



# Technical data / scope of delivery

## Unit designation

LWC 60

LWC 80

Performance data			813089-d	813090-c
<b>Heating capacity / COP</b>				
A10/W35	acc.to EN 14511	kW   COP	7,3   4,3	9,1   4,3
A7/W35	acc.to EN 14511	kW   COP	7,0   4,2	8,6   4,2
A7/W45	acc.to EN 14511	kW   COP	6,8   3,5	8,5   3,5
A2/W35	acc.to EN 14511	kW   COP	6,2   3,5	8,0   3,5
A-7/W35	acc.to EN 14511	kW   COP	4,7   2,9	6,1   2,8
A-15/W65	acc.to EN 14511	kW   COP	—	—
<b>Limits of use</b>				
Heating circuit	at nominal flow rate	°C	20 <sup>1</sup> – 52 <sup>2</sup>	20 <sup>1</sup> – 52 <sup>2</sup>
Heat source		°C	-20 – 35	-20 – 35
additional operating points	at nominal flow rate	°C	A>-7 / 60 <sup>2</sup>	A>-7 / 60 <sup>2</sup>
<b>Sound</b>				
Indoor sound pressure level (averaged in the free field at 1m distance around the machine)		dB(A)	47	47
Outdoor sound pressure level (averaged within the free field at 1m distance around the air connections; original air duct, 2x1.5m str)		dB(A)	42	42
Sound power level	Indoor (EN 12102)	dB (A)	55	55
Sound power level	Outdoor (EN 12102)	dB (A)	47	47
<b>Heat source</b>				
Air flow rate at maximum external pressure		m <sup>3</sup> /h	2500	2500
Maximum external pressure		Pa	25	25
<b>Heating circuit</b>				
Flow rate: minimum throughput   <b>nominal throughput A7/W35 EN14511</b>   maximum throughput		l/h	600   <b>1300</b>   1650	850   <b>1700</b>   2150
Free compression Δp   Pressure loss Δp   Flow rate		bar   bar   l/h	0,44   —   900	0,46   —   1200
Buffer tank capacity		l	55	55
max. allowable operating pressure		bar	3,0	3,0
<b>General unit data</b>				
Total weight		kg	290	295
Refrigerant Type   Capacity		...   kg	R407C   2,95	R407C   3,2
Free cross-section, air ducts		mm	570 x 570	570 x 570
<b>Electrics</b>				
Voltage code   all-pole heat pump fusing **)		...   A	3~/PE/400V/50Hz   C10	3~/PE/400V/50Hz   C10
Voltage code   Control voltage fusing **)		...   A	1~/N/PE/230V/50Hz   B10	1~/N/PE/230V/50Hz   B10
Voltage code   Electric heating element fusing **)		...   A	3~/N/PE/400V/50Hz   C10	3~/N/PE/400V/50Hz   C10
Effective power consumption at standard point A7/W35 acc. to EN14511:		kW	1,65	2,0
Current input   cosφ (A7/W35)		A   ...	3,65   0,66	4,1   0,7
Max. machine current within the use limits		A	5,7	7,2
Starting current: direct   with soft starter		A   A	32   19	46   22
Degree of protection		IP	20	20
Output of electric heating element 3   2   1 phase		kW   kW   kW	6   4   2	6   4   2
Heating circuit circulation pump power consumption   Nom. current input		kW   A	0,07   0,52	0,07   0,52
<b>Other unit information</b>				
<b>Included in the scope of supply or integrated</b>				
Heating and heat pump controller		• yes — no	•	•
Circulation pump for heating circuit		• yes — no	•	•
Soft starter		• yes — no	•	•
Overflow valve   Changeover valve: heating - domestic hot water		• yes — no	•   •	•   •
Heating circuit vibration isolators		• yes — no	•	•
Safety valve   Set pressure		• yes — no   bar	•   3,0	•   3,0
Heating circuit expansion vessel: Scope of supply   Volume   Initial pressure		• yes — no   l   bar	•   18   1,5	•   18   1,5

<sup>1</sup>) Heating water return <sup>2</sup>) Heating water flow

\*) depending on component tolerances and flow\*\*) comply with local regulations



## Unit designation

Performance data		LWC 100	LWC 120
		813083-j	813082-j
<b>Heating capacity / COP</b>			
A10/W35	acc.to EN 14511	kW   COP 13,1   4,3	14,6   4,4
A7/W35	acc.to EN 14511	kW   COP 12,2   4,1	13,7   4,2
A7/W45	acc.to EN 14511	kW   COP 11,8   3,3	13,5   3,3
A2/W35	acc.to EN 14511	kW   COP 10,4   3,4	11,9   3,4
A-7/W35	acc.to EN 14511	kW   COP 8,4   2,8	9,5   2,7
A-15/W65	acc.to EN 14511	kW   COP —	—
<b>Limits of use</b>			
Heating circuit	at nominal flow rate	°C 20 <sup>1</sup> – 58 <sup>2</sup> (60 <sup>2</sup> ) <sup>1)</sup>	20 <sup>1</sup> – 58 <sup>2</sup> (60 <sup>2</sup> ) <sup>1)</sup>
Heat source		°C -20 – 35	-20 – 35
additional operating points	at nominal flow rate	°C —	—
<b>Sound</b>			
Indoor sound pressure level (averaged in the free field at 1m distance around the machine)		dB(A) 47	47
Outdoor sound pressure level (averaged within the free field at 1m distance around the air connections; original air duct, 2x1.5m str)		dB(A) 49	49
Sound power level	Indoor (EN 12102)	dB (A) 55	55
Sound power level	Outdoor (EN 12102)	dB (A) 54	54
<b>Heat source</b>			
Air flow rate at maximum external pressure		m <sup>3</sup> /h 3400	3400
Maximum external pressure		Pa 25	25
<b>Heating circuit</b>			
Flow rate: minimum throughput   <b>nominal throughput A7/W35 EN14511</b>   maximum throughput		l/h 1200   2000   2500	1500   <b>2500</b>   3000
Free compression Δp   Pressure loss Δp   Flow rate		bar   bar   l/h 0,47   —   1430	0,43   —   1780
Buffer tank capacity		l 80	80
max. allowable operating pressure		bar 3,0	3,0
<b>General unit data</b>			
Total weight		kg 300	305
Refrigerant Type   Capacity		...   kg R404A   4,1	R404A   4,5
Free cross-section, air ducts		mm 570 x 570	570 x 570
<b>Electrics</b>			
Voltage code   all-pole heat pump fusing **)		...   A 3~/N/PE/400V/50Hz   C16	3~/N/PE/400V/50Hz   C16
Voltage code   Control voltage fusing **)		...   A 1~/N/PE/230V/50Hz   B10	1~/N/PE/230V/50Hz   B10
Voltage code   Electric heating element fusing **)		...   A 3~/N/PE/400V/50Hz   C16	3~/N/PE/400V/50Hz   C16
Effective power consumption at standard point A7/W35 acc. to EN14511:		kW 2,9	3,3
Current input   cosφ (A7/W35)		A   ... 5,5   0,75	6,3   0,75
Max. machine current within the use limits		A 8	9,7
Starting current: direct   with soft starter		A   A 62   24	61   25
Degree of protection		IP 20	20
Output of electric heating element 3   2   1 phase		kW   kW   kW 9   6   3	9   6   3
Heating circuit circulation pump power consumption   Nom. current input		kW   A 0,07   0,52	0,07   0,52
<b>Other unit information</b>			
		<b>Included in the scope of supply or integrated</b>	
Heating and heat pump controller		• yes — no •	•
Circulation pump for heating circuit		• yes — no •	•
Soft starter		• yes — no •	•
Overflow valve   Changeover valve: heating - domestic hot water		• yes — no •   •	•   •
Heating circuit vibration isolators		• yes — no •	•
Safety valve   Set pressure		• yes — no   bar •   3,0	•   3,0
Heating circuit expansion vessel: Scope of supply   Volume   Initial pressure		• yes — no   l   bar •   24   1,5	•   24   1,5

1) Heating water return 2) Heating water flow

\*) depending on component tolerances and flow\*\*) comply with local regulations