## **Draft Regulations**

#### **Draft Regulation**

An Act respecting energy efficiency and innovation (chapter E-1.3)

# **Energy efficiency of electrical or hydrocarbon-fuelled appliances**

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation respecting the energy efficiency of electrical or hydrocarbon-fuelled appliances, appearing below, may be made by the Government on the expiry of 45 days following this publication.

The draft Regulation harmonizes Québec's regulatory requirements with those of its main commercial partners, both as regards the categories of appliances covered and minimum requirements on energy performance.

The draft Regulation will lower interprovincial economic barriers, foster internal trade and produce major energy savings. For individuals, the purchase of appliances with improved energy performance may result in additional costs. The costs are however paid off by the savings from the lower energy consumption of the appliances over their useful life. For Québec manufacturers producing the appliances covered by the draft Regulation, there is no direct cost since the requirements included in the draft Regulation are based on the regulatory requirements of Canada and Ontario, which the enterprises must already comply with given that they export their products mostly to Ontario.

Further information on the draft Regulation may be obtained by contacting Jean-Philippe Gamache, Direction des secteurs résidentiel, institutionnel et des affaires, Bureau de l'efficacité et de l'innovation énergétiques, Ministère de l'Énergie et des Ressources naturelles, 5700, 4eAvenue Ouest, bureau B 406, Québec (Québec) G1H 6R1; fax: 418 643-5828, telephone: 418 627-6379, extension 8027; email: jean-philippe.gamache@mern.gouv.qc.ca

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 45-day period to Luce Asselin, Associate Deputy Minister for Energy, Ministère de l'Énergie et des Ressources naturelles, 5700, 4° Avenue Ouest, bureau A 407, Québec (Québec) G1H 6R1.

PIERRE ARCAND, Minister of Energy and Natural Resources

# Regulation respecting the energy efficiency of electrical or hydrocarbon-fuelled appliances

An Act respecting energy efficiency and innovation (chapter E-1.3, ss. 21, 22, 23 and 26)

**1.** An appliance listed in Schedule 1, whose manufacturing ends during the period determined in that Schedule, must comply with the energy efficiency standard and the energy performance requirement provided for each appliance in Schedule 1.

The compliance of an appliance is tested and verified according to the applicable test procedure provided for in the energy efficiency standard specified in Schedule 1 and according to any specification in Schedule 1.

Where a standard listed in Schedule 1 states that it is based on or harmonized with another standard, the test procedure of the latter standard may be used to test and verify the compliance of the appliance.

- **2.** A reference to an energy efficiency standard is a reference to the version listed in Schedule 1, including all subsequent modifications made to the standard.
- **3.** An appliance listed in Schedule 1 must be provided with an energy efficiency verification mark issued by a certification body accredited by the Standards Council of Canada, in the energy efficiency verification field. The energy efficiency verification mark certifies that the appliance has been tested and its energy performance has been verified.

In the case of a general service fluorescent lamp, a general service incandescent reflector lamp or a general service lamp, the energy verification mark may be affixed on the exterior of their package.

**4.** An appliance listed in Schedule 1 must be provided with at least one permanent label bearing its model number and its date of manufacturing or bearing a code identifying that date.

Where, for the purposes of section 24 of the Act respecting energy efficiency and innovation (chapter E-1.3), the Minister permits a manufacturer to apply to an appliance or a category of appliances energy efficiency standards different from those set out in Schedule 1, the appliance must be provided with a permanent label obtained from the Minister certifying that it meets Québec's energy performance requirement.

- **5.** A label or a mark provided for in sections 3 and 4 must be affixed so that it is easily located and read without having to disassemble a part of the appliance.
- **6.** The special stamp that an inspector may affix in the cases referred to in section 32 of the Act respecting energy efficiency and innovation (chapter E-1.3) is a red-coloured self-adhesive stamp containing a text indicating that the appliance cannot be marketed in Québec and the amount of the fines applicable if the stamp is removed. The stamp must be affixed on the exterior of an appliance package.
- **7.** A manufacturer of appliances listed in Schedule 1 keeps up to date a register containing at least
- (1) the name of the certification body referred to in section 3;
- (2) the number of the appliance energy performance verification file:
- (3) all information allowing to show the compliance of the appliance with the applicable energy efficiency standard and the energy performance requirement according to the test procedure provided for in the energy efficiency standard specified in Schedule 1.
- **8.** Attestations of the verification of the energy performance of appliances issued by the Canadian Standards Association, Warnock Hersey Professional Services Ltd., Underwriters Laboratories Inc. and the Canadian Gas Association before (*insert the date of coming into force of this Regulation*) in accordance with the Regulation respecting the energy efficiency of electrical or hydrocarbon-fuelled appliances (chapter E-1.2, r. 1), retain their full validity under this Regulation.
- **9.** This Regulation replaces the Regulation respecting the energy efficiency of electrical or hydrocarbon-fuelled appliances (chapter E-1.2, r. 1).
- **10.** This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette* officielle du Québec.

## **SCHEDULE 1** (ss. 1, 2, 3, 4 and 7)

The following abbreviations are used in this Schedule:

AC: Alternative current;

AFUE: Annual fuel utilization efficiency;

AHRI: Air-Conditioning, Heating, and Refrigeration Institute;

ANSI: American National Standards Institute;

ASHRAE: American Society of Heating, Refrigerating, and Air-Conditioning Engineers;

AV: Adjusted volume in litres;
BLE: Ballast luminous efficiency;
Cap: Cooling capacity;
CGT: Correlated colour temperate

CCT: Correlated colour temperature;
CEER: Combined energy efficiency ratio;

CEI: International Electrotechnical Commission;

COP: Coefficient of performance;

COPc: Coefficient of performance for cooling;
COPh: Coefficient of performance for heating;
Cr: Daily water removal capacity in L/d;
CRI: Colour rendering index;
CSA: Canadian Standards Association;

Eannual: Annual energy consumption or calculated annual energy consumption in

kWh/v:

Edaily: Daily energy consumption or calculated daily energy consumption in kWh/d;

EER: Energy efficiency ratio;
EF: Efficiency factor;
Hm: Daily production cabability in kg/d;
HSPF: Heating seasonal performance factor;
IFFR: Integrated energy efficiency ratio;

HSPF: Heating seasonal performance factor
IEER: Integrated energy efficiency ratio;
IES: Illuminating Engineering Society;
IPLV: Integrated part-load value;

ITE: Institute of Transportation Engineers; LE: Average lamp efficacy in Im/W;

LED: Light-emitting diode;

NEMA: National Electrical Manufacturers Association;

P: Rated wattage in watts;

PTAC: Packaged terminal air conditioner; PTHP: Packaged terminal heat pump; SEER: Seasonal energy efficiency ratio;

SL: Standby loss in watts;
TDA: Total display area;
TE: Thermal efficiency;
Vf: Freezer volume in litres;
Vr: Refrigerator volume in litres.

Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
Category 1: Domestic	water heaters		
1. Water heater			
1. Natural gas or propane-fired water heater with a capacity of 76 L (20 US gallons) or more and of 380 L (100 US gallons) or less and an input rating of 22 kW (75,000 Btu/h) or less. Units designed for combination space and water heating applications are	for Measuring Energy Consumption and Determining Efficiencies of Gas-Fired Storage Water Heaters	EF ≥ 0.7 – 0.0005 × Vn	As of the coming interfered force of the Regulation
excluded.  2. Oil-fired water heater with a capacity of 190 L (50 US gallons) or less and with an input rating of 30.5 kW (105,000 Btu/h) or less. Units designed for combination space and	Efficiency of Oil-Fired Storage Tank Water Heaters	EF ≥ 0.59 – 0.0005 × Vn  EF ≥ 0.68 – 0.0005 × Vn	As of the coming interfered force of the Regulation to 31 December 2017  From 1 Januar 2018
applications are excluded.  3. Electric storage tank		Tank with bottom inlet	As of the
water heater with a capacity of 50 L (13 US gallons) or more and of 454 L (120 US gallons) or less and with an input	Performance of electric storage tank water heaters for domestic hot water service	Vn ≥ 50 L and ≤ 270 L: SL ≤ 0.2 × Vn + 40  Vn > 270 L and ≤ 454 L: SL ≤ 0.472 × Vn − 33.5  Tank with top inlet	coming into force of the Regulation
rating of 12 kW or less. Units designed for combination space and water heating		Vn ≥ 50 L and < 160 L: SL ≤ 0.2 × Vn + 35  Vn ≥ 160 L and < 270 L: SL ≤ 0.2 × Vn + 25	
applications are excluded.		Vn ≥ 270 L and ≤ 290 L: SL ≤ 0.472 × Vn − 48.5 Vn > 290 L and ≤ 454 L: SL ≤ 0.472 × Vn − 38.5	
Category 2: Heating or	air-conditioning appliances		
1. Gas-fired unit heater	rs		
1. Gas-fired unit heater, automatically controlled, vented, that distributes warmed air without the use of ducts and whose capacity is 2,931 kW (10,000,000 Btu/h) or less, mounted or suspended from the ceiling.	method for measuring efficiency and energy consumption of gas-fired unit	·	As of the coming interfere of the Regulation

2. Boilers				
All boilers covered by the definitions below	N/A	All boilers must have an automatic water temperature adjustment device that adjusts the temperature of the water supplied by the boiler to ensure that an incremental change in inferred heat load produces a corresponding incremental change in the temperature of the water supplied. For boilers that fire at a single power, the requirement is met if the device automatically allows the burner or heating element to fire only when the device has determined that the inferred heat load cannot be met by the residual heat of the water in the system.  For hot water boilers with no inferred heat load, the device must limit the water temperature in the boiler to not more than 60°C.  A boiler must be operated only when the device is installed.	As of coming force of Regulation	the into the
2. Natural gas or propane boiler designed to be connected to a low pressure steam or hot water central heating system equipped or not with tankless domestic water heating coils and with a heat input of less than 88 kW (300,000 Btu/h). Units designed for combination space and water heating applications are excluded.	CAN/CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gasfired or oil-fired furnaces and boilers	with a continuously burning pilot light	coming force of Regulation	the into the
operates using oil or another hydrocarbon and with a heat input of 88 kW (300,000 Btu/h) or less. Units designed for combination space and water heating applications are excluded.	ANSI/ASHRAE 103-2007, Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers	Steam: AFUE ≥ 82%	As of coming force of Regulation	the into the
4. Electric boiler designed to be connected to a hot water central heating system with a heat input of less than 88 kW (300,000 Btu/h) and that is not equipped with tankless domestic water heating coils.	N/A	N/A	As of coming force of Regulation	the into the

3. Central air condition	ers and heat pumps (split-sy	stem or single-package)		
central air conditioner or heat pump, that uses	split-system and single- package air conditioners and	SEER ≥ 14, HSPF region V ≥ 7 and power consumption in off mode ≤ 30 W for an air conditioner or ≤ 33 W for a heat pump	As of coming force of Regulation	the into the
2. Space constrained split-system or single package air conditioner or heat pump, that uses	Performance standard for split-system and single-	SEER ≥ 12, HSPF region V ≥ 6.4 and power consumption in off mode ≤ 30 W for an air conditioner or ≤ 33 W for a heat pump	As of coming force of Regulation	the into the
3. Split-system central	Performance standard for	SEER ≥ 13 and power consumption in off mode ≤ 30 W	As of coming force of Regulation	the into the
4. Split-system heat pump, other than a small-duct and high-velocity heat pump or a heat pump for constrained spaces, that uses single-phase electric current, with a cooling capacity of less than 19 kW (65,000 Btu/h).		SEER $\geq$ 14, HSPF region V $\geq$ 7.1 and power consumption in off mode $\leq$ 33 W	As of coming force of Regulation	the into the
5. Split-system central air conditioner or heat pump, small-duct and high-velocity, that uses	Performance standard for split-system and single-	SEER ≥ 12, HSPF region V ≥ 6.3 and power consumption in off mode ≤ 30 W	As of coming force of Regulation	the into the
6. Central air		SEER ≥ 13 and HSPF region V ≥ 6.7	As of coming force of Regulation	the into the
4. Large air conditione	rs and heat pumps			
Large commercial or industrial unitary airconditioner, air-cooled, without a heating	CAN/CSA C746-06, Performance standard for rating large and single	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11.2 and IEER ≥ 11.4 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW	As of coming force of Regulation	the into the
	packaged vertical air conditioners and heat pumps	(240,000 Btu/h): EER ≥ 11 and IEER ≥ 11.2		

2. Large commercial or industrial unitary airconditioner, air-cooled, with a heating section other than an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps For IEER: ANSI/AHRI 340/360-2007, Performance Rating of	IEER ≥ 9.8  Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11 and IEER ≥ 11.2  Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 10.8 and IEER ≥ 11  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 9.8 and IEER ≥ 9.9  Cap ≥ 223 kW (760,000 Btu/h): EER ≥ 9.5 and	As of coming force of Regulation	the into the
3. Large commercial or industrial unitary air-conditioner, water-cooled, without a heating section or with an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single	(240,000 Btu/h): EER ≥ 12.5 and IEER ≥ 11.2  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 12.4 and IEER ≥ 11.1  Cap ≥ 223 kW (760,000 Btu/h): EER ≥ 11 and	As of coming force of Regulation	the into the
Large commercial or industrial unitary air-conditioner, water-cooled, with a heating section other than an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	(240,000 Btu/h): EER ≥ 12.3 and IEER ≥ 11  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 12.2 and IEER ≥ 10.9	As of coming force of Regulation	the into the
5. Large commercial or industrial unitary air-conditioner, evaporation-cooled, without a heating section or with an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps For IEER:	Cap = 40 KW (100,000 Blant) and 170 KW	As of coming force of Regulation	the into the
	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps For IEER:	(240,000 Btu/h): EER ≥ 11.8 and IEER ≥ 11  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 11.7 and IEER ≥ 10.9	As of coming force of Regulation	the into the

	Unitary Air-Conditioning and Heat Pump Equipment			
7. Large commercial or industrial variable flow unitary air-conditioner, water-cooled or evaporation-cooled, without a heating section or with an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps For IEER:	(240,000 Btu/h): EER ≥ 11 and IEER ≥ 11.2  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 11 and IEER ≥ 11.1  Cap ≥ 223 kW (760,000 Btu/h): EER ≥ 11 and	As of coming force of Regulation	the into the
Large commercial or industrial variable flow unitary air-conditioner, water-cooled or evaporation-cooled, with a heating section other than an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	(240,000 Btu/h): EER ≥ 10.8 and IEER ≥ 11  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 10.8 and IEER ≥ 10.9  Cap ≥ 223 kW (760,000 Btu/h): EER ≥ 10.8 and	As of coming force of Regulation	the into the
Large commercial or industrial unitary heat pump, air-cooled, without a heating section or with an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single	Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 10.6, IEER ≥ 10.7, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 9.5, IEER ≥ 9.6, COP at		the into the
10. Large commercial or industrial unitary heat pump, air-cooled, with a heating section other than an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps For IEER: ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial	(= 10,000 = 10)	As of coming force of Regulation	the into the
11. Large commercial or industrial unitary heat pump, water-cooled, without a heating section or with an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 12.1, IEER ≥ 11.2, COP at $8.3^{\circ}$ C ≥ 3.3 and COP at $-8.3^{\circ}$ C ≥ 2.25 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 12.5, IEER ≥ 10.7, COP at $8.3^{\circ}$ C ≥ 3.2 and COP at $-8.3^{\circ}$ C ≥ 2.05	As of coming force of Regulation	the into the

	ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment			
12. Large commercial or industrial unitary heat pump, water-cooled, with a heating section other than an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 12.3, IEER ≥ 10.5, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 12.2, IEER ≥ 9.4, COP	As of coming force of Regulation	the into the
13. Large commercial or industrial unitary heat pump, evaporation-cooled, without a heating section or with an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	(760,000 Btu/h): EER ≥ 11.9, IEER ≥ 9.6, COP	As of coming force of Regulation	the into the
14. Large commercial or industrial unitary heat pump, evaporation-cooled, with a heating section other than an electric heating section. Variable flow units are excluded.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 11.8, IEER ≥ 10.5, COP at 8.3°C ≥ 3.2 and COP at - 8.3°C ≥ 2.05  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 11.7, IEER ≥ 9.4, COP	As of coming force of Regulation	the into the
15. Large commercial or industrial variable flow unitary heat pump, water-cooled, without a heating section or with an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps For IEER: ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial	Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 10.6, IEER ≥ 10.7, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05  Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW		the into the

		PARTI		
		Cap ≥ 223 kW (760,000 Btu/h): EER ≥ 9.5, IEER ≥ 9.6, COP at $8.3^{\circ}$ C ≥ 3.2 and COP at $-8.3^{\circ}$ C ≥ 2.05		
16. Large commercial or industrial variable flow unitary heat pump, water-cooled, with a heating section other	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air	Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW	As of coming force of Regulation	the into the
than an electric heating section.	conditioners and heat pumps For IEER: ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment	(760,000 Btu/h): EER ≥ 9.8, IEER ≥ 9.4, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05		
		Cap $\ge$ 223 kW (760,000 Btu/h): EER $\ge$ 9.3, IEER $\ge$ 9.4, COP at $8.3^{\circ}$ C $\ge$ 3.2 and COP at $-8.3^{\circ}$ C $\ge$ 2.05		
17. Large commercial or industrial variable flow unitary heat pump, evaporation-cooled, without a heating section or with an electric heating section.	CAN/CSA C746-06, Performance standard for rating large and single	Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW		the into the
	Performance Rating of Commercial and Industrial	(760,000 Btu/h): EER ≥ 9.5, IEER ≥ 9.6, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05		
		Cap ≥ 223 kW (760,000 Btu/h): EER ≥ 9.5, IEER ≥ 9.6, COP at $8.3^{\circ}$ C ≥ 3.2 and COP at $-8.3^{\circ}$ C ≥ 2.05		
18. Large commercial or industrial variable flow unitary heat pump, evaporation-cooled,	CAN/CSA C746-06, Performance standard for rating large and single	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 10.8, IEER ≥ 11, COP at 8.3°C ≥ 3.3 and COP at -8.3°C ≥ 2.25	As of coming force of Regulation	the into the
with a heating section other than an electric heating section.	conditioners and heat pumps For IEER: ANSI/AHRI 340/360-2007,	at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05		
	Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment	(760,000 Btu/h): EER $\geq$ 9.3, IEER $\geq$ 9.4, COP at 8.3°C $\geq$ 3.2 and COP at -8.3°C $\geq$ 2.05		
		Cap $\ge$ 223 kW (760,000 Btw/h): EER $\ge$ 9.3, IEER $\ge$ 9.4, COP at $8.3^{\circ}$ C $\ge$ 3.2 and COP at $-8.3^{\circ}$ C $\ge$ 2.05		
5. Room air conditione	rs			
air conditioner that has a cooling capacity of	performance of room air	With louvred sides, without reverse cycle Cap < 1.75 kW (6,000 Btu/h): CEER ≥ 11	As of 1 Janu 2017	uary
10.55 kW (36,000 Btu/h) or less, except a packaged terminal air conditioner.		Cap ≥ 1.75 kW (6,000 Btu/h) and < 2.33 kW (8,000 Btu/h): CEER ≥ 11  Cap ≥ 2.33 kW (8,000 Btu/h) and < 4.08 kW		
Portable air conditioners are excluded.		(14,000 Btu/h): CEER ≥ 10.9 Cap ≥ 4.08 kW (14,000 Btu/h) and < 5.83 kW		
		(20,000 Btu/h): CEER ≥ 10.7  Cap ≥ 5.83 kW (20,000 Btu/h) and < 8.17 kW		
		(28,000 Btu/h): CEER ≥ 9.4		

		Cap ≥ 8.17 kW (28,000 Btu/h): CEER ≥ 9		
		With louvred sides, with reverse cycle		
		Cap < 8.17 kW (20,000 Btu/h): CEER ≥ 9.8		
		Cap ≥ 8.17 kW (20,000 Btu/h): CEER ≥ 9.3		
		Without louvred sides, without reverse cycle		
		Cap < 1.75 kW (6,000 Btu/h): CEER ≥ 10		
		Cap ≥ 1.75 kW (6,000 Btu/h) and < 2.33 kW (8,000 Btu/h): CEER ≥ 10		
		Cap ≥ 2,33 kW (8,000 Btu/h) and < 3.21 kW (11,000 Btu/h): CEER ≥ 9.6		
		Cap ≥ 3.21 kW (11,000 Btu/h) and < 4.08 kW (14,000 Btu/h): CEER ≥ 9.5		
		Cap $\geq$ 4.08 kW (14,000 Btu/h) and < 8.17 kW (20,000 Btu/h): CEER $\geq$ 9.3		
		Cap ≥ 8.17 kW (20,000 Btu/h): CEER ≥ 9.4		
		Without louvred sides, with reverse cycle Cap < 4.08 kW (14,000 Btu/h): CEER ≥ 9.3		
		Cap ≥ 4.08 kW (14,000 Btu/h): CEER ≥ 8.7		
		Unit for casement window only: CEER ≥ 9.5		
		Unit for casement or sliding window: CEER ≥ 10.4		
6. Packaged terminal a	ir conditioners and heat num			
or a domagou tommune	ir conditioners and neat pun	ips		
	AHRI 310/380-2004	PTAC: standard size	As of	the
Factory-built packaged terminal air	AHRI 310/380-2004 CAN/CSA C744-14, Standard	•	coming	into
Factory-built packaged terminal air conditioner or heat	AHRI 310/380-2004	PTAC: standard size Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7	coming force of	
Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap /	coming	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)	coming force of	into
Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap /	coming force of	into
Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone,	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.9 – (0.213 × Cap /	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling components and that is intended to heat and	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h): and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h): and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.9 – (0.213 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 7.7  PTHP: standard size	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling components and that is intended to heat and cool a single room or	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.9 – (0.213 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 7.7	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling components and that is intended to heat and cool a single room or	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.9 – (0.213 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 7.7  PTHP: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.9 and	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling components and that is intended to heat and cool a single room or	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.9 – (0.213 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 7.7  PTHP : standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.9 and COP ≥ 3.3  Cap ≥ 2,030 W (7,000 Btu/h): EER ≥ 11.9 and COP ≥ 3.3	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling components and that is intended to heat and cool a single room or	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h): and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h): and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.9 – (0.213 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 7.7  PTHP: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.9 and COP ≥ 3.3  Cap ≥ 2,030 W (7,000 Btu/h): EER ≥ 11.9 and COP ≥ 3.3  Cap ≥ 4,390 W (7,000 Btu/h): EER ≥ 14.0 – (0.300 × Cap / 293.1) and COP ≥ 3.7 – (0.052 × Cap)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.5 and COP ≥ 2.9  PTHP: non-standard size	coming force of	into
1. Factory-built packaged terminal air conditioner or heat pump that, as the case may be, consists of a wall sleeve and a separate unencased cooling component and that is intended to cool a single room or zone, or that consists of a wall sleeve and a separate unencased combination of heating and cooling components and that is intended to heat and cool a single room or	AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-	PTAC: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.7  Cap ≥ 2,030 W (7,000 Btu/h): and ≤ 4,390 W (15,000 Btu/h): EER ≥ 13.8 – (0.300 × Cap / 293.1)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.3  PTAC: non-standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h): EER ≥ 9.4  Cap ≥ 2,030 W (7,000 Btu/h): EER ≥ 7.7  PTHP: standard size  Cap < 2,030 W (7,000 Btu/h): EER ≥ 11.9 and COP ≥ 3.3  Cap ≥ 2,030 W (7,000 Btu/h): EER ≥ 11.9 and COP ≥ 3.3  Cap ≥ 2,030 W (7,000 Btu/h): A,390 W (15,000 Btu/h): EER ≥ 14.0 – (0.300 × Cap / 293.1) and COP ≥ 3.7 – (0.052 × Cap)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 9.5 and COP ≥ 2.9	coming force of	into

	I			
		Cap ≥ 2,030 W (7,000 Btu/h) and ≤ 4,390 W (15,000 Btu/h): EER ≥ 10.8 – (0.213 × Cap) and COP ≥ 2.9 – (0.026 × Cap)  Cap > 4,390 W (15,000 Btu/h): EER ≥ 7.6 and COP ≥ 2.5		
7. Single packaged ver	tical air conditioners and hea	nt pumps		
Single packaged commercial air conditioner or heat pump, that is air-cooled, encased, with or without heating capability but not a heat pump, the major components of which are arranged vertically and that is intended for mounting through, or on either side of, an exterior wall.	rating large and single	Cap < 19 kW (65,000 Btu/h): EER ≥ 9 and COP ≥ 3    Cap ≥ 19 kW (65,000 Btu/h) and < 39.5 kW (135,000 Btu/h): EER ≥ 8.9 and COP ≥ 3    Cap ≥ 39.5 kW (135,000 Btu/h): EER ≥ 8.6 and COP ≥ 2.9	As of coming force of Regulation	the into the
8. Internal water loop h	neat pumps			
Water source heat pump that is a factory- built single package or a split-system matching assembly, intended for installation in an internal water loop system and whose cooling or heating capacity is less than 40 kW (135,000 Btu/h).	Testing and rating for performance — Part 1: Water-	Cap < 5 kW: COPc $\geq$ 3.28 for an input water temperature of 30°C and COPh $\geq$ 4.2 for an input water temperature of 20°C  Cap $\geq$ 5 and < 40 kW: COPc $\geq$ 3.52 for an input water temperature of 30°C and COPh $\geq$ 4.2 for an input water temperature of 20°C	As of coming force of Regulation	the into the
9. Ground-source heat	pumps			
1. Ground-source heat pump that is a factory-built single package or a split-system matching assembly, that has a cooling or heating capacity of less than 40 kW (135,000 Btu/h) and is intended for application in an open or closed-loop ground-source system.	Water-source heat pumps — Testing and rating for performance — Part 1: Water- to-air and brine-to-air heat	Open-loop: cooling COP $\geq$ 4.74 for an input water temperature of 15°C and heating COP $\geq$ 3.6 for an input water temperature of 10°C Closed-loop: cooling COP $\geq$ 3.93 for an input water temperature of 25°C and heating COP $\geq$ 3.1 for an input water temperature of 0°C	As of coming force of Regulation	the into the
10. Furnaces				
propane furnace, that uses single-phase electric current and that	method for measuring the annual fuel utilization efficiency of residential gas-	Furnaces for mobile homes or recreational vehicles that are not equipped with an integrated cooling component: AFUE ≥ 80%  Furnaces for mobile homes or recreational vehicles that are equipped with an integrated cooling component: AFUE ≥ 81%		the into the
Natural gas or propane furnace, that uses three-phase	2012, Gas-fired central	For all other furnaces: AFUE ≥ 92%  AFUE ≥ 78% or TE ≥ 80%	As of coming	the into

			,	
electric current and that			force of	the
has an input rate of 65.92 kW			Regulation	
(225,000 Btu/h) or less,				
but does not include a				
furnace for a mobile				
home or a recreational				
vehicle.	AND 704 47 049 CCA 2 2	Furnaces for makile hames or represtigned	As of	4b.o
<ol><li>Gas furnace that has an input rate of more</li></ol>		Furnaces for mobile homes or recreational vehicles: TE ≥ 76% and must not be equipped	As of coming	the into
	furnaces	with a continuously burning pilot light	force of	the
(225,000 Btu/h) and not		, , ,	Regulation	
more than 117.23 kW		For all other furnaces: TE ≥ 80% and must not be		
(400,000 Btu/h).		equipped with a continuously burning pilot light		
4. Oil furnace that has	CAN/CSA P.2-13, Testing	Furnaces for mobile homes or recreational	As of	the
	method for measuring the	vehicles: AFUE ≥ 75%	coming	into
65.92 kW	annual fuel utilization		force of	the
	efficiency of residential gas- fired or oil-fired furnaces and		Regulation	
with oil or oil with		vehicles: AFUE ≥ 78%		
another hydrocarbon.				
		Non-weatherized furnaces that are not designed		
		for mobile homes or recreational		
		vehicles: AFUE ≥ 83%		
		For all non-weatherized furnaces: the maximum		
		electrical consumption in a standby or an off		
		mode must be less than 11 W		
		<u> </u>		
11. Condensing units				
Large commercial or	CAN/CSA C746-06,	Air-cooled: EER ≥ 10.1	As of	the
	Performance standard for	\\/-t	coming	into
	rating large and single	Water-cooled or evaporation- cooled: EER ≥ 13.1	force of	the
conditioning applications with a	packaged vertical air conditioners and heat pumps	0001cu. EETT = 10.1	Regulation	
cooling capacity of	conditioners and near pumps			
19 kW (65,000 Btu/h)				
or more and of 70 kW				
(240,000 Btu/h) or less.				
12. Chillers				
Machine designed to	CAN/CSA C743-09,	Vapour compression	As of 1 Jan	uary
	Performance Standard for	Air-cooled with or without a condenser,	2017	
	rating packaged water chillers	capacity < 528 kW, type A: COP ≥ 2.802 and		
remove heat from a liquid, usually water,		IPLV ≥ 3.664		
that rejects that heat to		Air-cooled with or without a condenser,		
a cooling medium,		capacity ≥ 528 kW, type A: COP ≥ 2.802 and		
usually air or water, and		IPLV ≥ 3.737		
the refrigerant condenser of which		Water alternating type A type B		
may, or may not be, an		Water, alternating, type A, type B  All water-cooled appliances, reciprocating,		
integral part of the		type A, type B, must meet the energy		
machine.		performance requirements for water-cooled		
		appliances, rotary screw or scroll		
		Water-cooled, rotary screw, scroll, capacity		
		< 264 kW, type A: COP ≥ 4.509 and IPLV ≥ 5.582		
		Water-cooled, rotary screw, scroll, capacity		
		< 264 kW, type B: COP ≥ 4.396 and IPLV ≥ 5.861		
		Water-cooled, rotary screw, scroll, capacity ≥ 264 and < 528 kW, type A: COP ≥ 4.538 and		
		IPLV ≥ 5.718		

	T	T.		
		Water-cooled, rotary screw, scroll, capacity ≥ 264 and < 528 kW, type B: COP ≥ 4.452 and IPLV ≥ 6.001		
		Water-cooled, rotary screw, scroll, capacity $\geq$ 528 and < 1,055 kW, type A: COP $\geq$ 5.172 and IPLV $\geq$ 6.063		
		Water-cooled, rotary screw, scroll, capacity $\geq$ 528 and < 1,055 kW, type B: COP $\geq$ 4.898 and IPLV $\geq$ 6.513		
		Water-cooled, rotary screw, scroll, capacity $\geq$ 1,055 kW, type A: COP $\geq$ 5.672 and IPLV $\geq$ 6.513		
		Water-cooled, rotary screw, scroll, capacity ≥ 1,055 kW, type B: COP ≥ 5.504 and IPLV ≥ 7.177		
		Water-cooled, centrifugal, capacity < 264 kW, type A: COP ≥ 5.547 and IPLV ≥ 5.901		
		Water-cooled, centrifugal, capacity < 264 kW, type B: COP ≥ 5.504 and IPLV ≥ 7.815		
		Water-cooled, centrifugal, capacity $\geq$ 264 and < 528 kW, type A: COP $\geq$ 5.547 and IPLV $\geq$ 5.901		
		Water-cooled, centrifugal, capacity $\geq$ 264 and < 528 kW, type B: COP $\geq$ 5.504 and IPLV $\geq$ 7.815		
		Water-cooled, centrifugal, capacity $\geq$ 528 and < 1,055 kW, type A: COP $\geq$ 6.1 and IPLV $\geq$ 6.401		
		Water-cooled, centrifugal, capacity $\geq$ 528 and < 1,055 kW, type B: COP $\geq$ 5.856 and IPLV $\geq$ 8.792		
		Water-cooled, centrifugal, capacity $\geq$ 1,055 kW, type A: COP $\geq$ 6.170 and IPLV $\geq$ 6.525		
		Water-cooled, centrifugal, capacity ≥ 1,055 kW, type B: COP ≥ 5.961 and IPLV ≥ 8.792		
		Absorption       Single-effect, type A: COP ≥ 0.6   all capacities, type A: COP ≥ 0.6		
		Single-effect, air-cooled, all capacities, type A: COP ≥ 0.7		
		Double-effect absorption, indirect-fired, all capacities, type A: COP ≥ 1 and IPLV ≥ 1.05		
		Double-effect absorption, direct-fired, all capacities, type A: COP ≥ 1 and IPLV ≥ 1		
13. Thermostats				
switching of a controlled	Performance requirements for thermostats used with		coming force of	the into the
	individual room electric space heating devices. For the duty			

Thermostats used exclusively with radiant floors are excluded.  14. Ceiling fans  1. Residential, industrial or commercial suspended or hugger ceiling fan designed to	the test room must be within 0.5°C of the original setpoint temperature of 22°C of the thermostat for a duty cycle of 50%  CAN/CSA C814-10, Energy performance of ceiling fans The service value must be measured in accordance with	thermostats: differential ≤ 0.5°C  All ceiling fan light kits and ceiling fans with integrated lights that have a total electrical power of 10 W or higher must be equipped with an electrical device or other limiting device, so that	coming force of	the into the
be connected to supply circuits not exceeding 250 V.	the procedure in Chapter 5 of CAN/CSA C814-96, Energy Performance of Ceiling Fans	the lighting cannot operate with bulbs consuming more than a total of 190 W.  For a household fan: service value ≥ 30 L/s/W  For an industrial or commercial fan: service value ≥ 35 L/s/W		
Category 3 : Lighting ι	ınits			
1. Fluorescent lamp ba	illasts			
For all ballasts covered by the definitions below.		a power factor of at least 90%. In the case of	coming force of	the into the
	N/A	BLE $\geq$ A / (1 + B × total lamp arc power (-C)) where A, B and C correspond to:		
2. Instant-start and rapid-start ballast (other than residential ballasts) designed to operate lamps commonly referred to as: (a) 1,200 mm medium bipin lamps, (b) 600 mm U-shaped lamps or (c) 2,400 mm slimline lamps (class 1).	Fluorescent lamp ballast efficacy measurements	277 V: A = 0.993, B = 0.47 and C = 0.25 347 V: A = 0.963, B = 0.27 and C = 0.25	As of coming force of Regulation	the into the
3. Programmed-start ballast (other than residential ballasts) designed to operate lamps commonly referred to as: (a) 1,200 mm medium bipin lamps, (b) 600 mm U-shaped lamps, (c) 1,200 mm miniature bipin standard output lamps or (d) 1,200 mm miniature bipin high output lamps (class 2).	Fluorescent lamp ballast efficacy measurements	277 V: A = 0.993, B = 0.51 and C = 0.37  347 V: A = 0.963, B = 0.51 and C = 0.37	As of coming force of Regulation	the into the
rapid-start ballast (other than sign ballasts) designed to operate lamps commonly referred to as 2,400 mm	Fluorescent lamp ballast efficacy measurements	347 V: A = 0.963, B = 0.38 and C = 0.25	coming force of Regulation	into the

high output lamps			
(class 3). 5. Programmed-start	CAN/CSA - C654-14,	277 V: A = 0.973, B = 0.70 and C = 0.37	As of the
ballast (other than sign		347 V: A = 0.944, B = 0.70 and C = 0.37	coming into
	efficacy measurements	0.70 and 0 = 0.57	force of the
operate lamps			Regulation
commonly referred to			
as 2,400 mm high			
output lamps (class 4).  6. Sign ballast that	CAN/CSA - C654-14,	277 V: A = 0.993, B = 0.47 and C = 0.25	As of the
operates lamps		347 V: A = 0.963, B = 0.47 and C = 0.25	coming into
commonly referred to	·		force of the
as 2,400 mm high			Regulation
output lamps (class 5).			
<ol><li>Residential instant- start and rapid-start</li></ol>		120 V: A = 0.993, B = 0.41 and C = 0.25	As of the
ballast designed to	· ·		coming into force of the
operate lamps	chicacy measurements		Regulation
commonly referred to			i i i gamanan
as: (a) 1,200 mm			
medium bipin lamps,			
(b) 600 mm U-shaped lamps or (c) 2,400 mm			
slimline lamps (class 6,			
120 V).			
	CAN/CSA - C654-14,	120 V: A = 0.973, B = 0.71 and C = 0.37	As of the
programmed-start	Fluorescent lamp ballast		coming into
ballast designed to	efficacy measurements		force of the
operate lamps commonly referred to			Regulation
as: (a) 1,200 mm			
medium bipin lamps or			
(b) 600 mm U-shaped			
lamps (class 7, 120 V).			
2. Exit signs			
1. Type 1, 2 or 3 exit	CAN/CSA C860-11,	Types 1 and 2: maximum wattage of 5 W per	As of 31 August
sign, as referred to in	Performance of internally	legend	2017
CAN/CSA C860-11.	lighted exit signs	Turn Our maintain and 5 M and	
		Type 3: maximum wattage of 5 W per legend + 5 W for a charging circuit	
		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
3. General service fluo	rescent lamps		
U-shaped general	CAN/CSA C819-11.	CCT ≤ 4,500 K: LE ≥ 84 and CRI ≥ 69	As of the
	Performance of general		coming into
	service fluorescent lamps	CCT > 4,500 and ≤ 7,000 K: LE ≥ 81 and	force of the
overall length of not		CRI ≥ 69	Regulation
less than 560 mm, but not more than 635 mm			
and a rated wattage			
greater than 35 W.			
2. U-shaped general	CAN/CSA C819-11,	CCT ≤ 4,500 K: LE ≥ 84 and CRI ≥ 45	As of the
	Performance of general		coming into
	service fluorescent lamps		force of the
overall length of not less than 560 mm, but		CRI ≥ 45	Regulation
not more than 635 mm			
and a maximum rated			
wattage of 35 W.			
	CAN/CSA C819-11,	CCT ≤ 4,500 K: LE ≥ 89 and CRI ≥ 69	As of the
	Performance of general		coming into
fluorescent lamp with a		CCT > 4,500 and ≤ 7,000 K: LE ≥ 88 and	
nominal overall length of 1,200 mm and a		CRI ≥ 69	Regulation
rated wattage greater			
than 35 W.			
		CCT ≤ 4,500 K: LE ≥ 89 and CRI ≥ 45	

<ol><li>Straight-shaped</li></ol>	CAN/CSA C819-11,		As of	the
	Performance of general		coming	into
fluorescent lamp with a nominal overall length		CRI ≥ 45	force of Regulation	the
of 1,200 mm and a			rvegulation	
maximum rated				
wattage of 35 W.				
<ol><li>Straight-shaped</li></ol>	CAN/CSA C819-11,	CCT ≤ 4,500 K: LE ≥ 92 and CRI ≥ 69	As of	the
slimline general service			coming	into
fluorescent lamp with a		CCT > 4,500 and ≤ 7,000 K: LE ≥ 88 and	force of	the
nominal overall length of 2,400 mm and a		CRI ≥ 69	Regulation	
rated wattage greater				
than 65 W.				
	CAN/CSA C819-11,	CCT ≤ 4,500 K: LE ≥ 92 and CRI ≥ 45	As of	the
slimline general service			coming	into
fluorescent lamp with a		CCT > 4,500 and ≤ 7,000 K: LE ≥ 88 and	force of	the
nominal overall length		CRI ≥ 45	Regulation	
of 2,400 mm and a				
maximum rated wattage of 65 W.				
7. Straight-shaped high	CAN/CSA C819-11	CCT ≤ 4,500 K: LE ≥ 97 and CRI ≥ 69	As of	the
output fluorescent lamp		55. 1 1,666 1	coming	into
with a nominal overall		CCT > 4,500 and ≤ 7,000 K: LE ≥ 93 and	force of	the
length of 2,400 mm and		CRI ≥ 69	Regulation	
a rated wattage greater				
than 100 W.	0411/004 0040 44	007 - 4 500 K   5 - 07   100 h 45		
8. Straight-shaped high		CCT ≤ 4,500 K: LE ≥ 97 and CRI ≥ 45	As of coming	the
output fluorescent lamp with a nominal overall		CCT > 4,500 and ≤ 7,000 K : LE ≥ 93 and		into the
length of 2,400 mm and		CRI ≥ 45	Regulation	uic
a maximum rated		5.4 1.6	r togulation	
wattage of 100 W.				
<ol><li>Straight-shaped</li></ol>	CAN/CSA C819-11,	CCT ≤ 4,500 K: LE ≥ 86	As of	the
	Performance of general		coming	into
output fluorescent lamp		CCT > 4,500 and ≤ 7,000 K: LE ≥ 81	force of	the
with a nominal overall length of 1,200 mm and			Regulation	
a rated wattage greater				
than 35 W.				
10. Straight-shaped	CAN/CSA C819-11,	CCT ≤ 4,500 K: LE ≥ 76	As of	the
miniature high output			coming	into
	service fluorescent lamps	CCT > 4,500 and ≤ 7,000 K: LE ≥ 72	force of	the
nominal overall length			Regulation	
of 1,200 mm and a maximum rated				
wattage of 35 W.				
wattago or oo vv				
4. General service inca	andescent reflector lamps			
Incandescent and		Standard spectrum, diameter > 6.35 cm and	As of	the
tungsten halogen		voltage ≥ 125 V: LE ≥ 6.8(P) 0,27	coming	into
reflector lamp designed for general lighting that		Standard apportrum diameter > 6.25 cm and	force of Regulation	the
has a rated wattage of		Standard spectrum, diameter > 6.35 cm and voltage < 125 V: LE $\geq$ 5.9(P) $^{0.27}$	Regulation	
less than 205 W, but		15.000 - 120 1. 22 - 0.0(1 )		
greater than 40 W, an		Standard spectrum, diameter ≤ 6.35 cm and		
operating capability		voltage ≥ 125 V: LE ≥ 5.7(P) 0.27		
included between 110				
and 130 V, an E26/24		Standard spectrum, diameter ≤ 6.35 cm and		
single contact or E26/50x39 skirted,		voltage < 125 V: LE ≥ 5.0(P) 0.27		
E26/50x39 skirted, medium screw base		Modified apportum diameter > 0.25 cm and		
and a bulb diameter		Modified spectrum, diameter > 6.35 cm and voltage $\geq$ 125 V: LE $\geq$ 5.8(P) <sup>0.27</sup>		
greater than 57 mm.		VOIMINGO = 120 V. LL = 0.0(F)		
		i e		
greater than or min.		Modified spectrum, diameter > 6.35 cm and		
ground than or min.		Modified spectrum, diameter > 6.35 cm and voltage < 125 V: LE $\geq$ 5.0(P) $^{0.27}$		
		voltage < 125 V: LE ≥ 5.0(P) 0.27		
greater than or min.				

		Madified another diameter C 25 am and	
		Modified spectrum, diameter ≤ 6.35 cm and voltage < 125 V: LE ≥ 4.2(P) $^{0.27}$	
		Voltage < 125 V. LL = 4.2(F)	
		ER30 and ER40 ≥ 40 W and < 50 W: LE ≥: 10.5	
		ER30 and ER40 50 W: LE ≥ 7.0	
		ER40 65 W: LE ≥ 12.5	
5. General service lam	ps		
1. Electrical device	NEMA/ANSI C82.77-2002,	For all lamps: the rate of total harmonic	As of 1 January
providing a luminous		distorsion must be 20% or less and the power	2018
flux having a nominal	limits - related power quality	factor must be at least 90%.	
voltage of not less than	requirements for lighting		
110 V and not more than 130 V or a nominal	equipment		
voltage range included	For En:	For general service lamps: LE ≥ 45, CRI ≥ 80	
at least partially	IES LM-45-15, IES Approved	and life ≥ 1,000 hours	
between those voltages	Method for the Electrical and		
and that is screw-	Photometric Measurement of		
based.	General Service		
The following lamps are	Incandescent Filament		
	Lamps or IES LM-66-14, IES		
	Approved Method for the		
	Electrical and Photometric	For modified spectrum lamps: LE ≥ 45, CRI ≥ 75	
lamps; (d) spherical- shaped (G-shaped)	modean amonto or amgre	and life ≥ 1,000 hours	
lamps referred to in	Based Fluorescent Lamps, or		
ANSI C78.20-2003, A,	LM-79-08, IES Approved		
G, PS, and Similar	Method for the Electrical and Photometric Measurements		
Shapes with E26			
Medium Screw Bases,	of Solid-State Lighting Products.		
and ANSI C79.1-2002,	i roddets.		
Nomenclature for Glass	For life:		
Bulbs Intended for Use	IES LM-49-12, IES Approved		
	Method for Life Testing of		
least 13 cm; (e) lamps			
for display cases;			
(f) left-hand thread			
base lamps; (g) plant			
lamps; (h) reflector	Testing of Single-Based		
lamps that have a	Fluorescent Lamps, or		
shape indicated in ANSI C79.1-2002;	IES LM - 80 - 15, IES		
(i) sign service lamps;	Approved Method: Measuring		
(j) silver bowl lamps;	Luminous Flux and Color		
(k) traffic signal module			
or pedestrian traffic			
signal module and	Modules		
street lights; (I) submersible lamps;	For CPI:		
(ii) submersible lamps; (m) screw-based lamps			
E5, E10, E11, E12,			
E17, E26/50×39,			
E26/53×39, E29/28,	of Light Sources		
E29/53×39, E39, E39d,	g 2 2 2 2 3 0		
EP39 or EX39,	Bulbs must be tested at 120 V		
according to ANSI C81.61-2006,	regardless of their nominal		
American National	voltage.		
Standard for Electrical			
Lamp			
Bases-Specifications			
for Bases (Caps) for			
Electric Lamps;			
(n) lamps that have a B, BA, CA, F, G16-1/2,			
G25, G30 or M-14			
shape or other similar			
shape, in accordance			
with ANSI C78.20-2003			

and ANSI C79.1-2002,				
and a maximum wattage of 40 W;				
(o) rough service				
lamps; (p) vibration				
service lamps;				
(q) shatter resistant				
lamps, including safety				
lamps and shock				
resistant lamps; and				
(r) three-way lamps.				
6. Traffic signal modul	es			
1. Road traffic signal			As of	the
module: self-contained		304.8 mm: maximum wattage of 17 W and	coming	into
device that consists of all of the optical	Signal Supplement, June 27,	nominal wattage of 11 W	force of	the
components required	2005		Regulation	
for its operation and is		A red light that has a diameter of		
designed to provide		203.2 mm: maximum wattage of 13 W and		
drivers with movement		nominal wattage of 8 W		
information and to fit		A red arrow: maximum wattage of 12 W and		
into a traffic signal		nominal wattage of 9 W		
housing.		Tioninal wattage of 5 vv		
		A green light that has a diameter of		
		304.8 mm: maximum wattage of 15 W and		
		nominal wattage of 15 W		
		A green light that has a diameter of		
		203.2 mm: maximum wattage of 12 W and		
		nominal wattage of 12 W		
		A green arrow: maximum wattage of 11 W and		
		nominal wattage of 11 W		
		Thomas wattage of 11 W		
2. Pedestrian traffic	ITE, Pedestrian Traffic	Combination of walking person and hand	As of	the
signal module: self-	J		coming	into
contained device that	LED Signal Modules, August		force of	into the
contained device that consists of all of the	LED Signal Modules, August	wattage of 13 W		
contained device that consists of all of the optical components	LED Signal Modules, August	waitage of 13 W  A walking person only display: maximum	force of	
contained device that consists of all of the optical components required for its	LED Signal Modules, August	wattage of 13 W	force of	
contained device that consists of all of the optical components	LED Signal Modules, August	waitage of 13 W  A walking person only display: maximum waitage of 12 W and nominal waitage of 9 W	force of	
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with	LED Signal Modules, August	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W	force of	
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information	LED Signal Modules, August	waitage of 13 W  A walking person only display: maximum waitage of 12 W and nominal waitage of 9 W	force of	
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a	LED Signal Modules, August 4, 2010	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W	force of	
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal	LED Signal Modules, August 4, 2010	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W	force of	
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a	LED Signal Modules, August 4, 2010	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W	force of	
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.	LED Signal Modules, August 4, 2010	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W	force of Regulation	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire	LED Signal Modules, August 4, 2010	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical	force of Regulation	the
contained device that consists of all of the optical components required components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl	LED Signal Modules, August 4, 2010	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W	force of Regulation	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire	LED Signal Modules, August 4, 2010	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal waitage of 9 W  A hand only display: maximum waitage of 16 W and nominal waitage of 13 W  Without additional sockets: total electrical power ≤ 75 W	As of coming force of	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped	LED Signal Modules, August 4, 2010	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	force of Regulation	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowd or similar-shaped reflector that directs	LED Signal Modules, August 4, 2010	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal waitage of 9 W  A hand only display: maximum waitage of 16 W and nominal waitage of 13 W  Without additional sockets: total electrical power ≤ 75 W	As of coming force of	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowd or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with additional sockets for	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with additional sockets for	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with additional sockets for other lighting functions.  Category 4: Household	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total	As of coming force of	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with additional sockets for other lighting functions.  Category 4: Household	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres  d appliances	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total electrical power ≤ 100 W	As of coming force of Regulation	the the into the
contained device that consists of all of the optical components required components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped additional sockets for other lighting functions.  Category 4: Household  1. Freezers, refrigerato  1. Household freezer	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres  d appliances  ors and refrigerator-freezers	wattage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total electrical power ≤ 100 W	As of coming force of Regulation	the
contained device that consists of all of the optical components required for its operation and is designed to provide pedestrians with movement information and to fit into a pedestrian signal housing.  7. Torchieres  1. Portable luminaire that has a reflector bowl or similar-shaped reflector that directs light in a predominantly upward direction for providing indirect lighting and that may be equipped with additional sockets for other lighting functions.  Category 4: Household  1. Freezers, refrigerator.	LED Signal Modules, August 4, 2010  CAN/CSA C867.1-08, Performance of torchieres  d appliances  rs and refrigerator-freezers  CAN/CSA C300-15, Energy	waitage of 13 W  A walking person only display: maximum wattage of 12 W and nominal wattage of 9 W  A hand only display: maximum wattage of 16 W and nominal wattage of 13 W  Without additional sockets: total electrical power ≤ 75 W  With one or more additional sockets: total electrical power ≤ 100 W  Refrigerators and refrigerator-freezers with a manual or semi-automatic defrost	As of coming force of Regulation	the the into the

household refrigerator			force of	the
	freezers, and wine chillers The following adjustments		Regulation	
	must precede the testing of	Refrigerators with manual defrost		
has a defrost system		(1A): Eannual ≤ 0.240 AV + 193.6		
	(a) the icemaker is on but not			
1,100 L or less.	in the process of freeing or	Refrigerator-freezers with partial automatic		
Refrigerators that have	removing ice pieces;	defrost (2): Eannual ≤ 0.282 AV + 225.0		
an absorption	(b) there is no ice in the ice	Refrigerator-freezers with automatic defrost and		
refrigeration system are		with a top-mounted freezer without through-the-		
excluded.	(c)the level indicating arm is	door-ice service and all-refrigerators with		
	mechanically fixed in the ice	automatic defrost (3):		
	full condition or, if the icemaker does not have a	Eannual ≤ 0.285 AV + 233.7		
	level indicating arm, it may be			
	disabled by another means	Refrigerator-freezers with automatic defrost with		
	that only prevents it from	a top-mounted freezer without an automatic		
	freeing or removing ice	icemaker (3-BI): Eannual ≤ 0.323 AV + 264.9		
	pieces;			
	(d) all other components are	Refrigerator-freezers with automatic defrost and		
	activated in the same manner	with a top-mounted freezer with an automatic icemaker without through-the-door-ice service		
	as when the icemaker is on	(3I): Eannual ≤ 0.25 AV + 317.7		
	but not in the process of	(61). Zamidai = 6.26710 + 61111		
	freeing or removing ice	Built-in refrigerator-freezers with automatic		
	pieces; (e) the ice storage bin is	defrost and with a top-mounted freezer without		
		an automatic icemaker		
	consistent with normal	(3I-BI): Eannual ≤ 0.323 AV + 348.9		
	operation of the equipment in			
	the home when the icemaker	All-refrigerators with automatic defrost		
	is on but not in the process of	(3A): Eannual ≤ 0.25 AV + 201.6		
	freeing or removing ice pieces	Built-in all-refrigerators with automatic defrost		
	from the icemaker;	(3A-BI): Eannual ≤ 0.283 AV + 228.5		
	consumer-adjustable setting	(67 B1). Zamidai = 0.2007 tv × 220.0		
	for multiple ice storage	Refrigerator-freezers with automatic defrost and		
	temperatures, it may be set at	with a side-mounted freezer without through-the-		
	the lowest temperature	door-ice service		
	setting.	(4): Eannual ≤ 0.301 AV + 297.8		
		D 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		Built-in refrigerator-freezers with automatic defrost and with a side-mounted freezer without		
	according to the method	an automatic icemaker (4 BI):		
	specified in Clauses 8.5.1, 9.4.1 and 10.11.1 of	Eannual ≤ 0.361 AV + 357.4		
	CAN/CSA standard C300-15	24		
	S/11/CC/10tandard CCCC 10	Refrigerator-freezers with automatic defrost and		
		with a side-mounted freezer with an automatic		
		icemaker without through-the-door ice service		
		(4I): Eannual ≤ 0.301 AV + 381.8		
		Della in a file and f		
		Built-in refrigerator-freezers with automatic defrost and with a side-mounted freezer with an		
		automatic icemaker without through-the-door ice		
		service (4I-BI): Eannual ≤ 0.361 AV + 441.4		
		Refrigerator-freezers with automatic defrost and		
		with a bottom-mounted freezer, without an		
		automatic icemaker through-the-door-ice service		
		(5): Eannual ≤ 0.312 AV + 317.0		
		Defringerator from a with automotic defect and		
		Refrigerator-freezers with automatic defrost and		
		with a bottom-mounted freezer, with through-the- door-ice service (5A):		
		Eannual ≤ 0.327 AV + 475.4		
		Built-in refrigerator-freezers with automatic		
		defrost and with a bottom-mounted freezer,		
		without an automatic icemaker (5-BI):		
		Eannual ≤ 0.332 AV + 336.9		
	1			

PART 1	
Refrigerator-freezers with automatic defrost and with a bottom-mounted freezer, with an automatic icemaker without through-the-door ice service (5I): Eannual ≤ 0.312 AV + 401.0	
Built-in refrigerator-freezers with automatic defrost and with a bottom-mounted freezer, with an automatic icemaker without through-the-door ice service (5I-BI): Eannual ≤ 0.332 AV + 420.9	
Built-in refrigerator-freezers with automatic defrost and with a bottom-mounted freezer, with through-the-door-ice service (5A-BI): Eannual ≤ 0.347 AV + 499.9	
Refrigerator-freezers with automatic defrost and with a top-mounted freezer, with through-the-door-ice service (6): Eannual ≤ 0.297 AV + 385.4	
Refrigerator-freezers with automatic defrost and with a side-mounted freezer with through-the-door-ice service (7): annual ≤ 0.302 AV + 432.8	
Built-in refrigerator-freezers with automatic defrost and with a side-mounted freezer with through-the-door-ice service (7-BI): Eannual ≤ 0.362 AV + 502.6	
Upright freezers with manual defrost (8): Eannual ≤ 0.197 AV + 193.7	
Upright freezers with automatic defrost (9): Eannual ≤ 0.305 AV + 228.3	
Upright freezers with automatic defrost with an automatic icemaker (9I): Eannual ≤ 0.305 AV + 312.3	
Built-in upright freezers with automatic defrost without an automatic icemaker (9-BI): Eannual ≤ 0.348 AV + 260.9	
Built-in upright freezers with automatic defrost with an automatic icemaker (9I-BI): Eannual ≤ 0.348 AV + 344.9	
Chest freezers and other freezers (10): Eannual ≤ 0.257 AV + 107.8	
Chest freezers with automatic defrost (10A): Eannual ≤ 0.362 AV + 148.1	
Compact refrigerators and refrigerator-freezers with manual or semi-automatic defrost (11): Eannual ≤ 0.319 AV + 252.3	
Compact refrigerators with manual defrost (11A): Eannual ≤ 0.277 AV + 219.1	
Compact refrigerator-freezers with partial automatic defrost (12): Eannual ≤ 0.209 AV + 335.8	
Compact refrigerator-freezers with automatic defrost and with a top-mounted freezer, and compact all-refrigerators with automatic defrost (13): Eannual ≤ 0.417 AV + 339.2	

		Compact refrigerator-freezers with automatic defrost and with a top-mounted freezer with an automatic icemaker (13I): Eannual ≤ 0.417 AV + 423.2  Compact all-refrigerators with automatic defrost (13A): Eannual ≤ 0.324 AV + 259.3  Compact refrigerator-freezers with automatic defrost and with a side-mounted freezer (14): Eannual ≤ 0.241 AV + 456.9  Compact refrigerator-freezers with automatic defrost and with a side-mounted freezer with an automatic icemaker (14I): Eannual ≤ 0.241 AV + 540.9  Compact refrigerator-freezers with automatic defrost and with a bottom-mounted freezer (15): Eannual ≤ 0.417 AV + 339.2  Compact refrigerator-freezers with automatic defrost and with a bottom-mounted freezer with an automatic icemaker (15I): Eannual ≤ 0.417 AV + 423.2  Compact upright freezers with manual defrost (16): Eannual ≤ 0.306 AV + 225.7  Compact upright freezers with automatic defrost (17): Eannual ≤ 0.359 AV + 351.9  Compact chest freezers and other compact freezers (18): Eannual ≤ 0.327 AV + 136.8  Wine chillers with manual defrost (19): Eannual ≤ 0.485 AV + 267  Wine chillers with automatic defrost (20): Eannual ≤ 0.616 AV + 344	
2. Commercial refriger	ators		
Self-contained commercial freezer, refrigerator or refrigerator-freezer that has one or more compartments and that is designed for freezing or storing food, beverages or ice and that has a self-contained refrigeration source that requires an energy input.	CSA C657-15, Energy performance standard for commercial refrigeration equipment	Self-contained commercial refrigerators that do not have transparent doors: Edaily $\leq 0.00353 \times Vr + 2.04$ Self-contained commercial refrigerators with transparent doors without pull-down temperature reduction capability: Edaily $\leq 0.00424 \times Vr + 3.34$ Self-contained commercial freezers that do not have transparent doors: Edaily $\leq 0.01413 \times Vf + 1.38$ Self-contained commercial freezers with transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ Self-contained commercial refrigerator-freezers that do not have transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ Self-contained commercial refrigerator-freezers that do not have transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ The self-contained commercial refrigerator-freezers that do not have transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ Self-contained commercial refrigerator-freezers that do not have transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ The self-contained commercial refrigerator-freezers that do not have transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ Self-contained commercial refrigerator-freezers with transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ The self-contained commercial refrigerator-freezers with transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$ Self-contained commercial refrigerator-freezers with transparent doors: Edaily $\leq 0.02649 \times Vf + 4.10$	coming into force of the Regulation
2. Self-contained commercial freezer, refrigerator or refrigerator-freezer that	performance standard for commercial refrigeration	vertical open, refinder contensing unit and designed for storage at medium temperature (VOP.RC.M): Edaily ≤ 8.826 × TDA + 4.07	

is not	equipp	oed	with
doors	and	that	is
designe	d for fr	eezin	g or
storing 1	food, b	evera	iges
or ice a	and th	at ha	ıs a
self-con	tained		
refrigera	ation so	urce	that
requires	an	ene	ergy
input.			

Vertical open, remote condensing unit and designed for storage at low temperature (VOP.RC.L): Edaily ≤ 24.434 × TDA + 6.85

Semi-vertical open, remote condensing unit and designed for storage at medium temperature (SVO.RC.M): Edaily ≤ 8.934 × TDA + 3.18

Semi-vertical open, remote condensing unit and designed for storage at low temperature (SVO.RC.L): Edaily ≤ 24.434 × TDA + 6.85

Horizontal open, remote condensing unit and designed for storage at medium temperature (HZO.RC.M): Edaily ≤ 3.767 × TDA + 2.88

Horizontal open, remote condensing unit and designed for storage at low temperature (HZO.RC.L): Edaily ≤ 6.135 × TDA + 6.88

Vertical closed transparent, remote condensing unit and designed for storage at medium temperature

(VCT.RC.M): Edaily ≤ 2.368 × TDA + 1.95

Vertical closed transparent, remote condensing unit and designed for storage at low temperature (VCT.RC.L): Edaily ≤ 6.028 × TDA + 2.61

Horizontal closed transparent, condensing unit and designed for storage at medium temperature (HCT.RC.M): Edaily ≤ 1.722 × TDA + 0.13

Horizontal closed transparent, condensing unit and designed for storage at low temperature (HCT.RC.L): Edaily ≤ 3.66 × TDA + 0.26

Vertical closed solid, remote condensing unit and designed for storage at medium temperature (VCS.RC.M): Edaily ≤ 3.885 × (Vf or Vr) + 0.26

Vertical closed solid, remote condensing unit and designed for storage at low temperature (VCS.RC.L): Edaily  $\leq 8.122 \times (Vf \text{ or } Vr) + 0.54$ 

Horizontal closed solid, remote condensing unit and designed for storage at medium temperature (HCS.RC.M): Edaily  $\leq 3.885 \times (Vf \text{ or } Vr) + 0.26$ 

Horizontal closed solid, remote condensing unit and designed for storage at low temperature (HCS.RC.L): Edaily ≤ 8.125 × (Vf or Vr) + 0.54

Service over counter, remote condensing unit and designed for storage at medium temperature (SOC.RC.M): Edaily  $\leq 5.49 \times TDA + 0.11$ 

Service over counter, remote condensing unit and designed for storage at low temperature (SOC.RC.L): Edaily ≤ 11.625 × TDA + 0.22

Vertical open, self-contained and designed for medium storage (VOP.SC.M): Edaily ≤ 18.729 × TDA + 4.71

Vertical open, self-contained and designed for at low temperature (VOP.SC.L): Edaily ≤ 47.038 × TDA + 11.82

Semi-vertical open, self-contained and designed for storage at medium temperature (SVO.SC.M): Edaily ≤ 18.622 × TDA + 4.59

Semi-vertical open, self-contained and designed for storage at low temperature (SVO.SC.L): Edaily ≤ 46.715 × TDA + 11.51

Horizontal open, self-contained and designed for storage at medium temperature (HZO.SC.M): Edaily  $\leq 8.288 \times TDA + 5.55$ 

Horizontal open, self-contained and designed for storage at low temperature (HZO.SC.L): Edaily ≤ 20.667 × TDA + 7.08

Vertical open, remote condensing unit and designed for the storage of ice cream (VOP.RC.I): Edaily ≤ 31.108 × TDA + 8.7

Semi-vertical open, remote condensing unit and designed for the storage of ice cream (SVO.RC.I): Edaily ≤ 31.108 × TDA + 8.7

Horizontal open, remote condensing unit and designed for the storage of ice cream (HZO.RC.I): Edaily  $\leq 7.75 \times TDA + 8.74$ 

Vertical closed transparent, remote condensing unit and designed for the storage of ice cream (VCT.RC.I): Edaily ≤ 7.104 × TDA + 3.05

Horizontal closed transparent, remote condensing unit and designed for the storage of ice cream (HCT.RC.I): Edaily ≤ 4.306 × TDA + 0.31

Vertical closed solid, remote condensing unit and designed for the storage of ice cream (VCS.RC.I): Edaily  $\leq 9.535 \times (Vf \text{ or } Vr) + 0.63$ 

Horizontal closed solid, remote condensing unit and designed for the storage of ice cream (HCS.RC.I): Edaily ≤ 9.535 × (Vf or Vr) + 0.63

Service over counter, remote condensing unit and designed for the storage of ice cream (SOC.RC.I): Edaily  $\leq 13.562 \times TDA + 0.26$ 

Vertical open, self-contained and designed for the storage of ice cream (VOP.SC.I): Edaily ≤ 59.74 × TDA + 15.05

Semi-vertical open, self-contained and designed for the storage of ice cream (SVO.SC.I): Edaily  $\leq 59.417 \times TDA + 14.63$ 

Horizontal open, self-contained and designed for the storage of ice cream (HZO.SC.I): Edaily  $\leq$  26.264 × TDA + 9

Vertical closed transparent, self-contained and designed for the storage of ice cream (VCT.SC.I): Edaily ≤ 7.212 × TDA + 3.29

Horizontal closed transparent, self-contained and designed for the storage of ice cream (HCT.SC.I): Edaily  $\leq 6.028 \times TDA + 0.43$ 

		Vertical closed solid, self-contained and designed for the storage of ice cream (VCS.SC.I): Edaily $\leq 13.42 \times (\text{Vf or Vr}) + 0.88$ Horizontal closed solid, self-contained and designed for the storage of ice cream (HCS.SC.I): Edaily $\leq 13.42 \times (\text{Vf or Vr}) + 0.88$ Service over counter, self-contained and designed for the storage of ice cream (SOC.SC.I): Edaily $\leq 18.944 \times \text{TDA} + 0.36$		
3. Ranges				
Natural gas or propane range with an electrical power source.	N/A	Must not be equipped with a continuously burning pilot light	As of coming force of Regulation	the into the
Household built-in or free-standing electric range with at least one surface element and one or more ovens.	Consumption Test Methods for Household Electric Ranges	Eannual ≤ 2.0 × oven volume in litres + 458	As of coming force of Regulation	the into the
Household integrated electric range with at least one surface element and no oven.	Consumption Test Methods for Household Electric Ranges	Eannual ≤ 258	As of coming force of Regulation	the into the
Household built-in or wall-mounted electric range with one or more ovens and no surface element.	Consumption Test Methods for Household Electric	Eannual ≤ 2.0 × oven volume in litres + 200	As of coming force of Regulation	the into the
4. Dehumidifiers				
Household factory- assembled electric dehumidifier mechanically	CAN/CSA C749-15, Energy performance of dehumidifiers	Cr ≤ 16.6: EF ≥ 1.35 L/kWh Cr > 16.6 and ≤ 21.3: EF ≥ 1.50 L/kWh	As of coming force of Regulation	the into the
refrigerated and whose water removal capacity		Cr > 21.3 and ≤ 25.5: EF ≥ 1.60 L/kWh	regulation	
is 87.5 L/d or less.		Cr > 25.5 and ≤ 35.5 : EF ≥ 1.70 L/kWh		
		Cr > 35.5: EF ≥ 2.50 L/kWh		
5. Vending machines				
Self-contained machine for dispensing, after accepting payment, packages of solid non-refrigerated food and bottled, canned or other sealed refrigerated beverages.		volume in litres + 2.56	As of coming force of Regulation	the into the
6. Clothes washers				
Household standard or compact electrically-operated clothes washer, top or frontloaded, that has an internal control system	performance, water consumption, and capacity of household clothes washers	axis: modified energy performance ≥ 24.35 L/kWh/cycle and integrated water factor ≤ 1.92 L/cycle/L Compact, capacity of less than 45 L and	coming force of Regulation 31 December	the into the to er
that regulates the water temperature without the need for user		horizontal axis: modified energy performance ≥ 32 L/kWh/cycle and integrated water factor ≤ 1.11 L/cycle/L		

intervention after the			
initiation of machine			
operation and that does not require fastening to		Standard, capacity of 45 L or more and vertical	
a floor or wall.		axis: modified energy	
a noor or wan.		performance ≥ 36.53 L/kWh/cycle and integrated water factor ≤ 1.12 L/cycle/L	
		Integrated water factor 3 1.12 E/cycle/E	
		Standard, capacity of 45 L or more and	
		horizontal axis: modified energy	
		performance ≥ 52.10 L/kWh/cycle and	
		integrated water factor ≤ 0.63 L/cycle/L	
	CAN/CSA C360-13, Energy		
	performance, water consumption, and capacity of	axis: modified energy performance	2018
	household clothes washers	≥ 32.56 L/kWh/cycle and integrated water factor ≤ 1.6 L/cycle/L	
	riouscrioid ciotiles washers	Tactor = 1.0 E/cyclc/E	
		Compact, capacity of less than 45 L and	
		horizontal axis: modified energy performance	
		≥ 32 L/kWh/cycle and integrated water	
		factor ≤ 0.87 L/cycle/L	
		0	
		Standard, capacity of 45 L or more and vertical axis: modified energy performance	
		axis: modified energy performance ≥ 44.46 L/kWh/cycle and integrated water	
		factor ≤ 1.12 L/cycle/L	
		Standard, capacity of 45 L or more and	
		horizontal axis: modified energy performance	
		≥ 52.10 L/kWh/cycle and integrated water	
		factor ≤ 0.63 L/cycle/L	
2 Flectrically-operated	CAN/CSA C360-13, Energy	Vertical axis: modified energy	From the
clothes washer			coming into
designed for use by			force of the
	household clothes washers	·	Regulation to
(for example: washers		Horizontal axis: modified energy	31 December
in common laundry		performance ≥ 56.63 L/kWh/cycle and water	2017
rooms in immovables lodging a number of		factor ≤ 0.73 L/cycle/L	
families, in coin-			
operated laundromats,	CAN/CSA C360-13, Energy		As of 1 January
hotels, or any other	performance, water	performance ≥ 38.23 L/kWh/cycle and integrated water factor ≤ 1.18 L/cycle/L	2018
commercial use), top or	household clothes washers	integrated water lactor = 1.10 EroyoterE	
front-loaded, that has		Horizontal axis: modified energy	
an internal control system that regulates		performance ≥ 56.63 L/kWh/cycle and	
the water temperature		integrated water factor ≤ 0.55 L/cycle/L	
without the need for			
user intervention after			
the initiation of machine			
operation and that does			
not require fastening to a floor or wall.			
a noor or wall.			
7. Integrated clothes w	rasher-dryers		
Household	For the washer function:	For the washer function, refer to the energy	From the
		performance requirements applicable to washers	
washer-dryer,	performance, water	,,	force of the
combination or not,	consumption, and capacity of		Regulation to
	household clothes washers		31 December
power source and			2017
having a single control			As of 1 January
panel.			2018
	For the drive functions	For the dryor function refer to the	An of 41
		For the dryer function, refer to the energy performance requirements applicable to dryers	As of the coming into
	method for measuring energy	periormande requirements applicable to dryers	Soming IIII
L			

automatic standard or performance and water consumption ≤ 13.25 L/cycle force of the compact household dishwashers of household dishwashers and ice storage bins  1. Automatic icemaker that may produce in batches.  CANICSA C742-15. Energy performance of automatic icemakers and ice storage bins  CANICSA C742-15. Energy performance of automatic icemakers and ice storage bins  CANICSA C742-15. Energy performance of automatic icemakers and ice storage bins  CANICSA C742-15. Energy performance of automatic icemakers and ice storage bins  Water-cooled and Hm ≥ 136 kg/d consumption (kJ/kg) ≤ 460.04 – 0.962 × Hm  Water-cooled and Hm ≥ 386 kg/d and < 386 kg/d: energy consumption (kJ/kg) ≤ 350.80 – 0.049 × Hm  Water-cooled and Hm ≥ 386 kg/d and < 1.134 kg/d: energy consumption (kJ/kg) ≤ 317.47  Water-cooled and Hm ≥ 136 kg/d energy consumption (kJ/kg) ≤ 317.47  Water-cooled and Hm ≥ 136 kg/d and < 363 kg/d: energy consumption (kJ/kg) ≤ 377.47  Air-cooled and Hm ≥ 136 kg/d and < 363 kg/d: energy consumption (kJ/kg) ≤ 378.36 – 2.157 × Hm  Air-cooled and Hm ≥ 363 kg/d and < 680 kg/d energy consumption (kJ/kg) ≤ 559.53 – 0.437 × Hm  Air-cooled and Hm ≥ 363 kg/d and < 680 kg/d energy consumption (kJ/kg) ≤ 440.48 – 0.110 × Hm  Air-cooled and Hm ≥ 363 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 365.88  Remote condensing unit and integrated compressor, air-cooled and Hm ≥ 25 kg/d and < 454 kg/d: energy consumption (kJ/kg) ≤ 365.88  Remote condensing unit and integrated compressor, air-cooled and Hm ≥ 454 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 361.12		consumption and drum volume of electrically operated household tumble- type clothes dryers		force of the Regulation
automatic standard or performance and water consumption of household dishwashers.  9. Icemakers  1. Automatic icemaker that may produce in batches.  CANICSA C742-15. Energy performance of automatic icemakers and ice storage bins  Water-cooled and Hm < 136 kg/d: energy consumption (kJ/kg) ≤ 546.04 − 0.962 × Hm (kJ/kg) ≤ 460.33 − 0.334 × Hm  Water-cooled and Hm ≥ 136 kg/d consumption (kJ/kg) ≤ 350.80 − 0.049 × Hm  Water-cooled and Hm ≥ 386 kg/d and < 880 kg/d: energy consumption (kJ/kg) ≤ 377.47  Water-cooled and Hm ≥ 1.134 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 377.47  Water-cooled and Hm ≥ 1.134 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 559.53 − 0.437 × Hm  Air-cooled and Hm ≥ 136 kg/d and < 363 kg/d: energy consumption (kJ/kg) ≤ 379.366 − 2.157 × Hm  Air-cooled and Hm ≥ 136 kg/d and < 363 kg/d: energy consumption (kJ/kg) ≤ 379.366 − 2.157 × Hm  Air-cooled and Hm ≥ 136 kg/d and < 368 kg/d: energy consumption (kJ/kg) ≤ 350.80 − 0.437 × Hm  Air-cooled and Hm ≥ 136 kg/d and < 368 kg/d: energy consumption (kJ/kg) ≤ 350.80 − 0.437 × Hm  Air-cooled and Hm ≥ 363 kg/d and < 680 kg/d: energy consumption (kJ/kg) ≤ 559.53 − 0.437 × Hm  Air-cooled and Hm ≥ 363 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 365.88  Remote condensing unit and integrated compressor, air-cooled and Hm ≥ 25 kg/d and < 454 kg/d: energy consumption (kJ/kg) ≤ 365.88  Remote condensing unit and integrated compressor, air-cooled and Hm ≥ 454 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 632.55 − 0.598 × Hm  Remote condensing unit and integrated compressor, air-cooled and Hm ≥ 454 kg/d and < 1.814 kg/d: energy consumption (kJ/kg) ≤ 632.55 − 0.598 × Hm	8. Dishwashers			
1. Automatic icemaker that may produce in batches.    CAN/CSA C742-15, Energy that may produce in batches.   Water-cooled and Hm < 136 kg/d: energy consumption (kJ/kg) ≤ 546.04 - 0.962 × Hm	automatic standard or compact household	performance and water consumption of household	and water consumption ≤ 13.25 L/cycle  Standard: energy consumption ≤ 307 kWh/year	coming into force of the
that may produce in berformance of automatic icemakers and ice storage bins    Water-cooled and Hm ≥ 136 kg/d consumption (kJ/kg) ≤ 460.33 – 0.334 × Hm	9. Icemakers			ı
remote concerning unit and remote compressor, air-cooled and Hm < 427 kg/d: energy consumption (kJ/kg) ≤ 632.55 − 0.598 × Hm  Remote condensing unit and remote compressor, air-cooled and Hm ≥ 427 kg/d and < 1,814 kg/d: energy consumption	Automatic icemaker that may produce in	performance of automatic icemakers and ice storage	consumption (kJ/kg) ≤ 546.04 − 0.962 × Hm  Water-cooled and And	

		Packaged, water-cooled and Hm < 91 kg/d: energy consumption (kJ/kg) ≤ 753.98 − 3.324 × Hm	
		Packaged, water-cooled and $Hm \ge 91 \text{ kg/d}$ and < 1,134 kg/d: energy consumption (kJ/kg) $\le 452.39$	
		Packaged, water-cooled and Hm≥1,134 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 452.39	
		Packaged, air-cooled and Hm < 50 kg/d: energy consumption (kJ/kg) ≤ 1173.83 – 8.206 × Hm	
		Packaged, air-cooled and Hm ≥ 50 kg/d and < 91 kg/d: energy consumption (kJ/kg) ≤ 985.73 – 4.432 × Hm	
		Packaged, air-cooled and Hm ≥ 91 kg/d and < 1,814 kg/d: energy (kJ/kg) ≤ 583.34	
Automatic icemaker that may produce in a continuous process.	CAN/CSA C742-15, Energy performance of automatic icemakers and ice storage	3	As of 28 January 2018
	bins	Water-cooled and $Hm \ge 363 \text{ kg/d}$ and < 1,134 kg/d: energy (kJ/kg) $\le 344.45$	
		Water-cooled and $Hm \ge 1,134 \text{ kg/d}$ and < 1,814 kg/d: energy consumption (kJ/kg) $\le 344.45$	
		Air-cooled and Hm < 141 kg/d: energy consumption (kJ/kg) ≤ 729.38 – 1.101 × Hm	
		Air-cooled and Hm ≥ 141 kg/d and < 372 kg/d: energy consumption $(kJ/kg) \le 653.19 - 0.560 \times Hm$	
		Air-cooled and $Hm \ge 372 \text{ kg/d}$ and $< 1,814 \text{ kg/d}$ : energy consumption $(kJ/kg) \le 445.25$	
		Remote condensing unit and integrated compressor, air-cooled and Hm < 363 kg/d and < 454 kg/d: energy consumption (kJ/kg) ≤ 769.85 – 1.015 × Hm	
		Remote condensing unit and integrated compressor, air-cooled and $Hm \ge 363 \text{ kg/d}$ and < 1,814 kg/d: energy consumption (kJ/kg) $\le 401.59$	
		Remote condensing unit and remote compressor, air-cooled and Hm $<$ 363 kg/d : energy consumption (kJ/kg) $\leq$ 785.73 $-$ 1.015 $\times$ Hm	
		Remote condensing unit and remote compressor, air-cooled and $Hm \ge 363 \text{ kg/d}$ and $< 1,814 \text{ kg/d}$ : energy consumption (kJ/kg) $\le 417.47$	
		Self-contained, water-cooled and Hm < 408 kg/d: energy consumption $(kJ/kg) \le 603.18 - 0.528 \times Hm$	

		Self-contained, water-cooled and Hm $\geq$ 408 kg/d and < 1,134 kg/d: energy consumption (kJ/kg) $\leq$ 387.31 Self-contained, water-cooled and Hm $\geq$ 1,134 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) $\leq$ 387.31 Self-contained, air-cooled and Hm < 91 kg/d: energy consumption (kJ/kg) $\leq$ 387.31 consumption (kJ/kg) $\leq$ 1,128,59 $=$ 5.249 $\times$ Hm	
		Self-contained, air-cooled and $Hm \ge 91 \text{ kg/d}$ and $< 318 \text{ kg/d}$ : energy consumption $(kJ/kg) \le 751.6 - 1.092 \times Hm$ Self-contained, air-cooled and $Hm \ge 318 \text{ kg/d}$ and $< 1,814 \text{ kg/d}$ : energy consumption	
3. Ice storage bin.	CAN/CSA C742-15, Energy performance of automatic icemakers and ice storage bins	(kJ/kg) ≤ 404.77  Ice storage bin capacity < 70 kg: storage effectiveness ≥ 60%  Ice storage bin capacity ≥ 70 kg and < 100 kg: storage effectiveness ≥ 70%	As of 2 January 2018
		Ice     storage     bin     capacity ≥ 100 kg       and ≤ 200 kg: storage effectiveness ≥ 75%       Ice     storage     bin     capacity > 200 kg: storage       effectiveness ≥ 80%	
10. Clothes dryers			
household tumble-type clothes dryer, designed	method for measuring energy consumption and drum volume of electrically operated household tumble-	(kg/kWh) ≥ 1.69  Conventional compact, 120 V: combined energy	As of th coming int force of th Regulation
120/240 or 120/208 V.		factor (kg/kWh) ≥ 1.48  Ventless compact, 240 V: combined energy factor (kg/kWh) ≥ 1.16	
		Ventless combination washer-dryer: combined energy factor (kg/kWh) ≥ 0.94	
Category 5: Electronic	devices		
Digital television ada	apters		
Device that is a type of terrestrial set-top box whose primary function	CAN/CSA C380-11, Test procedure for the measurement of energy consumption of set-top boxes	Capable of automatically entering in standby mode and capable of entering in the following modes:  - an on mode with a power consumption ≤ 8 W;  - a standby mode with a power consumption ≤ 1 W.	As of th coming int force of th Regulation

2. Video products				
an integral power supply, is connected to a mains power source		<ul> <li>a standby mode with display active and a power consumption ≤ 1 W;</li> <li>a standby mode with display inactive and</li> </ul>	coming	the into the
3. External power supp	olies			
convert line voltage ac	method for calculating the energy efficiency of single- voltage external ac-dc and ac- ac power supplies	Minimum average efficiency at the highest or lowest nominal output power setting:  - nominal output power < 1 W: 0.5 × nominal output power;  - nominal output power ≥ 1 W and ≤ 51 W: 0.09 × In (nominal output power) + 0.5;  - nominal output power > 51 W: 0.85;  - for a device other than a security external power supply: no load power ≤ 0.5 W.	coming	the into

4. Compact audio prod	lucts			
Product consisting of an amplifier and terrestrial tuner encased in a single housing, with attached	CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power. Compact video products must	With display active: consumption in a standby mode ≤ 1 W and consumption in an off mode ≤ 0.5 W  With display inactive: consumption in a standby	As of coming force of Regulation	the into the
or separable speakers, including a product that can produce sound from another media that	be tested at 115 V regardless of their nominal voltage.	mode ≤ 0.5 W and consumption in an off mode ≤ 0.5 W		
uses mains power as at least one means of power. Clock radios are excluded.		Without display: consumption in a standby mode $\leq$ 0.5 W and consumption in an off mode $\leq$ 0.5 W		
2. Clock radio.	CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power Clock radios must be tested at 115 V regardless of their nominal voltage.	With display active: consumption in a standby mode ≤ 2 W and consumption in an off mode ≤ 1 W	As of coming force of Regulation	the into the
5. Televisions				
primarily for the display and reception of a terrestrial, satellite, cable, Internet Protocol TV (IPTV) or other broadcast or recorded transmission of analog or digital video and	mode: CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power For a consumption in an on mode and the power factor: CAN/CSA C382-11,	For all televisions, capable of entering in one of the following modes, or more if applicable:  - in a standby mode with display active and a power consumption ≤ 1 W;  - in a standby mode with display inactive and a power consumption ≤ 0.5 W;  - in a standby mode without display with a power consumption ≤ 0.5 W;  - in an off mode with a power consumption ≤ 0.5 W.	As of coming force of Regulation	the into the
the following: (a) a household television monitor, namely a device without an	Televisions must be tested at	Consumption in an on mode ≤ 0.019 W/cm² x A + 25 W where A is the screen surface in cm² and	As of coming force of Regulation	the into the
internal tuner, receiver or playback device, (b) a combination television, namely a		Must automatically enter in a standby mode after a maximum of 15 minutes without audio or video signal in the input mode selected and	As of 1 Jan 2017	iuary
system in which a television and an and and additional device or devices, including a DVD player or VCR are combined into a single unit in which the additional devices are included in the		When turned off by remote control or by a key or an integrated switch, must enter in the operating mode in which the television is connected to the power supply but produces no sound or image, does not exchange data, does not receive data from an internal source and may be switched into another mode with the remote control or an internal signal.		iuary
television casing, (c) a component television, namely a television composed of two or		For models whose power is < 100 W: power factor ≥ 0.4	As of coming force of Regulation	the into the
more separate components marketed and sold as a television under one model or system designation. A computer monitor, namely an analog or digital device designed primarily for the display of computer generated signals and that is not marketed for use as a television is excluded.		For models whose power is $\geq$ 100 W: power factor $\geq$ 0.9	As of 1 2017	July

1. Machine that	otors CAN/CSA C390-10, Test	Coo Dort 2 of this Cahadula	As of	the
		See Part 2 of this Schedule	-	
	methods, marking		coming	into
	requirements, and energy		force of	the
•	efficiency levels for three-		Regulation	
	phase induction motors			
incorporated into				
another product,				
whether or not that				
other product is an				
energy-using product,				
that is rated for				
continuous duty				
operation and is an				
electric three-phase				
induction design, a				
cage or squirrel-cage				
design, a NEMA design				
A, B or C with NEMA T				
or U frame dimensions				
or IEC design N or H, is				
designed to operate at				
a single speed, has a				
nominal output power of				
not less than 0.746 kW				
(1 HP), and not more				
than 375 kW (500 HP),				
has a nominal voltage				
of not more than				
600 volts AC and a				
nominal frequency of				
50/60 Hz or 60 Hz, a				
two, four, six or eight				
pole construction, and				
has an IP code from 00				
to 66 and is of open or				
enclosed construction.				
NEMA design C motors				
of more than 150 kW				
(200 HP) and IEC				
design H motors of				
more than 150 kW				
(200 HP) are excluded.				
(200 TII ) are excitated.	<u> </u>			
Category 7: Dry-type to	ransformers			
1. Single-phase or	CAN/CSA C802.2-12,	See Part 3 of this Schedule	As of	the
three-phrase	Minimum efficiency values for		coming	into
transformer, self-	dry-type transformers		force of	the
contained or part of a	. 3 31 - 11-11-11-11		Regulation	
larger assembly, 60 Hz,			23	
natural cooling, with a				
nominal power of 15 to				
833 kVA for single-				
phase models and 15 to				
7,500 kVA for three-				
phase models.				
priase models.			1	

PART 2

	: Electric mo						
			C390-10, Test r	methods, markir	ng requirements,	and energy effic	ciency levels for
three-phase	e induction me	otors					
		<b>Energy efficier</b>	ncy requiremen	ts for 60 Hz (pe	ercentage) fire p	oumps	
Po	wer		Open			Enclosed	
(HP)	(kW)	2 poles	4 poles	6 poles	2 poles	4 poles	6 poles
1	0.75	77	85.5	82.5	77	85.5	82.5
1.5	1.1	84	86.5	86.5	84	86.5	87.5
2	1.5	85.5	86.5	87.5	85.5	86.5	88.5
3	2.2	85.5	89.5	88.5	86.5	89.5	89.5
5	3.7	86.5	89.5	89.5	88.5	89.5	89.5
7.5	5.5	88.5	91	90.2	89.5	91.7	91
10	7.5	89.5	91.7	91.7	90.2	91.7	91
15	11	90.2	93	91.7	91	92.4	91.7
20	15	91	93	92.4	91	93	91.7
25	19	91.7	93.6	93	91.7	93.6	93
30	22	91.7	94.1	93.6	91.7	93.6	93
40	30	92.4	94.1	94.1	92.4	94.1	94.1
50	37	93	94.5	94.1	93	94.5	94.1
60	45	93.6	95	94.5	93.6	95	94.5
75	55	93.6	95	94.5	93.6	95.4	94.5
100	75	93.6	95.4	95	94.1	95.4	95
125	90	94.1	95.4	95	95	95.4	95
150	110	94.1	95.8	95.4	95	95.8	95.8
200	150	95	95.8	95.4	95.4	96.2	95.8
250	185	95	95.8	95.4	95.8	96.2	95.8
300	225	95.4	95.8	95.4	95.8	96.2	95.8
350	260	95.4	95.8	95.4	95.8	96.2	95.8
400	300	95.8	95.8	95.8	95.8	96.2	95.8
450	340	95.8	96.2	96.2	95.8	96.2	95.8
500	375	95.8	96.2	96.2	95.8	96.2	95.8

Energy efficiency standard: CAN/CSA C390-10, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors   Power   Copen   Enclosed   En	Categor	ie 6: Elec	tric motors							
Power   Open   Sericles   Power   Copen   Sericles   Power   Open   Sericles   Power   Copen   Sericles   Power   Copen   Sericles   Power   Copen   Sericles   Power   Copen   Sericles   Power   Sericles   Power   Sericles   Seri				CAN/CSA C3	90-10, Test r	nethods, ma	rking requirer	nents, and e	nergy efficien	icy levels for
Power   Open	three-ph	ase induc	tion motors							
(HP)         (kW)         2 poles         4 poles         6 poles         8 poles         2 poles         4 poles         6 poles         8 poles           1         0.75         77         85.5         82.5         75.5         77         85.5         82.5         75.5           1.5         1.1         84         86.5         87.5         86.5         87.5         86.5         87.5         86.5         87.5         86.5         88.5         84.0           3         2.2         85.5         89.5         88.5         87.5         86.5         89.5         89.5         88.5         89.5         89.5         86.5         89.5         89.5         86.5         89.5         89.5         89.5         86.5         89.5         89.5         86.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         91.7         91         86.5         89.5         91.7         91         86.5         89.5         91.7         91         86.5         89.5         91.7         91         86.5         89.5         91.7         91         86.5         89.5         91.7         91         89.5         91.7			Energy	efficiency re	quirements	for all other	60 Hz (perce	entage) moto	ors	
1         0.75         77         85.5         82.5         75.5         77         85.5         82.5         75.5           1.5         1.1         84         86.5         86.5         77.0         84         86.5         87.5         78.5           2         1.5         85.5         86.5         87.5         86.5         85.5         88.5         84.0           3         2.2         85.5         89.5         88.5         87.5         86.5         89.5         89.5         85.5           5         3.7         86.5         89.5         89.5         88.5         89.5         89.5         89.5         86.5           7.5         5.5         88.5         91         90.2         89.5         89.5         89.5         86.5         89.5         89.5         86.5         89.5         89.5         86.5         89.5         89.5         86.5         89.5         89.5         86.5         89.5         89.5         89.5         86.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5 <td< td=""><td>Po</td><td></td><td></td><td>Op</td><td></td><td></td><td></td><td>Encl</td><td>osed</td><td></td></td<>	Po			Op				Encl	osed	
1.5         1.1         84         86.5         86.5         77.0         84         86.5         87.5         78.5           2         1.5         85.5         86.5         87.5         86.5         85.5         88.5         84.0           3         2.2         85.5         89.5         88.5         87.5         86.5         89.5         91.7         91         86.5         86.5         89.5         89.5         89.5         89.5         89.5         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91         89.5         91.7         91.7         91.7         91.7         89.6         91.7         90.2         92.4         91.7	(HP)									
2         1.5         85.5         86.5         87.5         86.5         85.5         86.5         88.5         84.0           3         2.2         85.5         89.5         88.5         87.5         86.5         89.5         89.5         85.5           5         3.7         86.5         89.5         88.5         88.5         88.5         88.5         89.5         89.5         91.7         91         86.5           7.5         5.5         88.5         91.7         91.7         90.2         90.2         91.7         91         86.5           10         7.5         89.5         91.7         91.7         90.2         90.2         91.7         91         89.5           15         11         90.2         93         91.7         90.2         91         92.4         91.7         91.89.5           20         15         91         93.6         93         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           25         19         91.7         94.1         93.6	1									
3         2.2         85.5         89.5         88.5         87.5         86.5         89.5         89.5         85.5           5         3.7         86.5         89.5         89.5         88.5         88.5         89.5         89.5         86.5           7.5         5.5         88.5         91.7         90.2         89.5         89.7         91         86.5           10         7.5         89.5         91.7         91.7         90.2         90.2         91.7         91         89.5           15         11         90.2         93         91.7         90.2         91         92.4         91.7         89.5           20         15         91         93         92.4         91.0         91         93         91.7         89.5           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         91.7           40         30         92.4         94.1         94.1         91.7         91.7         93.6         93		1.1				77.0				78.5
5         3.7         86.5         89.5         89.5         88.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         89.5         91.7         91         86.5           7.5         89.5         91.7         91.7         90.2         90.2         91.7         91         89.5           15         11         90.2         93         91.7         90.2         91         92.4         91.7         89.5           20         15         91         93         92.4         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           25         19         91.7         94.1         93.6         93         90.2         93         90.2           25         19         91.7         94.1         93.6         93         90.2         93         91.7         93.6         93         90.2           25         19			85.5	86.5	87.5	86.5	85.5	86.5	88.5	84.0
7.5         5.5         88.5         91         90.2         89.5         89.5         91.7         91         86.5           10         7.5         89.5         91.7         91.7         90.2         90.2         91.7         91         89.5           15         11         90.2         93         91.7         90.2         91         92.4         91.7         90.2           20         15         91         93.6         93         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         90.2           40         30         92.4         94.1         94.1         91.7         93.6         93         91.7           40         30         92.4         94.1         94.1         92.4         94.1         94.1         94.1         92.4         94.1         94.1         92.4         93         94.5         94.1         92.4         93         94.5         94.1		2.2	85.5	89.5	88.5	87.5	86.5	89.5	89.5	85.5
10         7.5         89.5         91.7         91.7         90.2         91.7         91         89.5           15         11         90.2         93         91.7         90.2         91         92.4         91.7         89.5           20         15         91         93         92.4         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         91.7           40         30         92.4         94.1         94.1         91.7         92.4         94.1         94.1         91.7           50         37         93         94.5         94.1         92.4         93         94.5         94.1         92.4           60         45         93.6         95         94.5         93.0         93.6         95         94.5         94.1         92.4         93         94.5         94.1         92.4           75         55         93.6         95         94	5	3.7	86.5	89.5	89.5	88.5	88.5	89.5	89.5	86.5
15         11         90.2         93         91.7         90.2         91         92.4         91.7         89.5           20         15         91         93         92.4         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         91.7           40         30         92.4         94.1         91.7         92.4         94.1         94.1         91.7           50         37         93         94.5         94.1         92.4         94.1         94.1         91.7           50         37         93.6         95         94.5         94.1         92.4         94.1         92.4           60         45         93.6         95         94.5         94.1         93.6         95.4         94.5         92.4           75         55         93.6         95         94.5         94.1         93.6         95.4         94.5         93.6	7.5		88.5		90.2	89.5	89.5	91.7	91	86.5
20         15         91         93         92.4         91.0         91         93         91.7         90.2           25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         91.7           40         30         92.4         94.1         94.1         91.7         92.4         94.1         94.1         91.7           50         37         93         94.5         94.1         92.4         93         94.5         94.1         92.4           60         45         93.6         95         94.5         93.0         93.6         95         94.5         94.1         93.6         95.4         94.1         92.4           75         55         93.6         95.4         95.9         94.5         94.1         93.6         95.4         94.5         93.6           100         75         93.6         95.4         95         94.1         94.1         95.4         95         93.6           125         90         94.1			89.5	91.7	91.7	90.2	90.2	91.7	91	89.5
25         19         91.7         93.6         93         91.0         91.7         93.6         93         90.2           30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         91.7           40         30         92.4         94.1         91.7         92.4         94.1         94.1         91.7           50         37         93         94.5         94.1         92.4         93         94.5         94.1         92.4           60         45         93.6         95         94.5         93.0         93.6         95         94.5         92.4           75         55         93.6         95         94.5         94.1         93.6         95.4         94.5         93.6           100         75         93.6         95.4         95         94.1         94.1         95.4         95         93.6           125         90         94.1         95.4         95         94.1         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1     <					91.7	90.2	91	92.4	91.7	89.5
30         22         91.7         94.1         93.6         91.7         91.7         93.6         93         91.7           40         30         92.4         94.1         94.1         91.7         92.4         94.1         94.1         91.7           50         37         93         94.5         94.1         92.4         93.9         94.5         94.1         92.4           60         45         93.6         95         94.5         93.0         93.6         95         94.5         92.4           75         55         93.6         95         94.5         94.1         93.6         95.4         94.5         93.6           100         75         93.6         95.4         95         94.1         93.6         95.4         94.5         93.6           125         90         94.1         95.4         95         94.1         95.4         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95         95.8				93		91.0	91	93	91.7	90.2
40         30         92.4         94.1         94.1         91.7         92.4         94.1         94.1         91.7           50         37         93         94.5         94.1         92.4         93         94.5         94.1         92.4           60         45         93.6         95         94.5         93.0         93.6         95         94.5         92.4           75         55         93.6         95         94.5         94.1         93.6         95.4         94.5         93.6           100         75         93.6         95.4         95         94.1         94.1         95.4         95         93.6           125         90         94.1         95.4         95         94.1         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         186         95         95.8         95.4         94.1         95.4         96.2         95.8	25		91.7	93.6	93	91.0	91.7	93.6		90.2
50         37         93         94.5         94.1         92.4         93         94.5         94.1         92.4           60         45         93.6         95         94.5         93.0         93.6         95         94.5         92.4           75         55         93.6         95         94.5         94.1         93.6         95.4         95         93.6           100         75         93.6         95.4         95         94.1         95.4         95         93.6           125         90         94.1         95.4         95         94.1         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.8         95.8         96.2         95.8         95.0	30	22	91.7	94.1	93.6	91.7	91.7	93.6	93	91.7
60         45         93.6         95         94.5         93.0         93.6         95         94.5         92.4           75         55         93.6         95         94.5         94.1         93.6         95.4         94.5         93.6           100         75         93.6         95.4         95         94.1         95.4         95         93.6           125         90         94.1         95.4         95         94.1         95         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.8         95.0         95.8         96.2         95.8         95.0           300         225         95.4         95.8         95.8         -         95.8         96.2         95.8         -           350         260         95.4         95.8         95.8         -         95.8         96.2         95.8	40			94.1	94.1	91.7	92.4	94.1	94.1	91.7
75         55         93.6         95         94.5         94.1         93.6         95.4         94.5         93.6           100         75         93.6         95.4         95         94.1         94.1         95.4         95         93.6           125         90         94.1         95.4         95         94.1         95.9         95.4         95.4         95.9         95.8         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.8         95.0         95.8         96.2         95.8         95.0           300         225         95.4         95.8         95.8         -         95.8         96.2         95.8         -           350         260         95.4         95.8         95.8         -         95.8         96.2         95.8         -           400         300         95.8         95.8         -         95.8 <td></td> <td>37</td> <td>93</td> <td>94.5</td> <td>94.1</td> <td>92.4</td> <td>93</td> <td>94.5</td> <td>94.1</td> <td>92.4</td>		37	93	94.5	94.1	92.4	93	94.5	94.1	92.4
100         75         93.6         95.4         95         94.1         94.1         95.4         95         93.6           125         90         94.1         95.4         95         94.1         95         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95.8         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.8         95.0         95.8         96.2         95.8         95.0           300         225         95.4         95.8         95.8         -         95.8         96.2         95.8         -           350         260         95.4         95.8         95.8         -         95.8         96.2         95.8         -           400         300         95.8         95.8         -         95.8         96.2         -         -           450         340         96.2         96.2         -         -         -         95.8         96.2 <td< td=""><td></td><td></td><td></td><td></td><td>94.5</td><td>93.0</td><td>93.6</td><td>95</td><td>94.5</td><td>92.4</td></td<>					94.5	93.0	93.6	95	94.5	92.4
125         90         94.1         95.4         95         94.1         95         95.4         95         94.1           150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.0         95.8         96.2         95.8         95.0           300         225         95.4         95.8         95.8         -         95.8         96.2         95.8         -           350         260         95.4         95.8         95.8         -         95.8         96.2         95.8         -           400         300         95.8         95.8         -         95.8         96.2         -         -           450         340         96.2         96.2         -         -         95.8         96.2         -         -	75		93.6	95	94.5	94.1	93.6	95.4	94.5	93.6
150         110         94.1         95.8         95.4         94.1         95         95.8         95.8         94.1           200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.8         95.0         95.8         96.2         95.8         95.0         95.8         95.0         95.8         96.2         95.8         -         95.8         96.2         95.8         -         400         95.8         95.8         96.2         95.8         -         95.8         96.2         95.8         -         95.8         96.2         95.8         -         -         95.8         96.2         95.8         -         -         95.8         96.2         -         -         -         95.8         96.2         -         -         -         -         95.8         96.2         -	100	75	93.6	95.4	95	94.1	94.1	95.4	95	93.6
200         150         95         95.8         95.4         94.1         95.4         96.2         95.8         94.5           250         185         95         95.8         95.0         95.8         96.2         95.8         95.0           300         225         95.4         95.8         95.8         -         95.8         96.2         95.8         -           350         260         95.4         95.8         95.8         -         95.8         96.2         95.8         -           400         300         95.8         95.8         -         95.8         96.2         -         -           450         340         96.2         96.2         -         -         95.8         96.2         -         -	125	90	94.1	95.4	95	94.1	95	95.4	95	94.1
250     185     95     95.8     95.8     95.0     95.8     96.2     95.8     95.0       300     225     95.4     95.8     95.8     -     95.8     96.2     95.8     -       350     260     95.4     95.8     95.8     -     95.8     96.2     95.8     -       400     300     95.8     95.8     -     95.8     96.2     -     -       450     340     96.2     96.2     -     -     95.8     96.2     -     -	150	110	94.1	95.8	95.4	94.1	95	95.8	95.8	94.1
300     225     95.4     95.8     95.8     -     95.8     96.2     95.8     -       350     260     95.4     95.8     95.8     -     95.8     96.2     95.8     -       400     300     95.8     95.8     -     95.8     96.2     -     -       450     340     96.2     96.2     -     -     95.8     96.2     -     -       450     340     96.2     96.2     -     -     95.8     96.2     -     -	200	150	95	95.8	95.4	94.1	95.4	96.2	95.8	94.5
350     260     95.4     95.8     95.8     -     95.8     96.2     95.8     -       400     300     95.8     95.8     -     -     95.8     96.2     -     -       450     340     96.2     96.2     -     -     95.8     96.2     -     -	250	185	95	95.8	95.8	95.0	95.8	96.2	95.8	95.0
400     300     95.8     95.8     -     -     95.8     96.2     -     -       450     340     96.2     96.2     -     -     95.8     96.2     -     -	300	225	95.4	95.8	95.8	-	95.8	96.2	95.8	-
450 340 96.2 96.2 95.8 96.2	350	260	95.4	95.8	95.8	-	95.8	96.2	95.8	-
	400	300	95.8	95.8	-	-	95.8	96.2	-	-
500 375 962 962 - 958 962	450	340	96.2	96.2	-	-	95.8	96.2	-	-
	500	375	96.2	96.2	-	-	95.8	96.2	-	-

PART 2

Category 7: Tr	ransformers			
Energy efficie	ncy standard: CAN/CSA C802.2-12, Minimum e	efficiency values for o	dry-type transforme	rs
	Energy efficiency requirements for	r single-phase tran	sformers	
Power	Performance in %, nominal power	Perforr	nance in %, nomina	al power
	per unit of 0.35		per unit of 0.5	
(kVA)	Class = 1.2 kV		Class > 1.2 kV	
		20 - 45 kV	> 45 - 95 kV	> 95 - 199 kV
15	97.7	98.1	97.86	97.6
25	98	98.33	98.12	97.9
37.5	98.2	98.49	98.3	98.1
50	98.3	98.6	98.42	98.2
75	98.5	98.73	98.57	98.53
100	98.6	98.82	98.67	98.63
167	98.7	98.96	98.83	98.8
250	98.8	99.07	98.95	98.91
333	98.9	99.14	99.03	98.99
500	-	99.22	99.12	99.09
667	-	99.27	99.18	99.15
833	-	99.31	99.23	99.2

Category 7: Tr	ransformers			
Energy efficie	ncy standard: CAN/CSA C802.2-12, Minimum	efficiency values for o	dry-type transforme	ers
	Energy efficiency requirements t	or three-phase trans	sformers	
Power	Performance in %, nominal power	Perforr	nance in %, nomin	al power
	per unit of 0.35		per unit of 0.5	
(kVA)	Class = 1.2 kV		Class > 1.2 kV	
		20 - 45 kV	> 45 - 95 kV	> 95 - 199 kV
15	97	97.5	97.18	96.8
30	97.5	97.9	97.63	97.3
45	97.7	98.1	97.86	97.6
75	98	98.33	98.12	97.9
112.5	98.2	98.49	98.3	98.1
150	98.3	98.6	98.42	98.2
225	98.5	98.73	98.57	98.53
300	98.6	98.82	98.67	98.63
500	98.7	98.96	98.83	98.8
750	98.8	99.07	98.95	98.91
1,000	98.9	99.14	99.03	98.99
1,500	-	99.22	99.12	99.09
2,000	-	99.27	99.18	99.15
2,500	-	99.31	99.23	99.2
3,000	=	99.34	99.26	99.24
3,750	-	99.38	99.3	99.28
5,000	-	99.42	99.35	99.33
7,500	-	99.48	99.41	99.39

PART 3

Category 7: Tr	ansformers				
Energy efficien	ncy standard: CAN/CSA C802.2-12, Minimum	efficiency values for o	dry-type transforme	rs	
	Energy efficiency requirements for	or single-phase tran	sformers		
Power Performance in %, nominal power Performance in %, nominal power					
	per unit of 0.35		per unit of 0.5		
(kVA)	Class = 1.2 kV		Class > 1.2 kV		
		20 - 45 kV	> 45 - 95 kV	> 95 - 199 kV	
15	97.7	98.1	97.86	97.6	
25	98	98.33	98.12	97.9	
37.5	98.2	98.49	98.3	98.1	
50	98.3	98.6	98.42	98.2	
75	98.5	98.73	98.57	98.53	
100	98.6	98.82	98.67	98.63	
167	98.7	98.96	98.83	98.8	
250	98.8	99.07	98.95	98.91	
333	98.9	99.14	99.03	98.99	
500	-	99.22	99.12	99.09	
667	=	99.27	99.18	99.15	
833	=	99.31	99.23	99.2	

Category 7: Tr	ransformers			
Energy efficier	ncy standard: CAN/CSA C802.2-12, Minimum e	efficiency values for o	lry-type transforme	rs
	Energy efficiency requirements f	or three-phase trans	sformers	
Power	Performance in %, nominal power	Perform	nance in %, nomina	al power
	per unit of 0.35		per unit of 0.5	
(kVA)	Class = 1.2 kV		Class > 1.2 kV	
		20 - 45 kV	> 45 - 95 kV	> 95 - 199 kV
15	97	97.5	97.18	96.8
30	97.5	97.9	97.63	97.3
45	97.7	98.1	97.86	97.6
75	98	98.33	98.12	97.9
112.5	98.2	98.49	98.3	98.1
150	98.3	98.6	98.42	98.2
225	98.5	98.73	98.57	98.53
300	98.6	98.82	98.67	98.63
500	98.7	98.96	98.83	98.8
750	98.8	99.07	98.95	98.91
1,000	98.9	99.14	99.03	98.99
1,500	-	99.22	99.12	99.09
2,000	-	99.27	99.18	99.15
2,500	=	99.31	99.23	99.2
3,000	=	99.34	99.26	99.24
3,750	=	99.38	99.3	99.28
5,000	=	99.42	99.35	99.33
7,500	=	99.48	99.41	99.39

102680

## **Draft regulation**

Health Insurance Act (chapitre A-29)

## Application regulation —Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation to amend the Regulation respecting the application of the Health Insurance Act, the text of which appears hereafter, may be made by the Government upon the expiry of 45 days following this publication.

The proposed amendment is aimed at increasing the coverage for ultrasonography by insuring this service outside a facility maintained by an institution which operate a hospital centre, if the service is rendered by a radiologist.

Furthermore, the amendment aims to insure optical tomography of the ocular globe and confocal scanning laser ophthalmoscopy of the optic nerve rendered as part of an intravitreal injection of an antiangiogenic drug for treatment of macular edema caused by vein occlusion, diabetic macular edema, retinopathy of prematurity, malignant myopia, neovascular glaucoma or neovascular diabetic retinopathy.

This draft regulation has no impact on enterprises, specifically small or medium-sized enterprises.

Further information concerning this draft regulation may be obtained by contacting Julie Goulet, Direction des relations professionnelles avec les fédérations médicales, Ministère de la Santé et des Services sociaux, 1005, chemin Sainte-Foy, 4° étage, Québec (Québec) GIS 4N4, by phone at 418 266-8437, by fax at 418 266-8444 or by email at julie.goulet@msss.gouv.qc.ca