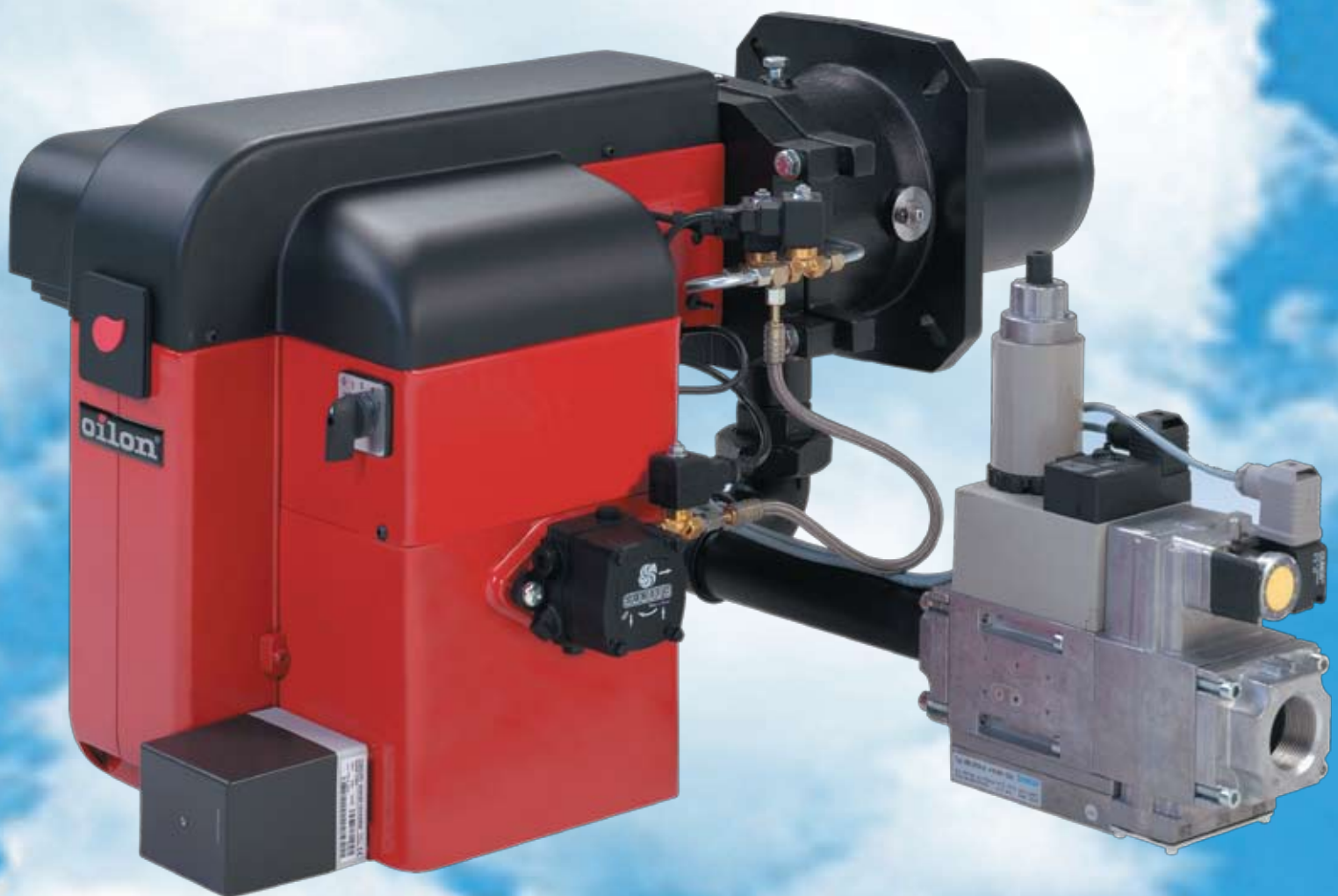


oilon[®]

Oil, gas and dual fuel burners

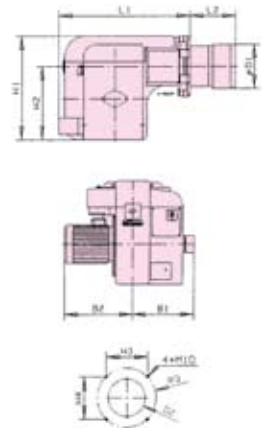
Series 50, 80 and 90

Group
2C
Capacity
200-1540 kW



Burner	Capacity kW	Table of Dimensions											Weight kg
		L1	L2 *)	H1	H2	H3	H4	B1	B2	ø D1	ø D2	R3	
KP-50 H	200 – 830	550	160/240	450	330	175	110	280	270	160	165	-	32
KP-80 H	350 – 1000	620	250/400	480	340	216	216	320	350	200	210	-	51
KP-90 H	350 – 1540	620	250/400	480	340	216	216	320	350	200	210	-	51
GP-50 H	200 – 800	710	240/300	450	330	-	-	230	270	160	165	117-135	40
GP-50 P	200 – 800	710	240/300	450	330	-	-	230	270	160	165	117-135	40
GP-80 H	350 – 1000	720	300/400	480	340	216	216	250	350	200	210	-	63
GP-80 P	350 – 1000	720	300/400	480	340	216	216	250	350	200	210	-	63
GP-90 H	350 – 1500	720	300/400	480	340	216	216	250	350	200	210	-	63
GP-90 P	350 – 1500	720	300/400	480	340	216	216	250	350	200	210	-	63
GKP-50 H	200 – 800	710	240/300	450	330	-	-	280	270	160	165	117-135	44
GKP-80 H	350 – 1000	720	300/400	480	340	216	216	320	350	200	210	-	65
GKP-90 H	350 – 1500	720	300/400	480	340	216	216	320	350	200	210	-	65

*) longer burner heads also available at intervals of 50 mm



DESCRIPTION

The Oilon burners, series 50, 80 and 90, are fully automatic light oil burners, gas burners or dual fuel burners. In their design and development special consideration has been given to economic and ecological factors, reliability, safety and easy servicing. The gas burners comply with standard **EN 676**, oil burners with **EN 267** and **EN 230** and dual fuel burners with all the above mentioned standards and they are EC type tested.

Special features on the burners:

- in order to simplify installation and servicing of the burner the burner is fitted with a **hinged burner flange** and **electrical components** are placed **under same cover**,
- **adjustment of combustion head from outside** enables easy adjustment during burner operation,
- due to precision combustion head **oil is mixed well** with combustion air – low flue gas emissions,
- suitable for high combustion chamber pressures,
- air damper closes automatically when burner shuts down,
- **quiet operation**,
- wide scope of application: water and steam boilers, air heaters, ovens, dryers, etc.,
- due to plug connectors electrical installation can be carried out quickly.

CONSTRUCTION

In the burner housing, casted of aluminium alloy, locate the fan wheel and three-phase motor, which drives the combustion air fan and oil pump. Motor **contactor** and **thermal relays** are ready **mounted into the burner**. Burner housing is finished with a long-lasting and **high-shining** paint. A **hinged flange fitted with a limit switch** is mounted on the burner housing. This allows the burner to be hinged to left or right. The hinged flange simplifies the service of combustion head, ignition electrodes and nozzles. It is possible to adjust the combustion head from outside during burner operation. Air dampers and servomotor, which are located on the suction side, adjust the air flow according to the heat requirement. For electrical installation the burners are fitted with a plug connector. Every burner, which leaves the factory, is tested and pre-adjusted.

APPLICATIONS

The burners can be fitted on hot water boilers, steam boilers or air heaters. The burners are suitable for use in boilers with either high or low combustion chamber pressure. They are intended for use in covered areas. Installation horizontally, vertically downwards or vertically upwards.

FUELS

In different burner types, the following fuels can be used:

- KP models: light fuel oil, viscosity from 4 to 12 mm²/s (+20 °C)
- GP models: -natural gas, gases of the 2nd family, groups H and E (equipment category I_{2R})
-LPG, gases of the 3rd family, group P (equipment category I_{3R})
- GKP models: natural gas, LPG or light fuel oil (as above)
Other fuels on request only.

CAPACITY REGULATION

For capacity regulation there are two possibilities:

- H, two-stage i.e. high-low operation (oil, gas and dual fuel burners)
 - P, sliding two-stage or modulating (gas burners)
- Burner starts at stage 1, after which the control device (thermostat/pressurestat) switches the burner to operate according to heat demand either at stage 1 or 2. H models are fitted with a servomotor, running time 4,5 secs/90°. P models are fitted with a servomotor, running time 30 secs/90°. A P burner with a separate capacity controller operates like a modulating burner.

OIL PIPES

KP and GKP models are fitted with one main shut-off valve for oil and each oil pipe leading to nozzle with its own shut-off valve. Oil hoses make it possible to turn the burner to both sides.

VALVE TRAINS

On GP and GKP models all gas fittings comply with EN 676. Burners are always fitted with two main shut-off valves and gas min. pressure switch. Other gas fittings according to the case.

FLAME MONITORING

All models are supplied with automatic flame monitoring. The flame sensor for the KP models is of photoresistor type, and the GP and GKP models have the UV photocell type.

CONTROL SYSTEM

The burner control (control unit) is mounted on the burner. The control unit sequences all the operation automatically. In the event of fault conditions control unit automatically goes to lockout and burner shuts down.

This specification is subject to alteration without notice.

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