


[HOME](#)
[ABOUT](#)
[SERVICES](#)
[INDUSTRIES](#)
[SHOP CSA](#)

## Class Description

### Quick Links

[Certification and Labels](#)  
[Certified Product Listing](#)  
[CSA Comm](#)  
[Request a](#)

Class Number	Description
4228-01	<b>MOTORS AND GENERATORS-For Hazardous Locations</b>

#### COVERAGE:

Electric motors (with or without inherent overheating protection) and generators for installation and use in accordance with the requirements of the Canadian Electrical Code Part I.

This category does not include sealed (hermetic) type motors such as in refrigerator compressors.

#### REQUIREMENTS:

CSA Standard C22.2 No 0	General Requirements - Canadian Electrical Code Part II
CSA Standard C22.2 No 25	Enclosures for Use in Class II Groups E, F and G Hazardous Locations
CSA Standard C22.2 No 30	Explosion-Proof Enclosures for Use in Class 1 Hazardous Locations
CSA Standard C22.2 No 77	Motors with Inherent Overheating Protection
CSA Standard C22.2 No 100	Motors and Generators
CSA Standard C22.2 No 145	Motors and Generators for Use in Hazardous Locations Class I Groups C and D, Class II Groups E, F and G
T.I.L. No E-13A	Electrical Equipment For Use in Hazardous Locations
T.I.L. No E-18	Explosion Proof Enclosures for Use in Class I Hazardous Locations
T.I.L. No E-19	Thermo-Electric Generators for Use in Class I, Division 2, Group D, Hazardous Locations
T.I.L. No E-22	Motors and Generators For Use in Class I, Division 2 and Class II, Division 2, Hazardous Locations
T.I.L. No E-24	HAZ LOC Equipment Class 1
T.I.L. No E-25	Electrical Equipment for Use in Explosive Gas Atmospheres

#### NOTES:

1. Motors marked "Thermally Protected" are provided with thermal protection in accordance with Standard C22.2 No 77 "Motors with Inherent Overheating Protection". The thermal protectors may open the motor winding circuits inside the motor enclosure, or may be connected in the control circuits of the equipment which opens the motor circuit externally.
2. Motors listed with statement "Component Certification Only" (or equivalent wording) are for use only as component parts of Certified equipment which provides for their proper use (e.g. such motors may have exposed live or moving parts which are required to be enclosed by the equipment in which they are intended to be used).

#### MARKING:

All marking required by CSA must be permanent, legible, and located where readily accessible for review after assembly of the device, except as permitted otherwise. The contents consist of:

- submittor's identification;
- model or type designation or equivalent;
- rated voltage;
- frequency in Hertz;
- rated amperes;
- number of phases;
- service factor (if different than unity);
- rated speed;
- insulation system code;
- horsepower rating;
- frame size;
- permissible ambient, if greater than 40C;
- temperature code;
- applicable hazardous locations designation;
- date code or equivalent;
- "THERMALLY PROTECTED" or "TP" and "PROTECTION THERMIQUE INHERENTE" or "PT", where applicable;
- "CAUTION - OPEN ALL CIRCUITS BEFORE REMOVING COVER" on terminal box;
- additional markings as may be required by the applicable Standards for specific models or usages;
- CSA Monogram.

**NOTE:**

The CSA Certification mark on a motor applies to the motor only, not to the driven equipment. Both the motor and the generator of a set, provided with a common base, bear the CSA Mark if the set is Certified.

The marking method consists of a data plate or plates or equally permanent marking applied at the factory.

/mkc

<p><b>CSA Group Web Sites</b></p> <p>CSA Group Bayern GmbH</p> <p>CSA Group Seattle</p> <p>CSA Group Testing UK Ltd.</p> <p>CSA Group UK – Transportation</p> <p>ICM GmbH</p>	<p><b>CSA Group Sites</b></p> <p>CSA Communities</p> <p>CSA Registries</p> <p>OHS Portal</p> <p>Public Review</p> <p>Shop CSA</p> <p>CSA Group Videos</p>	<p><b>Information For...</b></p> <p>Manufacturers</p> <p>Members</p> <p>Government, Regulators &amp; AHJs</p> <p>Retailers / Importers / Exporters</p> <p>Consumers</p>	<p><b>Corporate</b></p> <p>Privacy</p> <p>Terms of Use</p> <p>Service Agreement</p> <p>CSA Product Certification Scheme</p> <p>Evidence of Insurance</p> <p>OHS Corporate Policy</p> <p>Environment Corporate Policy</p>	<p><b>About CSA Group</b></p> <p>CSA Group is an independent, not-for-profit member-based association dedicated to advancing safety, sustainability and social good. We are an internationally-accredited standards development and testing &amp; certification organization. We also provide consumer product evaluation and education &amp; training services. Our broad range of knowledge and expertise includes: industrial equipment, plumbing &amp; construction, electro-medical &amp; healthcare, appliances &amp; gas, alternative energy, lighting and sustainability. The CSA mark appears on billions of products around the world.</p>
---	---	---	--	--


[HOME](#)
[ABOUT](#)
[SERVICES](#)
[INDUSTRIES](#)
[SHOP CSA](#)

## Certificate Record

### Quick Links

[Certification and Labels](#)
[Certified Product Listing](#)
[CSA Comm](#)
[Request a](#)

Customer	Class	File Number
Shanghai Top Motor Co., Ltd. No. 303 Kangliu Road, Kangqiao Industrial Area Nanhui Shanghai China 201315	4228-01 MOTORS AND GENERATORS-For Hazardous Locations	224693

### Class I, Div. 2, Groups A, B, C and D, Temperature coded: T4A,T3C,T2C or T2B (Where applicable)

Three-phase squirrel cage induction motors, TXA, TXC, TFA and TFC Series, NEMA frames 143T to 447T, TEFC, rated 200 HP max, 575 V max, 60 Hz, continuous duty, Class F insulation, 40°C ambient temperature.

Notes: a) S.F. 1.25 for frame sizes 143T to 256T

b) S.F. 1.15 for frame sizes 284T to 447T

c) Refer to Table 1 for temperature code

Table 1

Frame size	Max HP			Sinusoidal	
	2 pole	4 pole	6 pole	SF 1.15	S.F 1.25
143T/145T	2 HP	2 HP	1 HP	--	T4A
182T/184T	5 HP	5 HP	2 HP	--	T3C
213T/215T	10 HP	10 HP	5 HP	--	T3C
254T/256T	20 HP	20 HP	10 HP	--	T2C
284T/286T	30 HP	30 HP	20 HP	T2B	--
324TS/326TS	50 HP	50 HP	30 HP	T2B	--

364TS/365TS	75 HP	75 HP	50 HP	T2C	--
405T	100 HP	100 HP	75 HP	T2B	--
444T/445T	150 HP	150 HP	125 HP	T2B	--
447T	200 HP	200 HP	150 HP	T2B	--

/rm

<p><b>CSA Group Web Sites</b></p> <p>CSA Group Bayern GmbH</p> <p>CSA Group Seattle</p> <p>CSA Group Testing UK Ltd.</p> <p>CSA Group UK – Transportation</p> <p>ICM GmbH</p>	<p><b>CSA Group Sites</b></p> <p>CSA Communities</p> <p>CSA Registries</p> <p>OHS Portal</p> <p>Public Review</p> <p>Shop CSA</p> <p>CSA Group Videos</p>	<p><b>Information For...</b></p> <p>Manufacturers</p> <p>Members</p> <p>Government, Regulators &amp; AHJs</p> <p>Retailers / Importers / Exporters</p> <p>Consumers</p>	<p><b>Corporate</b></p> <p>Privacy</p> <p>Terms of Use</p> <p>Service Agreement</p> <p>CSA Product Certification Scheme</p> <p>Evidence of Insurance</p> <p>OHS Corporate Policy</p> <p>Environment Corporate Policy</p>	<p><b>About CSA Group</b></p> <p>CSA Group is an independent, not-for-profit member-based association dedicated to advancing safety, sustainability and social good. We are an internationally-accredited standards development and testing &amp; certification organization. We also provide consumer product evaluation and education &amp; training services. Our broad range of knowledge and expertise includes: industrial equipment, plumbing &amp; construction, electro-medical &amp; healthcare, appliances &amp; gas, alternative energy, lighting and sustainability. The CSA mark appears on billions of products around the world.</p>
---	---	---	--	--



Copyright © 2016 - CSA Group. All Rights Reserved.  
[Contact Us](#) | [Site Map](#) | [Accessibility](#)