Technical Data   AQ90IP

Performances*	rps	60	60	60	60	120
		B0W35	**B0W55**	**W10W35**	**W10W55**	**B0W35**
Heating Capacity	kW	32,9	29,3	42,5	38,5	**70,44**
Cooling Capacity	kW	26,2	20,0	35,9	28,6	**53,10**
Power In	kW	7,2	9,7	7,0	10,3	**18,14**
COP	-	4,59	3,02	6,04	3,73	**3,88**
Operating Current	A	14,0	18,1	13,7	19,0	**31,6**

Compressor

Type	2x	BLDC Inverter	
Speed		15-120	rps
Oil	HAF68D1U	2,0	l
LRC		-	A
Max. Op. Current		24	A

Evaporator

Type	PHE	
Material	AISI316	
Water Flow (W/W)	4,29	kg/s
Minimum Flow	3,22	kg/s
Brine Flow (B/W)	2,18	kg/s
Minimum Flow	1,25	kg/s
Temp. Difference	3	K
Internal Volume	5,1	l
Max. Water Overp.	250	kPa
Max. Ref. Overp.	3,1	MPa
Unit Pressure Drop	2,5	m
Pump Motor	-	W

Condenser

Type	PHE	
Material	AISI316	
Water Flow	1,58	kg/s
Minimum Flow	1,05	kg/s
Temp. Difference	5,0	K
Internal Volume	4,1	l
Max. Water Overp.	250	kPa
Max. Ref. Overp.	3,1	MPa
Unit Pressure Drop	1,5	m
Pump Motor	-	W

Refrigerant Circuit

Refrigerant	R290	
Charge	2x0,95	kg
Minimum Airflow**	35	m³/h

Aux. Heater (Option)

Heating Capacity	-	kW

Controls

Controller	pCO5
EEV	Yes
Water Probe	Yes
SHW Probe/Output	Yes
Mixing Probe/Output	Yes, 2x
Outdoor Probe	Yes
Dynamic Set Point	Yes
Refrigerant Probe	2xPT

Power Supply

Voltage	2x (3x400)	V
Frequence	50	Hz
Max. Current (AH)	3x32+3x25	A

Connections and Dimensions

Hot Water, Brine	2 1/2"	OD
He x Wi x De	120x102x72	cm
Weight	300	kg

Limits

W/B Overpressure	0,25	MPa
Ref. Overpressure	3,1	MPa
Brine Min/Max	-5/+20	°C
Water Min/Max	20/75	°C

*B0W35, acc. to EN14511, at 60rps
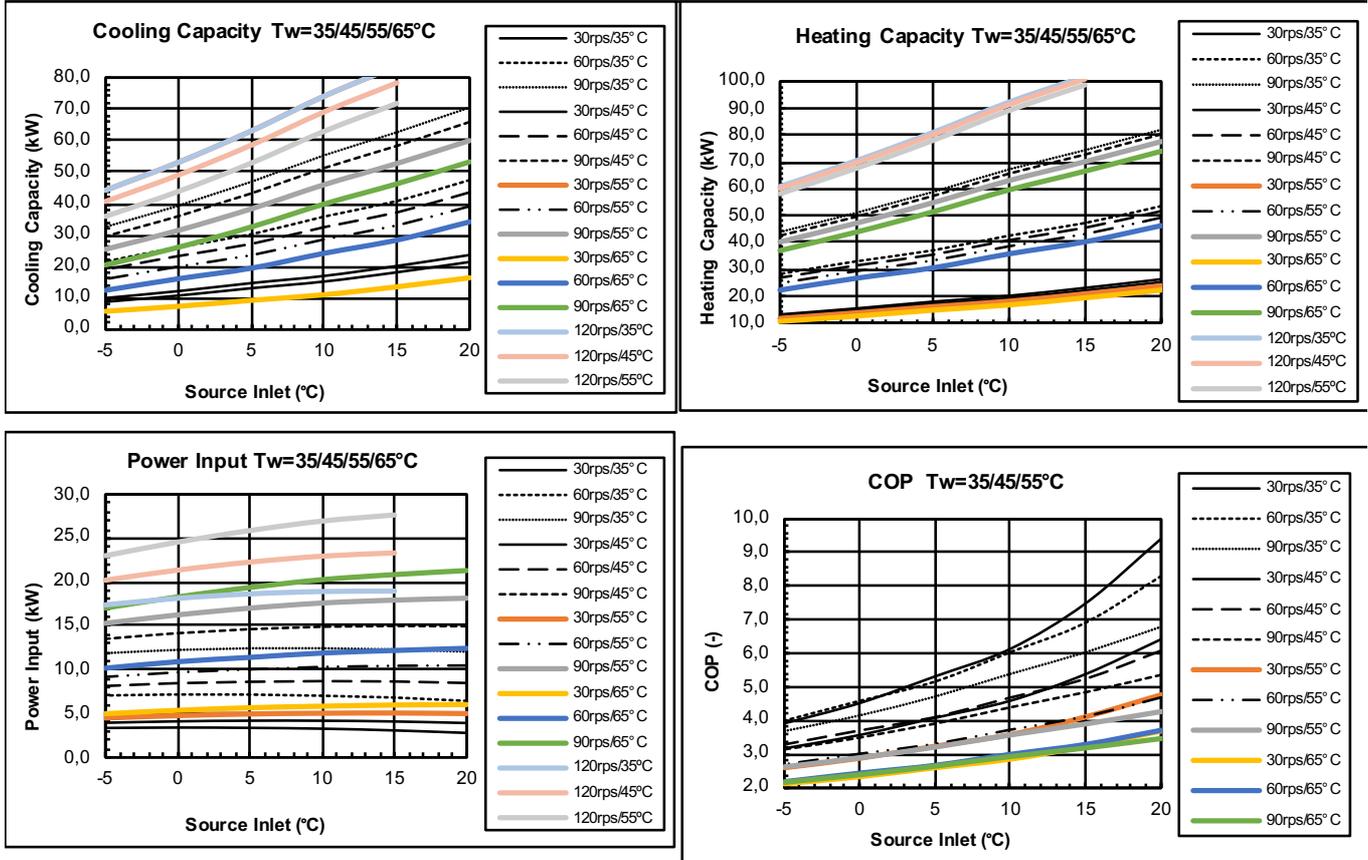"B0" Brine Inlet 0°C
"W35" Water Outlet 35°C
Performance Tolerance EN14511
** according to IEC 60335-2-40:2022

![MasterTherm logo]

Technical Data   AQ90IP

Performance *

Cooling Capacity Tw=35/45/55/65°C

Heating Capacity Tw=35/45/55/65°C

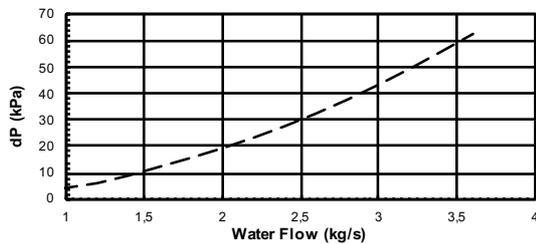
Power Input Tw=35/45/55/65°C

COP Tw=35/45/55°C
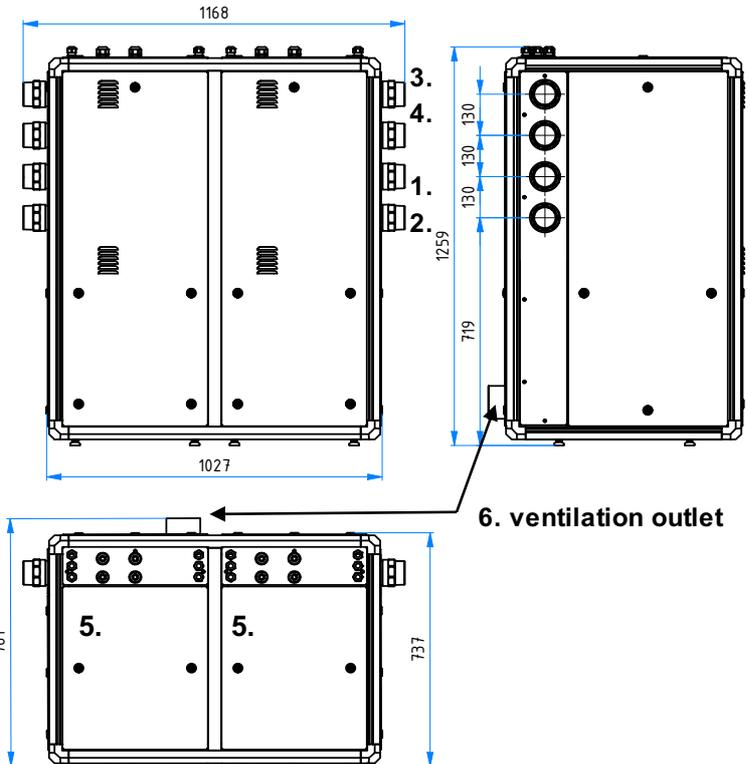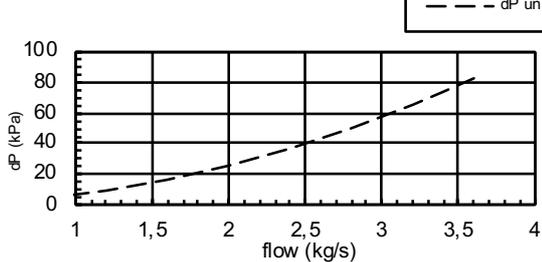
Dimensions, Connections

1. Water / Brine Inlet   2 1/2" OD
2. Water / Brine Outlet   2 1/2" OD
3. Hot Water Outlet   2 1/2" OD
4. Hot Water Inlet   2 1/2" OD
5. 2xPG16, 4xPG13.5

Unit Pressure Drop Condenser — dP unit

Unit Pressure Drop Evaporator — dP unit

6. ventilation outlet