

# **Certificate of Compliance**

Certificate:	1677417	Master Contract:	218999
Project:	70181550	Date Issued: 2018	-08-24
Issued to:	JVCKENWOOD Canada, Inc. 6070 Kestrel Rd Mississauga, Ontario L5T 1S8 CANADA Attention: Robert Harvey		

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: Zafar Iqbal Zafar Iqbal

#### **PRODUCTS**

**CLASS - C222801** - RADIO APPLIANCES - Transmitters and Receivers, Amateur,-Commercial and Communication - For Hazardous Locations

# Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class III, Division 1: Class I, Division 2, Groups A, B, C and D:

• Models TK-2180 (VHF) and TK-3180 (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-41NC 7.2V NiMH Battery Pack and Accessories per User Document B59-2424. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.
- 2. In Class I, Division 2, Groups A and B, a Kenwood Carrying Case must be used as outlined in referenced User Document B59-2424.

• Models NX-200 (VHF), NX-300 (UHF), TK-5220 (VHF) and TK-5320 (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-50NC 7.2V NiMH Battery Pack and Accessories per User Document B59-2531. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.



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#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.
- 2. In Class I, Division 2, Groups A and B, Kenwood Carrying Case KLH-148 or KLH-149 must be used as outlined in referenced User Document B59-2531.

• Models NX-210 (VHF), NX-410 (800MHz), NX-411 (900MHz) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-41NC 7.2V NiMH Battery Pack and Accessories per User Document B59-2665. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C (see note 3 below).

#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.
- 2. In Class I, Division 2, Groups A and B, Kenwood Carrying Case KLH-154 must be used as outlined in referenced User Document B59-2665.
- 3. Kenwood Carrying Case KLH-154 must be used in ambient temperatures below -20°C as outlined in referenced User Document B59-2665.

### Class I, Division 1, Groups D; Class II, Division 1, Groups E, F and G; Class III, Division 1; Class I, Division 2, Groups A, B, C and D:

• Models TK-5210 (VHF), TK-5310 (UHF) and TK-5410 (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-41NC 7.2V NiMH Battery Pack and Accessories per User Document B59-2427. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$  C.

#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.
- 2. In Class I, Division 2, Groups A and B, a Kenwood Carrying Case must be used as outlined in referenced User Document B59-2427.

# Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III, Division 1: Class I, Division 2, Groups A, B, C and D:

• Models NX-200AB (VHF), NX-300AB (UHF), TK-5220AB (VHF) and TK-5320AB (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-61LC or KNB-72LC 7.4V Li-Ion Battery Pack and Accessories per User Document B59-2635. Temperature Code T3C at  $Ta = -30^{\circ}C$  to  $+60^{\circ}C$ .

• Models NX-210AB (VHF), NX-410AB (800MHz), NX-411AB (900MHz) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-66LC 7.4V Li-Ion Battery Pack and Accessories per User Document B59-2703. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

• Models NX-5200 / TK-5230 / VP5230 / VP6230 (VHF), NX-5300 / TK-5330 / VP5330 / VP6330 (UHF) and NX-5400 / TK-5430 / VP5430 / VP6430 (700/800 MHz) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-LS6 or KNB-LS7 7.4V Li-Ion Battery Packs and Accessories per User Document B5K-0222. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.



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• Models NX-3200/3300 portable two-way radios. Intrinsically Safe with Kenwood Model KNB-79LC 7.4V Li-Ion Battery Pack and Accessories per User Document B5K-0446. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

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### Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class III, Division 1: Class I, Division 2, Groups A, B, C and D:

• Models NX-210 (VHF), NX-410 (800MHz), NX-411 (900MHz) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-41NC 7.2V NiMH Battery Pack or KNB-73LC 7.4V Li-Ion Battery Pack and Accessories per User Document B59-2720. Temperature Code T3C at  $Ta = -30^{\circ}C$  to  $+60^{\circ}C$  (see note 3 below).

#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area (KNB-41NC battery pack only).
- 2. In Class I, Division 2, Groups A and B, Kenwood Carrying Case KLH-154 must be used as outlined in referenced User Document B59-2720.
- 3. Kenwood Carrying Case KLH-154 must be used in ambient temperatures below -20°C as outlined in referenced User Document B59-2720.

• Models NX-200 (VHF), NX-300 (UHF), TK-5220 (VHF) and TK-5320 (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-50NC 7.2V NiMH Battery Pack or KNB-72LC 7.4V Li-Ion Battery Pack and Accessories per User Document B59-2781. Temperature Code T3C at  $Ta = -30^{\circ}C$  to  $+60^{\circ}C$ .

#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.
- 2. In Class I, Division 2, Groups A and B, Kenwood Carrying Case KLH-148 or KLH-149 must be used as outlined in referenced User Document B59-2781.

• Models TK-2180 (VHF) and TK-3180 (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-41NC 7.2V NiMH Battery Pack and Accessories per User Document B5K-0200. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

#### Notes:

- 1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.
- 2. In Class I, Division 2, Groups A and B, a Kenwood Carrying Case must be used as outlined in referenced User Document B5K-0200.

• Models NX-3200/3300 portable two-way radios. Intrinsically Safe with Kenwood Model KNB-79LC 7.4V Li-Ion Battery Pack and Accessories per User Document B5K-0491. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.



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### Class I, Division 1, Groups D; Class II, Division 1, Groups E, F and G; Class III, Division 1; Class I, Division 2, Groups A, B, C and D:

• Models TK-5210 (VHF), TK-5310 (UHF) and TK-5410 (UHF) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-41NC 7.2V NiMH Battery Pack and Accessories per User Document B5K-0201. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$  C.

#### Notes:

1. In Class I, Division 2, Groups A and B, the battery pack must only be changed in a non-hazardous area.

2. In Class I, Division 2, Groups A and B, a Kenwood Carrying Case must be used as outlined in referenced User Document B5K-0201.

• Models NX-5200 / TK-5230 / VP5230 / VP6230 (VHF), NX-5300 / TK-5330 / VP5330 / VP6330 (UHF) and NX-5400 / TK-5430 / VP5430 / VP6430 (700/800 MHz) portable two-way radios. Intrinsically Safe with Kenwood Model KNB-LS5 or KNB-LS7 7.4V Li-Ion Battery Packs and Accessories per User Document B5K-0221. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

#### Notes:

1. In hazardous areas less than 0°C, use carry case per User Document B5K-0221.

2. Change battery only in non-hazardous areas.

• Models NX-3220/3320 portable two-way radios. Intrinsically Safe with Kenwood Model KNB-79LC 7.4V Li-Ion Battery Pack and Accessories per User Document B5K-0445. Temperature Code T3C at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

#### Class I, Division 1, Groups D; Class I, Division 2, Groups A, B, C and D:

• Model TK-D240/D340 and NX-240/340 portable two-way radios. Intrinsically Safe with Kenwood Model KNB-82LC 7.4V Li-Ion Battery Pack and Accessories per User Documents B5K-0551 (TK-D240/D340) and B5K-0537 (NX-240/340). Temperature Code T4 at Ta =  $-30^{\circ}$ C to  $+60^{\circ}$ C.

#### **APPLICABLE REQUIREMENTS**

C22.2 No. 0-10 CSA Std. C22.2 No. 25-1966	- -	General Requirements - Canadian Electrical Code, Part II Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CAN/CSA-C22.2 No. 157-92	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA-C22.2 No. 213-M1987	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
UL913:1997 (5th Edition)	-	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations
ANSI/ISA-12.12.01-2011	-	Non Incendive Electrical Equipment for Use in Class I and Class II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations



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ANSI/TIA-4950-A-2014

Requirements for Battery-Powered, Portable Land Mobile Radio Applications in Class I, II, and III, Division 1, Hazardous (Classified) Locations

#### MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Refer to Descriptive Documents for label marking details.

Notwithstanding the battery pack label drawings referenced in this report, the battery packs are not required to bear the CSA mark. This is optional as the battery packs are not certified as stand-alone devices. The manufacturer name, model number and serial number/date code are applicable. The battery pack manufacturer (Kenwood) and model number is referenced on the radio label and in the referenced User Document.

Notwithstanding the model nameplate drawings referenced in this report, they may bear the name of E.F. Johnson Company, EFJ Corporation, EF Johnson Technologies or similar. This is based on the CSA Stickers containing the Kenwood file number 218999 under the CSA logo, identifying Kenwood as the actual Submitter.

Standards UL913:1997 (5th Edition) and ANSI/TIA-4950-A may be referenced on the CSA-us label.



### Supplement to Certificate of Compliance

**Certificate:** 1677417

Master Contract: 218999 (218999)

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

		I Touuct Certification History
Project	Date	Description
70181550	2018-08-24	Update of Report 1677417 to cover the following: 1. New radio Models TK-D240/D340 & NX-240/340 with new battery pack KNB-82LC (same limiter circuit as previous battery pack). 2. New EX-4999 high capacity battery pack for use with previously certified NX-5x00/TK-5x30 and VP-5x30/VP-6x30 radios (same limiter circuit as previous battery pack). 3. Miscellaneous document revisions.
70157473	2017-12-04	Update of Report 1677417 to cover the addition of new NX-3220/3320 and NX-3200/3300 radios with battery pack KNB-69LC for C/US.
70140520	2017-08-17	To test new labels per CSA 157 for chemical compatibility and drawing changes / paper updates.
70111630	2017-03-29	Update of Report 1677417 to cover the following: 1. Addition of Radio Models VP6230, 6330, 6430series 2. Addition of Various Related Accessories
70089773	2016-08-22	Update of Report 1677417 to cover the following: 1. Addition of Model Numbers VP5230 / VP5330 / VP5430 (based on existing Models NX-5200 / TK-5230 (VHF), NX-5300 / TK-5330 (UHF) and NX-5400 / TK-5430 (700/800 MHz). 2. Addition of microSD Card option. 3. Miscellaneous document revisions. No testing is required as outlined in the attached draft report prepared by Grant Lewis (Agent).
70068503	2016-05-20	Update of Report 1677417 to cover addition of new KNB-73LC Battery Pack for use with previously certified NX-210/410/411 Portable Radios and miscellaneous document updates
70048270	2016-01-06	Update of Report 1677417 to cover addition of new NX-5000 Portable Radios, batteries and Accessories.
70041757	2015-09-16	Update of Report 1677417 to add CSA-us coverage to TK-2180-3180-5210-5310-5410 Radios.
70031755	2015-06-19	Update of Report 1677417 to cover: Addition of NX-200G/300G/210G Radio Models and Document Revisions
70018507	2015-03-10	Update of Report 1677417 to cover new KNB-72LC Battery Pack for NX-200AB/300AB Portable Radios and additional accessories.
70013962	2014-11-03	Update of Report 1677417 to cover minor document revisions.

### **Product Certification History**



Certificate:	1677417	Master Contract: 218999
Project:	70181550	<b>Date Issued:</b> 2018-08-24
2699178	2014-03-10	Update to report 1677417 to cover addition of CSA us NX-200 (VHF),TK- 5220 (VHF) and TK-5320 (UHF) radios , Addition of KMC-47GPSD
		Speaker/Microphone and KMC-51D/KMC-52D
2659141	2013-10-21	Update to report 1677417 to cover addition of CSA-us coverage to previously certified NX-300 CD radios
2570805	2013-04-23	Update to Report 1677417 to cover dust test and document revisions.
2551843	2012-08-21	Update to include coverage to US Standards (ie. addition of c CSA us marking); addition of Model KMC-51 and -52 Speaker/Microphones; minor report corrections.
2456088	2011-12-16	Update to include similar I.S. radios (Models NX-210AB (VHF), NX-410AB (800MHz), NX-411AB (900MHz)); and battery pack KNB-66LC.
2418689	2011-08-10	Update to cover similar I.S. radio, Models NX-210, NX-410 and NX-411.
2415915	2011-04-27	Update to include similar radios, Models TK-5220AB (VHF) and TK-5320AB (UHF), and report updates.
2341150	2010-09-02	Update to cover similar radio, Models NX- 200AB and NX-300AB with battery pack KNB-61LC.
2297808	2010-06-08	Update to include new Radio, Models TK-5210 Version 3, TK-5310 Version 3 and TK-5410; alternative speaker/mic; and minor drawings revision.
2200452	2009-08-11	Update to include new radio models TK-5220 & TK-5320 and minor drawing revisions.
2115179	2008-12-15	Update to include new speaker/microphone Model V2-10372.
2092805	2008-10-17	Update to cover minor alternative constructions and components to meet RoHS
1984582	2008-05-15	Update to Include Similar Two-way Radios, Model NX-200 and NX-300
2034407	2008-05-01	Update Report 1677417 to add KMC-41/42W Speaker Microphone, similar to KMC-E25
1964129	2007-10-18	Update to include similar modules KWD-AE21/DE21
1937025	2007-08-08	Update to include similar radio K7 version - I.S.
1834434	2006-10-24	Update to Include Similar Radio, TK-5310, and Microphone, KMC-38GPS - I.S.
1802639	2006-07-24	Update to report to cover alternative constructions and revised drawings - I.S.
1677417	2005-07-08	CSA Certification of I.S. Radio for Use in Hazardous Locations