

CONTAINER BOILER ROOM – HOT WATER



FUEL natural gas, other gas, extra light fuel oil
POWER 0,7 – 8 MW
MEDIUM hot water



PRODUCTION / ПРОИЗВОДСТВО



LOADING / ПОГРУЗКА



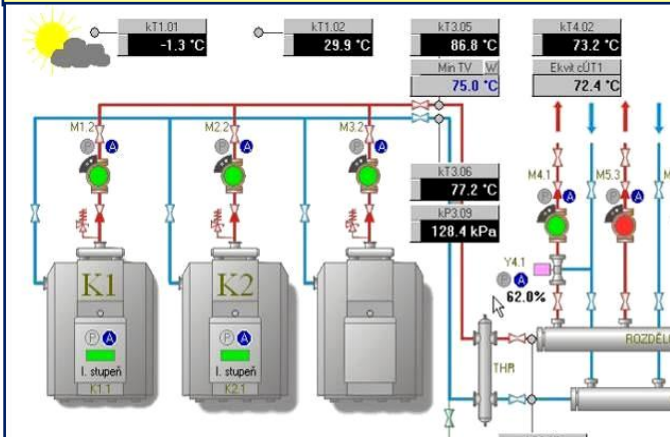
TRANSPORT / ТРАНСПОРТ



INSTALLATION / УСТАНОВКА



MONITORING / МОНИТОРИНГ



REFERENCES / РЕФЕРЕНЦИИ





STANDARD EQUIPMENT

EQUIPMENT COMPLETENESS

COMPLEXITY equipped with complete functional equipment, safety
DOCUMENTS certificate, passports, operating and maintenance instructions

HEATING PART

PARAMETERS max. pressure of 6 bar, max. temperature 95 °C, temperature gradient of 90/70°C
BOILER DESCRIPTION steel boiler with a fully automated process of combustion, **efficiency 92%**, power regulation 30 - 100%
EQUIPMENT primary pump, mixing valve, secondary pump with displacement of 10 m, fittings, one heating circuit
EXPANSION SYSTEM expansion devices for water volume of 1 m³ / 100 kW, safety devices
THERMAL INSULATION of all equipment (mineral wool with an aluminum foil surface)

FUEL PART

FUEL natural gas, calorific value 33 – 34 MJ/m³, inlet pressure up to 4 bar
EQUIPMENT GAS gas supply to the burner, gas pressure regulator, emergency fuel shutoff, fittings
FUEL OIL extra light fuel oil, calorific value 42 MJ/kg, density of 820 - 860 kg/m³
EQUIPMENT OIL oil supply to the burner, emergency fuel closure, fittings
EMISSION GAS (OIL) GAS - Nox max. 100 mg/ m³, OIL - Nox max. 200 mg/ m³ (standard EU)

WATER PART

EQUIPMENT water softening, automatic addition of water to the heating system, operating pressure max.10 bar, min. 4 bar
GAUGES water meter

ELECTRIC PART

PARAMETERS voltage 400 V, difference max. 10%, frequency 50 Hz
EQUIPMENT complete electrical installation, lighting, ventilation
REGULATION regulation of the burner power according to the outside temperature (equitherm regulation), automatic closing of the emergency fuel in case of an emergency
CONTROL SYSTEM AMIT main control unit with remote visualization and remote data collection to a computer (e.g. temperature, pressure, data from gauges etc.), the control system is programmable
GSM MODUL reporting emergency situations using the GSM module
OPERATION automatic operation of the boiler room without a permanent operator
GAUGES electricity meter

CONTAINER

COMPOSITION thermally insulated “sandwich” (galvanized steel, non-combustible mineral wool), light colors, construction of the container is designed for the outside air temperature to -25°C
FIRE RESISTANCE **30 minutes** - benefit for the location of the boiler room near buildings
VENTILATION provides supply of combustion air to the burners, removal of excess heat from the boiler room

CHIMNEY

COMPOSITION chimney 6 m high, 3-component (stainless steel sheet, thermal insulation, stainless steel sheet), the chimney is attached to the container using a structure



EXTRA - STANDARD EQUIPMENT

HEATING PART

PARAMETERS	medium pressure higher than 6 bar, temperature higher than 95 °C
REZERVE PUMP	primary side – pump without installation primary side – pump including fittings and installation secondary side – pump without installation secondary side – pump including fittings and installation
STRONGER PUMP	secondary pump with a higher discharge than 10
GAUGES	heat meter
TEMPER. GRADIENT	other temperature gradient than 90/70°C
HEAT EXCHANGER	installation between the boiler room and secondary heat distribution (boiler room protection)
EXPANSION SYSTEM	expansion device for water volume higher than 1m ³ / 100 kW

FUEL PART

REGULATOR	reserve regulator of gas pressure
GAUGES	gas meter (gas meter corrector), oil meter
NOISE DAMPER	for the burner - used in the installation of boilers in housing developments
BURNER GAS – OIL	combined burners for both types of fuel - natural gas and fuel oil

WATER PART

WATER TANK	cold water tank for adding water by pump to the heating system (used in case of low or unstable water pressure)
PWH	equipment for the preparation of hot water (DHW) according to the maximum hourly water consumption + water meter

ELECTRIC PART

DIESEL GENERATOR	reserve diesel aggregate as a source of electrical energy for the boiler room including the fuel tank
COGENERATION	gas MIKRO cogeneration unit for the production of part of the electricity for the boiler room's own needs (the parallel operation of cogeneration and electrical grid with purchasing electricity from the grid)

CONTAINER

ARCTIC	construction of the container is designed for the outside air temperature below -25°C
BIGGER SPACE	when installing extra-standard equipment, it is sometimes necessary to enlarge or add another container
VENTILATION	ventilation including air filtration (for sandy areas)
AIR CONDITIONING	air conditioning split-unit (for hot regions)
COLOR	other than light grey

CHIMNEY

HEIGHT	max. 21 m including steel structure
FLUE EXCHANGER	exchanger for higher boiler efficiency (economizer), efficiency 96,8%
NOISE DAMPER	for the chimney - used in the installation of boilers in housing developments

FUEL STORAGE - OIL

POWER MAX. 700 kW	fuel storage of 4,500 liters is located in a separate part of the boiler room
POWER MIN. 700 kW	separate container (12 000 or 15 000 l)

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TYPES

MAIN COMPONENTS

BOILERS	GERMANY MADE (VIESSMANN)
BURNERS	ITALY MADE (RIELLO)
	GERMAN MADE (WEISHAUPT)
CONTAINERS	CZECH MADE
CONTROL SYSTEM	CZECH MADE (AMIT)
CHIMNEYS	CZECH MADE



2 BOILERS IN ONE CONTAINER

type boiler room	power boilers MW	boiler pcs	power boilers room MW	fuel	storage of oil litrs	types boilers	container pcs	weight 1 cont. tons	electric	orientation size		
									power input kW	legth m	width m	height m
COMPACT	0,35	2	0,70	GAS	x	VIES	1	7	7	6	3	3
COMPACT	0,35	2	0,70	OIL	4 500	VIES	1	7	7	9	3	3
COMPACT	0,56	2	1,12	GAS	x	VIES	1	8	8	7	3	3
COMPACT	0,70	2	1,40	GAS-OIL	x	VIES	1	10	12	9	3	3
COMPACT	0,90	2	1,80	GAS-OIL	x	VIES	1	11	14	9	3	3,3

1 BOILER IN ONE CONTAINER

type boiler room	power boilers MW	boiler pcs	power boilers room MW	fuel	storage of oil litrs	types boilers	container pcs	weight 1 cont. tons	electric	orientation size		
									power input kW	legth m	width m	height m
COMPACT	1,30	2	2,6	GAS-OIL	x	VIES	3	8	17	9	3	3
COMPACT	1,30	3	3,9	GAS-OIL	x	VIES	4	8	22	9	3	3
COMPACT	1,30	4	5,2	GAS-OIL	x	VIES	6	9	27	9	3	3
COMPACT	1,60	2	3,2	GAS-OIL	x	VIES	3	9	19	9	3	3
COMPACT	1,60	3	4,8	GAS-OIL	x	VIES	4	9	24	9	3	3
COMPACT	1,60	4	6,4	GAS-OIL	x	VIES	6	9	29	9	3	3
COMPACT	1,95	2	3,9	GAS-OIL	x	VIES	3	9	20	9	3	3
COMPACT	1,95	3	5,9	GAS-OIL	x	VIES	4	9	25	9	3	3
COMPACT	1,95	4	7,8	GAS-OIL	x	VIES	6	9	30	9	3	3

MODULAR SYSTEM BOILERS ROOM

Assembling multiple pieces of modular containers = higher power boiler room

