

Energy  
optimization

RELIABLE  
SUPPLIER WITH  
**+120 YEARS**  
OF EXPERIENCE IN  
CONTROL VALVES

## Retrofit valves

### CONTROL VALVES FOR REPLACEMENT OF ALL 3-WAY VALVES IN THE MARKET

Control valves have been used in the maritime industry for many years and the valves have automated several critical temperature regulating applications such as ME JW Cooling, lube oil cooling and LT Cooling control. Challenges with fluctuating temperature control, difficulties acquiring genuine spare parts combined with no real alternative for replacing faulty control valves, have led to downtime, breakdowns, thermal stress and extra workload for the crew.

Control valves from BROEN Clorius Controls can replace all 3-way valves in the market and our plug n' play replacement packages are available from DN100 and up to 550.

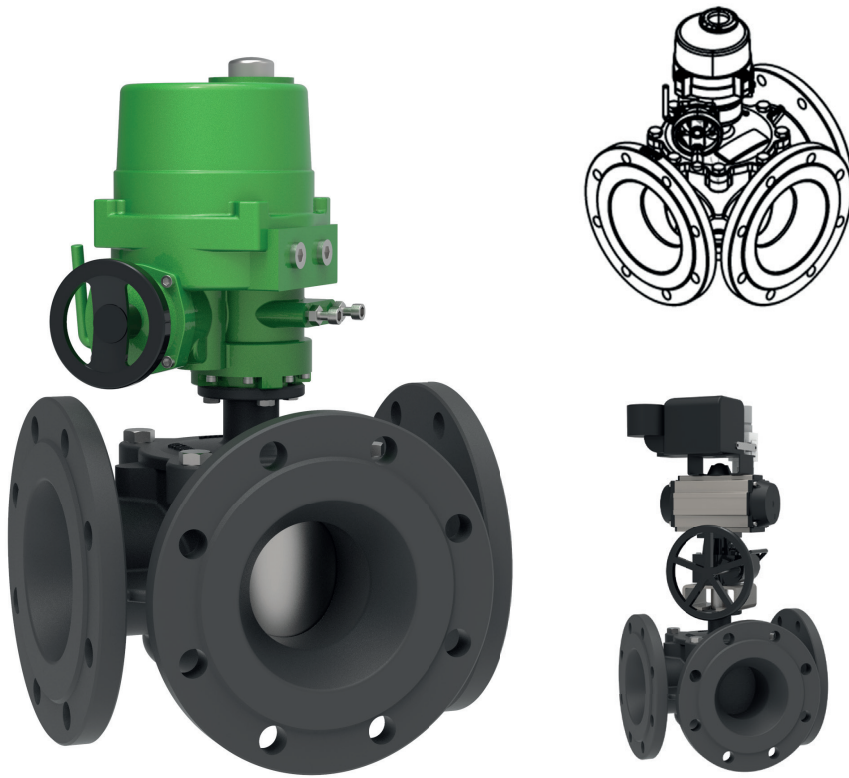
**Take control with BROEN Clorius Controls solutions**

## BROEN Clorius Controls offers

- BROEN Clorius Control valves can replace all 3-way valves in the market
- Replacement packages range from DN100 and up to 550
- Most compact low leakage 3-way control valves in the market
- Easy to install - plug n' play solution
- Flexible design - suitable for all type of installations.

## Benefits using our valves

- Controller with advanced settings for stable temperature control.
- Easy and quick access to spare parts
- Minimal maintenance
- Reduce thermal stress of engine components
- Improvement of the overall engine efficiency.



ER2022 Controller series  
Controller with advanced settings which, in combination with our 3-way valves, reduces temperature fluctuations, thermal stress and maintenance.

## Case samples of replacement and output

Vessel	Product	Output
Platform Supply Vessel	New Ultra Low Leakage valve, replacing wax (thermostatic) valve.	Preventing undercooling of auxiliary system during port stay in areas with cold water
VLCC tankers	New Ultra Low Leakage valve, replacing existing 3-way valve of other brand for ME JW Cooling control	Removing energy losses during port stay, reducing oil consumption from boiler and CO <sub>2</sub> emissions
Container	Low Leakage valve replacing existing 3-way valve on LT-cooling control	Removing the leakage from cooler side when the port is closed to maintain correct temperatures on LT side. (cooler oversized)
Container	New Ultra Low Leakage valve, replacing existing 3 way valve of other brand for ME JW Cooling control	Old valve and controller caused temperature fluctuation during maneuvering, solved by replacing valve and controller with Clorius Controls replacement package

**Leading manufacturer of control valves**  
BROEN Clorius Controls is part of BROEN Valve Technologies in Denmark.

BROEN A/S is owned by Aalberts N.V.

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