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Summary of	DE DIETRICH STRATEO 4.5 MR/E R32	Reg. No.	21HK0001/01		
Certificate Holder	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.	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	
СОР	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	
РТО	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	

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This information was general	<u>, </u>	,
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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: PSUP	0 kW	0.7 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

EN 14825		
	Low temperature	Medium temperature
η_{S}	234 %	163 %
Prated	5.00 kW	5.00 kW





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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
$COPTj = +2^{\circ}C$	3.51	2.42
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	3.30 kW	3.30 kW
$COP Tj = +7^{\circ}C$	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
РТО	15 W	15 W
PSB	15 W	15 W



PCK	o w	o 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	М	
Efficiency ηDHW	131 %	
СОР	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	



EN 16147		
Declared load profile	L	
Efficiency ηDHW	169 %	
СОР	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	



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	

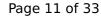
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.60 kW	4.10 kW
El input	0.96 kW	1.63 kW
СОР	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

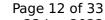
Cooling





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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Annual energy consumption Qce	669 kWh	536 kWh

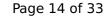
Average Climate



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 = $+7^{\circ}$ C	1.75 kW	1.74 kW
COP Tj = +7°C	4.37	3.73
Cdh Tj = +7 °C	0.960	0.960

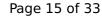
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2.70 kW	2.10 kW
7.06	5.78
0.950	0.950
5.00 kW	4.50 kW
2.87	2.08
5.00 kW	4.30 kW
2.87	1.77
0.990	0.990
60 °C	60 °C
15 W	15 W
15 W	15 W
15 W	15 W
0 W	0 W
n/a	n/a
0.00 kW	0.70 kW
2630 kWh	3348 kWh
	7.06 0.950 5.00 kW 2.87 5.00 kW 2.87 0.990 60 °C 15 W 15 W 0 W n/a 0.00 kW

EN 14825		
	Low temperature	Medium temperature
η_{S}	198 %	143 %





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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 = $+7^{\circ}$ C	3.30 kW	3.30 kW		
$COPTj = +7^{\circ}C$	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		
РТО	15 W	15 W		



PSB	15 W	15 W
PCK	o w	o 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 %	
СОР	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 I	



EN 16147	
Declared load profile	L
Efficiency ηDHW	169 %
СОР	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



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		

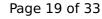
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	4.60 kW	4.10 kW	
El input	0.88 kW	1.55 kW	
СОР	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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	582 kWh	449 kWh

Average Climate

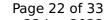




EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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
$COP Tj = +7^{\circ}C$	5.37	4.44
Cdh Tj = +7 °C	0.96	0.96

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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	0.95	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
РТО	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

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





This information was gener	ated by the HP KETMA	RK database on 23 Jun 2022
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
$COPTj = +2^{\circ}C$	3.51	2.42
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	3.30 kW	3.30 kW
$COP Tj = +7^{\circ}C$	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
РТО	15 W	15 W
PSB	15 W	15 W



PCK	o w	o 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 %
СОР	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



EN 16147	
Declared load profile	L
Efficiency ηDHW	169 %
СОР	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



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	

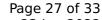
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	4.60 kW	4.10 kW
El input	0.96 kW	1.63 kW
СОР	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

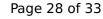
Cooling





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	

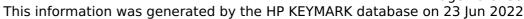
EN 14825





	+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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Annual energy consumption Qce	669 kWh	536 kWh

Average Climate

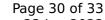




EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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
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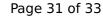
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Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	7.06	5.78
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	2.87	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o 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

EN 14825		
	Low temperature	Medium temperature
η_s	198 %	143 %





This information was generated by the HP KEYMARK database on 23 jun 2022			
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 = $+7^{\circ}$ C	3.30 kW	3.30 kW	
$COPTj = +7^{\circ}C$	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	
РТО	15 W	15 W	



This information was	generated by the HP KE	EYMARK database on	23 Jun 2022

PSB	15 W	15 W
PCK	o w	o 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 %	
СОР	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	



EN 16147		
Declared load profile	L	
Efficiency ηDHW	169 %	
СОР	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	