

# **Certificate of Compliance**

Certificate: 1143724 Master Contract: 176500

**Project:** 80059700 **Date Issued:** 2021-05-04

Issued To: Hyundai Electric and Energy Systems Co., Ltd.

1000, Bangeojinsunhwan-doro, Dong-gu

Ulsan, Ulsan, 44032

**South Korea** 

Attention: Han Shinkyu

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:** Ezio Migliozi Ezio Migliozi



#### **PRODUCTS**

CLASS - C422801 - MOTORS AND GENERATORS For Hazardous Locations

CLASS - C422881 - MOTORS AND GENERATORS For Hazardous Locations - Certified to US Standards

# Class I, Division 2 Groups A, B, C and D.

• Squirrel Cage Induction Motors, single or polyphase, Types, PK, PKS, PKP, PL, PLS and PLP, 250 hp max, 600V max, 50/60Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO, TENV or DP. Continuous duty, SF 1.0 and 1.15 max., IEC frame 71 to 280, NEMA frames 140 to 440; 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 20W for frames up to NEMA210/IEC132, 30W for frames from NEMA250/IEC160 to NEMA320/IEC200, 50W for frames NEMA360/IEC225 to NEMA400/IEC250, 75W for frames NEMA440/IEC280. Temperature Code at sine-wave power, T3C(160C) for NEMA320FR (IEC200FR) and below, T3B(165C) for NEMA360FR to 400FR (IEC225FR to 250FR), T3A(180C) for NEMA440FR (IEC280FR) at maximum



ambient 40deg C. And Temperature Code T3A(180C) for NEMA 400FR (IEC 250FR) and below, T3(200C) for NEMA 440FR(IEC 280FR) at maximum ambient 55°C

Squirrel Cage Induction Motors, single or polyphase, sine-wave power, Types PK, PKS, PKP, PL, PLS and PLP, 600 hp max, 600V max, 50/60 Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO, Continuous duty, SF 1.15, NEMA L449 to 500FR (IEC280KJH to 315FR); 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 75W.

Temperature Code at sine-wave power, T3 for NEMA L449 to 500FR (IEC280KJH to 315FR) at maximum ambient 40deg C. And Temperature Code T3(200C) for NEMA 440FR to 500FR (IEC 280FR to 315FR) at maximum ambient 55°C.

• Squirrel Cage Induction Motors, single or polyphase, Inverter Duty, Types PI, PIS, PIP, PJ, PJS and PJP, 600 hp max, 600V max, 3-90 Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO, Continuous duty, SF 1.0, IEC frame 71 to 315, NEMA frames 140 to 500; 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 20W for frames up to NEMA210/IEC132, 30W for frames from NEMA250/IEC160 to NEMA320/IEC200, 50W for frames NEMA360/IEC225 to NEMA400/IEC250, 75W for frames NEMA440/IEC280 to NEMA 500/IEC315.

Inverter operation conditions of VT 6Hz (or 3Hz at 50% load or below) to 60Hz, CHP 60 to 90Hz, CT 6Hz to 60Hz for NEMA210FR (IEC132FR) & below, CT 15Hz to 60Hz for NEMA250FR to 500FR (IEC 160FR to 315FR), alternate short time Duty(1hour) of CT at the lowest speed of 6Hz for NEMA250FR (IEC160FR) to 500FR (NEMA315FR).

Temperature Code at Inverter-duty application, T3 for NEMA 500FR (IEC 315FR) and below at maximum ambient 40°C. And CSA Certified Temperature Code T3 for NEMA 360FR (IEC 225FR) and below, T2D(215C) for NEMA 400FR to 500FR (IEC250FR to 315FR) at maximum ambient 55°C.

• Three phase, Squirrel Cage Induction Motors, Types HNA3, HNP3, HNQ3, HNB4, HNB5, HNE5, HNE6, HNA7 and HNP7, 13,800 V Max., 50/ 60Hz, Class B or F insulated, with space heaters 120/240 Vac – 600W Max (one bank: 300W per drawing 3M-183428 and 3M-214172) (HNA3, HNP3, HNQ3); 120Vac or 120/240Vac -300W Max. (HNB4, HNB5, HNE5 & HNE6) and 120Vac-960W Max. (HNA7 and HNP7). Horizontal or vertical flange with/without foot mounting, enclosure type TEFC, DP or WP and TEAAC for HNQ3. Continuous duty, SF 1.15 max. (see note 2 for S.F for inverter motors), IEC frame 280 to 900, NEMA frame 440 to 680, 2 pole to 30 pole. Temperature Code T3A (180°C) for HNB4 motors with and without space heaters, T3A (180°C) for HNB5, HNE5 & HNE6 motors with and without space heaters and T3 (200°C) for HNA3, HNP3, HNQ3 HNA7 and HNP7 motors with and without space heaters; Maximum ambient 50°C.

For Model HNE6, IEC frame sizes 315, 355, 400 and 450 are also CSA certified for inverter duty using inverter types VSI, 6 to 60 Hz (1:10), VT (Variable Torque); 30 to 60 Hz (1:2) CT (Constant Torque) and a service factor of 1.0.

• Squirrel Cage Induction Motors Model HNQ1 TEAAC Design, Weather Proof (WP) enclosure;



medium voltage 13800 VAC max., 3Ph, 60Hz, 1.0SF and VPWM (6 to 60Hz), 3600 rpm Max, VT (50 - 3600 rpm) and CHP (85 to 3600 rpm), 2 to 14 pole, Class F insulated.

Temperature Code T3 (200°C); Ambient temperature -45 to +55°C. With accessories:

- Frame space heaters rated  $110 \sim 120/220 \sim 240 \text{VAC}$  with wattage as per below table.
- Main junction box heater rated 110 ~ 120/220 ~ 240VAC 75W Max.
- PT100 temperature sensors for winding and bearings.
- Vibration and Key Phasor Sensors by Bently Nevada 3300 XL
- CT's by ABB

Frame size	2P	4P	6P	8P	10P	12P	14P	Maximum Heate r Wattage	
	60 Hz:3600rpm	60Hz;1800rpm	60Hz;1200rpm	60Hz; 900rp m	60Hz; 720r pm	60Hz; 600r pm	60Hz; 514 rpm		
	VFD:600-3600 r pm	VFD;300-2200 rpm	VFD;200-1500 r pm	VFD;150-10 80 rpm	VFD;120-87 0 rpm	VFD;100-72 0 rpm	VFD;85-62 0 rpm		
	kW	kW	kW	kW	kW	kW	kW	120 V	240V
400	1150	1150	1020	810	650	510	410	200	200
450	1700	1700	1650	1310	860	680	540	300	300
500	3050	3050	2690	2170	1490	1190	800	300	300
560	4900	4900	4380	3710	2650	2030	1330	600	600

 Squirrel Cage Induction Motors Model HNP1 WPII Design, Weather Proof (WP) enclosure; medium voltage 13800VAC max., 3Ph, 60Hz, 1.0SF and VPWM (6 to 60Hz), 3600 rpm Max, VT (50 – 3600 RPM) and CHP (85 to 3600 rpm), 2 to 14 pole, Class F insulated.

Temperature Code T3 (200°C); Ambient temperature -45 to +55°C. With accessories:

- Frame space heaters rated  $110 \sim 120/220 \sim 240 \text{VAC}$  with wattage as per below table.
- Main junction box heater rated 110 ~ 120/ 220 ~ 240VAC -75W Max.
- PT100 temperature detectors for windings, bearings and air.

Fram e size	2P	4P	6P	8P	10P	12P	14P	Maximum Heat er Wattage	
	60 Hz:3600rpm	60Hz;1800rpm	60Hz;1200rp	60Hz; 900rp	60Hz; 720rp	60Hz; 600rp	60Hz; 514r		
			m	m	m	m	pm		
	VFD:600-3600 r	VFD;300-2200	VFD;200-150	VFD;150-108	VFD;120-87	VFD;100-72	VFD;85-620		
	pm	rpm	0 rpm	0 rpm	0 rpm	0 rpm	rpm		
	kW	kW	kW	kW	kW	kW	kW	120 V	240V
500	4150	3330	2510	1810	1250	950	705	300	300

Note: For above models with mandatory hazardous location designation "Class I, Div. 2, Groups A, B, C, and D", optional additional Zone designation "Class I, Zone 2 Groups IIC, IIB+H2, IIB, IIA" can be stated, as applicable.



#### Class I, Division 2 Groups B, C and D.

- Three phase, Squirrel Cage Induction Motor, TEWAC design, Types HNN1 719-48E, 710 Frame, 13200V Max., 60Hz, 1793RPM, 6600kW (approx. 8800HP), 331.0A; 1.0 SF; Cooling method: IC81W water cooling, Max. cooling water 31.1°C at Min. flow rate of 25.3m³/hr; Class F insulated; Space heater 120VAC, 1ph, 630W; Max ambient 50°C; Temperature Code T3 (200°C).
- Three phase, Squirrel Cage Induction Motor, TEAAC design, Type HNQ1 567-68E, 560 Frame, 6P, 4000V Max., 60Hz, 1187RPM, 2870kW, 484.8A; 1.0 SF; Non-inverter Type; Class F insulated; Space heater 230Vac, 1ph, 400W; Max ambient 50°C; Temperature Code T2D (215°C).
- Three phase, Squirrel Cage Induction Motor, TEAAC design: Type HNQ3 567-48E, 560 Frame, 4P, 4000V Max., 60Hz, 1788RPM, 2800kW, 479.4A, Space heater 230V 1ph 400W; Type HNQ3 501-28E, 500 Frame, 2P, 4000V Max., 60Hz, 3578RPM, 1350kW, 227.9A, Space heater 230V 1ph 300W; Type HNQ3 565-48E, 560 Frame, 4P, 4000V Max., 60Hz, 1785RPM, 2470kW, 411.8A, Space heater 230V 1ph 400W; Type HNQ3 453-48E, 450 Frame, 4P, 4000V Max., 60Hz, 1778RPM, 980kW, 166.6A, Space heater 230V 1ph, 300W; Type HNQ3 639-38E, 630 Frame, 12P, 4000V Max., 60Hz, 594RPM, 2550kW, 520.8A, Space heater 230V 1 ph, 400W; Type HNQ3 453-28E, 450 Frame, 2P, 4000V Max., 60Hz, 3571ROM, 1000kW, 168.8A, Space heater 120V, 300W;
  - 1.0 SF, Non-inverter Type, Class F insulated, Max ambient 50°C, Temperature Code T2D (215°C).
- Three phase, Squirrel Cage Induction Motor, TEFC design: Type HNE5 449-48E, 449 Frame, 4P, 4000V Max., 60Hz, 1788RPM, 170kW, 30.4A, Space heater 230V 1ph 80W; Type HNE6 404-68E, 400 Frame, 6P, 4000V Max., 60Hz, 1193RPM, 600kW, 112.5A, Space heater 230V 1ph 160W; 1.0 SF; Non-inverter Type; Class F insulated; Space heater 230Vac, 1ph, 400W; Max ambient 50°C; Temperature Code T2D (215°C).
- Three phase, Squirrel Cage Induction Motor, WP design, Types HNP3 809-48E, 800 Frame, 7200V Max., 60Hz, 1795RPM, 17700HP, 1227.7A; 1.0 SF; Class F insulated; Space heater (frame) 120Vac, 1ph, 600W; Space heater (main t/box) 120Vac, 1ph, 30W; Max ambient 35°C; Temperature Code T3 (200°C).

Note: For above models with mandatory hazardous location designation "Class I, Div. 2, Groups B, C, and D", optional additional Zone designation "Class I, Zone 2 Groups IIB+H2, IIB, IIA" can be stated, as applicable.

#### CLASS 4228 01 - MOTORS AND GENERATORS - For Hazardous Locations

# Class I, Division 2 Groups A, B, C and D.

Three phase, Squirrel Cage Induction Motor TEWAC design, Types HNN3 453-28E Weather Proof Enclosure (WP), 450 Frame, 4000 V Max., 60Hz, 3577 rpm, 1866KW, 308.3A; Max. cooling water 36°C at Min. flow rate of 16.3m³/hr; Class F insulated; space heater 240VAC - 408W; Leakage Detector contacts rated 240 VDC/VAC - 20W; Max ambient 53°C; Temperature Code T1(450°C).

Note: For above models with mandatory hazardous location designation "Class I, Div. 2, Groups A, B, C, and D", optional additional Zone designation "Class I, Zone 2 Groups IIC, IIB+H2, IIB, IIA" can be stated, as applicable.



#### Class I, Division 2 Groups B, C and D.

• Three phase, Squirrel Cage Induction Motor TEWAC design, Types HNN3 809-58E Weather Proof Enclosure (WP), 800 Frame, 4000V Max., 60Hz, 511RPM, 4000HP, 559.5A; 1.0 SF; Max. cooling water 31.1°C at Min. flow rate of 25.3m³/hr; Class F insulated; Frame space heater 120VAC - 600W and T/Box space heater 120VAC 50W; Leakage Detector contacts rated 240 VDC/VAC – 20VA; PT 100 temperature monitoring signals for windings and bearings; Max ambient 30°C; Temperature Code T3 (200°C).

Note: For above models with mandatory hazardous location designation "Class I, Div. 2, Groups B, C, and D", optional additional Zone designation "Class I, Zone 2 Groups IIB+H2, IIB, IIA" can be stated, as applicable.

#### Class I, Division 2 Groups C and D.

- Three phase, Squirrel Cage Induction Motor WPII design, Types HRPS 453-26E Weather Proof Enclosure (WP), 450 Frame, 6,600 V Max., VPWM (15-50Hz), VT (896 to 2969 rpm), 840 KW, 85.9A; Class F insulated; space heater 220VAC 336W; Max ambient 40°C; Temperature Code T1 (450°C).
- Three phase, Squirrel Cage Induction Motor WPII design, Types HNPS 457-26E Weather Proof Enclosure (WP), 450 Frame, 6,600 V Max., VPWM (15-50Hz), VT (896 to 2971 rpm), 1300 KW, 131.8A; Class F insulated; space heater 220VAC 336W; Max ambient 40°C; Temperature Code T1 (450°C).
- Three phase, Squirrel Cage Induction Motor TEWAC design, Types HNN3 317-28E Weather Proof Enclosure (WP), 315 Frame, 4000 V Max., 60Hz, 3570 rpm, 700 HP, 87.7A; Max. cooling water 41°C at Min. flow rate of 5.3m³/hr. Class F insulated; space heater 120VAC 160W; Max ambient 50°C; Temperature Code T3 (200°C).

Note: For above models with mandatory hazardous location designation "Class I, Div. 2, Groups C, and D", optional additional Zone designation "Class I, Zone 2 Groups IIB, IIA" can be stated, as applicable.

All the motor model numbers listed in this PRODUCTS section are formed by the addition of numbers and letters to the type designation representing various mechanical and electrical variations as covered by report.

# The following motors have been Field Certified during witness testing

- TEWAC, HNN3 809-58E rated 4000 V, 4000 HP, 511 RPM, 60Hz, 3PH, 1.0 SF.

S/N 20133623RMHD21001 CSA Mark S/N FB521713 S/N 20133623RMHD22001 CSA Mark S/N FB521714

CLASS 4228 81 - MOTORS AND GENERATORS - For Hazardous Locations - CERTIFIED TO U.S. Standards CLASS 4228 01 - MOTORS AND GENERATORS - For Hazardous Locations



#### Class II, Division 2, Groups E, F and G.

• Squirrel Cage Induction Motors, single or polyphase, Types, PK, PKS, PKP, PL, PLS and PLP, 60hp max, 600Vmax, 50/60Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO and TENV. Continuous duty, SF 1.0 and 1.15 max., IEC frame 71 to 200, NEMA frames 140 to 320; 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 20W for frames up to NEMA210/IEC132, 30W for frames from NEMA250/IEC160 to NEMA320/IEC200. Temperature Code at sine-wave power, T3C(160C) for NEMA320FR (IEC200FR) and below at maximum ambient 40deg C.

# Class II, Division 2, Groups F and G.

- Squirrel Cage Induction Motors, single or polyphase, Types, PK, PKS, PKP, PL, PLS and PLP, 250 hp max, 600V max, 50/60Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO and TENV. Continuous duty, SF 1.0 and 1.15 max., IEC frame 71 to 280, NEMA frames 140 to 440; 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 20W for frames up to NEMA210/IEC132, 30W for frames from NEMA250/IEC160 to NEMA320/IEC200, 50W for frames NEMA360/IEC225 to NEMA400/IEC250, 75W for frames NEMA440/IEC280. Temperature Code at sine-wave power, T3C(160C) for NEMA320FR (IEC200FR) and below, T3B(165C) for NEMA360FR to 400FR (IEC225FR to 250FR), T3A(180C) for NEMA440FR (IEC280FR) at maximum ambient 40deg C. And Temperature Code T3A(180C) for NEMA 400FR(IEC 250FR) and below, T3(200C) for NEMA 440FR(IEC 280FR) at maximum ambient 55°C
- Squirrel Cage Induction Motors, single or polyphase, sine-wave power, Types PK, PKS, PKP, PL, PLS and PLP, 600 hp max, 600V max, 50/60 Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO, Continuous duty, SF 1.15, NEMA L449 to 500FR (IEC280KJH to 315FR); 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 75W.
  - Temperature Code at sine-wave power, T3 for NEMA L449 to 500FR(IEC280KJH to 315FR) at maximum ambient 40deg C. And Temperature Code T3(200C) for NEMA 440FR to 500FR (IEC 280FR to 315FR) at maximum ambient 55°C.
- Squirrel Cage Induction Motors, single or polyphase, Inverter Duty, Types PI, PIS, PIP, PJ, PJS and PJP, 600 hp max, 600V max, 3-90 Hz, Class F insulated, horizontal or vertical, flange with/without foot mounting. Enclosure Type TEFC, TEAO, Continuous duty, SF 1.0, IEC frame 71 to 315, NEMA frames 140 to 500; 2, 4, 6 and 8 pole. Space heaters rated 120 or 240VAC, 20W for frames up to NEMA210/IEC132, 30W for frames from NEMA250/IEC160 to NEMA320/IEC200, 50W for frames NEMA360/IEC225 to NEMA400/IEC250, 75W for frames NEMA440/IEC280 to NEMA 500/IEC315.

Inverter operation conditions of VT 6Hz (or 3Hz at 50% load or below) to 60Hz, CHP 60 to 90Hz, CT 6Hz to 60Hz for NEMA210FR (IEC132FR) & below, CT 15Hz to 60Hz for NEMA250FR to 500FR (IEC 160FR to 315FR), alternate short time Duty(1hour) of CT at the lowest speed of 6Hz for NEMA250FR (IEC160FR) to 500FR (NEMA315FR).



Temperature Code at Inverter-duty application, T3 for NEMA 500FR(IEC 315FR) and below at maximum ambient 40°C. And CSA Certified Temperature Code T3 for NEMA 360FR (IEC 225FR) and below at maximum ambient 55°C.

## **APPLICABLE REQUIREMENTS**

CSA C22.2 No. 0-10 CSA-C22.2 No. 100-14 CSA Std C22.2 No.145-11 CSA-C22.2 No. 213-17

UL Std No. 674 5th Ed.

UL Std No. 1004-1 2<sup>nd</sup> Ed. UL Std No. 1004-8 2<sup>nd</sup> Ed UL Std No. 1004-9 1<sup>st</sup> Ed. ANSI/ISA -12.12.01-2015

UL 1836: 2014

- General Requirements Canadian Electrical Code, Part II
- Motors and Generators
- Motors and Generators for Use in Hazardous Locations
- Non-Incendive Electrical Equipment for use in Class I, Division 2 Hazardous Locations
- Electric Motors and Generators for Use in Hazardous Locations Class I, Groups C and D; Class II, Groups E, F and G
- Electric Motors
- Inverter Duty Motors
- Form Wound and Medium Voltage Rotating Electrical Machines
- Non-incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
- Outline of Investigation for Electric Motors and Generators for Use in Class I, Division 2, Class I, Zone 2, Class II, Division 2 and Zone 22 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.

The marking method consists of a CSA Accepted Adhesive Type Label, or data plate, or plates fastened to a machine in a visible location applied at the factory and containing the following information. Low Voltage motors marking plates are per drawing NP249A7171RA Rev. 6 or NP249A7171RB Rev. 0 or NP249A7171RG Rev. 0, see Attachment 7.

\*For medium voltage machines required information is etched in or silk screened onto stainless steel or aluminum plates, and plates are fastened to motor designated marking areas.



- Manufacturers name.
- CSA Monogram with adjacent indicator "C" and "US", as applicable.
- Model or type designation or equivalent.
- Rated voltage
- Frequency in Hertz.
- Rated amperes.
- Power rating in HP or KW
- Number of phases
- Service factor (if different than unity).
- Rated speed
- Inverter type: VPWM (15 to 50 Hz) or VSI (6 to 60 Hz) as applicable
- Load type: Variable Torque or VT (896 2971 RPM) or Constant Torque or CT (30 to 60 Hz) (as applicable)
- Temperature Rise
- Insulation system code.
- Frame size.
- Space heater rating in volts and watts.
- Maximum ambient temperature.
- Temperature code rating.
- Hazardous location designation ("Class I, Div. 2, Groups A, B, C, and D" as applicable; and optional additional Zone designation "Class I, Zone 2 Groups IIC, IIB, IIA" can be stated), as applicable.
- Motor Design Type, i.e. TEFC, TENV, TEWAC (as applicable).
- Motor indoor/outdoor rating: Weather-Proof or WP / ÉTANCHE ou WP; Totally Enclosed or TE / FERMÉ ou TE.
- Date code or equivalent.
- Identification and electrical rating of all accessory junction boxes.
- Connection diagram appears on adhesive paper label fitted inside terminal box cover or on the main nameplate.
- Energy efficiency mark (EEV), as applicable.
- Direction of Rotation
- Main terminal box for motors rated higher than 750V shall be marked "DANGER: HIGH VOLTAGE/DANGER: HAUTE TENSION" or with the high voltage symbol.
- "CAUTION: OPEN CIRCUIT BEFORE REMOVING COVERS" and "OUVRIR LE CIRCUIT AVANT D'ENLEVER LE OUVERCLE", this shall be on each junction box cover.
- Connection diagram appears on adhesive paper label fitted inside terminal box cover or etched onto motor main nameplate.
- CAUTION: USE SUPPLY WIRES SUITABLE FOR 90°C / ATTENTION: EMPLOYER DES FILS D'ALIMENTATION ADÉQUATS POUR 90°C
- CAUTION: THIS LIFTING SUPPORT IS NOT TO BE USED TO LIFT THE ENTIRE MACHINE.
  ONLY THE COMPONENT ATTACHED DIRECTLY TO THIS SUPPORT MAY BE SAFELY LIFTED



BY THE SUPPORT / ATTENTION : CE SUPPORT DE LEVAGE NE DOIT PAS ÊTRE UTILISÉ POUR SOULEVER LE POIDS TOTAL DE LA MACHINE. SEUL L'ÉLÉMENT QUI REPOSE DIRECTEMENT SUR LE SUPPORT PEUT ÊTRE SOULEVÉ EN TOUTE SÉCURITÉ

- "WARNING EXPLOSION HAZARD SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2" and "AVERTISSEMENT: RISQUE D'EXPLOSION LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATERIEL INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE 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" and "AVERTISSEMENT: RISQUE D'EXPLOSION AVANT DE DECONNECTER L'EQUIPMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENTS EST DESIGNE NON DANGEREUX"
- "WARNING: MORE THAN ONE LIVE CIRCUIT. SEE DIAGRAM / AVERTISSEMENT : PLUS D'UN CIRCUIT EST SOUS TENSION. VOIR SCHÉMA"



# Supplement to Certificate of Compliance

Certificate: 1143724 Master Contract: 176500

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

# **Product Certification History**

Project	Date	Description
80059700	2021-05-04	Update to report 1143724 to cover design changes on the squirrel cage induction motor enclosures for model PK, PKS, PKP, PL, PLS, PLP, PI, PIS, PIP, PJ, PJS, PJP rated 50 HP max., 600 V max, 50/60 Hz, NEMA frame sizes 140 through 320 and IEC frame sizes 71 through 200.
80029866	2020-04-27	Update to report 1143724 to cover the addition of Cl. II, Div. 2 to motor Types, PK, PKS, PKP, PL, PLS, PLP and PI, PIS, PIP, PJ, PJS and PJP.
70219320	2019-05-21	Assessment for adding new models of previously certified type HNQ1, HNQ3 series, HNE5 and HNE6 for report 1143724.
000070145630	2017-07-21	Update to report 1143724 to cover certification of motor model HNQ1 and HNP1 for use in Class I, Div. 2 hazardous areas.
000070013923	2015-02-19	Update to report 1143724 to cover evaluation of inverter duty for HNE6, frame sizes 315, 355, 400 and 450 motors.
0002630583	2015-01-22	Update to Certificate 1143724 to add Motor 1866KW 2P 4000V 60Hz Type: HNN3 453-28E (Water cooling type)Class I, Div 2 GP A, B, C, D: T1/ Class 1, Zone 2, IIC, T1 Includes Witness testing: Note report was issued under project 2563574
0002728466	2015-01-20	Motors HNN3 809-58E S/N3RMHD21 and 3RMHD22 for use in Class I, Div 2 GP B, C, D / Class I, Zone 2 Group IIB+H2; T3 hazardous locations. Includes witness testing.
0002600780	2014-12-24	TOR614: Certification of "P" Series motors for use with VFD for Class I, Div. 2 Grp. A, B, C, D Hazardous Locations
0002692950	2014-08-25	Update to CSA report 1143724 to cover certification of HNE6 motors.
0002563574	2013-06-06	TOR388: Update to certificate 1143724 to add Motors HNPS 453-26E, HNPS 457-26E, HNN3 317-28E, Heater and Gasket Testing and 13.8 KV Rating Expansion - For use in Hazardous Locations.



000	02593501	2013-01-17	Update to report 1143724 to add 13.8KV rating
000	02392277	2011-05-03	Class I, Div 2 Premium Efficiency Motors PKP and PLP
000	02174699	2009-05-28	Correction to Project 2028717
000	02028717	2009-03-06	Update Rpt.1143724 to include new space heaters to motor Type PK, PKS, PL, PLS for Class I, Div.2, Grps A B C D; and Class I, Zone 2, Grp IIC:
000	01993107	2008-05-09	Update Report 1143724 for motors PK, PKS, PL & PLS to 55C ambient temperature.
000	01739231	2006-08-16	Addition of motors HNA3, HNP3, HNQ3 for use in Cl. I, Div. 2 and increase ambient from $40\ C$ to $50\ C$
000	01625802	2005-06-29	Addition of HNE5 Series Motors for Class 1, Div. 2