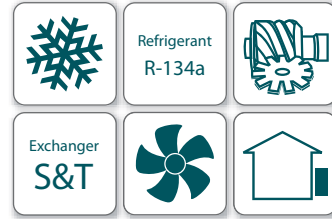


AWS Inverter

AIR COOLED CHILLER WITH INVERTER DRIVEN SCREW COMPRESSORS



Cooling capacity: 635 kW ÷ 1802 kW



GENERAL CHARACTERISTICS

- Stepless capacity control
- Independent circuit for each compressor
- Inverter driven single-screw compressors; start is inverter type
- Direct expansion shell&tube evaporator with single-pass; shall and tubes plate made of carbon steel; high efficiency copper tubes; electrical heater to prevent freezing insulation made of closed cells material, victaulic water connections
- R134 refrigerant
- High efficiency fin and tube type with integral subcooler
- Direct propeller fans type
- Electronic expansion valve
- MicroTech III controller compatible with BMS
- Cabinet and structure made of galvanized steel sheet and painted to provide a high resistance to corrosion; colour Ivory White (Munsell code 5Y7.5/1) (±RAL7044)

VERSIONS

EFFICIENCY
XE Standard efficiency

⁽¹⁾EER up to 3,14
⁽¹⁾ESEER up to 5,24

⁽¹⁾ (Standard Sound)

SOUND LEVELS

ST Standard sound 81,0 ÷ 82,9 dB(A)
LN Low sound 81,0 ÷ 82,9 dB(A)
XN Extra low sound 73,5 ÷ 75,9 dB(A)

STANDARD OPTIONS

- Double setpoint
- Compressor thermal relays
- Phase monitor
- Evaporator victaulic kit
- 20mm evaporator insulation
- Evaporator electric heater
- Electronic expansion valve
- Discharge line shut off valves
- Ambient temperature sensor and setpoint reset of leaving water temperature
- Hour run meter
- General fault contactor
- Set-point reset.
- Demand limit
- Alarm from external device
- Fan circuit breakers
- Main switch interlock door
- Emergency stop

OPTIONS ON REQUEST

- Total heat recovery / Partial heat recovery
- Brine version
- Under/Over voltage control
- Ampere / Volt meter
- Current limit display
- Evaporator flanged connections
- Speedtrol
- Condenser coil guards
- Evaporator area guards
- Cu-Cu condensing coils / Cu-Cu-Sn condensing coils
- Alucoat condensing coils
- Evaporator Flow switch
- Suction line shut off valves
- High pressure gauges
- Container kit
- Rubber type antivibration mounts
- Spring type antivibration mounts
- Hydronic Kit (single water pump) / (twin water pumps)
- Double pressure relief valve with diverter
- Compressors circuit breakers
- Fan speed regulation / Fan silent mode
- Refrigerant recovery tank
- Evaporator right water connections
- Ground fault protection
- Rapid restart

AWS Inverter

AIR COOLED CHILLER WITH INVERTER DRIVEN SCREW COMPRESSORS



TECHNICAL DATA AWS Inverter XE ST/LN - cooling only

AWS Inverter XE ST/LN		184.2	210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.3	445.3	470.3	490.3
Cooling Capacity ¹	kW	672	738	832	902	1037	1095	1236	1308	1450	1545	1622	1709	1802
Unit power input ¹	kW	245	235	266	305	339	375	400	442	488	531	558	588	611
EER	--	2,74	3,14	3,13	2,96	3,06	2,92	3,09	2,96	2,97	2,91	2,91	2,90	2,95
ESEER	--	5,07	5,13	5,20	5,22	5,24	5,03	4,93	4,74	5,02	5,17	5,03	5,03	4,85
Sound Pressure ST ²	dB(A)	81,0	81,0	81,1	81,1	81,1	81,1	81,2	81,2	81,2	81,2	82,8	82,9	82,9
Sound Pressure LN ²	dB(A)	77,5	78,0	78,1	78,1	78,1	78,1	78,2	78,2	78,2	78,2	79,8	79,9	79,9
Compressor	Type	Semi-hermetic single screw compressor Inverter driven												
Quantity	No.	2	2	2	2	2	2	2	2	2	2	3	3	3
Minimum capacity	%	20	20	20	20	20	20	20	20	20	20	13	13	13
Refrigerant	Type	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a
N. of circuits	No.	2	2	2	2	2	2	2	2	2	2	3	3	3
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler												
Fan	Type	Direct propeller												
Quantity	No.	10	12	14	14	14	16	20	20	22	24	24	26	28
Motor input	kW	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75
Speed	rpm	900	900	900	900	900	900	900	900	900	900	900	900	900
Diameter	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube												
Water volume	l	263	248	241	241	441	441	383	383	374	374	850	850	871
Nominal Water pressure drop	kPa	80	75	55	64	63	69	46	51	61	71	62	68	64
Piping connections	mm	168,3	168,3	168,3	168,3	219,1	219,1	219,1	219,1	219,1	219,1	273,0	273,0	273,0
Standard voltage	V/ph/Hz	400 V / 3ph / 50 Hz												

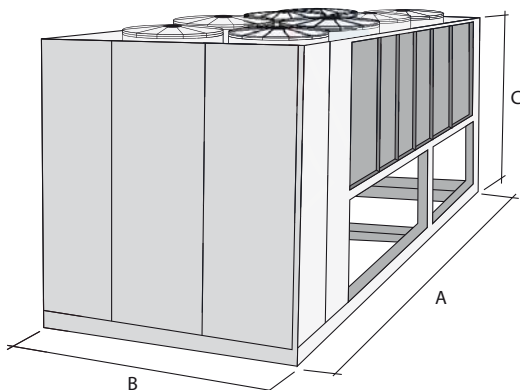
NOTES:

- (1) 12/7°C evaporator water temperature; 35°C ambient temperature
- (2) At 1 m, according to ISO 3744, at free field semispherical conditions

AIR COOLED CHILLERS

Weight and dimensions		184.2	210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.2	445.3	470.3	490.3
Shipping weight (ST)	kg	5880	6000	6620	6870	7440	7440	8570	8970	9600	9940	11370	12190	12920
Operating weight (ST)	kg	6140	6250	6860	7110	7880	7880	8960	9360	9980	10320	12220	13040	13790
Shipping weight (LN)	kg	6170	6280	6900	7150	7720	7720	8850	9250	9880	10220	11790	12610	13340
Operating weight (LN)	kg	6430	6530	7140	7390	8160	8160	9240	9640	10260	10600	12640	13460	14210
(A) Length	mm	6725	6725	7625	7625	8525	8525	10325	10325	11625	12525	12525	13425	14325
(B) Width	mm	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285
(C) Height	mm	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540

aircool / McQuay reserves the right to make changes in design and construction at anytime without notice



AWS Inverter

AIR COOLED CHILLER WITH INVERTER DRIVEN SCREW COMPRESSORS

TECHNICAL DATA AWS Inverter XE XN - cooling only



AWS Inverter XE ST/LN		184.2	210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.3	445.3	470.3	490.3
Cooling Capacity ¹	kW	672	738	832	902	1037	1095	1236	1308	1450	1545	1622	1709	1802
Unit power input ¹	kW	245	235	266	305	339	375	400	442	488	531	558	588	611
EER	--	2,74	3,14	3,13	2,96	3,06	2,92	3,09	2,96	2,97	2,91	2,91	2,90	2,95
ESEER	--	5,07	5,13	5,20	5,22	5,24	5,03	4,93	4,74	5,02	5,17	5,03	5,03	4,85
Sound Pressure ST ²	dB(A)	81,0	81,0	81,1	81,1	81,1	81,1	81,2	81,2	81,2	81,2	82,8	82,9	82,9
Sound Pressure LN ²	dB(A)	77,5	78,0	78,1	78,1	78,1	78,1	78,2	78,2	78,2	78,2	79,8	79,9	79,9
Compressor	Type	Semi-hermetic single screw compressor Inverter driven												
Quantity	No.	2	2	2	2	2	2	2	2	2	2	3	3	3
Minimum capacity	%	20	20	20	20	20	20	20	20	20	20	13	13	13
Refrigerant	Type	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a
N. of circuits	No.	2	2	2	2	2	2	2	2	2	2	3	3	3
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler												
Fan	Type	Direct propeller												
Quantity	No.	10	12	14	14	14	16	20	20	22	24	24	26	28
Motor input	kW	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75
Speed	rpm	900	900	900	900	900	900	900	900	900	900	900	900	900
Diameter	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube												
Water volume	l	263	248	241	241	441	441	383	383	374	374	850	850	871
Nominal Water pressure drop	kPa	80	75	55	64	63	69	46	51	61	71	62	68	64
Piping connections	mm	168,3	168,3	168,3	168,3	219,1	219,1	219,1	219,1	219,1	219,1	273,0	273,0	273,0
Standard voltage	V/ph/Hz	400 V / 3ph / 50 Hz												

NOTES:

- (1) 12/7°C evaporator water temperature; 35°C ambient temperature
- (2) At 1 m, according to ISO 3744, at free field semispherical conditions

Weight and dimensions		184.2	210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.2	445.3	470.3	490.3
Shipping weight (ST)	kg	5880	6000	6620	6870	7440	7440	8570	8970	9600	9940	11370	12190	12920
Operating weight (ST)	kg	6140	6250	6860	7110	7880	7880	8960	9360	9980	10320	12220	13040	13790
Shipping weight (LN)	kg	6170	6280	6900	7150	7720	7720	8850	9250	9880	10220	11790	12610	13340
Operating weight (LN)	kg	6430	6530	7140	7390	8160	8160	9240	9640	10260	10600	12640	13460	14210
(A) Length	mm	6725	6725	7625	7625	8525	8525	10325	10325	11625	12525	12525	13425	14325
(B) Width	mm	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285	2285
(C) Height	mm	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540

aircool / McQuay reserves the right to make changes in design and construction at anytime without notice

