TABLE OF CONTENTS

EKHTS-AC

1 Features

- High temperature application: up to 80ºC without electric heater
- Stainless steel domestic hot water tank
- Cost effective alternative to a fossil fuel boiler
- Low energy bills and low CO2 emissions
- Easy to install
- Total solution for year round comfort

2 Specifications

2-1 Technical Specifications					EKHTS200AC	EKHTS260AC
Casing	Colour				Metallic grey	
	Material				Galvanised steel (precoated sheet metal)	
Dimensions	Unit	Height	Tank	mm	1,335	1,610
			Integrated on indoor unit	mm	2,010	2,285
		Width		mm	600	
		Depth		mm	695	
	Packed unit	Height		mm	1,470	1,745
		Width		mm	680	
		Depth		mm	800	
Weight	Unit	Empty		kg	70	78
	Packed unit	Empty		kg	81	89
Packing	Material				EPS \ Wood \ Carton	EPS \ Wood \ Carton
	Weight			kg	11	
Tank	Water volume			l	200	260
	Material				Stainless steel (EN 1.4521)	
	Maximum water temperature			ºC	75	
	Maximum water pressure			bar	10	
	Insulation	Material			EPS	
		Heat loss		kWh/24h	1.2	1.5
Heat exchanger	Quantity				1	
	Tube material				Duplex steel (EN 1.4162)	
	Face area			m²	1.56	
	Internal coil volume			l	7.5	
3-way valve	Coefficient of flow (kV)	Space heating		m³/h	13	
		Domestic hot water tank		m³/h	8	
	Inlet			mm	Male quick coupling ø28.7	
	Outlet	Space heating		mm	Female quick coupling ø28.8	
		Domestic hot water tank		mm	Female quick coupling ø28.8	
Temperature sensor	Cable length			m	11.5	
Piping connections	Water inlet heat exchanger diameter			inch	G 3/4" F (if kit EKFMAHTB is used - stand alone tank)	
				mm	Female Quick coupling ø25	
	Water outlet heat exchanger diameter			inch	G 3/4" F (if kit EKFMAHTB is used - stand alone tank)	
				mm	Female Quick coupling ø25	
	Cold water in	Diameter		inch	G 3/4" (female)	
	Hot water out	Diameter		inch	G 3/4" (female)	
	Recirculation connection			inch	G 1/2" (male)	
Safety devices	Item	01			Thermal cutout (on indoor unit): 90-95ºC	

3 Capacity tables

3 - 1 Heating Capacity Tables

Daikin Altherma HT-TW Domestic hot water tank

The DAIKIN ALTHERMA heat pump in combination with the optional domestic hot water tank provide hot water for household usage.
The below mentioned date allow a proper selection of the domestic hot water tank size for maximum comfort and efficiency.

(1) Capacity:

	EKHTS*200	EKHTS*260
Total capacity (L)	210	258
Actual capacity (L)	193,5	250,5

Total capacity = internal volume of tank(= effective water volume+ coil volume)
Actual capacity=effective water volume inside the tank

(2) Maximum volume of usable hot water:
The volume of hot water available for domestic usage depends on the physical volume of the tank, on the domestic water setpoint temperature and on the temperature spreading in the tank.

Definition:
Maximum volume of usable hot water = the volume of hot water available for domestic usage at a temperature of 40°C.
40°C is considered a comfortable domestic hot water temperature. (cold water inlet temp = 10°C)

Tank	Setpoint temp.	Maximum volume of usable hot water	Tapping pattern*			
			Small	Medium	High	very high
EKHTS*200	40	190	+++	+	-	-
	50	255	+++	++	-	-
	60	320	+++	+++	-	-
	70	385	+++	+++	+	-
EKHTS*260	40	250	+++	++	-	-
	50	330	+++	+++	-	-
	60	415	+++	+++	++	-
	70	500	+++	+++	++	+

Grade +++ more than excessive availability of sanitary hot water (more than 40% of EHWV is still available after tapping pattern)
++ Excessive availability of sanitary hot water. (10%< EHWV still available after tapping pattern<40%)
+ Sufficient availability of sanitary hot water. (EHWV still available after tapping pattern <10%)
- Temporary shortage of sanitary hot water can occur.

Tapping pattern** **Small** Daily demand up to 90l -> typical 1-person daily usage pattern
Medium Daily demand up to 190l -> typical 2-persons daily usage pattern
High Daily demand up to 370l -> typical 3 to 4 persons daily usage pattern
very high Daily demand up to 500l -> 5 to 6 persons daily usage pattern

* based upon heat up to tank once / 24 hours
** Heat losses (over 24 hrs) are included in the tapping patterns

(3) Standing Heat loss:

Tank	Heat losses [kWh/24h]
EKHTS*200	1.2
EKHTS*260	1.5

* heat loss of tank at △T = 45K

(4) Heat-up time:

Definition:
Heat-up time = The time is required to heat up the domestic hot water tank from 15°C to 60°C (minutes)

Tank	Heat-up time <min>		
	EKHBRD11	EKHBRD14	EKHBRD16
EKHTS*200	60	50	40
EKHTS*260	70	60	50

conditions for testing: Ta = 7°CDB / 6°CWB, TStart = 15°C

(5) Reheat time:

Definition:
Reheat time = The time required to reheat the deomestic hot water tank back to 60°C after tapping 70% of the actual volume.

Tank	Reheat time <min>		
	EKHBRD11	EKHBRD14	EKHBRD16
EKHTS*200	50	40	30
EKHTS*260	60	50	40

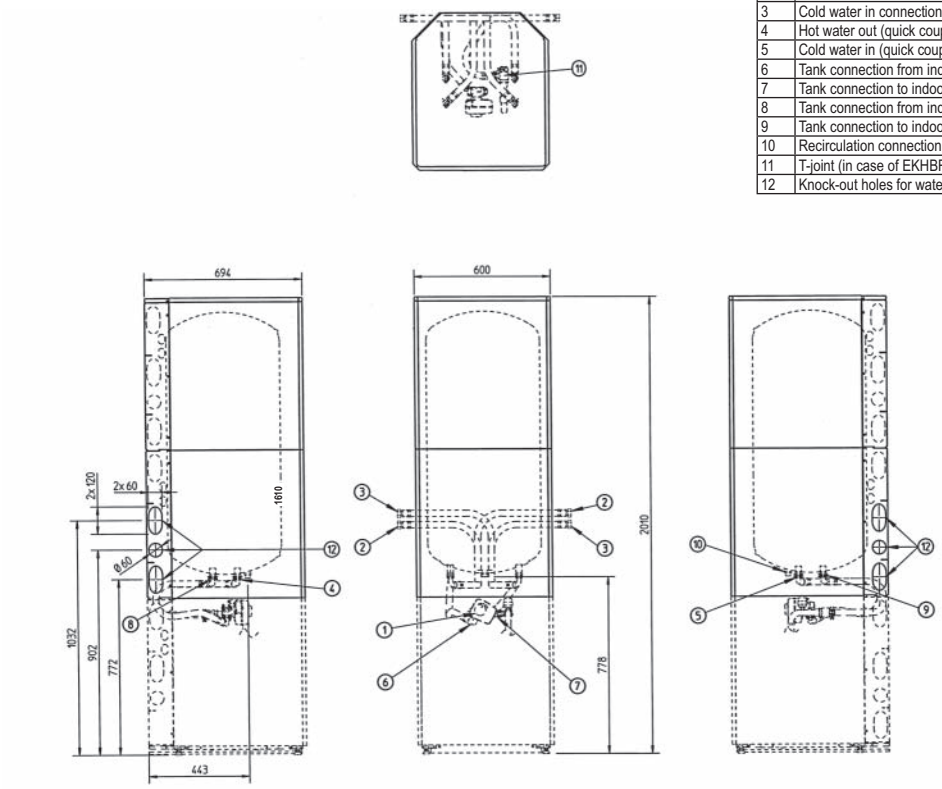
Starting condition before tapping 70% of volume: tank at 60°C
conditions for testing: Ta = 7°CDB / 6°CWB, TCold = 15°C

3TW58802-1A

4 Dimensional drawings

4 - 1 Dimensional Drawings

EKHTS200AC + EKHBRD-AB
EKHTS200AC + EKHVMR/YD-A



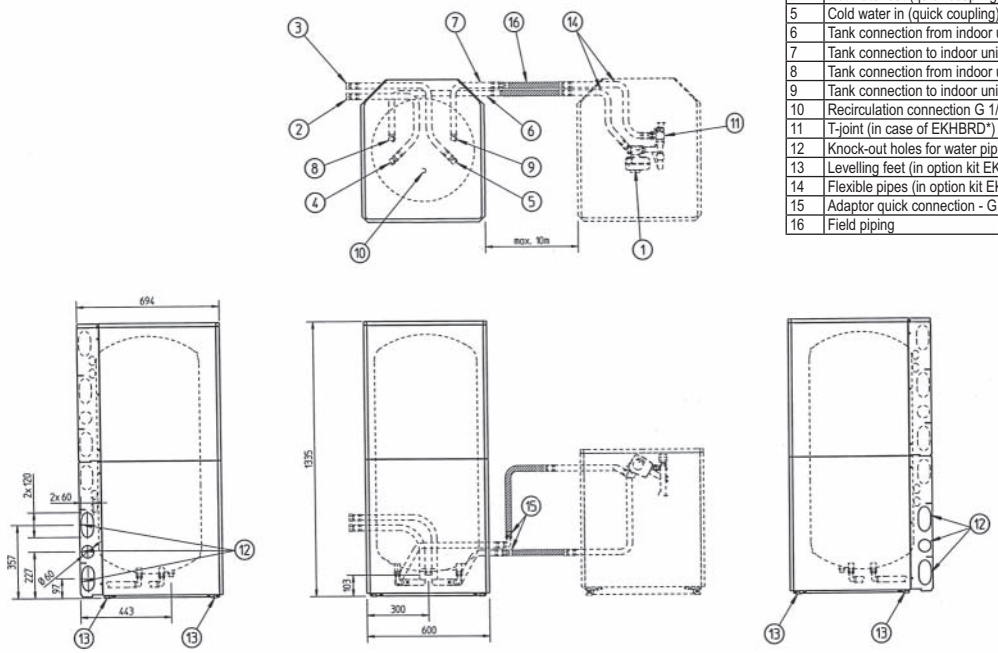
1	3-way valve
2	Hot water out connection G 3/4" (female)
3	Cold water in connection G 3/4" (female)
4	Hot water out (quick coupling) at bottom tank
5	Cold water in (quick coupling) at bottom tank
6	Tank connection from indoor unit (quick coupling)
7	Tank connection to indoor unit (quick coupling)
8	Tank connection from indoor unit (quick coupling) at bottom tank
9	Tank connection to indoor unit (quick coupling) at bottom tank
10	Recirculation connection G 1/2" (male)
11	T-joint (in case of EKHBRD*)
12	Knock-out holes for water piping

3TW60444-1

NOTE

For indoor unit details refer to 3TW59854-1 (EKHBRD*) or 3TW59914-1 (EKHVM*)

EKHTS200AC + EKHBRD-AB
EKHTS200AC + EKHVMR/YD-AA



1	3-way valve
2	Hot water out connection G 3/4" (female)
3	Cold water in connection G 3/4" (female)
4	Hot water out (quick coupling) at bottom tank
5	Cold water in (quick coupling) at bottom tank
6	Tank connection from indoor unit (quick coupling)
7	Tank connection to indoor unit (quick coupling)
8	Tank connection from indoor unit (quick coupling) at bottom tank
9	Tank connection to indoor unit (quick coupling) at bottom tank
10	Recirculation connection G 1/2" (male)
11	T-joint (in case of EKHBRD*)
12	Knock-out holes for water piping
13	Levelling feet (in option kit EKFMAHTB)
14	Flexible pipes (in option kit EKFMAHTB)
15	Adaptor quick connection - G 3/4" (in option kit EKFMAHTB)
16	Field piping

3TW60444-2

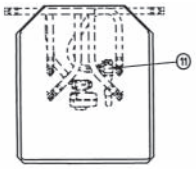
NOTE

For indoor unit details refer to 3TW59854-1 (EKHBRD*) or 3TW59914-1 (EKHVM*)

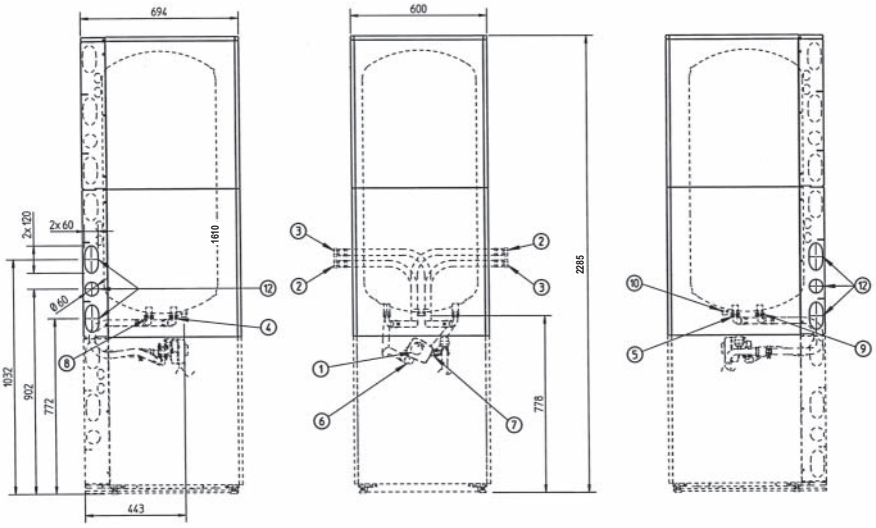
4 Dimensional drawings

4 - 1 Dimensional Drawings

EKHTS260AC + EKHBRD-AB
EKHTS260AC + EKHVMR/YD-A



1	3-way valve
2	Hot water out connection G 3/4" (female)
3	Cold water in connection G 3/4" (female)
4	Hot water out (quick coupling) at bottom tank
5	Cold water in (quick coupling) at bottom tank
6	Tank connection from indoor unit (quick coupling)
7	Tank connection to indoor unit (quick coupling)
8	Tank connection from indoor unit (quick coupling) at bottom tank
9	Tank connection to indoor unit (quick coupling) at bottom tank
10	Recirculation connection G 1/2" (male)
11	T-joint (in case of EKHBRD*)
12	Knock-out holes for water piping

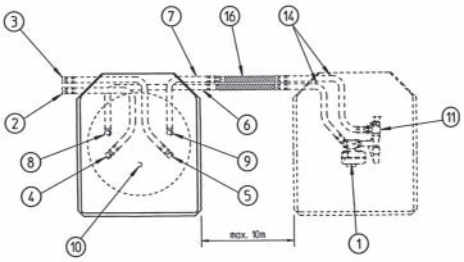


3TW60444-1

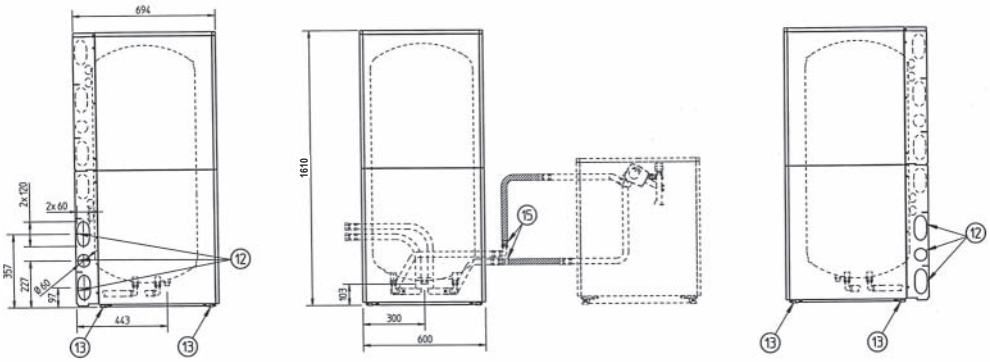
NOTE

For indoor unit details refer to 3TW59854-1 (EKHBRD*) or 3TW59914-1 (EKHVM*)

EKHTS260AC + EKHBRD-AB
EKHTS260AC + EKHVMR/YD-AA



1	3-way valve
2	Hot water out connection G 3/4" (female)
3	Cold water in connection G 3/4" (female)
4	Hot water out (quick coupling) at bottom tank
5	Cold water in (quick coupling) at bottom tank
6	Tank connection from indoor unit (quick coupling)
7	Tank connection to indoor unit (quick coupling)
8	Tank connection from indoor unit (quick coupling) at bottom tank
9	Tank connection to indoor unit (quick coupling) at bottom tank
10	Recirculation connection G 1/2" (male)
11	T-joint (in case of EKHBRD*)
12	Knock-out holes for water piping
13	Levelling feet (in option kit EKFMAHTB)
14	Flexible pipes (in option kit EKFMAHTB)
15	Adaptor quick connection - G 3/4" (in option kit EKFMAHTB)
16	Field piping



3TW60444-2

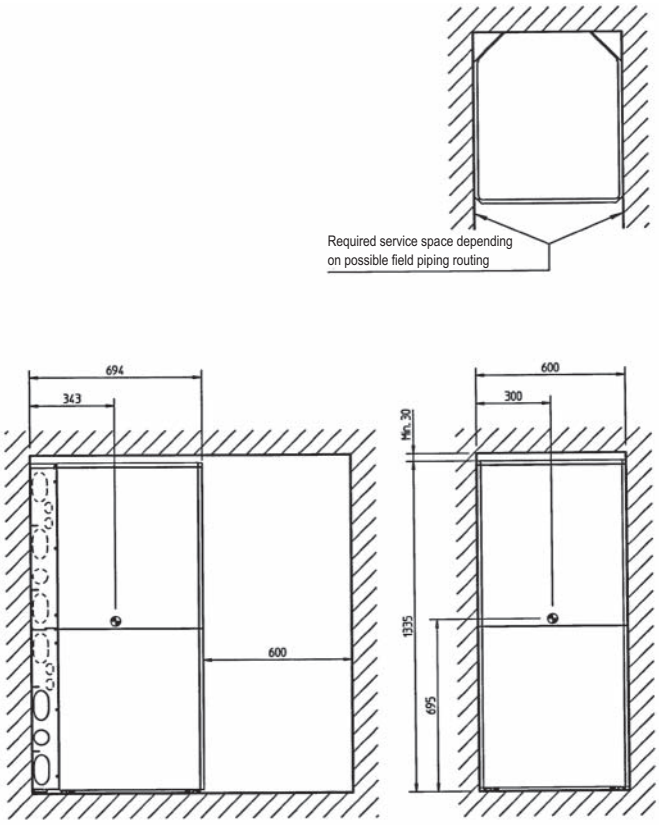
NOTE

For indoor unit details refer to 3TW59854-1 (EKHBRD*) or 3TW59914-1 (EKHVM*)

5 Centre of gravity

5 - 1 Centre of Gravity

EKHTS200AC

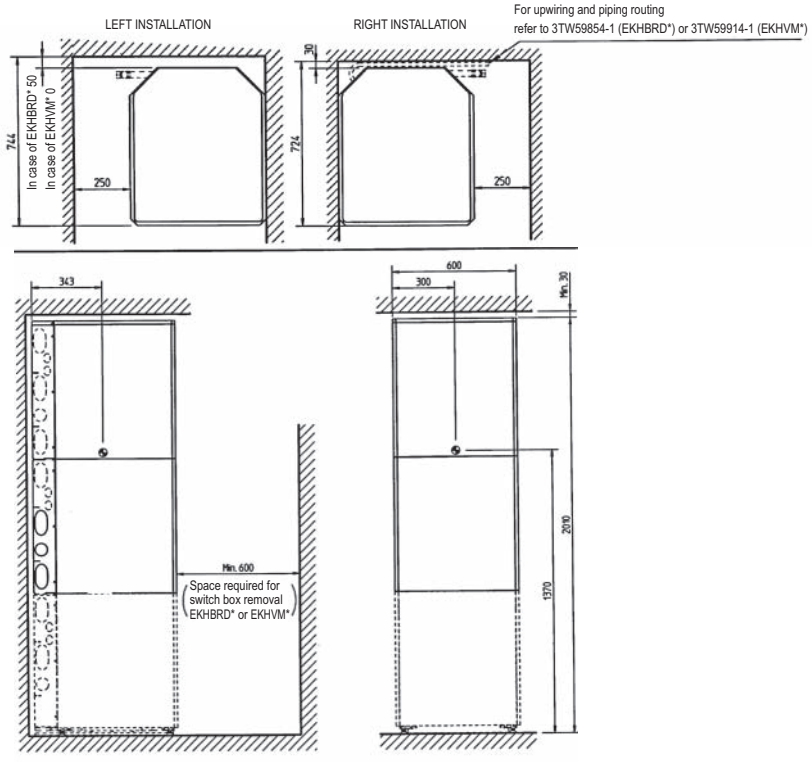


3TW60444-2

NOTE

For indoor unit details refer to 3TW59854-1 (EKHBRD*) or 3TW59914-1 (EKHVM*)

EKHTS200AC + EKHBRD-AB
EKHTS200AC + EKHVMR/YD-A



3TW60444-1

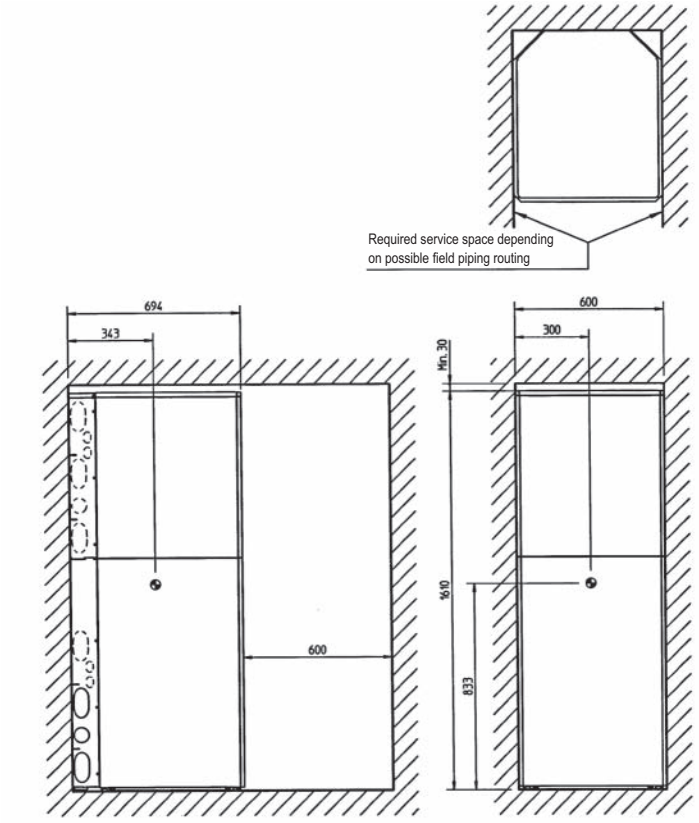
NOTE

Center of gravity only for EKHTS*AC

5 Centre of gravity

5 - 1 Centre of Gravity

EKHTS260AC

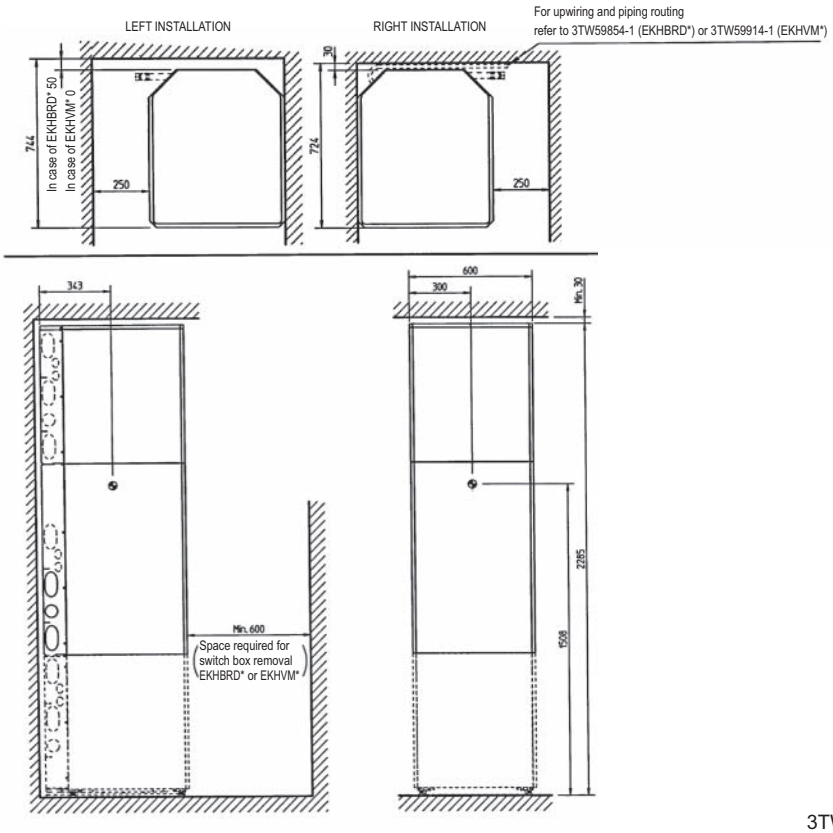


3TW60444-2

NOTE

For indoor unit details refer to 3TW59854-1 (EKHBRD*) or 3TW59914-1 (EKHVM*)

EKHTS260AC + EKHBRD-AB
EKHTS260AC + EKHVMR/YD-A



3TW60444-1

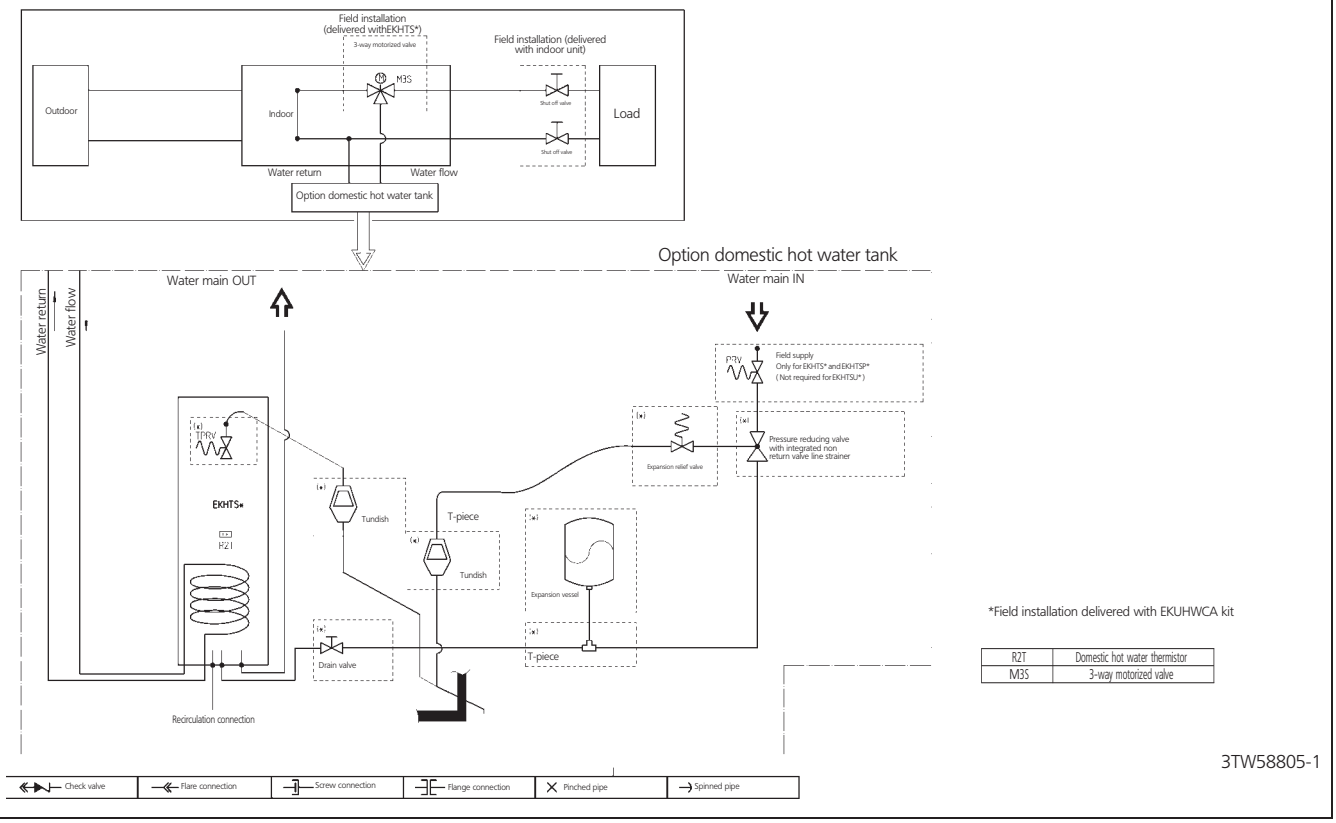
NOTE

Center of gravity only for EKHTS*AC

6 Piping diagrams

6 - 1 Piping Diagrams

EKHTS



*Field installation delivered with EKUHWCA kit

R2T	Domestic hot water thermistor
M3S	3-way motorized valve

3TW58805-1