

TECHNICAL DATA Brine Operation

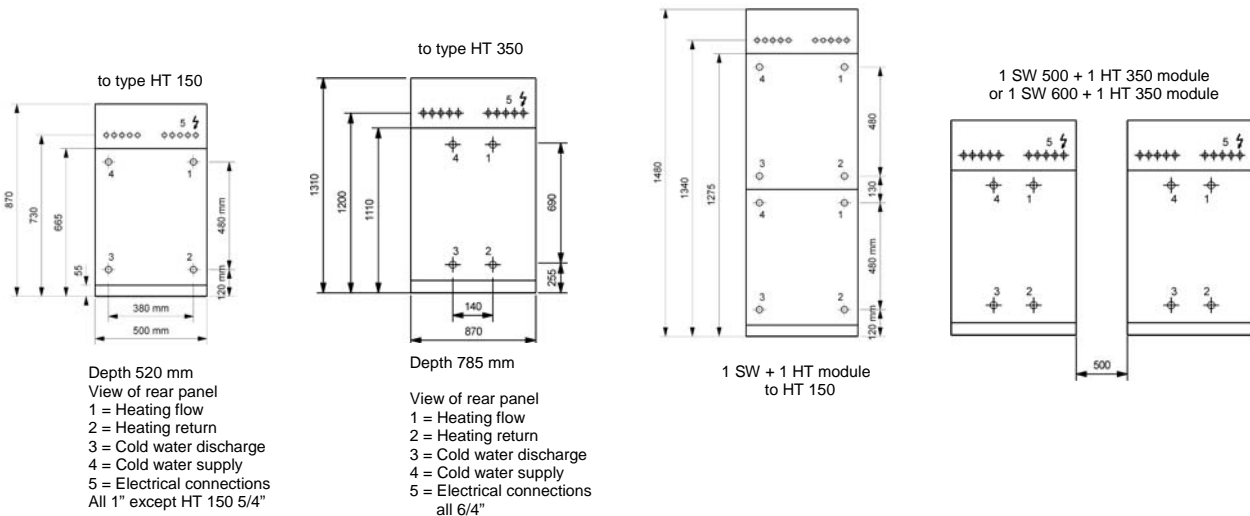
WEIDER – Heat Pumps



| HEAT PUMP | TYPE | HT60 | HT90 | HT140 | HT330 | HT350 |
|-----------|------|------|------|-------|-------|-------|
|-----------|------|------|------|-------|-------|-------|

BRINE OPERATION with a feed temperature of 0 °C and heating flow temperature of 35, 55 and 65 °C

| | °C | 35 | 55 | 65 | 35 | 55 | 65 | 35 | 55 | 65 | 35 | 55 | 65 | 35 | 55 | 65 |
|--|------|-------------|-----|-----|------------|-----|-----|------------|------|-----|------------|-----|-----|------------|-----|-----|
| Heating output | kW | 5,3 | 4,8 | 4,7 | 7,8 | 7,2 | 6,9 | 10,9 | 10,3 | 9,9 | 23 | 21 | 20 | 28 | 25 | 24 |
| Electric power consumption | kW | 1,1 | 1,6 | 1,9 | 1,7 | 2,3 | 2,7 | 2,3 | 3,3 | 3,9 | 5 | 6,8 | 8,1 | 6,1 | 8,1 | 9,2 |
| Coefficient of performance (ΔT 10 K) | | 4,7 | 3,1 | 2,5 | 4,7 | 3,1 | 2,5 | 4,7 | 3,1 | 2,5 | 4,6 | 3,1 | 2,5 | 4,6 | 3,1 | 2,6 |
| Coefficient of performance (ΔT 5 K) | | 4,2 | 2,8 | 2,2 | 4,2 | 2,8 | 2,2 | 4,2 | 2,8 | 2,2 | 4,1 | 2,7 | 2,2 | 4,1 | 2,7 | 2,3 |
| Volume flow rate – brine m³/h | | 1,2 | | | 1,7 | | | 2,5 | | | 5 | | | 6,3 | | |
| Pressure drop – evaporator | mbar | 100 | | | 110 | | | 100 | | | 150 | | | 200 | | |
| Temperature range – brine C | | -6 to +20 | | | | | | | | | | | | | | |
| Volume flow rate - heating water | m³/h | 0,5 to 0,9 | | | 0,7 to 1,3 | | | 0,9 to 1,9 | | | 2,0 to 3,9 | | | 2,4 to 4,8 | | |
| Pressure drop - heating water | mbar | 10 to 40 | | | 20 to 50 | | | 20 to 50 | | | 10 to 60 | | | 40 to 90 | | |
| Temperature difference Δt | °C | 5 to 10 | | | | | | | | | | | | | | |
| Feed temperature | °C | 25 to 68 | | | | | | | | | | | | | | |
| Mains connection | V | 2 x 230/400 | | | | | | | | | | | | | | |
| Operating current max. | A | 6,5 | | | 8 | | | 12 | | | 25 | | | 32 | | |
| Electric power consumption max. | kW | 2,6 | | | 3,4 | | | 4,9 | | | 11,4 | | | 14 | | |
| Starting current (lasts for 2 periods) | A | 40 | | | 51 | | | 70 | | | 167 | | | 198 | | |
| Pre-fuse, external | A | 3x16 | | | 3x16 | | | 3x16 | | | 3x13/3x32 | | | 3x13/3x32 | | |
| Approx. weight (complete) | kg | 102 | | | 110 | | | 116 | | | 400 | | | 450 | | |
| Refrigerant R407C | kg | 2,1 | | | 2,1 | | | 2,1 | | | 7,0 | | | 7,0 | | |



Heat exchanger: material no.1.4401, V4A steel made of chromium-nickel-molybdenum
 Type designation: egw for groundwater and eso for brine
 Groundwater heat pumps with nickel brazed heat exchanger
 HT 330 and HT 350 only available with copper brazed heat exchanger – in case of
 groundwater operation a secondary heat loop is necessary
 Electrical protection system: IP41
 Subject to alterations, Date 12/2010 Version 4.4 WT08

TECHNICAL DATA Groundwater Operation

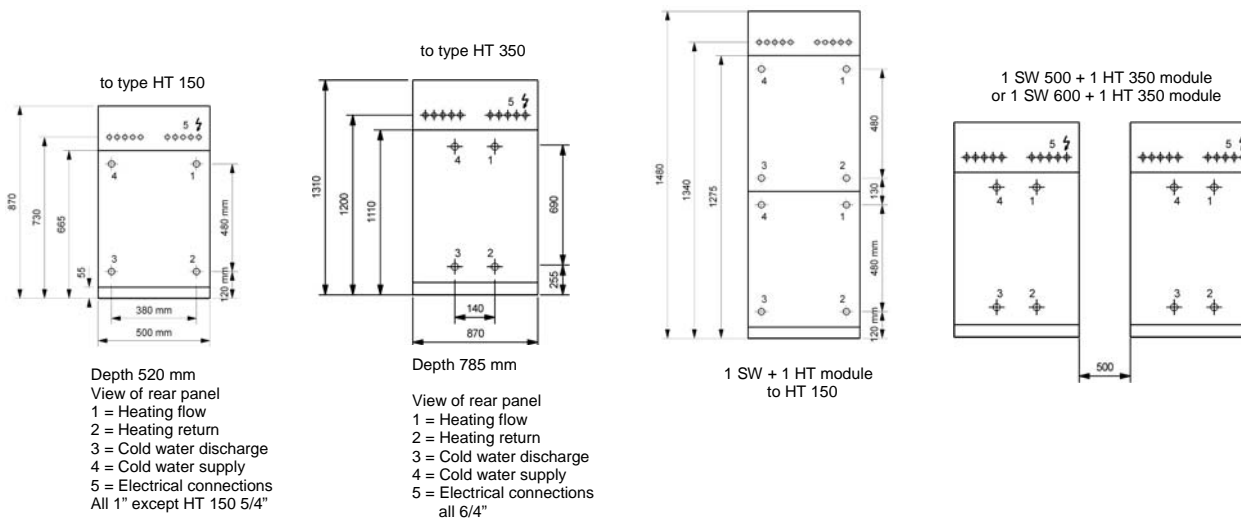
WEIDER – Heat Pumps



| HEAT PUMP | TYPE | HT80 | HT100 | HT150 | HT330 | HT350 |
|-----------|------|------|-------|-------|-------|-------|
|-----------|------|------|-------|-------|-------|-------|

GROUNDWATER OPERATION with a feed temperature of 10 °C and heating flow temperature of 35, 55 and 65 °C

| | °C | 35 | 55 | 65 | 35 | 55 | 65 | 35 | 55 | 65 | 35 | 55 | 65 | 35 | 55 | 65 |
|--|------|-------------|-----|-----|------------|-----|-----|------------|------|------|------------|------|------|------------|-----|------|
| Heating output | kW | 8,5 | 7,9 | 7,6 | 10,3 | 9,7 | 9,2 | 15,4 | 14,4 | 14,1 | 33 | 29,2 | 27,4 | 40 | 35 | 34 |
| Electric power consumption | kW | 1,3 | 2,1 | 2,6 | 1,7 | 2,6 | 3,2 | 2,5 | 3,1 | 4,6 | 5,6 | 7,8 | 9,1 | 6,8 | 9,7 | 10,8 |
| Coefficient of performance (ΔT 10 K) | | 6,2 | 3,7 | 2,8 | 6,2 | 3,7 | 2,9 | 6,1 | 3,6 | 2,9 | 5,9 | 3,6 | 3,0 | 5,9 | 3,6 | 3,0 |
| Coefficient of performance (ΔT 5 K) | | 5,7 | 3,4 | 2,5 | 5,7 | 3,4 | 2,5 | 5,6 | 3,3 | 2,5 | 5,5 | 3,3 | 2,5 | 5,5 | 3,3 | 2,5 |
| Volume flow rate – groundwater | m³/h | 1,8 | | | 2,4 | | | 3,3 | | | 7,5 | | | 10 | | |
| Pressure drop – evaporator | mbar | 100 | | | 110 | | | 150 | | | 150 | | | 150 | | |
| Temperature range – groundwater | °C | +7 to +20 | | | | | | | | | | | | | | |
| Volume flow rate - heating water | m³/h | 0,7 to 1,5 | | | 0,9 to 2,6 | | | 2,8 to 5,7 | | | 2,8 to 5,7 | | | 3,4 to 6,9 | | |
| Pressure drop - heating water | mbar | 10 to 40 | | | 10 to 40 | | | 40 to 90 | | | 30 to 120 | | | 30 to 120 | | |
| Temperature difference Δt | °C | 5 to 10 | | | | | | | | | | | | | | |
| Feed temperature | °C | 25 to 70 | | | | | | | | | | | | | | |
| Mains connection | V | 2 x 230/400 | | | | | | | | | | | | | | |
| Operating current max. | A | 6,5 | | | 10 | | | 11 | | | 25 | | | 32 | | |
| Electric power consumption max. | kW | 3,5 | | | 4,5 | | | 5,9 | | | 11,4 | | | 14 | | |
| Starting current (lasts for 2 periods) | A | 28 | | | 34 | | | 50 | | | 167 | | | 198 | | |
| Pre-fuse, external | A | 3x16 | | | 3x16 | | | 3x16 | | | 3x13/3x32 | | | 3x13/3x32 | | |
| Approx. weight (complete) | kg | 102 | | | 110 | | | 116 | | | 400 | | | 450 | | |
| Refrigerant R407C | kg | 2,1 | | | 2,1 | | | 2,1 | | | 7,0 | | | 7,0 | | |



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