

Subtype DE DIETRICH Alezio 4

Certificate Holder	BDR Thermea FR (DE DIETRICH)
Address	57 rue de la Gare
ZIP	67580
City	Mertzwiller
Country	FR
Certification Body	Kiwa Nederland B.V.
Subtype title	DE DIETRICH Alezio 4
Registration number	21HK0023 / 007-DM0123
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.2 kg
Certification Date	03.12.2021
Testing basis	European KEYMARK Scheme for Heat Pumps (v9)

Model AWHPR 4 MR + MIV-S 4-8/EM R32

Model name	AWHPR 4 MR + MIV-S 4-8/EM R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	135 %
Prated	5.00 kW	5.00 kW
SCOP	4.50	3.44
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.18	2.15
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	5.00 kW	4.50 kW

COP $T_j = T_{biv}$	3.00	2.15
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	5.00 kW	4.30 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.00	1.83
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.990	0.990
WTOL	60 °C	60 °C
P _{off}	12 W	12 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Q _{he}	2297 kWh	3000 kWh

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	234 %	163 %
Prated	5.00 kW	5.00 kW
SCOP	5.94	4.16
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^\circ\text{C}$	5.00 kW	5.00 kW
COP $T_j = +2^\circ\text{C}$	3.51	2.42
$C_{dh} T_j = +2^\circ\text{C}$	0.99	0.99
$P_{dh} T_j = +7^\circ\text{C}$	3.30 kW	3.30 kW
COP $T_j = +7^\circ\text{C}$	5.65	3.67
$C_{dh} T_j = +7^\circ\text{C}$	0.98	0.98
$P_{dh} T_j = 12^\circ\text{C}$	2.10 kW	1.90 kW
COP $T_j = 12^\circ\text{C}$	7.94	5.67
$C_{dh} T_j = +12^\circ\text{C}$	0.95	0.96
$P_{dh} T_j = T_{biv}$	5.00 kW	5.00 kW
COP $T_j = T_{biv}$	3.51	2.42
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	5.00 kW	5.00 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.51	2.42
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.99	0.99
WTOL	60 °C	60 °C
P _{off}	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: PSUP	0 kW	0 kW

Annual energy consumption Q_{he}	1125 kWh	1607 kWh
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Model AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO

Model name	AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	M
Efficiency η_{DHW}	118 %
COP	2.77
Heating up time	1:35 h:min
Standby power input	24.1 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	250 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	169 %
COP	4.00
Heating up time	1:35 h:min
Standby power input	28.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

Model AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO

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Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	133 %
COP	3.19
Heating up time	1:35 h:min
Standby power input	26.6 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	250 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	169 %
COP	4.00
Heating up time	1:35 h:min
Standby power input	28.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

Model AWHPR 4 MR + MIV-S 4-8/H R32

Model name	AWHPR 4 MR + MIV-S 4-8/H R32
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Any additional heat sources	n/a

General data

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Off-peak product	No

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COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.75 kW	1.74 kW
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Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	5.00 kW	4.50 kW

COP Tj = Tbiv	3.00	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	12 W	12 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2297 kWh	3000 kWh

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Pdh Tj = +2°C	5.00 kW	5.00 kW
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Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.30 kW	3.30 kW
COP Tj = +7°C	5.65	3.67
Cdh Tj = +7 °C	0.98	0.98
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Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.51	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.51	2.42
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: PSUP	0 kW	0 kW

Annual energy consumption Q_{he}

1125 kWh

1607 kWh
