# HSER 150

## PERFORMANCE DATA

## COOLING CAPACITY

Total capacity kW and Sensible capacity kW. T = Total S = Sensible
NOTE: Capacities are GROSS and do not include allowance for fan motor heat loss. For fan motor heat loss refer to Air Handling Performance.
LINE LOSSES: - Capacities are for close coupled systems - for split systems refrigerated line pressure drops will reduce capacity.

| INDOOR COIL E.A.T. | OUTDOOR COIL E.A.T. D.B.°C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 24 | | | | | | | | 27 | | | | | | | | 30 | | | | | | | | 35 | | | | | | | | 40 | | | | | | | |
| W.B.°C | 15 | | 17 | | 19 | | 22 | | 15 | | 17 | | 19 | | 22 | | 15 | | 17 | | 19 | | 22 | | 15 | | 17 | | 19 | | 22 | | 15 | | 17 | | 19 | | 22 | |
| AIR l/s | D.B. °C | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S |
| 180 | 20 | 3.8 | 2.5 | 4.1 | 2.1 | 4.4 | 1.8 | - | - | 3.7 | 2.5 | 4.0 | 2.1 | 4.3 | 1.7 | - | - | 3.6 | 2.5 | 3.9 | 2.1 | 4.2 | 1.7 | - | - | 3.5 | 2.4 | 3.8 | 2.0 | 4.1 | 1.6 | - | - | 3.4 | 2.3 | 3.6 | 2.0 | 3.9 | 1.6 | - | - |
| 180 | 22 | 3.8 | 2.9 | 4.1 | 2.5 | 4.4 | 2.1 | 4.9 | 1.6 | 3.7 | 2.9 | 4.0 | 2.5 | 4.3 | 2.1 | 4.8 | 1.5 | 3.6 | 2.8 | 3.9 | 2.5 | 4.2 | 2.1 | 4.7 | 1.5 | 3.5 | 2.8 | 3.8 | 2.4 | 4.1 | 2.0 | 4.6 | 1.4 | 3.4 | 2.7 | 3.6 | 2.3 | 3.9 | 2.0 | 4.4 | 1.4 |
| 180 | 24 | 3.8 | 3.3 | 4.1 | 2.9 | 4.4 | 2.5 | 4.9 | 1.9 | 3.7 | 3.3 | 4.0 | 2.9 | 4.3 | 2.5 | 4.8 | 1.9 | 3.6 | 3.2 | 3.9 | 2.8 | 4.2 | 2.5 | 4.7 | 1.9 | 3.5 | 3.2 | 3.8 | 2.8 | 4.1 | 2.4 | 4.6 | 1.8 | 3.4 | 3.1 | 3.6 | 2.7 | 3.9 | 2.3 | 4.4 | 1.8 |
| 180 | 26 | 3.8 | 3.7 | 4.1 | 3.3 | 4.4 | 2.9 | 4.9 | 2.3 | 3.7 | 3.6 | 4.0 | 3.3 | 4.3 | 2.9 | 4.8 | 2.3 | 3.6 | 3.6 | 3.9 | 3.2 | 4.2 | 2.9 | 4.7 | 2.3 | 3.7 | 3.7 | 3.8 | 3.2 | 4.1 | 2.8 | 4.6 | 2.2 | 3.6 | 3.6 | 3.6 | 3.1 | 3.9 | 2.7 | 4.4 | 2.1 |
| 180 | 28 | 4.1 | 4.1 | 4.1 | 3.7 | 4.4 | 3.3 | 4.9 | 2.7 | 4.0 | 4.0 | 4.0 | 3.7 | 4.3 | 3.3 | 4.8 | 2.7 | 4.0 | 4.0 | 3.9 | 3.6 | 4.2 | 3.2 | 4.7 | 2.7 | 3.8 | 3.8 | 3.8 | 3.6 | 4.1 | 3.2 | 4.6 | 2.6 | 3.7 | 3.7 | 3.6 | 3.5 | 3.9 | 3.1 | 4.4 | 2.5 |
| 220 | 20 | 4.0 | 2.8 | 4.3 | 2.3 | 4.6 | 1.9 | - | - | 3.9 | 2.7 | 4.2 | 2.3 | 4.5 | 1.8 | - | - | 3.8 | 2.7 | 4.1 | 2.2 | 4.5 | 1.8 | - | - | 3.7 | 2.6 | 4.0 | 2.2 | 4.3 | 1.7 | - | - | 3.5 | 2.6 | 3.8 | 2.1 | 4.1 | 1.7 | - | - |
| 220 | 22 | 4.0 | 3.2 | 4.3 | 2.8 | 4.6 | 2.3 | 5.2 | 1.6 | 3.9 | 3.2 | 4.2 | 2.7 | 4.5 | 2.3 | 5.1 | 1.6 | 3.8 | 3.1 | 4.1 | 2.7 | 4.5 | 2.2 | 5.0 | 1.5 | 3.7 | 3.1 | 4.0 | 2.6 | 4.3 | 2.2 | 4.8 | 1.5 | 3.5 | 3.0 | 3.8 | 2.6 | 4.1 | 2.1 | 4.6 | 1.4 |
| 220 | 24 | 4.0 | 3.7 | 4.3 | 3.2 | 4.6 | 2.8 | 5.2 | 2.1 | 3.9 | 3.6 | 4.2 | 3.2 | 4.5 | 2.7 | 5.1 | 2.0 | 3.8 | 3.6 | 4.1 | 3.2 | 4.5 | 2.7 | 5.0 | 2.0 | 3.7 | 3.5 | 4.0 | 3.1 | 4.3 | 2.6 | 4.8 | 1.9 | 3.5 | 3.5 | 3.8 | 3.0 | 4.1 | 2.6 | 4.6 | 1.9 |
| 220 | 26 | 4.2 | 4.2 | 4.3 | 3.7 | 4.6 | 3.2 | 5.2 | 2.5 | 4.1 | 4.1 | 4.2 | 3.6 | 4.5 | 3.2 | 5.1 | 2.5 | 4.0 | 4.0 | 4.1 | 3.6 | 4.5 | 3.2 | 5.0 | 2.5 | 3.9 | 3.9 | 4.0 | 3.6 | 4.3 | 3.1 | 4.8 | 2.4 | 3.8 | 3.8 | 3.8 | 3.5 | 4.1 | 3.0 | 4.6 | 2.3 |
| 220 | 28 | 4.4 | 4.4 | 4.3 | 4.1 | 4.6 | 3.7 | 5.2 | 3.0 | 4.3 | 4.3 | 4.2 | 4.1 | 4.5 | 3.6 | 5.1 | 2.9 | 4.2 | 4.2 | 4.1 | 4.1 | 4.5 | 3.6 | 5.0 | 2.9 | 4.1 | 4.1 | 4.1 | 4.1 | 4.3 | 3.5 | 4.8 | 2.9 | 3.9 | 3.9 | 4.0 | 4.0 | 4.1 | 3.5 | 4.6 | 2.8 |
| 260 | 20 | 4.1 | 3.0 | 4.5 | 2.5 | 4.8 | 1.9 | - | - | 4.1 | 2.9 | 4.4 | 2.4 | 4.7 | 1.9 | - | - | 4.0 | 2.9 | 4.3 | 2.4 | 4.6 | 1.9 | - | - | 3.8 | 2.8 | 4.1 | 2.3 | 4.5 | 1.8 | - | - | 3.7 | 2.8 | 4.0 | 2.3 | 4.3 | 1.7 | - | - |
| 260 | 22 | 4.1 | 3.5 | 4.5 | 3.0 | 4.8 | 2.5 | 5.4 | 1.7 | 4.1 | 3.5 | 4.4 | 3.0 | 4.7 | 2.4 | 5.3 | 1.6 | 4.0 | 3.4 | 4.3 | 2.9 | 4.6 | 2.4 | 5.2 | 1.6 | 3.8 | 3.4 | 4.1 | 2.9 | 4.5 | 2.3 | 5.0 | 1.5 | 3.7 | 3.3 | 4.0 | 2.8 | 4.3 | 2.2 | 4.8 | 1.4 |
| 260 | 24 | 4.1 | 4.0 | 4.5 | 3.5 | 4.8 | 3.0 | 5.4 | 2.2 | 4.1 | 4.0 | 4.4 | 3.5 | 4.7 | 3.0 | 5.3 | 2.1 | 4.0 | 4.0 | 4.3 | 3.4 | 4.6 | 2.9 | 5.2 | 2.1 | 3.9 | 3.9 | 4.1 | 3.4 | 4.5 | 2.8 | 5.0 | 2.0 | 3.8 | 3.8 | 4.0 | 3.3 | 4.3 | 2.8 | 4.8 | 2.0 |
| 260 | 26 | 4.4 | 4.4 | 4.5 | 4.0 | 4.8 | 3.5 | 5.4 | 2.7 | 4.3 | 4.3 | 4.4 | 4.0 | 4.7 | 3.5 | 5.3 | 2.7 | 4.2 | 4.2 | 4.3 | 4.0 | 4.6 | 3.4 | 5.2 | 2.6 | 4.1 | 4.1 | 4.1 | 3.9 | 4.5 | 3.4 | 5.0 | 2.6 | 4.0 | 4.0 | 4.0 | 3.8 | 4.3 | 3.3 | 4.8 | 2.5 |
| 260 | 28 | 4.6 | 4.6 | 4.6 | 4.6 | 4.8 | 4.0 | 5.4 | 3.2 | 4.5 | 4.5 | 4.5 | 4.5 | 4.7 | 4.0 | 5.3 | 3.2 | 4.4 | 4.4 | 4.4 | 4.4 | 4.6 | 4.0 | 5.2 | 3.2 | 4.3 | 4.3 | 4.3 | 4.3 | 4.5 | 3.9 | 5.0 | 3.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.3 | 3.8 | 4.8 | 3.0 |
| 300 | 20 | 4.3 | 3.2 | 4.6 | 2.6 | 5.0 | 2.0 | - | - | 4.2 | 3.2 | 4.5 | 2.6 | 4.9 | 2.0 | - | - | 4.1 | 3.1 | 4.4 | 2.5 | 4.8 | 1.9 | - | - | 3.9 | 3.0 | 4.3 | 2.5 | 4.6 | 1.9 | - | - | 3.8 | 3.0 | 4.1 | 2.4 | 4.4 | 1.8 | - | - |
| 300 | 22 | 4.3 | 3.8 | 4.6 | 3.2 | 5.0 | 2.6 | 5.6 | 1.7 | 4.2 | 3.7 | 4.5 | 3.2 | 4.9 | 2.6 | 5.4 | 1.6 | 4.1 | 3.7 | 4.4 | 3.1 | 4.8 | 2.5 | 5.3 | 1.6 | 3.9 | 3.6 | 4.3 | 3.0 | 4.6 | 2.4 | 5.1 | 1.5 | 3.8 | 3.6 | 4.1 | 3.0 | 4.4 | 2.4 | 4.9 | 1.5 |
| 300 | 24 | 4.4 | 4.4 | 4.6 | 3.8 | 5.0 | 3.2 | 5.6 | 2.3 | 4.3 | 4.3 | 4.5 | 3.7 | 4.9 | 3.2 | 5.4 | 2.2 | 4.2 | 4.2 | 4.4 | 3.7 | 4.8 | 3.1 | 5.3 | 2.2 | 4.1 | 4.1 | 4.3 | 3.6 | 4.6 | 3.0 | 5.1 | 2.1 | 3.9 | 3.9 | 4.1 | 3.6 | 4.4 | 3.0 | 4.9 | 2.1 |
| 300 | 26 | 4.6 | 4.6 | 4.6 | 4.4 | 5.0 | 3.8 | 5.6 | 2.9 | 4.5 | 4.5 | 4.5 | 4.3 | 4.9 | 3.7 | 5.4 | 2.8 | 4.4 | 4.4 | 4.4 | 4.3 | 4.8 | 3.7 | 5.3 | 2.8 | 4.3 | 4.3 | 4.3 | 4.2 | 4.6 | 3.6 | 5.1 | 2.7 | 4.1 | 4.1 | 4.1 | 4.1 | 4.4 | 3.6 | 4.9 | 2.7 |
| 300 | 28 | 4.6 | 4.6 | 4.8 | 4.8 | 5.0 | 4.4 | 5.6 | 3.5 | 4.7 | 4.7 | 4.7 | 4.7 | 4.9 | 4.3 | 5.4 | 3.4 | 4.6 | 4.6 | 4.6 | 4.6 | 4.8 | 4.3 | 5.3 | 3.4 | 4.5 | 4.5 | 4.5 | 4.5 | 4.6 | 4.2 | 5.1 | 3.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.4 | 4.2 | 4.9 | 3.3 |

## HEATING CAPACITIES

G = Gross Heating Capacity kW
N = Net Heating Capacity kW allowing for average defrost.
LINE LOSSES: - Capacities are for close coupled systems.
Interconnecting pipework pressure drops will reduce capacity.

| INDOOR COIL E.A.T. D.B.°C | OUTDOOR COIL E.A.T. D.B. °C | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -4 | | -2 | | 0 | | 2 | | 4 | | 6 | | 8 | | 10 | |
| | G | N | G | N | G | N | G | N | G | N | G | N | G | N | G | N |
| 15 | 3.2 | 2.9 | 3.5 | 3.1 | 3.7 | 3.3 | 3.9 | 3.4 | 4.2 | 3.5 | 4.5 | 4.1 | 4.7 | 4.7 | 4.9 | 4.9 |
| 20 | 3.1 | 2.8 | 3.4 | 3.0 | 3.6 | 3.2 | 3.8 | 3.3 | 4.0 | 3.4 | 4.3 | 4.0 | 4.6 | 4.6 | 4.8 | 4.8 |
| 25 | 3.0 | 2.7 | 3.3 | 2.9 | 3.5 | 3.1 | 3.7 | 3.2 | 3.9 | 3.3 | 4.2 | 3.8 | 4.5 | 4.5 | 4.6 | 4.6 |

| VARIATIONS IN HEATING CAPACITY WITH INDOOR AIR FLOW | | | | | | |
|---|---|---|---|---|---|---|
| HSER 150 based on 220 l/s | % Rated Air Flow | 80 % | 90 % | 100 % | 110 % | 120 % |
| | Capacity Multiplier | 0.986 | 0.993 | 1.0 | 1.006 | 1.01 |

## AIR HANDLING PERFORMANCE