Application For Certification
Part1
Individual application for 2019 Model Year

Durability Group	:	KNSXEEVNN300
Evaporative / Refueling Family	:	N.A.
Test Group	:	KNSXV0000TS3
Test Group Description	:	BEV (Battery Electric Vehicle)
		Federal LDV / California PC
Exhaust Emission Standard	:	Federal Tier3 Bin0 (Tier3 Compliant) / California ZEV
Evaporative Emission Standard	:	N.A.
Vehicles Covered	:	NISSAN LEAF SV/SL (50 States)
		NISSAN LEAF (50 States)
Vehicles Run	:	KWC511-00 (UDDS TN:KNSX10056741)
	:	KWC511-00 (HWY TN:KNSX10056742)
Issue Date	:	December 3, 2018
Response Requested By	:	January 14, 2019
For Questions, Contact	:	Shota Horiguchi Telephone No. 248-488-4654
		EPA Test Pending Conditional Cert Requested

NISSAN MOTOR CO., LTD

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Part1

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5. Test Group Description

Test Group Name	Fuel	Sales area	Vehicle Class	Emission St'd Class
KNSXV0000TS3	Electricity	50S	LDV (Fed) / PC (Cal)	Tier3 Bin0/ CFV ZEV, ILEV(Fed) ZEV(Cal)

6. Test Vehicle Description

Vehicle Class	Model Covered	Engine Code	Motor Model	Transmission	ETW (lbs)	GVWR (lbs)	Axle Ratio	Tire Size	Tire Type
LDV (Fed) / PC (Cal)	LEAF SV/SL	EVAA7	EM57	Auto (Fixed single Speed)	4250	4751	8.193	P215/50R17	All season
	LEAF				4000			P205/55R16	All season LRR

7. Test Results

Test Loc.	Test Number	Mode	Sales Area	Official Test (marked by X)	Certification Level
Mfr	KNSX10056741	UDDS All-Electric Range Test	50 states	X	Refer to the Certification Summary Information Report
Mfr	KNSX10056742	Hwy All-Electric Range Test	50 states	X	

Certification Summary Information Report

Manufacturer	Nissan Motor Co., Ltd.	**Manufacturer Code**	NSX
Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--
Certificate Number	--	**CARB Executive Order #**	--
Certificate Issue Date	--	**Certificate Revision Date**	--
Certificate Effective Date	--	**Conditional Certificate**	--
CSI Revision #	--	**CSI Submission/Revision Date**	11/13/2018 01:05:32 AM
Model Year	2019		

Test Group Information

CSI Type	New	**Running Change Reference Number**	--
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Electric Motor

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Electricity	--	--

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Rechargeable Energy Storage System Indicator**	Yes
Multiple Fuel Combustion	--	**Off-board Charge Capable Indicator**	Yes
Fuel Cell Indicator	No	**EPA Vehicle Class**	LDV
Federal Clean Fuel Vehicle	Yes	**Federal Clean Fuel Vehicle Standard**	ZEV
Federal Clean Fuel Vehicle ILEV	Yes	**California Partial Zero Emissions Vehicle Indicator**	No
Durability Group Name	KNSXEEVNN300	**Durability Group Equivalency Factor**	5.0
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	**CAP2000 Conditional Certificate?**	N/A
Independent Commercial Importer?	--	**Alternative Fuel Converter Certificate?**	--
SFTP Federal Composite Compliance Identifier	Not Applicable	**SFTP Tier 2 Composite CO Option**	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	**OBD Demonstration Vehicle Test Group**	KNSXT02.0PVA
Test Group OBD Compliance Level	Full - no deficiencies	**Number of Test Group OBD Deficiencies**	0
OBD Deficiencies Comments	This vehicle is exempted from OBD requirement because this vehicle is BEV.		
Mfr Test Group Comments	Durability Group Equivalency Factor is not available because this vehicle is BEV.(5.0 is a dummy)		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Models Covered by this Certificate

Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Nissan Motor Co., Ltd.	1 - NISSAN	25 - LEAF	California + CAA Section 177 states	2-Wheel Drive, Front	Automatic	1	Yes
Nissan Motor Co., Ltd.	1 - NISSAN	25 - LEAF	Federal	2-Wheel Drive, Front	Automatic	1	Yes
Nissan Motor Co., Ltd.	1 - NISSAN	26 - LEAF SV/SL	Federal	2-Wheel Drive, Front	Automatic	1	Yes
Nissan Motor Co., Ltd.	1 - NISSAN	26 - LEAF SV/SL	California + CAA Section 177 states	2-Wheel Drive, Front	Automatic	1	Yes

Engine Description

Hybrid Type	--	**Hybrid Description**	--
Engine Type	--	**Mfr Engine Description**	--
Engine Block Arrangement	--	**Mfr Engine Block Arrangement Description**	--
Camless Valvetrain Indicator	--	**Oil Viscosity/Classification**	
Number of Cylinders/Rotors	--	**Mechanically Variable Compression Ratio Indicator**	--

After Treatment Device(s) (ATD)

Mfr After Treatment Device (ATD) Comments	--
Direct Ozone Reduction (DOR) Device	--
Mfr Emission Control Device Comments	--

Official Test Numbers

Test Group Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Electricity	--	--	--	--	--	--	--	--	--	--

Official Charge Depleting Test Numbers

Test Group Fuel	UDDS	Highway
Electricity	KNSX10056741	KNSX10056742

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Hybrid Electric Vehicle And Fuel Cell Information

Rechargable Energy Storage System	Battery(s)	**Rechargable Energy Storage System, if Other**	--
Battery Type	Lithium Ion	**Number of Battery Packs**	1
Total Voltage of Battery Packs	350	**Battery Energy Capacity**	176
Battery Specific Energy	140.9	**Battery Charger Type**	On-Board
Number of Capacitors	--	**Capacitor Rating (In Farads)**	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Front Wheels	**Driver Controlled Regenerative Braking**	No
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	1		
Motor/Generator Type 1	DC Permanent Magnet, brushless	**Rated Motor/Generator Power**	160
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	**Usable H2 Fill Capacity (kg)**	--
Mfr Hybrid Electric/ Electric Vehicle Comments	--		

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Emission Data Vehicle Information

Vehicle ID / Configuration	KWC511 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	KNSXV0000TS3	**Original Evaporative/Refueling Family**	--
Original Test Vehicle Model Year	2019		

Vehicle Model

Represented Test Vehicle Make	NISSAN	**Represented Test Vehicle Model**	LEAF SV/SL

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Electric Motor	Electricity

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	No	**Rechargeable Energy Storage System Indicator**	Yes
Rechargeable Energy Storage System	Battery(s)	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	75	**Odometer Correction Factor**	0.971
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	EVAA7	**Rated Horsepower**	214
Displacement (liters)	99.999		
Air Aspiration Method	Naturally Aspirated	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	--	**Air Aspiration Device Configuration**	--
Charge Air Cooler Type	--	**Drive Mode While Testing**	2-Wheel Drive, Front
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	3843	**Equivalent Test Weight (pounds)**	4250
GVWR (lbs)	--	**N/V Ratio**	112.5
Axle Ratio	8.19		
Transmission Type	Auto(Fixed Single Speed)	**# of Transmission Gears**	1
Transmission Lockup	Yes	**Creeper Gear**	No

Dynamometer Coefficients:

	Target Coefficients			Set Coefficients			
Coefficient Category	**A (lbf)**	**B (lbf/mph)**	**C (lbf/mph**2)**	**A (lbf)**	**B (lbf/mph)**	**C (lbf/mph**2)**	**EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients**
City/Highway/Evap	30.36	0.3201	0.01956	11.75	0.1746	0.01884	12.7

Emission Control Device Comments Displacement is entered as a dummy.

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Manufacturer Test Vehicle Comments Normal mode.

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Test #	**KNSX10056741**	**Test Procedure**	**81 - Charge Depleting UDDS**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	11/06/2018	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Determined
Verify Test Lab ID	NISSAN MOTOR CO., LTD.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	2183	**Odometer Units**	M
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	**Road Speed Fan Usage**	Yes

PHEV/EV TEST INFO

Recharge Event Voltage	240	**Recharge Event Energy (kiloWatt-hours)**	70.0607
Charge Depleting Range (Calculated miles)	337.638	**Charge Depleting Range (Actual miles)**	337.638
Equivalent All Electric Range (miles)	337.638		
Number of Charge Depleting Bags/Phases Conducted	1		

Charge Depleting Bag/Phase

Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result
1	Actual Distance Driven (miles)	337.638
2	Average System Voltage	0
3	Carbon-Related Exhaust Emissions	0
4	Drive Trace Absolute Speed Change Rating	99.99
5	Drive Trace Energy Economy Rating	99.99
6	Drive Trace Inertia Work Ratio Rating	99.99
7	Integrated Amp-hours	0
8	Manufacturer Fuel Economy	162.4
9	System End State of Charge Watt-hours	0
10	System Start State of Charge Watt-hours	0

Manufacturer Test Comments AC Energy(Wh/mile):208, Net Vehicle DC energy consumption [DC Wh/mile]:179, Charge Time[sec]:40988 , Test procedure used MCT. DT-IWRR, DT-EER,and DT-ASCR are entered as a dummy.

Certification Summary Information Report

Test Group KNSXV0000TS3 **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Test #	**KNSX10056742**	**Test Procedure**	**84 - Charge Depleting Highway**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	11/06/2018	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Determined
Verify Test Lab ID	NISSAN MOTOR CO., LTD.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	2183	**Odometer Units**	M
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	**Road Speed Fan Usage**	Yes

PHEV/EV TEST INFO

Recharge Event Voltage	240	**Recharge Event Energy (kiloWatt-hours)**	70.0607
Charge Depleting Range (Calculated miles)	280.264	**Charge Depleting Range (Actual miles)**	280.264
Equivalent All Electric Range (miles)	280.264		
Number of Charge Depleting Bags/Phases Conducted	1		

Charge Depleting Bag/Phase

Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result
1	Actual Distance Driven (miles)	280.264
2	Average System Voltage	0
3	Carbon-Related Exhaust Emissions	0
4	Drive Trace Absolute Speed Change Rating	99.99
5	Drive Trace Energy Economy Rating	99.99
6	Drive Trace Inertia Work Ratio Rating	99.99
7	Integrated Amp-hours	0
8	Manufacturer Fuel Economy	134.8
9	System End State of Charge Watt-hours	0
10	System Start State of Charge Watt-hours	0

Manufacturer Test Comments AC Energy(Wh/mile):250, Net Vehicle DC energy consumption [DC Wh/mile]:215, Charge Time[sec]:40988 , Test procedure used MCT. DT-IWRR, DT-EER,and DT-ASCR are entered as a dummy.

Certification Summary Information Report

Test Group KNSXV0000TS3 **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Fuel Properties

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Consolidated List of Standards

Exhaust Standards

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California ZEV
Fuel	Electricity	**Test Procedure**	California fuel 3-day exhaust

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	--	0.0

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California ZEV
Fuel	Electricity	**Test Procedure**	Charge Depleting Highway

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	Charge Depleting UDDS

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	Charge Depleting Highway

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California ZEV
Fuel	Electricity	**Test Procedure**	Charge Depleting UDDS

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	California fuel 3-day exhaust

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	--	0.0

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Glossary

Useful Life			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		

Emission Name			
HC-TOTAL	Total Hydrocarbon	METHANOL	CH3OH - Methanol
CO	Carbon Monoxide	N2O	Nitrous Oxide
CO2	Carbon dioxide	SPITBACK	Spitback Hydrocarbon in grams
CREE	Carbon-Related Exhaust Emissions	AMP-HRS	Integrated Amp-hours
OPT-CREE	Optional Carbon-Related Exhaust Emissions	START-SOC	System Start State of Charge Watt-hours
NOX	Nitrogen Oxide	END-SOC	System End State of Charge Watt-hours
PM	Particulate Matter	ACT-DISTANCE	Actual Distance Driven (miles)
PM-COMP	SFTP Composite Particulate Matter	AS-VOLT	Average System Voltage
HC-NM	Non-methane Hydrocarbon	CO2 BAG 1	Bag 1 Carbon Dioxide
OMHCE	Organic material Hydrocarbon Equivalent	CO2 BAG 2	Bag 2 Carbon Dioxide
OMNMHCE	Organic material non-methane HC equivalent	CO2 BAG 3	Bag 3 Carbon Dioxide
NMOG	Non-methane organic gases	CO2 BAG 4	Bag 4 Carbon Dioxide
HCHO	Formaldehyde	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
H3C2HO	Acetaldehyde	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	DT-ASCR	Drive Trace Absolute Speed Change Rating
CO-COMP	SFTP Composite Carbon Monoxide	DT-EER	Drive Trace Energy Economy Rating
ETHANOL	C2H5OH - Ethanol	COMB-CREE	Combined Carbon-Related Exhaust Emissions
FE BAG 1	Bag 1 Fuel Economy	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
FE BAG 2	Bag 2 Fuel Economy	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
FE BAG 3	Bag 3 Fuel Economy	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
FE BAG 4	Bag 4 Fuel Economy	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
MFR FE	Manufacturer Fuel Economy	LEAK-DIA	Effective Leak Diameter (inches)
HC	Hydrocarbon for Running Loss and ORVR	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
METHANE	CH4 - Methane	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only

Certification Region			
CA	California + CAA Section 177 states	FA	Federal

Exhaust Emission Standard Level			
B1	Federal Tier 2 Bin 1	L3ULEV340	California LEV-III ULEV340
B2	Federal Tier 2 Bin 2	L3ULEV250	California LEV-III ULEV250
B3	Federal Tier 2 Bin 3	L3ULEV200	California LEV-III ULEV200
B4	Federal Tier 2 Bin 4	L3SULEV170	California LEV-III SULEV170
B5	Federal Tier 2 Bin 5	L3SULEV150	California LEV-III SULEV150

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--
B6	Federal Tier 2 Bin 6	L3LEV630	California LEV-III LEV630
B7	Federal Tier 2 Bin 7	L3ULEV570	California LEV-III ULEV570
B8	Federal Tier 2 Bin 8	L3ULEV400	California LEV-III ULEV400
B9	Federal Tier 2 Bin 9	L3ULEV270	California LEV-III ULEV270
B10	Federal Tier 2 Bin 10	L3SULEV230	California LEV-III SULEV230
B11	Federal Tier 2 Bin 11	L3SULEV200	California LEV-III SULEV200
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	T3B160	Federal Tier 3 Bin 160
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	T3B125	Federal Tier 3 Bin 125
L2	California LEV-II LEV	T3B110	Federal Tier 3 Transitional Bin 110
L2OP	California LEV-II LEV Optional	T3B85	Federal Tier 3 Transitional Bin 85
U2	California LEV-II ULEV	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
S2	California LEV-II SULEV	T3B70	Federal Tier 3 Bin 70
ZEV	California ZEV	T3B50	Federal Tier 3 Bin 50
OT	Other	T3B30	Federal Tier 3 Bin 30
T1	Federal Tier 1	T3B20	Federal Tier 3 Bin 20
PZEV	California PZEV	T3B0	Federal Tier 3 Bin 0
L2LEV160	California LEV-II LEV160	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
L2ULEV125	California LEV-II ULEV125	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
L2SULEV30	California LEV-II SULEV30	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2LEV395	California LEV-II LEV395	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2ULEV340	California LEV-II ULEV340	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
L2LEV630	California LEV-II LEV630	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
L2ULEV570	California LEV-II ULEV570	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
L3LEV160	California LEV-III LEV160	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
L3ULEV125	California LEV-III ULEV125	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
L3ULEV70	California LEV-III ULEV70	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
L3ULEV50	California LEV-III ULEV50	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L3SULEV30	California LEV-III SULEV30	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L3SULEV20	California LEV-III SULEV20	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L3LEV395	California LEV-III LEV395	HDV3B0	Federal Tier 3 HD Class 3 Bin 0

Transmission Type Code			
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual
A	Automatic	OT	Other
AM	Automated Manual	SA	Semi-Automatic
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)

Drive System Code			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		

Certification Summary Information Report

Test Group	KNSXV0000TS3	**Evaporative/Refueling Family**	--

Additional Terms and Acronyms

AFC	Alternative Fuel Converter	ICI	Independent Commercial Importer
CSI	Certificate Summary Information	ORVR	Onboard Refueling Vapor Recovery
DF	Deterioration Factor	SIL	Shift Indicator Light
Evap	Evaporation, Evaporative	Trans	Transmission

9. OBD System Description

Refer to the confidential section

10. Description of Alternate-fueled Vehicles

Refer to the confidential section

11. AECD Description

Refer to the confidential section

12. Description of Vehicles Covered by Certificate and Test Parameter

(3) List of Certified Vehicles

Durability Group : KNSXEEVNN300
Test Group : KNSXV0000TS3

[Vehicle Identification]

Carline	Trim Line	Trans./OD	Engine Code	Fuel	ETW (lbs)	Sales Area	SIL	Battery Capacity(kWh)	Vehicle Class
LEAF	S60	Auto (Fixed single Speed)	EVAA7	Electricity	4000	50S	N.A.	62	LDV (Fed) PC (Cal)
LEAF SV/SL	SL60 SV60				4250				

[Propulsion system]

-Motor

-Traction Inverter

Model	Type	Rated Power (kW)	Rated Torque (Nm)	Maximum Speed (rpm)	Number of Motor per vehicle	Drive type	Type	Modulation
EM57	DCPM	160 @4600-5800rpm	340 @500-4000rpm	11330	1	2-wheel Drive, front	DC/AC 3phase	PWM

-Battery

Refer to the confidential section. Sec16(10）-1

-Regenerative Braking

Type	Braking Source	Driver controlled Regen Braking
Electrical Regen. Brake	Front Wheels	None

-Standard Charger (Level 1)

Type	Input Voltage(V)
Conductive On-board	100-240 (<30A, AC50/60Hz)

[Other system]

-Climate control system

The climate control system equipped with electric motor-driven compressor/ Heat-Pump(SV60,SL60) + Air PTC heater system
The system uses HFC134a refrigerant and operates on 12volts DC/ 345 volts AC.
The vehicle are also equipped with a "pre-conditioning" system that turns on air conditioning system before passengers enter the car.
The vehicle is not equipped with a fuel-fired heating system.

12. Description of Vehicles Covered by Certificate and Test Parameters

(4) Test Parameter

Durability Group : KNSXEEVNN300
Test Group : KNSXV0000TS3

Carline	Trim Line	Trans.	ETW (lbs)	Tire Size	Tire Type	Axle Ratio	N/V Ratio	TRLHP	Coastdown Time (sec.)	Single Roll Dyno Terms A	B	C	Shift Schedule ID City	Hwy	Test Proc	Cooling Fan Config	Special Test Proc
LEAF SV/SL	SL60	Auto	4250	P215/50R17	All season	8.193	112.5	12.7	20.70	30.36	0.3201	0.01956	FTA	HWA	Part86	*1	*2*3*4
	SV60	(Fixed single Speed)	4250	P215/50R17	All season	8.193	112.5	12.7	20.70	30.36	0.3201	0.01956	FTA	HWA	Part86	*1	*2*3*4
LEAF	S60		4000	P205/55R16	All season LRR	8.193	114.7	12.1	20.47	26.30	0.2868	0.02003	FTA	HWA	Part86	*1	*2*3*4

*1: The road speed fan to all test cycles.
*2: Set in maintenance mode. Refer to SEC16(11)-5.
*3: If EV system starts, "READY" lamp in the meter illuminate, push the VDC CANCEL SWITCH within 10 seconds always.
*4: Cancel the automatic P position function by Nissan development tool.

12. Description of Vehicles Covered by Certificate and Test Parameter

(4) Test Parameter
Testing Related Information

-Charging procedure

1) Push the start button twice without brake pedal on to wake up the vehicle system
2) Move the shift lever to the "P" position.
3) Push the start button once to shut off the vehicle system.
4) To open the charge port access door, push the release switch.
5) Remove the charge connector from holster. All of the indicator display lamps come on and then go off.
6) Fully insert the charge connector into the charge port. When the charge connector is set correctly, vehicle answer one beep.
7) Charging begins automatically. The "CHG" indicator display comes on.
8) When the batteries are fully charged; the indicator display SOC meter lamps all come on and the "CHG" lamp goes off.
9) Remove the charge coupler from the charge port. Make sure to firmly secure the charge coupler in its holster.
10) Close the charge port access door on vehicle.

-Load setting for dyno procedure

1) With no depressing the brake pedal, push the “START” switch twice. The vehicle is set in “IGN-ON” condition, not "Ready"condition.
2) Shift into “N” position with depressing the brake.
3) Start the Load Set
4) When the load set is finished, push the "START" switch once to shut off vehicle system

-Safe handling of battery system Information

When working on high voltage cable, wear antistatic boots and insulated gloves. And remove the Shut Down switch.
If high voltage battery is damaged, there is a risk of short circuit to vehicle body due to leakage of electrolyte, and it is necessary to beware of electric shock.
When damaged, the battery may emit white fumes (vaporized electrolyte) due to short circuit.

> If this happens, cool the battery with hose streams.
> Since electrolyte is flammable, fire sources are prohibited.
> Electrolyte liquid and vapor are not toxic, but must not be directly inhaled in large quantities.

12. Description of Vehicles Covered by Certificate and Test Parameter

(4) Test Parameter
Testing Related Information

-System Warning Device Information

This EV has 3 indicating devices for warnings specific to EV.

"FAIL" as warning device for the existence of a vehicle malfunction, and the impossibility of vehicle running .
"CAUTION" as warning device for the existence of a vehicle malfunction and the possibility of vehicle running .
"FAIL" and "CAUTION" are same indicator behavior. The difference is run or not.
"SLOW DOWN" which is marked with the figure of TURTLE as warning device for the lowering of acceleration performance.

TYPE		FAIL	CAUTION	SLOW DOWN
Symbol				
	Traveling	IMPOSSIBLE	POSSIBLE	POSSIBLE
	Repair	Required	Required(or checked)	Not-required
	Acceleration performance	Impossible to run	Depend upon condition	SLOW DOWN
	User's responsibility	Repair	Repair or Check	Charging or Cooling the Vehicle

-Emergency procedures

When an accident happens:

> Stop the car to the safe place.

> Turn key off

> Rescue injured persons if there any.

> Please call emergency (911).

14. Request for Certification

Request for Certificate to ARB

Test Group	: KNSXV0000TS3
Exhaust emission control system number	: 1 of 1
Evaporative/Refueling Family	: N.A.
Carline	: LEAF SV/SL LEAF

The confirmatory test data is pending. Therefore, under the provisions of 86.1835-01(d),
Nissan Motor Co., Ltd requests that ARB issue a conditional 2019 model year certificate of conformity for the above specified test group and evaporative/refueling family combination more fully described in this application. This combination complies with the following applicable emission standard:

Federal	: X
California & 177 States	: X

This combination complies with all applicable regulations contained within 40 CFR Part86, if applicable, within Title13 of the California Code of Regulations, the application is current as of this date.
The exhaust and evaporative/refueling emission test results support this request for certificate.

Kazuhiro Murata
Manager
Regulation and Homologation Department

14. Request for Certification

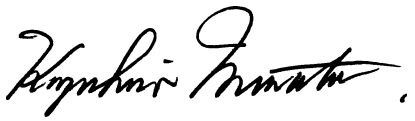
Request for Certificate to EPA

Test Group	: KNSXV0000TS3
Exhaust emission control system number	: 1 of 1
Evaporative/Refueling Family	: N.A.
Carline	: LEAF SV/SL LEAF

The confirmatory test data is pending. Therefore, under the provisions of 86.1835-01(d),
Nissan Motor Co., Ltd requests that EPA issue a conditional 2019 model year certificate of conformity for the above specified test group and evaporative/refueling family combination more fully described in this application. This combination complies with the following applicable emission standard:

Federal	: X
California & 177 States	: X

This combination complies with all applicable regulations contained within 40 CFR Part86, if applicable, within Title13 of the California Code of Regulations, the application is current as of this date.
The exhaust and evaporative/refueling emission test results support this request for certificate.



Kazuhiro Murata
Manager
Regulation and Homologation Department

KNSXV0000TS3
Issue Date : Refer to cover page
Revision Date :

15. Other Information

(1) Fee Filing Form

Refer to the attached Fee Filing Form

US EPA Fee Form

General Information

Date:	09/20/2018
Process Code:	Submit New Filing Fee Form
Manufacturer Code:	NSX
Manufacturer Name:	NISSAN MOTOR CO., LTD.

Manufacturer Contact

Name:	Farrukh Khan
Email Address:	KhanF@nrd.nissan-usa.com
Phone:	248-488-4649
Calendar Year complete application submitted to EPA:	2018
Engine Family / Evaporative Family / Test Group:	KNSXV0000TS3

Certificate Request Type (Industry Sector Code)

- (●) On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V)
- ( ) On-Highway HDE Dyno Cert (Federal) (E, H)
- ( ) On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V)
- ( ) On-Highway Motorcycle (C)
- ( ) On-Highway HDV Evap (F)
- ( ) On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V)
- ( ) On-Highway HDE Dyno Cert (California-Only) (E, H)
- ( ) Nonroad CI (L)
- ( ) Nonroad SI (B, S)
- ( ) Locomotive (G, K)
- ( ) All Nonroad Recreational, excluding Marine engines (X, Y)
- ( ) All Marine (Including IMO) (M, N, W)
- ( ) Component Certification for Evaporative Emissions (P)

IMO Name (Required for dual US/IMO Marine Only):	
ICI VIN Number (Required for ICIs Only):	
Do you qualify for a Reduced Fee (RF)?	
What is the total number of vehicles, engines, or units covered?:	
What is the aggregate total retail value of the vehicles, engines or units covered?:	

Payment Information

Amount Owed:	27,706.00
Payment Type:	Offline Wire

Comments:

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 12/31/2019

The public reporting and recordkeeping burden for this collection of information is estimated to average 20 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.