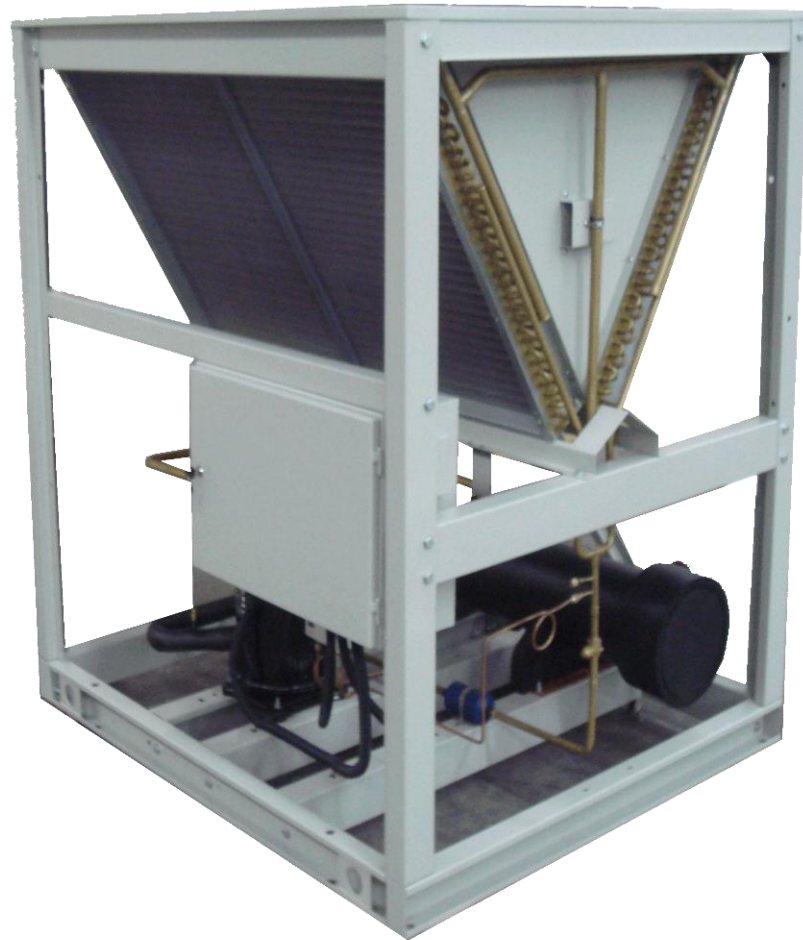


AIR-COOLED CHILLER 5RT to 78RT



HEAT TRANSFER TECHNOLOGIES (M) SDN BHD

Lot 37830, Jalan Bukit Naga, Kampung Bukit Naga, Section 32,
40460 Shah Alam, Selangor Darul Ehsan.

Tel: +603 51623 046 / +603-5162 3066 Fax: +603-5162 3070

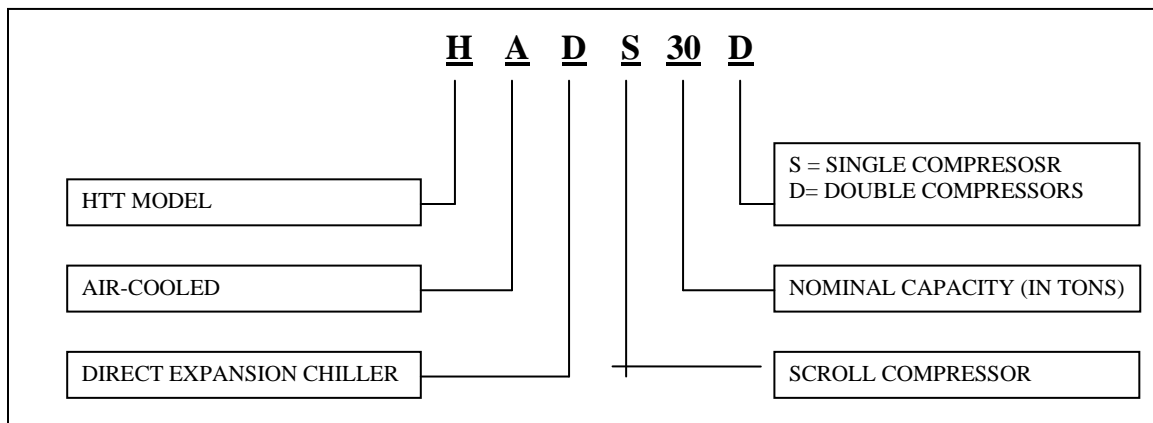


INTRODUCTION

Air-cooled chiller packaged systems available in standard sizes from 5 to 78 tons fully packaged with controls, condenser, shell and tube. HAD air-cooled chillers were designed for easy accessibility to components during maintenance. This range of chiller meets most application requirement and budget for contractors, consulting engineers and building owners.

AIR-COOLED SCROLL CHILLER - HADS

- Cooling Capacity: 5 to 78 Tons
- Scroll Compressors
- High Efficiency ASME Shell & Tube Evaporator
- Electro-Mechanical Control
- R22 & R407C refrigerant
- Copper Tube & Aluminum Fins Condenser
- Heavy gauge galvanized steel frame with weather-resistant epoxy power coated
- Corrosion resistance coil available as option.



MODELS

HADS-9S, HADS11S, HADS15S, HADS-18S ,HADS-19S, HADS-18D,
HADS-22D, HADS-30D, HADS-35D, HADS-39D, HADS-45T, HADS-53T,
HADS-59F, HADS-70F, HADS-78F

AIR-COOLED CHILLER

MODEL	HADS-9S	HADS11S	HADS15S	HADS-18S	HADS-19S
Cooling Capacity (tons)	9.0	11.4	15.3	19.5	19.5
Power Input (kW)	10	13	17	22	22
Unit kW/ton	1.1	1.1	1.1	1.1	1.1
Compressor					
Qty	1	1	1	1	1
Speed (rpm)	2900	2900	2900	2900	2900
Oil Charge per Compressor (Liter)	3.6	6.2	8	8	8
Evaporator					
Water Flow Rate (gpm)	21.57	27.20	36.62	46.71	46.71
Water Pressure Drop (ft wg)	1.66	2.49	1.69	11.45	11.45
Water in/out Connection Size, BS10 Table E	1-1/2"	1-1/2"	1-1/2"	2"	2"
Air-cooled Condenser					
No of Coil	2	2	2	2	2
Face Area(ft ²)	20.0	20.0	20.0	33.8	33.8
Fan Motor (kW)	1.25	1.25	1.5	1.25	1.25
No of Fans	1	1	1	2	2
Air Flow (cfm)	10000	10000	10000	16875	16875
Electrical Data @ 380V/3ph/50Hz					
Start-up Method	DOL	DOL	DOL	DOL	DOL
Compressor LRA	145	175	215	270	270
Unit Op. Current (A)	29	35	47	58	58
Physical Data					
Unit Length (mm)	1448	1448	1448	2286	2286
Unit Width (mm)	1234	1234	1234	1234	1234
Unit Height (mm)	1921	1921	1921	1921	1921

*HTT reserves the right to change specification or design at any time without prior notice.

All performance data are based on the following:

1. R22 Application
2. Evaporator in 54F/44F, Medium: Water
3. Ambient Temperature of 35C
4. Evaporator fouling factor of 0.000018m²C/W

AIR-COOLED CHILLER

MODEL	HADS-18D	HADS-22D	HADS-30D	HADS-35D	HADS-39D
Cooling Capacity (tons)	18.8	22.7	30.6	34.8	39.0
Power Input (kW)	20	26	34	39	44
Unit kW/ton	1.1	1.1	1.1	1.1	1.1
Compressor					
Qty	2	2	2	2	2
Speed (rpm)	2900	2900	2900	2900	2900
Oil Charge per Compressor (Liter)	3.6	6.2	8	8	8
Evaporator					
Water Flow Rate (gpm)	45.03	54.36	73.21	83.29	93.45
Water Pressure Drop (ft wg)	10.73	2.98	10.3	6.07	7.49
Water in/out Connection Size, BS10 Table E	2"	2-1/2"	2-1/2"	2-1/2"	3"
Air-cooled Condenser					
No of Coil	2	2	2	2	2
Face Area(ft ²)	33.8	33.8	49.5	49.5	49.5
Fan Motor (kW)	1.25	1.25	1.5	1.5	1.5
No of Fans	2	2	2	2	2
Air Flow (cfm)	16875	16875	24750	24750	24750
Electrical Data @ 380V/3ph/50Hz					
Start-up Method	DOL	DOL	DOL	DOL	DOL
Compressor LRA	145	175	215	215/270	270
Unit Op. Current (A)	29	35	47	47, 58	58
Physical Data					
Unit Length (mm)	2286	2286	2286	2286	2286
Unit Width (mm)	1234	1234	1234	1234	1234
Unit Height (mm)	1921	1921	2287	2287	2287

*HTT reserves the right to change specification or design at any time without prior notice.

All performance data are based on the following:

5. R22 Application
6. Evaporator in 54F/44F, Medium: Water
7. Ambient Temperature of 35C
8. Evaporator fouling factor of 0.000018m²C/W

AIR-COOLED CHILLER

MODEL	HADS-45T	HADS-53T	HADS-59F	HADS-70F	HADS-78F
Cooling Capacity (tons)	45.9	54.3	61.2	69.6	78.1
Power Input (kW)	51	56	68	78	88
Unit kW/ton	1.1	1.0	1.1	1.1	1.1
Compressor					
Qty	3	3	4	4	4
Speed (rpm)	2900	2900	2900	2900	2900
Oil Charge per Compressor (Liter)	8	8	8	8	8
Evaporator					
Water Flow Rate (gpm)	109.57	129.99	146.45	166.57	186.78
Water Pressure Drop (ft wg)	10.05	11.55	10.33	11.45	14.15
Water in/out Connection Size, BS10 Table E	3"	3"	3"	3"	4"
Air-cooled Condenser					
No of Coil	2	2	4	4	4
Face Area(ft2)	67.2	67.2	99.0	99.0	99.0
Fan Motor (kW)	1.5	1.5	1.5	1.5	1.5
No of Fans	3	3	4	4	4
Air Flow (cfm)	33611	33611	49500	49500	49500
Electrical Data @ 380V/3ph/50Hz					
Start-up Method	DOL	DOL	DOL	DOL	DOL
Compressor LRA	215	215/270	215	215/270	270
Unit Op. Current (A)	47	47, 58	47	47, 58	58
Physical Data					
Unit Length (mm)	3023	3023	2603	2603	2603
Unit Width (mm)	1234	1234	2229	2229	2229
Unit Height (mm)	2287	2287	2287	2287	2287

*HTT reserves the right to change specification or design at any time without prior notice.

All performance data are based on the following:

9. R22 Application
10. Evaporator in 54F/44F, Medium: Water
11. Ambient Temperature of 35C
12. Evaporator fouling factor of 0.000018m²C/W