HEXONIC | HEAT EXCHANGERS

AS

ASYMMETRIC BRAZED PLATE HEAT EXCHANGER

IF YOU LOOK FOR BETTER PERFORMANCE AND MORE EFFICIENCY IN YOUR HEATING INSTALLATION – WE TAKE UP THE CHALLENGE!

The Hexonic asymmetric brazed plate heat exchanger is designed especially for heating applications. Special system of the channels ensures maximum heat transfer efficiency on the higher flow rate side with a minimum pressure drop on the secondary circuit.

The biggest advantage of the asymmetric heat exchanger is its compact size and the possibility of using lower power pumps in central heating systems.

In many cases, the efficiency of asymmetric heat exchangers can be 18% higher compared to standard brazed plate heat exchangers.

ADVANTAGES

- HIGHER CAPACITY
- SMALLER HEAT PUMPS SYSTEM
- HIGHER PERFORMANCE
- COMPACT SIZE
- LOWER PRESSURE DROP
- IMPROVED HEAT TRANSFER
- LESS REFRIGERANT REQUIREMENT
- AN OPTION MADE OF STAINLESS MATERIALS IS AVAILABLE
- REDUCED CARBON FOOTPRINT

MODERN PLATE DESIGN

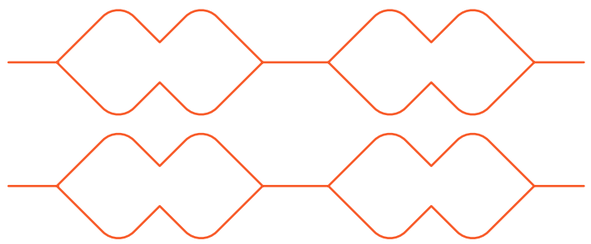
Asymmetric plate heat exchangers allow independent optimization of both fluids for maximum thermal efficiency and economy.

The unique plate design allows for operation in conditions where one of the media has a much higher flow rate.

ADVANTAGES

- ACTIVE FRONT PLATE FORMS AN ADDITIONAL CHANNEL
- INCREASED MAXIMUM WATER FLOW
- LESS WATER PRESSURE DROPS
- HIGHER FLOW TURBULENCE

ASSYMETRIC PATTERN

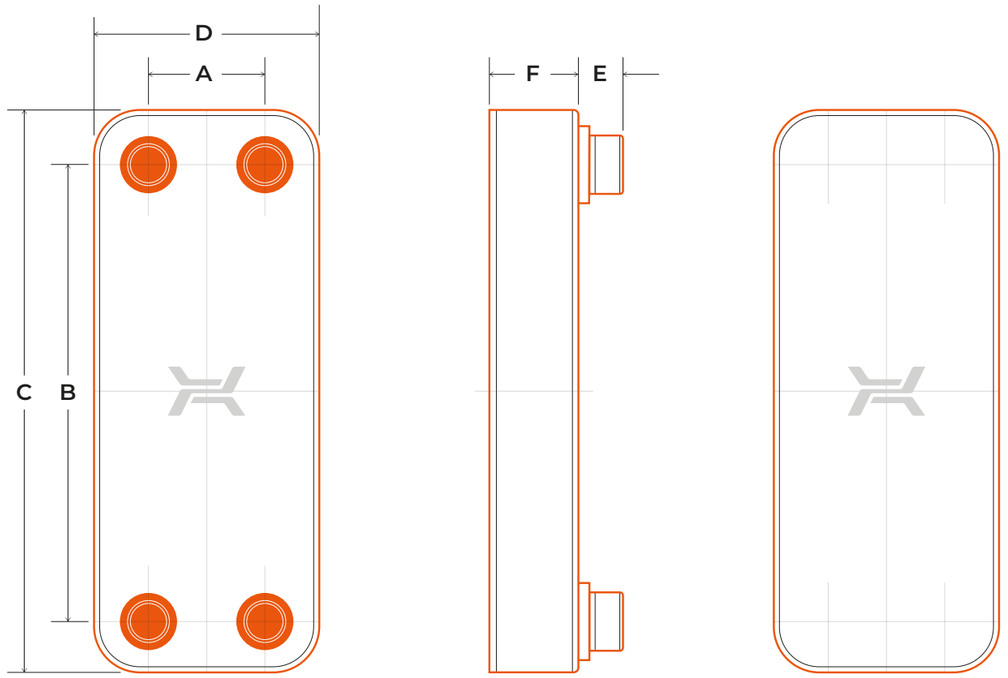


TECHNICAL DATA LA21AS

WORKING PARAMETERS

MAX. PRESSURE — 16 BAR
MAX. TEMPERATURE — 150°C
MIN. TEMPERATURE — -195°C

Type	Dimensions						Max. number of plates
	A	B	C	D	E	F	
	mm						
LA21AS	40	278	314	73	14	11 + 2,3 × NP	60
LC110AS	170	378	466	258	28/38; 100	11 + 2,4 × NP	200

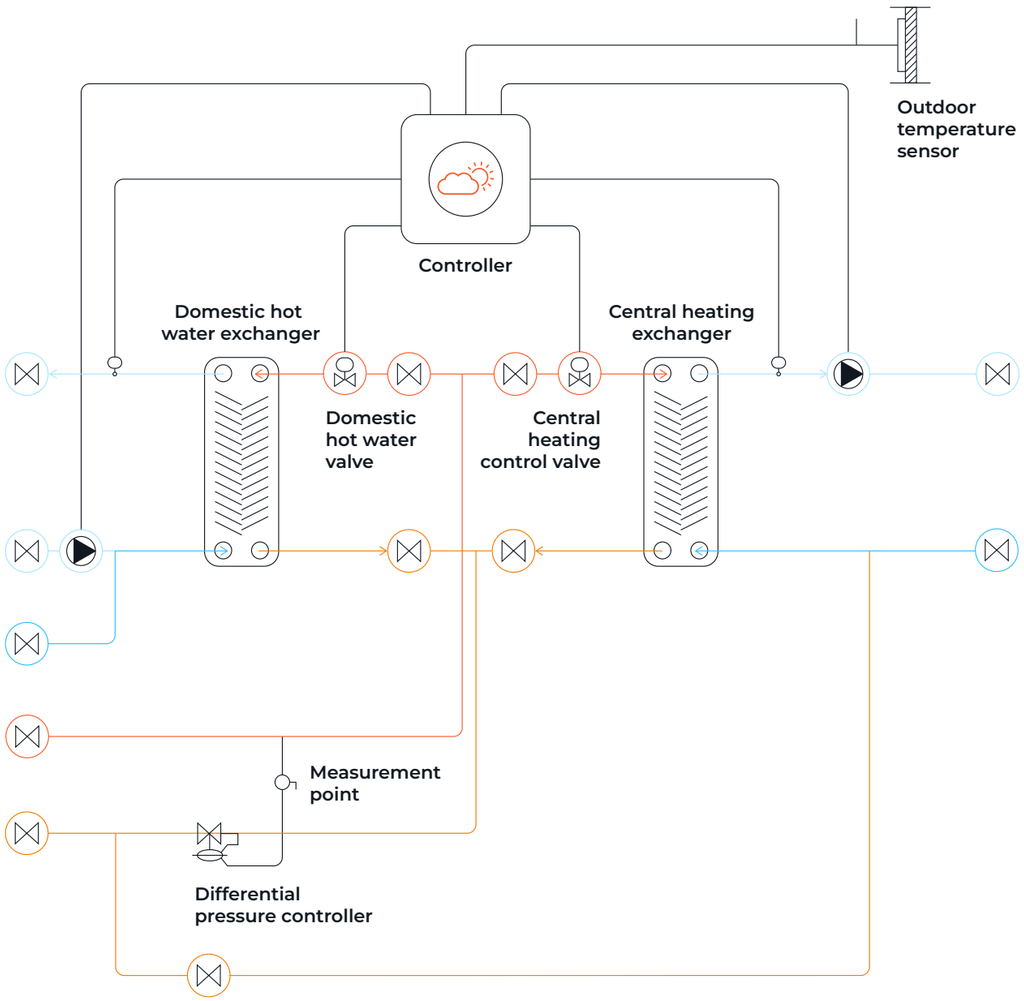


WHERE ARE THEY USED?

RESIDENTIAL DISTRICT HEATING SUBSTATION

A residential substation also called an individual apartment substation, is a compact device providing heat to a single apartment. It transfers the heat from a local boiler room or a district heating substation supplied by a city heating grid to the apartment. Such a solution provides the occupants of multi-family buildings with individual control over how they use heating and prepare domestic hot water.

The heat transfer process in the individual apartment district heating substations occurs with the help of asymmetric brazed plate heat exchangers.

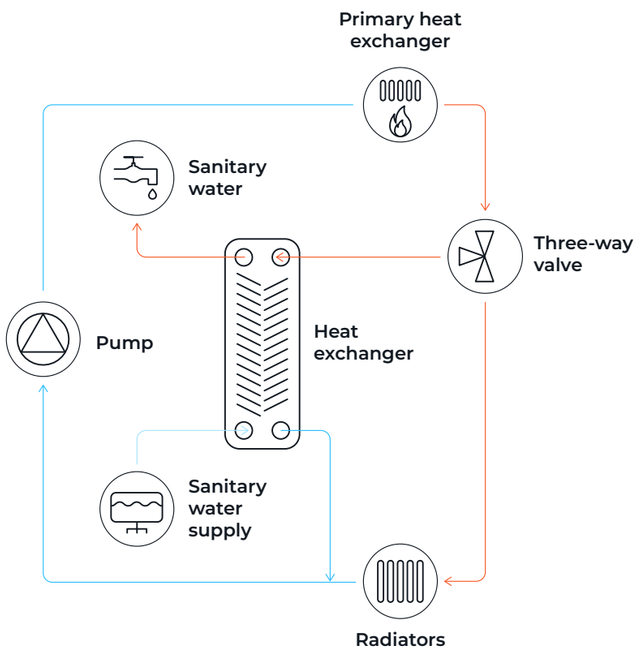


GAS-FIRED BOILERS

Gas-fired boilers are heating devices characterized by a high efficiency and performance.

Gas-fired combination boilers have been designed in a way that enables the unit to heat the building and supply domestic hot water (DHW) heated in a flow system. If hot water is needed, the boiler will switch to heating water drawn from a tapping point and, after a while, return to heating water for central heating (CH) purposes.

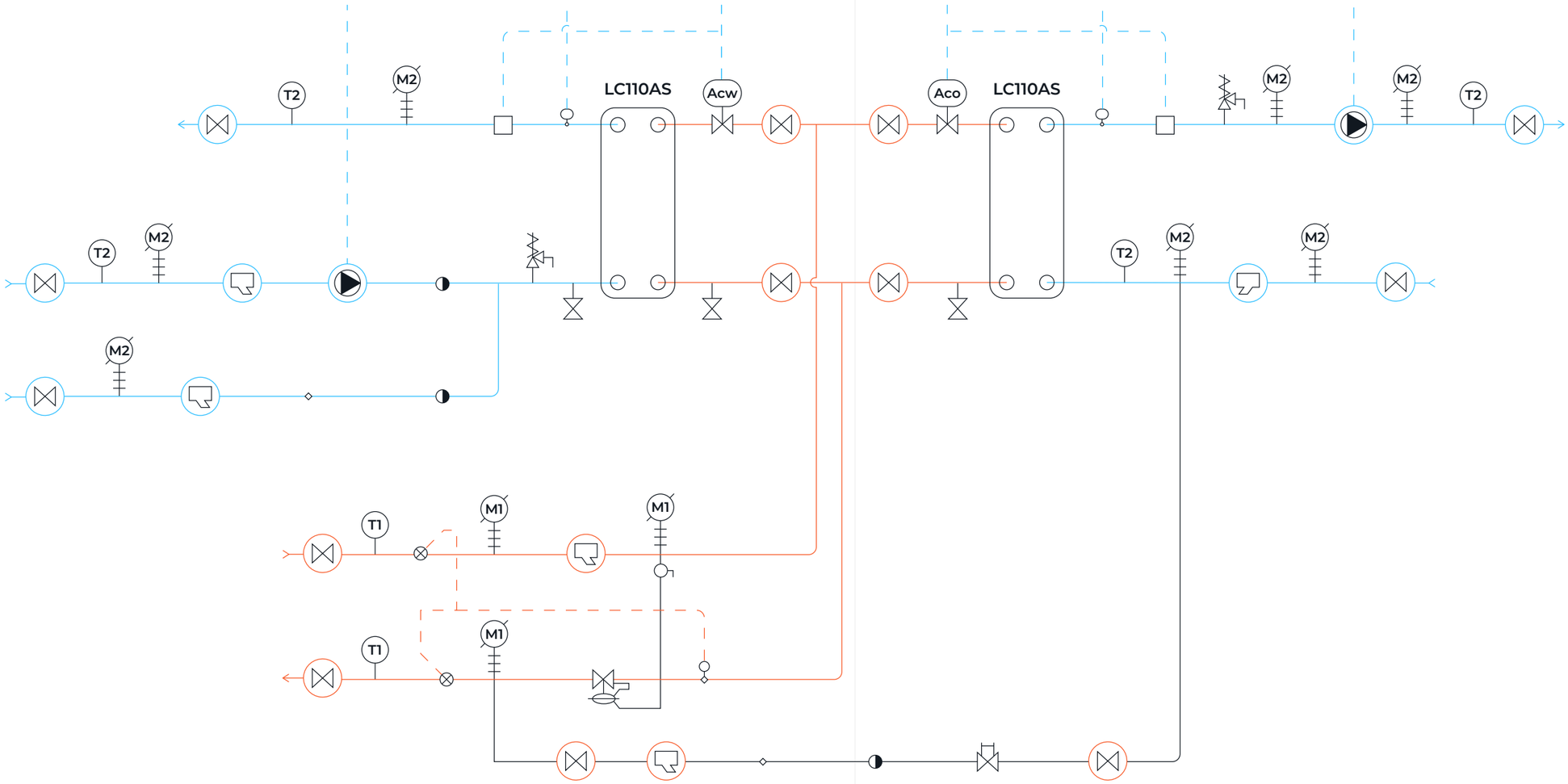
The main task of a single-function boiler is heating the water in a CH system. In order to use this type of boiler for heating DHW, it needs to be equipped with a DHW cylinder. The coil located inside the cylinder, which is supplied with hot water from the boiler, maintains the set water temperature.



DOUBLE–FUNCTION DISTRICT HEATING SUBSTATION

The heating system has three main components: the heat source, such as a combined heat and power plant or heat generating plant; the heating grid, through which hot water or water vapor is sent to the recipients and district heating substations, which collect the heat at buildings. System heat reaches millions of recipients every day. Hexonic has its part in this. As a supplier of heat exchangers, we supply most of the heating companies in Poland. Our exchangers also operate in the world's largest heating systems.

SCHEME OF DOUBLE–FUNCTION DISTRICT HEATING SUBSTATION



The devices most often used in district heating substations are brazed plate exchangers, which are reliable and durable devices, but most importantly offer an extensive range of types. This allows their application both in small, residential stations, as well as in distribution stations supplying multi-family and public buildings.

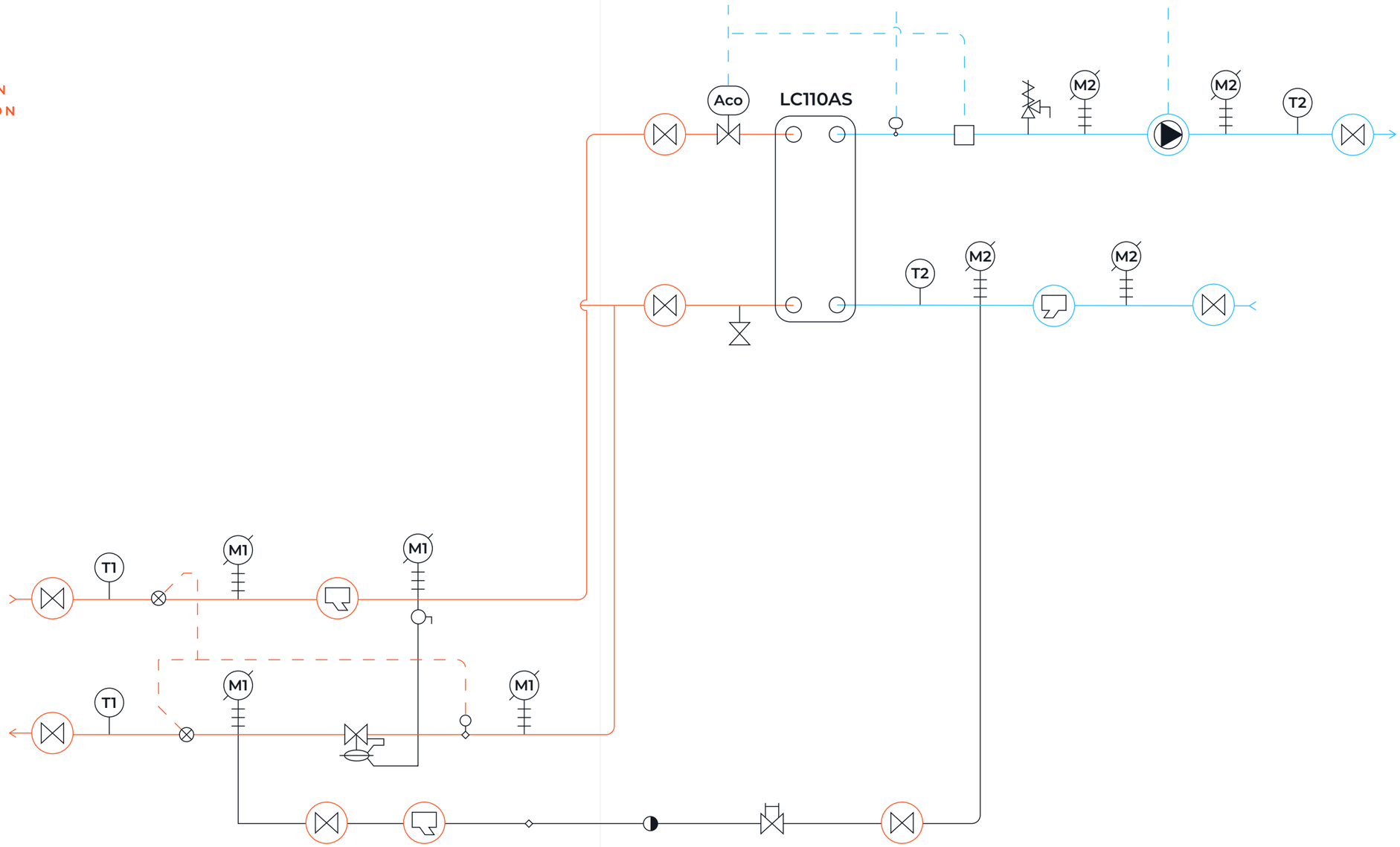
SINGLE–FUNCTION DISTRICT HEATING SUBSTATION

District heating substations are systems located at the junction of a city's heating grid and the internal system of a building.

One of the substation types is a single-function substation. Unlike two-function substations, it operates only for one consumer circuit, usually the central heating (CH) system, or it supplies the residential district heating substations (also called individual apartment substations). In this situation, domestic hot water (DHW) is heated by individual heat sources, e.g. gas-fired boilers, using a DHW storage tank with a coil or through mini-substations redirecting heat from the collective substation for the purposes of CH and DHW at individual apartments.

SCHEME OF SINGLE–FUNCTION DISTRICT HEATING SUBSTATION

The task of a single-function district heating substation is transferring heat from a heating grid to the building's central heating grid through a plate heat exchanger. This allows to achieve a lower temperature and pressure in the system than in the heating grid, which is safer for the end user. Hexonic's extensive product range provides a selection of exchangers for district heating substations of virtually any size.



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