

# 23 81 Decentralized Unitary HVAC Equipment

## 23 81 19 – Self-Contained Air-Conditioners

		Crew	Daily Output	Labor- Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
23 81 19.20 Self-Contained Single Package							Labor	Equipment		
0490	For duct mounting, no price change									
0500	For steam heating coils, add				Ea.	10%	10%			
1000	Water cooled for free blow or duct, not including tower									
1010	Constant volume									
1100	3 ton cooling	Q-6	1	24	Ea.	3,800	1,575		5,375	6,525
1120	5 ton cooling	"	1	24		4,975	1,575		6,550	7,825
1140	10 ton cooling	Q-7	.90	35.556	↓	8,850	2,375		11,225	13,300
1160	20 ton cooling	Q-7	.80	40	Ea.	27,200	2,675		29,875	33,900
1180	30 ton cooling	"	.70	45.714	"	36,000	3,050		39,050	44,200

## 23 81 23 – Computer-Room Air-Conditioners

### 23 81 23.10 Computer Room Units

0010 COMPUTER ROOM UNITS										
1000	Air cooled, includes remote condenser but not									
1020	interconnecting tubing or refrigerant									
1080	3 ton	Q-5	.50	32	Ea.	30,000	2,025		32,025	36,000
1120	5 ton		.45	35.556		32,000	2,250		34,250	38,600
1160	6 ton		.30	53.333		57,500	3,375		60,875	68,500
1200	8 ton		.27	59.259		60,000	3,750		63,750	71,500
1240	10 ton		.25	64		62,500	4,050		66,550	75,000
1280	15 ton		.22	72.727		69,000	4,600		73,600	82,500
1290	18 ton	↓	.20	80		76,000	5,075		81,075	91,000
1300	20 ton	Q-6	.26	92.308		82,500	6,050		88,550	99,500
1320	22 ton		.24	100		83,500	6,575		90,075	101,500
1360	30 ton	↓	.21	114	↓	102,500	7,500		110,000	124,000
2200	Chilled water, for connection to									
2220	existing chiller system of adequate capacity									
2260	5 ton	Q-5	.74	21.622	Ea.	21,700	1,375		23,075	26,000

## 23 81 43 – Air-Source Unitary Heat Pumps

### 23 81 43.10 Air-Source Heat Pumps

0010 AIR-SOURCE HEAT PUMPS, Not including interconnecting tubing										
1000	Air to air, split system, not including curbs, pads, fan coil and ductwork									
1012	Outside condensing unit only, for fan coil see Section 23 82 19.10									
1020	2 ton cooling, 8.5 MBH heat @ 0°F	Q-5	2	8	Ea.	1,625	505		2,130	2,550
1060	5 ton cooling, 27 MBH heat @ 0°F		.50	32		2,500	2,025		4,525	5,775
1080	7.5 ton cooling, 33 MBH heat @ 0°F	↓	.45	35.556		3,725	2,250		5,975	7,450
1100	10 ton cooling, 50 MBH heat @ 0°F	Q-6	.64	37.500		6,150	2,475		8,625	10,500
1120	15 ton cooling, 64 MBH heat @ 0°F		.50	48		10,700	3,150		13,850	16,500
1130	20 ton cooling, 85 MBH heat @ 0°F		.35	68.571		19,500	4,500		24,000	28,200
1140	25 ton cooling, 119 MBH heat @ 0°F	↓	.25	96	↓	22,400	6,300		28,700	34,000
1500	Single package, not including curbs, pads, or plenums									
1520	2 ton cooling, 6.5 MBH heat @ 0°F	Q-5	1.50	10.667	Ea.	3,400	675		4,075	4,750
1580	4 ton cooling, 13 MBH heat @ 0°F		.96	16.667		4,525	1,050		5,575	6,550
1640	7.5 ton cooling, 35 MBH heat @ 0°F	↓	.40	40	↓	7,875	2,525		10,400	12,400

## 23 81 46 – Water-Source Unitary Heat Pumps

### 23 81 46.10 Water Source Heat Pumps

0010 WATER SOURCE HEAT PUMPS, Not incl. connecting tubing or water source										
2000	Water source to air, single package									
2100	1 ton cooling, 13 MBH heat @ 75°F	Q-5	2	8	Ea.	2,125	505		2,630	3,075
2140	2 ton cooling, 19 MBH heat @ 75°F		1.70	9.412		2,350	595		2,945	3,475
2220	5 ton cooling, 29 MBH heat @ 75°F	↓	.90	17.778		3,425	1,125		4,550	5,450
3960	For supplementary heat coil, add				↓	10%				