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Central Air Conditioners and Air-Source Heat Pumps

Air Conditioners

(except window and wall types)

Package Air Conditioners — Air & Water-Cooled: Report as single package air conditioners with factory-made assemblies of one or more evaporator fans, evaporator coil, and condensing sections having means for air cooling, cleaning, dehumidification, heating with factory or field installed electric strip heaters and forced air circulation through a duct system and which may also have means for humidifying and control of temperature.. These units do not have gas heat and is not a heat pump. Report only those units that are assembled or are designed to be assembled in a single unit (within a single factory made enclosure). Do not report window and wall types of room air conditioners. Include single package (cooling only) roof top units in this category.

Indoor Package — Air & Water-Cooled: Report as single package air conditioners with factory-made assemblies of one or more evaporator fans, evaporator coil, and condensing sections having means for air cooling, cleaning, dehumidification, heating with factory or field installed electric strip heaters and forced air circulation through a duct system and which may also have means for humidifying and control of temperature. These units do not have gas heat and is not a heat pump. Report only those units that are assembled or are designed to be assembled in a single unit (within a single factory made enclosure). Do not report window and wall types of room air conditioners.

Year Round Air Conditioners

(except heat pumps)

Package Year Round Air Conditioners (With Gas/Oil Heat) — Air Cooled): Single Package: Report as gas and oil package air conditioners, factory made assemblies of one or more evaporator fans, evaporator coil, and condensing units and equipped with gas fired heating section and means for air cooling, heating cleaning, dehumidification and forced air circulation through a duct system and which may also have means for humidifying and control of temperature. Report only those units that are assembled or are designed to be assembled in a single unit (within a single factory made enclosure). Do not report either heat pumps or, window and wall type room air conditioners.

Split Systems

Air conditioning condensing units: Report as air conditioning condensing units. Report only those units which are intended for air conditioning purposes and will be installed remotely from the evaporator and require field connection of refrigerant lines. Report capacity and efficiency of air conditioning condensing units based on the highest sales volume tested combination (HSVTC). Report the indoor coil, air handler, or fan coil in the appropriate coil section. Include non-ducted units. Do not report window and wall type room air conditioners.



2007

2008

5.262.727

5.180.897

2002

2003

4.229.140

4.980.283

BOM Exhibit 1024 BOM v. Nidec IPR2014-01121



4.507.692

3.968.044

2012

2013

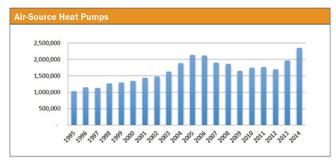
3.915.869

4.201.068

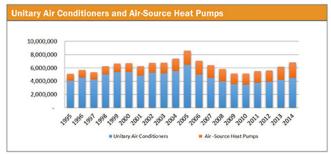
Heat Pumps

Package Heat Pumps — Air Cooled: Report as single package heat pumps with the provision for electric, hot water, steam or gas heat (Dual Fuel), factory made assemblies of one or more evaporator fans, evaporator coil, and condensing units having means for air cooling, heating, cleaning, dehumidification, and forced air circulation through a duct system and which may also have means for humidifying and control of temperature., with provision for modifying the performance so that either heating or cooling and dehumidification may be produced. Report, in this category, only those units that are assembled or are designed to be assembled in a single unit (within a single factory made enclosure). Include units both indoor and outdoor. Do not report window and wall type room air conditioners.

Split Heat Pumps-Air Cooled: Report as split systems heat pumps units. Report only those units which are intended for heat pump purposes and will be installed remotely from the indoor coil, air handler, or fan coil and require field connection of refrigerant lines. Report capacity and efficiency of heat pump units based on the highest sales volume tested combination (HSVTC). Report the indoor coil, air handler, or fan coil in the appropriate coil section. Include non-ducted units. Do not report window and wall type room air conditioners.



Air-Source Heat Pumps								
1995	1,024,885	2000	1,339,435	2005	2,136,525	2010	1,747,920	
1996	1,147,828	2001	1,442,355	2006	2,118,469	2011	1,765,002	
1997	1,130,718	2002	1,483,599	2007	1,898,905	2012	1,697,796	
1998	1,259,695	2003	1,626,365	2008	1,865,310	2013	1,968,632	
1999	1,293,395	2004	1,886,100	2009	1,642,064	2014	2,353,990	



	Unitary Air Conditioners	Air-Source Heat Pumps	Total	
1995	4,063,176	1,024,885	5,088,061	
1996	4,522,837	1,147,828	5,670,665	
1997	4,229,140	1,130,718	5,359,858	
1998	4,980,283	1,259,695	6,239,978	
1999	5,353,676	1,293,395	6,647,071	
2000	5,346,046	1,339,435	6,685,481	
2001	4,839,088	1,442,355	6,281,443	
2002	5,262,727	1,483,599	6,746,326	
2003	5,180,897	1,626,365	6,807,262	
2004	5,514,967	1,886,100	7,401,067	
2005	6,470,976	2,136,525	8,607,501	
2006	4,950,827	2,118,469	7,069,296	
2007	4,507,692	1,898,905	6,406,597	
2008	3,968,044	1,865,310	5,833,354	
2009	3,515,648	1.642,064	5,157,712	
2010	3,419,290	1,747,920	5,167,210	
2011	3,744,691	1,765,002	5,509,693	
2012	3,915,869	1,697,796	5,613,665	
2013	4,201,068	1,968,632	6,169,700	
2014	4,499,660	2,353,990	6,853,650	



Source Heat Pumps by BTUH

Size Description (000) BTUH	1997	1998	1999	2000	2001	2002
Under 16.5	27,778	31,615	31,087	40,036	37,329	38,770
16.5-21.9	365,250	440,396	446,590	458,512	409,143	445,652
22-26.9	1,003,862	1,169,535	1,254,809	1,259,189	1,155,187	1,317,113
27-32.9	967,396	1,091,336	1,179,705	1,151,884	1,068,358	1,188,902
33-38.9	1,185,106	1,376,659	1,432,131	1,429,977	1,353,044	1,462,674
39-43.9	492,299	556,835	600,007	598,101	579,807	605,444
44-53.9	578,544	678,375	738,095	737,114	725,909	748,138
54-64.9	497,824	615,093	668,020	701,182	675,915	681,068
65-96.9	90,095	102,463	109,243	111,638	99,549	97,780
97-134.9	68,339	81,231	83,278	87,752	76,752	69,901
135-184.9	40,887	46,462	48,867	49,390	44,571	43,006
185-249.9	19,315	22,415	24,747	26,831	24,643	22,637
250-319.5	9,022	10,901	11,767	12,631	11,690	9,892
320-379.9	4,074	4,288	4,806	5,119	4,864	4,354
380-539.9	3,827	4,343	4,902	4,950	4,446	3,889
540-639.9	1,918	2,447	2,759	3,834	3,466	2,814
640 & Over	4,322	5,584	6,258	7,341	6,770	4,292
TOTAL	5,359,858	6,239,978	6,647,071	6,685,481	6,281,443	6,746,326

Size Description (000) BTUH	2003	2004	2005	2006	2007	2008
Under 16.5	43,828	53,021	60,539	60,193	67,369	72,815
16.5-21.9	436,104	481,430	587,710	431,085	401,711	418,492
22-26.9	1,275,565	1,389,382	1,701,764	1,290,818	1,133,258	1,093,538
27-32.9	1,192,033	1,270,549	1,488,750	1,129,590	1,013,060	942,696
33-38.9	1,473,499	1,605,513	1,853,926	1,475,273	1,360,215	1,224,416
39-43.9	639,255	699,742	783,513	685,391	574,230	478,735
44-53.9	784,273	862,007	987,337	895,182	804,675	684,467
54-64.9	703,932	768,420	861,277	792,212	733,793	631,805
65-96.9	98,686	102,082	105,425	114,906	117,995	105,719
97-134.9	70,080	74,540	78,005	87,795	93,074	82,683
135-184.9	42,782	44,687	47,997	50,639	51,025	46,876
185-249.9	22,580	23,671	25,380	26,557	26,569	23,957
250-319.5	10,461	11,054	10,626	12,068	12,390	10,552
320-379.9	4,239	4,475	4,529	5,259	4,937	4,768
380-539.9	3,824	3,952	4,087	4,421	4,602	3,829
540-639.9	2,282	2,544	2,553	2,745	2,864	2,908
640 & Over	3,839	3,998	4,083	5,162	4,830	5,098
TOTAL	6,807,262	7,401,067	8,607,501	7,069,296	6,406,597	5,833,354

Size Description (000) BTUH	2009	2010	2011	2012	2013	2014
Under 16.5	83,396	118,106	114,400	117,478	154,538	184,391
16.5-21.9	381,021	344,293	397,363	422,275	498,143	586,544
22-26.9	1,013,373	989,327	1,055,636	1,062,592	1,176,723	1,331,295
27-32.9	815,566	807,755	864,379	885,497	973,840	1,078,573
33-38.9	1,126,923	1,144,010	1,180,003	1,194,792	1,293,780	1,421,812
39-43.9	407,814	433,370	452,949	452,301	501,692	546,790
44-53.9	604,135	615,603	640,635	647,883	701,698	766,135
54-64.9	515,523	504,408	573,570	584,835	617,350	670,896
65-96.9	77,922	76,265	83,501	89,474	93,187	96,993
97-134.9	61,408	60,502	65,657	69,364	71,045	74,469
135-184.9	35,588	39,098	42,376	44,473	44,819	48,244
185-249.9	16,796	16,806	18,233	19,314	19,838	21,495
250-319.5	7,168	7,794	9,593	11,055	10,524	12,325
320-379.9	3,615	3,093	3,171	3,322	3,392	3,567
380-539.9	2,936	2,609	3,040	3,514	3,344	3,739
540-639.9	1,781	1,911	2,169	2,257	2,423	2,546
640 & Over	2,747	2,260	3,018	3,239	3,364	3,836
TOTAL	5,157,712	5,167,210	5,509,693	5,613,665	6,169,700	6,853,650

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