Procedure for the replacement of energy installations

Energy installations:

Technical installations - ventilation, cooling, heating, emergency generator, water treatment, etc.

Description: This procedure primarily applies to new installations; however, it also applies to replacements due to age or breakdown.

Target audience: Consultants and external suppliers.

Geographical and organisational scope

The business procedure applies to purchases for the entire Group, but is implemented gradually.

Requirements for ventilation installations

- Ventilation installations must comprise recovery in the following order of priority:
- 1. Installations with rotating trimmers
- 2. Installations with cross-trimmers
- 3. Installations with liquid-cooled batteries
- Ventilators and motors in ventilation installations must comply with the definitions of energy-efficient ventilators and energy-efficient motors, which means that they comply with the efficiency in the Danish Electricity Saving Trust's Purchasing Guidelines 2010.
- If possible, it must be ensured that air flow is adjusted to cover the required needs.

Requirements for cooling

- Water-cooling installations must be supplemented with free cooling.
- Cooling must primarily be provided using water as a cooling agent from central cooling installations with the highest possible temperature in order to exploit free cooling as much as possible.
- So-called split installations using cooling agents must be avoided when purchasing new installations, if this is technically viable.
- In installations for staff cafeterias, the amount of cooling agent must be minimised by placing the installation as close to the cold storage as possible.
- Cooling: Condensers must always be located in the open air.
- Hermetically sealed cooling installations (including Schroll installations) must be used to the greatest possible extent in order to minimise the risk of leakage of cooling agent.
- Vectors for cooling installations with glycol must be placed as close to the cooling installation as possible in order to minimise the amount of glycol.
- If possible, heat from cooling installations must be used for heating.

Requirements for heating installations

• Heating installations must comprise the greatest possible differential between the supply and return temperatures.

Requirements for pumps

- Pumps for cooling and heating must be equipped with capacity management in order to minimise energy consumption.
- New pumps must feature on the list of pumps produced by the Danish electricity supply companies (www.sparepumper.dk) or meet the requirements for being included on the list.

Requirements for lighting

- Lighting sources with the least possible heat emission relative to the light emission must be used.
- Long-life tubes must be used if possible, thus reducing the consumption of fluorescent tubes.
- Lighting sources must be labelled Class A to the extent permitted by fitting design and lighting quality requirements, as described in the Danish Electricity Saving Trust's Purchasing Guidelines 2010. This only applies to normal types of lighting sources and the places where it is technically viable. If the functionality requires other lighting, such lighting will be established.

Requirements for CTS installations

• CTS installations must as far as possible be used for time control of energy installations.