

Advancing scroll technology for greater flexibility and efficiency



BY JOHNSON CONTROLS

Greater flexibility from advanced scroll technology



More capacity for a wider range of projects

Today's concerns about electricity costs and climate change are causing many building owners and operators to consider employing more energy-efficient HVAC technology. That's why Johnson Controls developed the YORK® YCWL chiller line. Its efficiency is superior to the industry average, and it is charged with HFC-410A, the environmentally friendly refrigerant with no phase-out date. The YCWL chiller is available in 14 models ranging from 50 to 200 TR (176 to 703 kW), providing the capacity to meet the cooling requirements for a wide range of facilities, including schools, hospitals, hotels, government buildings, and office complexes.

One chiller for many applications

The latest available scroll-compressor technology, combined with state-of-the-art heat-exchanger design, enable YCWL chillers to handle a wide range of operating conditions. They can produce chilled water from 59°F down to 15°F (15°C to -9°C) and utilize condenser water from 64°F to 125°F (18°C to 52°C). This large operating envelope means YCWL chillers are suitable for comfort cooling, process cooling, low-temperature brine cooling, non-reversing heat pump, and changeover thermal storage.

Options and accessories

For even greater flexibility, YCWL chillers can be equipped with these optional accessories:

- Electrical Options: Non-fused disconnect switch, circuit breakers, reduced MCA.
- Control options: BAS/EMS interface, non-reversible heat pump.
- Language for LCD and Keypad: English, German, French, Italian, or Spanish.
- Sound Reduction: Compressor acoustic blankets.
- Liquid-Flow Detection: Flow switch or pressure-differential switch.
- Vibration Isolators: Neoprene pads, spring isolators, or seismic isolators.

Energy-efficient at both full load and part load

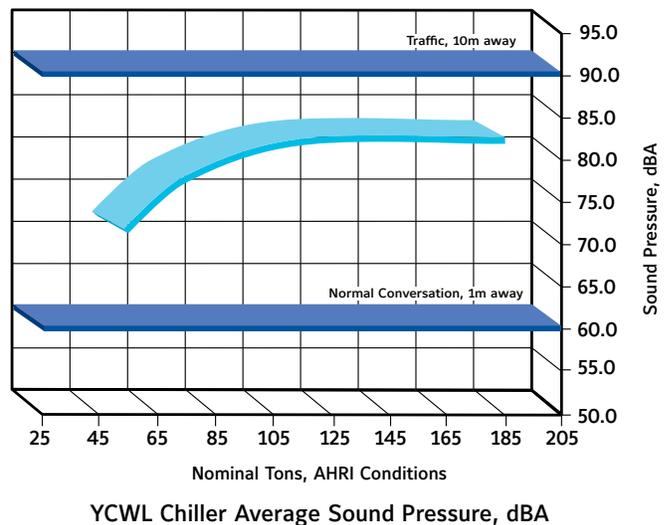
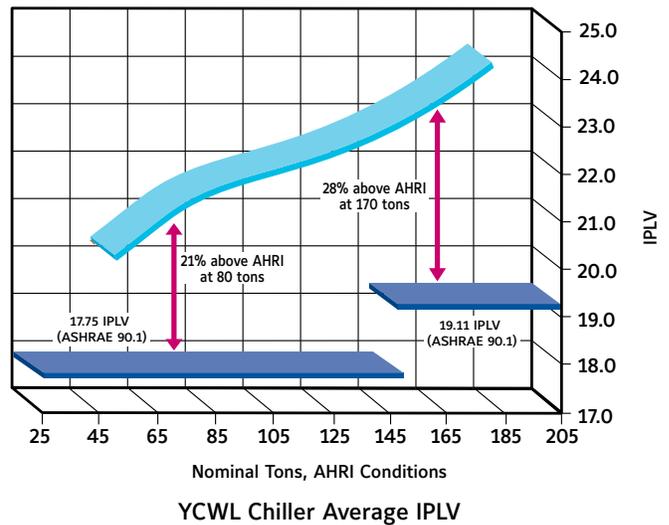
At design conditions, YCWL chillers provide a full-load efficiency up to 17.0 EER. In addition, part-load performance is outstanding, which is important because over 90% of operating hours are spent at part-load in most buildings. The YCWL chiller combines multiple scroll compressors with the intelligence to optimally load each compressor for part-load efficiencies that exceed industry averages, up to 24.5 IPLV.

Designed for quiet operation

YCWL chillers employ quiet scroll compressors and piping specifically designed to reduce vibration. Plus, optional acoustic blankets are available to further dampen sound down to 68 dBA. That's as quiet as a normal conversation, making the YCWL chiller one of the quietest on the market.

Saving floor space and installation time

The YCWL chiller saves installation costs by saving space. To make the most of limited mechanical room floor area, the compact YCWL design delivers up to 4.6 TR/square foot (173 kW/square meter). YCWL chillers fit through a standard single door with no disassembly required, making them an ideal solution for both new and retrofit projects. Installation is easy, thanks to a single-point electrical power connection, Victaulic water connections, plus pressure- and run-testing performed at the factory to reduce the risk of problems at startup.



Technical data

High Efficiency Models	YCWL 0064 HE	YCWL 0074 HE	YCWL 084 HE	YCWL 0094 HE	YCWL 0096 HE	YCWL 0118 HE	YCWL 0126 HE	YCWL 0156 HE
Cooling Capacity (TR) ¹	62.4	72.7	82.6	89.4	94.6	114.9	123.7	145.0
Compressor Input Power (kW)	45.5	53.4	58.9	63.5	68.0	82.6	89.4	104.6
Energy Efficiency Ratio	16.5	16.3	16.8	16.9	16.7	16.7	16.6	16.6
Integrated Part Load Value (IPLV)	20.2	20.7	23.1	23.1	20.5	22.8	23.0	22.4
Sound Pressure (dBA) ²	69	72	74	75	70	77	76	78
Height (in)	67-19/32	74-5/8	74-19/32	76-19/32	76-1/2	72-5/32	77-19/32	77-9/32
Width (in)	33-13/16	33-13/16	33-13/16	33-27/32	33-27/32	35-1/16	34-13/16	34-13/16
Length (in)	124-3/8	123-5/16	125-11/16	121-3/4	123-5/16	143-3/8	145-7/32	143-7/16
Operating Weight (lbs)	4336	4805	4983	5674	6224	5806	6996	7697

Standard Efficiency Models	YCWL 0056 SE	YCWL 0064 SE	YCWL 0074 SE	YCWL 084 SE	YCWL 0094 SE
Cooling Capacity (TR) ¹	52.4	59.9	67.8	76.6	85.9
Compressor Input Power (kW)	39.2	45.7	53.6	58.3	63.8
Energy Efficiency Ratio	16.1	15.7	15.2	15.8	16.2
Integrated Part Load Value (IPLV)	20.1	19.9	20.2	22.5	22.6
Sound Pressure (dBA) ²	66	69	72	74	75
Height (in)	64-15/32	64-15/32	68-29/32	68-29/32	72-9/32
Width (in)	34-5/8	34-5/8	33-3/16	33-13/16	33-13/16
Length (in)	119-5/8	119-5/8	125-15/16	125-15/16	125-15/16
Operating Weight (lbs)	3455	3823	4001	4470	4878

Standard Efficiency Models	YCWL 0104 SE	YCWL 0118 SE	YCWL 0132 SE	YCWL 0156 SE	YCWL 0177 SE	YCWL 0198 SE
Cooling Capacity (TR) ¹	92.8	108.5	129.6	140.7	166.6	198.4
Compressor Input Power (kW)	68.9	83.3	97.0	104.7	117.1	141.9
Energy Efficiency Ratio	16.2	15.6	16.0	16.1	17.1	16.8
Integrated Part Load Value (IPLV)	23.0	21.9	21.9	21.9	25.4	24.8
Sound Pressure (dBA) ²	76	77	78	78	82	82
Height (in)	71-25/32	71-25/32	74-1/2	76-17/32	77-9/32	77-9/32
Width (in)	33-13/16	33-13/16	33-13/16	34-13/16	34-13/16	34-13/16
Length (in)	124-1/8	124-1/8	123-5/16	143-7/16	143-7/16	143-7/16
Operating Weight (lbs)	5132	5078	5440	7316	8262	8617

1. Cooling Capacity at AHRI standard conditions, evaporator entering/leaving temperature 54°F/44°F, condenser entering/leaving temperature 85°F/95°F.
2. Sound Pressure is measured with compressor acoustic blankets installed.