









SVALBARD-F

- •
- Open installation
- Available in 1200mm to 3000mm lengths
- Adjustable pressure/air flow rate
- Variable flow pattern
- Dimensioningprogram Auracool F on our website

APPLICATION

Svalbard-F is a hydronic cooling, heating and ventilation system for use in offices, shops, schools etc. The system is designed to provide excellent cooling effect, and a high induction level ensures a draft-free environment in the occupied zone. Svalbard-F is designed for open installation in ceiling or covering.

Design

- Nozzle configuration for the chilled beam, i.e. desired air supply and
- pressure, is specified at time of order.
- Svalbard-F is delivered with integrated pressure outlet for air flow rate
- measurements.
- The front panel can be folded down for inspection and cleaning.
- Svalbard-F is available in installation lengths of 1200, 1800, 2400 and
- 3000 mm.
- Dispersion options: symmetrical 50/50 or asymmetrical 75/25
- (25/75) can be adjusted on site.
- Connection to air: gable end Ø125 mm (spigot dimension).
- Connection to water: Cu Ø15 x 1, 0 mm.
- Changeable flowpattern via Jet Split lamellaes in the beams outlet.
- Blind cover can be provided for adaptation to the wall. See Figure 9.

DESCRIPTION

Materials and surfaces

Frame and casing in a galvanised, steel-plated finish. Delivered in a powdered painted finish (white RAL 9003 - gloss 30) as standard. Copper tube coils with aluminium lamellae. Adjustable lamellae are in a plastic design.

INSTALLATION

SVALBARD-F

Svalbard-F is supplied with a mounting bar for attachment to ceiling or covering (fig. 7). Detailed installation instructions is to be found on our website: trox.no For connection to water (copper pipe \emptyset 15/1), use press, push or screw fittings. I.e. do not use soldering or similar as the heat may damage the O-ring on the push fitting between the cooling coil and pipe bend (see fig. 6 and 7).

WATER VALVE

The water valve should be placed on the return, that is, with arrow on the valve away from the cooling battery and at the tube as figure 8 shows..

TECHNICAL INFORMATION

Orde	er code						
Svalbard-E-180	00-104-SKB-A-50/50-1-W-A1-S-0						
	2 3 4 5 6 7 8 9 10 11						
1 2	2 3 4 5 6 7 8 9 10 11						
1 Type/variant	7 Water connection*						
Svalbard F, suspended installation	1 eller 2						
2 Length	8 Water valve						
1200 , 1800 , 2400 eller 3000	0 without water valve						
	VV TRV-2-way valve, delivered loose/unassembled**						
3. Adjustment factor	9 Actuator						
Auracoolfactor	0 uten aktuator						
4. Coll type	A1 actuator 24V, delivered loose/unassembled**						
SKB standard cooling coll	A2 actuator 230V, delivered loose/unassembled**						
HKB high-capacity coil							
VKB heating and cooling coil	10 Damper						
	0 without damper						
5. Air connection* A eller B	S with damper DRS-K 125**						
	11 Exposed surface						
6. Flow pattern	0 RAL 9003						
0 standard 50/50	SL-RAL special finish RAL						
25/75 asymmetrical, x=25/y=75 75/25 asymmetrical, x=75/y=25	SL-NCS special finish NCS						
*The standard air and water connections are at the same accessories supplied loose/unassembled.	e gable end: A1 or B2, see Figure 1.						
Exampel: Svalbard-F-1800-104-SKB-A-50/50-1-W-A1-S-0							
Type/variant	Svalbard-F						
Length	1800						
Adjustment factor	104						
Coil type	SKB						
Air connection*	A						

Svabard-F-1200 mm Δt, [°C] 6			8				10				L					
Total pressure	40 80			40 80			40 80				dB(A)					
Coil type		SKB	HKB		нкв	SKB	нкв	SKB	нкв	SKB	HKB	SKB	нкв	40 Pa		
	40	210	250	240	280	280	330	320	370	350	410	410	470	<20	27	
Air Sow rate [m³/h]	60	240	280	270	330	330	380	390	440	410	470	470	550	<20	28	
	80	260	300	300	340	340	390	400	460	420	510	510	600	24	30	
	100	270	320	320	360	360	420	430	490	450	550	550	650	27	32	
	120	280	340	330	380	380	440	450	520	470	570	570	680	31	35	
Table 2: Coo						(555	110000	10000	0.000		07000	370.75	110000		20.00	
Svabard-F-1	000 mm															
Δt, [°C]	OUU IIIIII			6				8		0	- 71	0			L.	
Total pressure in duct [Pa]		- 4	0	1 8	10	40		80		40		80		dB(A)		
Coil type		SKB	НКВ	SKB	HKB	SKB	НКВ	SKB	НКВ	SKB	HKB	SKB	НКВ	40 Pa	80 Pa	۱
Air flow rate [m ² /h]	50	300	350	340	400	400	460	440	520	500	590	560	640	<20	24	
	75	340	400	380	460	460	520	500	600	580	660	640	740	<20	26	
	100	380	450	420	500	500	580	560	680	620	700	680	820	22	30	
	125	400	480	460	550	550	640	620	740	700	780	760	880	26	32	
	150	420	500	480	580	580	680	660	780	740	840	820	940	29	34	
Svabard-F-2400 mm At, [°C]			76	6			8			10				L		
Total pressure in duct (Pa)		40		80		40		80		40		80		dB(A)		
Coil type		SKB	HKB	SKB	HKB	SKB	HKB	SKB	HKB	SKB	HKB	SKB	HKB	40 Pa	80 Pa	
	60	400	440	440	500	500	580	540	640	620	720	680	800	<20	24	
age	90	440	500	480	600	600	680	640	740	700	800	760	900	<20	26	
Air flow rate [m²/h]	120	480	560	540	640	640	740	720	840	800	920	900	1060	23	29	
5 -	150	520	620	580	680	680	780	760	880	840	980	980	1040	26	32	
1	180	550	660	620	740	720	840	820	960	900	1040	1040	1200	30	35	
Table 4: Coo	ling effects	at 0.06	litres of	water pe	r sec.											
Svabard-F-3	000 mm															
Δt, [°C]		100	6			В		1		0		_ L				
Total pressure in duct. [Pa]			0		80		40		80		40		80		dB(A)	
Coil type		SKB	HKB	SKB	HKB	SKB	HKB	SKB	HKB	SKB	HKB	SKB	HKB	40 Pa	80 Pa	
-	80	486	556	538	620	658	763	714	818	815	947	898	1038	<20	26	
46						704	822	813	937	907	1044	1001	1175	<20	29	
ate -	110	538	623	718	819	724	022	010	931		4644	1001	1110	120		
low rate m ² /h)	140	538 574	623 677	657	782	784	923	902	1035	987	1141	1098	1304	25	31	
Air flow rate [m³/h]																

Air is supplied via adjustable nozzles which ensure that the air is dispersed along the ceiling in a fan-shaped flow pattern. This technique optimises the dispersion effect by providing a larger area for the supply air and indoor air to mix. Such effective mixing of indoor air and supply air, i.e. induction, minimises the risk of draft in the occupied zone. Svalbard systems which are used for heating only utilises the same technique for effective dispersion of heat along the ceiling. The secondary air is extracted through the perforated area on the unit's frontpanel in order to avoid dirt accumulation on the ceiling.