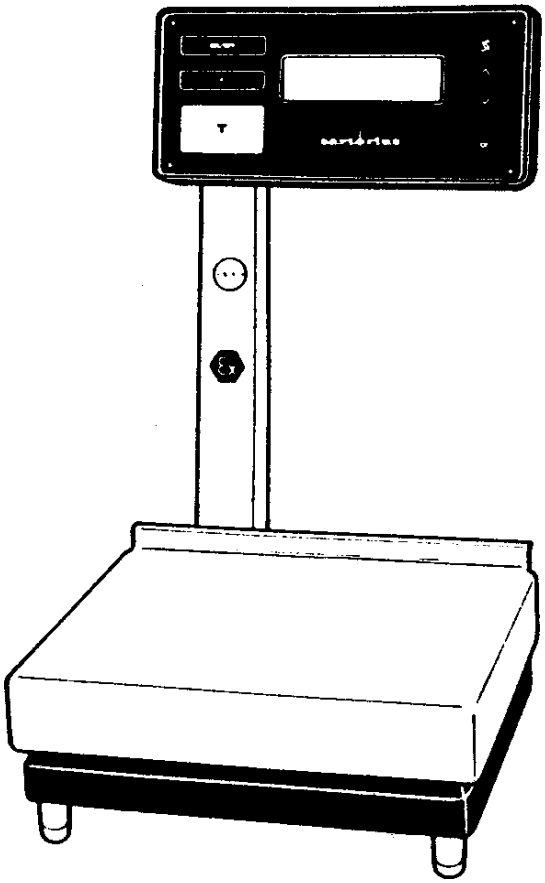
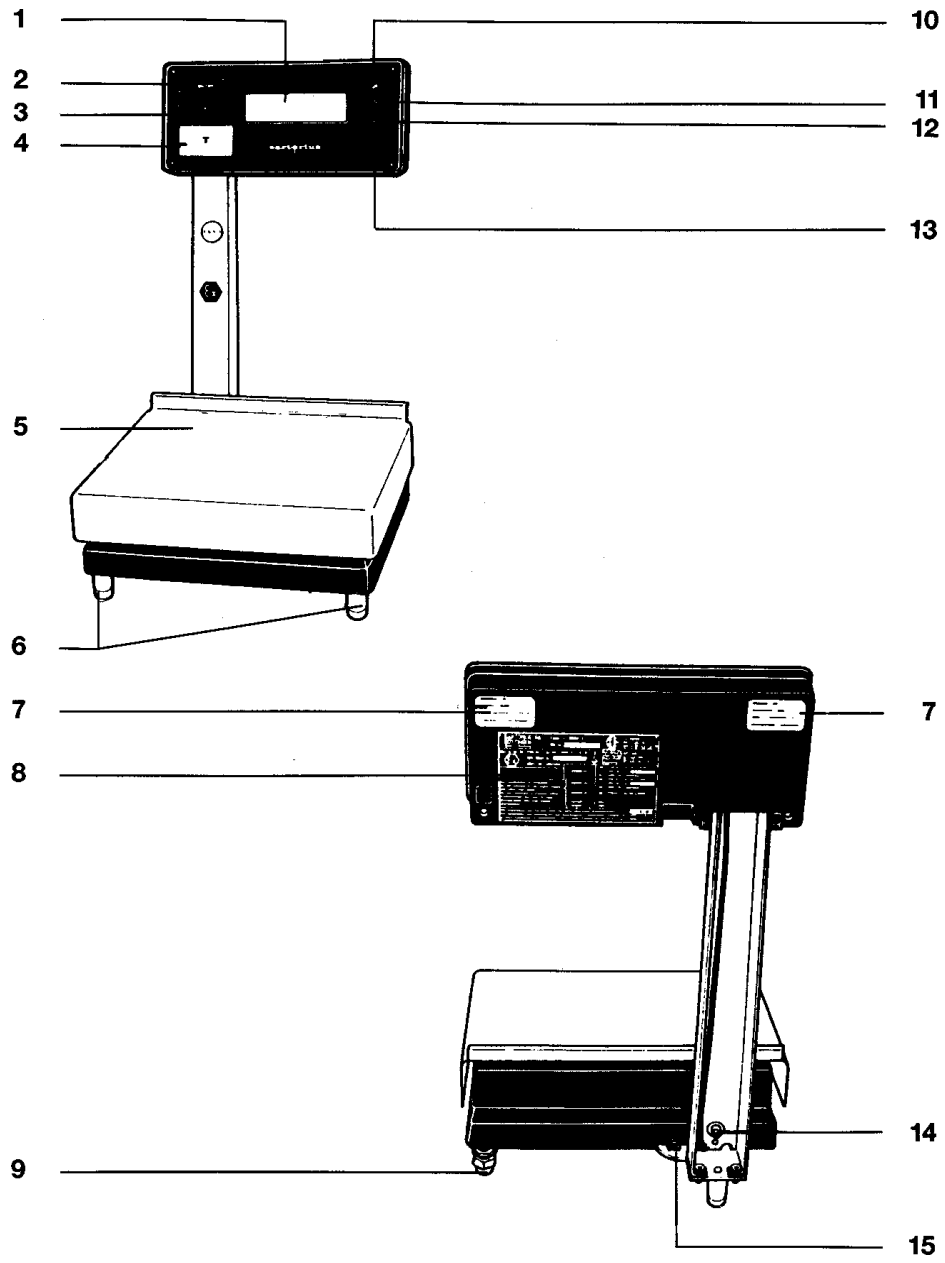
Sartorius Quality
XT 6200-X

Electronic Paint Mixing Scales for Use in Hazardous Locations/Areas
Installation and Operating Instructions



sartorius



1	Weight display	8	Manufacturer's label
2	ON/OFF key	9	Leveling foot (adjustable)
3	Toggle key (for conversion between grams and parts/pound	10	%/g toggle key
		11	Cursor key (arrow pointing up)
4	Tare key	12	Cursor key (arrow pointing down)
5	Weighing platform	13	CF key
6	Leveling foot	14	Power receptacle
7	Adhesive labels	15	Terminal for connecting an equipotential bonding conductor

Contents

About the Product

With this Sartorius Scale, you have acquired a high-quality electronic weighing Instrument that will ease your dally work load.

Please read these Installation and operating instructions carefully before operating your new scale.

Follow these recommendations in your own best interest.

Should you have any additional questions after familiarizing yourself with this manual, please contact your paint supplier.

This explosion-proof electronic precision scale, including the associated electrical equipment, is manufactured in compliance with the CENELEC harmonized European Standards currently in effect.
In addition, this equipment meets the requirements of the Council Directives of the European Community including the "Administrative guidance on the implementation of the European Community 'Explosive Atmospheres' Directives."
Both the scale, model XT 6200-X, and the associated power supply unit, model:

– 609306-01 (EC,A,CH)
– 609307-01 (EC,A,CH)
– 609306-21 (GB)
– 609307-21 (GB)

comply with the regulations of the European Standards (EN) and British Standards (BS), respectively:

EN 50 014 = Part 1 of BS 5501
EN 50 017 = Part 4 of BS 5501
EN 50 020 = Part 7 of BS 5501

Declaration for Canada

The explosion-proof, top loading scale, model XT 6200-X, and the associated power supply, model 609307-6 and 609306-6, meet the requirements of the Canadian Standards Association (CSA) Standard C22.2:

- No. O-M 1982- General Requirements -Canadian Electrical Code, Part II
- No. 142M 1987 - Process Control Equipment
- No. 213M1987 - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.

This electronic scale is suitable for Class I; Division 2; Groups A, B, C and D hazardous locations according to the Canadian Standards Association Certification (Report No. LR 56628).

U.S. Requirements

The explosion-proof, top loading scale, model XT 6200-X, and the associated power supply, 609306-6 and 609307-6, meet the requirements of the Factory Mutual Research Corporation.

This electronic scale is suitable for Class I, II, III; Division 1; Groups A, B, C, D, E, F and G hazardous locations according to the Factory Mutual Research Report OT9A7.AX.

Important Note:
Compliance with Article 501 (Class I location) "Hazardous (Classified) Locations" of the National Electrical Code (NEC) is required.

(Available from: Instrument Society of America, P.O. Box 12277; Research Triangle Park, N.C. 27709)

Warranty

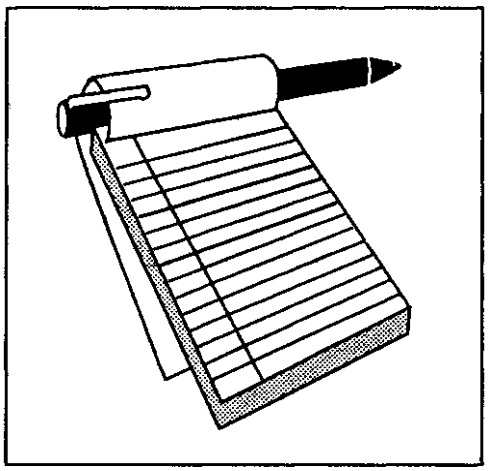
Do not miss out on the benefits of our full warranty. Please complete the registration card, indicating the date of installation, and return the card to your Sartorius dealer. If you do not know the address of your Sartorius dealer, ask your paint supplier.

Storage and Shipping Conditions

Storage temperature: -40° C ... +70° C

The packaging has been designed to ensure that the scale will not be damaged even if it is dropped from a height of 80 cm maximum (about 32 inches).
After unpacking the equipment, please check it immediately for any visible damage as a result of rough handling during shipment.
If this is the case, proceed as directed in the section entitled "Safety Inspection."

Save all parts of the packaging and the box because you may need to ship your scale. Before packing your scale to ship it, unplug all connected cables to prevent damage.



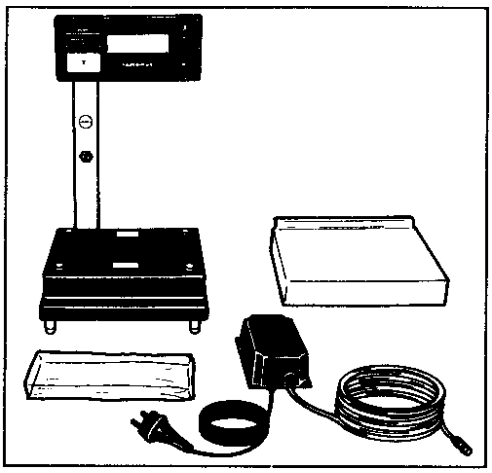
If you wish to send in your scale for repairwork, please proceed as follows:
– remove all splashes or Spills of paint
– include a description of the equipment failures/faults.

This will save you time and unnecessary expense for servicing.

When preparing your scale for transportation, make sure to remove the weighing platform from the scale to prevent damage to the weighing System during shipment.

Do not expose the scale unnecessarily to extreme temperatures, moisture, shocks, blows or vibrations.

Equipment Supplied



The equipment supplied includes the componen shown on the left:

— Scale

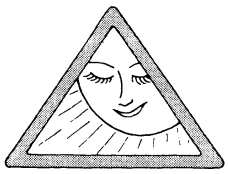
— Weighing platform

— Dust cover

— Explosion-proof power supply* (609307- 1)

*** Power supply model 609307- .1 may only be installed outside the hazardous area/location**

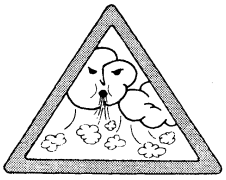
Installation Instructions



Ambient Conditions

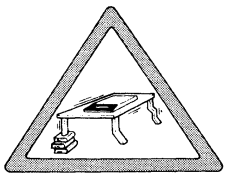
Choose a suitable place to set up your scale. It should not be exposed to the following:

- heat radiation
- drafts
- vibrations



Your Sartorius Scale provides accurate readouts even when it is exposed to unfavorable ambient conditions.

You can adapt the scale to your requirements simply by changing the menu code settings in the scale operating program.
See pp. 25 - 28 or contact your paint supplier for assistance.

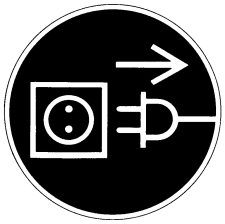


Note to Users in the U.K.
- use only a 3-amp mains fuse rated to BS 1364
- use the scale and the power supply unit in a clean, dry environment

Note to Users in the U.S.
It is recommended that a certified electrician install the Sartorius explosion-proof scale in compliance with National Electrical Code Standards for use in the hazardous location.

When you use the scale and associated equipment in a hazardous location/area, you must comply with the national electrical code and applicable safety regulations of your country.

Please ask your paint supplier to provide you with the regulations that apply in your country.



Warning!
Unplug the power supply from line power before you connect or disconnect any peripherals (printer, etc.) to or from the data interface.

Set up the explosion-proof electronic precision scale and the associated equipment (e.g., the power supply unit) according to the acknowledged technical regulations. You must also comply with the national electrical code and safety regulations of your country (e.g., Elex V, VbF;EX-RL, DIN VDE 0165, DIN VDE 0100, VDE DIN 0101, DIN VDE 0800).

Before you operate your scale in a hazardous location/area, the scale must be inspected either by an electrician or under the guidance and Supervision of an electrician to make sure the scale complies with regulations (§ 12 ElexV).
Determine whether your scale must be reported to the technical inspection authorities (trade board, for example) responsible in your country.
Inspection of the System is also required during Operation. The system should be inspected at intervals which allow for early detection of defects (the possibility of such defects developing must be taken into consideration and therefore, prevented). In any case, inspection must be performed every three years. When operating the system, you must follow the appropriate instructions (e.g., § 13 ElexV, DIN VDE 0105 Part 9, Professional Association/Trade Union Guidelines).

Any tampering with this scale by anyone, other than repair work done by authorized SARTORIUS service technicians, will result in forfeiture of the approval for use in hazardous locations/areas and of all Claims under the manufacturer's warranty and for product liability.

If you have trouble operating your scale, please notify your paint supplier.

Included at the back of these Installation and Operating Instructions is a Supplement entitled "Basic Layout of the Components." Make sure to follow the supplement's instructions and diagrams when setting up, maintaining and operating the electronic scale and associated equipment.

Startup

Place the dust cover on the display unit and mount the weighing platform on the scale.

When you do so, make sure to insert the four metal pins of the weighing platform in the four rubber pads.

When you use dust covers, install and maintain the equipment so as to prevent explosion hazards that can be caused by electrostatic charges.

Connecting the Scale to Line Power

The voltage selector of the power supply has been factory-set to

– 230 V (EC, A, GH)	609306-01, 609307-01
– 230 V (GB)	609306-21, 609307-21
– 120 V (USA)	609306-6,609307-6
– 120V(CDN)	609306-6,609307-6

Power supply model 609307-.. may only be installed outside the hazardous area/location.

Important Note:
The explosion-proof plug for the power cable of the portable power supply (model 609306), designed for portable use, is not included in the equipment supplied.

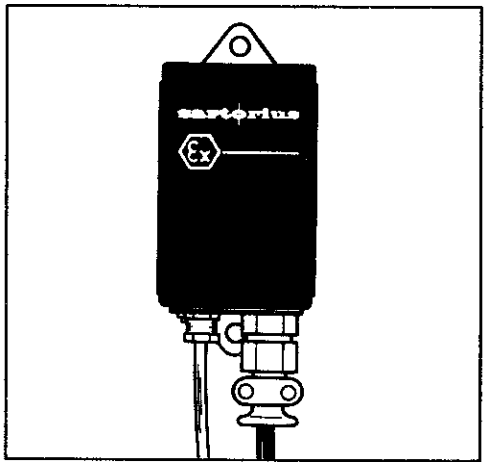
Note for Use in Canada

The scale must be wired to the power supply by a licensed electrician in accordance with the applicable Canadian Standards including the Canadian Electrical Code.
Signal cables connected to the complete unit are subject to acceptance by the authority having jurisdiction.

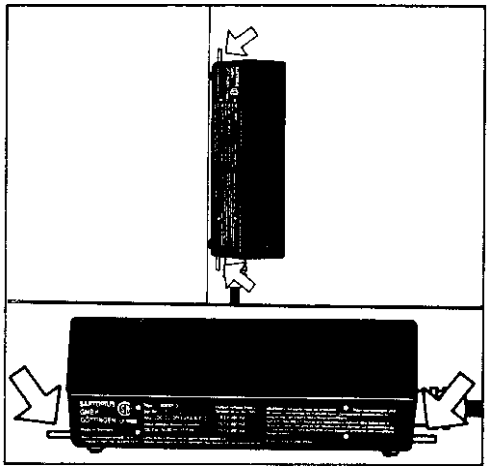
Note for Use in the USA

The scale must be wired to the power supply by a licensed electrician in accordance with NEC CodeArticle501 "Hazardous Locations."

Whenever possible, avoid connecting your scale to over-loaded networks (compressors or similar equipment).



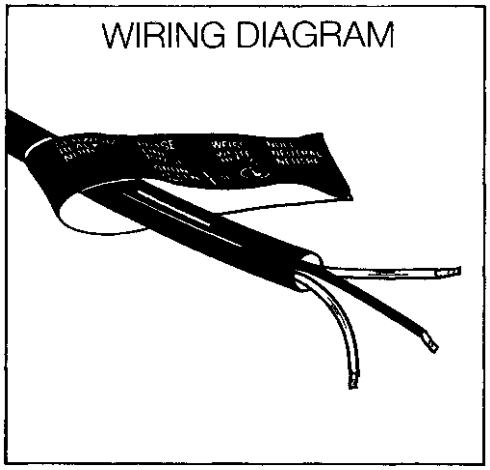
The power supply must be hooked up to the terminal box by a certified electrician. If you operate your explosion-proof scale with a non-explosion-proof plug, you will forfeit any liability Claims under our warranty.



Power supplies 609306-.. and 609307-.. may be instalied äs stationary equipment. To do so, mount the power supply with the lugs facing downward either on a wall or horizontal platform so that the power supply is off the floor. Securely tighten the screws in the lugs to fasten the power supply in place. If the power supply is secured on a wall, the cablemustexitpointingtowardstheground.

Hook up your scale to the power supply in conformance with the Installation requirements in your country.
Properly install the power cord with adequate mechanical protection so that it cannot be damaged.

Wiring Information:



Canada

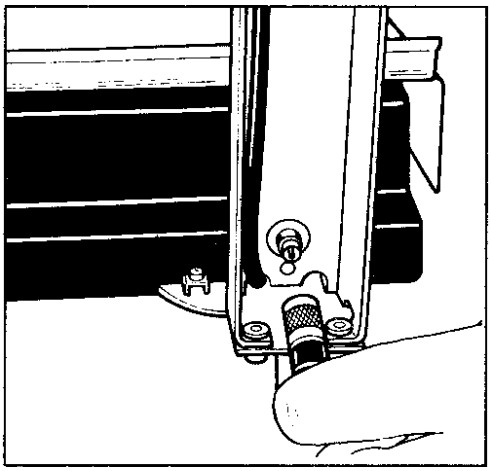
black (live [**L**])
white (neutral [**N**])
green (ground [**PE**])

USA: 120 V, 50-60 Hz

black (live [**L**])
white (neutral [**N**])
green (ground [**PE**])

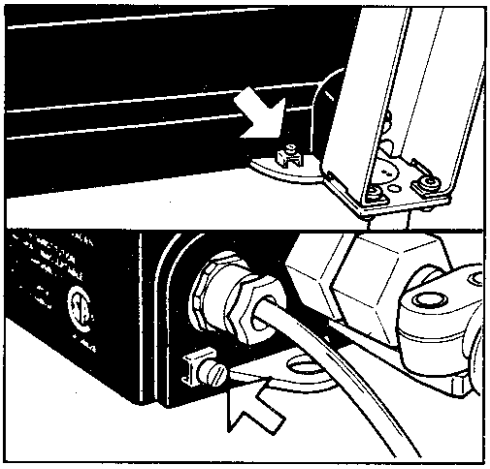
EC

brown (live [**L**])
blue (neutral [**N**])
green/yellow (protective earth [**PE**])



At the point of use, plug the cord of the power supply into the power receptacle**(14)** of the scale.
Secure the connection by tightening the knurled collar.

In doing so, make sure that the codes on the male and female connectors (plug and receptacle) match.



Terminal for Connecting an Equipotential Bonding Conductor

The housing of both the scale and the power supply has a grounding terminal. The screw on the terminal is designed for single equipotential bonding conductors up to .25" Standard gauge or 6 mm^2 and for .18" Standard gauge or 4 mm^2 stranded wires.

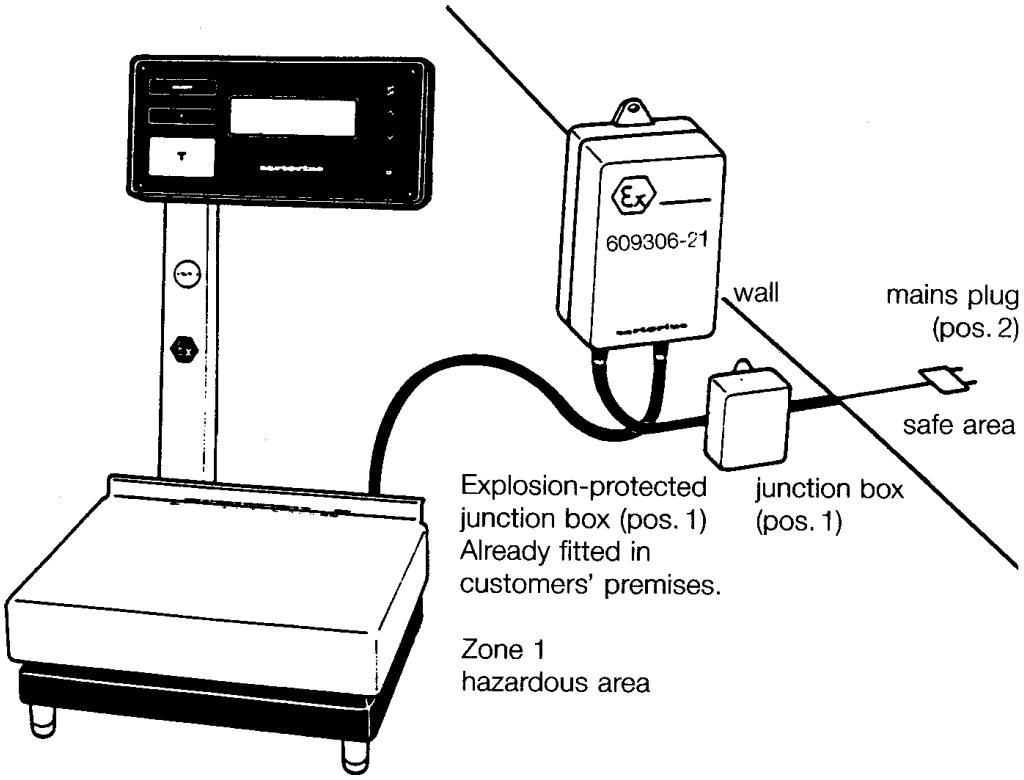
In the explosion-proof location/area, electrical equipment must be connected to the terminal for an equipotential bonding conductor (15).

Note on Installation (only for the U. K.)

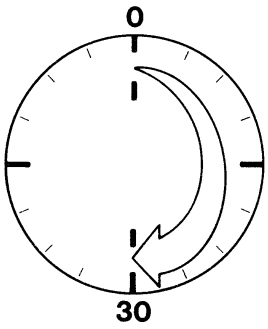
The mains lead must be protected by a 3-amp fuse. It must be installed either in the junction box (pos. 1), directly in the plug (pos. 2) or in the mains lead in a safe area.

Electrical protection for each power unit must comprise a sand-filled, ceramic-bodied fuse having a current rating not exceeding 3A and capable of interrupting a prospective short-circuit current of at least 4000A, e.g., fuses to BS 1362, or the equivalent thereof.

Installation Schematic

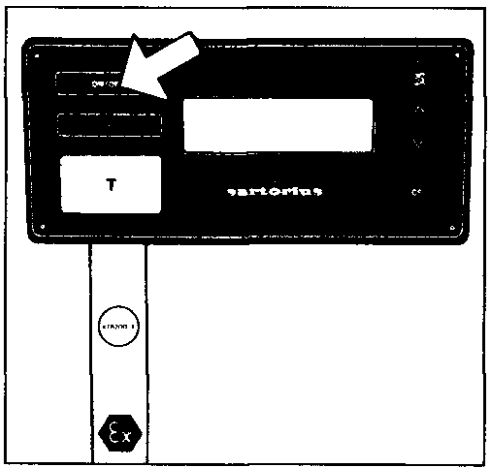


Operation



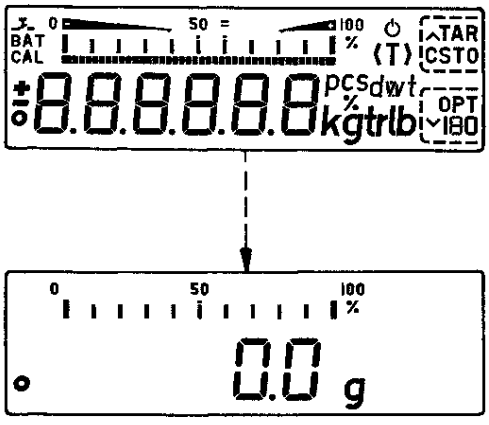
After you have initially plugged your scale into a wall outlet, allow for at least 30 minutes' warmup.

Turning the Display On and Off



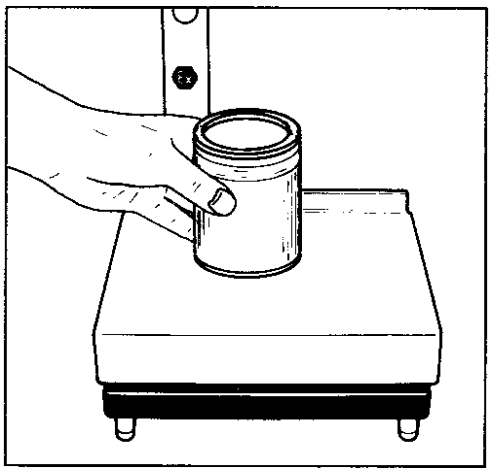
Press the ON/OFF key **(2)** to turn the display on or off.

Self-Test

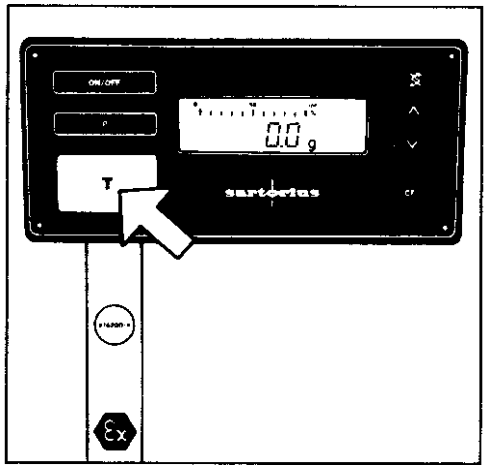


After the power is turned on, a test of all essential electronic functions is run automatically.
This self-test ends with a readout of "**0.0 g**".

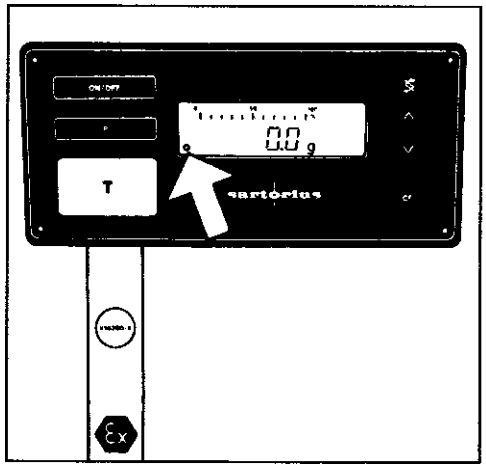
Weighing and Taring



Place the empty paint can on the weighing platform **(5).**

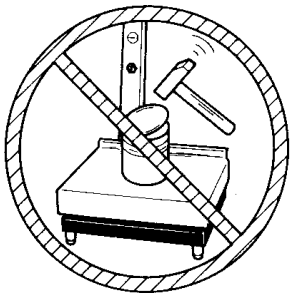


Press the tare control **(4)** to zero the weight display **(1)**.
Pour in the first component and read off the weight as soon as the weight unit (in this case "g") appears as the stability symbol.
Repeat this procedure to obtain the desired amount of paint.

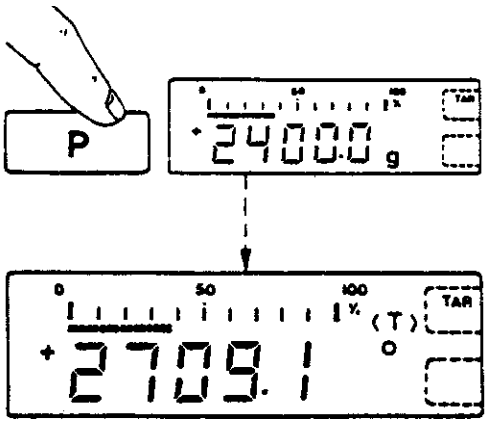


The small circle in the lower left-hand corner shows that the scale has been exactly tared to "0".

In addition to grams, this scale gives you a variety of other menu-definable international weight unit options.
To select the weight unit you desire, see the Scale Operating Program on pp. 25.



Never use a hammer to dose the lid of a paint can when it is still on the weighing platform, otherwise you will damage the system.



Toggling Unit Readouts

You can toggle the weight readout between grams and parts/pound -

press the **P** key **(3)**

Press the **P** key again to change the weight unit in the display back to grams ("g").

Examples for Paint Mixing with the XT6200-X Scale

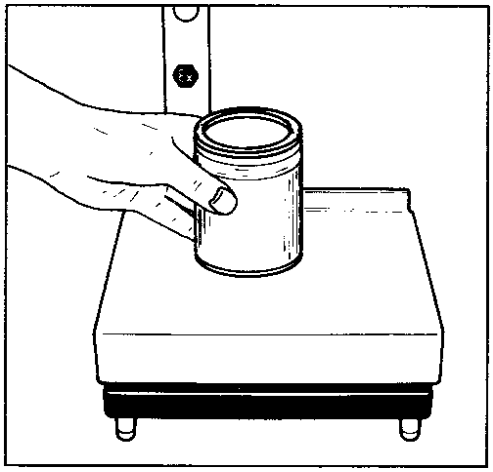
The following 2 examples will help you learn how to work with the scale.

Prerequisite
The code in the scale operating program must be set to **2 13** and **3 2**

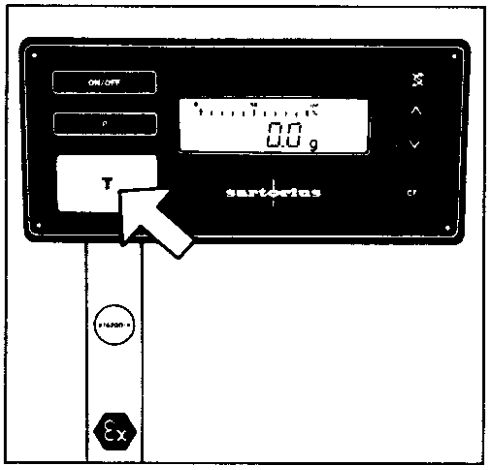
1st Example

Mix paint components with 13.5% hardener and 6.5% thinner,-.

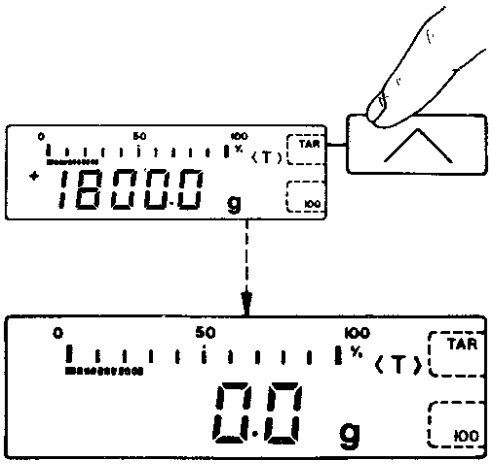
These percentages are in proportion to the total weight of the paint quantity (1 st paint component + 2nd component = 100%).



Place an empty Container on the scale.

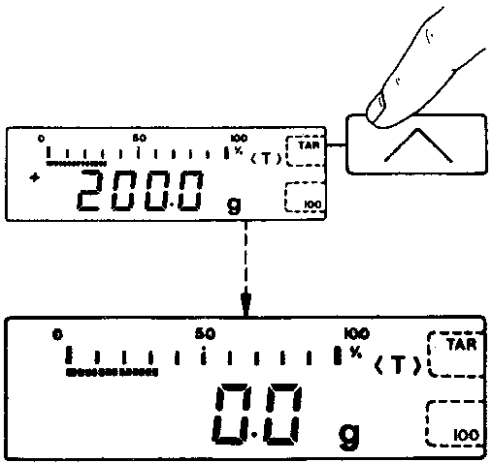


Tare.



Pour in the 1st paint component according to your formula and then store it

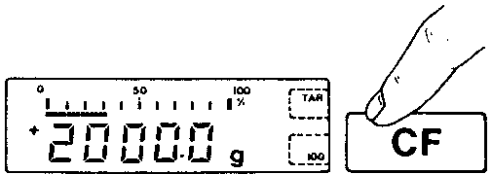
by pressing the cursor key that points up **(11)**



Pourin the 2nd paint component according to your formula and store it

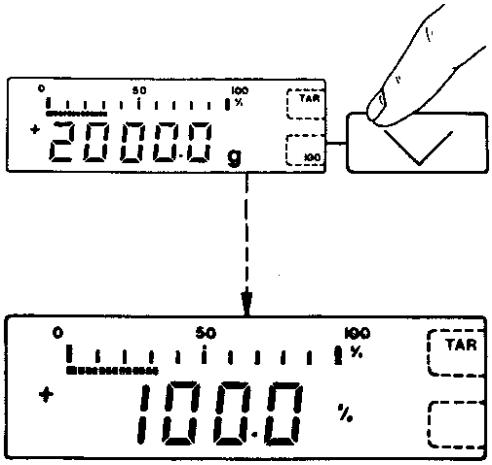
press the Cursor key that points up **(11)**

You can repeat this procedure as many times as the number of paint components you have available.



You can obtain a display of the total net weight of the paint components by pressing the

CF-key **(13)**

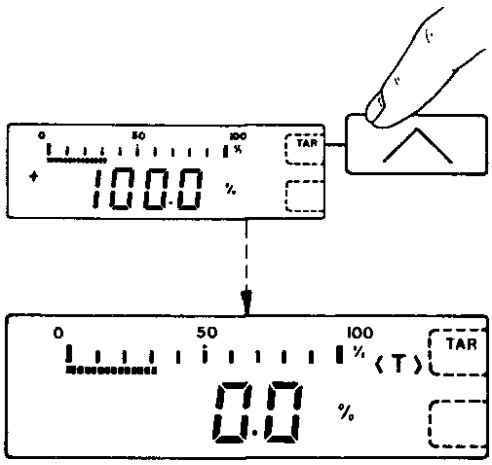


To store the total net weight as 100%-

press **cursor** key that points down **(12)**

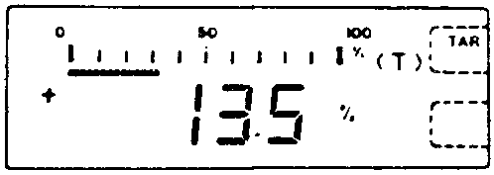
The decimal place will automatically disappear once the total weight is stored as 100%.

If "E" is displayed, the paint components are too light for the particular shade of paint. In this case, press the CF key and increase the minimum amount of the individual paint components.

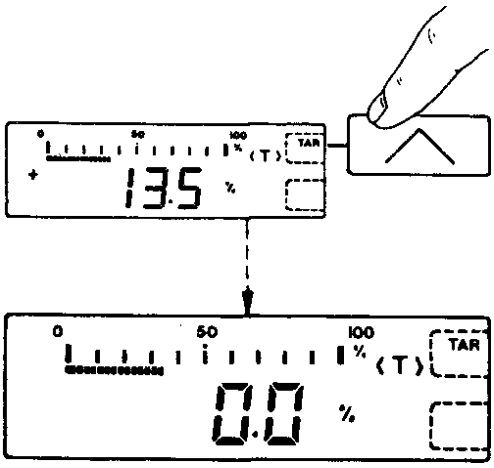


Again, to store the total weight as 100%

press the **cursor** key that points up **(11)**

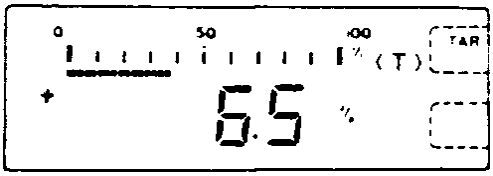


Add 13.5% hardener



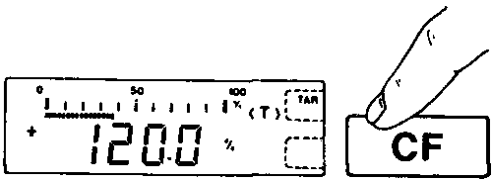
To add this value to the total weight and store

press the Cursor key that points up **(11)**



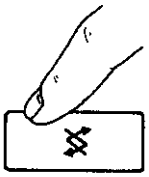
Add 6.5% thinner

If you wish to weigh in additional components, proceed as described for the hardener and thinner.



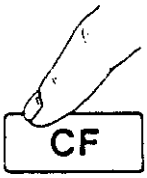
To display the total net weight in percent,

press the **CF** key **(13)**



To display the total net weight in the particular weight unit (in this case "g") -

press the **%/g toggle** key **(10)**



The CF key **(13)** deletes the stored factor for calculating the percentages

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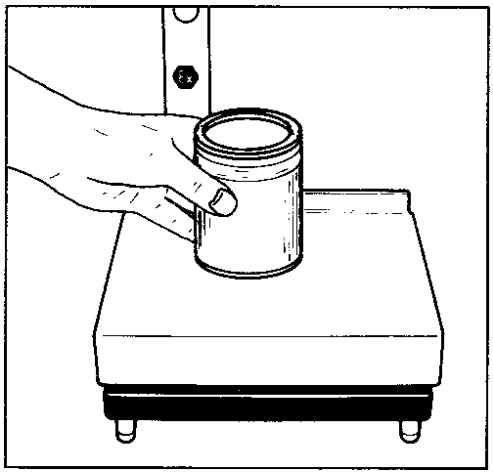
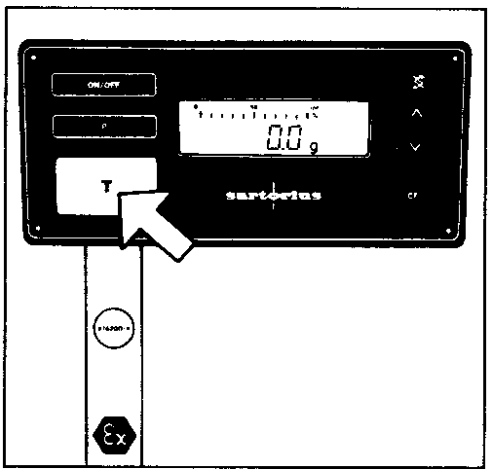
2nd Example

Mix paint components with hardener (35% of the total weight of the paint quantity) and 20% thinner.

The 20% thinner is in proportion to the total weight of the paint components and hardener.

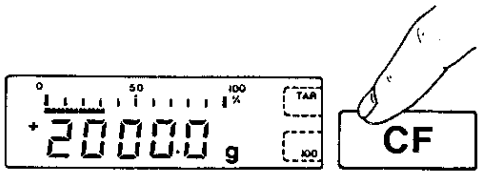


Place an empty Container on the scale.



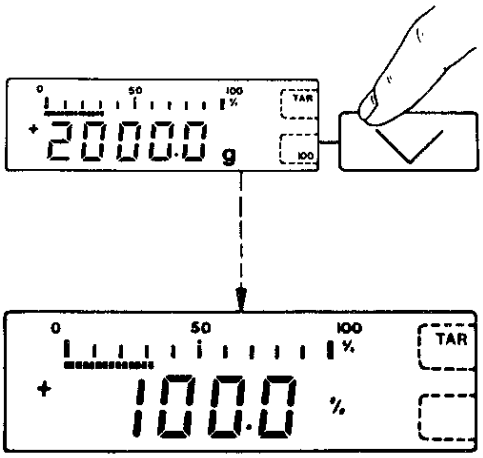
Tare.

To pour in the first and second paint components and store them, proceed as described in the first example (see page 18).



Display the total net weight of the paint components

by pressing the **CF** key **(13)**

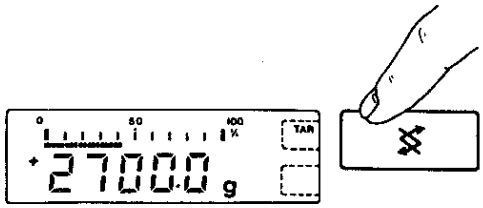


To store the total net weight as 100% -

press the **cursor** key that points down **(12)**

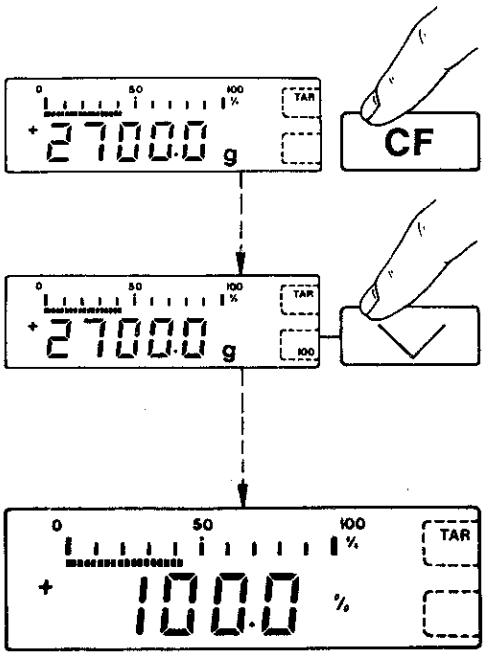
> The decimal place will automatically disappear once the total weight is stored as 100% or "**E**" will be displayed if the paint components are too light for the particular shade of paint. If "**E**" is displayed, press the **CF** key and increase the minimum amount of the individual paint components.

Add 35% hardener



Display the updated total net weight (paint components + hardener)

by pressing the **%/g toggle** key **(10)**



Store the total weight

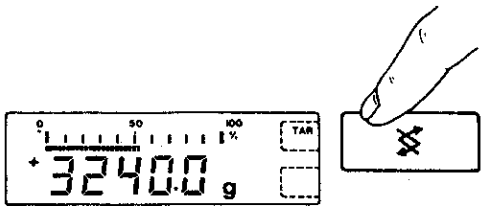
by pressing the **CF** key **(13)**

To store to total net weight as 100%
press the **cursor** key that points down **(12)**

Add 20 % thinner

Important Note:
Make sure that the 20% thinner is in proportion to the total weight of the paint components and hardener.

To display the updated total weight (paint components + hardener + thinner) -



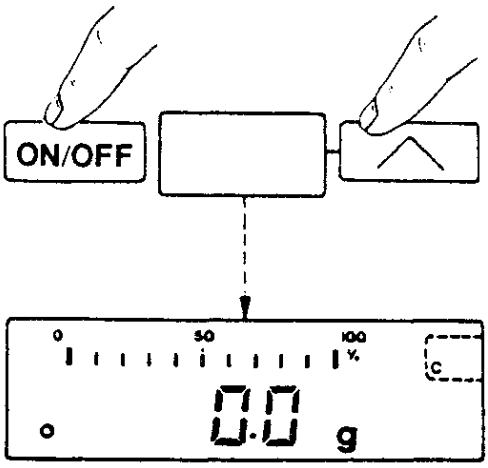
press the **%/g toggle** key **(10)**

The CF key **(13)** deletes the stored factor for calculating the percentages.

Calibration

Important Note:
Calibration can only be performed in the initial weight unit. If necessary, change the code in the scale operating program to **1-1** through **1 - 12**.

Have your scale checked and, if necessary, recalibrated on the basis of a regular System maintenance schedule.

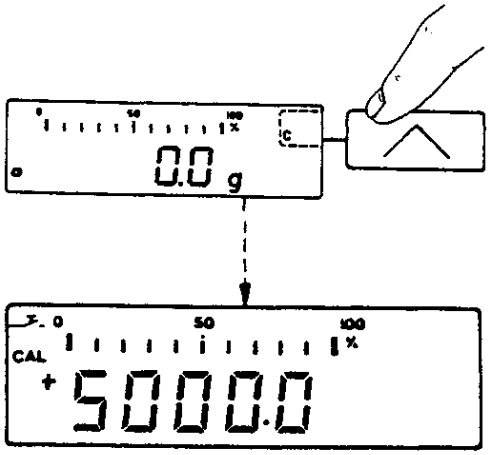


To calibrate, you need an accurate calibration weight (accuracy class F1 or better 5,000 g ± 0.03 g).

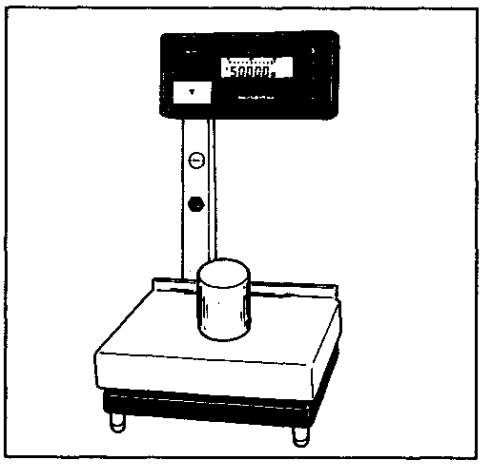
With the scale turned off, hold down the Cursor key that points up **(11)** and briefly press the ON/OFF key **(2)**.

Upon completion of the self-test, release the cursor key when "C" is displayed.

Unload the scale and tare.



Press the cursor key that points up **(11)** again when the display shows a zero readout. "CAL" and the calibration weight readout will now be displayed.



Center the calibration weight on the weighing pan.

Now the weight unit symbol is displayed. It indicates the end of the calibration procedure.

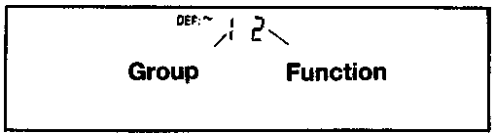
After calibration, use the ON/OFF key (2) to turn the scale off and then on again so that you will have direct access to the dedicated application programs preselected by menu code.

Even if you do not calibrate your scale regularly, this will not affect the mixing ratio so you will always obtain the correct shade of paint, provided you pour in the components correctly. However, the overall amount of your paint formula may slightly vary.

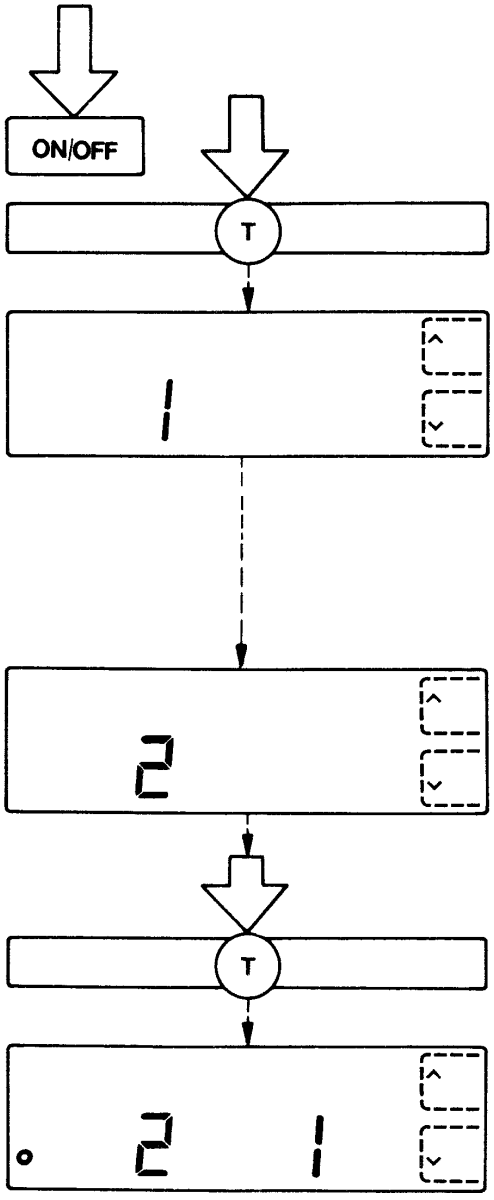
Scale Operating program

At the factory, we have set the codes for the scale operating program so you do not need to make any changes if you only want to weigh under normal ambient conditions.

If you have special operating requirements or wish to use the built-in dedicated application programs, you can access the scale operating program to - change the settings to meet your individual needs.



The "**codes**" for the menu settings are used to select the various functions in the scale operating program. Each code consists of a left-hand number for the function group and a right-hand number for a function within a group.



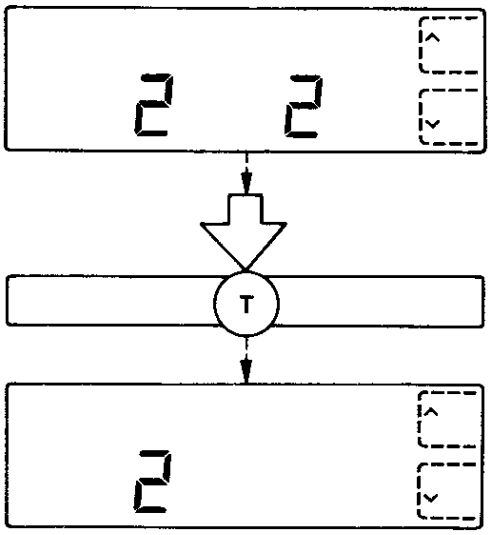
With the scale turned Off, hold down the tare control **(4)** and briefly press the ON/OFF key **(2)**.
Upon completion of the automatic self-test, release the tare control as soon as "1" is displayed.'

To check a menu code setting, select the desired code number (see pages 25 to 28)

using the ^ or v key

and press the tare control

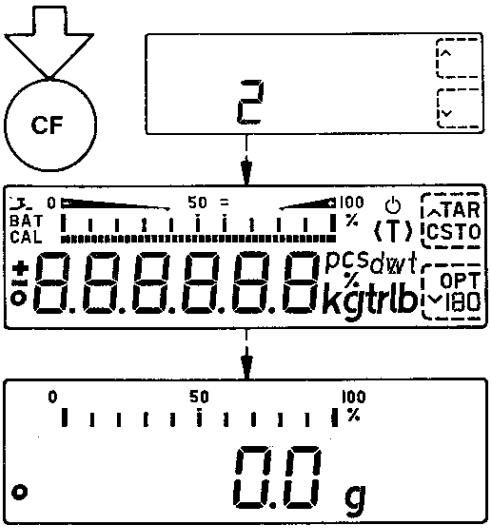
The **"o"** symbol indicates the actual menu code setting.



To change the menu code setting, select the right-hand number by pressing

the ^ or the v key

and confirm it by pressing the tare control **(4)**.
Afterwards, the left-hand number will be displayed.



How to return to the weighing mode:

Press the "**CF**" key **(13)** to store the setting you have just changed and to return to the weighing program.

After you turn off the scale, the automatic self-test will be run, and the scale will then return to the weighing mode.

Important Note:
A new code setting will not be stored if you turn off the scale by pressing the ON/OFF key.

List of the Programmable menu Code Settings

Menu of the Scale Operating Program
(Selectable parameters)

W1 (Initial-unit) **W2** (Conversion unit)

W1 Code	W2 Code	W1	W2	Weights Units	(Toggle between units by pressing the W1/W2 key)
		Factory Setting			
1	1	2	1	■	Grams g
1	2	2	2		Kilograms kg
1	3	2	3		Carats ct
1	4	2	4		Pounds lb
1	5	2	5		Ounces oz
1	6	2	6		Troy ounces ozt
1	7	2	7		Hong Kong taels tl
1	8	2	8		Singapore taels tl
1	9	2	9		Taiwanese taels tl
1	10	2	10		Grains gr
1	11	2	11		Pennyweights dwt
1	12	2	12	■	Parts/lb o

Weighing-in % Mode (activate using cursor key that points down)

2	13	100,0 %
2	14	100,00 %

3	1	■ No function assigned
3	2	**Net total/2nd tare memory** (activate using F1)

Over/under check weighing/classification & sorting/filling (activate using F1)
Besides the weight display, the Sartorius Graphic Guide also appears with a scaled-up middle range between the tolerance limits as an efficient convenience feature to help you during filling and check weighing.

3	3	Absolute weight readout(± 2.5% tolerance limits)
3	4	Readout of the weight difference (± 2.5% tolerance limits)
3	5	Absolute weight readout (± 5% tolerance limits)
3	6	Read out of the weight difference(±5%tolerancelimits)

■ = Factory Setting

Code			Ambient Conditions
4	1	■	Very stable
4	2		Stable
4	3		Unstable

Stability Range
Within the weight range, the weight readout will be displayed along with the weight unit as a stability symbol.

Code			
5	1		0,25 digit
5	2		0,5 digit
5	3		1 digit
5	4		2 digits
5	5	■	4 digits
5	6		8 digits
5	7		16 digits
5	8		32 digits

Code			Tare Parameter
6	1		Without stability control (the tare command is immediately executed)
6	2	■	At stability (the tare command is stored until the scale has stabilized and is then executed)

Auto Zero
The scale features an automatic zero tracking function known as "Auto Zero."
Changes off zero ≤ 0.5 of a digit per second are automatically set to zero within the zero tracking range of ± 0.5 of a digit.

Code			
7	1		OFF
7	2	■	ON

Code			Data Output Parameter (only if the scale has a built-in interface)
8	1		Output external print command regardless of stability (the print command is immediately executed)
8	2	■	Output upon external print command at stability (the print command is stored until the scale has stabilized and is then executed)
8	3		Automatic output synchronous with display regardless of stability
8	4		Automatic output synchronous with display at stability

Code			Linear Range Display/Sartorius Graphic Guide
10	1	■	ON
10	2		OFF

■ = Factory Setting

Care and Maintenance

Do not wait to replace worn dust covers!

Frequent cleaning with solvents (such as paint thinner) will soften the dust covers and eventually warp them. A warped dust cover may then push against the pan, causing the readout to drift or an incorrect weight to be displayed.

Make sure that paint Spills over the sides of the housing do not harden, causing the pan to stick to the base.

Cleaning

Only use gasoline specified for cleaning purposes or alcohol to clean the scale.

Do not wipe or rub the dust cover with a dry cloth.

The dust cover may only be cleaned outside the hazardous location/area.

After cleaning, decharge the cover to eliminate static electricity, for example, by wiping off all surfaces with a damp and grounded piece of cloth.
Make sure that no liquid enters the scale housing.

Important Note
Do not wash down or spray the scale or power supply.

Safety Inspection

If there is any indication that safe Operation of the scale with the power supply is no longer warranted, turn off the power and unplug the scale from the power supply immediately. Lock the equipment in a secure place to ensure that it cannot be used for the time being.

In this case, notify the Sartorius Service Center or International Technical Support Group based in Goettingen, Germany. Only Sartorius Service technicians who are authorized by Sartorius and have the proper manuals are allowed to perform maintenance and repair work on the equipment.

Safe Operation of the scale with the power supply is no longer ensured when

- there is visible damage to the scale
- the scale no longer functions properly
- the scale has been exposed to rough handling during shipment.

We recommend that the power supply be inspected according to the following checklist by a qualified Sartorius service technician:

For the 609307-..

- Leakage current<0.05 mA measured by a properly calibrated multimeter
- Insulation resistance >7 megohms measured with a constant voltage of at least 500 V at a 500 kohm load.

For the 609306-..

- Leakage current <0.75 mA measured by a properly calibrated multimeter
- Insulation resistance >2 megohms measured with a constant voltage of at least 500 V at a 500 kohm load
- Insulation resistance between and protective grounding conductor-housing <0.2 ohm

The duration and number of measurements should be determined by a qualified Sartorius service technician according to the particular ambient conditions and operational conditions. However, such inspection should be done at least once a year.

Only fort he U.K.

If you have any trouble operating your scale, please notify:

Sartorius Limited
Longmead Business Centre
Blenheim Road
Epsom, Surrey KT 19 9QN
Phone: 03727-45811
Telefax: 03727-270799
Telex: 925108 Sartor

Only for the U.S.

If you need further information or assistance, please contact:

Sartorius Corporation
140 Wilbur Place
Bohemia, Long Island
New York, 11716
Toll-free phone number: 1-800-368-7138

Accessories (Option)

Calibration weight	
1 x 5,000 g	707213
Antitheft locking device	6087
Dust cover	69XT0049

Specifications

Model		**XT 6200-X**
Capacity	g	6,200
Readability	g	0.1
Tare range (by subtraction)	g	-6,200
Standard deviation	g	≤ ±0.05
Maximum linearity	g	≤ ±0.1
Stabilization time (typical)	s	1.5
Integration time (can be set externally)	s	≤ ±0.3 to 4
Display Update (can be set externally)	s	≤ ±0.1 to 0,4
Stability range (can be set externally)	digit	2 to 32
Allowable ambient temperature range during Operation	°C	0 to +40
Sensitivity drift within +10°C to 30°C	1/K	≤ ±5 ppm
Deviation of readout when scale is tilted 1:1,000	g	≤ ±0.1
Weighing platform dimensions (W x D x H)	mm	265 x 210
Scale housing (W x D x H)	mm	265 x 304 x 445
Net weight	kg	5,4
Calibration weight	kg	5, accuracy class F1 or better
Power requirements (voltage + frequency) via explosion-proof power supply:		
– 609306-01 (EC,A, CH)		230 V, 50-60 Hz (-20% ... +15%)
– 609307*-01 (EC, A, CH)		230 V, 50-60 Hz (-20% ... +15%)
– 609307*-21 (GB)		230 V, 50-60 Hz (-20% ... +15%)
– 609306-21 (GB)		230 V, 50-60 Hz (-20% ... +15%)
– 609306-6, 609307*-6 (USA)		120 V, 50-60 Hz (-27,5% ... +10%)
– 609306-6, 609307*-6 (CDN)		120 V, 50-60 Hz (-27,5% ... +10%)
Power consumption	VA	5 (typical)
Approval identification marking (type of explosion protection)		
– scale		EEx ib IIB T6
– power supply 609306-01		Eexq[ib]IIBT6 or Eexq[ib]IICT6
– power supply 609307-01		[Eexib]IIB or [Eexib]IIC
Approved for use in the following hazardous locations/areas (according to DIN VDE 0165)		Zones 1,2

*** Power supply model 609307-.. may only be installed outside the hazardous area/location**

The approval for model XT6200-X granted for the European Community (EC) is recognized by the following additional countries:

- Norway
- Sweden
- with the country's own approval (place of approval/approval number):
- Austria (TÜV = Austrian Association for Technical Inspection/Vienna Ex-90.C.316X)
- Schweiz (Eidgenössisches Starkstrominspektorat/Zürich ASEV 90.1 C02148X)

Physikalisch-Technische Bundesanstalt

(1) KONFORMITÄTSBESCHEINIGUNG

PTB Nr. Ex-90.C.2089 X

(2)

(3) Diese Bescheinigung gilt [illegible]

Elektromechani[illegible] Präzisionswaage
Typ XT....-X[illegible]d Typ XT....-X...1.

(4) der Firma [illegible]orius GmbH
[illegible]3400 Göttingen

(5) Die Bauart dieses elektrischen Betriebsmittels sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Konformitätsbescheinigung festgelegt.

(6) Die Physikalisch-Technische Bundesanstalt bescheinigt als Prüfstelle nach Artikel 14 der Richtlinie des Rates der Europäischen Gemeinschaften vom 18. Dezember 1975 (76/117/EWG) die Übereinstimmung dieses elektrischen Betriebsmittels mit den harmonisierten Europäischen Normen

Elektrische Betriebsmittel für explosionsgefährdete Bereiche

EN 014:1977 + A[illegible] (VDE 0170/0171 Teil 1/1.87) Allgemeine Bestimmungen
EN [illegible]020:1977 + [illegible].A2 (VDE 0170/0171 Teil 7/1.87) Eigensicherheit "i"

nachdem das Betriebsmittel mit Erfolg einer Bauartprüfung unterzogen wurde. Die Ergebnisse dieser Bauartprüfung sind in einem [illegible]protokoll festgelegt.

(7) Das Betriebsmittel ist mit dem folgenden Kennzeichen zu versehen:

EEx ib IIB T6 bzw. EEx ib IIC T6

(8) Der Hersteller ist dafür verantwortlich, daß jedes derart gekennzeichnete Betriebsmittel in seiner Bauart mit den in der Anlage [illegible] Prüfungsunterlagen übereinstimmt und daß die vorgeschriebene[illegible] durchgeführt wurden.

(9) Das elektrische Betriebsmittel darf mit dem hier abgedruckten gemeinschaftlichen Unterscheidungszeichen gemäß Anhang II der Richtlinie des Rates vom 6. Februar 1979 (79/196/EWG) gekennzeichnet werden.

Im Auftrag

Braunschweig, 19.09.1990

Dr.-Ing. Schebsdat
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

V 15 - 320 007 · 12.85

Physikalisch-Technische Bundesanstalt

A N L A G E

zur Konformitätsbescheinigung PTB Nr. Ex-90.C.2089 X

Die elektromechanische Präzisionswaage wird durch ein bescheinigtes Netzgerät versorgt.

Elektrische Daten

Versorgung..... in Zündschutzart Eigensicherheit EEx ib IIC
bzw. EEx ib IIB

nur zum Anschluß an das Netzgerät
Typ 609306-..
gemäß Konformitätsbescheinigung
PTB Nr. Ex-90.C.2099 und

Typ 609307-..
gemäß Konformitätsbescheinigung
PTB Nr. Ex-90.C.2090

wirksame innere Kapazität Ci ≤ 7 µF

Interne Meßstromkreise in Zündschutzart Eigensicherheit EEx ib IIC
bzw. EEx ib IIB

Besondere Bedingungen

Die elektromechanische Präzisionswaage darf nur mit den Netzgeräten Typ 609306-.. und Typ 609307-.. betrieben werden.

Im Auftrag

Braunschweig, 19.09.1990

Dr.-Ing. Schebsdat
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 24

Blatt 1/1

Physikalisch-Technische Bundesanstalt

(1) KONFORMITÄTSBESCHEINIGUNG

PTB Nr. Ex-90.C.2090

(2)

(3) Diese Bescheinigung gilt für das elektrische Betriebsmittel

Netzgerät Type [illegible]9307-..

(4) der Firma Sartorius GmbH
D-8400 Göttingen

(5) Die Bauart dieses elektrischen Betriebsmittels sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Konformitätsbescheinigung festgelegt.

(6) Die Physikalisch-Technische Bundesanstalt bescheinigt als Prüfstelle nach Artikel 14 der Richtlinie des Rates der Europäischen Gemeinschaften vom 18. Dezember 1975 (76/117/EWG) die Übereinstimmung dieses elektrischen Betriebsmittels mit den harmonisierten Europäischen Normen

Elektrische Betriebsmittel für explosionsgefährdete Bereiche

EN 50 014:1977 + A1, ..A6 (VDE 0170/0171 Teil 1/1.87) Allgemeine Bestimmungen
EN 50 020:1977 + A1, ..A2 (VDE 0170/0171 Teil 7/1.87) Eigensicherheit "i"

nachdem das Betriebsmittel mit Erfolg einer Bauartprüfung unterzogen wurde. Die Ergebnisse dieser Bauartprüfung sind in einem [illegible]lichen Prüfprotokoll festgelegt.

(7) Das Betriebsmittel ist mit dem folgenden Kennzeichen zu versehen:

[EEx ib] IIB bzw. [EEx ib] IIC

(8) Der Hersteller ist dafür verantwortlich, daß jedes derart gekennzeichnete Betriebsmittel in seiner Bauart mit den in der Anlage [illegible] beschriebenen Prüfmustern übereinstimmt und daß die vorgeschriebenen [illegible] durchgeführt wurden.

(9) Das elektrische Betriebsmittel darf mit dem hier abgedruckten gemeinschaftlichen Unterscheidungszeichen gemäß Anhang II der Richtlinie des Rates vom 6. Februar 1979 (79/196/EWG) gekennzeichnet werden.

Im Auftrag

Dr.-Ing. Schebsdat
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 24

Braunschweig, 19.09.1990

V 15 - 320 007 - 12.85

Physikalisch-Technische Bundesanstalt

ANLAGE

zur Konformitätsbescheinigung PTB Nr. Ex-90.C.2090

Die Netzgeräte dienen zur Versorgung von Wägesystemen.

Elektrische Daten

Netzstromkreis ..... 230 V -20%/+15%
50...60 Hz

Ausgangsstromkreis .. in Zündschutzart Eigensicherheit EEx ib IIC
(Anschlüsse 1,2) bzw. EEx ib IIB

Höchstwerte: U_o = 8,7 V
I_k = 310 mA

EEx ib	IIC	IIB
höchstzul. äußere Kapazität	7 µF	70 µF
höchstzul. äußere Induktivität	0,19 mH	1,6 mH

Der Ausgangsstromkreis ist zum Anschluß an Geräte bestimmt, in deren Prüfbescheinigungen auf dieses Netzgerät verwiesen wird. Die maximale Leitungslänge zwischen Netzgerät und Waage darf 50 m betragen.

Der Netzstromkreis ist vom Ausgangsstromkreis bis zu einem Scheitelwert der Nennspannung von 375 V galvanisch getrennt.

Im Auftrag

Dr.-Ing. Schebsda
Regierungsdirekto

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 24

Braunschweig, 19.09.1990

Blatt 1/1

Physikalisch-Technische Bundesanstalt

(1) KONFORMITÄTSBESCHEINIGUNG

(2) **PTB Nr. Ex-90.C.2099**

(3) Diese Bescheinigung gilt für

Netzgerät Typen [illegible]06-..

(4) der Firma Sartorius GmbH
[illegible]3400 Göttingen

(5) Die Bauart dieses elektrischen Betriebsmittels sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Konformitätsbescheinigung festgelegt.

(6) Die Physikalisch-Technische Bundesanstalt bescheinigt als Prüfstelle nach Artikel 14 der Richtlinie des Rates der Europäischen Gemeinschaften vom 18. Dezember 1975 (76/117/EWG) die Übereinstimmung dieses elektrischen Betriebsmittels mit den harmonisierten Europäischen Normen

Elektrische Betriebsmittel für explosionsgefährdete Bereiche

EN 50 014:1977 + A1...A5 (VDE 0170/0171 Teil 1/1.81) Allgemeine Bestimmungen
EN 50 017:1977 + A1 (VDE 0170/0171 Teil 4/3.77) Sandkapselung "q"
EN 50 020:1977 + A1...A2 (VDE 0170/0171 Teil 7/11.87) Eigensicherheit "i"

nachdem das Betriebsmittel mit Erfolg einer Bauartprüfung unterzogen wurde. Die Ergebnisse dieser Bauartprüfung sind in einem vertraulichen Prüfprotokoll festgelegt.

(7) Das Betriebsmittel ist mit dem folgenden Kennzeichen zu versehen:

EEx q [ib] IIB T6 bzw. EEx q [ib] IIC T6

(8) Der Hersteller ist dafür verantwortlich, daß jedes derart gekennzeichnete Betriebsmittel in seiner Bauart mit den in der Anlage [illegible] übereinstimmt und daß die vorgeschriebenen [illegible]

(9) Das elektrische Betriebsmittel darf mit dem hier abgedruckten gemeinschaftlichen Unterscheidungszeichen gemäß Anhang II der Richtlinie des Rates vom 6. Februar 1979 (79/196/EWG) gekennzeichnet werden.

Im Auftrag

Braunschweig, 02.10.1990

Dr.-Ing. Schabacker
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

Prüfbescheinigungen ohne Unterschrift und ohne Dienststempel haben keine Gültigkeit.
Die Bescheinigungen dürfen nur unverändert weiterverbreitet werden.
Auszüge oder Änderungen bedürfen der Genehmigung der Physikalisch-Technischen Bundesanstalt, Bundesallee 100, Postfach 33 45, D-3300 Braunschweig.

V 15 - 320007 · 12.85

Physikalisch-Technische Bundesanstalt

ANLAGE
zur Konformitätsbescheinigung PTB Nr. Ex-90.C.2099

Die Netzgeräte dienen zur Versorgung von Wägesystemen.

Elektrische Daten

Netzstromkreis ..... 100...120 V bzw. 220...240 V
50...60 Hz etwa 2,2 VA

Ausgangsstromkreis .... in Zündschutzart Eigensicherheit EEx ib IIC
bzw. EEx ib IIB

Höchstwerte: U_o = 8,7 V
I_k = 310 mA

EEx ib	IIC	IIB
höchstzul. äußere Kapazität	7 µF	70 µF
höchstzul. äußere Induktivität	0,19 mH	1,6 mH

Der Ausgangsstromkreis ist zum Anschluß an Geräte bestimmt, in deren Prüfbescheinigungen auf dieses Netzgerät verwiesen wird. Die maximale Leitungslänge zwischen Netzgerät und Waage darf 50 m betragen.

Der Netzstromkreis ist vom Ausgangsstromkreis bis zu einem Scheitelwert der Nennspannung von 375 V galvanisch getrennt.

Im Auftrag

Dr.-Ing. Scheffler
Regierungsdirektor

Braunschweig, 02.10.1990

Blatt 1/1

FOR INSTALLATION IN CANADA:

WARNING!

EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS
MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

WARNING!

EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT
UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA
IS KNOWN TO BE NON-HAZARDOUS.

CAUTION!

UNSUSED DATA OUTPUT SOCKET MUST BE COVERED WITH
CUP – DRAWING NUMBER 98611.100-05.

AVERTISSEMENT!

RISQUE D'EXPLOSION – LA SUBSTITUTION DE COMPOSANTS
PEU RENDRE CE MATERIEL INACCEPTABLE POUR LES
EMPLACEMENTS DE CLASSE I, DIVISION 2.

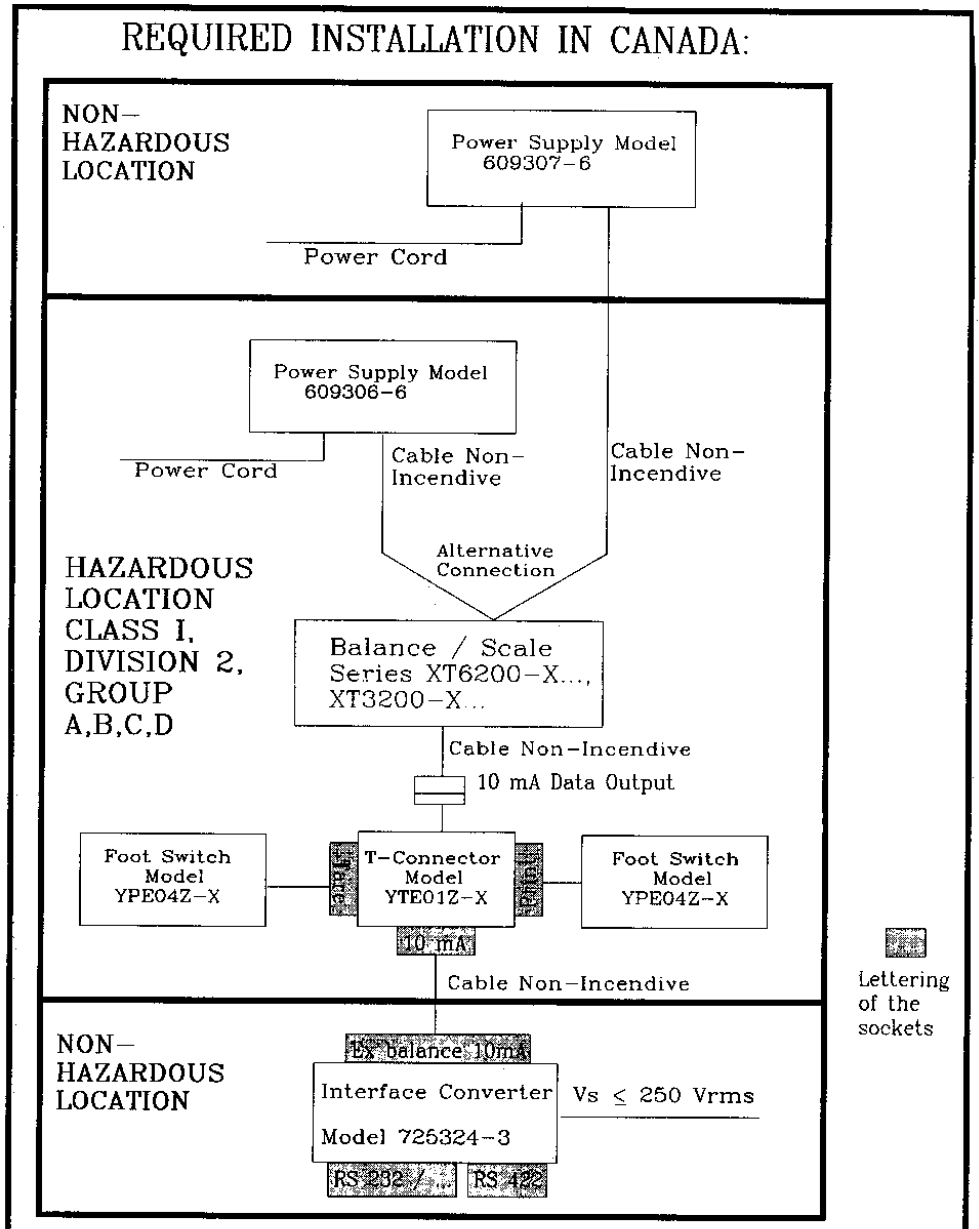
AVERTISSEMENT!

RISQUE D'EXPLOSION – AVANT DE DECONNECTER L'EQUIPMENT,
COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST
DESIGNE NON-DANGEREUX.

ATTENTION!

COUVRIR LA PRISE FEMELLE DE L'INTERFACE DE DONNES
AVEC LE CAPUCHON NUMERO 98611.100-05.

Revision	Date	Name	Material	
01	25/10/90	Klausgrete		
Editor	12/12/89	Klausgrete	Titel: Basic Layout of the Components	Scale 1 : 1
checked	25/10/90			
SARTORIUS AG GÖTTINGEN			Drawing Number: 32824-000-07	Sheet 1 of 4 Sheets
			Substitute for Edition dated: 12/12/89	



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checked	25/10/90				
SARTORIUS AG GÖTTINGEN			Drawing Number: 32824–000–07		Sheet 2 of 4 Sheets
			Substitute for Edition dated: 12/12/89		

FOR INSTALLATION IN THE USA:

WARNING!

EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, II and III, DIVISION 1, GROUP A,B,C,D,E,F,G.

WARNING!

EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.

WARNING!

THE POWER SUPPLIES 609306-6 AND 609307-6 ARE FOR CONNECTION TO CIRCUITS WHICH DO NOT USE OR GENERATE VOLTAGES IN EXCESS OF 132 Vac.

INSTALLATION OF THE WEIGHING SYSTEM MUST BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/ISA RP12.6. "INSTALLATION OF INTRINSICALLY SAFE INSTRUMENT SYSTEMS IN CLASS I HAZARDOUS LOCATIONS".

THE POWER CORD MUST BE TERMINATED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

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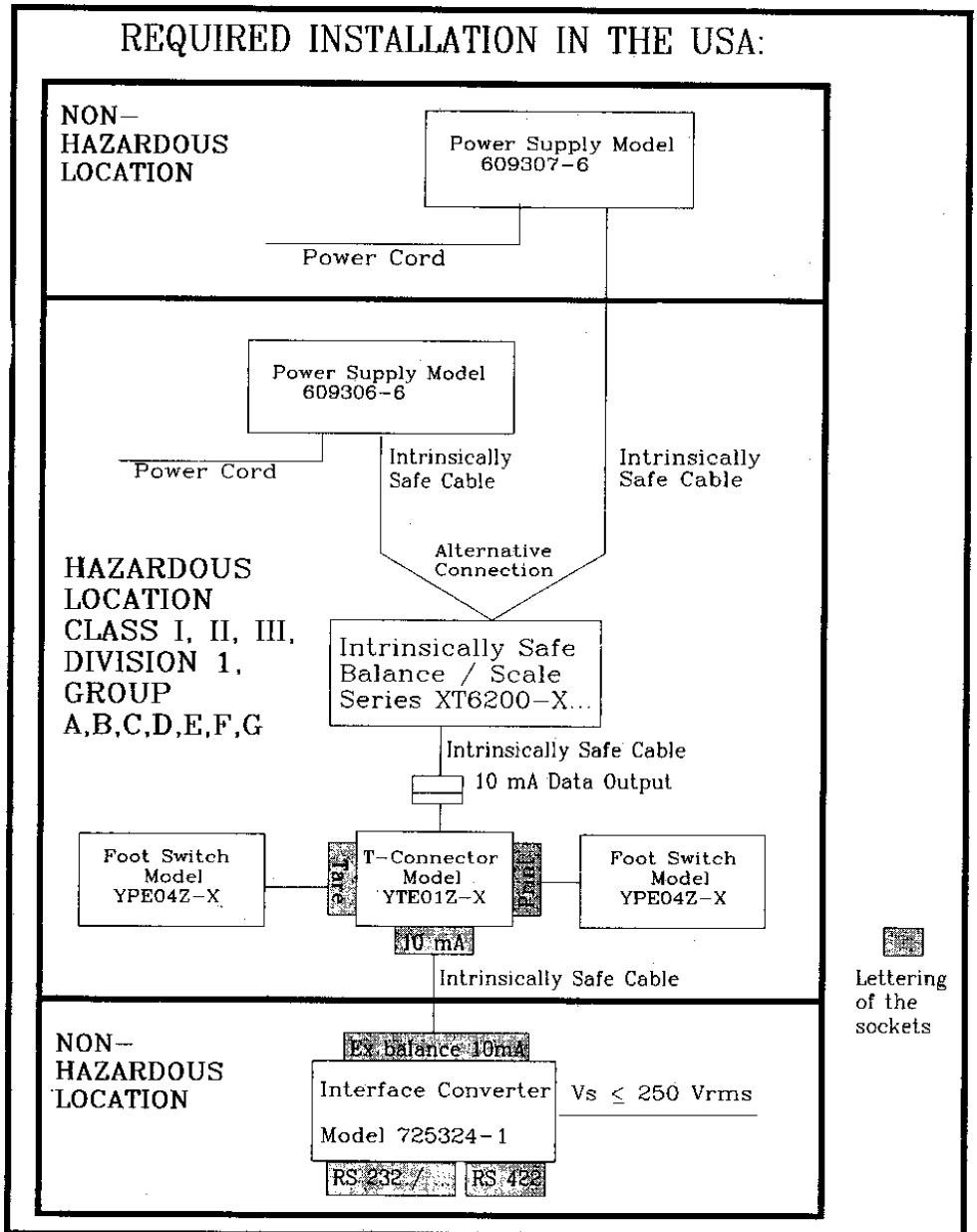
REQUIRED INSTALLATION IN THE USA:
NON–
HAZARDOUS
LOCATION
Power Supply Model
609307-6
Power Cord
Power Supply Model
609306-6
Power Cord
Intrinsically
Safe Cable
Intrinsically
Safe Cable
Alternative
Connection
HAZARDOUS
LOCATION
CLASS I, II, III,
DIVISION 1,
GROUP
A,B,C,D,E,F,G
Intrinsically Safe
Balance / Scale
Series XT6200–X...
Intrinsically Safe Cable
10 mA Data Output
Foot Switch
Model
YPE04Z–X
Tare
T–Connector
Model
YTE01Z–X
Print
Foot Switch
Model
YPE04Z–X
10 mA
Intrinsically Safe Cable
Lettering
of the
sockets
NON–
HAZARDOUS
LOCATION
Ex. balance 10mA
Interface Converter
Model 725324-1
Vs ≤ 250 Vrms
RS 232
RS 422
Revision
Date
Name
01
25/10/90
Klausgrete
Editor
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Klausgrete
checked
25/10/90
Material
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Scale
1 : 1
SARTORIUS
AG
GÖTTINGEN
Drawing
Number
32824–000–07
Sheet 4
of
4 Sheets
Substitute for Edition dated: 12/12/89

FOR INSTALLATION IN CANADA:

WARNING!

EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS
MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

WARNING!

EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT
UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA
IS KNOWN TO BE NON-HAZARDOUS.

AVERTISSEMENT!

RISQUE D'EXPLOSION - LA SUBSTITUTION DE COMPOSANTS
PEU RENDRE CE MATERIEL INACCEPTABLE POUR LES
EMPLACEMENTS DE CLASSE I, DIVISION 2.

AVERTISSEMENT!

RISQUE D'EXPLOSION - AVANT DE DECONNECTER L'EQUIPMENT,
COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST
DESIGNE NON-DANGEREUX.

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SARTORIUS AG GÖTTINGEN			Drawing Number: 65193-000-07		Sheet 1 of 3 Sheets
			Substitute for Edition dated: 12/12/89		

FOR INSTALLATION IN CANADA:

WARNING!

EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

WARNING!

EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.

AVERTISSEMENT!

RISQUE D'EXPLOSION – LA SUBSTITUTION DE COMPOSANTS PEU RENDRE CE MATERIEL INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE I, DIVISION 2.

AVERTISSEMENT!

RISQUE D'EXPLOSION – AVANT DE DECONNECTER L'EQUIPMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DESIGNE NON-DANGEREUX.

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SARTORIUS AG GÖTTINGEN			Drawing Number: 65195-000-07		Sheet 1 of 3 Sheets
			Substitute for Edition dated: 12/12/89		

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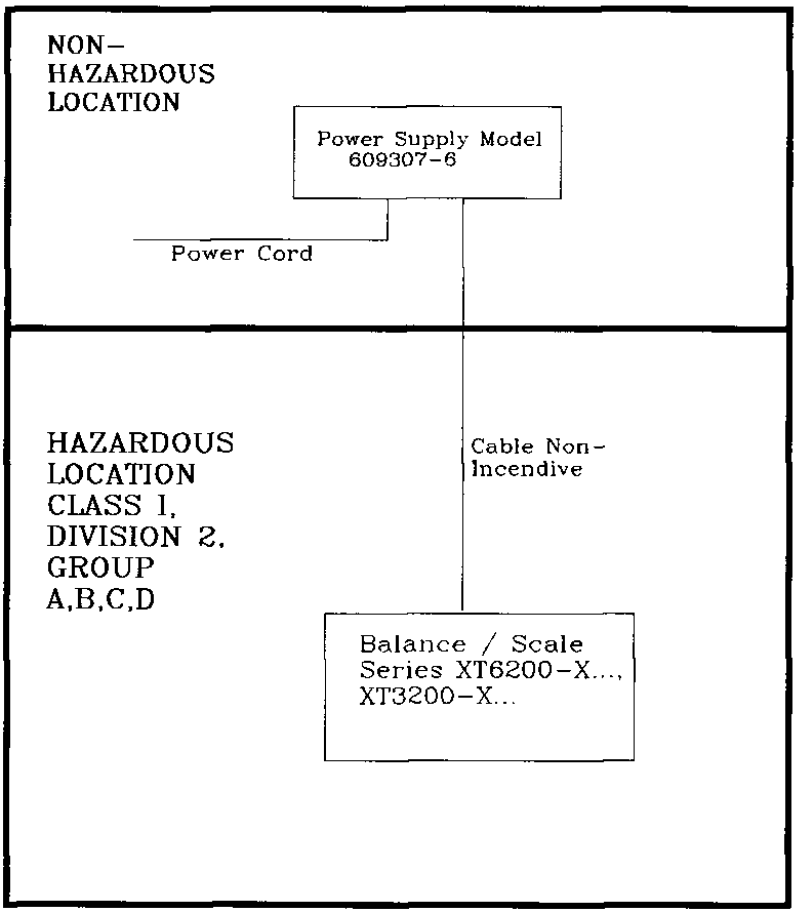

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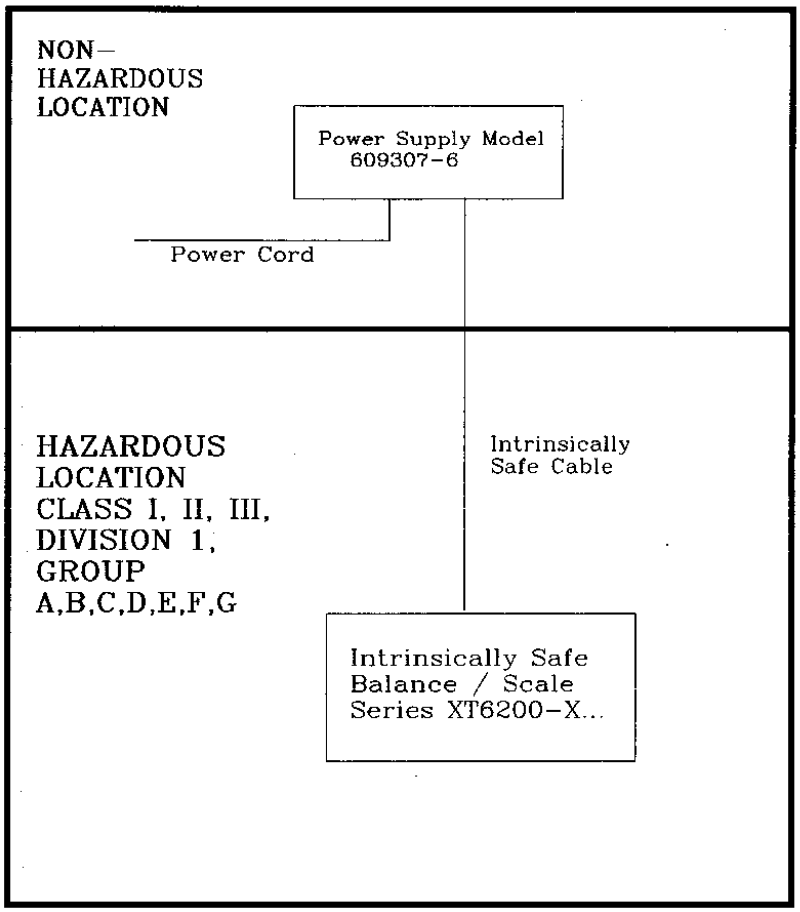

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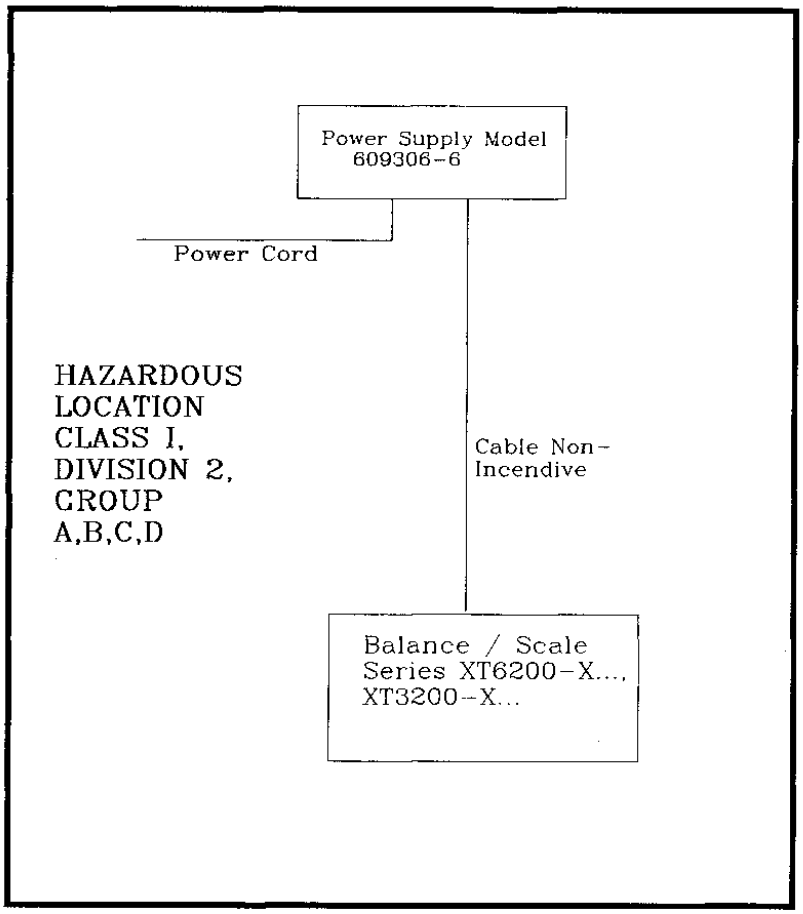

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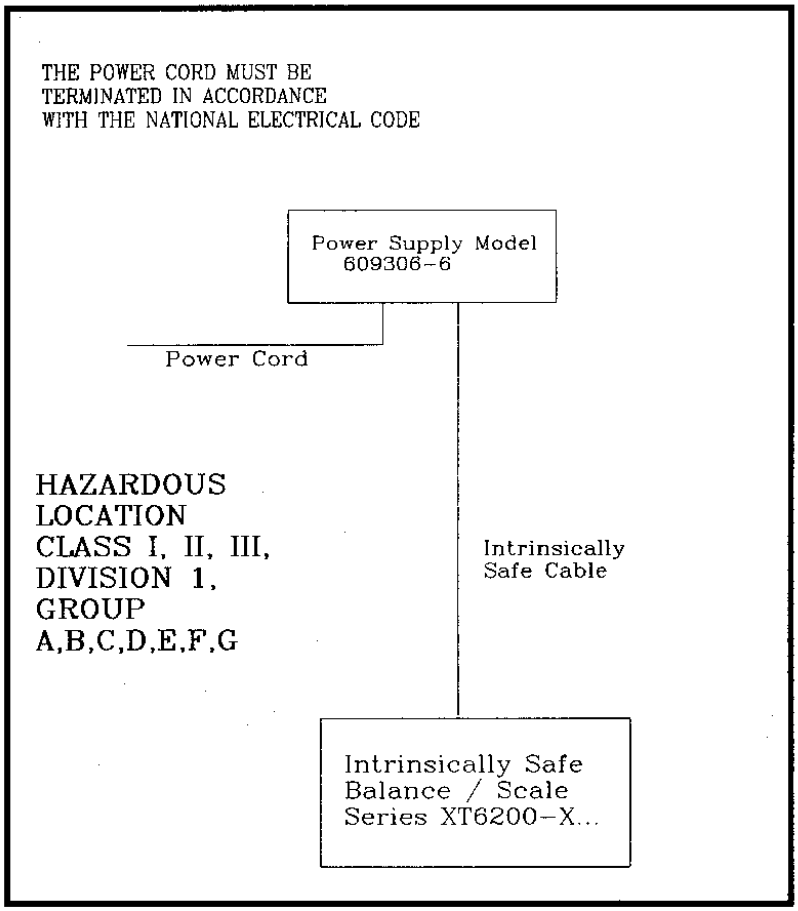

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