# YLPB Heat pump scroll compressor

Cooling capacities from 336 kW to 628 kW Heating capacities from 343 kW to 652 kW











#### **Features**

The **YLPB** heat pump delivers premium energy efficiency, it is easy to install, quiet to run, and it is supported by a knowledgeable service force.

#### Efficiency

One of the highest part load cooling efficiency unit in the market, improved defrost cycle, extended operating envelope. Maximize heating efficiency and renewable energy use with the **YLPB** heat pump.

#### Sound

Designed for quiet operation at full and part load conditions.

### Ease of installation

Quick and easy to install, compact design. Smart Equipment and Verasys ready.

#### Reliability

The **YLPB** is our third generation of fully factory tested scroll heat pumps, and thanks to our extensive service solutions, support and minimal maintenance are assured.

## Options/Accessories

- Soft start
- Power factor correction capacitors
- BMS interfacing options
- Dual pressure relief valves
- Victaulic coupling
- Flow switch
- Desuperheater
- Enclosure options
- Sound attenuation options
- Anti-vibration mounts options
- VSD single and dual pump kits



Multiple scroll design enables sound reduction during part load operation by simply turning off unnecessary compressors

# Heat pump scroll compressor

YLPB 0345 to 0650



# Nominal capacity

YLPB	0345	0430	0525	0575	0650
Cooling capacity (kW)	336	413	479	559	628
EER	2.98	2.93	2.88	2.94	2.98
SEER	4.36	4.55	4.47	4.53	4.51
ηs,c	171	179	176	178	177
Heating capacity (kW)	343	427	514	574	652
COP	3.06	3.07	3.03	2.99	3.01
SCOP	3.48	3.50	3.53	3.56	3.59
ŋs, h	136	137	138	139	141
Sound Power Level (dBA)	94	94	95	96	97

Net values at Eurovent nominal conditions:

Cooling capacities in kW given for  $7^{\circ}\text{C}$  water leaving temperature  $\Delta t$   $5^{\circ}\text{C}$  and  $35^{\circ}\text{C}$  ambient temperature. Heating capacities in kW given for  $45^{\circ}\text{C}$  water leaving temperature and  $7^{\circ}\text{C}$  ambient temperature. SCOP calculated according to EN14511 and EN14825.

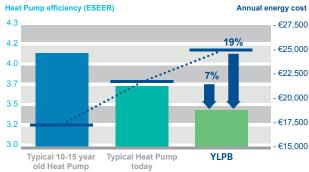
 $\eta$ s calculated according to Ecodesign regulation for heating (813/2013).

Ecodesign figures are calculated following fixed water and variable outlet approach (FW/VO). For other Ecodesign calculations, please contact your JCI representative. The above data is based on Johnson Controls' selection software YORKworks 21.04a. Please refer to the latest version of the software for specific projects.

#### Technical data

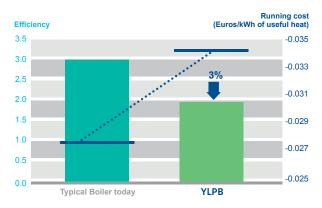
YLPB			0345	0430	0525	0575	0650
Dimensions	Length	mm		4721		5839	6958
	Width	mm			2242		
	Height	mm			2391		
Operating weight		kg	3793	4043	4210	4747	5495

#### High Efficiency Cooling Mode



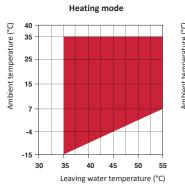
500 kW unit, 3000 operating hours, energy rate = 0.1 EUR / kWh

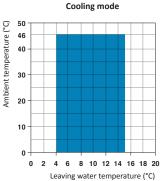
### Additional Energy Savings in Heating Mode



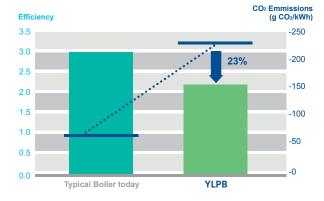
Energy Rate: Electricity 0.1 EUR / kWh; Gas 0.03 EUR / kWh

#### Operation limits



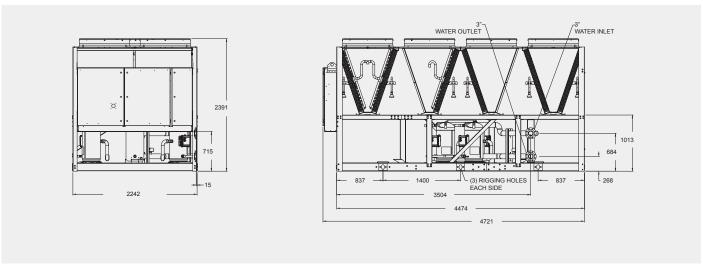


#### Carbon footprint in Heating Mode



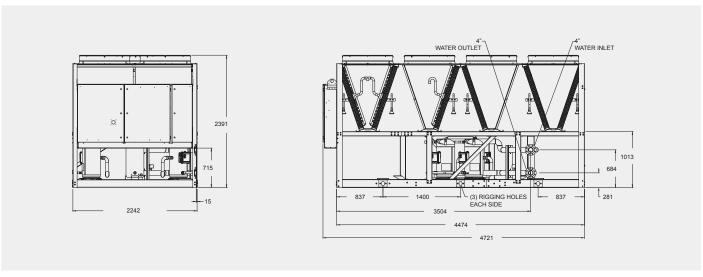
# Dimensions and hydraulic connections

# YLPB 0345 and 0430



All dimensions in mm. Drawings not in scale.

# YLPB 0525

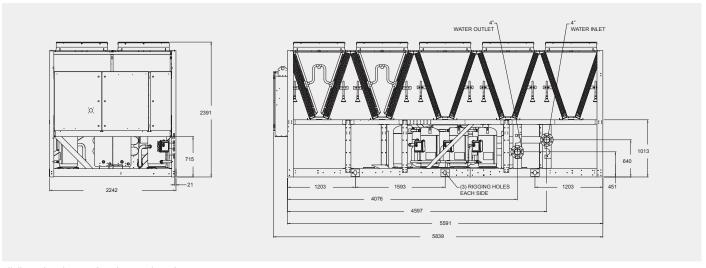


All dimensions in mm. Drawings not in scale.

# YLPB 0345 to 0650

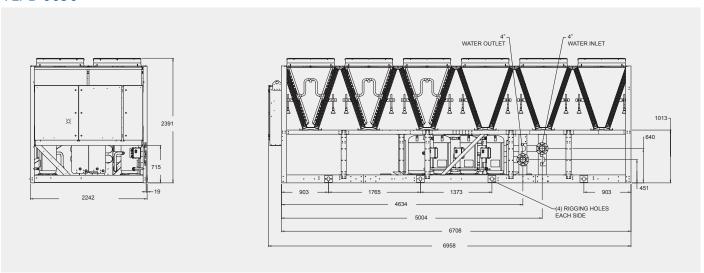


# YLPB 0575



All dimensions in mm. Drawings not in scale.

# YLPB 0650



All dimensions in mm. Drawings not in scale.