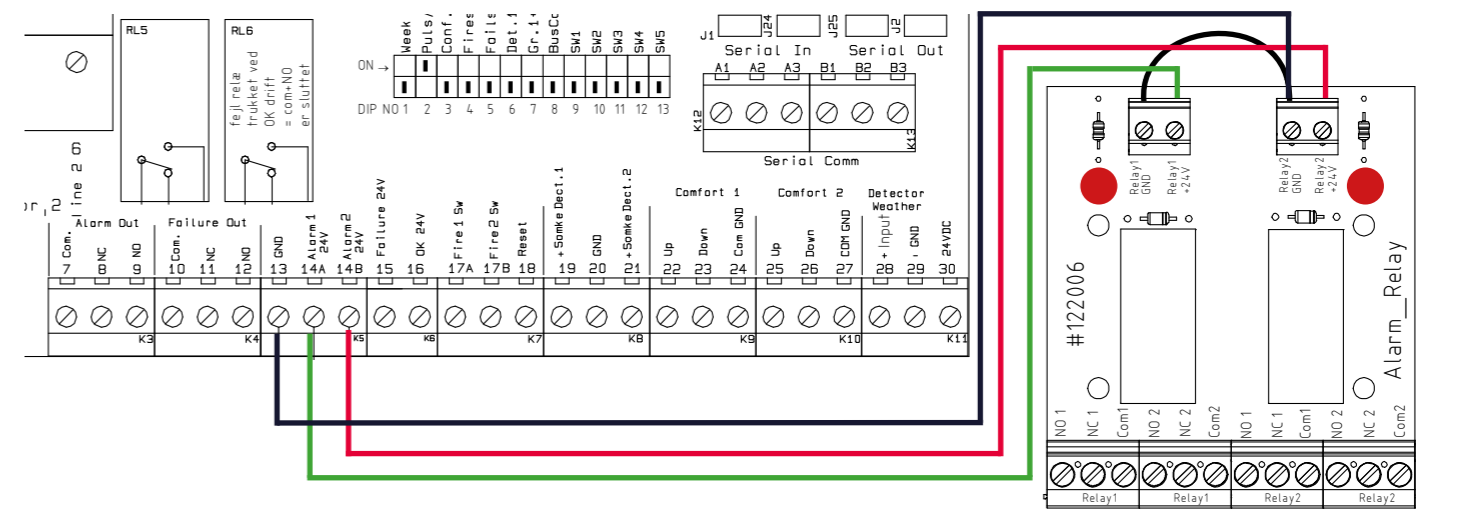
extra potential free NO / NC contact for SV control panels



This "Add on" relay PCB can be used when more NO / NC contacts are needed.

Each relay has 2 potential free NO / NC contacts.

## SV Control panel



## SPECIFICATIONS

Supply: 24V DC
Contact function: 2 pcs. NO/NC contacts
Load on contacts: 230V / 2A
LED1 / LED2: Indication of relays ON / OFF
Product no.: 111930

# Actulux Universal Line Monitoring

Type UniMon for non-Actulux actuators



### ADVANCED ELECTRONIC

UniMon is an advanced Actulux electronic product, used to line monitor non-Actulux actuators with 2 wires only.

UniMon is delivered in a discreet plastic box, which also functions as a link between the supply and the actuators.

#121030 UniMon 24V S  
AP9 junction box (86x86x39mm)  
Input terminals: 6mm<sup>2</sup>

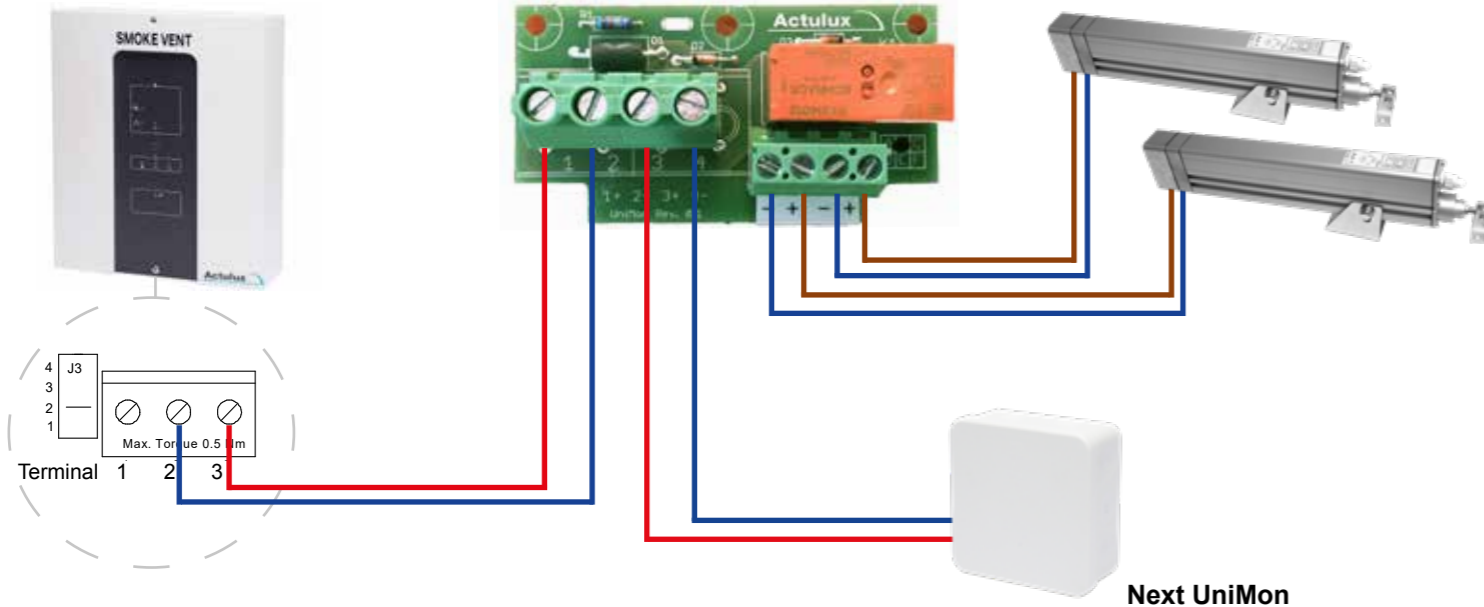
#121031 UniMon 24V L  
K2 junction box (105,6x105,6x48,5mm)  
Input terminals: 10mm<sup>2</sup>

## Universal Line Monitoring

SVM Control panel

UniMon (#121030)

Non-Actulux actuators



### SPECIFICATIONS

Power supply: 24VDC
Input resistance: 27kΩ
Max 8A total
Size (LxWxH): AP9 (86x86x39mm)
Size (LxWxH): K2 (105,6x105,6x48,5mm)
Material: White plastic box
IP rating: IP54
Silicone cable: Not included
Meets requirements: EN12101-2 / EN60335-1 / EN50130-4      Marking: CE
Product no.: 121030 (UniMon 24V S) / 121031 (UniMon 24V L)

# “Add on” Relay PCB

heat control, indication on BMS controls, intruder alarms

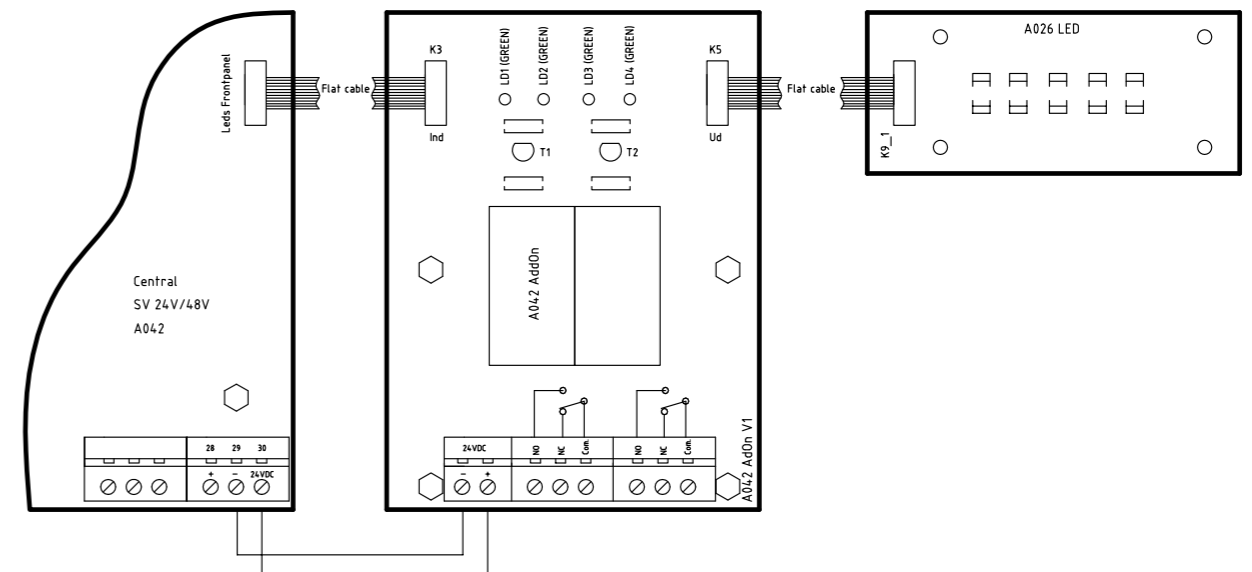


### PCB FOR INDICATION OF WINDOW POSITION

This “Add on” relay PCB can be used when indication of opened windows on the comfort or alarm function is needed.

The “Add on” relay PCB is going to be connected through a flat cable to the SV control unit and the indication LED display in the front.

## Connection



### SPECIFICATIONS

Supply: 24V DC
Contact function: 2 pcs. NO/NC contacts
Load on contacts: 230V / 2A
LED1 / LED2: Indication about open
Can also be used for indication of active weather sensor (requires special software in control panel)
Product no.: #111690 (SV Control Panels)



# Actulux

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