



Horizontal Condensing Boiler (Optima Series)



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The condensing technology of boilers and water heaters features an advanced high efficiency and convenient that produces installation, operating, and lifetime cost advantages to systems operating from 500 to 1200 kW. For applications greater the 600 kW,you can easily chain multiple units together.

Premix burners with a fiber mesh make the PACKMAN Condensing Boilers ideal for "green" operation. The Premix burner technology help to achieve emission levels less than 20 ppm Nox.

At a Glance

Key Features:

- Available in five sizes from 100 to 600 kW
- Efficiencies of up to 98%
- •Advanced modulation technology
- Natural gas fuel
- •Turndown ratio up to 5:1
- •Whisper-quiet operation, even at full fire
- Small footprint
- chain multiple units for applications over 600 kW
- Direct/conventional vent with CPVC or Polypropylene(PP)

OPTIMA Series

The OPTIMA Series of boilers and water heaters continues the PACKMAN tradition of meeting the market demand for hot water solutions that reduce installation and life cycle costs while providing the best uptime reliability. Incorporating the latest in highefficiency, the OPTIMA Series brings best-in class operation to a wide range of facilities including.

- Multi-family/Apartments
- •Education
- Hotels
- Medical Centers/Nursing Homes
- •Office Buildings



High performance in a compact, flexible design makes the OPTIMA Series the perfect hot water solution for systems requiring 100 to 300 kW and above. In addition to lowering energy usage, the OPTIMA Series maximizes each square foot for a greater return on new facility investment. A variety of quick-to-install, cost-efficient accessories eliminate the need for special rigging or system changes to existing mechanical rooms, making the OPTIMA Series equally well suited for retrofits. The end result is an easily-installed, highly efficient solution that conserves space and owers energy use to create significant shortand long-term savings for all kind of buildings.

The modular design in the OPTIMA Series creates installation, operational, and reliability benefits unmatched by competitive boilers or water heaters in the same class. Designing a hydronic system with an OPTIMA Series unit delivers advantages such as:

Lower Costs: Installation, operating, and lifetime costs are all reduced due to the modular design that maximizes efficiency and operation.

Higher Uptime Reliability: The modular design also creates a level of redundancy and reliability from a single OPTIMA Series boiler or water heater that is typically only found in multi-unit systems.

Installation Flexibility: A wide variety of venting options allows the OP-TIMA Series to be easily integrated into any system, whether it is a retrofit or new construction.

Space Savings: Its compact footprint allows the OPTIMA Series to be installed in small mechanical rooms.

Easy Access: Simple side access makes it more efficient for technicians to conduct scheduled service and maintenance on the units, which in turn saves time and reduces labor costs.

Maintaining the PACKMAN heritage, the OPTIMA Series delivers high operating efficiency of up to 98%. By achieving the highest possible seasonal effi-



ciencies, the OPTIMA Series creates short-term and lifecycle energy savings. Best-in-class performance is achieved by using superior design approach that incorporates.

High-quality materials: At the heart of the boiler is a unique heat exchanger designed with oval-section stainless steel tubes. The heat exchanger is constructed out of 316L stainless steel tubes for high reliability and long life.

Advanced Modulation and Condensing Technologies: The OPTIMA Series continues the decades-long trademark of PACKMAN solutions featuring fully modulating and condensing technologies. High modulation means the OPTIMA Series matches loads exactly to need, minimizing cycling, eliminating over-firing, and achieving tight temperature control.

Premix Burner: The OPTIMA Series features a total premix combustion unit, with variable-speed fan. The burner occupies very little space vertically, allowing the entire length of the heat exchanger to be exploited and bringing obvious benefits regarding condensation and stratification in the boiler.

High Level Design: PACKMAN condensing boilers are designed using high level technics such as computational fluid dynamics (CFD) for high thermal efficiency and finite elements (FE) analysis for ensuring long life.





Dimension	Unit	Model					
		500	600	800	1000	1200	
L	(mm)	1700	1950	1950	2150	2380	
W	(mm)	965	965	1030	1030	1030	
Н	(mm)	1350	1350	1350	1350	1350	
h	(mm)	1210	1210	1210	1210	1210	
hb	(mm)	840	840	840	840	840	
h1	(mm)	260	260	260	260	260	
h2	(mm)	775	775	775	775	775	
W	(mm)	775	775	840	840	840	
L1	(mm)	1500	1750	1750	1950	2180	
Weight	Kg	925	1015	1170	1290	1560	





Longard	Aulisstian	Turne	Model					
Legend Aplication	Туре	500	600	800	1000	1200		
1	Outlet	PN10	3"	3"	4"	4"	4"	
2	Inlet	PN10	3"	3"	4"	4"	4"	
3	Drain	Cplg.	1"	1"	1"	1"	1"	
4	ReliefValve	Cplg.	1"	1"	1"	1"	1"	
5	Condensate	Threaded	1/2"	1/2"	1/2"	1/2"	1/2"	
6	Manometer	Cplg.	1"	1"	1"	1"	1"	
7	Auxiliary	Cplg.	1"	1"	1"	1"	1"	
8	Flue Stack	-	10"	10"	12"	12"	12"	
9	Electric Cabinet	-	-	-	-	-	-	
10	Pressure Tap	Threaded	M8	M8	12"	12"	12"	
11	Inspection Glass	-	11/4"	11/4"	11/4"	11/4"	11/4"	
12	Flue Temp. Sensor	Cplg.	1/4"	1/4"	1/4"	1/4"	1/4"	
13	Auxiliary	Cplg.	1/4"	1/4"	1/4"	1/4"	1/4"	

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	Unit	Model					
		500	600	800	1000	1200	
PowerInput(- Max)	kW	500	600	800	1000	1200	
PowerInput(Min)	kW	170	200	240	300	400	
Max Water Pressure	bar	6	6	6	6	6	
Max Water Flow	Lit/s	24	29	38.5	48	58	
Min Water Flow	Lit/s	8	9.6	12.8	16	19.2	
Max Gas Consumption	m3/hr	46	55	74	92	110	
Gas Pressure	PSI	2	2	2	2	2	
Max Condensate	Lit/hr	60	72	96	120	144	
Electric Supply	ph/V	3/220	3/220	3/220	3/220	3/220	
Dry Weight	kg	925	1015	1170	1290	1560	

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PACKMAN GROUP History

The Packman Company was founded in February 1975, and was soon afterwards registered in companies Registration Office. In early years the Packman construction and service branch focused on building installations. Different mega power plants were built by cooperating with Brown Boveri and Asseck companies in 1976.

The company started its official activities in construction of High-Pressure Vessels such as Hot-Water Boilers, Steam Boilers, Storage Tanks, Softeners and Heat Exchangers from 1984.

Packman Company is one of the first companies which supplied the high quality and standard hot water boilers to the customers.

Packman has exported its products to countries such as Uzbekistan, United Arab Emirates and other countries in the Middle East. It is one of the largest producers of hot-water and steam boilers in the Middle East.

Now we are proud to announce that the Packman industrial group has five major sub-brands that have product titles in all field of HVAC equipment and engineering services, and we do not know this success except with the help and support of our customers.

- 1. Construction Services Industry Association
- 2. Industry Association
- 3. Construction Companies' Syndicate
- 4. Technical Department Association
- 5. Mechanical Engineering Association
- 6. Engineering Standard Association

Departements:

Sales Deps:

∩ Power Plant & Petrochemical ∩ Industrial ∩ Hospitally Service
∩ Commercial & Residential ∩ Sport Complex & Pool

Technical Deps:

- Manufacturing R&D
- Innovation Center
- EPC Execute Unit
- Product Develop Unit ■ Sales Engineering Dep.

Others:

- ≈ After Sales Service ≈ Project Control
- ≈ Financial Office
- ≈ Commercial Office
- ≈ Marketing Department





PACKMAN GROUP Brands





Designer&manufacturer of Condensing, Hot Water, Steam, Hot Oil & Waste Heat Boilers, Heat Exchangers, Autoclave Pressure & Storage Vessels & etc



Green mindset, green future

Engineering & Designing Commercial Greenhouse Plant, CO2 Dosing System, Flue gas Condenser & Special HVAC Systems, Sustainable Agriculture & etc



Water solution

Designer & manufacturer Reverse Osmosis Plant & Package, Water Treatment, Softener & Filters and Chemical Dosing Systems & etc



Designer&manufacturer ofIndustrial Mono&Dual BlockGas,LPG,Light& HeavyOilBurners, Premixed&Postmixed Burners,Watertube burners,Processburners, Special application burners&Combustion Solutions&etc



Designer&manufacturer of Air&Water Cooled Chillers, Air Handling Units, Fancoil, HVAC Equipment, Cold Storage Room&etc



1. Isfahan Factory

2. Vilashahr Factory

3. Parand Factory

4. Parand (2) Factory

5. Bonyad Factory

SOME OF Certificates are



Knowledge Based













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