SDR-52 Dry Room

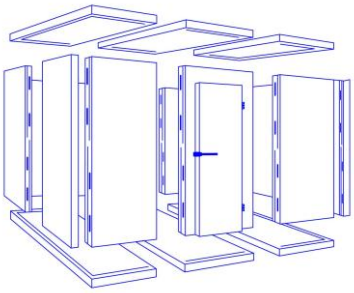
Outstanding performance

The SDR-52 dry room has an outstanding performance for drying moisture sensitive components, PCB's and other moisture sensitive products.

The 5000 series Dynamic Drying Unit reaches very reliable, low humidity values of 0.5% RH and automatically regenerates when necessary.

Regeneration times are reduced due to the closed loop control of the Dry Unit which automatically responds to atmospheric change and frequent door openings.

The relevant process data is obtained by use of an accurate Rotronic sensor. Data can be exported from the cabinet via RS232 with optional software.



Totech Europe BV
De Linge 28
NL-8253 PJ Dronten
www.totech.eu.com

Phone: +31 (0) 321 330239
Fax: +31 (0) 321 330254
K.v.K: Lelystad 390 86417
E-Mail: info@totech.eu.com

V.A.T.: NL813341887B01
IBAN:NL83Rabo0145683443
B.I.C./Swift: RaboNL2U
Bank: 1456.83.443

Features

User friendly handling	Display with easy menu structure
ESD features	Different materials can be requested. Static safe 10^{12} Ohm/sq, conductive 10^{6} Ohm/sq or even hard grounded
Insulation	80 mm sandwich polyurethane construction
Body	Painted in white steel plated RAL 9010
Data logging	Integrated data logger over Sensor with standard 2000 measuring points (optional software is required)
Online read out	RS 232 interface for data (optional software is required)
Door & humidity alarm buzzer	Longer door openings are detected, high RH levels are detected
Flooring	80 mm flooring, delivered with 1.5 mm stainless steel, anti-slip pressure plate
Lockable doors	Every door can be locked individually with a key
U 5000 series Drying Unit	< 0.5% RH, made in Germany
Rotronic sensor	Precision sensor, accuracy +/- 0.8 % RH, +/- 0.3°C
Power supply	5 meter power cord with IEC plug

Benefits

Recovery time after door opening	< 60 minutes to below 1% (with 1 door opening)
Temperature stability	An even temperature throughout the drying cabinet as a result of the use of a radial fan and an insulated sandwich construction 0.24 Watt/m2 K according to DIN 52612 (If heater is installed). Accuracy +/- 2%
Temperature setting	Heating up to 60°C (if heater is installed)
Energy saving consumption	As a result of a Dynamic Dry Unit, sandwich construction with insulating 80 mm polyurethane
Network	Optional
IPC	According to IPC/JEDEC-JSTD 033C and IPC-1601
European Quality	Made in Germany
Maintenance	Easy to service, low maintenance
Panel construction	Different sizes of panel available
Shelves	Possible to add shelving
Trolleys	Different sizes of trolleys available
Flooring	Different pressure plates available (heavy duty weight)

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Technical Data Cabinet

- Dimensions: Different sizes available
- Electric supply: 230 V AC (120 V AC optional)
- Power consumption: 30 W/h (without heater)
- Protection class: Class 1, hard grounded
- Humidity level cabinet: <0.5 % RH can be reached with U 5002 Drying Unit
- Sensor accuracy: +/- 0.8 % RH, +/- 0.3°C
- Temperature accuracy: 60° C, +/- 2° C (if heater is installed)

Technical Data 52 Display

Settings:

- Language Menu
- Nominal Value Humidity
- Nominal Value Humidity Alarm
- Delay Humidity Alarm (in combination with heater)
- Nominal Value Temperature (in combination with heater)
- Temperature Alarm (in combination with heater)
- Delay Temperature Alarm
- Door Alarm
- Interlocking
- Manual Regeneration

Display:

- Voltage supply (supplied by drying unit) 24 VAC/DC
- 4 input function keys (tactile-touch keys)
- Display 61 x 33 mm, white, controllable backlight, adjustable contrast
- SUB-D plug ("universal" 9-wire standard serial cable)
- Power consumption at 24 VDC, 40 mA

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Technical Data Rotronic Sensor HC2-S

Based on the Airchip 3000 Technology, the HygroClip 2 probes can be used for control of temperature and humidity.

The HygroClip 2 probes can be configured with the ROTRONIC HW4 software and share the following features:

- Measurement of relative humidity and temperature.
- Data recording of up to 2000 relative humidity and temperature value pairs.
- Programmable automatic sensor test with fail safe mode and sensor drift compensation.

Technical Data U 5000 Dry Unit series

- Dehumidifying performance: 120 g/h max.
- Minimal humidity: 0.2% RH
- Dehumidifying Temperature: 10 – 60° C
- Electric supply: 230 VAC (120 VAC available)
- Dimensions (L x B x H): 487 x 487 x 150 mm
- Weight: 14 kg

Technical Data U 7000 Dry Unit (optional)

Technical performance data applies for the transfer of air with 20°C and 60% RH

- Dehumidifying performance: 1.6 kg/h
- Minimal humidity 2% RH
- Process air mixture continuously adjustable to max.: 300 m³/h
- External compression: 150Pa
- Fitting supports for process air 2x 160 mm
- Regeneration air mixture adjustable to max.: 65 m³/h
- External compression: 70 Pa
- Electric supply: 230 V AC, 50/60 Hz, 2,1 KW
- Dimensions (L x B x H): 524x 450x 480 mm
- Fitting supports for air regeneration: 2x 120 mm
- Weight: 38 kg

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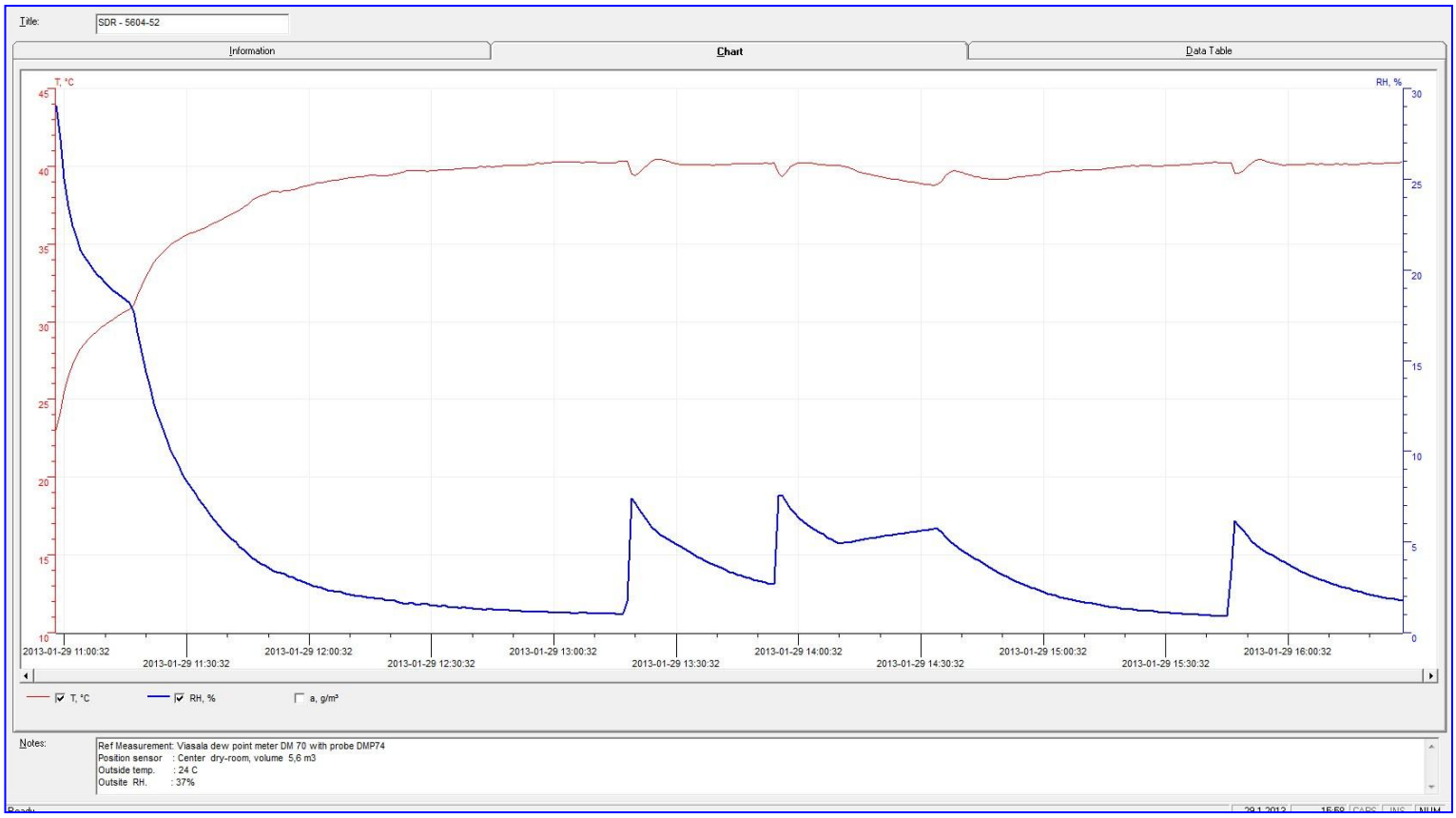
Performance test



Test conditions

Instrument:	Vaisala.
Type of dew point sensor:	Vaisala drycap 180M
Accuracy of dew point sensor:	± 0.2° C at + 20° C (+ 68° F)
Location of sensor:	In the direct surrounding of cabinet sensor
Ambient conditions:	Humidity 50 ± 5% RH, 25° ± 2°C, Pressure 994 ± 20hPa.
Door openings:	2 door openings, 15 sec. (average RH 0.70%)

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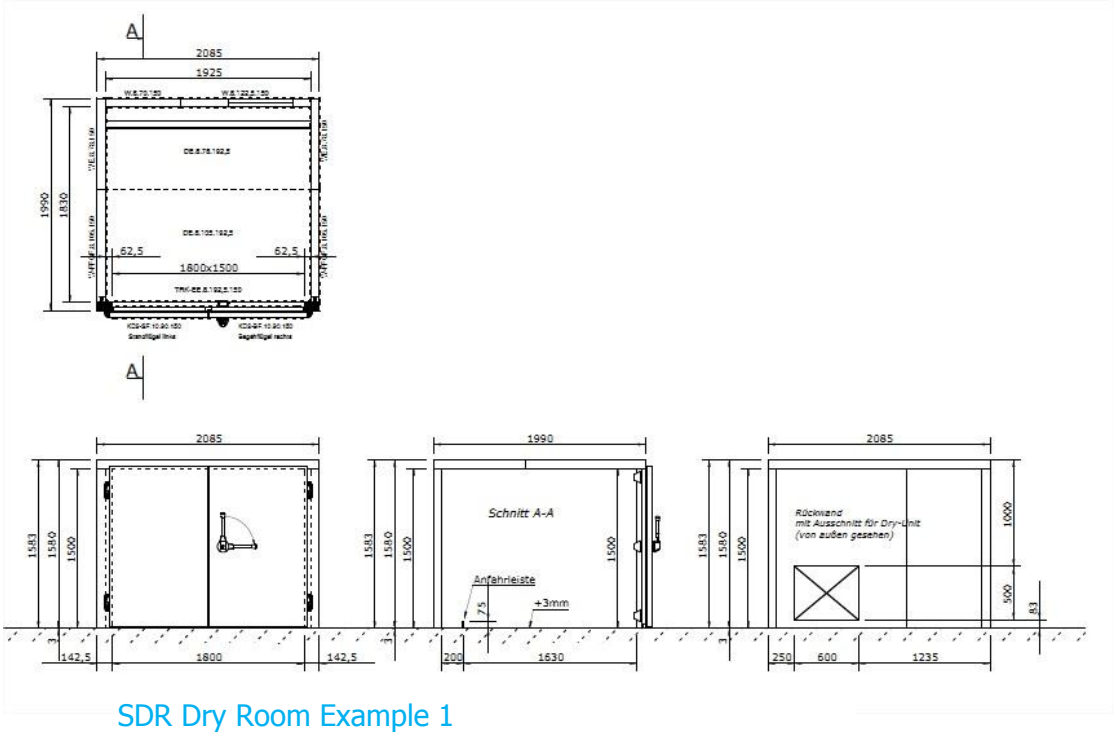
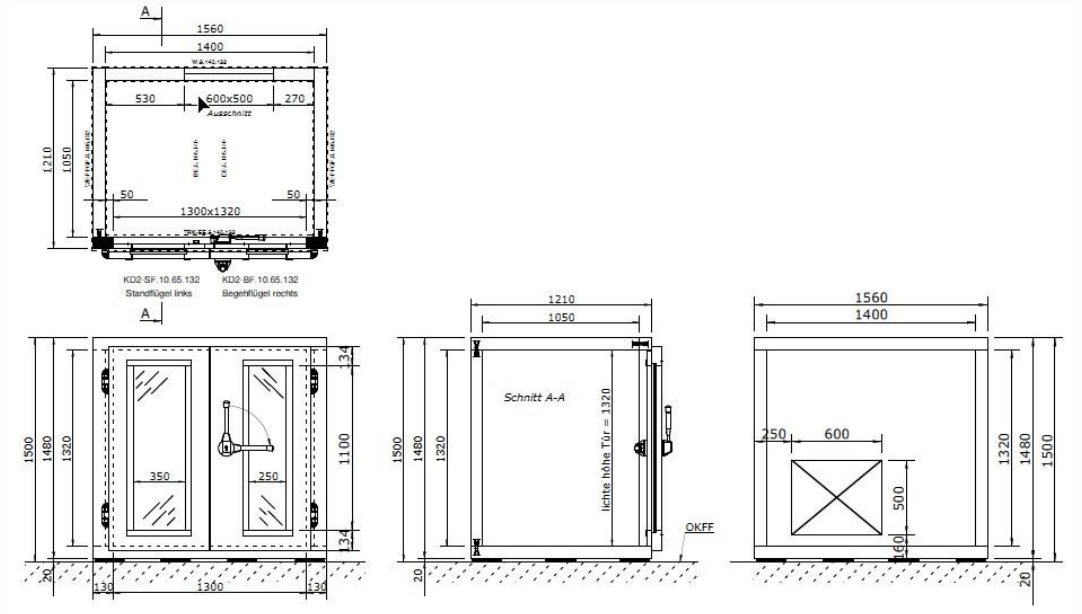
Technical Drawings

SDR-52



SDR Dry Room Example 1



SDR Dry Room Example 2

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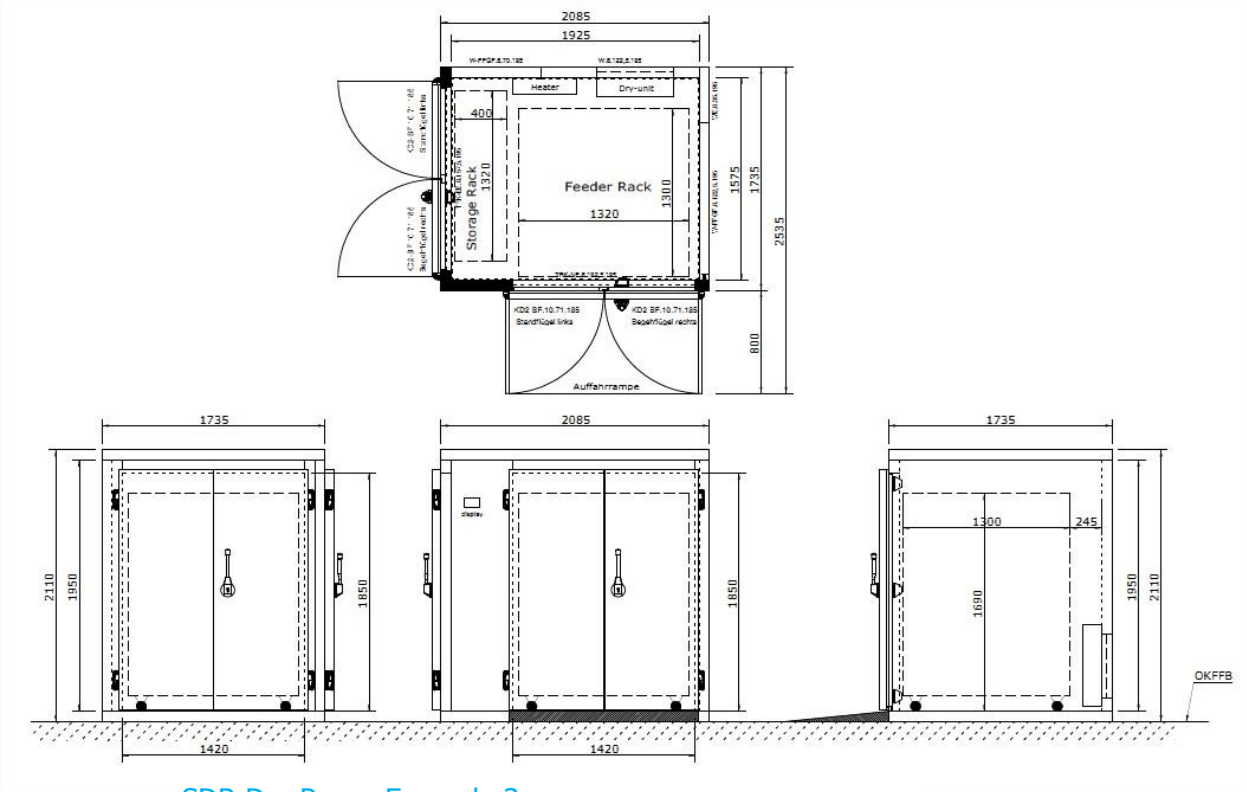
Technical Drawings



SDR Dry Room Example 3

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Options

Humdidity alarm signal lamp

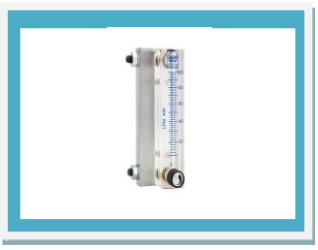
Two-color, (orange/green or red/green), magnetically fixed, providing optical signals on operational states and exceeded limit values. Operates on 24 V.

Item number orange/green 20016030 .

N2 Auto Flow System

The Auto Flow System is developed for use in combination with a Totech drying cabinet. The device is used for the quick removal of moisture in the cabinet after the doors have been opened. The drying process is realized by using nitrogen (N^2), which is added automatically after the doors have been closed (by means of adjustable timer function).

Item number 22613000.



N2 Flow System

The Flow System is developed for use in combination with a Totech drying cabinet. The apparatus is used for adding nitrogen (N^2).

Item number 20010020

HygroClip 2

Probe with maximum accuracy for all climate measurements

Item number 470000027

Exchange calibrated sensor:

Item number 47000040

Humidity calibrator Hygropalm 22

Precision measuring device for calibrating sensors

Set includes hygroclip sensor, extension cable and transport case (KIT):
Item number 20001019

Hygropalm and hygroclip only:
Item number 20001016

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Options

Rotronic datalogger set

Including HW4-E-V3 Software and Cable AC3006

Item number 47000580

MSL basic software control

Software solution for the monitoring of moisture sensitive components and their MSL state during storage and processing in production. The exact drying state for each component is individually monitored and displayed. Provides complete traceable history for each component up to final processing. The evaluation of the drying conditions is based on the requirements of IPC / JEDEC J-STD-033C.

Item number 200174500

MSL basic software control upgrade

Upgrade to the basic software for monitoring of another storage facility, (dry cabinet, dry room).

Item number 200174502

HW4-E data logging software

Standard edition for use with 1 cabinet. Rotronic HW4 is a process oriented, validated software for use with the Rotronic line of digital humidity-temperature instruments.

Item number 47000034

HW4-P data logging software

Professional edition for use with multiple cabinets. Rotronic HW4 is a process oriented, validated software for use with the Rotronic line of digital humidity-temperature instruments.

Item number 47000031

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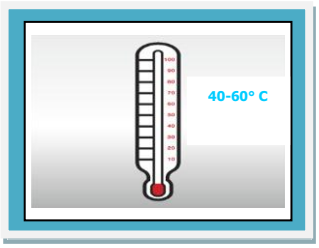
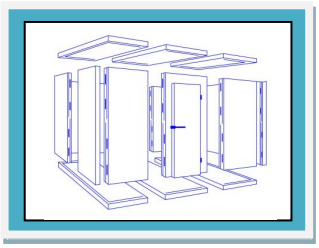
Options



Upgrade 40-60° C
Heater 40-60° C for SDR

U-7000 Dry Unit

Item number 30021500

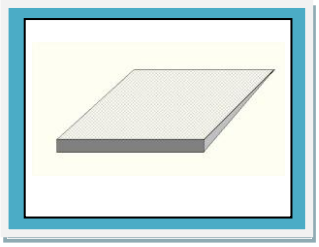


Panel construction
The panels can be supplied in different materials. Standard in RAL white 9002

Options are:
- Both sides same RAL color
- Both sides stainless steel
- Inside stainless steel, outside RAL color or the opposite
- ESD grounding according to IEC-61340-5-1

Flooring
Standard 80 mm flooring, delivered with 1.5 mm stainless steel, anti-slip pressure plate

Different pressure plates available (heavy duty weight)



Ramp
Different sizes of ramps available to give access to the dry room

Material: anti-slip, stainless steel material

version 28-01

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