



NSHE 24 / 48 V (OPEN / CLOSE) for skylight domes

Data sheet

Aerodynamic smoke and heat extraction device, certificated in accordance with EN 12101-2 with integral ventilation function



Daylight and lighting systems
Natural aeration and ventilation systems
Smoke and heat extraction systems
Service and maintenance
Building automation

Application

The NSHE 24 / 48 V (OPEN / CLOSE) is the ideal solution for applications where an electric smoke and heat extraction device in accordance with EN 121010-2 is required which can also be used for daily aeration and ventilation. An additional aeration device is therefore not required. If the unit is triggered incorrectly due to a false alarm or vandalism, the skylight domes can be easily closed by pressing a button at the manual call point. This device is therefore ideally suited for use in schools, sports halls and theatres. On roofs which cannot be walked on (e.g. corrugated roofs), the required regular functional checks can be carried out from the manual call point, thus saving time and money. The power supply can be easily selected directly on the device. The unit is controlled from the relevant control panel where the ventilation stroke is also set. This powerful system can be used with snow loads up to SL 1000.

Application areas

- Kingspan classic skylight domes, darkening flaps, ASM stacking systems and renovation sets
- new builds, renovations and repairs
- industrial buildings, retail buildings, commercial and administration buildings, stairwells
- trade fair and exhibition halls, sports halls

Material

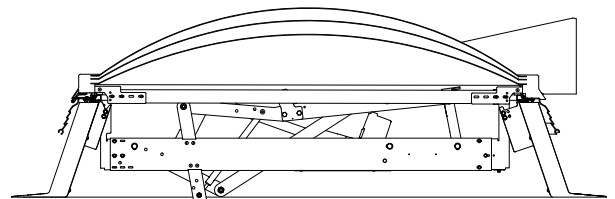
- Sendzimir zinc-coated steel (standard)
- RAL coating (base member and base sheet) available on request

Features and benefits

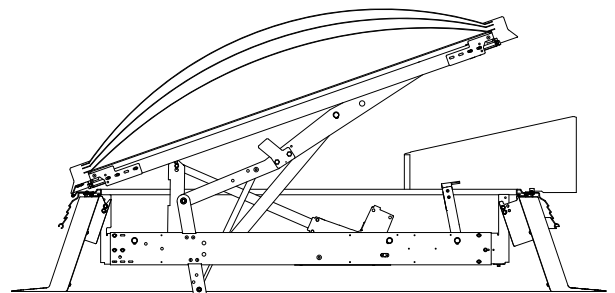
- smoke and heat extraction device with OPEN/CLOSE function and integral ventilation function
- powerful, stable, extremely low-noise drive
- tested and approved in accordance with EN 12101-2:2003
- complies with the minimum requirements in accordance with DIN 18232-9
- available with either 24 / 48 V control system
- easy configuration using DIP switches in pre-installed junction box
- easy installation due to preset bracket set for all types of Kingspan skylight base
- can be combined with corner guide walls to improve the aerodynamic effective smoke extraction area (A_{DQ})
- can be combined with Kingspan fall and fall-through protection system (EAD)
- unique design with minimum space requirement
- ventilation function: maximum stroke length 700 mm, operating time approx. 15 s
- integral locking mechanism



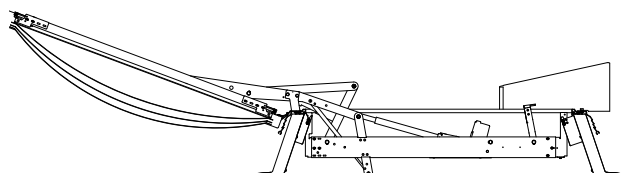
Kingspan NSHE 24 / 48 V – in open ventilation position



Kingspan skylight dome with NSHE 24 / 48 V - closed



Kingspan skylight dome with NSHE 24 / 48 V - ventilation



Kingspan skylight dome with NSHE 24 / 48 V - SHE function

Technical specifications

Power supply: 24 V DC
48 V DC

Single: 4 A – 6 A
2 A – 6 A

Tandem: 8 A – 12 A
4 A – 6 A

A protection rating: IP 54
Opening time: max. 60 s
Operating mode: S3 25 % duty cycle

Technical data in accordance with EN 12101-2:2003

Functional reliability; classification of functional reliability (Appendix C)	Re 1,000 type B with double function
Opening under environmental conditions; opening under load (Appendix D)	SL 500 - 1,000 (N/m ²) (depending on size and snow load)
Opening under environmental conditions; low ambient temperature (Appendix E)	up to T (-15)
Functional reliability; wind load (Appendix F)	WL 1,500 (N/m ²)
Performance under conditions of fire; heat resistance (Appendix G)	B 300
Fire behaviour of building materials	E

Size	Aero-dynamic surface	Geomet-ric surface	Opening area in accordance with EN 12101-2, Appendix B		Opening area in accordance with EN 12101-2, Appendix B		Opening area in accordance with EN 12101-2, Appendix B		Opening area in accordance with EN 12101-2, Appendix B		Max. snow load with classic skylight dome	Drive type
			A ₀ value PVC AK 30 i / ih Metal AK 30	A ₀ value PVC AK 50 i / ih Metal - AK 50	A ₀ value PVC AK 45 (SAK 15 + AK 30) PVC AK 60 (SAK 30 + AK 30) SAK 15 metal AK 40	A ₀ value Metal AK 51 to 110 Metal AK VAK 30 to 110						
L x W [cm]	A ₀ [m ²]	A _V [m ²]	with CTW [m ²]	without CTW [m ²]	with CTW [m ²]	without CTW [m ²]	with CTW [m ²]	without CTW [m ²]	with CTW [m ²]	without CTW [m ²]	[N] per m ²	
100 x 100	0.64	1.00	0.61	0.55	0.63	0.57	0.62	0.56	0.64	0.64	1,000	S
100 x 150	1.04	1.50	0.95	0.83	0.98	0.86	0.96	0.84	0.96	0.89	1,000	S
100 x 200	1.44	2.00	1.28	1.10	1.32	1.14	1.30	1.12	1.28	1.08	500	S
100 x 250	1.84	2.50	1.58	1.40	1.68	1.45	1.60	1.43	1.58	1.28	500	S
100 x 300	2.24	3.00	1.95	1.65	2.01	1.74	1.98	1.68	1.86	1.50	500	T
120 x 120	1.00	1.44	0.88	0.78	0.91	0.81	0.89	0.79	0.92	0.89	1,000	S
120 x 150	1.30	1.80	1.13	0.99	1.17	1.03	1.15	1.01	1.15	1.06	1,000	S
120 x 180	1.60	2.16	1.38	1.19	1.43	1.23	1.40	1.21	1.38	1.23	1,000	S
120 x 240	2.20	2.88	1.87	1.58	1.96	1.64	1.90	1.61	1.81	1.47	1,000	S
120 x 270	2.50	3.24	2.14	1.81	2.24	1.88	2.17	1.85	2.01	1.62	1,000	T
120 x 300	2.80	3.60	2.41	2.02	2.48	2.09	2.45	2.05	2.20	1.73	1,000	T
125 x 125	1.10	1.56	0.95	0.83	0.98	0.86	0.97	0.84	1.00	0.97	1,000	S
125 x 250	2.42	3.13	2.06	1.72	2.13	1.78	2.09	1.75	1.97	1.59	800	S
125 x 300	2.94	3.75	2.51	2.10	2.59	2.18	2.55	2.14	2.29	1.80	1,000	T
150 x 150	1.69	2.25	1.46	1.22	1.51	1.26	1.49	1.24	1.44	1.35	1,000	S
150 x 180	2.08	2.70	1.76	1.49	1.81	1.54	1.81	1.51	1.70	1.54	800	S
150 x 210	2.47	3.15	2.08	1.73	2.14	1.80	2.11	1.76	1.98	1.64	800	S
150 x 240	2.86	3.60	2.38	1.98	2.45	2.05	2.41	2.02	2.27	1.84	800	S
150 x 250	2.99	3.75	2.51	2.06	2.59	2.14	2.55	2.10	2.33	1.91	800	S
150 x 270	3.25	4.05	2.71	2.19	2.79	2.27	2.75	2.23	2.51	1.94	800	T
150 x 300	3.64	4.50	3.02	2.48	3.11	2.57	3.06	2.52	2.75	2.07	800	T
172 x 179	2.42	3.08	2.06	1.69	2.13	1.76	2.09	1.72	1.94	1.66	800	S
172 x 300	4.26	5.16	3.46	2.68	3.56	2.79	3.51	2.73	3.15	2.32	800	T
180 x 180	2.56	3.24	2.17	1.78	2.24	1.85	2.20	1.81	2.04	1.75	800	S
180 x 240	3.52	4.32	2.89	2.38	2.98	2.46	2.94	2.42	2.72	2.16	800	T / S
180 x 250	3.68	4.50	3.02	2.43	3.11	2.52	3.06	2.48	2.79	2.21	800	T / S
180 x 270	4.00	4.86	3.26	2.62	3.35	2.72	3.30	2.67	3.01	2.28	800	T
180 x 300	4.48	5.40	3.62	2.81	3.73	2.92	3.67	2.86	3.29	2.43	800	T
200 x 200	3.24	4.00	2.68	2.16	2.76	2.24	2.72	2.20	2.48	2.12	800	T / S
200 x 300	5.04	6.00	4.02	3.06	4.14	3.18	4.08	3.12	3.66	2.52	800	T

INTERNATIONAL

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Subject to technical alterations.

Illustrations are not binding.

