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No. S 747

ENERGY CONSERVATION ACT (CHAPTER 92C)

ENERGY CONSERVATION (PRESCRIBED REGULATED GOODS) ORDER 2017

ARRANGEMENT OF PARAGRAPHS

In exercise of the powers conferred by section 11 of the Energy Conservation Act, the Minister for the Environment and Water Resources, after consulting the National Environment Agency, makes the following Order:

Citation and commencement

1. This Order is the Energy Conservation (Prescribed Regulated Goods) Order 2017 and comes into operation on 1 January 2018.

Regulated goods

2. The following goods are regulated goods for the purposes of Part III of the Act, if they are not second-hand goods:

(*a*) any air-conditioner described in Part 1 of the First Schedule, from the date specified opposite that air-conditioner;

(*b*) any clothes dryer described in Part 1 of the Second Schedule, from the date specified opposite that clothes dryer;

(*c*) any lamp described in Part 1 of the Third Schedule, from the date specified opposite that lamp;

(*d*) any refrigerator described in Part 1 of the Fourth Schedule, from the date specified opposite that refrigerator;

(*e*) any television described in Part 1 of the Fifth Schedule, from the date specified opposite that television;

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(*f*) any motor described in Part 1 of the Sixth Schedule, from the date specified opposite that motor;

[S 602/2018 wef 01/10/2018]

[S 729/2019 wef 01/11/2019]

(*g*) any ballast described in Part 1 of the Seventh Schedule, from the date specified opposite that ballast.

[S 729/2019 wef 01/11/2019]

Revocation

3. The Energy Conservation (Registrable Goods) Order 2013 (G.N. No. S 556/2013) is revoked.

FIRST SCHEDULE

Paragraph 2(*a*)

PART 1

AIR-CONDITIONERS THAT ARE REGULATED GOODS

	Description of air-conditioner	*Date from which becomes regulated goods*
1.	Any single-phase non-ducted room air-conditioner (casement or window type) with cooling capacity of 8.8 kW or lower	1 January 2018
2.	Any single-phase non-ducted room air-conditioner (split type (inverter)) with cooling capacity of 17.6 kW or lower	1 January 2018
3.	Any single-phase non-ducted room air-conditioner (split type	1 January 2018

FIRST SCHEDULE — *continued*

(non-inverter)) with cooling capacity of 17.6 kW or lower	
4. Any three-phase variable refrigerant flow (VRF) air-conditioner	1 April 2021

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PART 2

DEFINITIONS

In this Schedule —

"casement or window type air-conditioner", in relation to a single-phase non-ducted room air-conditioner, means such air-conditioner having an assembly of components of a refrigeration system fixed on a common mounting to form a single unit;

"single-phase non-ducted room air-conditioner" means an encased assembly or assemblies of one or more evaporators, compressors and condensers, designed to be used together as a permanently installed piece of equipment to provide conditioned air to any enclosed space, and —

(*a*) includes a prime source of refrigeration for cooling and dehumidification; and

(*b*) may include other means for dehumidifying, circulating and cleaning the air in the enclosed space;

"split type (inverter) air-conditioner", in relation to a single-phase non-ducted room air-conditioner, means such air-conditioner having an assembly of components of a refrigeration system fixed on 2 or more mountings to form a matched functional unit that employs technologies that vary the output of the compressor, by means other than start-stop operation;

"split type (non-inverter) air-conditioner", in relation to a single-phase non-ducted room air-conditioner, means such air-conditioner having an assembly of components of a refrigeration system fixed on 2 or more mountings to form a matched functional unit that employs technologies that control the output of the compressor by start-stop operation;

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"three-phase variable refrigerant flow (VRF) air-conditioner" means an encased assembly or assemblies of one or more evaporators, compressors and condensers, designed to be used together as a permanently installed

FIRST SCHEDULE — *continued*

piece of equipment to provide conditioned air to any enclosed space, that —

(*a*) is of the variable refrigerant flow type;

(*b*) has one or more outdoor units that service a network of indoor units; and

(*c*) uses a three-phase power supply.

[S 200/2021 wef 01/04/2021]

SECOND SCHEDULE

Paragraph 2(*b*)

PART 1

CLOTHES DRYERS THAT ARE REGULATED GOODS

Description of clothes dryer	*Date from which becomes regulated goods*
1. Any single-phase clothes dryer having a rated capacity of 10 kilograms or lower	1 January 2018

PART 2

DEFINITIONS

In this Schedule —

"rated capacity", in relation to a single-phase clothes dryer, means the mass in kilograms of a particular type of dry textiles which, according to the instructions of the manufacturer of the clothes dryer, can be treated in a drying programme suitable for drying the particular type of dry textiles;

"single-phase clothes dryer" means an assembly consisting of —

(*a*) a rotating drum, in which textile material is dried by tumbling; and

(*b*) a heating device, which electrically heats the air used for drying the textile material in the rotating drum.

THIRD SCHEDULE

Paragraph 2(*c*)

PART 1

LAMPS THAT ARE REGULATED GOODS

Description of lamp	*Date from which becomes regulated goods*
1. Any specified single-phase lamp that is an incandescent lamp — (*a*) with an Edison screw or a bayonet lamp cap; and (*b*) with power rating 25 W or above but not exceeding 200 W	
2. Any specified single-phase lamp that is a compact fluorescent lamp with integrated ballast — (*a*) with an Edison screw or a bayonet lamp cap; and (*b*) with power rating up to 60 W	1 January 2018
3. Any specified single-phase lamp that is an LED lamp — (*a*) with an Edison screw or a bayonet lamp cap; and (*b*) with power rating up to 60 W	1 January 2018
4. CFLni	1 November 2019
5. LFL	1 November 2019
6. Any specified single-phase lamp that is an LED lamp designed as a direct replacement for a lamp described in item 4 or 5 without requiring any internal modification of the luminaires	1 November 2019

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THIRD SCHEDULE — *continued*

PART 2

DEFINITIONS

In this Schedule —

"ballast" means a device that is inserted between the electrical supply and a discharge lamp and limits the current of a lamp to the required value;

"compact fluorescent lamp with integrated ballast" means a fluorescent lamp with a lamp cap, a ballast and other components necessary to start and stably operate the lamp, that is manufactured as a unit that cannot be dismantled without permanently damaging the lamp;

"compact fluorescent lamp without integrated ballast" or "CFLni" means any specified single-phase lamp that is a compact fluorescent lamp without an integrated ballast, with a lamp cap designed to be fitted into a lamp holder for G24d-1, G24d-2, or G24d-3 lamp cap as specified in IEC 60061-1;

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"discharge lamp" means a lamp in which light is produced, directly or indirectly, by an electric discharge through a gas, a metal vapour or a mixture of several gases or vapours;

"fluorescent lamp" means a discharge lamp of the low pressure mercury type in which most of the light is emitted by one or several layers of phosphors excited by the ultraviolet radiation from an electric discharge;

"IEC" means the International Electrotechnical Commission;

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"incandescent lamp" means a lamp in which light is produced by heating a filament to incandescence by the passage of an electric current, and in which the filament operates in an evacuated bulb or is surrounded by inert gas;

"lamp" means a device that is designed to emit light produced by the transformation of energy, and includes any additional components necessary for starting, power supply or stable operation of the lamp or for the distribution, filtering or transformation of light, where such components cannot be removed without permanently damaging the device;

"lamp cap" means the part of a lamp that connects the lamp to the electrical supply;

THIRD SCHEDULE — *continued*

"LED lamp" means a lamp incorporating one or more solid state devices embodying a p-n junction, emitting optical radiation when excited by an electric current;

"light" means visible optical radiation with a wavelength of 380 nm to 780 nm;

"linear, double-capped fluorescent lamp without integrated ballast" or "LFL" means any specified single-phase lamp that is a linear, double-capped, fluorescent lamp with a diameter of 26 mm and with a length of 0.5 m and above but not exceeding 1.5 m;

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"luminaire" means an apparatus that distributes, filters or transforms the light transmitted from one or more light sources and that includes all the parts necessary for supporting, fixing and protecting the light sources (including the circuit auxiliaries together with the means for connecting them to the supply) but not the light sources themselves;

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"specified single-phase lamp" means a single-phase lamp that is designed to be connected directly to any 230 V mains voltage by means of a socket or lamp connector, other than a single-phase lamp that —

(*a*) has at least 80% light output within a solid angle of π steradian (corresponding to a 120° angle cone);

(*b*) has a luminous flux below 130 lumens;

(*c*) is designed to be used only —

(i) to emit light as an agent in a chemical or biological process;

(ii) for image capture and image projection;

(iii) to provide heating; or

(iv) in signalling devices;

(*d*) is a coloured lamp with chromaticity coordinates within the range of $x < 0.270$ or $x > 0.530$ and $y < -2.3172\,x^2 + 2.3653\,x - 0.2199$ or $y > -2.3172\,x^2 + 2.3653\,x - 0.1595$;

(*e*) has a spectral distribution that is adjusted to the specific needs of technical equipment;

(*f*) is designed to protect a subject lit by the lamp from the negative effects of the light emitted by the lamp;

THIRD SCHEDULE — *continued*

(*g*) is designed to withstand rough use, extreme vibration, or temperatures below -20°C or above 50°C; or

(*h*) is incorporated in a product the primary purpose of which is not to emit light.

[S 729/2019 wef 01/11/2019]

FOURTH SCHEDULE

Paragraph 2(*d*)

PART 1

REFRIGERATORS THAT ARE REGULATED GOODS

Description of refrigerator	*Date from which becomes regulated goods*
1. Any single-phase refrigerator with an adjusted volume of up to 900 litres	1 January 2018

PART 2

DEFINITIONS

1. In this Schedule —

"adjusted volume" or "V_{adj}", in relation to a single-phase refrigerator, means the sum of the adjusted volumes of the compartments or sections of the refrigerator, where the adjusted volume of a compartment or section is the product of the rated volume of that compartment or section and the corresponding volume correction factor as follows:

#Compartment/Section Type	*Volume correction factor*
Fresh food	1.00
Four-star	1.79
Three-star	1.79
Two-star	1.57
One-star	1.36
Chill	1.13
Cellar	0.75

FOURTH SCHEDULE — *continued*

#Compartment/Section Type	*Volume correction factor*
# The compartment/section types are defined in accordance with Section 3.3 of the standard ISO15502:2005 of the International Organization for Standardization.	

"single-phase refrigerator" means an assembly consisting of —

(*a*) a thermally insulated cabinet for the storage and preservation of foodstuffs above 0°C (32°F); and

(*b*) a refrigerating unit operating on the vapour compression principle and arranged to extract heat from within the cabinet, whether or not with one or more freezer compartments.

FIFTH SCHEDULE

Paragraph 2(*e*)

PART 1

TELEVISIONS THAT ARE REGULATED GOODS

Description of television	*Date from which becomes regulated goods*
1. Any single-phase television that is designed to be connected to 230 volts mains voltage	1 January 2018

PART 2

DEFINITION

In this Schedule, "television" means an appliance, with an in-built television tuner, that is designed to be used primarily for the display and possible reception of television broadcast and similar services for terrestrial, cable, satellite and broadband network transmission of analogue or digital signals, and includes a television that has additional functions that are not required for its basic operation as a television, but excludes a television that displays broadcasts by means of front or rear projection.

SIXTH SCHEDULE

Paragraph 2(*f*)

PART 1

MOTORS THAT ARE REGULATED GOODS

	Description of motor	*Date from which becomes regulated goods*
1.	Any specified electric single speed induction motor	1 October 2018

PART 2

DEFINITIONS

In this Schedule —

"driven unit" means the appliance or piece of equipment that a motor drives, and includes a shaft or housing;

"excluded motor" means a motor that is —

(*a*) designed to operate wholly immersed in a liquid;

(*b*) integral to its driven unit, where —

(i) the motor shares common components (apart from connectors such as bolts) with the driven unit; and

(ii) the separation of the motor from the driven unit will render the motor inoperative;

(*c*) designed to operate exclusively —

(i) where ambient air temperatures exceed 60°C;

(ii) with a maximum operating temperature above 400°C;

(iii) where ambient air temperatures are less than -30°C in the case of any motor, or less than 0°C in the case of a motor with water cooling;

(iv) where the water coolant temperature at the inlet to the product in which the motor is embedded is less than 0° C or exceeding 32°C; or

(v) in an atmosphere that could become explosive due to local and operational conditions;

(*d*) equipped with an electro-mechanical brake unit operating directly on the motor shaft without couplings;

SIXTH SCHEDULE — *continued*

(*e*) a high slip motor designed primarily to provide torque, often at or near 100% slip; or

(*f*) supplied exclusively for export to another country, or supplied exclusively for the incorporation of the motor into equipment that will be exported to another country;

"IEC" means the International Electrotechnical Commission;

"motor" means a machine that converts electrical energy into mechanical energy;

"pole" means the total number of magnetic north and south poles produced by the rotating magnetic field of the motor;

"specified electric single speed induction motor" means an electric single speed, three-phase 50 Hz or 50/60 Hz, squirrel cage induction motor (including a motor that runs at different speeds by means of a variable voltage or variable frequency controller) that is not an excluded motor, and that —

(*a*) has 2 to 6 poles;

(*b*) has a rated voltage of up to 1,000 volts;

(*c*) has a rated output power between 0.75 kW and 375 kW; and

(*d*) is rated for duty type S1, S3 (with cyclic duration factor of 80% or more), S6 or S9, in accordance with IEC 60034-1 (2017); and

"squirrel cage induction motor" means an electric motor with no brushes, commutators, slip rings or electrical connections to the rotor.

[S 602/2018 wef 01/10/2018]

SEVENTH SCHEDULE

Paragraph 2(*g*)

PART 1

BALLASTS THAT ARE REGULATED GOODS

Description of ballast	*Date from which becomes regulated goods*
1. Any specified ballast for a fluorescent lamp	1 November 2019

SEVENTH SCHEDULE — *continued*

PART 2

DEFINITIONS

In this Schedule —

"ballast" has the meaning given by Part 2 of the Third Schedule;

"fluorescent lamp" has the meaning given by Part 2 of the Third Schedule;

"high frequency ballast", in relation to a fluorescent lamp, means a ballast that is a mains-supplied alternating current to alternating current inverter that includes stabilising elements for starting and operating one or more fluorescent lamps, generally at high frequency;

"luminaire" has the meaning given by Part 2 of the Third Schedule;

"non-high frequency ballast" means a ballast that is not a high frequency ballast;

"specified ballast for a fluorescent lamp" means an external ballast —

(*a*) designed to operate with a fluorescent lamp that can be interchangeably operated with a high frequency ballast or non-high frequency ballast; and

(*b*) that is not —

(i) integrated as an irreplaceable part of a luminaire;

(ii) for use as a reference ballast in laboratories for lighting measurement techniques; or

(iii) intended for use in emergency lighting luminaires, and designed to operate the lamps in emergency conditions.

[S 729/2019 wef 01/11/2019]

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