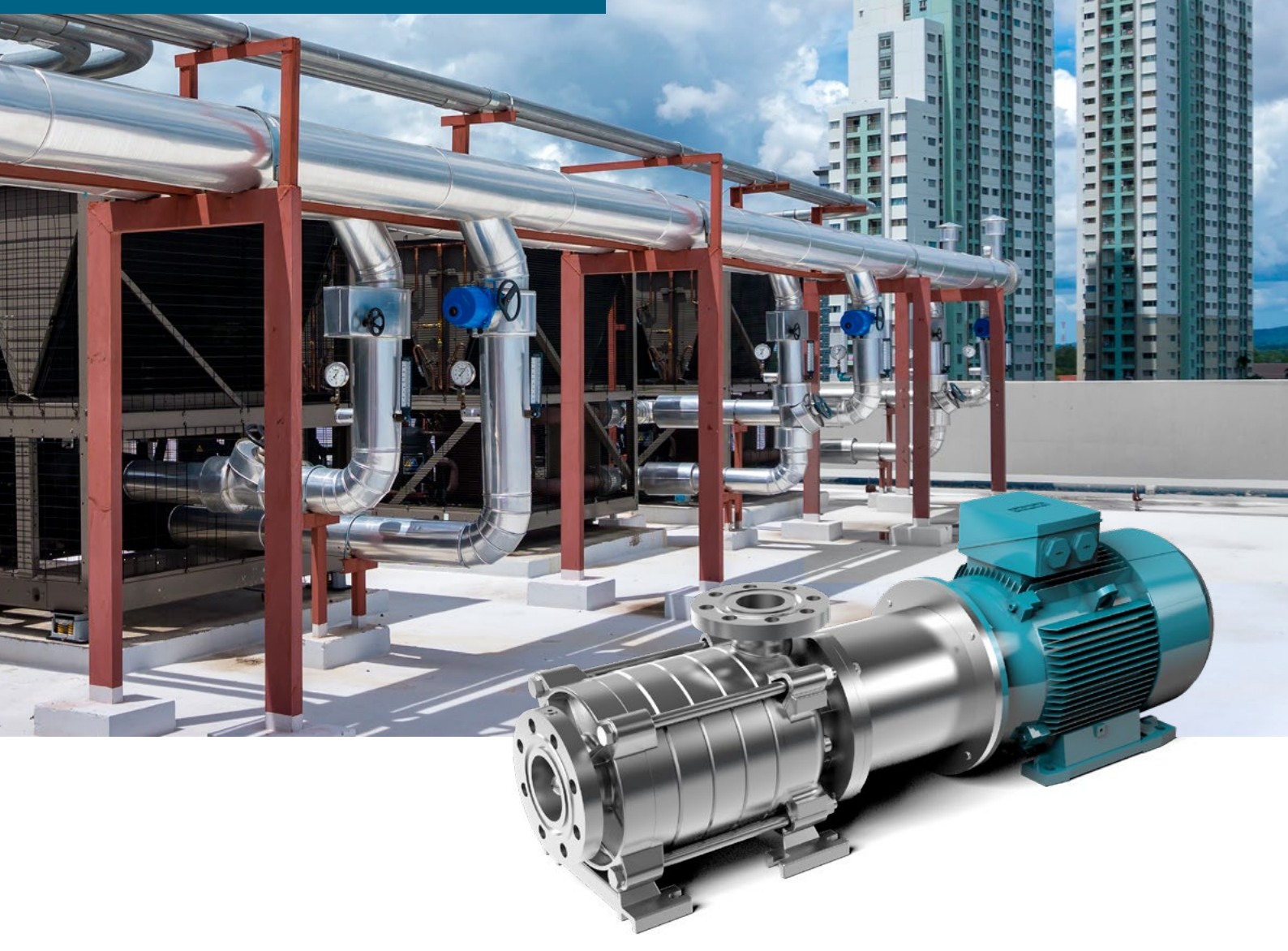




Product information

MADE IN GERMANY
...SINCE 1927

Refrigerants Pumps –
for safe and reliable
handling of cooling agents



Experience and reliability:

Handling of refrigerants – a job for the specialist!

EXPERIENCE PAYS OFF

EDUR-centrifugal pumps are successfully used in refrigeration systems in the industry for decades. They are important key components in the cooling process and provide a maximum level of safety, reliability and efficiency, being designed for high loads and extreme temperature ranges. EDUR-pumps are suitable for ecologically harmless refrigerants such as CO₂ and ammonia but also for a multitude of other synthetic and refrigerants containing hydrocarbon as well. Three different series of refrigerant pumps are available, depending on execution and size of the system.

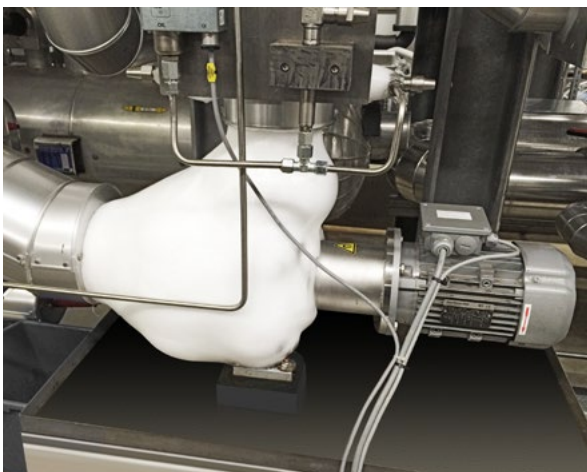
EFFICIENT TECHNOLOGY

EDUR-refrigeration pumps are designed as magnetically coupled pumps, in order to get the refrigerant hermetically sealed against the atmosphere. The spatial separation between motor and pump does avoid a heat transfer into the medium and consequently benefits the energy balance of the system.

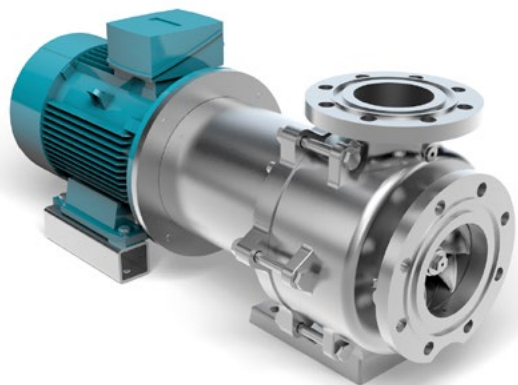
Furthermore these pumps are characterized by a compact design, open impellers without axial thrust or closed balanced impellers as well as diffuser devices in the circular casing that do compensate most of the radial forces. This among others has a positive influence on the magnetic coupling service life.

COMPETENCE IN LIQUIDS-GAS-MIXTURES

EDUR-refrigeration pumps are characterized by very low NPSH values that do have positive impact especially on refrigerants being at boiling point. In contrast to volute casing pumps in general EDUR-centrifugal pumps are in a position to handle certain gas contents in the pumping medium due to the diffuser devices. In particular this has the advantage for refrigerants that also some slight evaporation of refrigerants is mastered reliably. Type selection, configuration and optimum pump choice is the job of the specialized EDUR-engineers. Please contact us!



SERIES NMB



Properties: space saving single-stage compact unit with 3-phase A.C. motor

Applications: natural refrigerants like NH₃ and CO₂ as well as other synthetic and hydro-carbon refrigerants

Technical Data

Flow rate	up to 600 m ³ /h 2642 US gpm
Working pressure	up to 16 bar 232 psi
Temperature range	-50 up to +140 °C -58 up to +284 °F
Shaft sealing	magnetic coupling

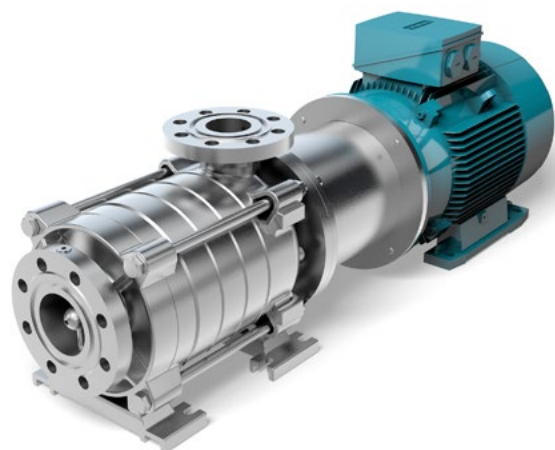
SERIES LBM

Properties: space saving multi-stage compact unit with 3-phase A.C. motor

Applications: natural refrigerants like NH₃ and CO₂ as well as other synthetic and hydro-carbon refrigerants

Technical Data

Flow rate	up to 60 m ³ /h 264 US gpm
Working pressure	up to 40 bar 580 psi
Temperature range	-50 up to +220 °C -58 up to +428 °F
Shaft sealing	magnetic coupling



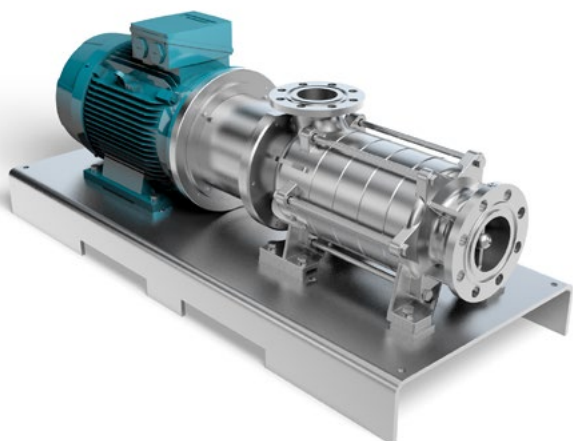
SERIES NHM

Properties: multi-stage compact design on bedplate with 3-phase A.C. motor

Applications: natural refrigerants like NH₃ and CO₂ as well as other synthetic and hydro-carbon refrigerants

Technical Data

Flow rate	up to 170 m ³ /h 749 US gpm
Working pressure	up to 40 bar 580 psi
Temperature range	-50 up to +220 °C -58 up to +428 °F
Shaft sealing	magnetic coupling



EDUR-Centrifugal Pumps for energy storage systems:

Individual – as your requirements for modern energy storage technologies!

PUMP UNIT

Hermetically sealed

ENERGY EFFICIENT MOTORS

Assembly/disassembly without system opening

IMPELLERS

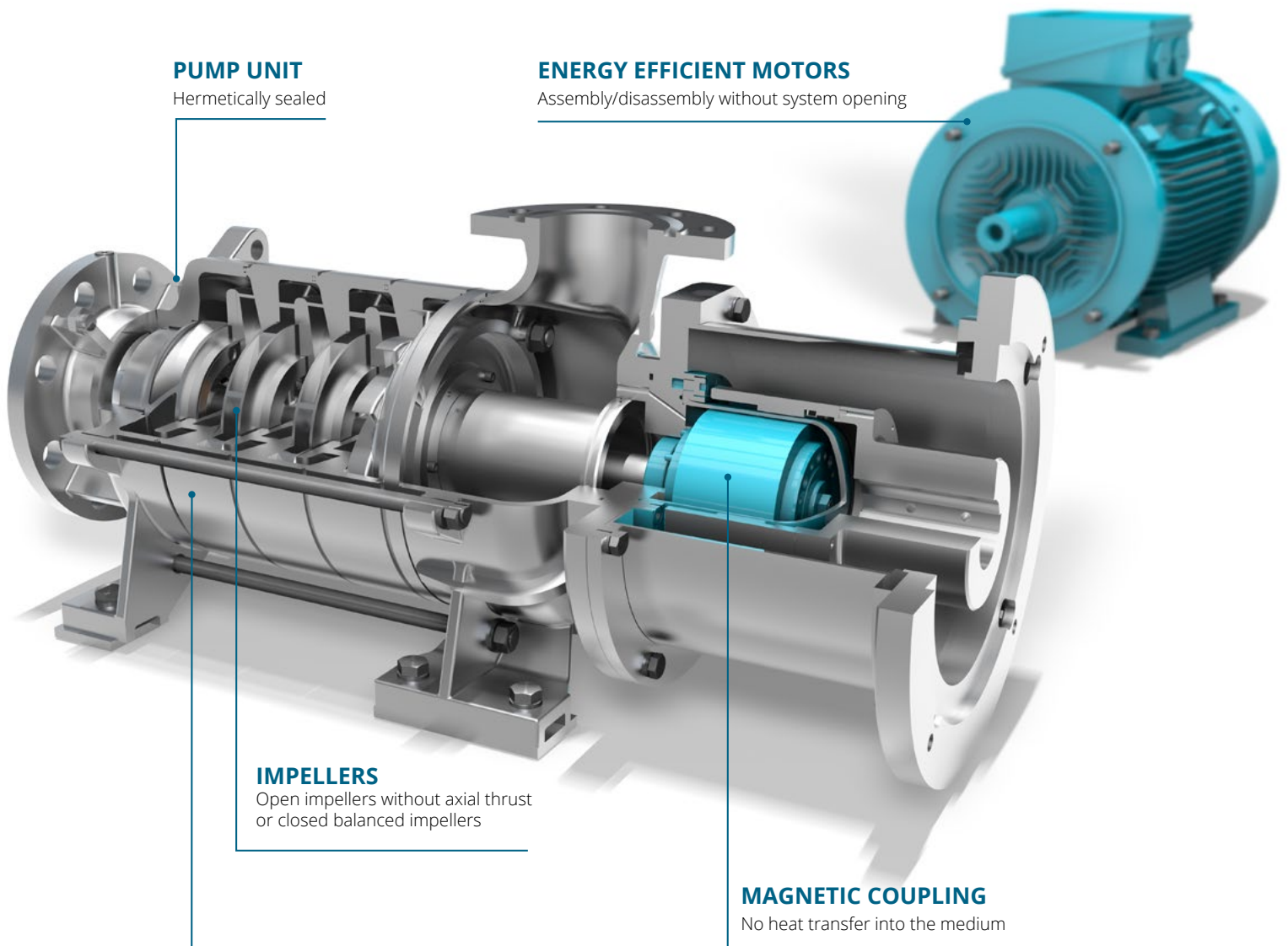
Open impellers without axial thrust
or closed balanced impellers

CIRCULAR DIFFUSER CASING

Compensation of radial forces by especially
designed circular diffuser casing

MAGNETIC COUPLING

No heat transfer into the medium



Advantages at a glance

LOW OPERATING COSTS

- very high efficiencies

PROCESS RELIABILITY

- Hermetically sealed
- No heat transfer into the medium
- Low wear and tear
- Reliable handling of liquids with entrained gas
- Maintenance free
- Low NPSH values
- High operational safety
- Pulsation free operation
- Long service life
- Low noise emissions

- Closed lantern
- Icing protection
- Motors with standstill heating
- High efficiency option with plastic can
- Q_{\min} pipe not necessarily

EASY INSTALLATION

- Modular design system for customized solutions
- Compact block construction or bedplate unit
- Low space requirements

LAYOUT

- Optimum pump selection by our specialized engineers

FIELDS OF APPLICATION AND TARGET GROUPS:

- Food processing and -packing
- Slaughterhouses
- Dairy technology
- Beverages industry, breweries
- Chemical industry
- Cold storage houses
- Ice rinks
- Bob and toboggan runs

Your application is not listed?
Please contact us!

EDUR-Centrifugal Pumps – extremely versatile for industrial and process engineering

