

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;
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/y;
Edaily:	Daily energy consumption or calculated daily energy consumption in kWh/d;
EER:	Energy efficiency ratio;
EF:	Efficiency factor;
Hm:	Daily production capability in kg/d;
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 lm/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;
Vn:	Tank nominal volume in litres;
Vr:	Refrigerator volume in litres.

## PART 1

Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
<b>Category 1: Domestic water heaters</b>			
<b>1. Water heater</b>			
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 excluded.	CSA P.3-04, Testing Method for Measuring Energy Consumption and Determining Efficiencies of Gas-Fired Storage Water Heaters	$EF \geq 0.7 - 0.0005 \times V_n$	As of the coming into force of the Regulation
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 water heating applications are excluded.	CAN/CSA B211-00, Energy Efficiency of Oil-Fired Storage Tank Water Heaters	$EF \geq 0.59 - 0.0005 \times V_n$	As of the coming into force of the Regulation to 31 December 2017
	CAN/CSA B211-00, Energy Efficiency of Oil-Fired Storage Tank Water Heaters	$EF \geq 0.68 - 0.0005 \times V_n$	From 1 January 2018
3. Electric storage tank 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 rating of 12 kW or less. Units designed for combination space and water heating applications are excluded.	CAN/CSA C191-04, Performance of electric storage tank water heaters for domestic hot water service	<b>Tank with bottom inlet</b>	As of the coming into force of the Regulation
		$V_n \geq 50 \text{ L and } \leq 270 \text{ L: } SL \leq 0.2 \times V_n + 40$	
		$V_n > 270 \text{ L and } \leq 454 \text{ L: } SL \leq 0.472 \times V_n - 33.5$	
		<b>Tank with top inlet</b>	
		$V_n \geq 50 \text{ L and } < 160 \text{ L: } SL \leq 0.2 \times V_n + 35$	
		$V_n \geq 160 \text{ L and } < 270 \text{ L: } SL \leq 0.2 \times V_n + 25$	
		$V_n \geq 270 \text{ L and } \leq 290 \text{ L: } SL \leq 0.472 \times V_n - 48.5$	
		$V_n > 290 \text{ L and } \leq 454 \text{ L: } SL \leq 0.472 \times V_n - 38.5$	
<b>Category 2: Heating or air-conditioning appliances</b>			
<b>1. Gas-fired unit heaters</b>			
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.	CAN/CSA P.11-07, Testing method for measuring efficiency and energy consumption of gas-fired unit heaters	$TE \geq 80\%$ at the maximum heat input nominal capacity and must be equipped with an intermittent ignition device and <ul style="list-style-type: none"> <li>- a power-vented system;</li> <li>- an automatic vent damper; or</li> <li>- an automatic flue damper.</li> </ul>	As of the coming into force of the Regulation
<b>2. Boilers</b>			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
<p>1. 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.</p>	<p>CAN/CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gas-fired or oil-fired furnaces and boilers</p>	<p>Boiler designed for a hot water system and equipped with heating coils: AFUE <math>\geq</math> 82% and must not be equipped with a continuously burning pilot light</p>	<p>As of the coming into force of the Regulation</p>
		<p>Boiler designed for a hot water system not equipped with heating coils: AFUE <math>\geq</math> 82%, must not be equipped with a continuously burning pilot light, must be equipped with an automatic water temperature adjustment device and not operable without the device</p>	
		<p>Boiler designed for a steam heating system: AFUE <math>\geq</math> 80% and must not be equipped with a continuously burning pilot light</p>	
<p>2. Oil-fired 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, that 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.</p>	<p>CAN/CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gas-fired or oil-fired furnaces and boilers or ANSI/ASHRAE 103-2007, Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers</p>	<p>Boiler designed for a hot water system and equipped with heating coils: AFUE <math>\geq</math> 84%</p>	<p>As of the coming into force of the Regulation</p>
		<p>Boiler designed for a hot water system and not equipped with heating coils: AFUE <math>\geq</math> 84%, must be equipped with an automatic water temperature adjustment device and not operable without the device</p>	
		<p>Boiler designed for a steam heating system: AFUE <math>\geq</math> 82%</p>	
<p>3. 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.</p>	<p>N/A</p>	<p>Equipped with an automatic water temperature adjustment device and not operable without the device</p>	<p>As of the coming into force of the Regulation</p>
<p><b>3. Central air conditioners and heat pumps (single-package or split-system)</b></p>			
<p>1. Single-package central air conditioner or heat pump, that uses single-phase electric current, with a cooling capacity of less than 19 kW (65,000 Btu/h). Appliances designed for constrained spaces are excluded.</p>	<p>CAN/CSA C656-14, Performance standard for split-system and single-package air conditioners and heat pumps</p>	<p>SEER <math>\geq</math> 14, HSPF region V <math>\geq</math> 7 and power consumption in off mode <math>\leq</math> 30 W for an air conditioner or <math>\leq</math> 33 W for a heat pump</p>	<p>As of the coming into force of the Regulation</p>
<p>2. Space constrained split-system or single package air conditioner or heat pump, that uses single-phase electric current, with a cooling</p>	<p>CAN/CSA C656-14, Performance standard for split-system and single-package air conditioners and heat pumps</p>	<p>SEER <math>\geq</math> 12, HSPF region V <math>\geq</math> 6.4 and power consumption in off mode <math>\leq</math> 30 W for an air conditioner or <math>\leq</math> 33 W for a heat pump</p>	<p>As of the coming into force of the Regulation</p>

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
capacity of less than 19 kW (65,000 Btu/h). Wall units are included.			
3. Split-system central air conditioner other than a small-duct and high-velocity air conditioner or an air conditioner for constrained spaces, that uses single-phase electric current, with a cooling capacity of less than 19 kW (65,000 Btu/h).	CAN/CSA C656-14, Performance standard for split-system and single-package air conditioners and heat pumps	SEER ≥ 13 and power consumption in off mode ≤ 30 W	As of the coming into force of the Regulation
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).	CAN/CSA C656-14, Performance standard for split-system and single-package air conditioners and heat pumps	SEER ≥ 14, HSPF region V ≥ 7.1 and power consumption in off mode ≤ 33 W	As of the coming into force of the Regulation
5. Split-system central air conditioner or heat pump, small-duct and high-velocity, that uses single-phase electric current, with a cooling capacity of less than 19 kW (65,000 Btu/h).	CAN/CSA C656-14, Performance standard for split-system and single-package air conditioners and heat pumps	SEER ≥ 12, HSPF region V ≥ 6.3 and power consumption in off mode ≤ 30 W	As of the coming into force of the Regulation
6. Central air conditioner or heat pump, that uses three-phase electric current, with a cooling capacity of less than 19 kW (65,000 Btu/h).	CAN/CSA C656-14, Performance standard for split-system and single-package air conditioners and heat pumps	SEER ≥ 13 and HSPF region V ≥ 6.7	As of the coming into force of the Regulation
<b>4. Large air conditioners and heat pumps</b>			
1. Large commercial or industrial unitary air-conditioner, air-cooled, without a heating section or with an electric heating section.	For EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11.2 and IEER ≥ 11.4	As of the coming into force of the Regulation
		Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (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 ≥ 10 and IEER ≥ 10.1	
2. Large commercial or industrial unitary air-conditioner, air-cooled, with a heating section other than an electric heating section.	For EER: 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 ≥ 11 and IEER ≥ 11.2	As of the coming into force of the Regulation
		Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 10.8 and IEER ≥ 11	

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
	For IEER: ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 9.8 and IEER ≥ 9.9	
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.	For EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 12.1 and IEER ≥ 11.7 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (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	As of the coming into force of the Regulation
4. Large commercial or industrial unitary air-conditioner, water-cooled, with a heating section other than an electric heating section. Variable flow units are excluded.	For EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11.9 and IEER ≥ 11.5 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (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 the coming into force of the Regulation
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.	For EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 12.1 and IEER ≥ 11.7 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 12 and IEER ≥ 11.2 Cap ≥ 70 kW (240,000 Btu/h) and < 223 kW (760,000 Btu/h): EER ≥ 11.9 and IEER ≥ 11.1	As of the coming into force of the Regulation
6. Large commercial or industrial unitary air-conditioner, evaporation-cooled, with a heating section other than an electric heating section. Variable flow units are excluded.	For EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11.9 and IEER ≥ 11.5 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (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 the coming into force of the Regulation
7. Large commercial or industrial variable flow unitary air-conditioner, water-cooled or evaporation-cooled, without a heating	For EER: 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 ≥ 11.5 and IEER ≥ 11.7 Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 11 and IEER ≥ 11.2	As of the coming into force of the Regulation

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section or with an electric heating section.	For IEER: ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment	Cap $\geq$ 70 kW (240,000 Btu/h) and $<$ 223 kW (760,000 Btu/h): EER $\geq$ 11 and IEER $\geq$ 11.1	
8. Large commercial or industrial variable flow unitary air-conditioner, water-cooled or evaporation-cooled, with a heating section other than an electric heating section.	For EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap $\geq$ 19 kW (65,000 Btu/h) and $<$ 40 kW (135,000 Btu/h): EER $\geq$ 11.3 and IEER $\geq$ 11.5	As of the coming into force of the Regulation
		Cap $\geq$ 40 kW (135,000 Btu/h) and $<$ 70 kW (240,000 Btu/h): EER $\geq$ 10.8 and IEER $\geq$ 11	
		Cap $\geq$ 70 kW (240,000 Btu/h) and $<$ 223 kW (760,000 Btu/h): EER $\geq$ 10.8 and IEER $\geq$ 10.9	
9. Large commercial or industrial unitary heat pump, air-cooled, without a heating section or with an electric heating section.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap $\geq$ 19 kW (65,000 Btu/h) and $<$ 40 kW (135,000 Btu/h): EER $\geq$ 11, IEER $\geq$ 11.2, COP at 8.3°C $\geq$ 3.3 and COP at -8.3°C $\geq$ 2.25	As of the coming into force of the Regulation
		Cap $\geq$ 40 kW (135,000 Btu/h) and $<$ 70 kW (240,000 Btu/h): EER $\geq$ 10.6, IEER $\geq$ 10.7, COP at 8.3°C $\geq$ 3.2 and COP at -8.3°C $\geq$ 2.05	
		Cap $\geq$ 70 kW (240,000 Btu/h) and $<$ 223 kW (760,000 Btu/h): EER $\geq$ 9.5, IEER $\geq$ 9.6, COP at 8.3°C $\geq$ 3.2 and COP at -8.3°C $\geq$ 2.05	
10. Large commercial or industrial unitary heat pump, air-cooled, with a heating section other than an electric heating section.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap $\geq$ 19 kW (65,000 Btu/h) and $<$ 40 kW (135,000 Btu/h): EER $\geq$ 10.8, IEER $\geq$ 11, COP at 8.3°C $\geq$ 3.3 and COP at -8.3°C $\geq$ 2.25	As of the coming into force of the Regulation
		Cap $\geq$ 40 kW (135,000 Btu/h) and $<$ 70 kW (240,000 Btu/h): EER $\geq$ 10.4, IEER $\geq$ 10.5, COP at 8.3°C $\geq$ 3.2 and COP at -8.3°C $\geq$ 2.05	
		Cap $\geq$ 70 kW (240,000 Btu/h) and $<$ 223 kW (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	
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.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap $\geq$ 19 kW (65,000 Btu/h) and $<$ 40 kW (135,000 Btu/h): EER $\geq$ 12.1, IEER $\geq$ 11.2, COP at 8.3°C $\geq$ 3.3 and COP at -8.3°C $\geq$ 2.25	As of the coming into force of the Regulation
		Cap $\geq$ 40 kW (135,000 Btu/h) and $<$ 70 kW (240,000 Btu/h): EER $\geq$ 12.5, IEER $\geq$ 10.7, COP at 8.3°C $\geq$ 3.2 and COP at -8.3°C $\geq$ 2.05	
		Cap $\geq$ 70 kW (240,000 Btu/h) and $<$ 223 kW (760,000 Btu/h): EER $\geq$ 12.4, IEER $\geq$ 9.6, COP at 8.3°C $\geq$ 3.2 and COP at -8.3°C $\geq$ 2.05	
12. Large commercial or industrial unitary heat pump, water-cooled, with a heating section	For COP and EER: CAN/CSA C746-06, Performance standard for rating large and single	Cap $\geq$ 19 kW (65,000 Btu/h) and $<$ 40 kW (135,000 Btu/h): EER $\geq$ 11.9, IEER $\geq$ 11, COP at 8.3°C $\geq$ 3.3 and COP at -8.3°C $\geq$ 2.25	As of the coming into force of the Regulation

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
other than an electric heating section. Variable flow units are excluded.	packaged vertical air conditioners and heat pumps For IEER: ANSI/AHRI 340/360-2007, Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment	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 at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	
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.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 12.1, IEER ≥ 11.2, COP at 8.3°C ≥ 3.3 and COP at -8.3°C ≥ 2.25  Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 12, 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 ≥ 11.9, IEER ≥ 9.6, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	As of the coming into force of the Regulation
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.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11.9, IEER ≥ 11, COP at 8.3°C ≥ 3.3 and COP at -8.3°C ≥ 2.25  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 at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	As of the coming into force of the Regulation
15. Large commercial or industrial variable flow unitary heat pump, water-cooled, without a heating section or with an electric heating section.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 12, IEER ≥ 11.2, COP at 8.3°C ≥ 3.3 and COP at -8.3°C ≥ 2.25  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 ≥ 10, IEER ≥ 9.6, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	As of the coming into force of the Regulation
16. Large commercial or industrial variable flow unitary heat pump, water-cooled, with a heating section other than an electric heating section.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 12, IEER ≥ 11, COP at 8.3°C ≥ 3.3 and COP at -8.3°C ≥ 2.25  Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 10.4, 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 ≥ 9.8, IEER ≥ 9.4, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	As of the coming into force of the Regulation

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17. Large commercial or industrial variable flow unitary heat pump, evaporation-cooled, without a heating section or with an electric heating section.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	Cap ≥ 19 kW (65,000 Btu/h) and < 40 kW (135,000 Btu/h): EER ≥ 11, IEER ≥ 11.2, COP at 8.3°C ≥ 3.3 and COP at -8.3°C ≥ 2.25	As of the coming into force of the Regulation
		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 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	
18. Large commercial or industrial variable flow unitary heat pump, evaporation-cooled, with a heating section other than an electric heating section.	For COP and EER: 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 Unitary Air-Conditioning and Heat Pump Equipment	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 the coming into force of the Regulation
		Cap ≥ 40 kW (135,000 Btu/h) and < 70 kW (240,000 Btu/h): EER ≥ 10.4, 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 ≥ 9.3, IEER ≥ 9.4, COP at 8.3°C ≥ 3.2 and COP at -8.3°C ≥ 2.05	
<b>5. Room air conditioners</b>			
1. Single-phase room air conditioner that has a cooling capacity of 10.55 kW (36,000 Btu/h) or less, except a packaged terminal air conditioner. Portable air conditioners are excluded.	CAN/CSA C368.1-14, Energy performance of room air conditioners	<b>With louvred sides, without reverse cycle</b> Cap < 1.75 kW (6,000 Btu/h): CEER ≥ 11	As of 1 January 2017
		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 (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	
		<b>With louvred sides, with reverse cycle</b> Cap < 8.17 kW (20,000 Btu/h): CEER ≥ 9.8	
		Cap ≥ 8.17 kW (20,000 Btu/h): CEER ≥ 9.3	
		<b>Without louvred sides, without reverse cycle</b> 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	



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		<p>Cap <math>\geq</math> 4.08 kW (14,000 Btu/h) and <math>&lt;</math> 8.17 kW (20,000 Btu/h): CEER <math>\geq</math> 9.3</p> <p>Cap <math>\geq</math> 8.17 kW (20,000 Btu/h): CEER <math>\geq</math> 9.4</p> <p><b>Without louvred sides, with reverse cycle</b></p> <p>Cap <math>&lt;</math> 4.08 kW (14,000 Btu/h): CEER <math>\geq</math> 9.3</p> <p>Cap <math>\geq</math> 4.08 kW (14,000 Btu/h): CEER <math>\geq</math> 8.7</p> <p><b>Unit for casement window only:</b> CEER <math>\geq</math> 9.5</p> <p><b>Unit for casement or sliding window:</b> CEER <math>\geq</math> 10.4</p>	
<b>6. Packaged terminal air conditioners and heat pumps</b>			
<p>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 zone.</p>	<p>AHRI 310/380-2004 CAN/CSA C744-14, Standard for packaged terminal air-conditioners and heat pumps</p>	<p><b>PTAC: standard size</b></p> <p>Cap <math>&lt;</math> 2,030 W (7,000 Btu/h): EER <math>\geq</math> 11.7</p> <p>Cap <math>\geq</math> 2,030 W (7,000 Btu/h) and <math>\leq</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 13.8 – (0.300 <math>\times</math> Cap / 293.1)</p> <p>Cap <math>&gt;</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 9.3</p> <p><b>PTAC: non-standard size</b></p> <p>Cap <math>&lt;</math> 2,030 W (7,000 Btu/h): EER <math>\geq</math> 9.4</p> <p>Cap <math>\geq</math> 2,030 W (7,000 Btu/h) and <math>\leq</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 10.9 – (0.213 <math>\times</math> Cap / 293.1)</p> <p>Cap <math>&gt;</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 7.7</p> <p><b>PTHP : standard size</b></p> <p>Cap <math>&lt;</math> 2,030 W (7,000 Btu/h): EER <math>\geq</math> 11.9 and COP <math>\geq</math> 3.3</p> <p>Cap <math>\geq</math> 2,030 W (7,000 Btu/h) and <math>\leq</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 14.0 – (0.300 <math>\times</math> Cap / 293.1) and COP <math>\geq</math> 3.7 – (0.052 <math>\times</math> Cap)</p> <p>Cap <math>&gt;</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 9.5 and COP <math>\geq</math> 2.9</p> <p><b>PTHP : non-standard size</b></p> <p>Cap <math>&lt;</math> 2,030 W (7,000 Btu/h): EER <math>\geq</math> 9.3 and COP <math>\geq</math> 2.7</p> <p>Cap <math>\geq</math> 2,030 W (7,000 Btu/h) and <math>\leq</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 10.8 – (0.213 <math>\times</math> Cap) and COP <math>\geq</math> 2.9 – (0.026 <math>\times</math> Cap)</p> <p>Cap <math>&gt;</math> 4,390 W (15,000 Btu/h): EER <math>\geq</math> 7.6 and COP <math>\geq</math> 2.5</p>	<p>As of the coming into force of the Regulation</p>
<b>7. Single packaged vertical air conditioners and heat pumps</b>			
<p>1. Single packaged commercial air conditioner or heat</p>	<p>CAN/CSA C746-06, Performance standard for rating large and single</p>	<p>Cap <math>&lt;</math> 19 kW (65,000 Btu/h): EER <math>\geq</math> 9 and COP <math>\geq</math> 3</p>	<p>As of the coming into</p>

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
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.	packaged vertical air conditioners and heat pumps	Cap $\geq$ 19 kW (65,000 Btu/h) and $<$ 39.5 kW (135,000 Btu/h): EER $\geq$ 8.9 and COP $\geq$ 3	force of the Regulation
		Cap $\geq$ 39.5 kW (135,000 Btu/h): EER $\geq$ 8.6 and COP $\geq$ 2.9	
<b>8. Internal water loop heat pumps</b>			
1. 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).	CAN/CSA-C13256-1-01, Water-source heat pumps — Testing and rating for performance — Part 1: Water-to-air and brine-to-air heat pumps	Cap $<$ 5 kW: COP <sub>c</sub> $\geq$ 3.28 for an input water temperature of 30°C and COP <sub>h</sub> $\geq$ 4.2 for an input water temperature of 20°C	As of the coming into force of the Regulation
		Cap $\geq$ 5 and $<$ 40 kW : COP <sub>c</sub> $\geq$ 3.52 for an input water temperature of 30°C and COP <sub>h</sub> $\geq$ 4.2 for an input water temperature of 20°C	
<b>9. Ground-source heat pumps</b>			
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.	CAN/CSA-C13256-1-01, Water-source heat pumps — Testing and rating for performance — Part 1: Water-to-air and brine-to-air heat pumps	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	As of the coming into force of the Regulation
		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	
<b>10. Furnaces</b>			
1. Natural gas or propane furnace, that uses single-phase electric current and that has an input rate of 65.92 kW (225,000 Btu/h) or less.	CAN/CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gas-fired or oil-fired furnaces and boilers	Furnace for a mobile home or a recreational vehicle: AFUE $\geq$ 80%	As of the coming into force of the Regulation
		Weatherized furnace that is not designed for a mobile home or a recreational vehicle equipped with an integrated cooling component: AFUE $\geq$ 81%	
		For all other furnaces: AFUE $\geq$ 92%	
2. Natural gas or propane furnace, that uses three-phase electric current and that has an input rate of 65.92 kW (225,000 Btu/h) or less, but does not include a furnace for a mobile home or a recreational vehicle.	ANSI Z21.47-2012 CSA 2.3-2012, Gas-fired central furnaces	AFUE $\geq$ 78% or TE $\geq$ 80%	As of the coming into force of the Regulation

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3. Gas furnace that has an input rate of more than 65.92 kW (225,000 Btu/h) and not more than 117.23 kW (400,000 Btu/h).	ANSI Z21.47-012 CSA 2.3-2012, Gas-fired central furnaces	Furnace for a mobile home or a recreational vehicle: TE ≥ 75% and must not be equipped with a continuously burning pilot light	As of the coming into force of the Regulation
		For all other furnaces: TE ≥ 80% and must not be equipped with a continuously burning pilot light	
4. Oil furnace that has an input rate of 65.92 kW (225,000 Btu/h) or less and that is fired only with oil or oil with another hydrocarbon.	CAN/CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gas-fired or oil-fired furnaces and boilers	Furnace for a mobile home or a recreational vehicle: AFUE ≥ 75%	As of the coming into force of the Regulation
		Weatherized furnace that is not designed for a mobile home or a recreational vehicle: AFUE ≥ 78%	
		Non-weatherized furnace that is not designed for a mobile home or a recreational vehicle: AFUE ≥ 83%	
		For all non-weatherized furnaces: the maximum electrical consumption in a standby or an off mode must be less than 11 W	
<b>11. Condensing units</b>			
1. Large commercial or industrial condensing unit intended for air conditioning applications with a cooling capacity of 19 kW (65,000 Btu/h) or more and of 70 kW (240,000 Btu/h) or less.	CAN/CSA C746-06, Performance standard for rating large and single packaged vertical air conditioners and heat pumps	Air-cooled: EER ≥ 10.1	As of the coming into force of the Regulation
		Water-cooled or evaporation-cooled: EER ≥ 13.1	
<b>12. Chillers</b>			
1. Machine designed to make use of a refrigerant cycle to remove heat from a liquid, usually water, that rejects that heat to a cooling medium, usually air or water, and the refrigerant condenser of which may, or may not be, an integral part of the machine.	CAN/CSA C743-09, Performance Standard for rating packaged water chillers	<b>Vapour compression</b>	As of the coming into force of the Regulation
		Air-cooled with or without a condenser, capacity < 528 kW, type A: COP ≥ 2.802 and IPLV ≥ 3.664	
		Air-cooled with or without a condenser, capacity ≥ 528 kW, type A: COP ≥ 2.802 and IPLV ≥ 3.737	
		<b>Water, alternating, type A, type B</b>	
		All water-cooled appliances, reciprocating, type A, type B, must meet the energy 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			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		Water-cooled, rotary screw, scroll, capacity $\geq 264$ and $< 528$ kW, type B: COP $\geq 4.452$ and IPLV $\geq 6.001$	
		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 $\geq 1,055$ kW, type B: COP $\geq 5.504$ and IPLV $\geq 7.177$	
		Water-cooled, centrifugal, capacity $< 264$ kW, type A: COP $\geq 5.547$ and IPLV $\geq 5.901$	
		Water-cooled, centrifugal, capacity $< 264$ kW, type B: COP $\geq 5.504$ and IPLV $\geq 7.815$	
		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 $\geq 1,055$ kW, type B: COP $\geq 5.961$ and IPLV $\geq 8.792$	
		<b>Absorption</b>	
		Single-effect, air-cooled, all capacities, type A: COP $\geq 0.6$	
		Single-effect, air-cooled, all capacities, type A: COP $\geq 0.7$	
		Double-effect absorption, indirect-fired, all capacities, type A: COP $\geq 1$ and IPLV $\geq 1.05$	
Double-effect absorption, direct-fired, all capacities, type A: COP $\geq 1$ and IPLV $\geq 1$			
<b>13. Thermostats</b>			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
1. Thermostat intended for line-voltage switching of a controlled resistive heating load (120 to 240 V). Thermostats used exclusively with radiant floors are excluded.	CAN/CSA C828-13, Performance requirements for thermostats used with individual room electric space heating devices. For the duty cycle: the average temperature at the centre of 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%	For all thermostats: the maximum absolute thermostat droop in temperature $\leq 1.5^\circ\text{C}$	As of the coming into force of the Regulation
		For all thermostats, except fan-coil units: differential $\leq 0.5^\circ\text{C}$	
<b>14. Ceiling fans</b>			
1. Residential, industrial or commercial suspended or hugger ceiling fan designed to be connected to supply circuits not exceeding 250 V.	CAN/CSA C814-10, Energy performance of ceiling fans The service value must be measured in accordance with the procedure in Chapter 5 of CAN/CSA C814-96, Energy Performance of Ceiling Fans	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 the lighting cannot operate with bulbs consuming more than a total of 190 W.  For a household fan: service value $\geq 30$ L/s/W  For an industrial or commercial fan: service value $\geq 35$ L/s/W	As of 1 January 2019
<b>Category 3 : Lighting units</b>			
<b>1. Fluorescent lamp ballasts</b>			
1. For all ballasts covered by the definitions below.	NEMA/ANSI C82.77-2002, Harmonic emission limits – related power quality requirements for lighting equipment	For all ballasts, the requirements respecting harmonic rates must be met. Ballasts must have a power factor of at least 90%. In the case of ballasts designed and marked for residential use at 120 V, a power factor of 50% or more must be deemed to be acceptable.	As of the coming into force of the Regulation
	N/A	$\text{BLE} \geq A / (1 + B \times \text{total lamp arc power}^{(-C)})$ 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).	CAN/CSA - C654-14, Fluorescent lamp ballast efficacy measurements	277 V: A = 0.993, B = 0.27 and C = 0.25 347 V: A = 0.963, B = 0.27 and C = 0.25	As of the coming into force of the Regulation
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	CAN/CSA - C654-14, 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 the coming into force of the Regulation

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
standard output lamps or (d) 1,200 mm miniature bipin high output lamps (class 2).			
4. Instant-start and rapid-start ballast (other than sign ballasts) designed to operate lamps commonly referred to as 2,400 mm high output lamps (class 3).	CAN/CSA - C654-14, Fluorescent lamp ballast efficacy measurements	277 V: A = 0.993, B = 0.38 and C = 0.25	As of the coming into force of the Regulation
		347 V: A = 0.963, B = 0.38 and C = 0.25	
5. Programmed-start ballast (other than sign ballasts) designed to operate lamps commonly referred to as 2,400 mm high output lamps (class 4).	CAN/CSA - C654-14, Fluorescent lamp ballast efficacy measurements	277 V: A = 0.973, B = 0.70 and C = 0.37	As of the coming into force of the Regulation
		347 V: A = 0.944, B = 0.70 and C = 0.37	
6. Sign ballast that operates lamps commonly referred to as 2,400 mm high output lamps (class 5).	CAN/CSA - C654-14, Fluorescent lamp ballast efficacy measurements	277 V: A = 0.993, B = 0.47 and C = 0.25	As of the coming into force of the Regulation
		347 V: A = 0.963, B = 0.47 and C = 0.25	
7. Residential instant-start and rapid-start ballast 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 6, 120 V).	CAN/CSA - C654-14, Fluorescent lamp ballast efficacy measurements	120 V: A = 0.993, B = 0.41 and C = 0.25	As of the coming into force of the Regulation
8. Residential programmed-start ballast designed to operate lamps commonly referred to as: (a) 1,200 mm medium bipin lamps or (b) 600 mm U-shaped lamps (class 7, 120 V).	CAN/CSA - C654-14, Fluorescent lamp ballast efficacy measurements	120 V: A = 0.973, B = 0.71 and C = 0.37	As of the coming into force of the Regulation
<b>2. Exit signs</b>			
1. Types 1, 2 and 3 exit sign, as referred to in CAN/CSA C860-11.	CAN/CSA C860-11, Performance of internally lighted exit signs	Types 1 and 2: maximum wattage of 5 W per legend	As of the coming into force of the Regulation
		Type 3: maximum wattage of 5 W per legend + 5 W for a charging circuit	
<b>3. General service fluorescent lamps</b>			
1. U-shaped general service fluorescent lamp with a nominal overall length of not less than 560 mm, but not more than 635 mm and a rated wattage equal to or greater than 25 W.	CAN/CSA C819-11, Performance of general service fluorescent lamps	CCT ≤ 4,500 K: LE ≥ 84	As of 1 January 2019
		CCT > 4,500 and ≤ 7,000 K: LE ≥ 81	

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2. Straight-shaped general service fluorescent lamp with a nominal overall length of 1,200 mm and a rated wattage equal to or greater than 25 W.	CAN/CSA C819-11, Performance of general service fluorescent lamps	CCT ≤ 4,500 K: LE ≥ 89	As of 1 January 2019
		CCT > 4,500 and ≤ 7,000 K: LE ≥ 88	
3. Straight-shaped slimline general service fluorescent lamp with a nominal overall length of 2,400 mm and a rated wattage equal to or greater than 52 W.	CAN/CSA C819-11, Performance of general service fluorescent lamps	CCT ≤ 4,500 K: LE ≥ 97	As of 1 January 2019
		CCT > 4,500 and ≤ 7,000 K: LE ≥ 93	
4. Straight-shaped high output fluorescent lamp with a nominal overall length of 2,400 mm	CAN/CSA C819-11, Performance of general service fluorescent lamps	CCT ≤ 4,500 K: LE ≥ 92	As of 1 January 2019
		CCT > 4,500 and ≤ 7,000 K: LE ≥ 88	
5. Straight-shaped miniature standard output fluorescent lamp with a nominal overall length of 1,200 mm and a rated wattage equal to or greater than 26 W.	CAN/CSA C819-11, Performance of general service fluorescent lamps	CCT ≤ 4,500 K: LE ≥ 86	As of 1 January 2019
		CCT > 4,500 and ≤ 7,000 K: LE ≥ 81	
6. Straight-shaped miniature high output fluorescent lamp with a nominal overall length of 1,200 mm and a rated wattage equal to or greater than 49 W.	CAN/CSA C819-11, Performance of general service fluorescent lamps	CCT ≤ 4,500 K: LE ≥ 76	As of 1 January 2019
		CCT > 4,500 and ≤ 7,000 K: LE ≥ 72	
<b>4. General service incandescent reflector lamps</b>			
1. Incandescent and tungsten halogen reflector lamp designed for general lighting that has a rated wattage of less than 205 W, but greater than 40 W, an operating capability included between 110 and 130 V, an E26/24 single contact or E26/50x39 skirted, medium screw base and a bulb diameter greater than 57 mm.	CAN/CSA C862-12, Performance of incandescent reflector lamps	Standard spectrum, diameter > 6.35 cm and voltage ≥ 125 V: LE ≥ 6.8(P) <sup>0.27</sup>	As of the coming into force of the Regulation
		Standard spectrum, diameter > 6.35 cm and voltage < 125 V: LE ≥ 5.9(P) <sup>0.27</sup>	
		Standard spectrum, diameter ≤ 6.35 cm and voltage ≥ 125 V: LE ≥ 5.7(P) <sup>0.27</sup>	
		Standard spectrum, diameter ≤ 6.35 cm and voltage < 125 V: LE ≥ 5.0(P) <sup>0.27</sup>	
		Modified spectrum, diameter > 6.35 cm and voltage ≥ 125 V: LE ≥ 5.8(P) <sup>0.27</sup>	
		Modified spectrum, diameter > 6.35 cm and voltage < 125 V: LE ≥ 5.0(P) <sup>0.27</sup>	
		Modified spectrum, diameter ≤ 6.35 cm and voltage ≥ 125 V: LE ≥ 4.9(P) <sup>0.27</sup>	
		Modified spectrum, diameter ≤ 6.35 cm and voltage < 125 V: LE ≥ 4.2(P) <sup>0.27</sup>	
		ER30 and ER40 ≥ 40 W and < 50 W: LE ≥: 10.5	
ER30 and ER40 50 W: LE ≥ 7.0			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		ER40 65 W: LE ≥ 12.5	
<b>5. General service lamps</b>			
<p>1. Electrical device providing a luminous flux having a nominal voltage of not less than 110 V and not more than 130 V or a nominal voltage range included at least partially between those voltages and that is screw-based. The following lamps are excluded: (a) appliance lamps; (b) coloured lamps; (c) infrared lamps; (d) spherical-shaped (G-shaped) lamps referred to in ANSI C78.20-2003, A, G, PS, and Similar Shapes with E26 Medium Screw Bases, and ANSI C79.1-2002, Nomenclature for Glass Bulbs Intended for Use with Electric Lamps, with a diameter of at least 13 cm; (e) lamps for display cases; (f) left-hand thread base lamps; (g) plant lamps; (h) reflector lamps that have a shape indicated in ANSI C79.1-2002; (i) sign service lamps; (j) silver bowl lamps; (k) traffic signal module or pedestrian traffic signal module and street lights; (l) submersible lamps; (m) screw-based lamps E5, E10, E11, E12, E17, E26/50×39, E26/53×39, E29/28, E29/53×39, E39, E39d, EP39 or EX39, according to ANSI C81.61-2006, American National 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;</p>	<p>NEMA/ANSI C82.77-2002, Harmonic emission limits – related power quality requirements for lighting equipment</p> <p>For En: IES LM-45-15, IES Approved Method for the Electrical and Photometric Measurement of General Service Incandescent Filament Lamps or IES LM-66-14, IES Approved Method for the Electrical and Photometric Measurements of Single-Based Fluorescent Lamps, or LM-79-08, IES Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.</p> <p>For life: IES LM-49-12, IES Approved Method for Life Testing of General Lighting Incandescent Filament Lamps or IES LM-65-14, IES Approved Method for Life Testing of Single-Based Fluorescent Lamps, or IES LM - 80 - 15, IES Approved Method: Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules</p> <p>For CRI: CIE 13.3-1995, Method of Measuring and Specifying Colour Rendering Properties of Light Sources</p> <p>Bulbs must be tested at 120 V regardless of their nominal voltage.</p>	<p>For all lamps: the rate of total harmonic distortion must be 20% or less and the power factor must be at least 90%.</p> <p>For general service lamps: LE ≥ 45, CRI ≥ 80 and life ≥ 1,000 hours</p> <p>For modified spectrum lamps: LE ≥ 45, CRI ≥ 75 and life ≥ 1,000 hours</p>	<p>As of 1 January 2018</p>



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(o) rough service lamps; (p) vibration service lamps; (q) shatter resistant lamps, including safety lamps and shock resistant lamps; and (r) three-way lamps.			
<b>6. Traffic signal modules</b>			
1. Road traffic signal module: self-contained device that consists of all of the optical components required for its operation and is designed to provide drivers with movement information and to fit into a traffic signal housing.	ITE, Vehicle Traffic Control Signal Heads: LED Circular Signal Supplement, June 27, 2005	A red light that has a diameter of 304.8 mm: maximum wattage of 17 W and nominal wattage of 11 W	As of the coming into force of the Regulation
		A red light that has a diameter of 203.2 mm: maximum wattage of 13 W and nominal wattage of 8 W	
		A red arrow: maximum wattage of 12 W and nominal wattage of 9 W	
		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	
2. Pedestrian traffic signal module: self-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.	ITE, Pedestrian Traffic Control Signal Indicators: LED Signal Modules, August 4, 2010	Combination of walking person and hand display: maximum wattage of 16 W and nominal wattage of 13 W	As of the coming into force of the Regulation
		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	
<b>7. Torchieres</b>			
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.	CAN/CSA C867.1-08, Performance of torchieres	Without additional sockets: total electrical power $\leq 75$ W	As of the coming into force of the Regulation
		With one or more additional sockets: total electrical power $\leq 100$ W	
<b>Category 4: Household appliances</b>			
<b>1. Freezers, refrigerators and refrigerator-freezers</b>			

**PART 1**

Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
<p>1. Household freezer that has a capacity of 850 L or less, household refrigerator or household refrigerator-freezer, as the case may be, that has a defrost system and a capacity of 1,100 L or less. Refrigerators that have an absorption refrigeration system are excluded.</p>	<p>CAN/CSA C300-15, Energy performance and capacity of household refrigerators, refrigerator-freezers, freezers, and wine chillers</p> <p>The following adjustments must precede the testing of automatic icemakers:</p> <p>(a) the icemaker is on but not in the process of freeing or removing ice pieces;</p> <p>(b) there is no ice in the ice storage bin;</p> <p>(c) the level indicating arm is mechanically fixed in the ice full condition or, if the icemaker does not have a level indicating arm, it may be disabled by another means that only prevents it from freeing or removing ice pieces;</p> <p>(d) all other components are activated in the same manner as when the icemaker is on but not in the process of freeing or removing ice pieces;</p> <p>(e) the ice storage bin is maintained at a temperature consistent with normal operation of the equipment in the home when the icemaker is on but not in the process of freeing or removing ice pieces from the icemaker;</p> <p>(f) if the ice storage bin has a consumer-adjustable setting for multiple ice storage temperatures, it may be set at the lowest temperature setting.</p> <p>AV must be determined according to the method specified in Clauses 8.5.1, 9.4.1 and 10.11.1 of CAN/CSA standard C300-15</p>	<p>Refrigerator and refrigerator-freezer with a manual or semi-automatic defrost (1): Eannual <math>\leq 0.282 AV + 225.0</math></p>	<p>As of the coming into force of the Regulation</p>
		<p>All-refrigerator with manual defrost (1A): Eannual <math>\leq 0.240 AV + 193.6</math></p>	
		<p>Refrigerator-freezer with partial automatic defrost (2): Eannual <math>\leq 0.282 AV + 225.0</math></p>	
		<p>Refrigerator-freezer with automatic defrost and with a top-mounted freezer without through-the-door-ice service and all-refrigerator with automatic defrost (3): Eannual <math>\leq 0.285 AV + 233.7</math></p>	
		<p>Built-in refrigerator-freezer with automatic defrost with a top-mounted freezer without an automatic icemaker (3-BI): Eannual <math>\leq 0.323 AV + 264.9</math></p>	
		<p>Refrigerator-freezer with automatic defrost and with a top-mounted freezer with an automatic icemaker without through-the-door-ice service (3I): Eannual <math>\leq 0.285 AV + 317.7</math></p>	
		<p>Built-in refrigerator-freezer with automatic defrost and with a top-mounted freezer without an automatic icemaker (3I-BI): Eannual <math>\leq 0.323 AV + 348.9</math></p>	
		<p>All-refrigerator with automatic defrost (3A): Eannual <math>\leq 0.25 AV + 201.6</math></p>	
		<p>Built-in all-refrigerator with automatic defrost (3A-BI): Eannual <math>\leq 0.283 AV + 228.5</math></p>	
		<p>Refrigerator-freezer with automatic defrost and with a side-mounted freezer without through-the-door-ice service (4): Eannual <math>\leq 0.301 AV + 297.8</math></p>	
		<p>Built-in refrigerator-freezer with automatic defrost and with a side-mounted freezer without an automatic icemaker (4 BI): Eannual <math>\leq 0.361 AV + 357.4</math></p>	
		<p>Refrigerator-freezer with automatic defrost and with a side-mounted freezer with an automatic icemaker without through-the-door ice service (4I): Eannual <math>\leq 0.301 AV + 381.81</math></p>	
<p>Built-in refrigerator-freezer with automatic defrost and with a side-mounted freezer with an automatic icemaker without through-the-door ice service (4I-BI): Eannual <math>\leq 0.361 AV + 441.4</math></p>			
<p>Refrigerator-freezer with automatic defrost and with a bottom-mounted freezer without through-the-door-ice service (5): Eannual <math>\leq 0.312 AV + 317.0</math></p>			
<p>Refrigerator-freezer with automatic defrost and with a bottom-mounted freezer, with through-the-</p>			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		door-ice service (5A): Eannual ≤ 0.327 AV + 475.4	
		Built-in refrigerator-freezer with automatic defrost and with a bottom-mounted freezer, without an automatic icemaker (5-BI): Eannual ≤ 0.332 AV + 336.9	
		Refrigerator-freezer with automatic defrost and with a bottom-mounted freezer without through-the-door ice service (5I): Eannual ≤ 0.312 AV + 401.0	
		Built-in refrigerator-freezer 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-freezer with automatic defrost and with a bottom-mounted freezer with through-the-door-ice service (5A-BI): Eannual ≤ 0.347 AV + 499.9	
		Refrigerator-freezer with automatic defrost and with a top-mounted freezer with through-the-door-ice service (6): Eannual ≤ 0.347 AV + 499.9	
		Refrigerator-freezer 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-freezer with automatic defrost and with a side-mounted freezer with through-the-door-ice service (7-BI): Eannual ≤ 0.362 AV + 502.6	
		Upright freezer with manual defrost (8): Eannual ≤ 0.197 AV + 193.7	
		Upright freezer with automatic defrost (9): Eannual ≤ 0.305 AV + 228.3	
		Upright freezer with automatic defrost with an automatic icemaker (9I): Eannual ≤ 0.305 AV + 312.3	
		Built-in upright freezer with automatic defrost without an automatic icemaker (9-BI): Eannual ≤ 0.348 AV + 260.9	
		Built-in upright freezer with automatic defrost with an automatic icemaker (9I-BI): Eannual ≤ 0.348 AV + 344.9	
		Chest freezer and all other freezers (10): Eannual ≤ 0.257 AV + 107.8	
		Chest freezer with automatic defrost system (10A): Eannual ≤ 0.362 AV + 148.1	
		Compact refrigerator and refrigerator-freezer with manual or semi-automatic defrost (11): Eannual ≤ 0.319 AV + 252.3	

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		<p>Compact all-refrigerator with manual defrost (11A): <math>E_{\text{annual}} \leq 0.277 AV + 219.1</math></p> <p>Compact refrigerator-freezer with partial automatic defrost (12): <math>E_{\text{annual}} \leq 0.209 AV + 335.8</math></p> <p>Compact refrigerator-freezer with automatic defrost and with a top-mounted freezer, and compact all-refrigerator with automatic defrost (13): <math>E_{\text{annual}} \leq 0.417 AV + 339.2</math></p> <p>Compact refrigerator-freezer with automatic defrost and with a top-mounted freezer with an automatic icemaker (13I): <math>E_{\text{annual}} \leq 0.417 AV + 423.2</math></p> <p>Compact all-refrigerator with automatic defrost (13A): <math>E_{\text{annual}} \leq 0.324 AV + 259.3</math></p> <p>Compact refrigerator-freezer with automatic defrost and with a side-mounted freezer (14): <math>E_{\text{annual}} \leq 0.241 AV + 456.9</math></p> <p>Compact refrigerator-freezer with automatic defrost and with a side-mounted freezer with an automatic icemaker (14I): <math>E_{\text{annual}} \leq 0.241 AV + 540.9</math></p> <p>Compact refrigerator-freezer with automatic defrost and with a bottom-mounted freezer (15): <math>E_{\text{annual}} \leq 0.417 AV + 339.2</math></p> <p>Compact refrigerator-freezer with automatic defrost and with a bottom-mounted freezer with an automatic icemaker (15I): <math>E_{\text{annual}} \leq 0.417 AV + 423.2</math></p> <p>Compact upright freezer with manual defrost (16): <math>E_{\text{annual}} \leq 0.306 AV + 225.7</math></p> <p>Compact upright freezer with automatic defrost (17): <math>E_{\text{annual}} \leq 0.359 AV + 351.9</math></p> <p>Compact chest freezer and all other compact freezers (18): <math>E_{\text{annual}} \leq 0.327 AV + 136.8</math></p> <p>Wine chiller with manual defrost (19): <math>E_{\text{annual}} \leq 0.485 AV + 267</math></p> <p>Wine chiller with automatic defrost (20): <math>E_{\text{annual}} \leq 0.616 AV + 344</math></p>	
<b>2. Commercial refrigerators</b>			
1. Self-contained commercial freezer, refrigerator or refrigerator-freezer that has one or more compartments and that is designed for freezing or storing food,	CSA C657-15, Energy performance standard for commercial refrigeration equipment	<p>Self-contained commercial refrigerator that do not have transparent doors: <math>E_{\text{daily}} \leq 0.00353 \times Vr + 2.04</math></p> <p>Self-contained commercial refrigerator with transparent doors without pull-down temperature reduction capability: <math>E_{\text{daily}} \leq 0.00424 \times Vr + 3.34</math></p>	As of the coming into force of the Regulation

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
beverages or ice and that has a self-contained refrigeration source that requires an energy input.		Self-contained commercial freezer that does not have transparent doors: $E_{daily} \leq 0.01413 \times V_f + 1.38$	
		Self-contained commercial freezer with transparent doors: $E_{daily} \leq 0.02649 \times V_f + 4.10$	
		Self-contained commercial refrigerator-freezer that does not have transparent doors: $E_{daily} \leq$ the higher of 0.70 and $(0.009534 \times \text{adjusted volume (in litres)} - 0.71)$ , where the adjusted volume = $V_r + 1.63 \times V_f$	
2. Self-contained commercial freezer, refrigerator or commercial refrigerator-freezer that is not equipped with doors 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	Vertical open, remote condensing unit and designed for storage at medium temperature (VOP.RC.M): $E_{daily} \leq 8.826 \times TDA + 4.07$	As of the coming into force of the Regulation
		Vertical open, remote condensing unit and designed for storage at low temperature (VOP.RC.L): $E_{daily} \leq 24.434 \times TDA + 6.85$	
		Semi-vertical open, remote condensing unit and designed for storage at medium temperature (SVO.RC.M): $E_{daily} \leq 8.934 \times TDA + 3.18$	
		Semi-vertical open, remote condensing unit and designed for storage at low temperature (SVO.RC.L): $E_{daily} \leq 24.434 \times TDA + 6.85$	
		Horizontal open, remote condensing unit and designed for storage at medium temperature (HZO.RC.M): $E_{daily} \leq 3.767 \times TDA + 2.88$	
		Horizontal open, remote condensing unit and designed for storage at low temperature (HZO.RC.L): $E_{daily} \leq 6.135 \times TDA + 6.88$	
		Vertical closed transparent, remote condensing unit and designed for storage at medium temperature (VCT.RC.M): $E_{daily} \leq 2.368 \times TDA + 1.95$	
		Vertical closed transparent, remote condensing unit and designed for storage at low temperature (VCT.RC.L): $E_{daily} \leq 6.028 \times TDA + 2.61$	
		Horizontal closed transparent, remote condensing unit and designed for storage at medium temperature (HCT.RC.M): $E_{daily} \leq 1.722 \times TDA + 0.13$	
		Horizontal closed transparent, remote condensing unit and designed for storage at low temperature (HCT.RC.L): $E_{daily} \leq 3.66 \times TDA + 0.26$	
		Vertical closed solid, remote condensing unit and designed for storage at medium temperature (VCS.RC.M): $E_{daily} \leq 3.885 \times (V_f \text{ or } V_r) + 0.26$	
Vertical closed solid, remote condensing unit and designed for storage at low temperature (VCS.RC.L): $E_{daily} \leq 8.122 \times (V_f \text{ or } V_r) + 0.54$			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		Horizontal closed solid, remote condensing unit and designed for storage at medium temperature (HCS.RC.M): $E_{daily} \leq 3.885 \times (V_f \text{ or } V_r) + 0.26$	
		Horizontal closed solid, remote condensing unit and designed for storage at low temperature (HCS.RC.L): $E_{daily} \leq 8.125 \times (V_f \text{ or } V_r) + 0.54$	
		Service over counter, remote condensing unit and designed for storage at medium temperature (SOC.RC.M): $E_{daily} \leq 5.49 \times TDA + 0.11$	
		Service over counter, remote condensing unit and designed for storage at low temperature (SOC.RC.L): $E_{daily} \leq 11.625 \times TDA + 0.22$	
		Vertical open, self-contained and designed for storage at medium temperature (VOP.SC.M): $E_{daily} \leq 18.729 \times TDA + 4.71$	
		Vertical open, self-contained and designed for storage at low temperature (VOP.SC.L): $E_{daily} \leq 47.038 \times TDA + 11.82$	
		Semi-vertical open, self-contained and designed for storage at medium temperature (SVO.SC.M): $E_{daily} \leq 18.622 \times TDA + 4.59$	
		Semi-vertical open, self-contained and designed for storage at low temperature (SVO.SC.L): $E_{daily} \leq 46.715 \times TDA + 11.51$	
		Horizontal open, self-contained and designed for storage at medium temperature (HZO.SC.M): $E_{daily} \leq 8.288 \times TDA + 5.55$	
		Horizontal open, self-contained and designed for storage at low temperature (HZO.SC.L): $E_{daily} \leq 20.667 \times TDA + 7.08$	
		Vertical open, remote condensing unit and designed for the storage of ice cream (VOP.RC.I): $E_{daily} \leq 31.108 \times TDA + 8.7$	
		Semi-vertical open, remote condensing unit and designed for the storage of ice cream (SVO.RC.I): $E_{daily} \leq 31.108 \times TDA + 8.7$	
		Horizontal open, remote condensing unit and designed for the storage of ice cream (HZO.RC.I): $E_{daily} \leq 7.75 \times TDA + 8.74$	
		Vertical closed transparent, remote condensing unit and designed for the storage of ice cream (VCT.RC.I): $E_{daily} \leq 7.104 \times TDA + 3.05$	
		Horizontal closed transparent, remote condensing unit and designed for the storage of ice cream (HCT.RC.I): $E_{daily} \leq 4.306 \times TDA + 0.31$	
		Vertical closed solid, remote condensing unit and designed for the storage of ice cream (VCS.RC.I): $E_{daily} \leq 9.535 \times (V_f \text{ or } V_r) + 0.63$	

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		<p>Horizontal closed solid, remote condensing unit and designed for the storage of ice cream (HCS.RC.I): <math>E_{daily} \leq 9.535 \times (V_f \text{ or } V_r) + 0.63</math></p> <p>Service over counter, remote condensing unit and designed for the storage of ice cream (SOC.RC.I): <math>E_{daily} \leq 13.562 \times TDA + 0.26</math></p> <p>Vertical open, self-contained and designed for the storage of ice cream (VOP.SC.I): <math>E_{daily} \leq 59.74 \times TDA + 15.05</math></p> <p>Semi-vertical open, self-contained and designed for the storage of ice cream (SVO.SC.I): <math>E_{daily} \leq 59.417 \times TDA + 14.63</math></p> <p>Horizontal open, self-contained and designed for the storage of ice cream (HZO.SC.I): <math>E_{daily} \leq 26.264 \times TDA + 9</math></p> <p>Vertical closed transparent, self-contained and designed for the storage of ice cream (VCT.SC.I): <math>E_{daily} \leq 7.212 \times TDA + 3.29</math></p> <p>Horizontal closed transparent, self-contained and designed for the storage of ice cream (HCT.SC.I): <math>E_{daily} \leq 6.028 \times TDA + 0.43</math></p> <p>Vertical closed solid, self-contained and designed for the storage of ice cream (VCS.SC.I): <math>E_{daily} \leq 13.42 \times (V_f \text{ or } V_r) + 0.88</math></p> <p>Horizontal closed solid, self-contained and designed for the storage of ice cream (HCS.SC.I): <math>E_{daily} \leq 13.42 \times (V_f \text{ or } V_r) + 0.88</math></p> <p>Service over counter, self-contained and designed for the storage of ice cream (SOC.SC.I): <math>E_{daily} \leq 18.944 \times TDA + 0.36</math></p>	
<b>3. Ranges</b>			
1. Natural gas or propane range with an electrical power source.	N/A	Must not be equipped with a continuously burning pilot light	As of the coming into force of the Regulation
2. Household built-in or free-standing electric range with at least one surface element and one or more ovens.	CAN/CSA C358-03, Energy Consumption Test Methods for Household Electric Ranges	$E_{annual} \leq 2.0 \times \text{oven volume in litres} + 458$	As of the coming into force of the Regulation
3. Household integrated electric range with at least one surface element and no oven.	CAN/CSA C358-03, Energy Consumption Test Methods for Household Electric Ranges	$E_{annual} \leq 258$	As of the coming into force of the Regulation
4. Household built-in or wall-mounted electric range with one or more ovens and no surface element.	CAN/CSA C358-03, Energy Consumption Test Methods for Household Electric Ranges	$E_{annual} \leq 2.0 \times \text{oven volume in litres} + 200$	As of the coming into force of the Regulation
<b>4. Dehumidifiers</b>			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
1. Household factory-assembled electric dehumidifier mechanically refrigerated and whose water removal capacity is 87.5 L/d or less.	CAN/CSA C749-15, Energy performance of dehumidifiers	Cr ≤ 16.6: EF ≥ 1.35 L/kWh	As of the coming into force of the Regulation
		Cr > 16.6 and ≤ 21.3: EF ≥ 1.50 L/kWh	
		Cr > 21.3 and ≤ 25.5: EF ≥ 1.60 L/kWh	
		Cr > 25.5 and ≤ 35.5 : EF ≥ 1.70 L/kWh	
		Cr > 35.5: EF ≥ 2.50 L/kWh	
<b>5. Vending machines</b>			
1. Self-contained machine for dispensing, after accepting payment, packages of solid non-refrigerated food and bottled, canned or other sealed refrigerated beverages.	ASHRAE 32.1-2010, Methods of Testing for Rating Vending Machines for Sealed Beverages The ambient temperature must be 23.9°C ± 1°C.	Class A automatic vending machine: E <sub>daily</sub> ≤ 0.00194 × refrigerated volume in litres + 2.56	As of the coming into force of the Regulation
		Class B automatic vending machine: E <sub>daily</sub> ≤ 0.00258 × refrigerated volume in litres + 3.16	
<b>6. Clothes washers</b>			
1. Household standard or compact electrically-operated clothes washer, top or front-loaded, that has an internal control system that regulates the water temperature without the need for user intervention after the initiation of machine operation and that does not require fastening to a floor or wall.	CAN/CSA C360-13, Energy performance, water consumption, and capacity of household clothes washers	Compact, capacity of less than 45 L and vertical axis: modified energy performance ≥ 24.35 L/kWh/cycle and integrated water factor ≤ 1.92 L/cycle/L	From the coming into force of the Regulation to 31 December 2017
		Compact, capacity of less than 45 L and horizontal axis: modified energy performance ≥ 32 L/kWh/cycle and integrated water factor ≤ 1.11 L/cycle/L	
		Standard, capacity of 45 L or more and vertical axis: modified energy performance ≥ 36.53 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	
	CAN/CSA C360-13, Energy performance, water consumption, and capacity of household clothes washers	Compact, capacity of less than 45 L and vertical axis: modified energy performance ≥ 32.56 L/kWh/cycle and integrated water factor ≤ 1.6 L/cycle/L	As of 1 January 2018
		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	
		Standard, capacity of 45 L or more and vertical 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	



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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
2. Electrically-operated clothes washer designed for use by more than one family (for example: washers in common laundry rooms in immovables lodging a number of families, in coin-operated laundromats, hotels, or any other commercial use), top or front-loaded, that has an internal control system that regulates the water temperature without the need for user intervention after the initiation of machine operation and that does not require fastening to a floor or wall.	CAN/CSA C360-13, Energy performance, water consumption, and capacity of household clothes washers	Vertical axis: modified energy performance $\geq 45.31$ L/kWh/cycle and water factor $\leq 1.13$ L/cycle/L	From the coming into force of the Regulation to 31 December 2017
		Horizontal axis: modified energy performance $\geq 56.63$ L/kWh/cycle and water factor $\leq 0.73$ L/cycle/L	
	CAN/CSA C360-13, Energy performance, water consumption, and capacity of household clothes washers	Vertical axis: modified energy performance $\geq 38.23$ L/kWh/cycle and integrated water factor $\leq 1.18$ L/cycle/L	As of 1 January 2018
		Horizontal axis: modified energy performance $\geq 56.63$ L/kWh/cycle and integrated water factor $\leq 0.55$ L/cycle/L	
<b>7. Integrated clothes washer-dryers</b>			
1. Household integrated clothes washer-dryer, combination or not, powered by a single power source and having a single control panel.	For the washer function: CAN/CSA C360-13, Energy performance, water consumption, and capacity of household clothes washers	For the washer function, refer to the energy performance requirements applicable to washers	From the coming into force of the Regulation to 31 December 2017
			As of 1 January 2018
	For the dryer function: CAN/CSA C361-12, Test method for measuring energy consumption and drum volume of electrically operated household tumble-type clothes dryers	For the dryer function, refer to the energy performance requirements applicable to dryers	As of 1 January 2019
<b>8. Dishwashers</b>			
1. Electrically-operated automatic standard or compact household dishwasher.	CAN/CSA C373-14, Energy performance and water consumption of household dishwashers	Compact: energy consumption $\leq 222$ kWh/year and water consumption $\leq 13.25$ L/cycle	As of the coming into force of the Regulation
		Standard: energy consumption $\leq 307$ kWh/year and water consumption $\leq 18.93$ L/cycle	
<b>9. Icemakers</b>			
1. Automatic icemaker that may produce in batches.	CAN/CSA C742-15, Energy performance of automatic icemakers and ice storage bins	Water-cooled and $H_m < 136$ kg/d: energy consumption (kJ/kg) $\leq 546.04 - 0.962 \times H_m$	As of 28 January 2018
		Water-cooled and $H_m \geq 136$ kg/d and $< 386$ kg/d: energy consumption (kJ/kg) $\leq 460.33 - 0.334 \times H_m$	
		Water-cooled and $H_m \geq 386$ kg/d and $< 680$ kg/d: energy consumption (kJ/kg) $\leq 350.80 - 0.049 \times H_m$	

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
		Water-cooled and Hm ≥ 680 kg/d and < 1,134 kg/d: energy consumption (kJ/kg) ≤ 317.47	
		Water-cooled and Hm ≥ 1,134 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 317.47	
		Air-cooled and Hm < 136 kg/d: energy consumption (kJ/kg) ≤ 793.66 – 2.157 × Hm	
		Air-cooled and Hm ≥ 136 kg/d and < 363 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 ≥ 680 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 365.88	
		Remote condensing unit and integrated compressor, air-cooled and Hm ≥ 23 kg/d and < 454 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) ≤ 361.12	
		Remote condensing 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 (kJ/kg) ≤ 376.99	
		Packaged, water-cooled and Hm < 91 kg/d: energy consumption (kJ/kg) ≤ 753.98 – 3.324 × Hm	
		Packaged, water-cooled and Hm ≥ 91 kg/d and < 1,134 kg/d: energy consumption (kJ/kg) ≤ 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 consumption (kJ/kg) ≤ 583.34	

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
2. Automatic icemaker that may produce in a continuous process.	CAN/CSA C742-15, Energy performance of automatic icemakers and ice storage bins	Water-cooled and Hm < 363 kg/d: energy consumption (kJ/kg) ≤ 514.29 – 0.467 × Hm	As of 28 January 2018
		Water-cooled and Hm ≥ 363 kg/d and < 1,134 kg/d: energy consumption (kJ/kg) ≤ 344.45	
		Water-cooled and Hm ≥ 1,134 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 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) ≤ 653.19 – 0.560 × Hm	
		Air-cooled and Hm ≥ 372 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 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 ≥ 363 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 401.59	
		Remote condensing unit and remote compressor, air-cooled and Hm < 363 kg/d : energy consumption (kJ/kg) ≤ 785.73 – 1.015 × Hm	
		Remote condensing unit and remote compressor, air-cooled and Hm ≥ 363 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 417.47	
		Self-contained, water-cooled and Hm < 408 kg/d: energy consumption (kJ/kg) ≤ 603.18 – 0.528 × Hm	
		Self-contained, water-cooled and Hm ≥ 408 kg/d and < 1,134 kg/d: energy consumption (kJ/kg) ≤ 387.31	
		Self-contained, water-cooled and Hm ≥ 1,134 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 387.31	
		Self-contained, air-cooled and Hm < 91 kg/d: energy consumption (kJ/kg) ≤ 1,128,59 – 5.249 × Hm	
Self-contained, air-cooled and Hm ≥ 91 kg/d and < 318 kg/d: energy consumption (kJ/kg) ≤ 751.6 – 1.092 × Hm			
Self-contained, air-cooled and Hm ≥ 318 kg/d and < 1,814 kg/d: energy consumption (kJ/kg) ≤ 404.77			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
3. Ice storage bin.	CAN/CSA C742-15, Energy performance of automatic icemakers and ice storage bins	Ice storage bin capacity < 70 kg: storage effectiveness $\geq 60\%$	As of 28 January 2018
		Ice storage bin capacity $\geq 70$ kg and < 100 kg: storage effectiveness $\geq 70\%$	
		Ice storage bin capacity $\geq 100$ kg and $\leq 200$ kg: storage effectiveness $\geq 75\%$	
		Ice storage bin capacity > 200 kg: storage effectiveness $\geq 80\%$	
<b>10. Clothes dryers</b>			
1. Electrically-operated compact or standard household tumble-type clothes dryer, designed for a 60 Hz alternating current supply with a nominal voltage of 120, 120/240 or 120/208 V.	CAN/CSA C361-12, Test method for measuring energy consumption and drum volume of electrically operated household tumble-type clothes dryers	Conventional standard: combined energy factor (kg/kWh) $\geq 1.69$	As of 1 January 2019
		Conventional compact, 120 V: combined energy factor (kg/kWh) $\geq 1.64$	
		Conventional compact, 240 V: combined energy factor (kg/kWh) $\geq 1.48$	
		Ventless compact, 240 V: combined energy factor (kg/kWh) $\geq 1.16$	
		Ventless combination washer-dryer: combined energy factor (kg/kWh) $\geq 0.94$	
<b>Category 5: Electronic devices</b>			
<b>1. Video products</b>			
1. Household electronic device encased in a single housing, that has an integral power supply, is connected to a mains power source and is designed primarily to produce or record, or both, audio and video signals, to or from digital or analog media. Cameras are excluded.	CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power Video products must be tested at 115 V regardless of their nominal voltage	Capable of entering in one of the following modes, or more if applicable: <ul style="list-style-type: none"> <li>- a standby mode with display active and a power consumption <math>\leq 1</math> W;</li> <li>- a standby mode with display inactive and a power consumption <math>\leq 0.5</math> W;</li> <li>- a standby mode without display and power consumption <math>\leq 0.5</math> W;</li> <li>- an off mode with a power consumption <math>\leq 0.5</math> W.</li> </ul>	As of the coming into force of the Regulation
<b>2. External power supplies</b>			
1. Power supply device that is designed to convert line voltage ac input into lower voltage ac or dc output, is able to convert to only one dc or ac output voltage at a time, is designed to be used with a household or office end-use product that constitutes the primary	CAN/CSA C381.1-08, Test method for calculating the energy efficiency of single-voltage external ac-dc and ac-dc power supplies	Minimum average efficiency at the highest or lowest nominal output power setting: <ul style="list-style-type: none"> <li>- nominal output power &lt; 1 W: <math>0.5 \times</math> nominal output power;</li> <li>- nominal output power <math>\geq 1</math> W and <math>\leq 51</math> W : <math>0.09 \times \ln</math> (nominal output power) + 0.5;</li> <li>- nominal output power &gt; 51 W : 0.85;</li> <li>- for a device other than a security external power supply: no load power <math>\leq 0.5</math> W.</li> </ul>	As of 1 January 2019

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
<p>load, is encased in an enclosure separated from that end-use product and is connected to that product by an electrical connection and has a nominal power of 250 W or less.</p> <p>Any device: (a) that powers the charger of a detachable battery pack of an end-use product, (b) that charges the battery of an end-use product that is fully or primarily motor-operated, (c) that is an accessory to a medical device within the meaning of section 1 of the Medical Devices Regulations (DORS/98-282), (d) that is a power sourcing equipment within the meaning of IEEE standard IEEE 802.3 – 2008, Standard for Information Technology — Telecommunications and Information Exchange Between Systems - Specific requirements Part 3, is excluded.</p>			
<b>3. Compact audio products</b>			
<p>1. Product consisting of an amplifier and terrestrial tuner encased in a single housing, with attached or separable speakers, including a product that can produce sound from another media that uses mains power as at least one means of power. Clock radios are excluded.</p>	<p>CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power.</p> <p>Compact video products must be tested at 115 V regardless of their nominal voltage.</p>	<p>With display active: consumption in a standby mode <math>\leq 1</math> W and consumption in an off mode <math>\leq 0.5</math> W</p> <hr/> <p>With display inactive: consumption in a standby mode <math>\leq 0.5</math> W and consumption in an off mode <math>\leq 0.5</math> W</p> <hr/> <p>Without display: consumption in a standby mode <math>\leq 0.5</math> W and consumption in an off mode <math>\leq 0.5</math> W</p>	<p>As of the coming into force of the Regulation</p>
<p>2. Clock radio.</p>	<p>CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power</p> <p>Clock radios must be tested at 115 V regardless of their nominal voltage.</p>	<p>With display active: consumption in a standby mode <math>\leq 2</math> W and consumption in an off mode <math>\leq 1</math> W</p>	<p>As of the coming into force of the Regulation</p>
<b>4. Televisions</b>			

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Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
<p>1. Analog or digital device designed 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 audio signals, including the following: (a) a household television monitor, namely a device without an internal tuner, receiver or playback device, (b) a combination television, namely a system in which a television and an 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 television casing, (c) a component television, namely a television composed of two or more separate components marketed and sold as a television under one model or system designation.</p> <p>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.</p>	<p>For a consumption in an off mode and a standby mode: CAN/CSA C62301:11, Household electrical appliances – Measurement of standby power</p> <p>For a consumption in an on mode and the power factor: CAN/CSA C382-11, Energy performance of televisions and displays</p> <p>Televisions must be tested at 115 V regardless of their nominal voltage.</p>	<p>For all televisions, capable of entering in one of the following modes, or more if applicable:</p> <ul style="list-style-type: none"> <li>- in a standby mode with display active and a power consumption <math>\leq 1</math> W;</li> <li>- in a standby mode with display inactive and a power consumption <math>\leq 0.5</math> W;</li> <li>- in a standby mode without display with a power consumption <math>\leq 0.5</math> W;</li> <li>- in an off mode with a power consumption <math>\leq 0.5</math> W.</li> </ul>	As of 1 January 2019
		<p>Consumption in an on mode <math>\leq 0.019</math> W/cm<sup>2</sup> x A + 25 W where A is the screen surface in cm<sup>2</sup> and</p>	As of 1 January 2019
		<p>Must automatically enter in a standby mode after a maximum of 15 minutes without audio or video signal in the input mode selected and</p>	As of 1 January 2019
		<p>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.</p>	As of 1 January 2019
		<p>For models whose power is &lt; 100 W: power factor <math>\geq 0.4</math></p>	As of 1 January 2019
		<p>For models whose power is <math>\geq 100</math> W: power factor <math>\geq 0.9</math></p>	As of 1 January 2019
<p><b>Category 6: Electric motors</b></p>			
<p>1. Machine that converts electrical power into rotational mechanical power, including a machine incorporated into another product, whether or not that other product is an energy-using product, that is rated for continuous duty operation or S1 operation and is an electric three-phase induction design, a cage or squirrel-cage</p>	<p>CAN/CSA C390-10, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors</p>	<p>See Part 2 of this Schedule</p>	<p>As of the coming into force of the Regulation</p>

**PART 1**

Categories, appliances and scope of application	Energy efficiency standard	Energy performance requirements	Manufacturing period
<p>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 67 and is of open or enclosed construction. Air-over, liquid-cooled, inverter-only, 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.</p>			
<p><b>Category 7: Dry-type transformers</b></p>			
<p>1. Single-phase or three-phase transformer, self-contained or part of a larger assembly, 60 Hz, 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.</p>	<p>CAN/CSA C802.2-12, Minimum efficiency values for dry-type transformers</p>	<p>See Part 3 of this Schedule</p>	<p>As of the coming into force of the Regulation</p>

## PART 2

### Category 6: Electric motors

**Energy efficiency standard:** CAN/CSA C390-10, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors

Energy efficiency requirements for 60 Hz (percentage) motors for fire pumps							
Power		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

### Category 6: Electric motors

**Energy efficiency standard:** CAN/CSA C390-10, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors

Energy efficiency requirements for all other 60 Hz (percentage) motors									
Power		Open				Enclosed			
(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	86.5	77.0	84	86.5	87.5	78.5
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	89.5	88.5	88.5	89.5	89.5	86.5
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	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	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	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	-
400	300	95.8	95.8	-	-	95.8	96.2	-	-
450	340	96.2	96.2	-	-	95.8	96.2	-	-
500	375	96.2	96.2	-	-	95.8	96.2	-	-



**PART 3**

<b>Category 7: Transformers</b>				
<b>Energy efficiency standard: CAN/CSA C802.2-12, Minimum efficiency values for dry-type transformers</b>				
<b>Energy efficiency requirements for single-phase transformers</b>				
Power	Performance in %, nominal power per unit of 0.35	Performance in %, nominal power 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

<b>Category 7: Transformers</b>				
<b>Energy efficiency standard: CAN/CSA C802.2-12, Minimum efficiency values for dry-type transformers</b>				
<b>Energy efficiency requirements for three-phase transformers</b>				
Power	Performance in %, nominal power per unit of 0.35	Performance in %, nominal power 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