

YMWA/YMRA

Water-cooled reversible heat pump with scroll compressor

Cooling capacities from 21 kW to 193 kW
 Heating capacities from 24 kW to 212 kW



Features

- Scroll compressors (single or tandem)
- Higher EER and COP
- 2 different frames/configurations:
 - 1 compressor/1 circuit up to 45 kW
 - 2 compressors/1 circuit from 50 to 190 kW
- Reduced refrigerant charge
- Condensing pressure control
- "Plug and Play" units

Available versions

14 available YMWA sizes in three versions:

- 1) **YMWA-CO**: Cooling only
- 2) **YMRA**: Remote condenser
- 3) **YMWA-HP**: Reversible heat pump



Same cabinet w/o or with factory mounted hydrokit (one or two pumps).
 More compact and slim.

Nominal capacity and technical data

YMWA-CO	0020	0025	0030	0035	0040	0045	0050	0060	0075	0090	0120	0150	0170	0190
Cooling Capacity (kW)	21.2	26.2	31.1	34.8	39.2	46.6	50.9	61.1	77.3	91.1	118.4	147.1	170	192.7
EER	4.58	4.54	4.46	4.53	4.48	4.57	4.29	4.48	4.48	4.38	4.46	4.46	4.50	4.51
SEER	5.58	5.60	5.45	5.50	5.35	5.83	6.13	6.38	5.95	6.70	5.90	6.13	6.08	6.20
$\eta_{s,c}$	220	221	215	217	211	230	242	252	235	265	233	242	240	245
Length / Width / Height (mm)	821 / 455 / 1350						1210 / 850 / 1500							
Operating weight (kg)	162	182	179	185	191	214	352	371	392	411	597	666	701	745
YMRA	0020	0025	0030	0035	0040	0045	0050	0060	0075	0090	0120	0150	0170	0190
Cooling Capacity (kW)	21.2	26.2	31.1	34.8	39.2	46.6	50.9	61.1	77.3	91.1	118.4	147.1	170	192.7
Length / Width / Height (mm)	821 / 455 / 1350						1210 / 850 / 1500							
Operating weight (kg)	144	164	166	166	172	172	332	344	365	376	558	612	643	674
YMWA-HP	0020	0025	0030	0035	0040	0045	0050	0060	0075	0090	0120	0150	0170	0190
Cooling Capacity (kW)	20.8	26.0	30.1	34.0	38.1	45.5	49.9	58.9	76.1	88.6	114.9	144.3	165.7	185.4
Heating Capacity (kW)	23.7	28.9	33.6	38.5	42.9	51.2	57.7	68.2	86.3	102.2	132.0	164.2	190.1	212.3
EER	4.45	4.47	4.28	4.35	4.33	4.39	4.15	4.24	4.36	4.20	4.26	4.33	4.34	4.28
COP	3.88	3.85	3.73	3.79	3.77	3.85	3.83	3.81	3.92	3.89	3.92	3.95	3.93	3.93
SCOP	5.65	5.40	5.24	5.23	5.18	5.46	5.06	5.57	5.28	5.05	5.5	5.12	5.21	5.34
$\eta_{s,h}$	218	208	202	201	199	210	194	215	203	194	212	197	200	205
Length / Width / Height (mm)	821 / 455 / 1350						1210 / 850 / 1500							
Operating weight (kg)	165	187	184	190	195	219	360	379	403	422	610	683	718	762

Net values at Eurovent nominal conditions:

YMWA-CO: Standard Eurovent LCP/W/AC conditions in cooling mode: evaporator EWT/LWT 12°C/7°C, condenser EWT/LWT 30°C/35°C

YMRA: Evaporator EWT/LWT 12°C/7°C, condensing temperature 40°C

YMWA-HP: Standard Eurovent LCP/W/AC conditions in cooling mode: evaporator EWT/LWT 12°C/7°C, condenser EWT/LWT 30°C/35°C

YMWA-HP: Standard Eurovent LCP/W/AC conditions in heating mode: evaporator EWT/LWT 10°C/7°C, condenser EWT/LWT 40°C/45°C

Ecodesign figures are calculated following variable water flow and variable outlet approach (VW/VO). For other Ecodesign calculations, please contact your JCI representative.

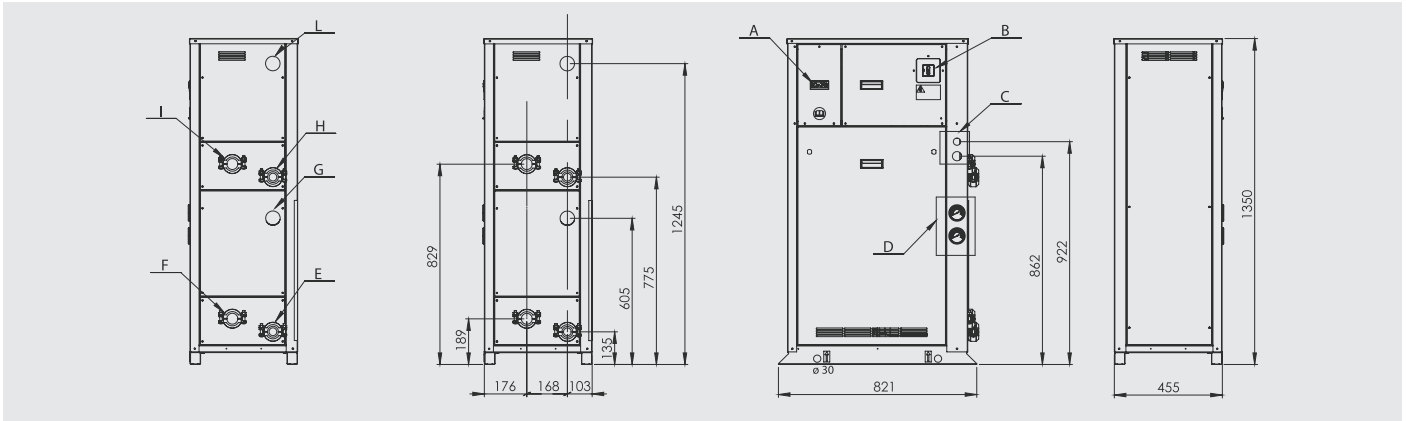
SEER and SCOP calculated according to EN14511 and EN14825

η_s calculated according to Ecodesign regulation for chillers comfort cooling and heating (813/2013, 2016/2281).

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

Dimensions and hydraulic connections

YMWA-CO/HP 0020-0045

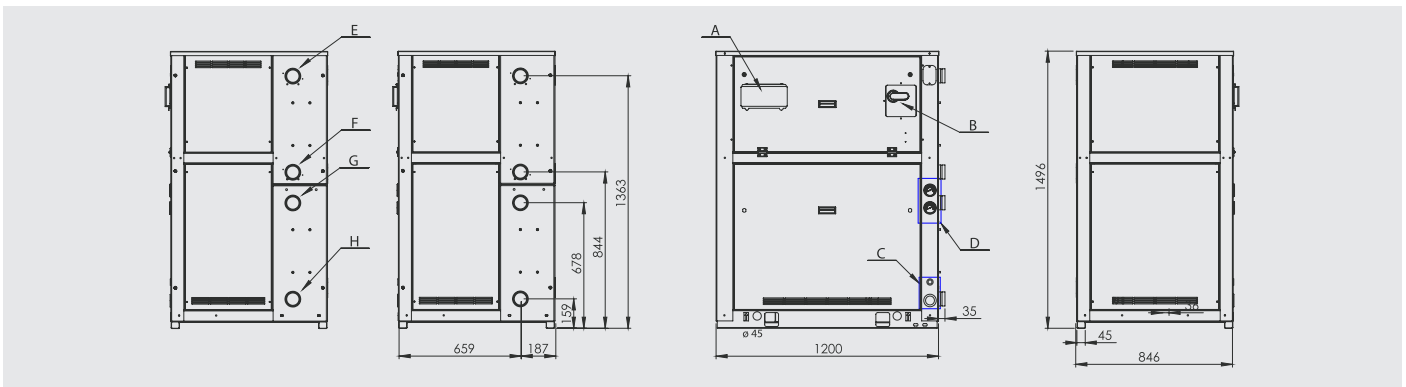


A	Control display	D	Gauge kit
B	Main switch	E, F, G	Water evaporator connections \varnothing 1 1/2" victaulic
C	Auxiliary lines, electrical connection	H, I, L	Water condenser connections \varnothing 1 1/2" victaulic

YMRA Sizes	In	Out
020	H \varnothing 5/8"	L \varnothing 5/8"
025-045	H \varnothing 5/8"	L \varnothing 7/8"

All dimensions in mm. Drawings not in scale.

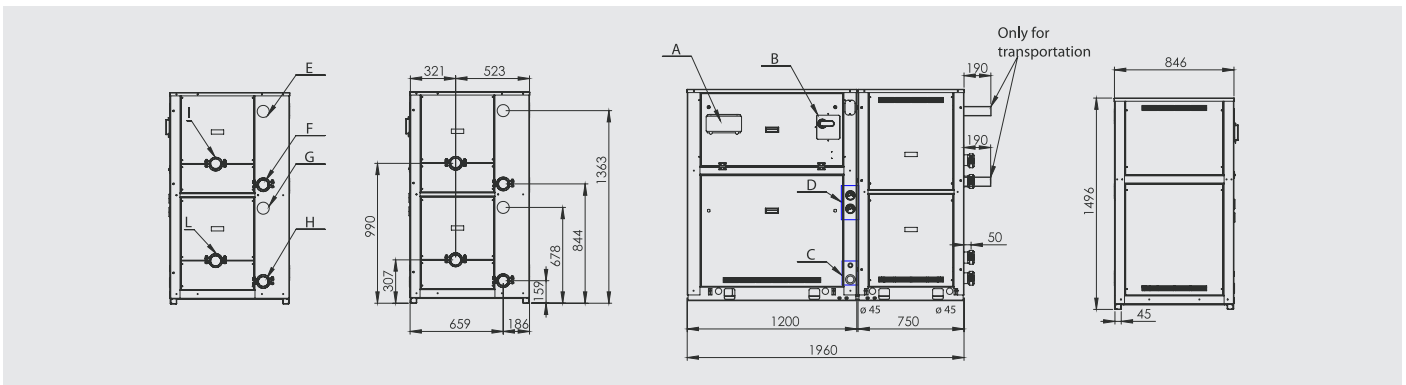
YMWA-CO/HP 0050-0190 without Hydrokit



A	Control display	D	Gauge kit
B	Main switch	G, H	Water evaporator connections \varnothing 1 1/2" victaulic
C	Auxiliary lines, electrical connection	E, F	Water condenser connections \varnothing 1 1/2" victaulic

All dimensions in mm. Drawings not in scale.

YMWA-CO/HP 0050-0190 with Hydrokit



A	Control display	D	Gauge kit
B	Main switch	G, H, L	Water evaporator connections \varnothing 1 1/2" victaulic
C	Auxiliary lines, electrical connection	E, F, I	Water condenser connections \varnothing 1 1/2" victaulic

YMRA Sizes	In	Out
050-060	F \varnothing 5/8"	E \varnothing 7/8"
075-090	F \varnothing 7/8"	E \varnothing 1 1/8"
120	F \varnothing 7/8"	E \varnothing 1 3/8"
150	F \varnothing 7/8"	E \varnothing 1 5/8"
170-190	F \varnothing 1 1/8"	E \varnothing 1 5/8"

All dimensions in mm. Drawings not in scale.



Manufacturer reserves the rights to change specifications without prior notice.