

ENGINEERING  
TOMORROW

*Danfoss*

# Technology Leadership

Mads Holst Nielsen, Segment Marketing Manager

 **ATMO**  
sphere

Business Case for  
Natural Refrigerants

07/05/2018 – Sydney



# A global company

## Key facts

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**26,645**

Employees

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**USA, CHINA  
AND GERMANY**

Top three markets

**WORLDWIDE SALES**

in more than **100** countries

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**PRIVATELY HELD**

Ownership

**72 FACTORIES**

in more than **20** countries

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**NORDBORG,  
DENMARK**

Headquarters

**5.8bn€**

Turnover 2017

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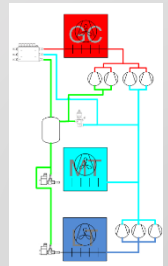
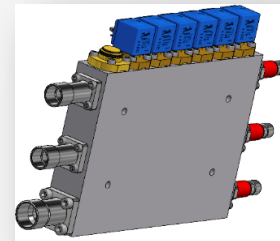
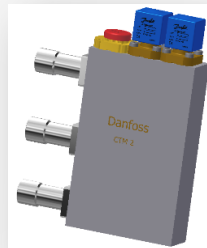
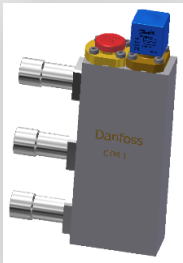
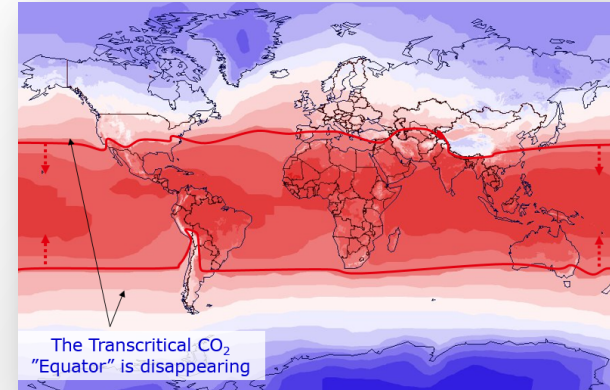
# Technology leadership

## CO<sub>2</sub> a global solution that is applicable in all climates

- CO<sub>2</sub> is moving down into smaller systems
- Also moving into industrial applications

## Low charge Ammonia a solution for industrial refrigeration

- Challenges with toxic and flammability
- A solution for existing and new installations



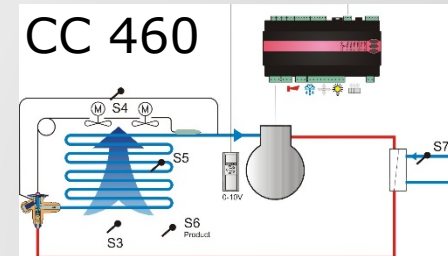
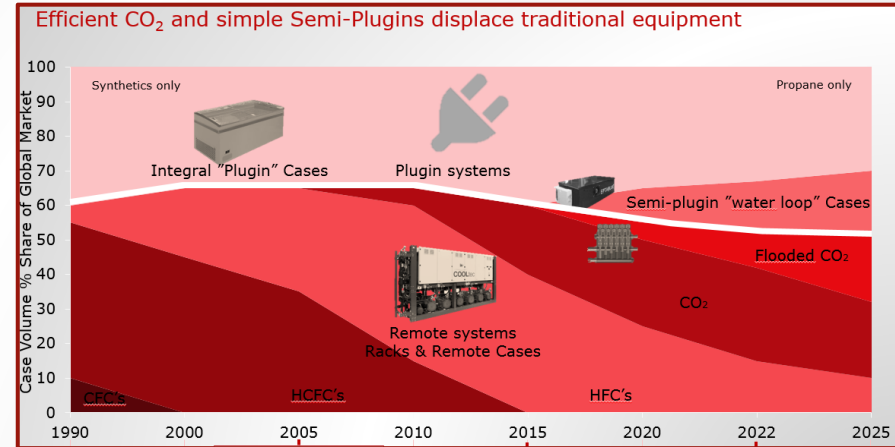
# Technology leadership

## Propane a refrigerant for small systems like Semi-plugin

- Challenges with charge limitations and flammability
- Supported by update of the EN60335-2-89 increasing the charge limit

## Making it a system solution

- Integration of heating and Air conditioning
- Smart grid integration





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