INNOVATIVE TEST & MEASUREMENT SYSTEMS

TECHNICAL DESCRIPTION

DUST CHAMBER SK

SK 500 / SK 1000

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. Depending on the test component or standard, options may be required.

Standards and regulations	Included	Optional	Option
IEC 60529:1989 + A1:1999 + A2:2013	x		
ISO 20653	x		
EN 60068-2-68 – test La2	x		
IEC 60598-1	x		
LV 124	x		
BMW GS 95003-4	x		
SAE 575 (with option)		x	SK.OP-140 (12333)
JIS D203 (with option)		x	SK.OP-140 (12333)

STANDARD SCOPE OF DELIVERY – SK SERIES

The SK dust chamber is a self-contained system and can be easily positioned in the test room via castors. After connecting the system, reproducible tests are carried out repeatedly in the SK dust chambers using standardised test dusts.

SK series	SK 500	SK 1000-8	SK 1000-10
Internal test chamber W x D x H [mm]	500 x 500 x 1000	800 x 1000 x 1000	1000 x 1000 x 1000
Door cut-out W x H [mm]	450 x 910	740 x 910	940 x 910
Number of doors	1	1	1
Size viewing window W x H [mm]	245 x 700	510 x 680	710 x 680
External test chamber W x D x H [mm]	720 x 950 x 1050	1100 x 1850 x 1950	1300 x 1850 x 1950
Weight [kg]	300	530	550

STANDARD SCOPE OF DELIVERY – SK SERIES

SK series	SK 500	SK 1000-8	SK 1000-10
Number of dust blowers	1	1	1
Number of vacuum devices	1	1	1
Test chamber lighting	Yes / LED	Yes / LED	Yes / LED
Cable entry port [number/ø mm]	1 / 100	1 / 100	1 / 100
Load capacity test grid [kg]	50	100	100
Position of control panel	left	left	left

GENERAL REQUIREMENTS ON SITE – SK SERIES

Climatic conditions	SK 500 / SK 1000
Ambient temperature [°C]	10 - 30
Relative humidity max. [%] - non condensing	70

Electrical power supply	SK 500 / SK 1000	
Power supply	3 x 400 Volt /50Hz N/PE	
Power consumption up to [kW]	1	2
Installed load max. [A]	16	
Electrical connection via	CEE 16A 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 500 / SK 1000
Compressed air [bar]	3-6, max. 40 l/min
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.**

Dust chamber with connections in the lower area (here: Power / compressed air / network)

OVERVIEW: OPTIONS - SK SERIES

Option number	Option	Checkbox
SK.OP-030 (11834)	DAkkS calibration of the vacuum sensor and flow meter	☐
SK.OP-131 (11848)	Factory calibration of the vacuum and volumetric flow sensors	☐
SK.OP-040 (11835)	Additional Flow Meter (0- 60l/h)	☐
SK.OP-041 (11836)	DAkkS calibration of the secondary flow meter (0-60 l/h)	☐
SK.OP-141 (11849)	Factory calibration of the second flow meter (0-60 l/h)	☐
SK.OP-042 (12322)	Additional low pressure unit (max.3 per dust chamber)	☐ ☐ ☐
SK.OP-132 (14541)	DAkkS calibration of the vacuum sensor and flow meter (SK.OP-042)	☐ ☐ ☐
SK.OP-133 (14542)	Factory calibration of the vacuum sensor and flow meter (SK.OP-042)	☐ ☐ ☐
SK.OP-045 (12279)	Discount for chamber without low pressure unit	☐
SK.OP-046 (12319)	Gloves installed in the window of the front door	☐
SK.OP-070 (11839)	Side wall as a bulkhead	☐
SK.OP-081 (12325)	1-phase test room socket	☐
SK.OP-090 (11841)	Additional entry port 100 mm	☐
SK.OP-091 (11842)	Additional entry port 150 mm	☐
SK.OP-092 (11843)	Additional entry port 200 mm	☐
SK.OP-093 (11844)	Additional entry port 250 mm	☐
SK.OP-100 (11845)	Heavy load grid with increased surface load	☐
SK.OP-140 (12333)	SAE nozzles for SAE and JIS Test	☐
SK.OP-200 (12289)	Data recording incl. ITS companion App - Basic	☐
SK.OP-210 (12290)	Ethernet interface for data recording incl. iTS Companion App - Pro	☐
SK.OP-212 (14583)	iTS Companion App – Pro Plus	☐
SK.OP-220 (12291)	Programmable digital channel (1st channel)	☐
SK.OP-224 (14545)	Additional programmable digital channel (2/3/4. channel)	☐ ☐ ☐
SK.OP-225 (14543)	Emergency stop switch-off of the dust chamber from external	☐
SK.OP-226 (14544)	Dust chamber safety signal for on-site control centre	☐

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		☐
SK.ZB-030 (11854)	Arizona dust A2 according to ISO 12103-1		☐
SK.ZB-035 (14538)	Arizona dust A2 quartz-free according to ISO 12103-1		☐
SK.ZB-040 (11855)	China dust according to FLTM BZ106-01		☐
SK.ZB-080 (11859)	Arizona dust according to SAE J 726		☐
SK.ZB-090 (11860)	Test dust according to ECE R 16		☐
SK.ZB-095 (12318)	Test dust according to DIN EN 40050-9		☐
SK.ZB-070 (11858)	Starter kit for dust chamber		☐
SK.ZB-060 (11857)	Test leak for controlling low pressure equipment		☐

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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& MEASUREMENT SYSTEMS

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