

TECHNICAL DESCRIPTION

DUST CHAMBER SK XL

200/200/200

260/360/200

300/420/200



FULFILLED STANDARDS AND REGULATIONS –SK SERIES

The iTS dust chambers from the SK series enable standard-compliant testing of electrical equipment *inside an enclosure* against the ingress of dust. The following standards and specifications for dust testing are met.

Standards and regulations	Included	Optional	Option
IEC 60529:1989 + A1:1999 + A2:2013	x		
ISO 20653	x		
EN 60068-2-68 – test La2	x		
LV 124	x		
BMW GS 95003-4	x		

STANDARD SCOPE OF DELIVERY – SK SERIES

The SK XL dust chamber is a self-contained system and is fixed in position in the test room. After connecting the system, reproducible tests are carried out repeatedly in the SK dust chambers using standardised test dusts.

SK - Serie	SK SL 200/200/200	SK XL 260/360/200	SK XL 300/420/200
Internal test chamber W x D x H [mm]	2000 x 2000 x 2000	2600 x 3600 x 2000	3000 x 4200 x 2000
Door cut-out W x H [mm]	1900 x 1900	2400 x 1900	2800 x 1900
Number of doors	2	2	2
Size viewing window W x H [mm]	2 windows: each 710 x 680	2 windows: each 710 x 680	2 windows: each 710 x 680
External test chamber W x D x H [mm]	3000 x 2200 x 2500 (with pressure relief: approx. 450mm higher)	3800 x 3700 x 2500 (with pressure relief: approx. 450mm higher)	4200 x 4300 x 2500 (with pressure relief: approx. 450mm higher)
Weight [kg]	2500	3000	3500
Number of dust blowers	4	6	8
Number of vacuum devices	1	1	1
Test chamber lighting	Yes / LED	Yes / LED	Yes / LED

STANDARD SCOPE OF DELIVERY – SK SERIES

SK - Serie	SK SL 200/200/200	SK XL 260/360/200	SK XL 300/420/200
Cable entry port [number/ø mm]	After agreement	After agreement	After agreement
Load capacity test grid [kg]	Max.1500 (weight distribution: 500 kg/m ²)	Max.1500 (weight distribution: 500 kg/m ²)	Max.1500 (weight distribution: 500 kg/m ²)
Position of control panel	left	left	left

Test chamber

- The test chamber is made entirely of stainless steel (1.4301). The design of the chamber has been optimised to prevent dust from settling.
- The DUTs are placed on the grating. These can be loaded up to a maximum of 500 kg/m². The gratings are installed above the sweeping floor.
- A pedestrian-controlled forklift truck can be used to insert DUTs. The chamber can be driven under in this area.



GENERAL REQUIREMENTS ON SITE – SK SERIES

Climatic conditions	SK XL
Ambient temperature [°C]	10 - 30
Relative humidity max. [%] - non condensing	70

Electrical power supply	SK XL
Power supply	3 x 400 Volt /50Hz N/PE
Power consumption up to [kW]	16
Installed load max. [A]	32
Electrical connection via	CEE 32A plug
Ethernet (Optional)	RJ 45 socket

- **Note: If connected via a CEE socket outlet, this must be protected by a separate residual current device (RCD) of TYPE B (AC/DC sensitive).**

Compressed air supply	SK XL
Compressed air [bar]	3-6
Compressed air quality	ISO 8573-1:2010 [3:3:4]
Compressed air connection	Via quick-release coupling NW 7,2

- **Note: The adapter for the connection is included in the scope of delivery.**

The media connections of the SK XL are located on the back of the chamber.

OVERVIEW: OPTIONS - SK SERIES

Option number	Option	Checkbox
SK.OP-030 (11834)	DAkkS calibration of the vacuum sensor and flow meter	<input type="checkbox"/>
SK.OP-131 (11848)	Factory calibration of the vacuum and volumetric flow sensors	<input type="checkbox"/>
SK.OP-040 (11835)	Additional Flow Meter (0- 60l/h)	<input type="checkbox"/>
SK.OP-041 (11836)	DAkkS calibration of the secondary flow meter (0-60 l/h)	<input type="checkbox"/>
SK.OP-141 (11849)	Factory calibration of the second flow meter (0-60 l/h)	<input type="checkbox"/>
SK.OP-045 (12279)	Discount for chamber without low pressure unit	<input type="checkbox"/>
SK.OP.711 (14527)	Pressure relief flap DN 300	<input type="checkbox"/>
SK.OP.712 (14555)	Video camera for monitoring the DUT	<input type="checkbox"/>
SK.OP.713 (14523)	Bushing 1" for HDWM system	<input type="checkbox"/>
SK.OP.714 (14525)	Door contact switch with guard locking	<input type="checkbox"/>
SK.OP.715 (14529)	Purge air fan	<input type="checkbox"/>
SK.OP-200 (12289)	Data recording incl. ITS companion App - Basic	<input type="checkbox"/>
SK.OP-210 (12290)	Ethernet interface for data recording incl. ITS Companion App - Pro	<input type="checkbox"/>
SK.OP-212 (14583)	iTS Companion App – Pro Plus	<input type="checkbox"/>
SK.OP-220 (12291)	Programmable digital channel (1st channel)	<input type="checkbox"/>
SK.OP-224 (14545)	Additional programmable digital channel (2/3/4. channel)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
SK.OP-225 (14543)	Emergency stop switch-off of the dust chamber from external	<input type="checkbox"/>
SK.OP-226 (14544)	Dust chamber safety signal for on-site control centre	<input type="checkbox"/>

The individual options are described below.

OVERVIEW: ACCESSORIES - SK SERIES

Accessory number	Accessory	Amount [kg]	Checkbox
SK.ZB-020 (11853)	Talcum powder according to DIN EN 60529		<input type="checkbox"/>
SK.ZB-030 (11854)	Arizona dust A2 according to ISO 12103-1		<input type="checkbox"/>
SK.ZB-035 (14538)	Arizona dust A2 quartz-free according to ISO 12103-1		<input type="checkbox"/>
SK.ZB-040 (11855)	China dust according to FLTM BZ106-01		<input type="checkbox"/>
SK.ZB-080 (11859)	Arizona dust according to SAE J 726		<input type="checkbox"/>
SK.ZB-090 (11860)	Test dust according to ECE R 16		<input type="checkbox"/>
SK.ZB-095 (12318)	Test dust according to DIN EN 40050-9		<input type="checkbox"/>
SK.ZB-070 (11858)	Starter kit for dust chamber		<input type="checkbox"/>
SK.ZB-060 (11857)	Test leak for controlling low pressure equipment		<input type="checkbox"/>

The accessories are described below.

NOTE

We reserve the right to make design and technical changes in the interests of further technical development.
This applies to the entire technical description.

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