

24V/48V/230V SHEV device

VELUX®
Commercial


Safe, powerful and flexible opening and closing of dome rooflights and darkening flaps

24V/48V/230V shev device (FIREJET® 165 J SA 24V/48V/230V AZ)

SHEV opening device 165° consisting of

- galvanized crossbars
- special designed consoles
- electrical drive
- junction box with load disconnection pre-installed at the device
- for dome rooflights and darkening flap from the product range (see overview back side)
- for upstand from the extensive upstand product range (see overview back side)

Technical data

- Nominal size:
up to 150 x 250 cm depending on order size and configuration
- Aerodynamic exhaust surface:
up to 2.74 m² (depending on order size and configuration)
- max. snow load:
max. SL 2600 N/m²
(depending on dome size, nominal voltage and product configuration)

Additional benefit

- programmable air conditioning position for large ventilation surface
- connection to building management system is possible

Product advantages

- EC Certificate of Conformity according to DIN EN 12101-2 (CE-mark) no. 1368-CPD-C-002/2009
- standalone-device for all nominal sizes
- robust, powerful and fast gear motor with low noise emission
- max. temperature class T (-15)
- delivery as complete pre-assembled unit
- corresponding 24V/48V SHEV centrals with a wide range of accessories and various activation options



TOP-90 PLUS dome rooflight with 24V/48V/230V SHEV device assembled on upstand

6.1.2

Dome rooflight, VARIO light flaps and aluminium darkening flap

Advantages of the 24V/48V/230V technology

- almost noiseless function
- daily ventilation without additional motor
- stepless ventilation possible
- simple maintenance
- short circuits and cable interruptions are detected immediately
- connection to smoke detection or building management system
- aesthetically appealing because of flat design

Characteristics

- standby current controlled system
- connection components for building management system integrated
- triggering of 2 SHEV groups possible with one central control unit
- optical status indication
- inputs for detectors, buttons and sensors
- connection of several central control units possible via a bus system

Advantages of the 48V technology

- triggering of twice as many opening systems possible with one central control unit
- significant reduction of the installation effort
- cost saving because of much smaller cable cross sections
- effective reduction of project costs
- safety even with high snow loads
- integration of standard components from (SHEV button, smoke detector, wind/rain sensor etc.)

Product range

Order sizes	Hinges/ opening side	with RAK 30/40/45/50 (RAK geometry)		with AK 30/40/50/60 ¹ (AK geometry)	
		without wind baffles lowest A _a -value	with wind baffles highest A _a -value	without wind baffles lowest A _a -value	with wind baffles highest A _a -value
100 x 150		0.86	1.08	0.86	0.93
120 x 120		0.81	1.02	0.81	0.88
120 x 150		1.01	1.30	1.01	1.12
120 x 180		1.14	1.56	1.14	1.34
120 x 210		1.34	1.84	1.34	1.59
120 x 240		1.53	2.07	1.53	1.93
120 x 250		1.59	2.19	1.59	2.01
125 x 125		0.88	1.11	0.88	0.95
125 x 250		1.66	2.25	1.66	2.09
150 x 150		1.28	1.64	1.28	1.42
150 x 180		1.54	1.94	1.54	1.81
150 x 210		1.80	2.30	1.80	2.11
150 x 240		1.91	2.63	1.91	2.45
150 x 250		1.99	2.74	1.99	2.55

Note:

1) Applies to ISO-Therm AK

A_a value in m² (aerodynamic effective smoke exhaust surface) according to DIN EN 12101-2
230V SHEV controls require a project-related design / calculation

Advantages of the 230V technology

- ideal for larger objects with many opening systems
- a high number of opening systems can be realised with minimised cable cross-sections and reduced infrastructure

Applicable domes rooflights and darkening flaps for 24V/48V/230V SHEV device

- TOP-90 dome rooflight
- TOP-90 PLUS dome rooflight (double skinned)
- TOP-90 sound reduction dome rooflight (up to 150 x 180 cm)
- SUPER-TOP dome rooflight
- HEATSTOP dome rooflight
- PET-TOP dome rooflight
- BLACK-TOP dome rooflight
- aluminium-heat insulation-composite darkening flap:
WD 40, WD 80, WD 80 sound insulation up to order size
150 x 250 cm

Applicable upstands for 24V/48V/230V SHEV device

- metal AK upstand (RAK 30/40/50, SE 30/40/50, TE 30/40/50)
- steel aluminium composite upstand (RAK 30/40, AK 30/40)
- GRP upstand (RAK 30/45, AK 30)
- GRP aluminium composite TRP upstand (AK 15/30/50)
- SHEV PVC upstand (AK 30)
- metal riser 25