

16DJ

DIRECT-FIRED DOUBLE-EFFECT ABSORPTION CHILLERS/HEATERS

Technical data

16DJ		11	12	13	14	21	22	23	24	31	32	41	42
Cooling capacity	kW	352	422	527	633	738	844	985	1125	1266	1407	1582	1758
Heating capacity	kW	268	322	403	483	564	644	751	859	966	1074	1208	1342
Chilled/hot-water system*													
Flow rate	l/s	15.1	18.2	22.7	27.3	31.8	36.3	42.4	48.4	54.5	60.6	68.1	75.7
Pressure drop	kPa	70	71	90	94	85	89	61	65	69	72	62	65
Connection (ANSI)	in	4	4	4	4	5	5	6	6	6	6	8	8
Retention volume	m ³	0.12	0.13	0.15	0.17	0.22	0.24	0.28	0.30	0.34	0.36	0.46	0.48
Cooling water system*													
Flow rate	l/s	25.2	30.3	37.9	45.4	53.0	60.6	70.7	80.7	90.8	100.9	113.6	126.2
Pressure drop	kPa	33	36	50	56	43	46	88	94	76	80	85	89
Connection (ANSI)	in	5	5	5	5	6	6	8	8	8	8	10	10
Retention volume	m ³	0.31	0.34	0.38	0.42	0.53	0.58	0.63	0.69	0.89	0.95	1.11	1.19
Fuel type		Natural gas											
Consumption (cooling/heating)**	kW	320	384	479	575	671	767	895	1023	1151	1279	1438	1598
Dimensions													
Length A	mm	3080	3080	3810	3810	3980	3980	4980	4980	5000	5000	5040	5040
Height B	mm	1960	1960	1960	1960	2160	2160	2160	2160	2390	2390	2600	2600
Width C	mm	1810	1810	1910	1910	2090	2090	2130	2130	2290	2290	2490	2490
Operating weight	kg	5200	5500	6600	7100	8300	8800	10100	10700	13200	13900	16300	17100
Power supply	V-ph-Hz	400-3-50											
Total current drawn	A	10.8	10.8	10.8	16.3	16.3	16.3	19.2	19.2	19.2	19.2	26.0	32.9

16DJ		51	52	53	61	62	63	71	72	73	81	82
Cooling capacity	kW	1969	2215	2461	2813	3165	3516	3868	4220	4571	4923	5274
Heating capacity	kW	1503	1691	1879	2147	2415	2684	2952	3221	3489	3757	4026
Chilled/hot-water system*												
Flow rate	l/s	84.8	95.4	106.0	121.2	136.3	151.4	166.5	181.7	196.8	212.0	227.1
Pressure drop	kPa	56	75	98	69	91	120	74	94	116	94	115
Connection (ANSI)	in	8	8	8	10	10	10	12	12	12	14	14
Retention volume	m ³	0.65	0.71	0.77	0.99	1.06	1.13	1.41	1.51	1.61	1.83	1.94
Cooling water system*												
Flow rate	l/s	141.3	159.0	176.6	201.9	227.1	252.3	277.6	302.8	328.0	353.3	378.5
Pressure drop	kPa	68	92	121	83	112	146	90	115	142	117	142
Connection (ANSI)	in	12	12	12	14	14	14	16	16	16	16	16
Retention volume	m ³	1.87	2.01	2.14	2.79	2.97	3.15	3.67	3.90	4.11	4.51	4.76
Fuel type		Natural gas										
Consumption (cooling/heating)**	kW	1790	2014	2237	2557	2877	3196	3516	3836	4155	4475	4795
Dimensions												
Length A	mm	5310	5850	6350	6110	6600	7130	6490	7020	7520	7010	7510
Height B	mm	2900	2900	2900	3330	3330	3330	3450	3450	3450	3650	3650
Width C	mm	2990	2990	2990	3250	3250	3250	4100	4100	4100	4450	4450
Operating weight	kg	22800	24600	26300	32700	35200	37900	46100	49500	52500	57200	60200
Power supply	V-ph-Hz	400-3-50										
Total current drawn	A	34.9	34.9	34.9	41.4	48.7	56.7	58.7	58.7	66.8	68.8	68.8

* Cooling per ARI 560 2000:

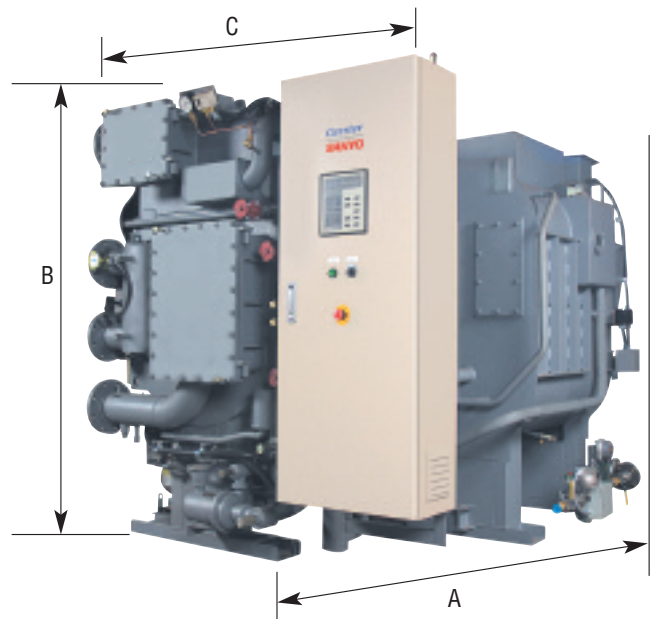
12.2 → 6.7°C (fouling factor = 0.0176 m² K/kW)

29.4 → 35.3°C (fouling factor = 0.044 m² K/kW)

Heating:

55.8 → 60°C (fouling factor = 0.0176 m² K/kW)

** Consumption in Nm³/h of gas = $\frac{\text{Consumption}}{\text{High gas calorific value (kW/h/Nm}^3\text{)}}$

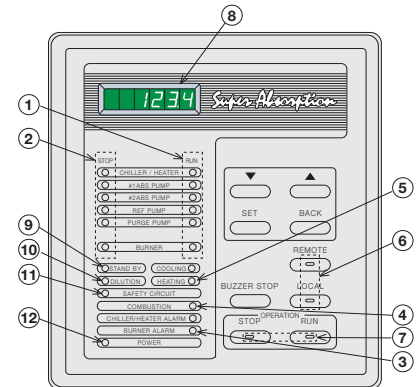




SUPER ABSORPTION

FEATURES

- Twenty-three sizes with nominal cooling capacities from 352 to 5274 kW and heating capacities from 268 to 4026 kW.
- The 16DJ absorption chillers/heaters offer building owners a better solution for many new and retrofit applications. Installation of a direct-fired chiller/heater eliminates the need for a boiler, reducing the initial cost of the system.
- Excellent for peak shaving during high electrical demand periods.
- Allows diversification of critical cooling requirements. Critical loads are met with minimal electrical power input.
- Allows use of smaller emergency generators since the electrical load associated with an absorption chiller is minimal.
- Ozone-friendly and CFC-free.
- Minimises global warming effect by greatly reducing power consumption.
- Reduced noise and vibration levels. The absorption chiller does not use a large motor-compressor, leading to quiet, vibration-free operation.
- Small footprint. The high efficiency associated with double-effect chillers results in reducing the required installation space.
- Auto-diagnosis system monitors operating conditions, predicts chiller information and maintains stable operation.
- Advanced high-precision control system
- Absorption pump with inverter control for efficient, energy-saving operation.
- High-performance purge system minimises maintenance requirements.
- State-of-the-art protection devices guarantee enhanced operating safety.



DISPLAY AND CONTROL BOARD

- 1 Operation indication
- 2 Stop indication
- 3 Alarm indication
- 4 Combustion indication
- 5 Cooling/heating indication
- 6 Remote/local select button
- 7 Operation mode selection
- 8 Data display
- 9 Stand-by indication
- 10 Dilution indication
- 11 Safety circuit indication
- 12 Power indication