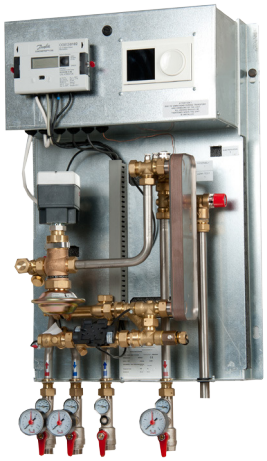
ENGINEERING TOMORROW

Fact sheet

UNISTAT 1016 A/W Small

Compact district heating substation from 16 to 30 kW*



Application

The UNISTAT 1016A(PN16) / W(PN25) is designed for use in district heating networks. Depending on type, it can be used both in micro- and macronetworks, in low temperature (LT) and high temperature (HT) ranges. The substation is an innovative product which sets industry standards.

Function

The communicative controller ECL 310 is used. This controller ensures optimum regulation of the energy distribution. The supply temperature for the domestic system is weather compensated. Energy consumption and temperatures can be remote monitored.

Construction

The built-in components are connected by means of precisionmanufactured stainless steal pipe connections produced with a special Danfoss end-forming connection technology for PN16, the PN25 version is featured with welded carbon steel pipes on primary side and stainless steel pipes on secondary side. High quality EPDM for PN16 is used as sealing material. The entire waterbearing part of the substation is thermally insulated (EPP). This design enables an easy and quick removal for service purposes.

The benefits of this design are:
- Minimal radiation heat losses
- High durability
- Mounting option for pressure and temperature measuring instruments is incorporated.

Assembly

The compact substation is easy to wall-mount.

FEATURES AND BENEFITS

- Thermal insulation
- Easy installation (by one person)
- Easy electrical connection
  - edgewise cable routing
  - plenty of space for wiring work
- High serviceability
- Compact and modern design
- Durability due to the use of precious metals
- PN16 / PN25 application
- Steel sheet cover
- New Danfoss ECL controller
- Easy operation of the ontroller display

** Power levels and types are dependent on flow rate and spread*

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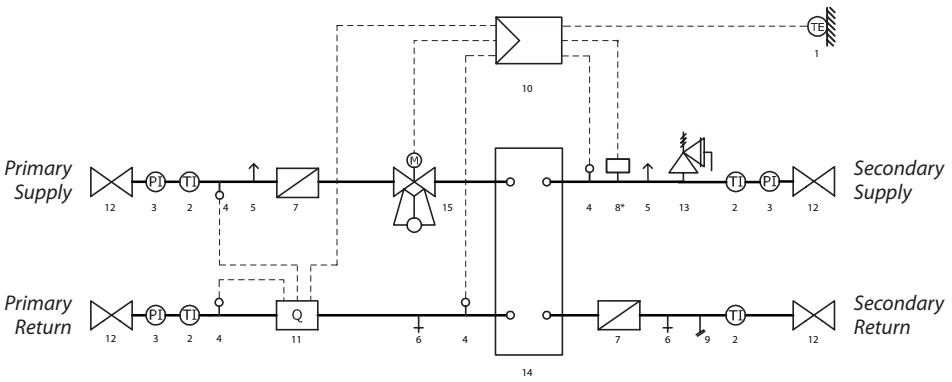
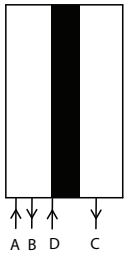
CIRCUIT DIAGRAM - EXAMPLE



1	*External sensor*
2	*Thermometer*
3	*Manometer*
4	*Sensor*
5	*Air vent*
6	*Drainage*
7	*Strainer*
*8**	*Safety thermostat*
9	*Connection for expansion vessel*
10	*Controller*
*11**	*Heat meter*
12	*Ball valve*
13	*Safety valve*
14	*Plate heat exchanger*
*15**	*Differential pressure*



Technical parameters:

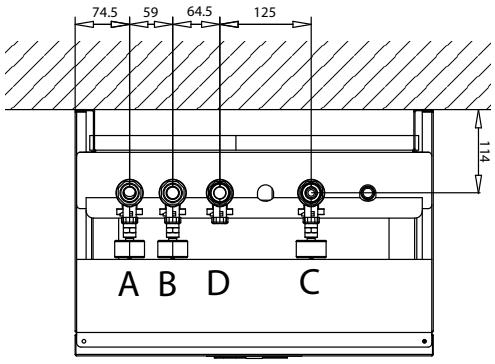
Nominal pressure:	1016A: PN 16 1016W: PN25
Δ T:	35 °C / 20 °C [1]
Capacity:	16/30 kW
Weight:	40-45 kg
Cover:	Steel sheet

Dimensions (mm):

With cover (incl. connections):
H 870 × W 490 × D 337

Connections sizes:

Primary:	G ¾"
Secondary:	Rp ¾"
Heat meter:	G ¾" x 110mm



Connections:

A Primary supply
B Primary return
C Secondary supply
D Secondary return

Regulation possibilities for ECL 310:
• With different application keys

Options:
• Heat meter
• Safety thermostat
• Actuator with emergency off function

The substation is delivered preassembled, electrically wired internally and tested for function and leak tightness.

[1] primary side / secondary side

STANDARD OPERATING TEMPERATURES*:

Primary [°C]	95-65	90-60	90-50	95-60	95-55	80-50
Secondary [°C]	60-85 55-80	50-70 50-75 55-75 55-80	45-65 47-70 45-75	55-75 57-80 55-80	50-70 50-75 52-75	45-65

* Capacity may vary depending on temperature

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