



FB2900 & ACC-2930 Conditions of Use In Hazardous Locations

05/2026

Certification & Classification

The FB2900 weighing instrument and ACC-2930 battery are certified for use in hazardous locations per United States, Canadian, and IEC standards.

1. FB2900 Instrument Hazardous (Classified) Location Electrical Equipment Per United States and Canadian standards.

- a. Certificate Numbers: FM24US0087X, FM24CA0032X
- b. Equipment Rating:

FM/cFM

I.S., S.I. Class I, II, III, Division 1, Groups ABCDEFG T4 $-10^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

Class I, Zone 0, AEx / Ex ia op is IIC T4 Ga $-10^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

Zone 20, AEx / Ex ia IIIC T₂₀₀64°C Da $-10^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

IP65 Rated Enclosure

Install per control drawing 38209

2. ACC-2930 Battery Hazardous (Classified) Location Electrical Equipment Per United States and Canadian Standards.

- a. Certificate Numbers: FM24US0086X, FM24CA0031X
- b. Equipment Ratings:

FM/cFM

I.S., S.I. Class I, II, III, Division 1, Groups ABCDEFG T4 $-10^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

Class I, Zone 0, AEx / Ex ia IIC T4 Ga $-10^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

Zone 20, AEx / Ex ia IIIC T₂₀₀45°C Da $-10^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

IP65 Rated Enclosure

Install per control drawing 38339

Specific Conditions of Use

1. Service



WARNING: Failure to heed these warnings could result in serious injury or death.

- This equipment contains no user-serviceable parts.



AVERTISSEMENT: Le non-respect de directives pourrait entraîner des blessures graves ou la mort.

- Cet équipement ne contient aucune pièce réparable par l'utilisateur.

Field Serviceability & Repairs:

The FB2900 Weighing Instrument and associated accessories may only be serviced by Fairbanks Scales and Authorized Distributors service technicians that have been trained by Fairbanks Scales for intrinsically safe weighing.

Contact Fairbanks Scales to schedule an onsite service call:

Fairbanks Scales
6800 W 64th Street
Overland Park, KS 66202
(800)451-4107

2. Equipment



WARNING: Failure to heed these warnings could result in serious injury or death.

- Risk of electrostatic sparking in dust atmospheres. Equipment shall not be applied in an explosive dust atmosphere where high electrostatic charging processes are present that could result in propagating brush discharges. See IEC TS60079-32-1 for additional guidance.
- The window of the LCD display of the FB2900 Weighing Instrument is considered to constitute an electrostatic discharge hazard. Clean using only a wet or damp cloth.
- The cable glands for external cable connections are considered to constitute an electrostatic discharge hazard. Clean using only a wet or damp cloth.
- The ACC-2930 Battery is the only battery approved for use with the FB2900 Weighing Instrument.
- The ACC-2945 Safe-Area Battery Charger is the only approved charger for use with the ACC-2930 battery.
- The ACC-2930 Battery must only be charged using the ACC-2945 Safe-Area Battery Charger.
- The ACC-2945 Safe-Area Battery Charger is rated for 100 – 120V @ 50-60 Hz AC input power.
- The ACC-2945 Safe-Area Battery Charger, FB7290 Safe-Area Weighing Terminal, and FB7291 Safe-Area Weighing Terminal must only be installed or used in a non-hazardous (unclassified) safe area.
- Do not use equipment in direct sunlight.
- The FB2900 Weighing Instrument, ACC-2930 Battery and ACC-2945 Safe-Area Battery Charger must only be used in locations where the ambient temperature falls within the range of -10°C to +40°C (14°F to 104°F).



AVERTISSEMENT: Le non-respect de directives pourrait entraîner des blessures graves ou la mort.

- Risque d'étincelles électrostatiques dans les atmosphères poussiéreuses. L'équipement ne doit pas être utilisé dans une atmosphère poussiéreuse explosive où sont présents des processus de charge électrostatique élevés qui pourraient entraîner la propagation de décharges en brosse. Voir CEI TS60079-32-1 pour des conseils supplémentaires.
- La fenêtre de l'écran LCD de l'instrument de pesée FB2900 est considérée comme présentant un risque de décharge électrostatique. Nettoyer uniquement à l'aide d'un chiffon mouillé ou humide.

- Les presse-étoupes pour les connexions de câbles externes sont considérés comme présentant un risque de décharge électrostatique. Nettoyer en utilisant uniquement un chiffon mouillé ou humide.
- La batterie ACC-2930 est la seule batterie approuvée pour une utilisation avec l'instrument de pesée FB2900.
- Le chargeur de batterie pour zone sûre ACC-2945 est le seul chargeur approuvé pour une utilisation avec la batterie ACC-2930.
- La batterie ACC-2930 doit être chargée uniquement à l'aide du chargeur de batterie pour zone sûre ACC-2945.
- Le chargeur de batterie pour zone sûre ACC-2945 est conçu pour une puissance d'entrée CA de 100 à 120 V à 50-60 Hz.
- Le chargeur de batterie pour zone sûre ACC-2945, le terminal de pesée pour zone sûre FB7290 et le terminal de pesée pour zone sûre FB7291 doivent être installés ou utilisés uniquement dans une zone sûre non dangereuse (non classée).
- N'utilisez pas l'équipement en plein soleil.
- L'instrument de pesée FB2900, la batterie ACC-2930 et le chargeur de batterie pour zone sûre ACC-2945 doivent être utilisés uniquement dans des endroits où la température ambiante est comprise entre -10 °C et +40 °C (14 °F et 104 °F).

Approval Standards

1. United States Standards

Title	Number	Issue
Electrical Equipment for Use in Hazardous (Classified) Locations - General Requirements	FM Class 3600	2022
Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous (Classified) Locations	FM Class 3610	2021
Electrical Equipment for Measurement, Control and Laboratory Use	FM Class 3810	2021
Degrees of Protection Provided by Enclosures (IP Code)	ANSI/IEC 60529	2020
Electrical Apparatus for Explosive Gas Atmospheres. Part 0: General Requirements	IEC 60079-0	2020 (R2024)
Explosive Atmospheres Part 11: Equipment Protection by Intrinsic Safety "I"	IEC 60079-11	2018 (R2023)
Explosive atmospheres Part 28: Protection of equipment and transmission systems using optical radiation	IEC 60079-28	2015
Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements	ANSI 61010-1	2010

2. Canadian Standards

Title	Number	Issue
Explosive atmospheres – Part 0: Equipment – General requirements	CSA C22.2 No. 60079-0	2019 (R2004)
Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "I"	CSA C22.2 No. 60079-11	2014 (R2018)
Explosive atmospheres – Part 28: Protection of equipment and transmission systems using optical radiation	CSA C22.2 No. 60079-28	2016

Degrees of protection provided by enclosures (IP Code)	CSA C22.2 No. 60529	2016
Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory use – Part 1: General Requirements	CSA C22.2 No. 61010-1-12	2012 (R2023)

Cable Glands



WARNING: The cable glands are considered to constitute an electrostatic discharge hazard. Clean using only a wet or damp cloth.



AVERTISSEMENT: Les presse-étoupes sont considérés comme présentant un risque de décharge électrostatique. Nettoyer en utilisant uniquement un chiffon mouillé ou humide.

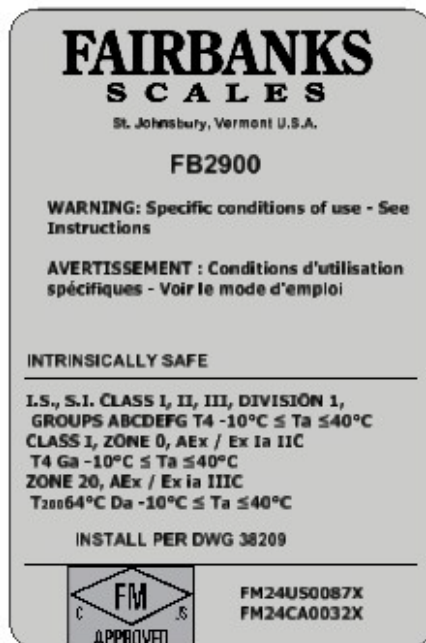
The FB2900 instrument uses cable glands for all cable entries. Cable glands must be torqued to seal the cables and blanking plugs inserted at any unused glands.

<u>Cable Gland Size</u>	<u>Cable Diameter Range</u>	<u>Sealing Nut Torque Around Cable</u>
PG7	0.114 - 0.250" (2.9 - 6.4mm)	25 in. lbs. (2.8 Nm)
PG9	0.094 - 0.118" (2.4 - 3mm)	26.5 in. lbs (3 Nm)
PG11	0.230 - 0.395" (5.8 - 10.0mm)	65 in. lbs. (7.3 Nm)
PG16	0.394 - 0.551" (10 - 14mm)	40 in. lbs (4.5 Nm)

System Limitations & Restrictions

1. Weighing Instrument

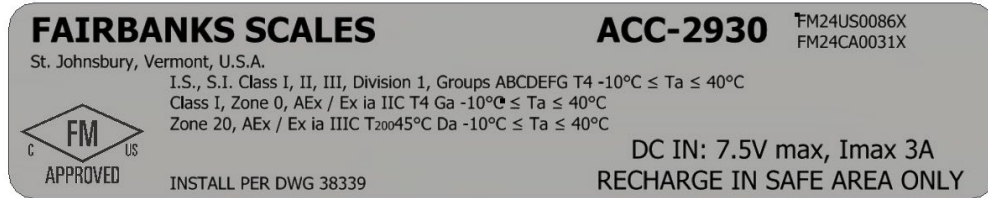
- The FB2900 Weighing Instrument will include the following nameplate and affixed to the enclosure.
- Nameplate:



- c. Weighing Instrument must have a factory installed nameplate.
- d. Installation and use of instrument must be in accordance with control drawing P/N 38209.
- e. Instruments may only be serviced by Fairbanks Scales' and Authorized Distributor's service technicians that have been trained by Fairbanks Scales for intrinsically safe weighing. Instrument may also be returned to Fairbanks Scales for maintenance or repair.
- f. Replacement coin cell battery is Fairbanks Scales P/N 38715 and replaceable from the safe area only.
- g. Field modifications are not permitted.

2. Battery

- a. The ACC-2930 Battery will include the following nameplate and affixed to the housing.
- b. Nameplate:



- c. Battery must have a factory installed nameplate.
- d. Battery must be returned to Fairbanks Scales for maintenance or repair.
- e. Field modifications are not permitted.

3. Safe-Area Battery Charger

- a. The ACC-2945 Safe-Area Battery Charger will include a serial tag affixed to the bottom of the housing.
- b. The ACC-2945 Safe-Area Battery Charger must only be located and installed in a non-hazardous (unclassified) safe area.
- c. The ACC-2945 Safe-Area Battery Charger may only be serviced by Fairbanks Scales and Authorized Distributors service technicians that have been trained by Fairbanks Scales for intrinsically safe weighing or returned to Fairbanks Scales for maintenance or repair.
- d. Replacement fuse is Fairbanks P/N 38992C only. Fuse is cartridge-type 5x20mm 1.25A 250VAC fast-blow fuses. Breaking current must be 1500A or higher. Disconnect all equipment from electrical supply before replacing fuses or opening enclosures.
- e. Field modifications are not permitted.