

Installation Instructions | Installationsanleitung | Notice d'installation | Instrucciones de instalación | Installationsanvisning

PMA.Evolution | PMA.HD

EVO1X | LAB1X

Paint-mixing Scales for Potentially Explosive Areas Zone 1 |
Farbmischwaagen für den Einsatz in explosionsgefährdeten Bereichen der Zone 1 |
Balances pour peintures pour atmosphères explosibles de la zone 1 |
Balanzas para la mezcla de pinturas en áreas potencialmente explosivas de la zona 1 |
Färgblandningsvågar för insats i explosionsfarliga områden i zon 1





Contents of DVD:

- Operating instructions as a pdf file in various international languages
- Adobe Reader
- Software drivers for configuration of USB interfaces

Download online: www.sartorius.com/paintmixing

System Requirements:

- Windows, MacOS X
- Browser with JavaScript enabled
- PDF-Reader

Use start.html to run the application

English - page 3

In cases involving questions of interpretation, the German-language version shall prevail.

Deutsch - Seite 14

Im Auslegungsfall ist die deutsche Sprache maßgeblich.

Français - page 25

En cas de questions concernant l'interprétation, la version en langue allemande fera autorité.

Español - página 38

En caso de interpretación, la versión en lengua alemana será determinante.

Svenska – sidan 49

1 oklara fall är den tyska tolkningen avgörande.

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User Information

1.1 Warning/Danger Symbols



These notes identify hazards which have a high probability of resulting in death or serious physical injury if not avoided.



These notes identify hazards that can result in moderate or mild injuries if not avoided.



These notes identify hazards associated with the risk of material damage.

1.2 Explanation of Symbols



This symbol identifies useful information and tips

The following symbols are used in these instructions:

- indicates required steps
- describes what happens after you have performed a particular step
- texts that use this mark are lists

Conventions for these Instructions:

The figures in these instructions are based on "standard" scales. On scales verified for use in legal metrology, some displays and reports may deviate slightly from the figures. Where this is significant for operation, the differences will be explained in the text.

1.3 About These Instructions

- ▶ Please read these instructions carefully and completely before putting the equipment into operation for the first time. Observe the safety instructions.
- ► These instructions are an important part of the product. Keep these instructions in a safe place. If you give the device to others to use, give them these instructions too.
- If these instructions are lost, please contact Sartorius for a replacement or download the latest manual from our website: www.sartorius.com/paintmixing

2. Safety Information

2.1 Guidelines and General Information

- The scale and the ex-link converter meet the relevant EU Directives and applicable harmonized standards (see "EC Type Examination Certificate" in the Appendix).
- Improper use or handling, however, can result in damage and/or injury. Any improper use or operation of the scale or of the ex-link converter, i.e., that is not consistent with the instructions, will result in forfeiture of all claims under the manufacturer's warranty.
- Personnel need to have read and understood these installation instructions, including the safety instructions.
- In the event of use in systems and ambient conditions which have greater safety requirements, you must observe the requirements and provisions applicable in your country.
- Always keep the equipment and scale freely accessible.



Make sure that the voltage rating printed on the AC adapter is identical to your local mains voltage.



The IP protection rating of the scale and the ex-link converter YCO14-Z is IP40 as per EN 60529. The device must be handled carefully according to the IP protection rating. The environment must be suitably secured.

Ex Zone 1 (Category 2 Equipment)

In accordance with Directive 94/9/EC, the EVO1X | LAB1X model is a category 2 device, suitable for use in Zone 1 potentially explosive areas.

EC Type Examination Certificates: FM14ATEX0085X ID code: II 2G Ex ib IIB T4 Gb

The ex-link converter is only suitable for installation as an electrical apparatus with the following ID code outside of the potentially explosive area:
 II (2)G [Ex ib Gb]IIB

as per EC Type Examination Certificate no. FM14ATEX0084X

The converter may only be connected to supply voltages of 90 V to 264 V at a frequency of 48–62 Hz.



If the device is used in Zone 1 potentially explosive areas outside the Federal Republic of Germany, the relevant national electrical codes and safety regulations must be observed. Ask your dealer or Sartorius Service Center about the guidelines that apply in their country.

2.2 Installation Information



Do not operate the scale if its housing, the ex-link converter, or the AC adapter including all connections are damaged. Immediately disconnect the damaged device from the power.



Do not expose the scale, the ex-link converter, or its AC adapter or the accessories supplied by Sartorius to extreme temperatures, aggressive chemical vapors, moisture, shocks, vibrations, or strong electromagnetic fields. Observe the conditions of operation described in the Specifications.

The casing on all connection cables as well as the casing on the wires inside the equipment housing are made of PVC. Chemicals that corrode this material must be kept away from these cables.



The operator shall be solely responsible for any modifications to the equipment and for connecting any cables or equipment not supplied by Sartorius! Information on operational quality is available upon request from Sartorius.

You should only use accessories supplied by Sartorius.



Note the IP protection rating of the scale, the ex-link converter, and its AC adapter. Do not allow liquid penetration. The protection rating specifies the suitability of equipment for various environmental conditions (moisture, foreign bodies).



Before cleaning the AC adapter, ex-link converter, or the scale:
Disconnect all devices from the power.



The scale and ex-link converter should only be opened by personnel trained by Sartorius with the power disconnected. Do not open the AC adapter.



Avoid generating static electricity on the glass panel of the touch screen and plastic casing. The equipotential bonding conductor of the devices must be connected properly, according to commonly accepted technical standards. Only clean the device as stipulated in the cleaning instructions.



Take care that the glass panel of the touch screen is not damaged (e.g., by falling objects, impact, or extreme pressure).

If the glass panel is damaged, disconnect the device from the power supply immediately.



The surface of the touch screen should not be touched with pointed, sharp, hard, or rough objects. You should only use the touch pen provided or your fingertip. Do not use parts of clothing (e.g., sleeves) or sponges for cleaning because these can scratch the surface (e.g., due to rivets, buttons on the sleeve, or sand in the sponge).

The device must be protected from unnecessarily extreme temperatures, aggressive chemical vapors, moisture, shocks, and vibrations. Note the connection data (see EC Type Examination Certificates for the device and/or the safety instructions, drawing no. 2023040).

Warnings Concerning Installation and Operation:



The equipment must only be used indoors. Avoid generating static electricity on glass and plastic parts. Connect the scale and the ex-link converter (YCO14-Z) to the equipotential bonding conductor using a suitable low resistance method. All electrical circuits are grounded and electrically connected to the metal parts of the device.

- The installation must be inspected for correct function and safety by a trained and qualified person at appropriate intervals (e.g., checking the cable for damage).
- Operating personnel must be trained to recognize faulty operating states and to be able to initiate the necessary safety measures (e.g., disconnecting the ex-link converter from the power supply).



Lay the cables where they pose no risk of causing someone to trip.



Never close a paint can using a hammer while it is still on the weighing pan.

When closing, place the paint can on a firm, stable surface.

Observe the additional safety and danger information in the following chapters.

2.3 Intended Use

This scale is only intended for mixing colors and paints. The scale is connected to the ex-link converter installed outside of the potentially explosive area only using the supplied link cable. The scale is used in Zone 1 potentially explosive areas. Appropriate containers must be used for each type of material.

The scale can be operated via the keypad as a stand-alone device or using application software (such as a paint-mixing program from a paint manufacturer) installed on a connected PC. The scale is connected to the ex-link converter installed outside of the potentially explosive area via a USB cable.

3. Getting Started



The scale must be disconnected from the power supply for all assembly work.

3.1 Unpacking and Equipment Supplied

- Open the packaging, making sure to remove all parts carefully.
- After unpacking the device, check it immediately for any external damage.
- ► If you detect any damage, proceed as directed in Chapter "4. Care and Maintenance," page 8.
- ➤ Save the box and all parts of the packaging for any future transport.
 - All cables should be unplugged when transporting.

The following parts are included in the equipment supplied:

Model	Evolution	HD
Large weighing pan: ∅ 233 mm	Х	-
Small weighing pan: ∅ 180 mm	_	Х
USB cable	Х	Х
Ex-link converter	Х	X
Link cable from converter to scale	Х	X
Installation instructions	х	Х

3.2 Selecting a Setup Location

Select the right setup location:

- Set up the device on a stable, even surface that is not exposed to vibrations.
- Maintain free access to the device at all times.

Choose a location that is not subject to the following negative influences:

- Heat (heater or direct sunlight)
- Drafts from open windows, A/C systems, and doors
- Extreme vibrations during weighing
- Heavy traffic areas (personnel)
- Extremely high humidity
- Electromagnetic fields
- Extremely dry air

Acclimatization

Condensation from humidity can form on the surfaces of a cold device when it is brought into a substantially warmer area. You should therefore let a device that has been disconnected from its power source acclimatize for approximately 2 hours before reconnecting it to the supply voltage.

3.3 Installing the Scale



Inserting the Weighing Pan

► Place the weighing pan onto the scale from above.

3.4 Power Supply



The scale is connected to the power supply via a PC/notebook or using the optional AC adapter YPS06-USB (see Chapter "6. Accessories," page 9), which is supplied with mains adapters for use in various different countries. Power supply via the AC adapter is only required:

- When no PC or notebook is available.
- In exceptional cases, when the output voltage of the USB interface of the PC or notebook is not high enough.

AC adapter assembly is described in the following.

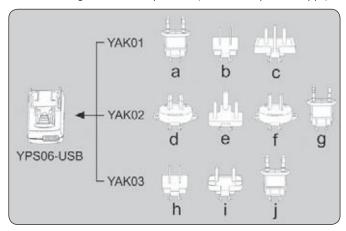
3.4.1 AC Adapter Assembly



Using the wrong mains adapter may cause fatal electric shock and damage the equipment.

Never plug the mains adapter into the socket when it is disconnected from the AC adapter (danger of electrical shock).

▶ Use the right mains adapter for your mains power supply:



Mains adapter set YAK01

Bag	Region/Country
a) transparent	Europe/EU (except United Kingdom)
b) blue	USA
c) yellow	United Kingdom

Mains adapter set YAK02

d) red	Australia
e) turquoise	South Africa
f) white	Argentina
g) pink	Brazil

Mains adapter set YAK03

h) light brown	China
i) black	India
j) green	Korea



Push (1) and slide (2) the mains adapter required for your power supply into the opening of the AC adapter module. When doing this, the mains adapter needs to lock into position.



Removing/Replacing the Mains Adapter

Unlock (1) the mains adapter and then detach (2) it.

Power Connection/Safety Precautions

- Only use original Sartorius AC adapters.
 The AC adapter has an IP rating of IP40 in accordance with EN 60529/IEC 60529.
- Make sure that the voltage rating printed on this unit matches the voltage at the place of installation.
- If the stated supply voltage or the plug design of the AC adapter does not comply with your country's standard, please inform your nearest Sartorius representative.
- The power must be connected in accordance with the regulations applicable in your country.

3.4.2 Connecting the Scale



Connecting the Scale

Insert the link cable plug into the socket on the back of the display.



 Lay the link cable through the cable holders on the back of the scale.



 Connect the link cable to the ex-link converter.

Connecting the Grounding Cable

This explosion-protected system should be set up according to commonly accepted technical standards. The applicable national electrical code and safety regulations for your particular country must be observed.

Before commissioning the scale, a check must be carried out by or under the supervision of a qualified electrician to ensure that the system is in good working order.

Check whether or not the competent authorities (e.g., industrial supervisory board) need to be informed. It is also necessary to carry out inspections of the system during operation.

Inspection intervals should be such that any significant defects that may occur can be identified in good time. Inspections should be carried out at least once every three years. The applicable requirements and guidelines should also be observed during operation.

Establish a low resistance connection from the scale and the ex-link converter YCO14-Z to a customer-supplied equipotential bonding conductor connection via the equipotential bonding conductor connections (PA) on the device using a suitable grounding cable with a gauge of at least 4 mm² (not included).

Installation must be carried out properly by trained personnel and according to commonly accepted technical standards. The system should only be operated for the first time when it is certain that the area is not potentially explosive. If deviations are evident during startup due to transport damage (e.g., no display, no backlighting), disconnect the scale from the power supply and contact the Sartorius Service Center.



Connect the scale to the equipotential bonding conductor using an equipotential bonding cable with a gauge of at least 4 mm².

- Connect the cable lug of the equipotential bonding cable to the grounding terminal of the scale.
- Connect the equipotential bonding cable to the customersupplied equipotential bonding conductor.



Connect the ex-link converter to the equipotential bonding conductor using another equipotential bonding cable with a gauge of at least 4 mm².

- Connect the cable lug of the equipotential bonding cable to the grounding terminal of the ex-link converter.
- Connect the equipotential bonding cable to the customersupplied equipotential bonding conductor.

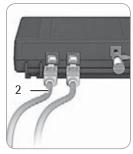


► Insert a USB cable (1) into the right-hand socket on the ex-link converter and connect the cable to a PC or notebook.



Connecting an AC Adapter (Optional)

Insert an additional USB cable(2) into the ex-link converter.



- Insert the USB cable into the YPS06-USB AC adapter.
- Plug the AC adapter into the wall outlet (supply voltage).

3.5 Anti-theft Locking Device



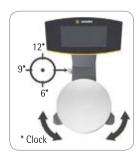
If required, secure the scale at the back.

3.6 Leveling

Leveling the HD Model



Leveling the scale compensates for slant or unevenness at the place of installation. The scale must be perfectly horizontal to ensure consistent, reproducible weighing results. The scale needs to be re-leveled and then adjusted each time its setup location is changed.



- Turn the two leveling feet as shown in the illustration until the air bubble is centered within the circle of the level indicator.
- Air bubble at "12 o'clock":
 Turn both feet clockwise.
- Air bubble at "3 o'clock":
 Turn the left foot clockwise and the right foot counterclockwise.
- Air bubble at "6 o'clock":
 Turn both feet counterclockwise.
- Air bubble at "9 o'clock": Turn the left foot counterclockwise and the right foot clockwise.

3.7 Warm-up Time



To ensure accurate results are delivered, the scale must warm up for at least 30 minutes after initial connection to the power supply. Only after this time will the scale have reached the required operating temperature.

4. Care and Maintenance

4.1 Cleaning



Electrical hazard from voltage or current! Disconnect the AC adapter (if connected) from the mains. Unplug any connected data cables from the ex-link converter. Never open the scale or the AC adapter.

The parts contained in these cannot be cleaned, repaired, or replaced by the operator.

- Make sure that no liquid or dust gets into the scale or the AC adapter.
- Only use soft brushes and cloths for cleaning.
- Never use cleaning agents that contain solvents or abrasive ingredients (e.g., scouring cream, steel wool).
 This can ultimately damage the equipment.



Do not clean the following parts with acetone or aggressive cleaning agents:

Mains socket, data interface, labels, and all other plastic parts.

Cleaning the Control Panel

► Turn off the device before cleaning the control panel, since touching the screen could trigger unwanted inputs.

Cleaning the Scale Housing

- Clean the device using a mild cleaning agent.
- Use a soft cloth to dry the device.

4.2 Maintenance



Electrical hazard from voltage or current! Repair work on the (optional) AC adapter must only be carried out by trained service technicians. Contact the Sartorius Service Center or a Sartorius dealer for proper repairs.

To ensure the continued accuracy of your scale, we recommend scheduling regular servicing at least once a year. The Sartorius Service Center offers different service contracts with maintenance intervals that are tailored to your needs. A calibration certificate should always be issued as part of every maintenance session. Safety inspections of the AC adapter and its connections must be performed at appropriate intervals by a qualified electrician (e.g., every 2 years).

5. Disposal

Packaging

The packaging is made of environmentally friendly materials that can be used as secondary raw materials. If the packaging is no longer needed, it can be disposed of by local waste disposal authorities.



Device

The equipment, including accessories and empty non-rechargeable and rechargeable batteries, does not belong in your regular household waste; this equipment is manufactured from high-grade materials which can be recycled and reused. European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) requires that electrical and electronic equipment be collected and disposed of separately from other unsorted municipal waste, with the aim of recycling it. The crossed-out waste bin symbol indicates that separate collection is required.

In Germany and several other countries, Sartorius itself assumes responsibility for the return and legally compliant disposal of its electronic and electrical products. These products may not be placed with household waste or brought to collection centers run by local public disposal operations – not even by small commercial operators. Please contact the Sartorius Service Center.

In countries that are not members of the European Economic Area (EEA) or where no Sartorius subsidiaries or dealerships are located, please contact your local authorities or a commercial disposal operator.

Prior to disposal and/or scrapping of the equipment, any batteries should be removed and disposed of at local collection points.



Sartorius will not take back equipment contaminated with hazardous materials (ABC contamination) – either for repair or disposal.

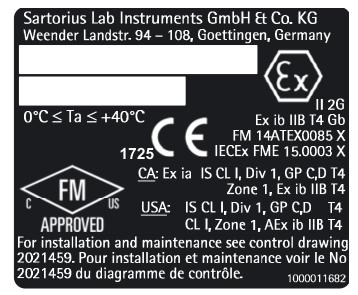
Addresses for Disposal

Detailed information with service addresses for the disposal of your device can be found on our website (www.sartorius.com).

6. Accessories

Accessory	Order Number		
AC adapter (5 V/900 mA)	YPS06-USB		
USB cable, 5 m	YCC01-0040M5		
AC plug adapter set for YPS06-USB - USA and Japan - Europe/EU - United Kingdom	YAK01		
AC plug adapter set for YPS06-USB - Australia - South Africa - Argentina - Brazil	YAK02		
AC plug adapter set for YPS06-USB - India - Korea - China	YAK03		
Ex-link converter	YCO14-Z		
Link cable from converter to scale, 10 m	YCC01-0052M10		
Link cable from converter to scale, 20 m	YCC01-0052M20		
Link cable from converter to scale, 30 m	YCC01-0052M30		
Equipotential bonding cable, 2 m	YCC01-X046M2		
In-use cover for the control panel, pack of 10	YDC03PMA10		
In-use cover for the support arm, PMA.Evolution, pack of 10	YDC03PMA-C010		
In-use cover for weighing pan, PMA.Evolution, pack of 10	YDC03PMA-WP10		
Adjustment weight			
 for PMA.Evolution, 5 kg, accuracy class F2 	YCW654-AC-00		
 for PMA.Evolution PMA.HD, 2 kg, accuracy class F2 	YCW624-AC-00		
 for PMA.Evolution PMA.HD, 1 kg, accuracy class F2 	YCW614-AC-00		

7. Serial Number Coding



The manufacture date of this device is encoded in the serial number. The format is as follows:

YMMxxxxx	
Υ	Year
3	2014-2020
4	2021-2027
5	2028-2034 etc.

The Y column indicates the year group, which covers a period of 7 years. Within each year group, the months (M M) are counted up from 13.

Year: 2015 2016 2017 2018 2019 ... MM: 25-36 37-48 49-60 61-72 73-84 ...

Example:

328xxxxx (April 2015). "xxxxxx" is a consecutive number, increasing by one every month.

8. Specifications

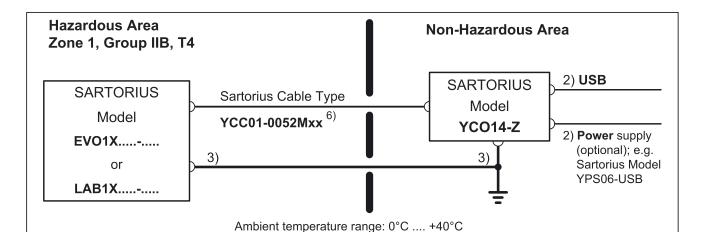
8.1 General Data

Specification Unit		Value		
Scale, ID code: (explosion protection) II 2G Ex ib IIB T4 Gb as per EC Type Examination Certificate no. FM14ATEX0085X				
Power supply		only via USB interface or Sartorius AC adapter YPS06-USB		
Input supply voltage	V_{DC}	+5.0		
Power consumption	W	2.0		
Other data		IP40 in accordance with EN 60529/IEC 60529		
Ambient Conditions				
The specifications apply under the following	g ambient	t conditions:		
Environment		For indoor use only		
Operational capability	°C	Guaranteed between +5 and +40		
Storage and shipping	°C	-10 to +60		
Relative humidity %		15% to 80% for temperatures up to 30°C non-condensing, decreasing linearly to 50% relative humidity at 40°C		
Ex-Link Converter Interface Connection		USB, type B		
Electromagnetic Compatibility		As per EN 61326-1/IEC 61326-1 Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements		
Interference resistance		Basic requirements		
Transient emissions		Class B Suitable for use in residential areas and areas that are connected to a low voltage network that also supplies residential buildings.		
Available Application Programs		Recalculation, factor calculation, formula		
AC Adapter YPS06-USB				
USB power plug (5 V/900 mA)		Type FW7712 (manufacturer's certificate)		
Primary		100−240 V~, -10%/+10%, 50−60 Hz, 0.125 A		
Secondary		5 V _{DC} , ±5%, 900 mA (max.)		
Other data		Protection class II IP40 in accordance with EN 60529/IEC 60529		
Ex-Link Converter YCO14-Z				
ID code (explosion protection)		II (2)G [Ex ib Gb]IIB as per EC Type Examination Certificate no. FM14ATEX0084X		
Other data		IP40 in accordance with EN 60529/IEC 60529		

8.2 Model-specific Data

Model

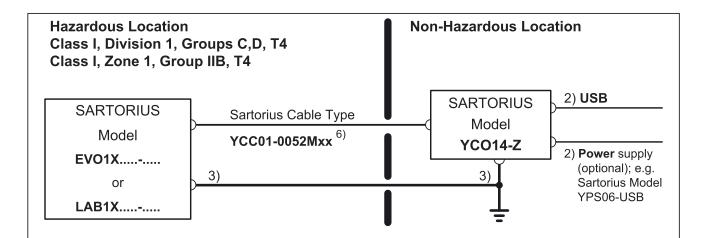
Specification	Unit	Value	Value
		PMA.Evolution	PMA.HD
		EV01X	LAB1X
Weighing capacity	g	7500 / 999.95	2200
Readability	g	0.1 / 0.05	0.01
Tare range (subtractive)	g	-7500	-2200
External adjustment weight/ accuracy class	kg	1, 2, 5 / F2 or better	1, 2 / F1 or better
Size of weighing pan	Ø mm	233	180
Net weight	kg	2.4	2.3



These safety instructions apply to the installation, operation, maintenance and repair of the equipment

- 1) Install the equipment in compliance with applicable laws, rules and regulations, ordinances and standards. For ATEX: In particular, be sure to conform to the European Standards EN 60079-14 (Explosive atmospheres Part 14: Electrical installations design, selection and erection). Be sure to follow the installation, operating, maintenance and servicing instructions given in the manuals supplied.
- 2) No connection to any device that uses or generates in excess of 250Vrms or 250Vdc.
- 3) All metal parts must be electrically connected to the terminal for the equipotential bonding conductor (PA). The equipment operator is obligated to connect a lead with a gauge of at least 4 mm² (cross section) to the PA terminal located on the housing of the Ex-Link converter and scale. The low resistance of this connection to the PA bus bar must be checked when the system is installed at the intended place of use. The shielding of the connecting cables may only be used for grounding when no impermissible difference in voltage is generated and, if necessary, the shielding is able to conduct the equipotential current.
- 4) Exposure to UV radiation is not allowed!
- 5) The connecting cable of the display unit must be prevented against damage and stress caused by strain.
- 6) Only the Sartorius cable type YCC01-0052Mxx (XX = 10 for 10m, 20 for 20m; 30 for 30m) may be used. Maximum cable length: 100ft (30.5m). The data cable connected to the scale (weighing unit) is considered as intrinsically safe circuit. Check the correct function of the data transfer before you use the equipment in a hazardous location. The equipment operator is responsible for any non-Sartorius cables used.
- 7) Prior to opening the equipment, disconnect the power supply or make sure that there is no potentially explosive atmosphere or any other explosion hazard in the surrounding area!
- 8) If the equipment does not operate properly, unplug it immediately from line power (mains supply)!
- 9) The equipment shall be installed in such a way that it is protected against the entry of solid foreign objects or water capable of impairing the safety of the apparatus. Reduce the risk of mechanical damage to a minimum.
- 10) Avoid generating static electricity. Use only a damp cloth to wipe down the equipment. The equipment operator shall be responsible for preventing any risks caused by static electricity.
- 11) Keep chemicals and other agents, which can corrode the housing seals and cable sheaths, away from the equipment. These agents include oil, grease, benzene, acetone and ozone. If you are not sure about the safety of a certain substance, please contact the manufacturer.
- 12) Use equipment only in the temperature ranges indicated. Avoid exposing the equipment to heat.
- 13) At reasonable intervals, have your equipment installation checked for proper functioning and safety by a trained and certified technician.
- 14) WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY. If your equipment needs to be repaired, use only original spare parts supplied by the manufacturer!
- Any tampering with the equipment by anyone, other than repair work done by authorized Sartorius service technicians, will result in the loss of EX conformity and in the forfeiture of all claims under the manufacturer's warranty. Only authorized specialists may open the equipment.
- 16) Modifications, including those to be carried out by Sartorius employees, may be permitted only after the express written authorization has been obtained from Sartorius.





- 1) <u>USA</u>: The installation must be in accordance with the National Electrical Code[®], NFPA 70, Article 504 or 505 and ANSI / ISA-RP 12.6.
 - <u>Canada</u>: The installation must be in accordance with the Canadian Electrical Code®, Section 18.
- 2) No connection to any device that uses or generates in excess of 250Vrms or 250Vdc.
- 3) <u>USA</u>: The apparatus must be connected to a suitable ground electrode per National Electrical Code[®], NFPA 70, Article 504 or 505. The resistance of the ground pad must be less than 1 ohm.

 <u>Canada</u>: The apparatus must be connected to a suitable ground electrode per Canadian Electrical Code[®], Section 18. The resistance of the ground pad must be less than 1 ohm.
- 4) **Ambient temperature** range: 0°C +40°C (+32°F + 104°F)
- 5) WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.

 If your equipment needs to be repaired, use only original spare parts supplied by the manufacturer!
- 6) Only the Sartorius cable type YCC01-0052Mxx (XX = 10 for 10m, 20 for 20m; 30 for 30m) may be used. Maximum cable length: 100ft (30.5m). The equipment operator is responsible for any non-Sartorius cables used.
- 7) Be sure to follow the installation, operating, maintenance and servicing instructions given in the manuals supplied.
- 8) The equipment shall be installed in such a way that it is protected against the entry of solid foreign objects or water capable of impairing the safety of the apparatus. Reduce the risk of mechanical damage to a minimum.
- 9) Exposure to UV radiation is not allowed!
- 10) The connecting cable of the display unit must be prevented against damage and stress caused by strain.
- 11) Prior to opening the equipment, disconnect the power supply or make sure that there is no potentially explosive atmosphere or any other explosion hazard in the surrounding area!
- 12) The data cable connected to the scale (weighing unit) is considered as intrinsically safe circuit. Check the correct function of the data transfer before you use the equipment in a hazardous location.
- 13) If the equipment does not operate properly, unplug it immediately from line power (mains supply)!
- 14) Avoid generating static electricity. Use only a damp cloth to wipe down the equipment. The equipment operator shall be responsible for preventing any risks caused by static electricity.
- 15) Keep chemicals and other agents, which can corrode the housing seals and cable sheaths, away from the equipment. These agents include oil, grease, benzene, acetone and ozone. If you are not sure about the safety of a certain substance, please contact the manufacturer.
- 16) Use equipment only in the temperature ranges indicated. Avoid exposing the equipment to heat.
- 17) At reasonable intervals, have your equipment installation checked for proper functioning and safety by a trained and certified technician.
- 18) Any tampering with the equipment by anyone, other than repair work done by authorized Sartorius service technicians, will result in the loss of EX conformity and in the forfeiture of all claims under the manufacturer's warranty. Only authorized specialists may open the equipment.
- 19) Modifications, including those to be carried out by Sartorius employees, may be permitted only after the express written authorization has been obtained from Sartorius.

(c.,\	2014-08-08	 sartorius	Control Drawing	EV01X / LAB1X + YC014-Z		
⟨cx/	Dr. D. Klausgrete	 381101103	2021459	Revision 00	Sheet	