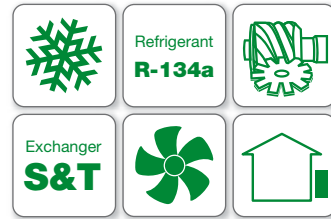


Cooling capacity: 619 kW ÷ 2008 kW



GENERAL CHARACTERISTICS

- Stepless capacity control
- Independent circuit for each compressor
- Single-screw compressors; Star-Delta standard start
- Direct expansion shell and tube evaporators with single pass; shell and tube plates made of carbon steel; high efficiency copper tubes; electrical heater to prevent freezing insulation made of closed cells material; Victaulic water connections
- R134a refrigerant
- Condenser coils with copper tubes mechanically expanded in aluminium fins; sub-cooler circuits
- Direct propeller fans type
- Electronic expansion valves
- Micro Tech III controller compatible with BMS
- Cabinet and structure made of galvanized steel sheet and painted to provide high resistance to corrosion; colour Ivory White (Munsell code 5Y7.5/1) (±RAL7044)

STANDARD OPTIONS

- Wye-Delta Compressors starter (Y-D)
- Double set-point
- Fans thermal overload relays
- Phase monitor
- Evaporator victaulic kit
- 20mm evaporator insulation
- Evaporator electric heater
- Electronic expansion valve
- Discharge line shut off valve
- Outside ambient temperature sensor and set-point reset
- Hour run meter
- General fault
- Set-point reset
- Demand limit
- Alarm from external device
- Main switch interlock door
- Emergency stop
- Fans circuit breakers

VERSIONS

EFFICIENCY

SE Standard efficiency **EER up to 2,99**
(1)**ESEER up to 4,09**

XE High efficiency **EER up to 3,29**
(1)**ESEER up to 4,37**

PR Premium efficiency **EER up to 3,64**
(1)**ESEER up to 4,53**

(1) (Standard Sound)

SOUND LEVELS

ST Standard sound **79,0 ÷ 81,9 dB(A)**
LN Low sound **75,5 ÷ 78,0 dB(A)**
XN Extra low sound **71,0 ÷ 74,0 dB(A)**

OPTIONS ON REQUEST

- Total/Partial heat recovery
- Soft starter
- Brine version
- Compressor thermal overload relays
- Under/Overvoltage control
- Ampere / Volt meter
- Capacitors for power factor correction
- Current limit
- Fan speed regulation
- Speedtrol
- Condenser coil guards
- Compressor and evaporator area guards
- Cu-Cu/Cu-Cu-Sn condenser coils
- Alucoat fins coils
- Evaporator flow switch
- Suction line shut off valve
- High pressure side manometers
- Rubber/Spring type anti vibration mounts
- Hydronic Kit (single water pump) / (twin water pumps)
- Evaporator right water (2 comp. chillers only)
- Evaporator flanged connections
- Refrigerant recovery tank
- Compressors circuit breakers
- Ground fault protection

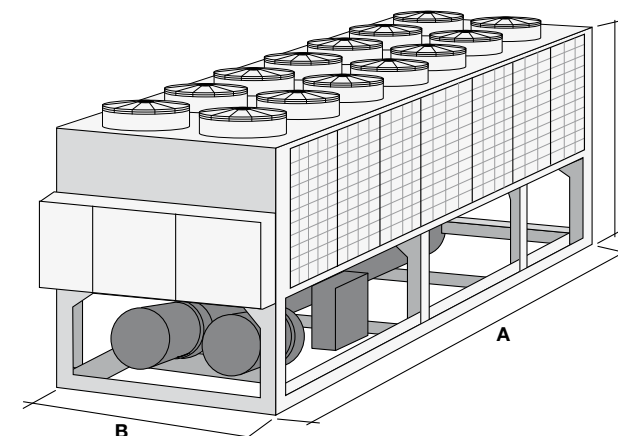
TECHNICAL DATA AWS SE ST/LN - cooling only

AWS SE ST/LN		184.2	212.2	237.2	260.2	275.2	303.2	327.2	375.2	405.2	435.3	461.3	487.3	515.3	535.3	550.3
Cooling Capacity ¹	kW	647	744	832	912	967	1064	1152	1319	1418	1538	1622	1714	1802	1875	1922
Unit power input ¹	kW	221	262	299	318	351	378	402	441	474	551	580	618	665	682	715
EER	--	2,93	2,84	2,78	2,87	2,76	2,82	2,86	2,99	2,99	2,79	2,80	2,77	2,71	2,75	2,69
ESEER	--	3,95	3,87	3,89	3,84	3,80	3,88	3,84	4,09	4,08	3,90	3,87	3,78	3,79	3,82	3,77
Sound Pressure ST ²	dB(A)	79,0	79,5	79,5	80,4	80,6	80,6	80,6	80,7	80,7	81,1	81,1	81,2	81,5	81,9	81,9
Sound Pressure LN ²	dB(A)	75,5	75,6	75,6	76,5	76,6	76,6	76,8	77,0	77,0	77,2	77,3	77,4	77,9	78,0	78,0
Compressor	Type	Semi-hermetic single screw compressor														
Quantity	No.	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Minimum capacity	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	7	7	7	7	7	7
Refrigerant	Type	R-134a														
N. of circuits	No.	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler														
Fan	Type	Direct propeller														
Quantity	No.	10	10	10	12	12	14	16	18	18	20	22	22	22	24	24
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	1,75	1,75
Speed	rpm	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920
Diameter	mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube														
Water volume	l	266	266	251	251	251	243	243	386	386	408	408	474	850	850	850
Nominal Water pressure drop	kPa	73	59	52	61	68	63	72	54	58	59	65	73	36	39	40
Piping connections	mm	6,6	6,6	6,6	6,6	6,6	6,6	6,6	8,6	8,6	8,6	8,6	8,6	10,8	10,8	10,8
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	212.2	237.2	260.2	275.2	303.2	327.2	375.2	405.2	435.3	461.3	487.3	515.3	535.3	550.3
Shipping weight (ST)	kg	5630	5740	5760	6280	6560	7010	7280	7900	7900	10320	10710	10770	11240	11600	11600
Operating weight (ST)	kg	5910	5990	6010	6530	6810	7250	7520	8280	8280	10730	11110	11260	12110	12480	12480
Shipping weight (LN)	kg	5920	6030	6050	6570	6850	7300	7570	8190	8190	10770	11150	11210	11680	12040	12040
Operating weight (LN)	kg	6200	6280	6300	6820	7100	7540	7810	8570	8570	11170	11550	11700	12560	12920	12920
(A) Length	mm	6185	6185	6185	6185	6185	7085	7985	8885	8885	10185	11085	11085	11085	11985	11985
(B) Width	mm	2285	2285	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	2540	2540



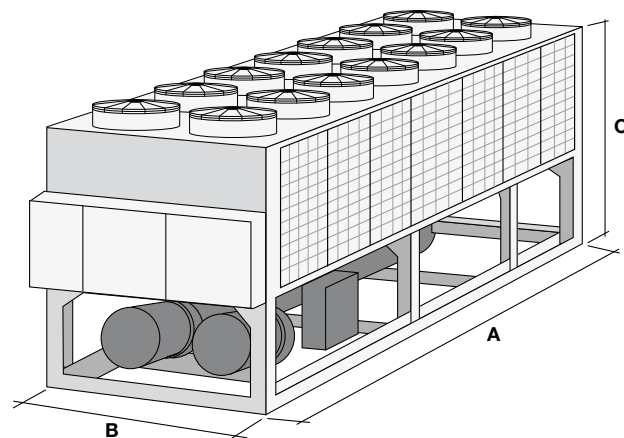
TECHNICAL DATA AWS SE XN - cooling only

AWS SE XN		184.2	212.2	237.2	260.2	275.2	303.2	327.2	375.2	405.2	403.3	435.3	461.3	487.3	515.3	535.3	550.3
Cooling Capacity ¹	kW	619	715	789	876	922	1020	1112	1270	1321	1367	1471	1556	1623	1714	1795	1833
Unit power input ¹	kW	223	272	315	331	369	395	417	457	495	517	576	603	647	702	718	757
EER	--	2,77	2,62	2,51	2,65	2,50	2,59	2,67	2,78	2,67	2,64	2,55	2,58	2,51	2,44	2,50	2,42
ESEER	--	4,08	3,96	3,98	3,99	4,00	3,96	3,96	4,13	4,00	3,90	3,87	3,90	3,83	3,80	3,83	3,77
Sound Pressure ²	dB(A)	71,0	71,5	71,5	72,0	72,5	72,6	72,7	72,9	72,9	73,0	73,0	73,1	73,1	73,4	73,7	74,0
Compressor	Type	Semi-hermetic single screw compressor															
Quantity	Nr	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Minimum capacity	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	7	7	7	7	7	7	7
Refrigerant	Type	R-134a															
N. of circuits	Nr	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler															
Fan	Type	Direct propeller															
Quantity	Nr	10	10	10	12	12	14	16	18	18	20	20	22	22	22	24	24
Motor input	kW	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78
Speed	RPM	715	715	715	715	715	715	715	715	715	715	715	715	715	715	715	715
Diameter	mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube															
Water volume	l	266	266	251	251	251	243	243	386	386	421	408	408	474	850	850	850
Nominal Water pressure drop	kPa	67	55	47	57	62	58	68	50	54	44	54	60	66	33	36	37
Piping connections	mm	6,6	6,6	6,6	6,6	6,6	6,6	6,6	8,6	8,6	8,6	8,6	8,6	8,6	10,8	10,8	10,8
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	212.2	237.2	260.2	275.2	303.2	327.2	375.2	405.2	403.3	435.3	461.3	487.3	515.3	535.3	550.3
Shipping weight	kg	5920	6030	6050	6570	6850	7300	7570	8190	8190	10750	10750	11150	11210	11680	12040	12040
Operating weight	kg	6200	6280	6300	6820	7100	7540	7810	8570	8570	11170	11170	11550	11700	12560	12920	12920
(A) Length	mm	6185	6185	6185	6185	6185	7085	7985	8885	8885	10185	10185	11085	11085	11085	11985	11985
(B) Width	mm	2285	2285	2285	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	2540	2540	2540



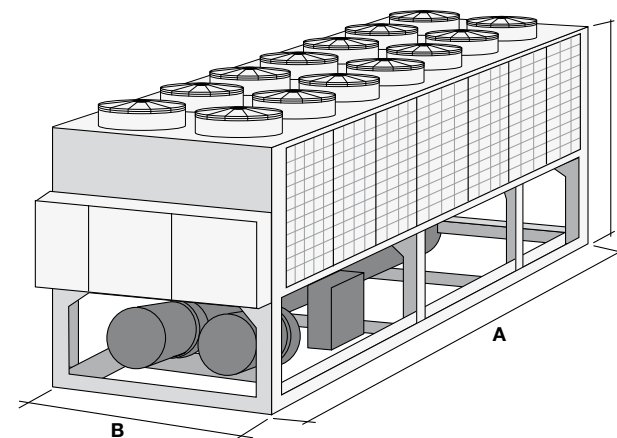
TECHNICAL DATA AWS XE ST/LN - cooling only

AWS XE ST/LN		210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.2	434.2	445.3	470.3	490.3	515.3	540.3	555.3	570.3
Cooling Capacity ¹	kW	756	830	889	1001	1074	1196	1280	1349	1415	1525	1596	1685	1768	1858	1901	1953	2008
Unit Power Input ¹	kW	233	253	278	307	338	364	400	411	444	475	504	533	561	590	615	642	672
EER	--	3,25	3,28	3,20	3,26	3,18	3,29	3,20	3,29	3,19	3,21	3,17	3,16	3,15	3,15	3,09	3,04	2,99
ESEER	--	4,02	4,11	4,02	4,11	4,05	4,14	4,02	4,28	4,31	4,37	4,17	4,16	4,13	4,13	4,15	4,05	4,01
Sound Pressure Levels ² (ST)	dB(A)	79,7	79,7	79,7	80,2	80,7	80,3	80,4	80,4	80,4	80,4	80,9	80,8	81,0	81,0	81,0	81,0	81,0
Sound Pressure Levels ² (LN)	dB(A)	76,3	76,5	76,5	76,9	77,1	76,7	76,8	76,8	76,8	76,8	77,3	77,4	77,5	77,5	77,5	77,5	77,5
Compressor	Type	Semi-hermetic single screw compressor																
Quantity	No.	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Minimum Capacity	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	7	7	7	7	7	7	7
Refrigerant	Type	R-134a																
Circuits Number	No.	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Condenser Coil	Type	High efficiency fin and tube type with integral subcooler																
Fan	Type	Direct propeller																
Quantity	No.	12	14	14	16	16	20	20	20	20	20	24	26	28	30	30	30	30
Power 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	1,75	1,75	1,75	1,75
Speed	rpm	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920	920
Diameter	mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Evaporator	Type	Single Pass Shell&Tube																
Water Volume	l	251	243	243	403	403	386	386	979	979	979	850	850	871	850	850	850	850
Pressure Drop	kPa	80	56	64	61	69	45	51	71	77	84	62	68	64	37	39	41	43
Water Connections Size	"	6,6	6,6	6,6	8,6	8,6	8,6	8,6	8,6	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	
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		210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.2	434.2	445.3	470.3	490.3	515.3	540.3	555.3	570.3
Shipping weight (ST)	kg	5990	6340	6360	7190	7470	8220	8240	8900	8900	8900	11570	11900	12260	12600	12600	12600	12600
Operating weight (ST)	kg	6240	6580	6600	7600	7870	8610	8630	9890	9890	9890	12430	12760	13140	13470	13470	13470	13470
Shipping weight (LN)	kg	6280	6630	6650	7480	7760	8510	8530	9190	9190	9190	12010	12350	12700	13040	13040	13040	13040
Operating weight (LN)	kg	6520	6870	6890	7880	8160	8900	8920	10180	10180	10180	12870	13200	13580	13910	13910	13910	13910
(A) Length	mm	6185	7085	7085	7985	7985	9785	9785	9785	9785	9785	11985	12885	13785	14685	14685	14685	14685
(B) Width	mm	2285	2285	2285	2285	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	2540	2540	2540	2540



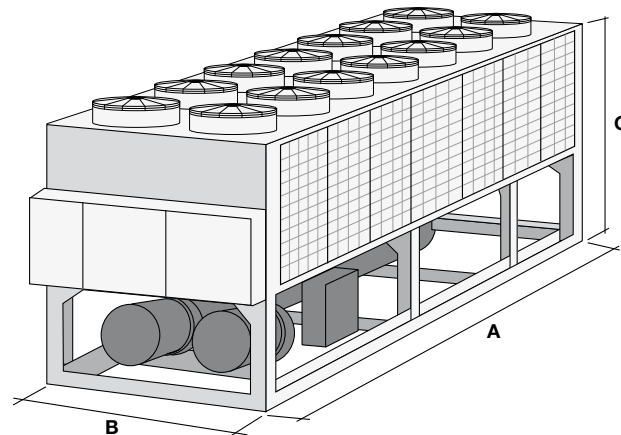
TECHNICAL DATA AWS XE XN - cooling only

AWS XE XN		210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.2	434.2	445.3	470.3	490.3	515.3	540.3	555.3	570.3
Cooling Capacity ¹	kW	736	811	866	974	1041	1168	1247	1302	1367	1468	1550	1639	1722	1813	1854	1902	1959
Unit power input ¹	kW	235	254	281	309	343	365	404	415	454	491	513	541	567	595	624	658	692
EER	--	3,14	3,20	3,08	3,15	3,03	3,20	3,08	3,14	3,01	2,99	3,03	3,03	3,04	3,04	2,97	2,89	2,83
ESEER	--	4,29	4,36	4,23	4,34	4,24	4,38	4,25	4,33	4,39	4,43	4,26	4,20	4,21	4,20	4,21	4,11	4,10
Sound Pressure ²	dB(A)	71,5	71,5	71,5	72,3	72,5	72,2	72,3	72,3	72,5	72,9	73,0	73,0	73,0	73,3	73,3	73,7	73,7
Compressor	Type	Semi-hermetic single screw compressor																
Quantity	Nr	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Minimum capacity	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	7	7	7	7	7	7	7	7
Refrigerant	Type	R-134a																
N. of circuits	Nr	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler																
Fan	Type	Direct propeller																
Quantity	Nr	12	14	14	16	16	20	20	20	20	24	26	28	30	30	30	30	30
Motor input	kW	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78
Speed	RPM	715	715	715	715	715	715	715	715	715	715	715	715	715	715	715	715	715
Diameter	mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube																
Water volume	l	251	243	243	403	403	386	386	979	979	979	850	850	871	850	850	850	850
Nominal Water pressure drop	kPa	76	54	61	58	65	43	49	67	73	79	59	65	61	35	37	39	41
Piping connections	mm	6,6	6,6	6,6	8,6	8,6	8,6	8,6	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8
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		210.2	230.2	250.2	280.2	300.2	325.2	360.2	385.2	402.2	434.2	445.3	470.3	490.3	515.3	540.3	555.3	570.3
Shipping weight	kg	6280	6630	6650	7480	7760	8510	8530	9190	9190	9190	12010	12350	12700	13040	13040	13040	13040
Operating weight	kg	6520	6870	6890	7880	8160	8900	8920	10180	10180	10180	12870	13200	13580	13910	13910	13910	13910
(A) Length	mm	6185	7085	7085	7985	7985	9785	9785	9785	9785	9785	11985	12885	13785	14685	14685	14685	14685
(B) Width	mm	2285	2285	2285	2285	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	2540	2540	2540	2540



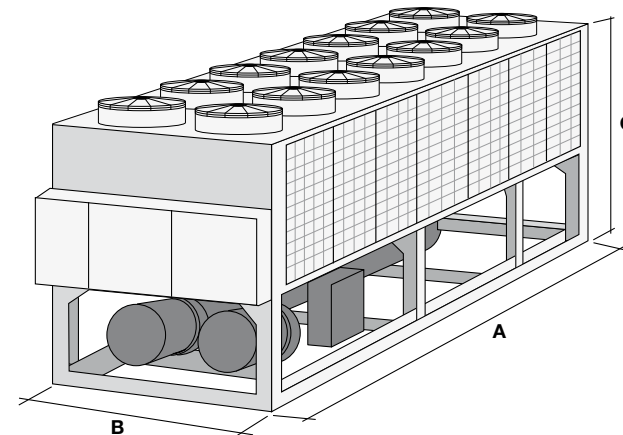
TECHNICAL DATA AWS PR ST/LN - cooling only

AWS PR ST/LN		221.2	243.2	266.2	290.2	313.2	350.2	378.2	420.2	444.2
Cooling Capacity ¹	kW	821	890	975	1074	1158	1279	1390	1474	1562
Unit power input ¹	kW	225	249	274	301	330	363	396	424	453
EER	--	3,64	3,58	3,56	3,56	3,51	3,52	3,51	3,48	3,45
ESEER	--	4,44	4,50	4,41	4,53	4,39	4,44	4,31	4,33	4,32
Sound Pressure ST ¹	dB(A)	79,5	79,5	79,5	80,0	80,5	80,4	80,5	80,8	81,1
Sound Pressure LN ¹	dB(A)	76,9	76,9	76,9	77,0	77,1	77,1	77,2	77,5	77,8
Compressor	Type	Semi-hermetic single screw compressor								
Quantity	No.	2	2	2	2	2	2	2	2	2
Minimum capacity	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5
Refrigerant	Type	R-134a								
N. of circuits	No.	2	2	2	2	2	2	2	2	2
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler								
Fan	Type	Direct propeller								
Quantity	No.	18	18	18	20	20	22	24	24	24
Motor input	kW	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75
Speed	rpm	920	920	920	920	920	920	920	920	920
Diameter	mm	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube								
Water volume	l	599	599	1043	1027	1027	995	979	979	979
Nominal Water pressure drop	kPa	57	65	30	61	69	60	73	81	89
Piping connections	"	8,6	8,6	10,8	10,8	10,8	10,8	10,8	10,8	10,8
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		221.2	243.2	266.2	290.2	313.2	350.2	378.2	420.2	444.2
Shipping weight (ST)	kg	7530	7530	7660	8290	8550	9390	9730	9730	9730
Operating weight (ST)	kg	8130	8130	8700	9330	9590	10380	10720	10720	10720
Shipping weight (LN)	kg	7820	7820	7950	8580	8840	10380	10720	10720	10720
Operating weight (LN)	kg	8420	8420	8990	9620	9880	10670	11010	11010	11010
(A) Length	mm	8885	8885	8885	9785	9785	11085	11985	11985	11985
(B) Width	mm	2285	2285	2285	2285	2285	2285	2285	2285	2285
(C) Height	mm	2540	2540	2540	2540	2540	2540	2540	2540	2540



TECHNICAL DATA AWS PR XN - cooling only

AWS PR XN		221.2	243.2	266.2	290.2	313.2	350.2	378.2	420.2	444.2
Cooling Capacity ¹	kW	809	875	956	1053	1132	1251	1359	1439	1521
Unit power input ¹	kW	219	244	272	299	330	364	396	425	457
EER	--	3,69	3,59	3,51	3,52	3,43	3,44	3,43	3,39	3,33
ESEER	--	4,63	4,59	4,54	4,59	4,5	4,53	4,51	4,50	4,47
Sound Pressure ²	dB(A)	71,2	71,2	71,2	71,7	72	72	72	72,3	72,6
Compressor	Type	Semi-hermetic single screw compressor								
Quantity	Nr	2	2	2	2	2	2	2	2	2
Minimum capacity	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5
Refrigerant	Type	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a	R-134a
N. of circuits	Nr	2	2	2	2	2	2	2	2	2
Air heat exchanger	Type	High efficiency fin and tube type with integral subcooler								
Fan	Type	Direct propeller								
Quantity	Nr	18	18	18	20	20	22	24	24	24
Motor input	kW	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78
Speed	RPM	715	715	715	715	715	715	715	715	715
Diameter	mm	800	800	800	800	800	800	800	800	800
Water heat exchanger	Type	Single Pass Shell&Tube								
Water volume	l	599	599	1043	1027	1027	995	979	979	979
Nominal Water pressure drop	kPa	56	63	29	59	66	58	70	77	84
Piping connections	--	8,6	8,6	10,8	10,8	10,8	10,8	10,8	10,8	10,8
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

**A GLOBAL LEADER IN
SYSTEM SOLUTIONS
FOR AIR CONDITIONING,
HEATING, VENTILATING
AND REFRIGERATION**



Weight and dimensions		221.2	243.2	266.2	290.2	313.2	350.2	378.2	420.2	444.2
Shipping weight	kg	7820	7820	7950	8580	8840	10380	10720	10720	10720
Operating weight	kg	8420	8420	8990	9620	9880	10670	11010	11010	11010
(A) Length	mm	8885	8885	8885	9785	9785	11085	11985	11985	11985
(B) Width	mm	2285	2285	2285	2285	2285	2285	2285	2285	2285
(C) Height	mm	2540	2540	2540	2540	2540	2540	2540	2540	2540

