

CENELEC/TC or SC JTC 17	Secretariat Germany	Date 2020-09-28
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*Please ensure this form is annexed to the TC Report to the CENELEC Technical Board if it has been prepared during a meeting, or sent to CCMC promptly after its contents have been agreed by the Committee by correspondence.*

*TC or SC title:*

Gas Appliances with Combined Heat and Power

## **A Background**

JTC 17 is the successor of CEN/CENELEC JWG FCGA that has elaborated the first edition of EN 50465 "Gas appliances - Combined heat and power appliance of nominal heat input inferior or equal to 70 kW"

## **B Business Environment**

### **B.1 General**

Product standards are necessary for gas appliances with combined heat and power and to be harmonized with the essential requirements of

- the Gas Appliance Regulation (EU/2016/426) and
- the Commission Regulations (EU) No 813/2013 implementing EcoDesign Directive (2009/125/EC) and
- the Commission Regulations (EU) No. 811/2013 supplementing Energy Labelling Regulation (EU/2017/1369).

To avoid overlapping with projects of other technical bodies, the focus of the standards to be elaborated by JTC 17 is on the requirements and test methods for construction, safety, fitness for purpose, rational use of energy, sound power measurement and also on marking and advice at the end of life disposal.

Commercialization in stationary applications has already taken off. It is therefore important to elaborate standards at this early stage in order to facilitate commercialization and European trade, and harmonize and ease approval procedures for mCHPs. On the other hand, there is a strong need for not restricting further development of the relatively young technology.

Close cooperation with IEC/TC 105 standards has been established, however, different gas qualities and regulations all over the world request common modifications at European level.

### **B.2 Market demand**

The standards are intended to cover the market demand of:

- CHP component, sub-system and CHP suppliers
- CHP system installers
- CHP system manufacturers
- CHP testing and certification bodies (including notified bodies)
- CHP regulators, authorities
- CHP original equipment manufacturers.
- CHP users.

### **B.3 Trends in technology**

CHPs are fast developing technologies which are being commercialized. New technologies, components and materials are appearing and quickly developing on a global basis. An increasing need for off-grid systems and small-scale (co)generators with ever stricter requirements can be met with CHPs. Rapid developments in grid infrastructures and off takers call for more intelligent and flexible systems, for which CHPs are eminently suitable in combination with other energy storage systems. Micro CHPs can also support renewable technologies such as wind turbines and photovoltaic by providing power and energy when the renewable resource is not available or it is not enough to feed the load or coupling to the electrical energy system or even by converting excess power produced by these renewable power generators into hydrogen or synthetic fuels.

#### **B.4 Market trends**

By assuring the global relevance due to cooperation with IEC/TC 105, JTC 17 also bears in mind the input of the market. There is a main trend to include new requirements in the standards to have in mind consumers, national regulators inputs and manufacturers proposals to get the closest alignment of standards and products.

#### **B.5 Ecological environment**

JTC 17 standards contribute to safer and more efficient operations in the environment concerned. Therefore, the Gas Appliance Regulation (EU/2016/426), EcoDesign Directive (2009/125/EC) and Energy Labelling Regulation (EU/2017/1369) are taken into account.

#### **B.6 Involvement of societal stakeholders**

According to the CENELEC Rules for Standardization, JTC 17 is proactive to cover the interests of all stakeholders in order to achieve a wide acceptance of the standards e.g. by regulators, unions and insurance companies. This is an essential goal for the ambition of JTC 17 to provide the most accepted standards for CHPs within the EU.

#### **B.7 Involvement of SMEs**

Nearly all enterprises and laboratories are SMEs. JTC 17 has close cooperation with manufacturers associations representing SMEs.

### **C System approach aspects**

Due to the close cooperation with IEC/TC 105 "Fuel Cell Technologies" the standards are duly developed taking the system approach into account to assure that all borderlines and interfaces of internationally standardized fuel cell products are compatible with other internationally standardized products/systems used in conjunction with these fuel cell systems.

TC 105 will contribute to

SyC Smart cities

SyC Smart energies (liaison to be decided)

IEC/TC 120 Electrical Energy Storage (EES) Systems

ISO/TC 197 Hydrogen technologies

ISO/TC22/SC37 Electrically propelled vehicles

CLC/TC6 Hydrogen in energy systems

IEC/TC 8 Systems aspects for electrical energy supply.

### **D Objectives and strategies (3 to 5 years)**

To adapt IEC 62282-3-400 to the European situation.

### **E Action plan**

To adapt IEC 62282-3-400 to the European situation.

**F Useful links to CENELEC web site**

[https://www.cenelec.eu/dyn/www/f?p=104:7:3221815318644401:::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:2411071,25](https://www.cenelec.eu/dyn/www/f?p=104:7:3221815318644401:::FSP_ORG_ID,FSP_LANG_ID:2411071,25)

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