

IMPORTANT NOTE: All CSA/ATEX certifications have EXPIRED (3/28/2025). Units manufactured after that date or unmarked DX8x models are no longer approved for Ex/ HazLoc Hazardous Location applications.

IMPORTANT NOTE: All CSA/ATEX certifications have EXPIRED (2/28/2024). Units manufactured after that date or unmarked DX9x models are no longer approved for Ex/ HazLoc Hazardous Location applications.

CSA and ATEX Hazardous Area Certifications



Contents

Defining CSA Hazardous Areas	2
Classes	2
Divisions	2
Groups	2
Defining ATEX Hazardous Areas	2
Gas, Mists, or Vapors	2
Dusts	2
SureCross Certifications Summary by Model Groups	3
DX80...C, DX85...C, DX70...C Models	4
DX99 Polycarbonate Housings	5
DX99 Metal Housings	6

Defining CSA Hazardous Areas

Classes

Class I	Flammable gases may be present in sufficient quantities to produce explosive or flammable mixtures.
Class II	The presence of combustible dust.
Class III	Contain easily ignitable fibers and flyings.

Divisions

Division 1	Flammable gases, vapors, liquids, combustible dusts, or ignitable fibers and flyings are likely to exist under normal operating conditions.
Division 2	Flammable gases, vapors, liquids, combustible dusts, or ignitable fibers and flyings are not likely to exist under normal operating conditions.

Groups

Hazardous atmospheres are further defined by "groups." These include:

Group A	Atmospheres containing acetylene.
Group B	Atmospheres containing hydrogen, gases or vapors of equivalent hazard such as manufactured gas.
Group C	Atmospheres containing ethyl-ether vapors, ethylene, or cyclo-propane.
Group D	Atmospheres containing gasoline, hexane, naptha, benzene, butane, propane, alcohol, acetone, benzol, lacquer solvent vapors, or natural gas.
Group E	Atmospheres containing metal dust - including aluminum, magnesium, and their commercial alloys, and other metals of similarly hazardous characteristics.
Group F	Atmospheres containing carbon black, coal, or coke dust.
Group G	Atmospheres containing flour, starch, or grain dusts.

Defining ATEX Hazardous Areas

Gas, Mists, or Vapors

Zone 0	A mixture of air and flammable substances in the form of gas, vapor, or mist is present frequently, continuously, or for long periods.
Zone 1	A mixture of air and flammable substances in the form of gas, vapor, or mist is likely to occur in normal operation occasionally.
Zone 2	A mixture of air and flammable substances in the form of gas, vapor, or mist is not likely to occur in normal operation but, if it does occur, will persist for only a short period.

Dusts

Zone 20	A cloud of combustible dust in the air is present frequently, continuously, or for long periods.
Zone 21	A cloud of combustible dust in the air is likely to occur in normal operation occasionally.
Zone 22	A cloud of combustible dust in the air is not likely to occur in normal operation but, if it does occur, will persist for only a short period.

SureCross Certifications Summary by Model Groups

CSA C/US	Class I, Division 1, Groups A, B, C, D Ex ia IIC / AEx ia IIC T4	Class I, Division 1, Groups A, B, C, D Class II, Division 1, Groups E, F, G Class III, Division 1 Ex ia IIC T4 / AEx ia IIC T4	Class I, Division 2, Group A, B, C, D Ex/AEx nA II	Class I, Division 2, Group A, B, C, D Class II, Group E, F, G Class III Ex/AEx nA II
CSA Certificate	2008243 (LR 41887)	2008243 (LR 41887)	1921239	1921239
LCIE/ATEX	Zone 0, Group IIC Temperature Class T4 II 1 G / Ex ia IIC T4	Zone 0 (Group IIC) and 20 (Group II) Temperature Class T4 II 1 GD / Ex ia IIC T4 Ex iaD 20 IP68 T82°C	Zone 2, Group IIC II 3G / Ex nA IIC T4	Zone 2 (Group IIC) and 22 (Group IIIC) II 3GD Gc Ex nA IIC T4 Dc Ex tc IIIC T92°C
LCIE/ATEX Certificate	LCIE 08 ATEX 6098 X	LCIE 08 ATEX 6098 X	LCIE 10 ATEX 1012 X	LCIE 09 ATEX 1034 X
Control Drawings	141513	141513	143086	143086
Models				
DX99...A Polycarbonate housing	x			
DX99...B Metal housing (dual chamber)		x		
DX99...D Metal housing (single chamber)		x		
DX80...C (IP20) 150 mW Radios			x	
DX80...B (Metal housing)				x
DX70...C (IP20)			x	
DX85...C (IP20)			x	
DX80G*M2S-P Performance Gateway			x	
DX80DR*M-H MultiHop Data Radio			x	
DX81 Battery Supply			x	
DX80 Counter FlexNode, Int Batt			x	
DX80 Serial FlexNode, Int Batt			x	

DX80...C, DX85...C, DX70...C Models

Please refer to the table on page 3 for a list of all devices under this certification.

CSA

Class I, Division 2, Groups A, B, C, D
Ex/AEx nA II



ATEX

Certificate: LCIE 10 ATEX 1012 X

Compliance with the Essential Health and Safety Requirements has been assured by reference to: EN 60079-0 (2006); EN 60079-15 (2005).

Certification	Definition	Definition	Atmospheres
II 3G		Category 3G, Group II, Zone 2	Gas Atmospheres
Ex nA IIC T4	Ex	Explosion Protected	
	nA	No arcs, sparks, or hot surfaces	
	IIC	EU/IEC: Up to Group IIC US and CA: Up to Class I, Group A	
	T4	Temperature Class T4: Up to 135° C	

CA: Canada

EU: European Union

IEC: International Electrotechnical Commission

US: United States

DX99 Polycarbonate Housings

CSA

Class I, Division 1, Groups A, B, C, D
Ex ia IIC / AEx ia IIC T4



ATEX

Certificate: LCIE 08 ATEX 6098 X / 01

Compliance with the Essential Health and Safety Requirements has been assured by reference to: EN 60079-0 (2006); EN 60079-11 (2007); EN 61241-0 (2006); EN-61241-11 (2006).

Certification	Definition	Definition	Atmospheres
II 1 G		Category 1G, Group II, Zone 0	Gas Atmospheres
Ex ia IIC T4	Ex	Explosion Protected	
	ia	Category 1G, Group II, Zone 0 (Limit energy of sparks and surface temperature)	
	IIC	EU/IEC: Up to Group IIC US and CA: Up to Class I, Group A	
	T4	Temperature Class T4: Up to 135° C	

CA: Canada

EPL: Equipment Level Protection

EU: European Union

IEC: International Electrotechnical Commission

US: United States

DX99 Metal Housings

CSA

Class I, Division 1, Groups A, B, C, D

Class II, Division 1, Groups E, F, G

Class III, Division 1

Ex ia IIC T4 / AEx ia IIC T4



ATEX

Certificate: LCIE 08 ATEX 6098 X / 01

Compliance with the Essential Health and Safety Requirements has been assured by reference to: EN 60079-0 (2006); EN 60079-11 (2007); EN 61241-0 (2006); EN-61241-11 (2006).

Certification	Definition	Definition	Atmospheres
II 1 GD		Category 1G, Group II, Zone 0 Category 1D, Group II, Zone 20	
Ex ia IIC T4	Ex	Explosion Protected	Gas Atmospheres
	ia	Category 1G, Zone 0, (Equipment Group II) (Limit energy of sparks and surface temperature)	
	IIC	EU/IEC: Up to Group IIC US and CA: Up to Class I, Group A	
	T4	Temperature Class T4: Up to 135° C	
Ex iaD 20 IP68 T82°C	Ex	Explosion Protected	Dust Atmospheres
	iaD	Category 1D, Zone 20, (Equipment Group III) (Limit energy of sparks and surface temperature)	
	20	Zone 20	
	IP68	IP68 (Ingress Protection)	
	T82°C	Temperature Class: Up to 82° C	

CA: Canada

EU: European Union

IEC: International Electrotechnical Commission

US: United States