

KIT FOR SUN SIMULATION LAMP TEST



THE ACCESSORY CAN BE COMBINED WITH THE FOLLOWING CHAMBER MODELS

BASIC VERSION	E VERSION	ES VERSION	flower® VERSION
CLIMATIC AND THERMOSTATIC MODELS	CLIMATIC MODELS	CLIMATIC AND THERMOSTATIC MODELS	CLIMATIC MODELS
Field T -40/+180°C	Field T -20/+180°C	Field T -40/+180°C	Field T -40/+180°C
DM340 (T) DM600 (T) DM1200 (T) DM1600 (T)	DM340 E DM600 E DM1200 E DM1600 E	DM340 (T) ES DM600 (T) ES DM1200 (T) ES	FM340 FM600 FM1200
Field T -70/+180°C		Field T -70/+180°C	Field T -70/+180°C
DM340 C (T) DM600 C (T) DM1200 C (T) DM1600 C (T)		DM340 C (T) ES DM600 C (T) ES DM1200 C (T) ES	FM340 C FM600 C FM1200 C

1.1 DESCRIPTION

1 Solar lamp

The lamp structure is made of anodized aluminum and the assembly components are made of stainless steel.

The percentage of the lamp intensity can be adjusted using the touchscreen control panel. It takes approximately 3 minutes from the moment the lamp is turned on for it to reach the requested output.

2 Internal chamber plug

The internal chamber plug is easy to remove and/or install and makes it possible to use the chamber in its standard configuration without a lamp.

3 Porthole cover panel

An easy to remove and/or install inspection porthole cover panel is provided for installation in the chamber door.

4 Electrical power system (EPS)

This unit provides a permanent regulation of the power output. The irradiance selected will therefore be stabilized by means of voltage and current parameters. This device is positioned on top of the chamber.

5 Maintenance

The light bulb is easy to change thanks to the handy clamps provided.



STANDARDS

DIN 75220 (outdoor)*

GB/T 2423.24

IEC 60068-2-5

DEF-STAN 0035-3

VDA 230-219

ISO 9022-9

MIL STD 810 G (Method 505.5)**

MIL STD 810 F**

Standards may be subject to change without notice. It's possible to have additional device with some standards.

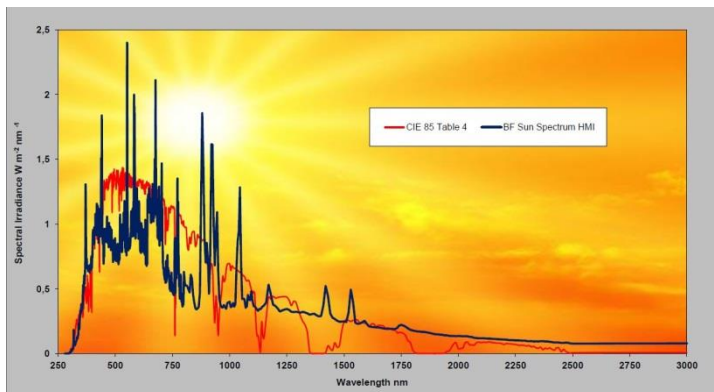
* In case of Indoor test, for DIN 75220, customer should add the accessory filter glasses.

**MIL-STD 810 F and G (for lower irradiation steps of procedure I (cycling test) < 400 W/m² additional moving grid is needed); 55W/m² steps are not possible.

1.2 PERFORMANCE *(temperature performance refer to version basic model)*

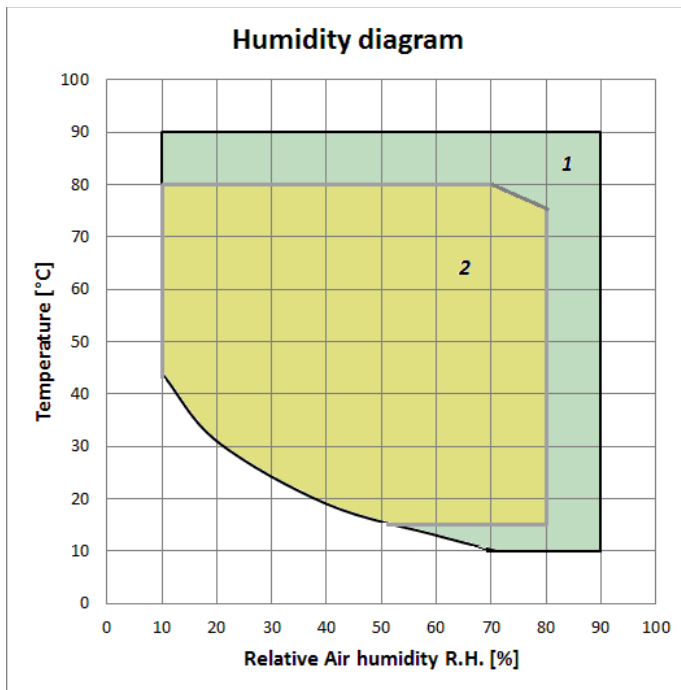
	With Radiation	Without Radiation (with cover)
External dimension (H) respect to the standard	+350mm	
Temperature range (1)	-20°C / +100°C	-70°C (-40°C) ⁽²⁾ / +180°C
Relative humidity range only for climatic chamber (1)	10% / 80% (range +15°C / +80°C)	10% / 90% (range +10°C / +90°C)
Dew point temperature range (for continuous tests) only for climatic chamber (1)	+5°C / +71°C	+5°C / +87°C
Relative humidity accuracy only for climatic chamber	±3%...±5%	±1%...±3%
Temperature fluctuation (1)	±1 K	±0.1...±0.5 K
Radiation source	HMI (double-ended metal halide lamp)	
Power lamp	1x1200W (340 l) 1x2500W (600 l) 1x2500W (1200 l) 2x2500W (1600 l)	
Irradiation area (approx.)	200x200mm (340 l) 600x600mm (600 l) 600x800mm (1200 l) 700x1000mm (1600 l)	
Restart of the lamp after switch-off cold ignition approx.	10 minutes	
Irradiance	1150 ÷ 600 W/m ²	
Weight (Without packaging) respect to the standard	+50kg	
Storage temperatures of EPS (Electronic Power Unit)	-20°C / +80°C no condensation	
NOTE (1) Performance measured at room temperature of +22°C and empty working space		
NOTE (2) min temperature -20°C for E models		

Selecting additional portholes or any other devices that influence the internal test space may be a performance reduction.



Spectral distribution: according to IEC60068-2-5

280 a 320 nm	5 W/m ²	± 35%
320 a 400 nm	63 W/m ²	± 25%
400 a 520 nm	200 W/m ²	± 10%
520 a 640 nm	186 W/m ²	± 10%
640 a 780 nm	174 W/m ²	± 10%
780 a 3000 nm	492 W/m ²	± 20%



- 1- Range without radiation
- 2- Range with radiation

The points with low temperatures and high humidity with solar radiation (within chart zone 2) are guaranteed for limited periods.

1.3 ACCESSORY CODES

ACCESSORY CODE	DESCRIPTION
18AX1300	KIT FOR SUN SIMULATION LAMP TEST (340 l)
18AX1305	KIT FOR SUN SIMULATION LAMP TEST (600 l)
18AX1310	KIT FOR SUN SIMULATION LAMP TEST (1200 l)
18AX1315	KIT FOR SUN SIMULATION LAMP TEST (1600 l)

18AX1390 PYRANOMETER: The pyranometer with amplifier allows to read the light intensity inside the chamber. This system makes it possible to control the light intensity of the lamp using the touchscreen panel, with feedback from the reading sensor.



18AX1388 TEMPERATURE PROBE: PT100 probe for black body DIN Class B 4 wires.

18AX1351, 18AX1352, 18AX1353: FILTER FOR DIN 75220 INDOOR TEST: Glass filter to install / uninstall manually