



**MELORIA HEAT PUMP
WATER HEATER**

EN



MELORIA

HEAT PUMP STORAGE WATER HEATERS FOR DOMESTIC HOT WATER SUPPLY



Available in wall-hung versions for 100 litres and 150 litres nominal capacity

100

150

Available in floor-standing versions for 190 litres and 300 litres nominal capacity

190

300

- › Refrigerant gas R290 - very low environmental impact GWP index = 3
- › Excellent heating performance values
- › Equipped with electric auxiliary resistance as standard
- › Hot water setting range from 38 °C to 65 °C
- › Wide operating range based on outside temperature.
 - 7 °C ÷ 43 °C heat pump only
 - 20 °C ÷ 45 °C with auxiliary resistance
- › Aluminium microchannel heat exchanger
- › Double protection against corrosion: magnesium node and impressed-current anode
- › Polyurethane thermal insulation
- › The floor-standing versions are preset with an additional exchange circuit for integration with a solar thermal system
- › Preset for connection to solar photovoltaic system
- › Option to vary the available head at the inlet - outlet of air ducts
- › Wi-Fi module for remote control



- › Integrated user interface
- › 4" LCD display with keypad
- › Displaying errors and alarms on screen
- › Child Lock function
- › On/off control, Timer, 'Vacation' mode, 'Disinfection' mode for anti-legionella, electrical resistance activation and 'Smart' function

Model	Code	Energy efficiency class Load profile (1)	Hot water storage	Total height (2)	Diameter	Depth (3)	Gross weight
			litres	mm	mm	mm	kg
100*	DME0MMX100	A ⁺ M	98	1365	500	550	68
150*	DME0MMX200	A ⁺ L	145	1708	500	550	87
190 S**	DME0MBS190	A ⁺ L	181	1730	560	595	115
300 S**	DME0MBS300	A ⁺ XL	270	1895	660	695	160

(1) Under average climatic conditions, according to EU Regulation 812/2013.

(2) Including air duct initial connections.

(3) It represents the overall dimensions in depth including the control panel and, for the 100 - 150 litre models, the wall mounting bracket.

* Available from May 2025

** Available from June 2025



MELORIA WALL-HUNG VERSIONS 100 - 150



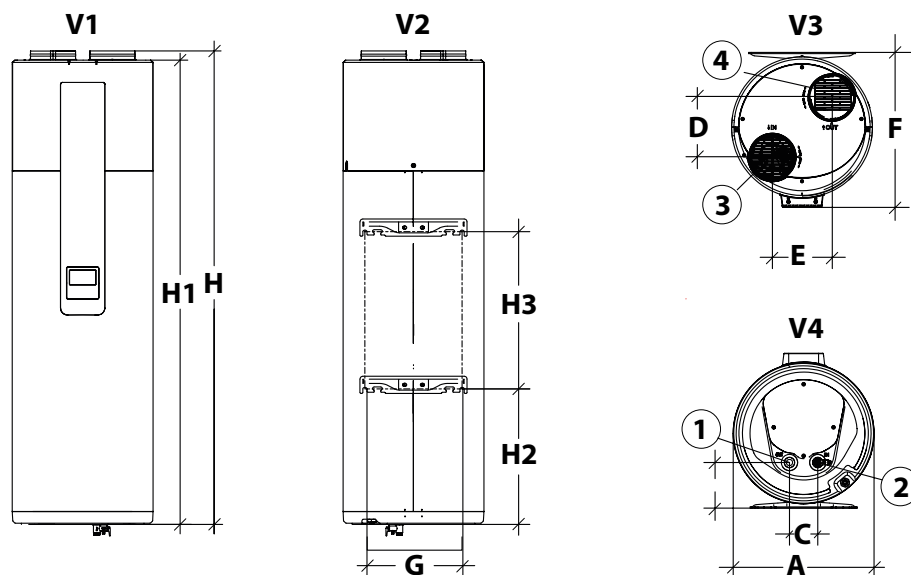
MELORIA FLOOR-STANDING VERSIONS 190 S - 300 S

MELORIA DISPLAY



Function	Description
VACATION	The water temperature in the tank is kept low (set at 15°C) to avoid the risk of freezing, reducing on/off cycles.
HYBRID	Heat pump and electric heater operate at the same time, only in case of very low air source temperatures or if the heat pump cannot reach the set temperature after a long period of functioning.
E-HEATER	The heat pump and electric resistance are activated by operating simultaneously.
ECONOMY	The heat pump heats the water up to its maximum capacity in standard performance with high efficiency. The electrical resistance is activated if additional heating is required. The heat pump and the electrical resistance do not work at the same time.
SMART	The use habits of the user from the last 7 days are stored. The water heater is activated in advance according to the user's peak use hours.

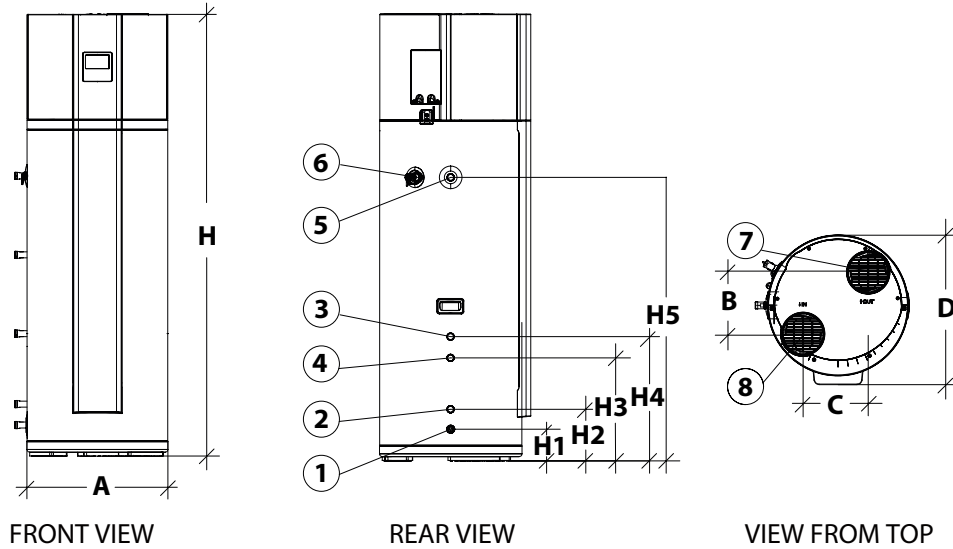
DIMENSIONS OF MELORIA 100 AND MELORIA 150 WALL-HUNG WATER HEATERS



KEY	
V1	Front view
V2	Rear view
V3	Top view
V4	Bottom view
1	½' hot water outlet
2	½' cold water inlet
3	Air inlet D 160
4	Air outlet D 160

Ref.	um	MELORIA 100	MELORIA 150
A	mm	500	500
B	mm	162	162
C	mm	100	100
D	mm	210	210
E	mm	210	210
F	mm	550	550
G	mm	345	345
H	mm	1365	1708
H1	mm	1332	1675
H2	mm	281	481
H3	mm	415	558

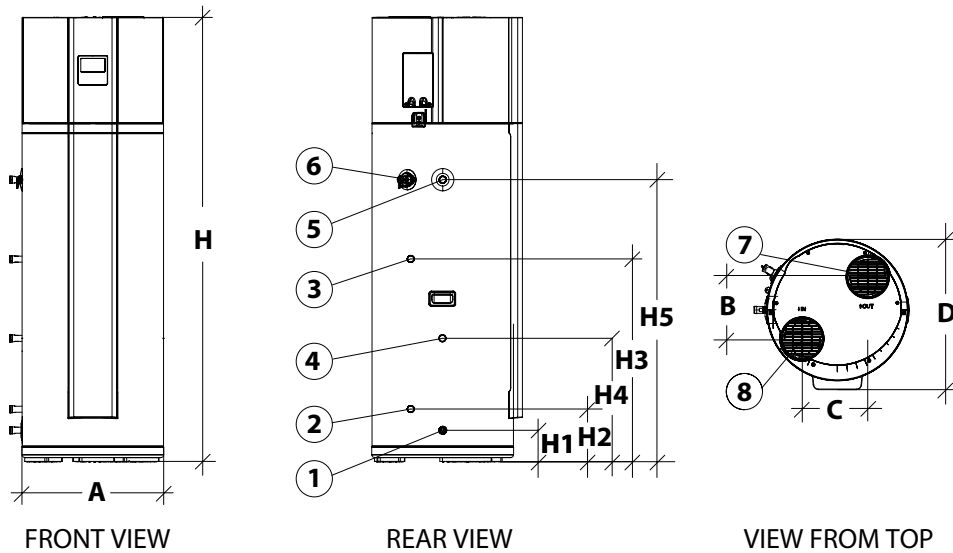
MELORIA 190 S FLOOR-STANDING WATER HEATER DIMENSIONS



KEY	
1	Drain connection - NPT 3/4
2	Outlet (to) solar circuit 3/4"
3	Inlet (from) solar circuit 3/4"
4	3/4" cold water inlet
5	3/4" hot water outlet
6	3/4" overpressure drain
7	D190 air outlet
8	D190 air inlet

Ref.	um	MELORIA 190 S
A	mm	560
B	mm	250
C	mm	250
D	mm	595
H	mm	1730
H1	mm	125
H2	mm	230
H3	mm	395
H4	mm	570
H5	mm	1100

MELORIA 300 S FLOOR-STANDING WATER HEATER DIMENSIONS



KEY	
1	Drain connection - NPT 3/4
2	Outlet (to) solar circuit 3/4"
3	Inlet (from) solar circuit 3/4"
4	3/4" cold water inlet
5	3/4" hot water outlet
6	3/4" overpressure drain
7	D190 air outlet
8	D190 air inlet

Ref.	um	MELORIA 300 S
A	mm	660
B	mm	300
C	mm	200
D	mm	695
H	mm	1895
H1	mm	125
H2	mm	215
H3	mm	825
H4	mm	425
H5	mm	1185

Technical Specifications	um	MELORIA 100	MELORIA 150	MELORIA 190 S	MELORIA 300 S
Product code	-	DME0MMX100	DME0MMX200	DME0MBS190	DME0MBS300
Empty net weight	kg	62	80	94	132
Empty gross weight	kg	68	87	115	160
Nominal storage capacity	l	100	150	190	300
Actual storage capacity	l	98	145	181	270
Type of internal coating	-	Enamelling	Enamelling	Enamelling	Enamelling
Insulation material	-	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Insulation thickness	mm	42	42	42	42
Maximum working pressure	bar/MPa	7,5/ 0,75	7,5 / 0,75	8,5 / 0,85	8,5 / 0,85
Pes dispersions	kW	0,019 (1)	0,023 (2)	0,026 (3)	0,022 (3)
Solar coil exchange surface area	m ²	-	-	0,6	1,1
Solar coil material	-	-	-	INOX AISI 316 L	INOX AISI 316 L
Maximum solar coil pressure	bar / MPa	-	-	10/1	10/1
Refrigerant type	-	R290	R290	R290	R290
Refrigerant charge	g	150	150	150	150
GWP	-	3	3	3	3
CO2 equivalent	t	0,00045	0,00045	0,00045	0,00045
Refrigerant circuit operating pressure (aspiration side)	MPa	1,2	1,2	1,2	1,2
Refrigerant circuit operating pressure (drain side)	MPa	3	3	3	3
Refrigerant circuit maximum pressure	MPa	3,1	3,1	3,1	3,1
Min - max power supply	V	220 – 240	220 – 240	220 – 240	220 – 240
Frequency	Hz	50 – 1Ph	50 – 1Ph	50 – 1Ph	50 – 1Ph
Electrical protection class	IP	21	21	21	21
Min - max installation room temperature	°C	0 ÷ 43	0 ÷ 43	0 ÷ 43	0 ÷ 43
Min - max outside air temperature	°C	-7 ÷ 43	-7 ÷ 43	-7 ÷ 43	-7 ÷ 43
Min - max outside air temperature with resistance	°C	-20 ÷ 45	-20 ÷ 45	-20 ÷ 45	-20 ÷ 45
Hot water maximum temperature - heat pump only	°C	65	65	65	65
Hot water maximum temperature - with resistance	°C	70	70	70	70
Hot water setting range	°C	38 – 65	38 – 65	38 – 65	38 – 65
Nominal air flow rate	m ³ /h	200	240	350	450
Minimum volume for the installation room *	m ³	15	15	15	15
Minimum area for the installation room *	m ²	4	4	4	4

(1) EN 16147 - Average climate conditions air T 7°C/6°C (dry bulb/wet bulb), water inlet T 10 °C. Hot water outlet T setting 55°C.

(2) EN 16147 - Average climate conditions air T 7°C/6°C (dry bulb/wet bulb), water inlet T 10 °C. Hot water outlet T setting 52°C.

(3) EN 16147 - Average climate conditions air T 7°C/6°C (dry bulb/wet bulb), water inlet T 10 °C. Hot water outlet T setting 53°C.

* Requirements to ensure proper functioning with performance.

PERFORMANCE DATA TABLE

Technical Specifications	um	MELORIA 100	MELORIA 150	MELORIA 190 S	MELORIA 300 S
Product code	-	DME0MMX100	DME0MMX200	DME0MBS190	DME0MBS300
Maximum power input to the heat pump	W	450	750	600	710
Electrical resistance power	W	1500	1500	1640	1640
Maximum power consumption of the heat pump (with resistance)	W	1950	2250	2240	2350
Maximum input power to the heat pump	A	9	9	10,5	11
COP - air T 7°C	W/W	2,61 (1)	2,67 (2)	3,13 (5)	3,13 (5)
SCOP - air T 7°C	W/W	2,61 (1)	2,67 (2)	3,13 (5)	3,13 (5)
Heating time - air T 7°C	hh:min	06:04 (1)	06:32 (2)	07:47 (5)	09:02 (5)
COP air temperature 14 °C	W/W	2,74 (3)	3,02 (4)	3,52 (6)	3,51 (6)
SCOP air temperature 14°C	W/W	2,74 (3)	3,02 (4)	3,52 (6)	3,51 (6)
Heating time – air T 14°C	Hh:min	05:14 (3)	06:10 (4)	06:33 (6)	07:35 (6)

(1) EN 16147 - Average climate conditions air T 7°C/6°C (dry bulb/wet bulb), water inlet T 10 °C. Hot water outlet T setting 55°C. Water heating heat pump only

(2) EN 16147 - Average climate conditions air T 7°C/6°C (dry bulb/wet bulb), water inlet T 10 °C. Hot water outlet T setting 52°C. Water heating heat pump only

(3) EN16147 - At declared load profile, outside T air 14°C / 13°C (dry bulb / wet bulb), water inlet T 10°C setting hot water outlet T 54°C. Water heating heat pump only

(4) EN16147 - At declared load profile, outside T air 14°C / 13°C (dry bulb / wet bulb), water inlet T 10°C setting hot water outlet T 52°C. Water heating heat pump only

(5) EN16147 - At declared load profile, outside T air 7°C / 6°C (dry bulb / wet bulb), water inlet T 10°C setting hot water outlet T 53°C. Water heating heat pump only

(6) EN16147 - At declared load profile, outside T air 14°C / 13°C (dry bulb / wet bulb), water inlet T 10°C setting hot water outlet T 53°C. Water heating heat pump only

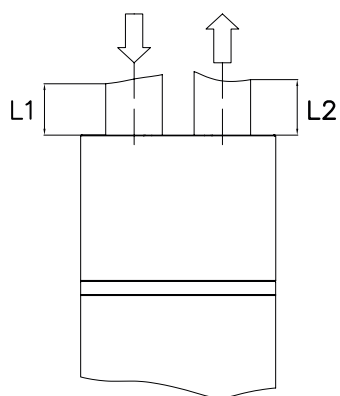
ERP PERFORMANCE DATA TABLE ACCORDING TO EU REGULATIONS 812/2013 AND EU 814/2013

Technical Specifications		um	MELORIA 100	MELORIA 150	MELORIA 190 S	MELORIA 300 S
Product code	-	-	DME0MMX100	DME0MMX200	DME0MBS190	DME0MBS300
Stated load profile	-	-	M	L	L	XL
Energy efficiency class water heating - average climate F -> A+	-	-	A+	A+	A+	A+
Energy efficiency water heating - average climate	η_{wh}	%	111	122	130	128
Energy efficiency water heating - warmer climate	η_{wh}	%	114	137	144	144
Energy efficiency water heating - colder climate	η_{wh}	%	92	103	86	104
Annual energy consumption - average climate	AEC	kWh	463	843	785	1312
Annual energy consumption - warmer climate	AEC	kWh	451	746	708	1167
Annual electricity consumption - colder climate	AEC	kWh	558	997	1192	1614
Thermostat temperature settings	-	°C	55	52	54	53
Indoor/outdoor sound power (*)	LWA	dB(A)	54 / -	56 / -	51 / 54	51 / 54
Daily energy consumption - average climate	Q_{elec}	kWh	2,435	4,36	3,718	6,095
Daily energy consumption - warmer climate	Q_{elec}	kWh	2,133	3,85	3,314	5,148
Daily electricity consumption - colder climate	Q_{elec}	kWh	2,631	4,685	5,62	7,499
Hot water storage	V	l	98	145	181	270
Mixed water at 40°C - average climate	V40	litres	110	160	245	345

(*) According to EN 12102 - 2. Unit not channelled and set to ECO operation mode

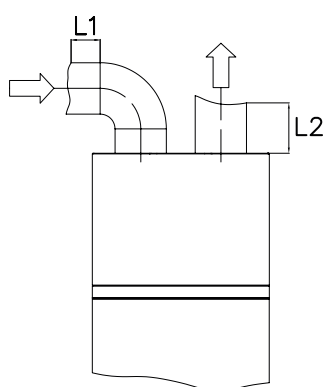
TOTAL DUCT LENGTHS TABLE

Vertical ducts



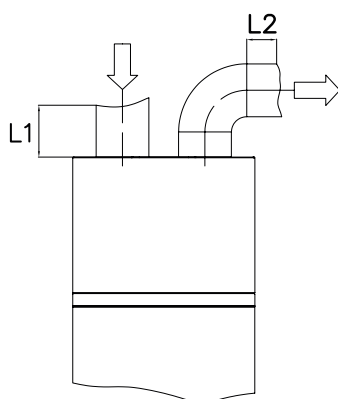
Model	Ducts diameter	L1 + L2
-	mm	m
MELORIA 100	160	60
MELORIA 150	160	50
MELORIA 190 S	160	32
MELORIA 300 S	190	40

Horizontal aspiration - vertical ejection



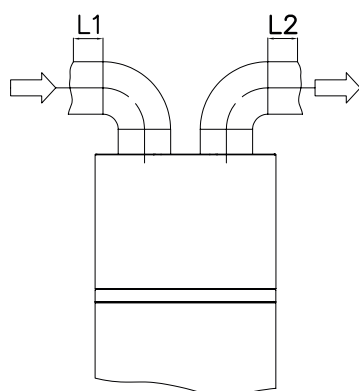
Model	Ducts diameter	L1 + L2
-	mm	m
MELORIA 100	160	57
MELORIA 150	160	46
MELORIA 190 S	160	28
MELORIA 300 S	190	36

Vertical aspiration - horizontal ejection



Model	Ducts diameter	L1 + L2
-	mm	m
MELORIA 100	160	57
MELORIA 150	160	46
MELORIA 190 S	160	28
MELORIA 300 S	190	36

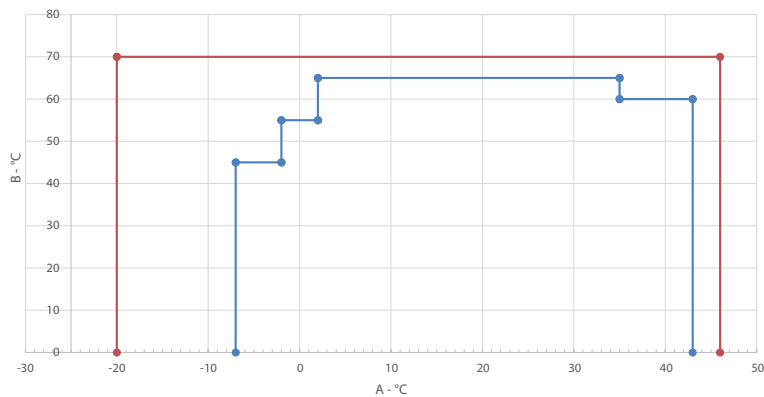
Horizontal aspiration - horizontal ejection



Model	Ducts diameter	L1 + L2
-	mm	m
MELORIA 100	160	54
MELORIA 150	160	42
MELORIA 190 S	160	24
MELORIA 300 S	190	32

DIAGRAMS

MELORIA 100



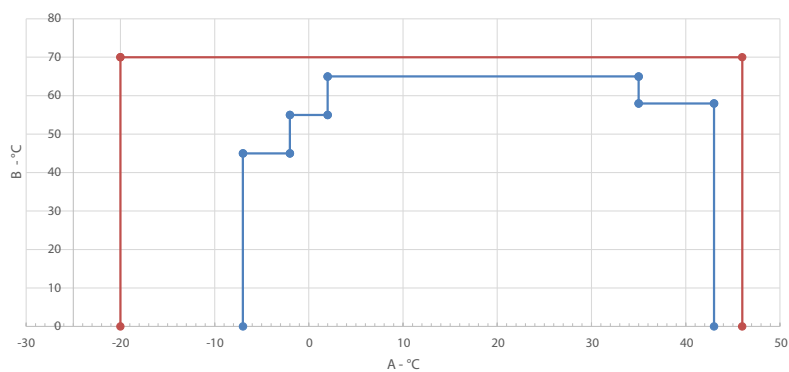
A= Inlet air temperature

B= Hot water maximum temperature

— Operating limit area - electric resistance only

— Operating limit area - heat pump only

MELORIA 150



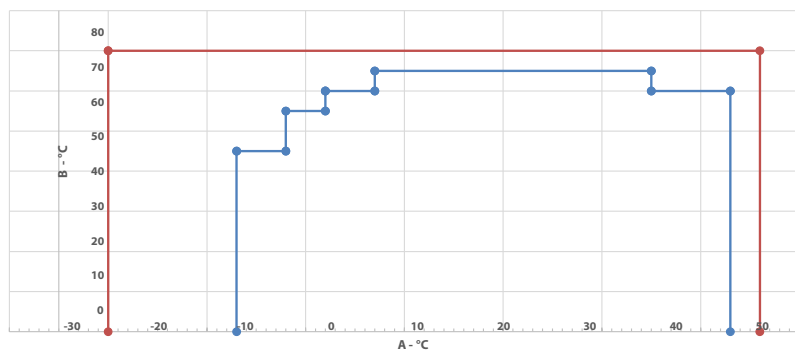
A= Inlet air temperature

B= Hot water maximum temperature

— Operating limit area - electric resistance only

— Operating limit area - heat pump only

MELORIA 190 S



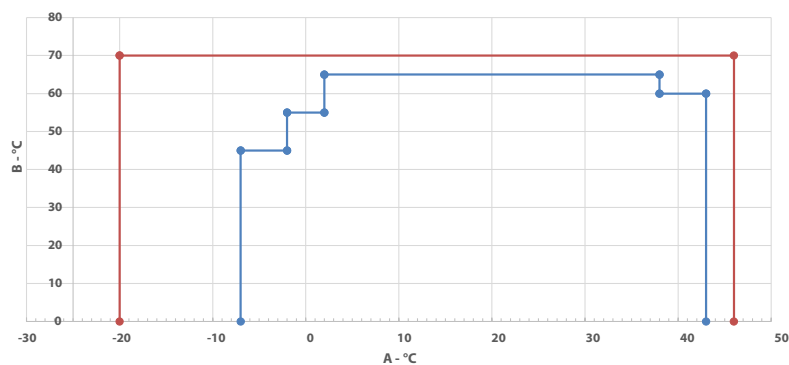
A= Inlet air temperature

B= Hot water maximum temperature

— Operating limit area - electric resistance only

— Operating limit area - heat pump only

MELORIA 300 S



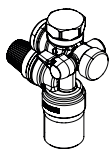
A= Inlet air temperature

B= Hot water maximum temperature

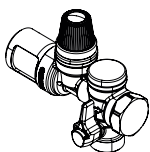
— Operating limit area - electric resistance only

— Operating limit area - heat pump only

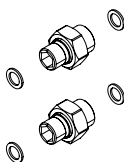
ACCESSORIES



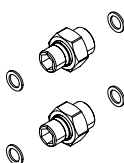
Description	Code
Safety hydraulic unit EN 1487. Connection 1/2".	DKGRUPI00
Vertical installation under water heater.	
Height 122 mm	



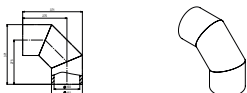
Description	Code
Safety hydraulic unit EN 1487. Connection 3/4".	DKGRUPI01
Configuration available according to the configuration, either vertical or horizontal use.	
Height x Length: 100 x 130 mm (horizontal use). Height x Length: 130 x 100 mm (vertical use).	



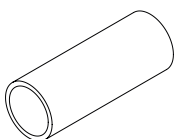
Description	Code
Dielectric joint M/F 1/2" - 2 pcs.	DKGIUDIE00
Including 1/2" gaskets.	



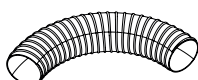
Description	Code
Dielectric joint M/F 3/4" - 2 pcs.	DKGIUDIE01
Including 3/4" gaskets.	



Description	Code
Initial elbow air duct diameter 160 + connection clamp.	0CURVAXX37



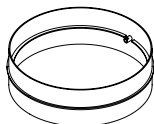
Description	Code
Straight pipe diameter 160, 0.5 m + connection clamp.	OPROLUNG34



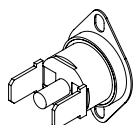
Description	Code
Flexible air duct D 203 L 1 metre	DKCONDAR00



Description	Code
Galvanised clamp D 190-210 for air duct D 203	DKFASCET00



Description	Code
Coupling D 200	DKMANICT01



Description	Code
Safety thermostat kit 80 °C with manual reset for solar integration	DKTERSIC00



Description	Code
Probe kit for solar panel	DKSONDAC00



Notes

[illegible]

The manufacturer reserves the right to make any modifications deemed necessary without prior notification.

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COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV
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