Login

Summary of	DE DIETRICH STRATEO 4.5 MR/E R32	Reg. No.	21HK0001/01
Certificate Holder			
Name	BDR Thermea FR (DE DIETRICH)		
Address	57 rue de la Gare	Zip	67580
City	Mertzwiller	Country	France
Certification Body	Kiwa Nederland B.V.		
Subtype title	DE DIETRICH STRATEO 4.5 MR/E R32		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.2 kg		
Certification Date	30.05.2022		
Testing basis	European KEYMARK Scheme for Heat Pumps (v9)		

Model: AWHPR 4 MR + MIC-1C V190 R32

Configure model	
Model name	AWHPR 4 MR + MIC-1C V190 R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.60 kW	4.10 kW
El input	0.88 kW	1.55 kW
COP	5.20	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.25 kW	1.12 kW
Cooling capacity	4.50	6.00
EER	3.60	5.35

EN 14825		
	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.50 kW	6.00 kW
SEER	4.64	8.02
Pdc Tj = 35°C	4.50 kW	6.00 kW
EER Tj = 35°C	3.60	5.35
Pdc Tj = 30°C	3.32 kW	4.50 kW
EER Tj = 30°C	3.97	7.09
Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	582 kWh	449 kWh

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	176 %	134 %
Prated	5.00 kW	5.00 kW
SCOP	4.48	3.43
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	0.99	0.99
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.96	0.96

Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.95	0.95
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	0.99	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	0.7 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	234 %	163 %
Prated	5.00 kW	5.00 kW

SCOP	5.94	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.51	2.42
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
Pdh Tj = 12°C	2.10 kW	1.90 kW
COP Tj = 12°C	7.94	5.67
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 Qhe	1125 kWh	1607 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	M
Efficiency ηDHW	131 %
COP	3.00
Heating up time	1:35 h:min
Standby power input	29.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

Warmer Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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 + MIC-2C V190 R32

Configure model	
Model name	AWHPR 4 MR + MIC-2C V190 R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.60 kW	4.10 kW
El input	0.96 kW	1.63 kW
COP	4.82	2.52

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	1.33 kW	1.20 kW
Cooling capacity	4.50	6.00
EER	3.40	5.01

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.50 kW	6.00 kW
SEER	4.04	6.72
Pdc Tj = 35°C	4.50 kW	6.00 kW
EER Tj = 35°C	3.40	5.01
Pdc Tj = 30°C	3.32 kW	4.50 kW
EER Tj = 30°C	3.64	6.34
Cdc		
Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	4.47	7.38
Cdc		
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	5.08	9.25
Cdc		
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	669 kWh	536 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	154 %	120 %
Prated	5.00 kW	5.00 kW
SCOP	3.93	3.09
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.02	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	3.95	3.10
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	4.37	3.73
Cdh Tj = +7 °C	0.960	0.960

Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	7.06	5.78
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	2.87	2.08
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	2.87	1.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2630 kWh	3348 kWh

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	198 %	143 %

Prated	5.00 kW	5.00 kW
SCOP	5.03	3.66
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.33	2.34
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.30 kW	3.30 kW
COP Tj = +7°C	5.01	3.39
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.10 kW	1.90 kW
COP Tj = 12°C	6.19	4.63
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.33	2.34
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	3.33	2.34
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1328 kWh	1825 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	M
Efficiency ηDHW	131 %
COP	3.00
Heating up time	1:35 h:min
Standby power input	29.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

Warmer Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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 + MIC-1C V190 R32

Configure model	
Model name	AWHPR 4 MR + MIC-1C V190 R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.60 kW	4.10 kW
El input	0.88 kW	1.55 kW
COP	5.20	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.25 kW	1.12 kW
Cooling capacity	4.50	6.00
EER	3.60	5.35

EN 14825		
	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.50 kW	6.00 kW
SEER	4.64	8.02
Pdc Tj = 35°C	4.50 kW	6.00 kW
EER Tj = 35°C	3.60	5.35
Pdc Tj = 30°C	3.32 kW	4.50 kW
EER Tj = 30°C	3.97	7.09
Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	582 kWh	449 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	176 %	134 %
Prated	5.00 kW	5.00 kW
SCOP	4.48	3.43
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	0.99	0.99
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.96	0.96

Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.95	0.95
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	0.99	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	0.7 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	234 %	163 %
Prated	5.00 kW	5.00 kW

SCOP	5.94	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.51	2.42
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
Pdh Tj = 12°C	2.10 kW	1.90 kW
COP Tj = 12°C	7.94	5.67
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 Qhe	1125 kWh	1607 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	139 %
COP	3.30
Heating up time	1:35 h:min
Standby power input	31.8 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

Warmer Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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 + MIC-2C V190 R32

Configure model	
Model name	AWHPR 4 MR + MIC-2C V190 R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.60 kW	4.10 kW
El input	0.96 kW	1.63 kW
COP	4.82	2.52

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	1.33 kW	1.20 kW
Cooling capacity	4.50	6.00
EER	3.40	5.01

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.50 kW	6.00 kW
SEER	4.04	6.72
Pdc Tj = 35°C	4.50 kW	6.00 kW
EER Tj = 35°C	3.40	5.01
Pdc Tj = 30°C	3.32 kW	4.50 kW
EER Tj = 30°C	3.64	6.34
Cdc		
Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	4.47	7.38
Cdc		
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	5.08	9.25
Cdc		
Poff	15 W	15 W
PTO	15 W	15 W
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Annual energy consumption Qce	669 kWh	536 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	154 %	120 %
Prated	5.00 kW	5.00 kW
SCOP	3.93	3.09
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.02	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	3.95	3.10
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	4.37	3.73
Cdh Tj = +7 °C	0.960	0.960

Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	7.06	5.78
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	2.87	2.08
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	2.87	1.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2630 kWh	3348 kWh

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	198 %	143 %

Prated	5.00 kW	5.00 kW
SCOP	5.03	3.66
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.33	2.34
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.30 kW	3.30 kW
COP Tj = +7°C	5.01	3.39
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.10 kW	1.90 kW
COP Tj = 12°C	6.19	4.63
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.33	2.34
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	3.33	2.34
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1328 kWh	1825 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	139 %
COP	3.30
Heating up time	1:35 h:min
Standby power input	31.8 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

Warmer Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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