

EUROPA HOT-WATER HEAT PUMPS

The ideal supplement for every heating system! As well as hot-water heating, the Europa series offers additional functions such as cooling, drying and ventilation.



Exclusive design combined with cutting-edge technology for efficient, round-the-clock hot-water heating, at any time of day or night and with renewable energy in all weathers.

Regulator Tiptronic plus with Touch Display



NEW!

available from 2nd quarter 2014

Regulator Tiptronic light

EUROPA 323 DK

Air/exhaust air heat pump with 300 l tank

for
domestic-hot-water heating
cooling of pantries and storage rooms
cellar dehumidification
ventilation

323 DK compact unit:

- » with 300 l tank
- » for households of up to 5 persons
- » water temperature of up to 65°C during heat pump operation
- » heat pump operation with defrost function for use down to -10°C air temperature
- » ready for operation
- » easy installation
- » with immersion sleeve for external brand thermostat or sensor
- » with register for external heat sources such as furnaces or solar panels
- » E-rod integrated as standard
- » DN150 air ducts up to 20 m possible
- » 2 integrated protective magnesium anodes as standard
- » legionella switching via heat pump operation
- » optimal heat input

» Tiptronic plus control with touch display

for simple operation of:

- hot-water regulation with selectable hygiene-comfort switching
- real-time clock
- ventilation function with integrated fan speed control and timer programm
- heat pump operation with de-icing function for use down to -10 °C air temperature
- built in solar control for solar collector system (not supplied)
- with the Smart Grid function of the Tiptronic plus, the Europa 323 DK is already set-up for Smart Metering.

EUROPA 250 DK / DKL

Air/exhaust air heat pump with 250 l tank

for
domestic-hot-water heating
cooling of pantries and storage rooms
cellar dehumidification

250 DK compact unit:

- » with 250 l tank
- » for households of up to 4 persons
- » water temperature of up to 65°C in heat pump operation
- » ready for operation
- » easy installation
- » E-rod integrated as standard
- » DN150 air ducts up to 20 m possible
- » 2 pc. Magnesium sacrificial anode factory fitted standard
- » legionella switch with heat pump
- » optimal heat input
- » Tiptronic light control

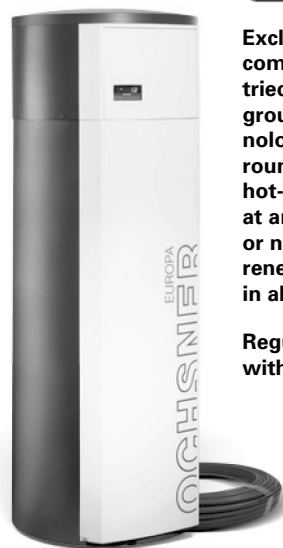
Compact 250 DKL:

- » without an additional register!
Therefore not suitable for external sources such as boilers or solar energy
- » 1 pc Magnesium sacrificial anode factory fitted standard



Exclusive design combined with tried-and-tested ground heat technology for efficient, round-the-clock hot-water heating, at any time of day or night and with renewable energy in all weathers.

Regulator Tiptronic plus with Touch Display



NEW!



MINI IWP / MINI EWP

Regulator Tiptronic plus with Touch Display



EUROPA 323 DK-EW

Direct ground heat extraction heat pump with 300 l tank

for **domestic-hot-water heating all year round, also usable for low outside temperatures and for passive and low-energy buildings**

- » with 300 l tank
- » for households of up to 5 persons
- » water temperature of up to 60°C in heat pump operation
- » ready for operation
- » easy installation
- » with immersion sleeve for external brand thermostat or sensor
- » with register for external heat sources such as boiler or solar collectors
- » E-rod integrated as standard
- » with 75 m copper ground collector for geothermal energy from the garden for up to 1,700 operational hours per year
- » 2 pc Magnesium sacrificial anode factory fitted standard
- » legionella switch with heat pump
- » optimal heat input
- » **Tiptronic plus control with touch display** for simple operation of:
 - hot-water regulation with selectable hygiene-comfort switch
 - real-time clock
 - built in solar control for solar collector system (not supplied)
 - with the Smart Grid function of the Tiptronic plus, the Europa 323 DK-EW is already set-up for Smart Metering

EUROPA MINI IWP / IWPL

Air/exhaust air heat pump for external tanks up to 500 l

for **domestic-hot-water heating cooling of pantries and storage rooms cellar dehumidification combination with existing pellet, solar or furnace systems**

- » for external tanks up to 500 l
- » for households of up to 5 persons
- » water temperature of up to 60°C in heat pump operation
- » ready for operation, easy installation
- » space-saving design
- » DN150 air ducts up to 20 m possible
- » internal heat exchange
- » tank charging via integrated circulation pump
- » legionella switch with heat pump
- » also available as a package solution with 300 l or 500 l storage tank or Twin-solution with 750 l storage tank

IWP split appliance:

- » **Tiptronic plus control with Touch display** for ease of operation for:
 - hot water regulation with selectable hygiene-comfort switch
 - real-time clock
 - ventilation function with integrated fan speed control and timer program
 - heat pump operation with defrost function for use down to -10 °C air temperature
 - preparation for on-site installation of E-immersion heater
 - with the smart grid function of the Tiptronic plus, the Europa Mini IWP is already prepared for Smart Metering.

IWPL split appliance:

- » Tiptronic light control

EUROPA MINI EWP

Direct ground heat extraction heat pump for ext. tanks up to 500l

for **domestic-hot-water heating, also at low outside temperatures auxiliary heating via buffer tank passive house energy supply combination with existing pellet, solar or furnace systems**

Split unit:

- » for external tanks up to 500 l
- » for households of up to 5 persons
- » water temperature of up to 60°C in heat pump operation
- » ready for operation
- » easy installation
- » space-saving design
- » with 75 m copper ground collector for geothermal energy from the garden for up to 1.700 operational hours per year
- » internal heat exchange
- » tank charging via integrated circulation pump
- » legionella switch with heat pump
- » **Tiptronic plus control with Touch display** for ease of operation for:
 - hot water regulation with selectable hygiene-comfort switch
 - real-time clock
 - preparation for on-site installation of E-immersion heater
 - with the SmartGrid function of the Tiptronic plus, the Europa Mini EWP is already prepared for Smart Metering.
- » also available as a package solution with 300 l or 500 l tank or as Twin-solution with 750 l tank

PRODUCTS

Multifunctional appliances /
Exhaust air heat pumps



EUROPA



Heat source	AIR/EXHAUST AIR				
Dimensions (Diam.xH) or (LxWxH) [mm]	650 x 1850	650 x 1610	650 x 1610	650 x 426	650 x 426
Model	323 DK	250 DK	250 DKL	Mini IWP	Mini IWPL
Order number / delivery class	110261 / I	110234 / I	110233 / I	110246 / I	110244 / I

Price compact unit (incl. storage tank) EU 323 DK-EW incl. copper ground collector	3.104,-	2.690,-	2.483,-	-	-
Price split unit (incl. wall bracket set and, for EWP, copper ground collector(s) storage tank not included)	-	-	-	2.267,-	1.956,-

Technical data:

Heat pump capacity at		L21/W15-55	L21/W15-55	L21/W15-55	L21/W15-55	L21/W15-55
Type		Compact	Compact	Compact	Int. heat exchanger	Int. heat exchanger
Weight	[kg]	165	145	141	45	45
Heat pump heating capacity (exhaust air or ground)	[kW]	2,2	2,1	2,1	2,2	2,1
Sound pressure (at 1 m distance)	[dB(A)]	49	49	49	49	49
Nominal voltage/frequency	[V/Hz]	230/50	230/50	230/50	230/50	230/50
Operating current	[A]	2,9	2,7	2,7	2,93	2,7
Heat pump power draw	[kW]	0,5	0,5	0,5	0,5	0,5
Heat pump COP		4,4	4,4	4,4	4,4	4,4
Fuse (trip characteristic 'C')	[A]	16	16	16	13	13
Electronic Control		Tiptronic plus with Touch	Tiptronic light	Tiptronic light	Tiptronic plus with Touch	Tiptronic light
Electrical rod - fail-safe fuse	[kW]	1,5	1,5	1,5	up to max. 2,5*	up to max. 2,5*
Min. evaporator operating temperature	[°C]	-10	+6	+6	-10	+6
Max. evaporator operating temperature	[°C]	+40	+40	+40	+40	+40
Max. hot water temperature during heat pump operation	[°C]	+65	+65	+65	+60	+60
Auxiliary heating via furnace up to max.	[°C]	+65	+65	+65	-	-
Auxiliary heating via E-rod up to max.	[°C]	+65	+65	+65	-	-
Refrigerant		R134a	R134a	R134a	R134a	R134a
Compressor						
Type		Rolling piston	Rolling piston	Rolling piston	Rolling piston	Rolling piston
Start type		direct	direct	direct	direct	direct
Evaporator						
Type		air/finned tube	air/finned tube	air/finned tube	air/finned tube	air/finned tube
Material		Cu Al	Cu Al	Cu Al	Cu Al	Cu Al
Defrost function/frost protection cut-out		hot gas	electronic	electronic	hot gas	electronic
R407C pre-filled copper ground collectors						
Condenser						
Type		Finned tube - HE	Finned tube - HE	Finned tube - HE	Plates - HE	Plates - HE
Material		Copper	Copper	Copper	Stainless steel	Stainless steel
Number		1	1	1	1	1
Water storage tank						
Nominal capacity	[l]	300	250	250	-	-
Allowable operating pressure	[bar]	6	6	6	-	-
Heat insulation		PU rigid foam	PU rigid foam	PU rigid foam	-	-
Auxiliary heat register						
Type Register		3/4" smooth tube	3/4" smooth tube	WITHOUT Register	-	-
Allowable operating pressure	[bar]	4	4	-	-	-
Allowable operating temperature of heating medium	[°C]	90	90	-	-	-
Register surface area	[m²]	1,4	1,0	-	-	-
Air flow						
Unrestricted air flow	[m³/h]	510-360	510	510	510	510
Continuously variable		integrated	integrated	integrated	integrated	integrated
External static pressure	[Pa]	80	80	80	80	80

Delivery class I - in-stock

Weight specification excl. packaging. The performance and/or COP of heat pumps is dependent on air temperature, air flow and humidity. Tank specification: high-quality 2-coat vacuum enamelling. When using for living-room ventilation, we recommend using pipework noise insulation (not included). Tiptronic plus incl. ventilation switching. First seal of approval for hot-water heat pumps with highest COP value hitherto measured according to EN 255-3 at the Buchs heat-pump centre: standard cycle COP 3.4 to 3.5. Integrated auxiliary exchanger register for solar connection or combination with pellet- or fuel-fired boiler only possible with Europa 323 DK / 323 DK-EW. When using two ground collectors (over 1,700 h/a or more than 300 l/day), order the Europa Mini EWP heat pump, article no. 130246. Packages to be connected on-site. We recommend installing a decalcifier in areas with hard water. See operating instructions. Machine failure due to poor water quality = loss of guarantee! Hot-water heat pumps are intended Brinely for hot-water heating and not for room heating. Further components on request. EUROPA series: performance data with constructional tolerance of ± 10%. For tank and accessories, see pages 52–53.

EUROPA



GROUND

650 x 1850	650 x 426	650 x 426
323 DK-EW	Mini EWP 1	Mini EWP 2
130261 / I	130247 / I	130248 / I

3.621,-

-

-

-

2.991,-

3.612,-

E4/W15-55	E4/W15-55	E4/W35	E4/W15-55
Compact	Int. heat exchanger		Int. heat exchanger
165	43		43
2,3	3	2,7	3
35	35		35
230/50	230/50		230/50
3,1	3,8	3,6	3,8
0,66	0,73	0,67	0,73
3,5	4,1	4	4,1
16	13		13
Tiptronic plus with Touch	Tiptronic plus with Touch		Tiptronic plus with Touch
1,5	up to max. 2,5*		up to max. 2,5*
-	-		-
-	-		-
+60	+60		+60
+60	-		-
+60	-		-
R407C	R407C		R407C
Rolling piston	Rolling piston		Rolling piston
direct	direct		direct
tube evaporator	tube evaporator		tube evaporator
Cu PE	Cu PE		Cu PE
-	-		-
1	1		2
Finned tube - HE	Plates - HE		Plates - HE
Copper	Stainless steel		Stainless steel
1	1		1
300	-		-
6	-		-
PU rigid foam	-		-
3/4" smooth tube	-		-
4	-		-
90	-		-
1,4	-		-
-	-		-
-	-		-
-	-		-

*not included in scope of delivery

Europa 250 DK / DKL

Available from 2nd quarter 2014

Accessories included in price of Europa heat pump:

Accessories	Pc.	Models
Wall bracket set (525 mm height x 700 mm projection)	2	Mini IWP/IWPL + Mini EWP 1 + 2
Pre-filled copper ground collector R407C	1	Mini EWP 1
	2	Mini EWP 2
	1	323 DK-EW

Optional accessories:

	Nr.	Models	Price
Continuously adjustable flow regulator (retrofit set) 510-360 m ³	930207	250 DK/DKL + Mini IWPL	58,-
Transport aid Europa (Fig. P 19)	936132	323 DK, 250 DK/DKL, 323 DK-EW	620,- Netto

Combination options for domestic-hot-water heat pumps

Package Individual solution



Package with 300 l storage tank

Heat pump	Mini IWP	Mini IWPL	Mini EWP 1	Mini EWP 2
Package code	180012	180013	180014	180015
Package Price	3.337,-	3.035,-	4.039,-	4.642,-

Package with 500 l storage tank

Heat pump	Mini IWP	Mini IWPL	Mini EWP 1	Mini EWP 2
Package code	180016	180017	180018	180019
Package Price	3.682,-	3.380,-	4.384,-	4.987,-

Package Twin solution for increased hot water demand



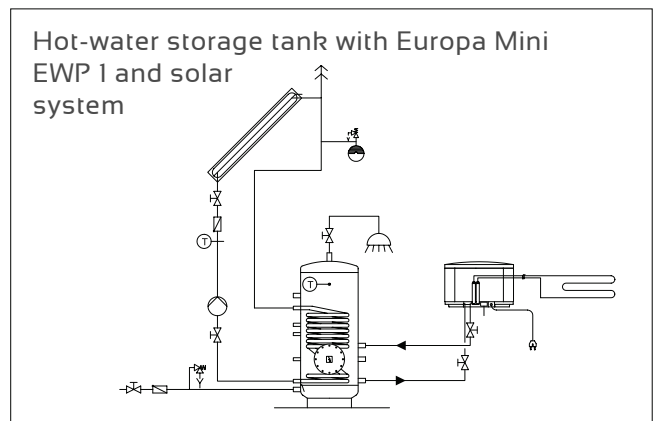
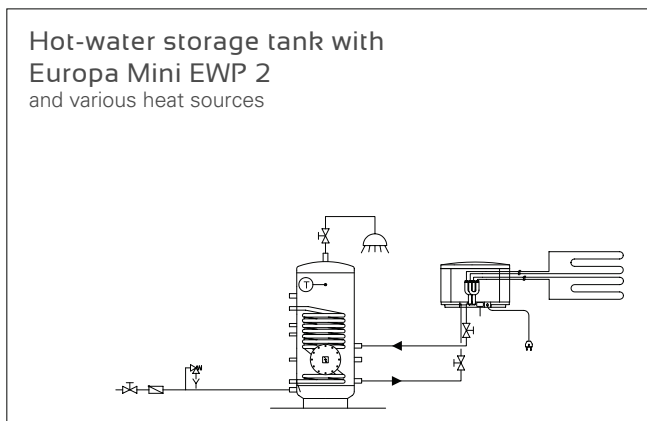
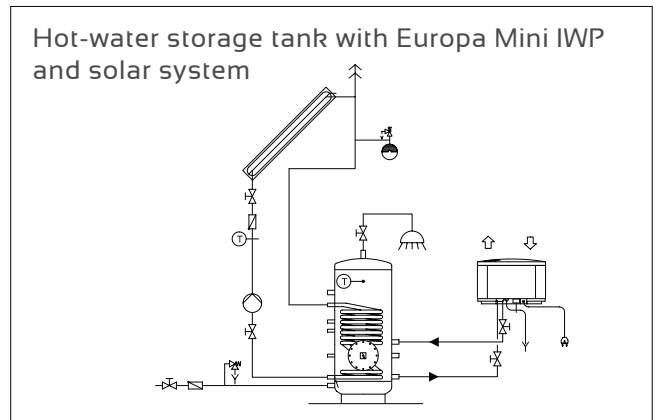
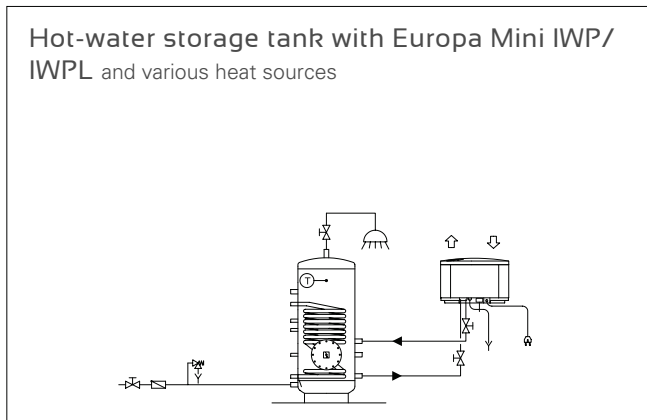
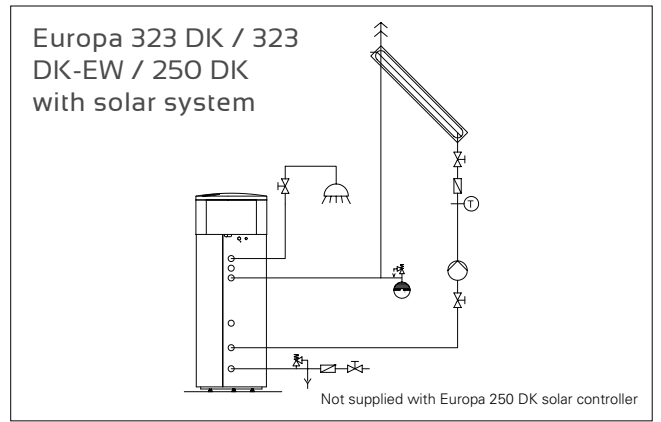
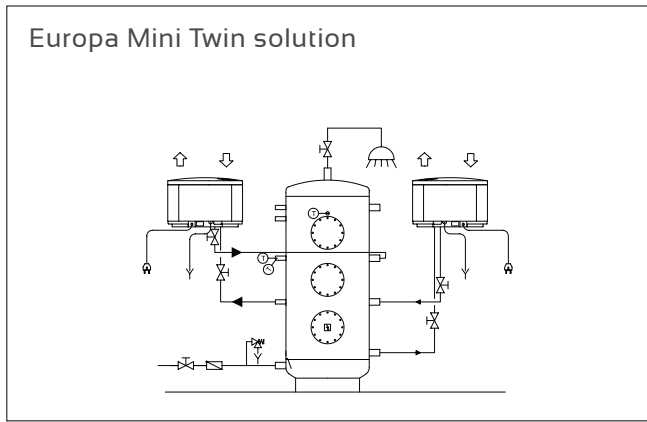
Package with 750 l storage tank + 2x Mini IWP/IWPL or EWP

Heat pump	Mini IWP	Mini IWPL	Mini EWP 1	Mini EWP 2
Package code	180020	180021	180022	180023
Package Price	6.733,-	6.130,-	8.138,-	9.343,-

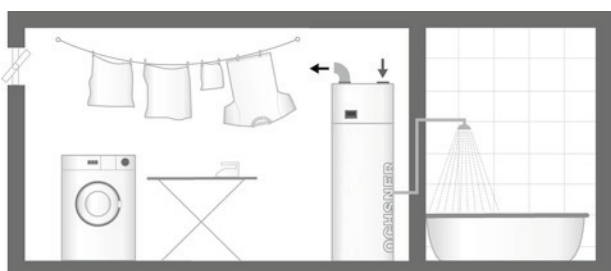
Package solutions incl. wall bracket set for Europa Mini; SP 300, SP 500 or SP 750 series storage tank available; for detailed information on hot-water storage tanks, see pages 52-53
-3% package discount incl. in price

COMBINATION OPTIONS

Depending on requirements, domestic-hot-water heat pumps can be installed in both new and existing buildings for optimal and economical hot-water heating.

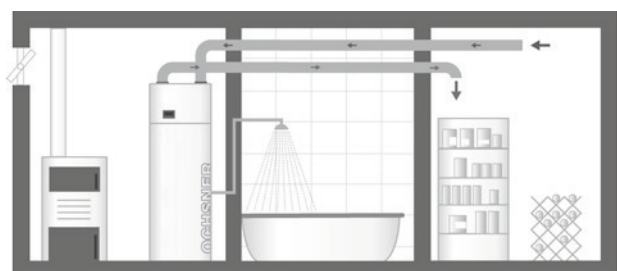


EXAMPLES OF APPLICATION



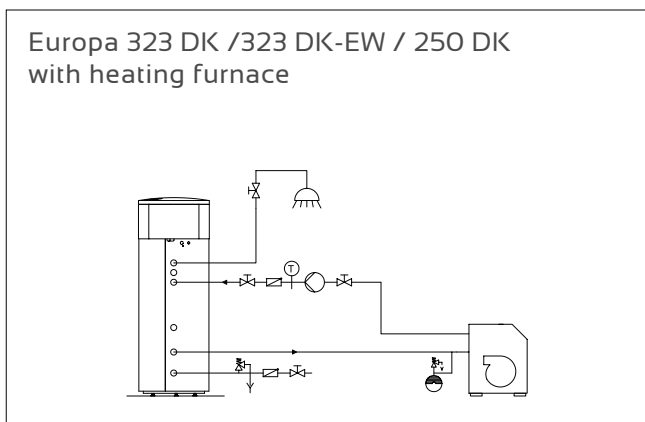
Installation in laundry
Hot-water heating from ambient air, drying of room

Symbolic illustration



Cooling of storeroom

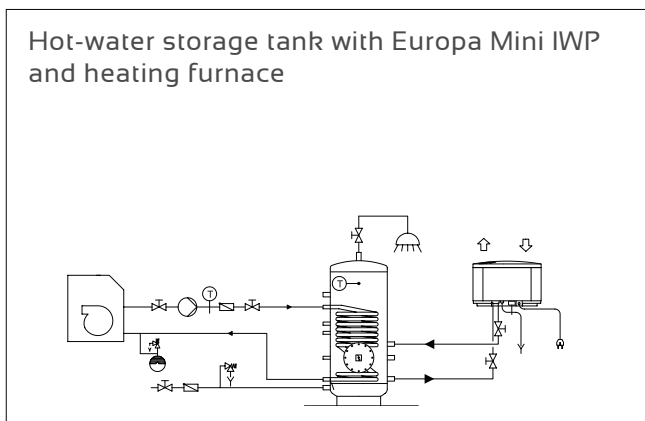
Symbolic illustration



Europa 323 DK / 323 DK-EW / Mini IWP / EWP Normal operation - SmartGrid function inactive

Selected normal-temperature e.g. 50°C

Except Europa Mini IWPL and Europa 250 DK/DKL



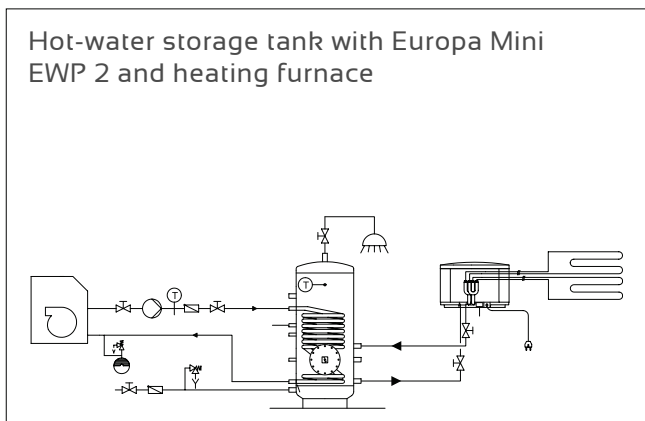
Europa 323 DK / 323 DK-EW / Mini IWP / EWP PV - own power supply

Call-up via SG-input of EU 323 DK / EU 323 DK-EW through suitable inverters in PV system

Switch-on command for increased nominal value as power is free, e.g. 60°C (up to max. 65°C possible)

PV system (PV- photovoltaic)

Except Europa Mini IWPL and Europa 250 DK/DKL



Europa 323 DK / 323 DK-EW / Mini IWP / EWP SmartGrid operation with excess current from renewable energy

Switch-on command from power utility company via Smart-Meter

Switch-on command at increased nominal value as power is available at lower tariff (planned by and tariff dependent on utility company), e.g. 60°C (up to max. 65°C possible).

Except Europa Mini IWPL and Europa 250 DK/DKL



Symbolic illustration

Transport aid

Europa 323 DK / 250 DK/DKL / 323 DK-EW

1.850 mm

max. tilting angle 45°

max. tilting dimensions 2050 mm

Dimensions incl. transport aid