



Air-cooled Scroll Chillers

Model: AW10-AW80

Cooling capacity: 4.5hp,9hp,12hp,17.4hp,24hp,30.4hp



AW-TM026D-GB

Jul 2016



AIR-COOLED SCROLL CHILLERS AW 10-80

Amrta's AW range of chillers is ideal for light commercial applications. Amrta chilled water systems is reliable and efficient.

Your primary concern when selecting chiller for your project should be reliable, efficiency and economy. Amrta chillers uniquely combine good performance with the best in value.

Reliability and efficiency

- 1 Scroll compressors** have acquired an indisputable notoriety in today's market due to their unmatched efficiency and reliability.
- 2 Tube in shell** are designed to guarantee the highest energy efficiencies and the widest operating temperature ranges, meaning users fully benefit from a **year-round operation**.
- 3 Low ambient double fans** allow operation down to -18°C .
- 4 Optional black epoxy coating** to protect condenser fins (available as standard in certain regions).
Units are equipped with an integrated flow switch.

Safe and simplified installation

Maintenance tasks are simplified and installations are made safer, easier and faster, due to several well-designed features incorporated in the chillers.

Units are **compact** and have a reduced footprint, facilitating handling and installation on the job site.

- 5 The large side panels allow direct access** to the main components of the refrigeration circuit.

Reliable controls ensuring performance, simplicity and safety

Units are equipped with **controllers** specifically designed for chillers. This controls the **return water temperature** as it monitors numerous **operating and security parameters**, such as high and low pressure and fan speed.

The controller guarantees **optimised power consumption** thanks to the following features:

- anti-short cycling
- staggered compressor operation

The user interface will allow the user to interact very simply and quickly with the system.

The display indicates:

- current return water temperature
- operating status
- fault codes

General Data

Model AW		10	20	30	40	60	80			
Performance										
Nominal Capacity	HP	4.5	9	12	17.4	24	30.4			
	BTU	38212	76765	101671	148072	225179	279768			
	Ton	3.2	6.4	8.5	12.3	18.7	23.3			
	(kW)	11.2	22.5	29.8	43.4	66	82			
	Kcal/h	9631	19349	25627	37322	56758	70517			
Total Power Input	(kW)	4.1	8.1	10.7	14.9	20.1	25.5			
EER		2.73	2.77	2.78	2.91	3.28	3.21			
Running Amps	(A)	7.2	14.7	19.2	28.5	37.18	51.22			
Sound Power Level	(dBA)	62	61	63	66	66	70			
System Data										
Refrigerant Circuit	#	1	2	2	2	2	2			
Capacity Steps	%	100	50-100	50-100	50-100	50-100	50-100			
Compressor										
Number	#	1	2	2	2	2	2			
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll			
Condenser										
Type		Aluminum Fin and Copper Tube								
Coil Shape		I	V	V	V	V+V	V+V			
Evaporator										
Quantity	#	1	2	2	2	1	1			
Type		Tube in Shell				Shell and Tube				
Water Flow	(m ³ /h)	1.93	3.4	5.1	6.86	10.3	13.7			
Water Drop		38	38	42	44	43	44			
Water Connection Size	(mm)	DN25	DN65	DN65	DN65	DN65	DN65			
Type(Standard)		External Thread								
Heat Recovery Heat Exchanger										
Partial Heat Recovery Capacity	(kW)	3.3	6.7	9	13	19.8	24.6			
Quantity		1	1	1	1	1	1			
Type		PHE								
Material		Stainless Steel								
Water Flow	(m ³ /h)	0.52	1.03	1.5	2	3	4			
Water Connection Size	(mm)	DN20	DN20	DN20	DN20	DN25	DN25			
Axial Fan										
Type		Propeller								
Drive Type		Direct								
Blade Material		Aluminium								
Qty	#	2	2	2	2	2	2			
Air Flow Per Fan	(m ³ /h)	2200	4600	4000	7700	6000	8900	8000	13000	16000
Power Input Per Motor	(W)	170	270	540	450	635	640	620	550	1100
Refrigerant Charge R410a	(kg)	2.8	2x2.8	2x4.2	2x4.7	2x8.5	2x11			
Dimensions										
Unit Length	mm	1401	1401	1843	1756	1843	1756	1843	2100	2100
Unit Width	mm	600	810	913	960	913	960	913	1060	1060
Unit Height	mm	1008	1027	1795	1022	1795	1022	1795	2022	2022
Weight (Net)	kg	320	350	400	400	430	420	450	720	810

Notes: At evaporator water temperature : 12°C/7°C - Condenser air temperature 35°C according to EN14511:2013.



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<http://www.amrtachiller.com>

For more information, contact: info@amrtachiller.com

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