SENERTEC

EUROPE'S LEADING CHP SPECIALISTS

DACHS – MINI CHP

COMBINED HEAT AND POWER

TECHNICAL SPECIFICATION



DACHS MINI-CHP

SenerTec have installed over 32,000 Dachs units throughout Europe and have over 20 years' experience in CHP technologies. SenerTec UK are considered a leading authority for mini-CHP in the UK market.

FEATURES

Installed close to where the electricity and heat are to be used
Easy to install
Design life of 80,000 hours of continuous running
Internal combustion engine driving a maintenance free 3-phase asynchronous electrical generator
750 litre buffer vessel for connecting 1-3 Dachs units
DachsPortal for remote monitoring of the system

BENEFITS

Electricity isn't lost during transportation
Very little down time means it is more convenient for the end user
Cost effective and reliable for its lifetime
Proven, long-lasting, reliable technology
For improved running and increased efficiency
So you can plan maintenance and ensure optimum performance at all times

GENERAL

Height (to top of casing)	1000 mm
Width (excl. MSR2 controller)	720 mm
Depth	1060 mm
Service space - sides / front / rear	600 / 600 / 350 mm
Vertical space required (with condenser)	2250 mm
Delivered weight	530 kg
Noise level (at 1 metre from casing)	52-56 dBA
Plant room air inlet	150 cm^2

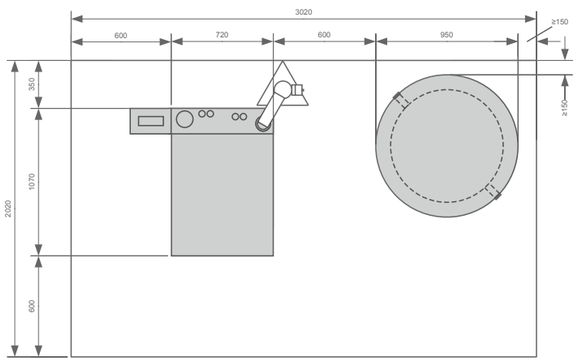
ENGINE

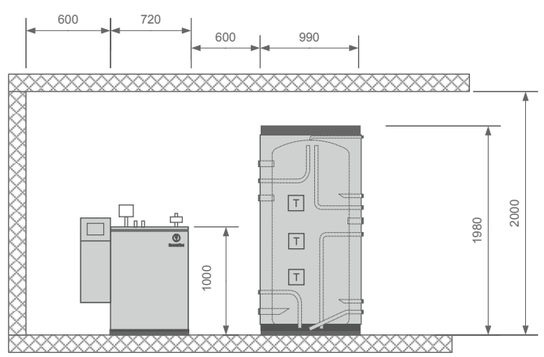
Engine type	Single cylinder 4-stroke
Service intervals	3,500 hours
Designed service life	80,000 hours
Non-cond. exhaust (steel exhaust pipe excl.)	1"
Condenser exhaust (plastic flue available)	DN80

FUEL

Fuel type	Natural gas
Natural gas input (22.8kW)	2.13 m3/h
Gas supply pressure	20 mbar
Gas connection (flexible supplied)	½"

SPACE REQUIREMENTS





DACHS MINI-CHP
TECHNICAL SPECIFICATION

ELECTRICAL

Generator type	Asynchronous
Electrical output (3-phase)	5.5 kW
Electrical efficiency - gross (nett)	24% (27%)
Electricity supply	400/3/50
Integrated grid protection (type tested)	G83/2
External type 'C' circuit breakers (by others)	20A circuit breakers
Equipotential bonding to main earth	10 mm

CONTROL CONNECTIONS

- Volt free enable
- 230 volt remote fault indication
- 230 volt remote service due indication
Modem connection - optional analogue, GSM or ethernet

THERMAL

Thermal output without condenser	12.5 kW
Thermal output with condenser (maximum)	15.5 kW
Heating F&R connections (flexibles supplied)	1"
Efficiency without condenser - gross (nett)	79% (88%)
Max. efficiency with condenser - gross (nett)	92% (102%)
Flow temperature	80°C
Maximum return temperature	70°C
Minimum return temperature	10°C
Flow rate max.	0.35 l/s
Standard safety valve	2.5 bar
Max. working pressure (4.5 bar SV reqd.)	5.0 bar

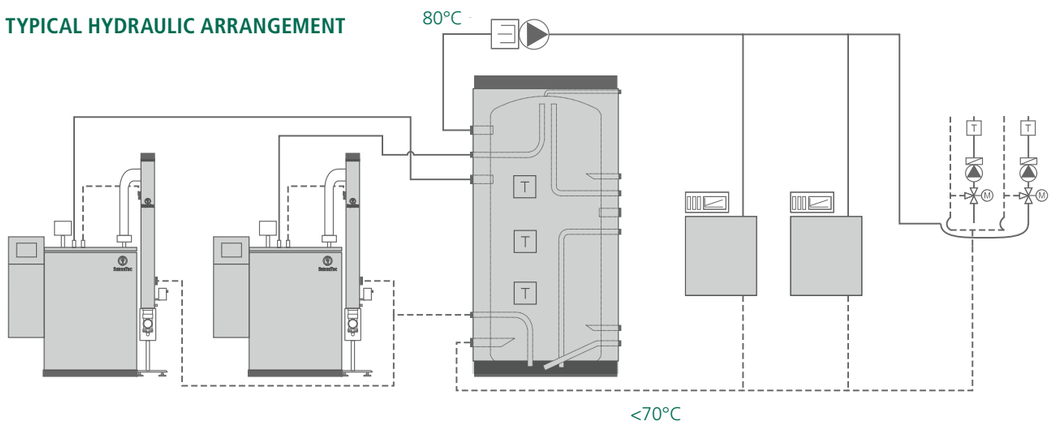
SE750 BUFFER VESSEL

Capacity	750 litres
Height x Diameter (with insulation)	1920 x 950 mm
Diameter (excluding insulation)	750 mm
Weight (excluding insulation)	140 kg
Max. hydraulic W.P.	3.0 bar
F&R connections to DACHS	1"
F&R connections to heating system	1½"

EXHAUST FLUE CONDENSER

Additional heat output:	
– at 60°C return temp.	0.8 kW
– at 50°C return temp.	0.9 kW
– at 35°C return temp.	2.3 kW
– at 20°C return temp.	3.0 kW
Height x width x depth	1750 x 400 x 300 mm
Weight	25 kg
Max. hydraulic W.P.	5.0 bar
Heating F&R connections	½"
Exhaust gas outlet (plastic)	DN80
Condensate drain	25 mm
High limit safety thermostat (STL)	110°C
Heating inlet temp. (return)	10°C - 70°C

TYPICAL HYDRAULIC ARRANGEMENT



SENERTEC

EUROPE'S LEADING CHP SPECIALISTS

DACHS MINI-CHP

BUFFER VESSEL - SE 750



Wood Lane
Erdington
Birmingham
B24 9QP

phone 0845 070 1075
email service@senertec.co.uk
web senertec.co.uk

part of BAXI COMMERCIAL