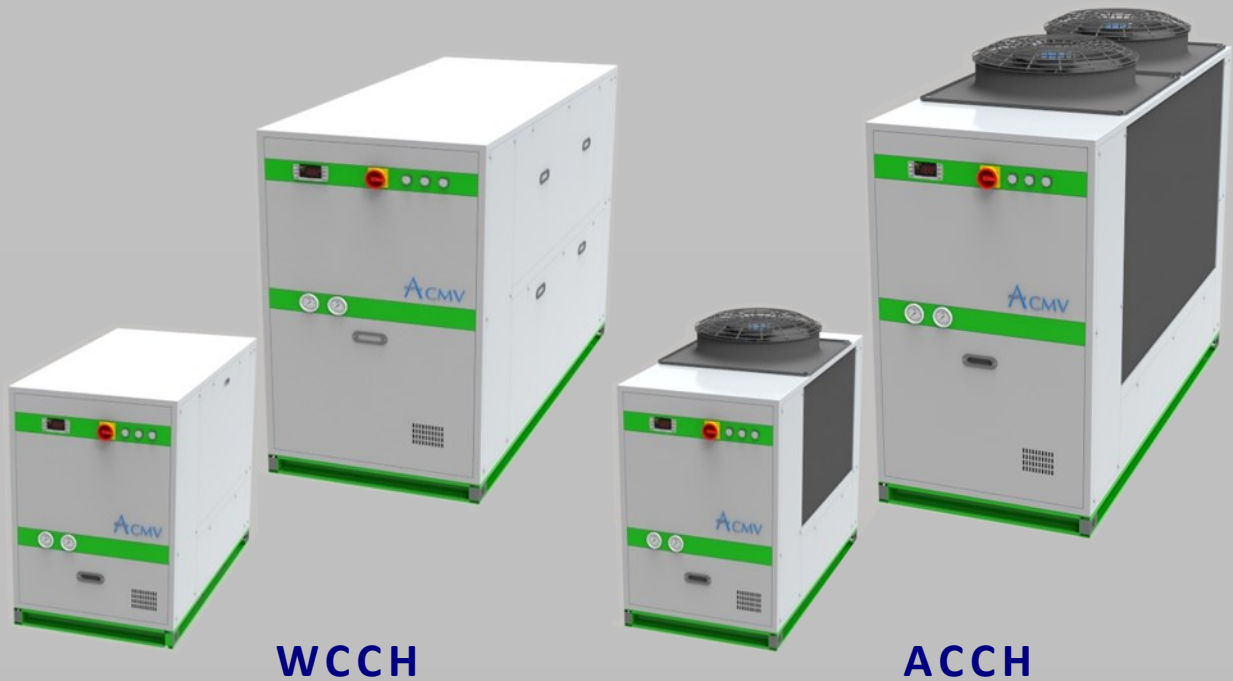


*"Better Buildings. Better World"*



## **WATER and AIR COOLED MINI CHILLERS**

*ENERGY EFFICIENT HUMIDITY CONTROL SOLUTIONS*

*5 to 250 KILOWATT COOLING CAPACITIES*

*HEAT PUMPS, HEAT RECOVERY*

# ACMV MINI CHILLERS

## Air cooled chillers (ACCH)

Cooling capacity range : 5 - 225 kW

ACMV P L air cooled mini chillers are compact units designed for use in HVAC and process industry, supplied with hermetic scroll or reciprocating compressors, high efficiency heat exchangers and couple of capacity control options.

The 50/60 Hz version covers wide technical standard unit requirements, well suited to precise controls in air-conditioning and process cooling, while saving you money and protecting the environment

ACCH can be fitted with heat recovery heat exchangers to generate hot water for commercial and industrial application.

Heat exchangers can be supplied as vented cleanable double wall, single wall, and braze type as options.

Capacity Control options available from On-Off, and infinite VFD control 40 to 100% and CR11 type from 10-100%

## Water-cooled process chillers (WCCH)

Cooling capacity range 7 - 250 kW

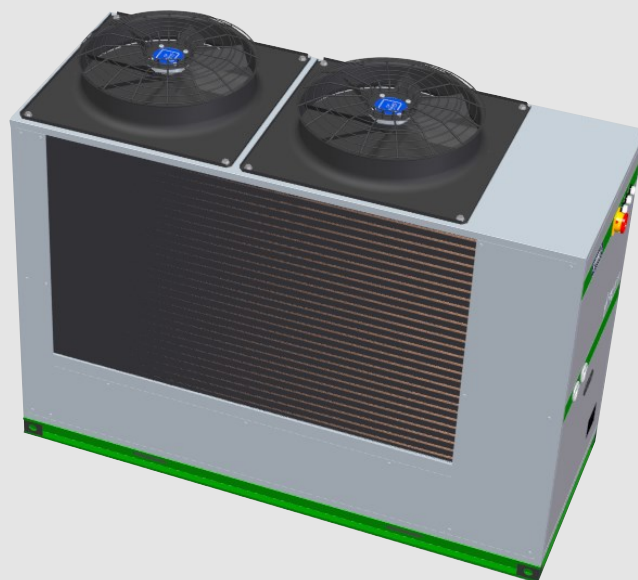
ACMV P L water cooled mini chillers are compact units designed for use in HVAC and process industry, supplied with hermetic scroll or reciprocating compressors, high efficiency heat exchangers and couple of capacity control options. Condenser and evaporators heat exchangers are optionally supplied as brazed type, co-axial type and shell and tube.

The 50/60 Hz version covers wide technical standard unit requirements, well suited to precise controls in air-conditioning and process cooling, while saving you money and protecting the environment.

WCCH can be fitted with heat recovery heat exchangers to generate hot water for commercial and industrial application.

Heat exchangers can be supplied as vented cleanable double wall, single wall, and braze type as options.

Capacity Control options available from On-Off, and infinite VFD control 40 to 100% and CR11 type from 10-100%



# SPECIFICATIONS

WCCH Mini Chiller	Water Cooled Models																		
	W007	W010	W012	W018	W030	W035	W045	W050	W060	W070	W080	W090	W100	W120	W135	W150	W170	W200	W250
Nominal Cooling Capacity, kW	7	10	12	18	30	35	45	50	60	70	80	90	100	120	135	150	170	200	250
Power Input, kW	1.7	2.4	2.8	4.3	6.9	8.1	10.8	12.5	14.6	16.1	18.8	23.9	24.8	29.3	31.9	37.1	42.3	49.1	59.5
COP	4.1	4.2	4.2	4.2	4.3	4.3	4.2	4.0	4.1	4.3	4.3	3.8	4.0	4.1	4.2	4.0	4.0	4.1	4.2
Power Supply	400VAC +/-10%, 3 Phase / 50 Hz																		
Sound Pressure Level	52	52	53	55	56	56	55	54	54	54	56	57	59	54	56	57	58	59	61
Dimensions, meters																			
Width	0.65	0.65	0.67	0.67	0.78	0.78	0.78	0.78	0.87	0.87	0.87	0.87	1.18	1.18	1.28	1.28	1.28	1.35	1.5
Depth	1200	1200	1.35	1.35	1.88	1.88	1.88	1.88	2.28	2.28	2.28	2.28	2.8	2.8	3.1	3.1	3.1	3.65	3.65
Height	1.1	1.1	1.3	1.3	1.35	1.35	1.35	1.35	1.95	1.95	1.95	1.95	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Installed Weight, kg (approx. w/ Pump)	298	320	358	378	529	696	704	725	978	1061	1094	1105	1438	1523	1731	1780	1816	2297	2317
Water Connections (DN)																			
Condenser	25	25	32	32	40	40	40	40	50	50	50	50	65	65	65	65	80	80	90
Evaporator	25	25	32	32	40	40	40	40	50	50	50	50	65	65	65	65	80	80	90

ACCH Mini Chiller	Air Cooled Models																		
	A005	A007	A010	A015	A020	A030	A035	A040	A045	A050	A060	A070	A080	A090	A100	A115	A135	A160	A180
Nominal Cooling Capacity, kW	5	7	9.2	14.2	22	27.5	34	40	44	50	59	68	81	93	102	114	137	161	178
Power Input, kW	2.0	2.9	3.73	5.6	8.9	10.2	12.1	14.8	16.9	20.29	22.7	27.2	27.9	31.0	39.2	43.8	52.7	57.5	63.6
COP	2.44	2.45	2.5	2.55	2.48	2.7	2.8	2.7	2.6	2.5	2.6	2.5	2.9	3	2.6	2.6	2.6	2.8	2.8
Power Supply	400VAC +/-10%, 3 Phase / 50 Hz																		
Sound Pressure Level	56	57	58	57	59	56	60	60	58	59	62	60	61	63	63	65	65	64	65
Dimensions, meters																			
Width	0.56	0.56	0.6	0.6	0.78	0.78	0.78	0.78	0.88	0.88	0.88	0.88	1.18	1.18	1.28	1.28	1.28	1.28	1.35
Depth	1.2	1.2	1.3	1.3	1.35	1.35	1.88	1.88	1.88	2.28	2.28	2.28	2.9	2.9	3.3	3.3	3.3	3.3	3.5
Height	0.8	0.8	1.35	1.35	1.88	1.88	1.88	1.88	2.28	2.28	2.28	2.28	2.85	2.85	3.31	3.31	3.31	3.55	3.55
Installed Weight, kg (approx. w/ Pump)	210	215	340	352	495	650	670	685	1020	1035	1068	1070	1415	1520	1775	1796	2280	2295	2310
Water Connections (DN)																			
Evaporator	20	20	25	25	40	40	40	50	50	50	50	65	65	65	65	65	80	80	90

**Notes:**

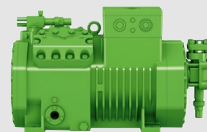
1. Chilled Water Inlet/Outlet = 12/7 °C, Ambient Air Temperature = 35 °C
2. Noise values are average measure in a free field about 10 meters distance and height of 1.65 m from the unit base level w/ tolerance of +/-2.5 dB.
3. Units dimensions are nominal and may change based on customer requirements.
4. The manufacturer reserves the rights to change without prior notice.
5. Consult the factory for special voltage requirements, 60 Hz frequency
6. Minimum chilled water temperature without freeze depressant =4°C



Scroll Compressor



Screw Compressor



Reciprocating Compressor



Braze Plate Heat Exchanger

## BENEFITS

- High Efficiency Air Cooled Condenser coil finned-tube type with low air pressure drop.
- Shell & Tube condensers designed for low water pressure drop in order to save pumping energy and costs. Other heat exchanger available are brazed type and coaxial type depending on the customer's application.
- Reduced sound pressure level.
- The refrigerant available are R410A and R134a depending on the capacity range.
- Storage tank compensate load fluctuations can be fitted as option.
- Wide operating limits
- Operating pressure up to 10 bar.
- Compact design
- Designed for Outdoor
- Water by-pass for safety
- Available for customized solutions
- Easy installation, use and maintenance
- Designed to operate long hours under the most demanding HVAC conditions
- Able to communicate to BMS



Programmable Logic Controller

## TECHNICAL FEATURES

- Casings are made of G.I. sheets finished with powdered coated.
- Environmentally friendly refrigerant: R410A and R134a
- High performance hermetic scroll, screw and reciprocating compressors
- Cleanable tube in tube or vented Coaxial condenser as option.
- High Efficiency Finned-Tube for air cooled condenser
- Compact Shell & Tube condensers or brazed type heat exchangers per customer requirements.
- Pressure gauges are built-in
- Pumps are fitted as option. Pump is supplied only upon customer request.
- All-In-One PLC control and with HMI—Factory Pre-Programmed
- General alarm free contact and remote ON/OFF digital input
- Water flow pressure gauge (option)
- Phase monitor (option)
- Compressor crankcase heaters
- Flow switches for condenser and chilled water
- Electric power supply 400/3/50
- Capacity control : On-Off, and infinite control using VFD (40-100%) and CRII from 10-100%



All-In-One PLC+HMI



Heat Recovery Chiller



VFD Drive Chiller

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