

# MECS Datasheet

Pressure to power (P2P) configuration



## C2 Technology's

Modular Energy Conversion Systems

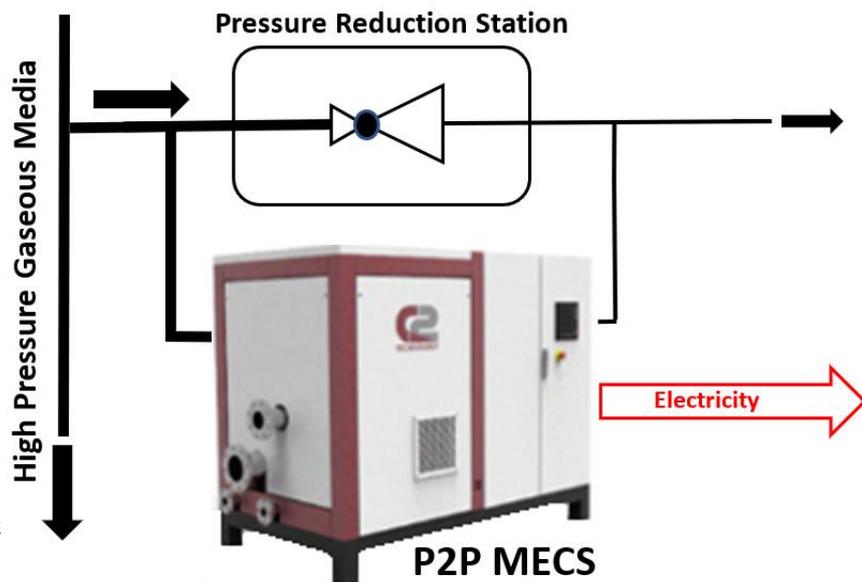
(MECS) P2P configuration is for businesses with a high-pressure gaseous media distribution network incorporating a pressure reduction station (PRS). MECS would help them reduce their energy bills, minimise their carbon footprint and improve their operational efficiency.

### Description

C2 Technology's **MECS** pressure to power configuration allows you to generate and supplement your own electrical demands by harnessing the energy released during the pressure reduction process. **MECS** is typically installed in parallel to a conventional pressure reduction station.

### MECS features include:

- Clean power generation without CO<sub>2</sub> emissions.
- High efficiency as it is configured for the client's specific needs.
- Oil free with no risk of contamination of the process media.
- Eco-friendly with no leakage of the process media into the environment.
- High reliability and durability due to wearless gas bearings enabling low maintenance costs.
- Flexibility of installation close to the process source due to its compact and adaptable footprint.
- Low investment costs as payback period is 2-3 years across various applications.
- Long life span of 25-30 years contributing to high overall ROI values.



### MECS Technical Data

<b>Rated power output</b>	75/150kW
<b>Voltage</b>	415V, 3Ph, 50/60Hz
<b>Process media</b>	steam, natural gas, air, CO <sub>2</sub> , refrigerants

- Supplied as a plug and play system minimising onsite disruptions.
- Automated control maintains downstream pressure whilst generating optimal electrical output and maintaining safety and integrity of the system.
- Easy to use with little training.

+44 (0) 7737 175370

c2@c2technology.co.uk

c2technology.co.uk

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or email us for more  
information

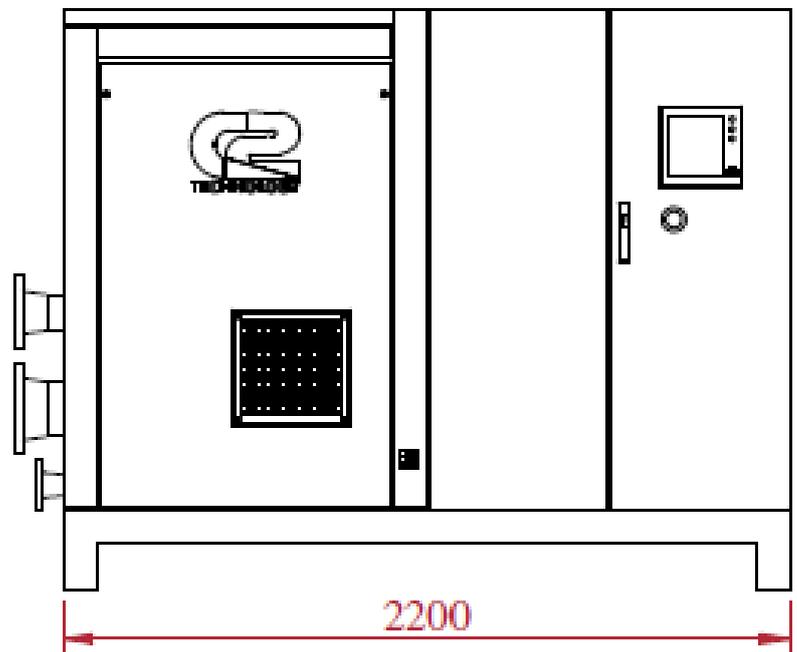
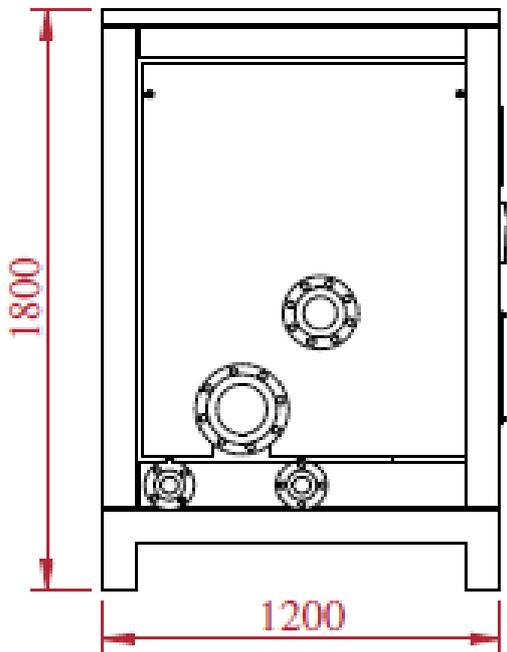
## Standards

The **MECS** fully complies with the requirements of:

- the Machinery Equipment Directive 2006/42/EC.

- the Electromagnetic Compatibility Directive 2004/108/EC.

- the European Pressure Equipment Directive 97/23/EC and carries the CE mark when required.



## Grid Connectivity

The **MECS** is compliant with:

- Engineering Recommendation (EREC) G59/2: Recommendations for the Connection of Generating Plant to the Distribution Systems of Licensed Distribution Network Operators. G59/2 sets out the requirements that must be met before the local Distribution Network Operator (DNO) will allow the generating plant to be connected to the network.

- Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators.

## Potential Application Example

Steam is used in food processing for a variety of reasons — from preparing product to cleaning equipment. C2 Technology's **MECS** installed, as a P2P **Steam Let-Down Expander (SLDE)**, in parallel with the pressure reduction station allows the business to generate 1.2MWh of electricity per annum from the steam without effecting the downstream processes, equating to more than £100,000 of electricity that can be used onsite.

## How Can I Get a C2 Technology P2P MECS?

C2 Technology supports each installation by a full set of expert services starting with a thorough analysis of the site and calculations of the projected savings from a **MECS** installation.

**To arrange a free consultation call or email us.**

Please visit our website  
or email us for more  
information

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for Smart & Eco-friendly Solutions**

**Bringing Tomorrow's Technology into Today**