

Fact sheet: Energy efficiency regulations for electrical appliances according to the EnEV (RS 730.02)

Regulations as of September 1st 2021

Appendix	Product group	Swiss regulations	EU regulations
1.1	Refrigerators/ freezers 10 to 1'500 litres	<i>EEI < 100 (class E)</i> The following product groups are in line with the EU regulations: - Single-door refrigerators (with a ratio of the volume of the three-star or four-star compartment(s) to total volume of less than 0.18) - Wine refrigerators (class G) - Low noise refrigerating appliances (class G)	EEI < 125 (class F) Requirements for other product groups: - Wine refrigerators: EEI < 150 oder 190 (depending on device type, class G) - Low noise refrigerating appliances: EEI < 300, 375 or 380 (depending on device type, class G)
1.2	Household washing machines and household washer-dryers	In line with EU regulations	EEI < 105 (class G)
1.3	Household tumble driers	<i>EEI < 42 (class A+)</i>	EEI < 76 (class B)
1.5	Household dishwashers	In line with EU regulations	EEI < 63 (class G)
1.6	Electric ovens	In line with EU regulations	EEI < 96 (class A)
1.7	Range hoods	In line with EU regulations	EEI < 100 (class D)
1.8	Vacuum cleaners	In line with EU regulations	Max. 43 kWh p.a., input power <900W. No energy label
1.12	Electronic displays (televi-sions, monitors and digital signage displays)	In line with EU regulations	Displays with a resolution up to HD: EEI < 0.9 (class F) Displays with a resolution up to UHD-4k: EEI < 1.10



			(class G)
1.13	Air conditioners	In line with EU regulations	e.g. single duct, refrigerant with high global warming potential, EER > 2.6 (class A), COP > 2.04 (class B)
1.14	Commercial refrigerated storage cabinets, blast chillers/frosters, condensing units and process coolers	In line with EU regulations	e.g. commercial refrigerated storage cabinets : EEI < 85 (class E)
1.15	Water heaters, hot water tanks and heat storage devices up to 400 kW or 2,000 litres	In line with EU regulations <i>Exceptions: hot water tanks and heat storage devices up to and including 500 litres : efficiency class B (instead of C)</i>	Hot water heaters: EEI requirements between class D and class B, depending on load profile. Hot water tanks and heat storage devices: class C.
1.16	Room heaters, combined heaters	In line with EU regulations	Regulations not consistent with EEI. Requirements depend on type of heater. EEI class requirements vary: from E for electric heaters to A++ for low-temperature heat pumps.
1.17	Room ventilators	In line with EU regulations	Specific energy consumption < - 20kWh/a m ² (class D)
1.18	Local space heaters	In line with EU regulations	e.g. seasonal space heating energy efficiency of electric underfloor local space heaters: not less than 38%
1.19	Solid fuel local space heaters	In line with EU regulations	e.g. seasonal space heating energy efficiency of open fronted solid fuel local space heaters: not less than 30%
1.20	Solid fuel boilers	In line with EU regulations	e.g. seasonal space heating energy efficiency for boilers with a rated heat output of 20 kW or less: not less than 75%
1.21	Refrigerating appliances with a direct sales function	In line with EU regulations <i>Exceptions : beverage coolers as well as vertical and combined supermarket cabinets: EEI < 80 (class F)</i>	EEI < 100 (class G) Exception : Ice-cream freezers: EEI < 80 (class F)



1.22	Light sources and separate control gears	In line with EU regulations	Differentiated according to type of lamp and rating (requires a separate table). Details are in EU Regulation 2019/2020
2.1	Household and office appliances in standby and off mode	In line with EU regulations	Max. power consumption in off mode, 0.5 watts and in standby mode, 1 watt. Electricity consumption in networked standby mode: max. 2 watts (networked devices) or 8 watts (networked appliances with high network availability)
2.2	External power supply units up to 250 watts	Efficiency specifications in line with EU regulation	AC/DC power supply units with a nominal rating of up to 49 watts: no-load mode, max. 0.1 watts Over 49 watts and AC/AC power supply units: no-load mode, max. 0.21 watts Multiple voltage output external power supplies: no-load mode, max. 0.3 watts Minimum energy efficiency level dependent on power rating, increasing up to 88% (with 1 watt equivalent to 66%)
2.3	Computers	In line with EU regulations	e.g. - Category A desktop computers, max. 94 kWh p.a. - Category B notebook computer, max. 36 kWh p.a.
2.4	Complex set-top boxes	<i>Reference to voluntary industry agreement, requirements on standby consumption</i>	No regulations, voluntary industry agreement With respect to the requirements on standby consumption, complex set-top boxes are classified as “networked equipment”.
	Simple set-top boxes	In line with EU regulations	Operation 5 watts, standby 0.5 watts
2.5	Household hobs	In line with EU regulations	EEl <195



2.6	Ventilators	In line with EU regulations	e.g. axial, static, $N > 40$
2.7	Electric motors and variable speed drives	In line with EU regulations	Motors from 0.12 kW – 0.75 kW: Energy efficiency class IE2 Motors from 0.75 kW – 1000 kW: Energy efficiency class IE3 Variable speed drives: Energy efficiency class IE2
2.8	Circulating pumps	In line with EU regulations	$EEI \leq 0.23$
2.9	Water pumps	In line with EU regulations	$MEI = 0.4$
2.10	Transformers	In line with EU regulations	e.g. three-phase liquid-immersed medium power transformers with a coil with $U_m \leq 24$ kV and one with $U_m \leq 3.6$ kV, nominal output 50 kVA. Maximum load losses: 1,100 watts
2.11	Air heating products, cooling products, high temperature process chillers and fan coil units	In line with EU regulations	Seasonal space heating energy efficiency of air heating products: 31% ~ 137%, depending on device type. Seasonal space cooling energy efficiency of cooling products: 138% ~ 272%, depending on device type. Seasonal energy performance ratio (SEPR) of high temperature process chillers: 5 ~ 8.5, depending on device type.
2.12	Servers and data storage products	In line with EU regulations	e.g. blade oder multi-node servers (without additional components) - Idle state power, P_{idle} : Max. 40 watts - Minimum active state efficiency, Eff_{server} : Min. 8,0
2.13	Welding equipment	In line with EU regulations	From the 1st of January 2023: - Maximum idle state power consumption: 50W
3.2	Coffee machines	<i>Mandatory energy label</i>	No regulations



The fact sheet provides an overview. For the exact requirements, the respective legal and regulatory texts are authoritative.

All details, including references to the Energy Efficiency Ordinance EnEV and to the EU regulations, to which the EnEV refers, can be found at <https://www.bfe.admin.ch/bfe/en/home/efficiency.html>.