

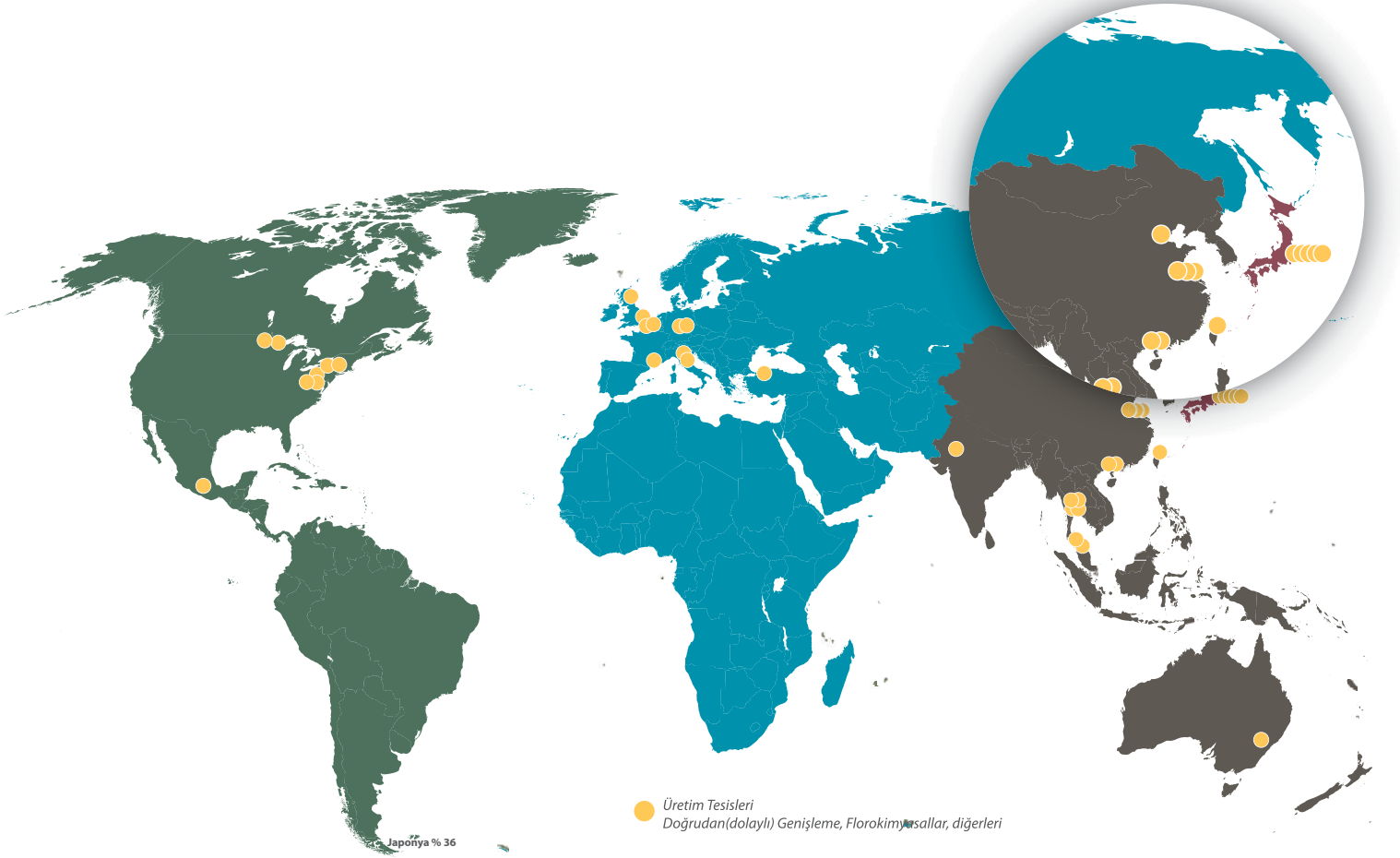
 **airfel** *Safe
Heating*



Airfel Combi Boiler

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Daikin in the World



SINCE ITS BEGINNINGS IN THE 1950'S, DAIKIN HAS GROWN INTO A GLOBAL PLAYER IN THE HEATING, AIR CONDITIONING AND INDUSTRIAL CLIMATE CONTROL MARKET.

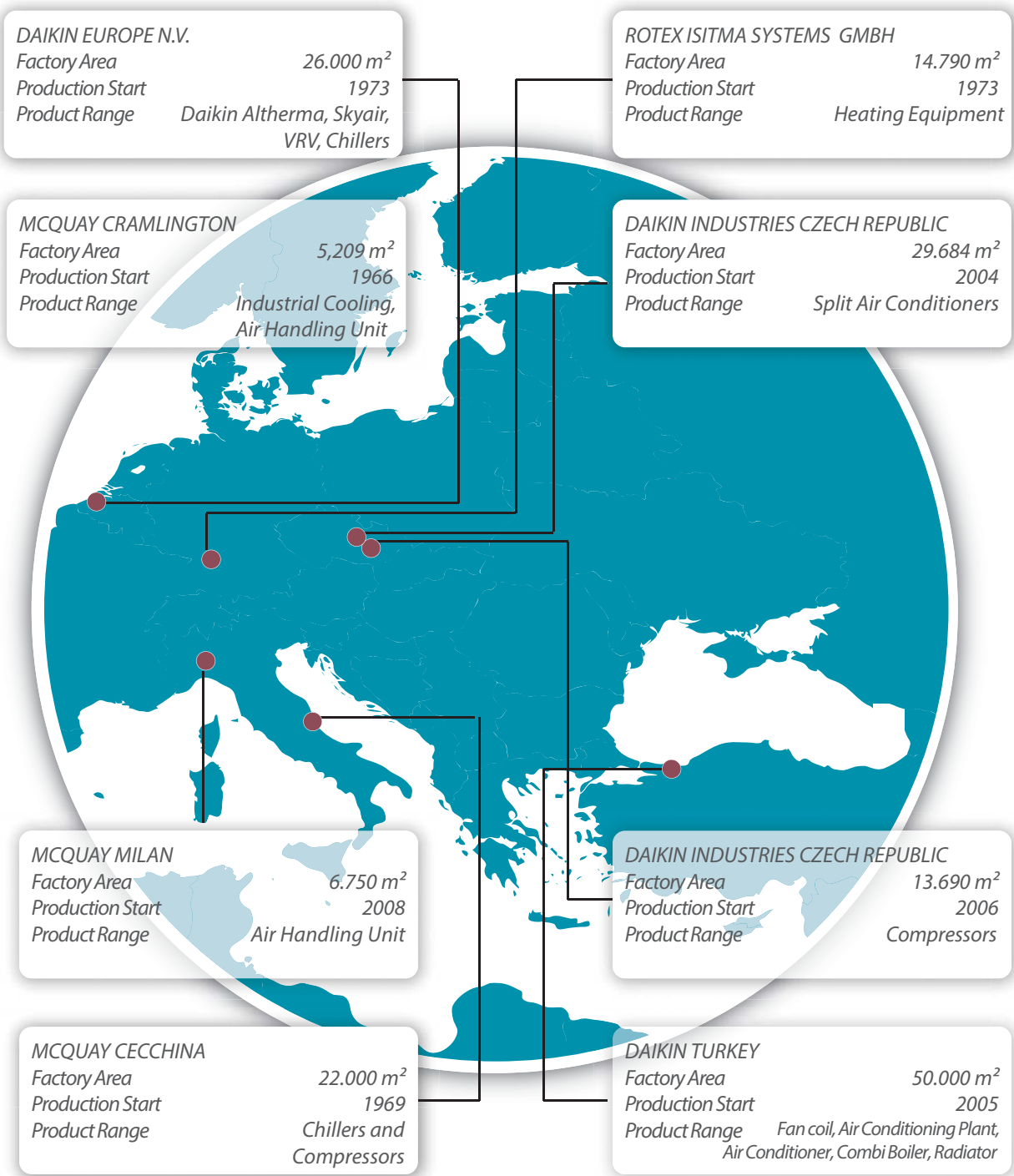
Parent company Daikin Industries Ltd. is actively engaged in a wide spectrum of technologies and Disciplines: from mechanics and electronics to Chemicals and fluorocarbons. Its Japan operations include major manufacturing locations and a new R&D Centre focused on the creation of next-generation Climate control technologies.

DAIKIN LEADS THE WAY

In 1973, parent company daikin industries Ltd. formed daikin europe N.V. in Ostend to tailor and market Daikin products to the specific needs and requirements of Europe, the Middle East, Russia and Africa.

In 2006, daikin complemented its strong position in Japan and Europe with the acquisition of Asian HVAC-R giant OYL Industries Bhd., home to such names as Mc Quay (applied systems) and J&E Hall (refrigeration) and AAF (Air filtration). In addition to expanding its product offerings, the acquisition gave Daikin a significant presence in the North American and Asian markets.

Daikin in Europe



In addition to housing the european production and administration headquarters, Daikin europe N.v. Is home to the EMEA sales and marketing headquarters.

The production site of Daikin Europe N.V. has grown into the most advanced plant of its kind in Europe with over 150,000 m² of production and administrative space dedicated to manufacturing state-of-the-art residential, commercial and industrial heating and cooling solutions. European production facilities in Pilsen and Brno (Czech Republic), as well as Cecchina and Milan (Italy) and Cramlington (UK) have added to capacity and optimised lead times to all markets. With the acquisition of German heating manufacturer Rotex GmbH and Turkish manufacturer Airfel Daikin Europe N.V. has strengthened its offerings and expanded its market presence in the heating market.

Daikin Turkey



DAIKIN TURKEY, HENDEK FACTORY

Having been active in Turkey through its distributors since 1978, Daikin has become the most powerful players of industry with the acquisition of Airfel in July 2011.

Today among other brands, Daikin has the widest product range in Turkey in heating, cooling and ventilation fields.

Daikin Turkey manufactures Daikin and Airfel branded air conditioners, combi boilers, panel radiators, fancoils, air handling units etc. with cutting edge technology to offer total air conditioning solution to meet different customer needs.

In production facilities of Daikin located in Hendek, Sakarya; along with Airfel branded units, Daikin branded products started to be manufactured.

Having its head office in Istanbul, Daikin Turkey keeps its service quality at highest level with its sales network including 6 regional directorates in Adana, Ankara, Antalya, Gaziantep, İzmir and Trabzon, 170 dealers and 500 sales points and 501 authorized services.

Daikin carries on its business to fulfill customer needs offering total comfort solutions with its wide product range, high technology production facilities, experienced and expert team in Turkey as well as globally.

With Daikin, Turkey will be positioned as R&D, manufacturing and logistic base of Europe, Middle East and Africa and will be the most important air conditioning market of EMEA region.

Daikin Turkey



Combi Boiler Production Plant
Hendek / Sakarya

Boiler production plant, which has a capacity of 300 thousand boiler production in a year, has also great emphasis on R&D studies. Our boilers are designed by a special team and manufactured with use of high quality components of industry. Products are tested for 100% security, function, tightness and pressure resistance. CE certifications are given by accredited laboratories of Europe.



Panel Radiator Production Plant
Hendek / Sakarya

Airfel radiator factory, which reached yearly 1.600.000 meter square production are with latest investments, is among limited number of facilities all around the world in panel radiator production field with high machine technology and cataphoresis coating. Whole manufacturing is made in full automatic weld lines. They are tested for 100% tightness, pressure resistance and presented with Airfel quality, which can be prove with the fact that our panel radiators have 12 years warranty.



Split Air Conditioner Production Plant
Hendek / Sakarya

Our air conditioners that are manufactured in our yearly 400 thousand set capacity split air conditioner factory, are tested for 100% electricity safety, function and high pressure in enthalpy, calorimetric and sound measurement laboratories. In addition to its high quality manufacturing copper pipe connections in critical positions are made by welding robots without any human contact.



Air Conditioning Production Plant
Hendek / Sakarya

Air Handling Units Production Plant, where hygienic package type and comfort type air handling units are manufactured by putting great importance on R&D studies, is the most modern facility in Turkey. Both home and abroad, our applied ventilation systems are preferred in hotel, hospitals, pharmaceutical plants, shopping centers, convention centers and office projects.



Fan coil Production Plant
Hendek / Sakarya

Our fan coil plant started its design and certification operation in 2009, now reached yearly 50 thousand fan coil production capacity. Our products are preferred at Turkey and abroad in several hotel and business centers due to their low sound level and high efficiency.

Digifel Premix - Condensing Combi Boiler



Room Thermostat with QAA73 Modulation

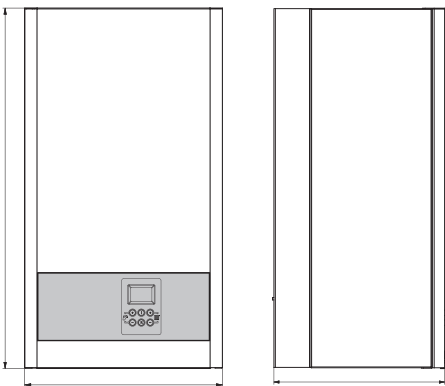
- 24 kW, 29 kW and 40 kW thermal capacity options
- Full combustion technology with Premix burner
- High efficiency up to %108 (according to EN 677)
- High fuel saving with condensing technology
- Stainless steel heat exchanger
- Non-gradual modulation between %15 -100 thanks to frequency-controlled fan
- Operation with frequency-controlled pump
- Hot water comfort according to EN 13203 ***
- NOx class 5
- Environmentally-friendly with low emission rates
- Failure detection and safety systems
- Opportunity of applying cascade system up to 15 units.
- Compatible with solar energy
- Operation with storagetank (optional)
- Integrated operation with outdoor sensor (optional)
- Integrated operation with room thermostat (optional)
- Embossed control panel designed specially for use of sight-disabled and elderly family members



	Features	Units	DIGIFEL PREMIX CP1-25SP	DIGIFEL PREMIX CP1-30SP	DIGIFEL PREMIX CP1-40SP
Energy Performance	Rated thermal load max.	kW	22,4	27,1	37,7
	Rated thermal load min.	kW	4,8	6,1	8,9
	Max./Min.Heating power(80/60°C)	kW	21,6 / 4,5	26,2 / 5,8	36,5 / 8,5
	Max./Min.Heating power (50/30°C)	kW	24,2 / 5,2	29,3 / 6,6	40 / 9,6
	Efficiency (80/60°C)	%	96,4	96,7	96,7
	Efficiency (50/30°C)	%	108	108	106
	Combustion Performance (92/42/EEC)		****	****	****
	NOx class		5	5	5
Heating Circuit	Minimum operating pressure	bar	0,7	0,7	0,7
	Maximum operating pressure	bar	3	3	3
	Expansion tank capacity	liter	7	8	12
	Expansion tank initial pressure	bar	1	1	1
	Heating circuit temp. range	°C	20/85	20/85	20/85
Domestic Water Circuit	Domestic water temperature max./min.	°C	40/65	40/65	40/65
	Hot water amount DT=30 °K	Liter/ min	10	12	17,1
	Domestic water comfort (EN 13203)		***	***	***
	Minimum hot water flow	Liter/ min	2,1	2,1	2,3
	Water installation pressure max./min.	Bar V/Hz	10/0,5	10/0,5	10/0,5
Electrical Data	Supply voltage	W IP	230/50	230/50	230/50
	Electrical power	mbar	110	110	110
	Electrical protection class	mbar	X4D	X4D	X4D
Gas Pressure	Natural gas (G20) inlet pressure	m³/h	21	21	21
	LPG (G30/G31) inlet pressure	kg/h	30/37	30/37	30/37
	Natural gas (G20) cons. (max./min.)	kg/h	2,37 / 0,52	2,85 / 0,64	4,1/1,01
	Natural gas (G30) cons. (max./min.)	kg	1,77 / 0,39	2,12 / 0,48	2,73/0,78
	Natural gas (G31) cons. (max./min.)	mm	1,74 / 0,38	2,09 / 0,47	2,64/0,68
Weight and Sizes	Net Weight:	kg	36	38	44
	Device sizes	mm	403*733*345	403*733*410	403*733*445
	Weight (with packaging)	m	38	42	48
	Box sizes	m	470*840*420	470*840*490	470*840*520
	Max. funnel length (60/100 mm)	m	6	6	6
	Max. funnel length (80/125 mm)		12	12	7
	Max. Funnel length (80/80 mm)		60	60	40

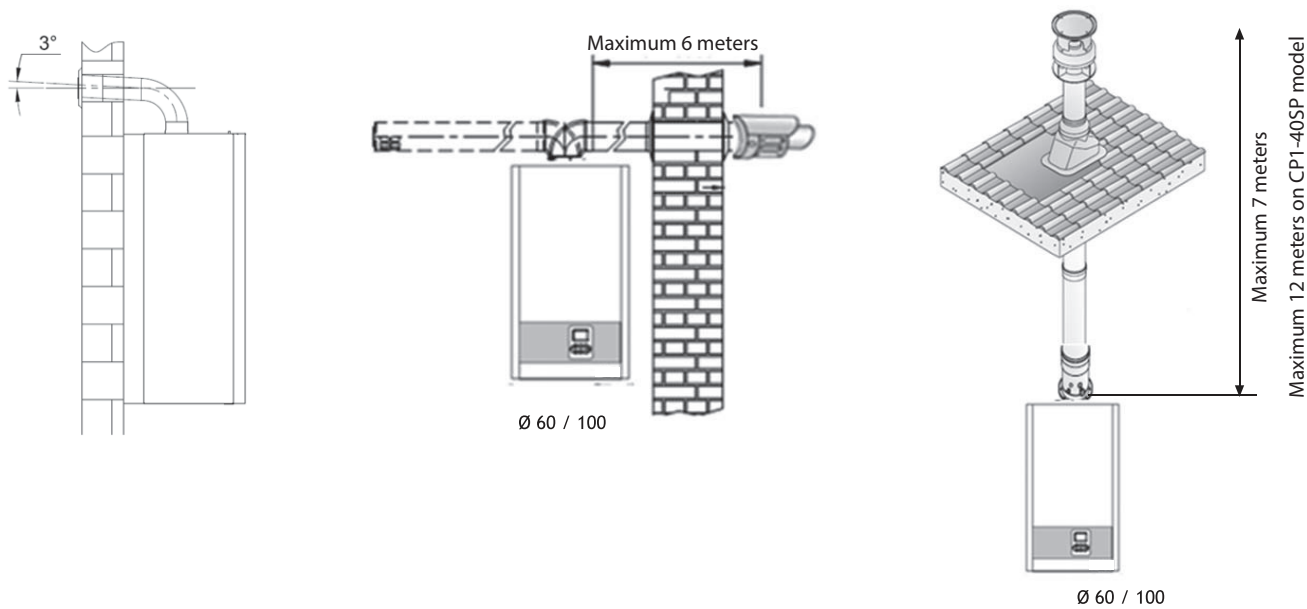
Digifel Premix - Condensing Combi Boiler

Dimensions



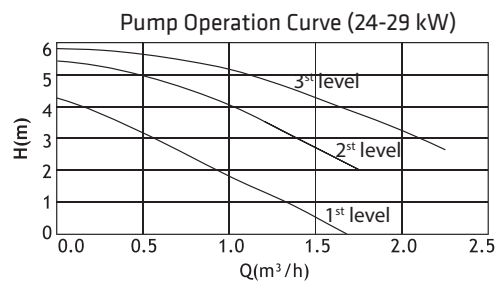
Dimensions	CP1 25 SP	CP1 30 SP	CP1 40 SP
Height (mm)	733	733	733
Width (mm)	403	403	403
Depth (mm)	345	410	445

Flue Gas Connections

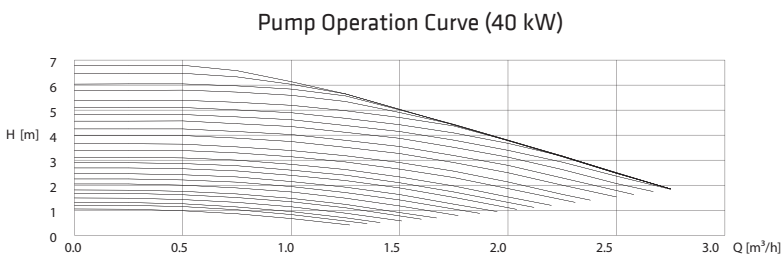


Funnel Type	Max.Total Funnel Length		Loss in every add. 90° elbow	Loss in every add. 45° elbow
	Horizontal	Vertical		
Ø 60 / 100	6 m. (C13)	12 m. (C13) 7 m. (CP1-40SP)	1 meter	0,5 meter
Ø 80 / 125	12 m. (C13) 7 m. (CP1-40SP)	13 m. C33	1 meter	0,5 meter
Ø 80 / 80	60 m. (C43-C53-C83) 40m. (CP1-40SP)		1 meter	0,5 meter

Pump Operation Curves



Grundfos brand, low energy consumption, high performance, 3-level circulation pumps are used for 24 - 29 kW Digifel Premix condensing boilers.



Grundfos brand, UPM15-70 series frequency-controlled, high performance, circulation pumps are used for 40 kW Digifel Premix combustion boilers.

Digifel Duo/Digifel - Hermetic Boiler



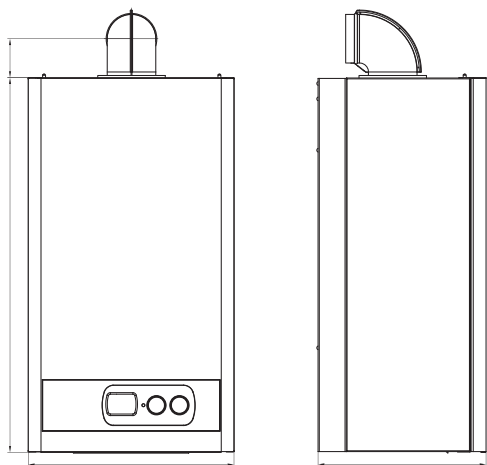
- Hermetic Boiler with 24 kW and 28 kW capacity
- Easy to use LCD screen
- High efficiency 93%
- Aesthetic look with modern design
- Full flame modulation with electronic ignition
- 3-star combustion performance according to 92/42/EEC directive
(Applicable for Digifel Duo KM1-24CE model.)
- Powered with Natural gas or LPG
- Double exchanger system
- Copper-made main exchanger
- Stainless steel plate exchanger
- Low consumption 3 stage long-lasting silent pump
- Hot water access in low city water (0,5 Bar)
- Electrical protection class IPX5D
- Device protection with 13 different safety systems
- Automatic detection system with LCD screen
- Room thermostat (optional)
- Easy assembly and maintenance
- Available for floor heating system



	Features	Units	DIGIFEL KB2-24 CE	DIGIFEL DUO KM1-24CE	DIGIFEL DUO KM1-28CE
Energy Performance	Rated thermal load max.	kW	25,9	25,7	30,7
	Rated thermal load min.	kW	11	10,5	12,2
	Max./Min. Heating power (80/60°C)	kW	24,1 / 9,6	23,8/9,4	28,1/10,7
	Max./Min. Heating power (50/30°C)	kW	----	----	----
	Efficiency (80/60°C)	%	93,1	92,8	91,5
	Efficiency (50/30°C)	%	----	----	----
	Combustion Performance (92/42/EEC)		***	***	***
	NOx class		2	2	2
Heating Circuit	Waste gas temperature max./min.	°C	108	108,2	129,2
	Minimum operating pressure	bar	0,5	0,5	0,5
	Maximum operating pressure	bar	3	3	3
	Expansion tank capacity	liter	7	7	7
	Expansion tank initial pressure	bar	1	1	1
Domestic Water Circuit	Heating circuit temperature range	°C	35/85	35/85	35/85
	Domestic water temperature max./min.	°C	35/55	35/55	35/55
	Hot water amount DT=25 °K	Liter/ dak	11	10,2	12,3
	Domestic water comfort (EN 13203)		**	***	***
	Minimum hot water flow	Liter/ dak	2,1	2,1	2,1
Electrical Data	Water installation pressure max./min.	Bar	10/0,5	10/0,5	10/0,5
	Supply voltage	V/Hz	230/50	230/49	230/50
	Electrical power	W	110	110	115
Gas Pressure	Electrical protection class	IP	X5D	X5D	X5D
	Natural gas (G20) inlet pressure	mbar	20	20	20
	LPG (G30/G31) inlet pressure	mbar	30/37	30/37	30/37
	Natural gas (G20) cons. (max./min.)	m ³ /h	2,54/1,1	2,54/1,1	2,88/1,2
	Natural gas (G30) cons.max./min.)	kg/h	1,88 / 0,82	1,88 / 0,81	2,15/0,9
Weight and Sizes	Natural gas (G31) cons. (max./min.)	kg/h	1,87 / 0,81	1,87 / 0,80	2,1/0,9
	Net Weight	kg	34	35	35
	Device sizes	mm	403*733*329	403*730*329	403*730*329
	Weight (with packaging)	kg	38	39	39
	Box sizes	mm	470*840*420	470*840*420	470*840*420
	Max. funnel length (60/100 mm)	m	4	5	5
	Max. funnel length (80/125 mm)	m	-	-	-
	Max. funnel length (80/80 mm)	m	-	-	-

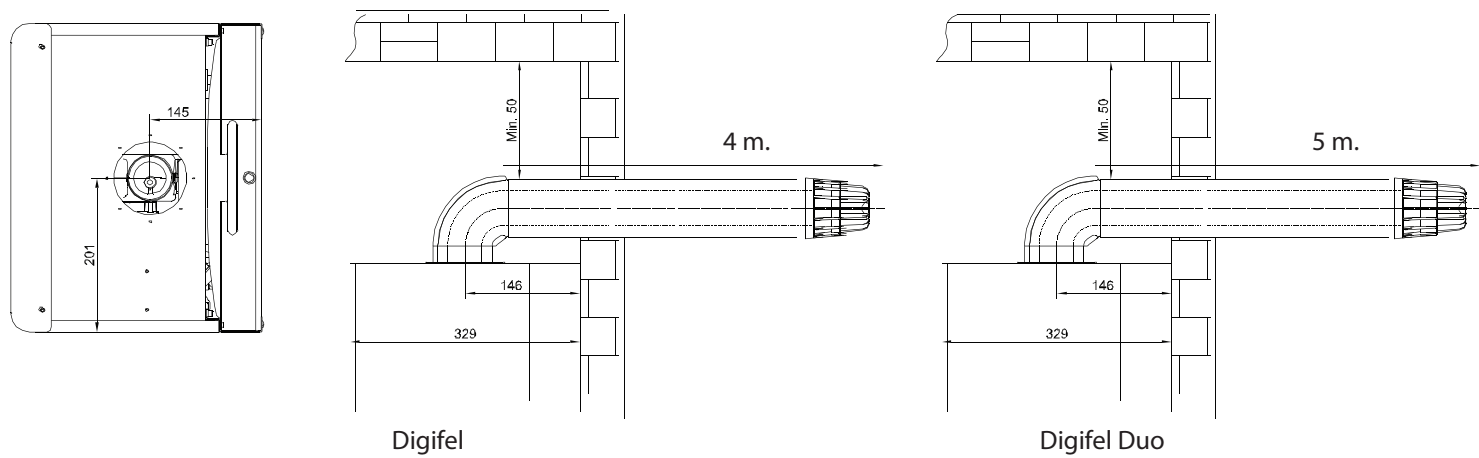
Digifel Duo/Digifel - Hermetic Boiler

Dimensions



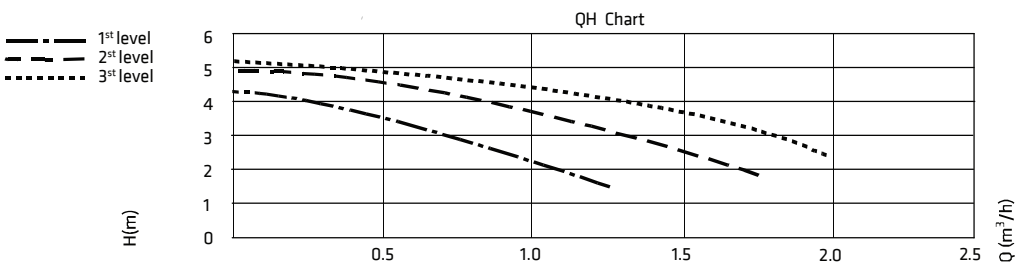
Dimensions	KB2 24 CE	KM1 24 CE	KM1 28 CE
Height (mm)	733	733	733
Width (mm)	403	403	403
Depth (mm)	329	329	329

Flue Gas Connections



Pump Operation Curve

The circulation pump used in Digifel/Digifel Duo combi boilers has 5 mSS pumping height and three levels. Circulation pump is classified in low energy class



Digifix Duo/Digifix - Hermetic Boiler



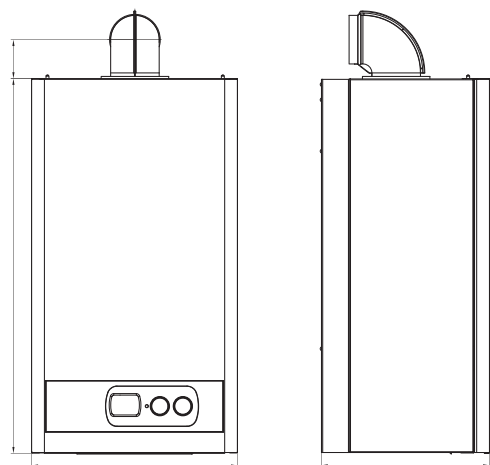
- Hermetic Boiler with 24 kW capacity
- Easy to use LCD screen
- High efficiency 93%
- Aesthetic look with modern design
- Full Flame modulation with electronic ignition
- 3-star combustion performance according to 92/42/EEC directive (Applicable for Digifix Duo KM1-24CE model.)
- Powered with Natural gas or LPG
- Double exchanger system
- Copper-made main exchanger
- Stainless steel plate exchanger
- Low consumption 3 stage, long-lasting silent pump
- Hot water access in low city water (0,5 Bar)
- Electrical protection class IPX5D
- Device protection with 13 different safety systems
- Automatic detection system with LCD screen
- Room thermostat (optional)
- Easy assembly and maintenance
- Available for floor heating system



	Features	Units	DIGIFIX KB2-24 CE	DIGIFIX DUO KM1-24CE
Energy Performance	Rated thermal load max.	kW	25,9	25,7
	Rated thermal load min.	kW	11	10,5
	Max./Min. Heating power (80/60°C)	kW	24,1 / 9,6	23,8/9,4
	Max./Min. Heating power (50/30°C)	kW	----	----
	Efficiency (80/60°C)	%	93,1	92,8
	Efficiency (50/30°C)	%	----	----
	Combustion Performance (92/42/EEC)		***	***
	NOx class		2	2
Heating Circuit	Waste gas temperature max./min.	°C	108	108,2
	Minimum operating pressure	bar	0,5	0,5
	Maximum operating pressure	bar	3	3
	Expansion tank capacity	litre	7	7
	Expansion tank initial pressure	bar	1	1
Domestic Water Circuit	Heating circuit temperature range	°C	35/85	35/85
	Domestic water temperature max./min.	°C	35/55	35/55
	Hot water amount DT=25 °K	Litre/ dak	11	10,2
	Domestic water comfort (EN 13203)		**	***
	Minimum hot water flow	Litre/ dak	2,1	2,1
Electrical Data	Water installation pressure max./min.	Bar	10/0,5	10/0,5
	Supply voltage	V/Hz	230/50	230/49
	Electrical power	W	110	110
	Electrical protection class	IP	X5D	X5D
Gas Pressure	Natural gas (G20) inlet pressure	mbar	20	20
	LPG (G30/G31) inlet pressure	mbar	30/37	30/37
	Natural gas (G20) cons. (max./min.)	m³/h	2,54/1,1	2,54/1,1
	Natural gas (G30) cons.max./min.)	kg/h	1,88 / 0,82	1,88 / 0,81
	Natural gas (G31) cons. (max./min.)	kg/h	1,87 / 0,81	1,87 / 0,80
Weight and Sizes	Net Weight	kg	34	35
	Device sizes	mm	403*733*329	403*730*329
	Weight (with packaging)	kg	38	39
	Box sizes	mm	470*840*420	470*840*420
	Max. funnel length (60/100 mm)	m	4	5
	Max. funnel length (80/125 mm)	m	-	-
	Max. funnel length (80/80 mm)	m	-	-

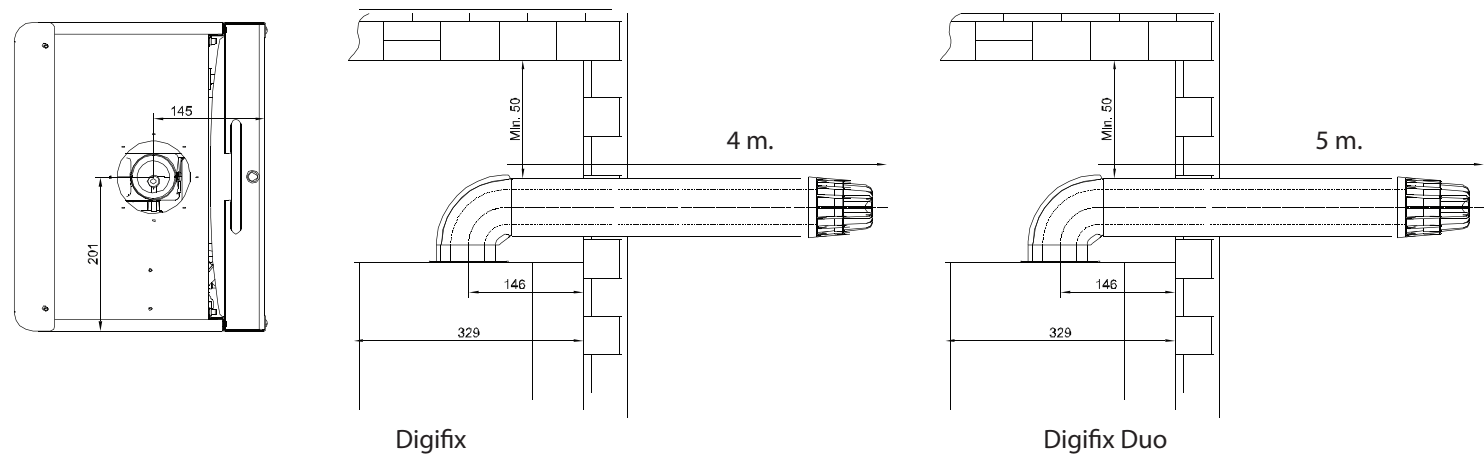
Digifix Duo/Digifix - Hermetic Boiler

Dimensions



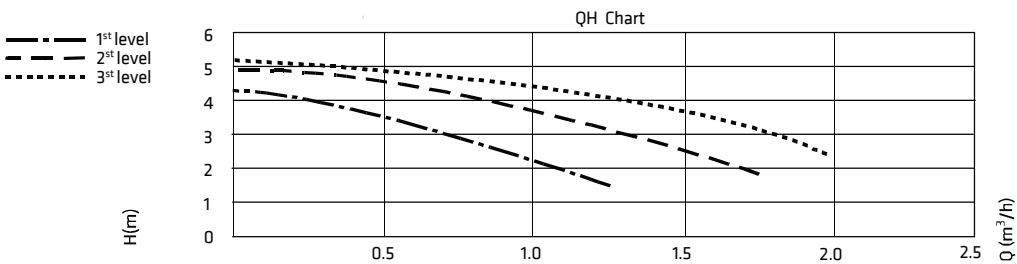
Dimensions	KB2 24 CE	KM1 24 CE
Height (mm)	733	733
Width (mm)	403	403
Depth (mm)	329	329

Flue Gas Connections

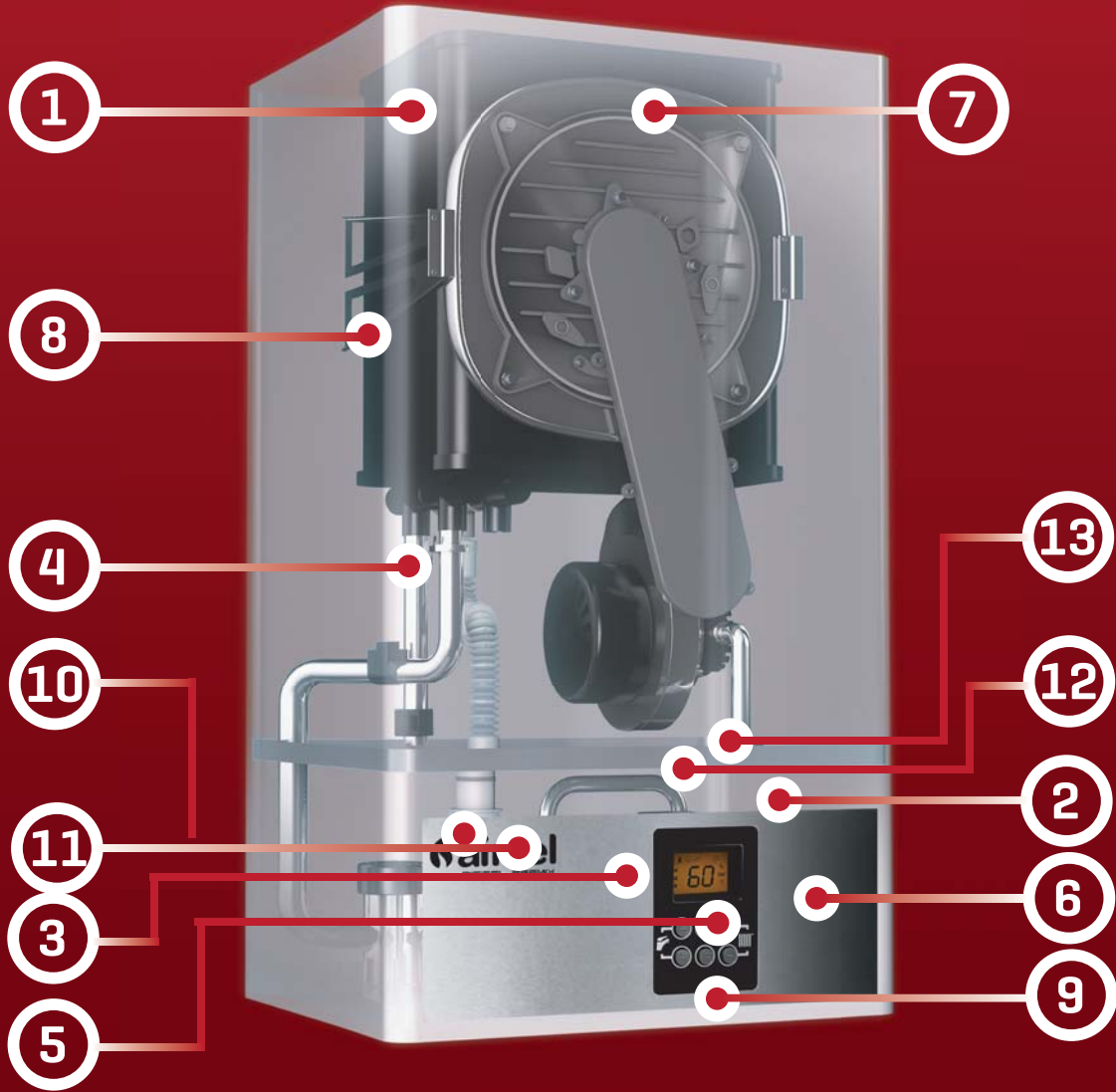


Pump Operation Curve

The circulation pump used in Digifix/Digifix Duo combi boilers has 5 mSS pumping height and three levels. Circulation pump is classified in low energy class

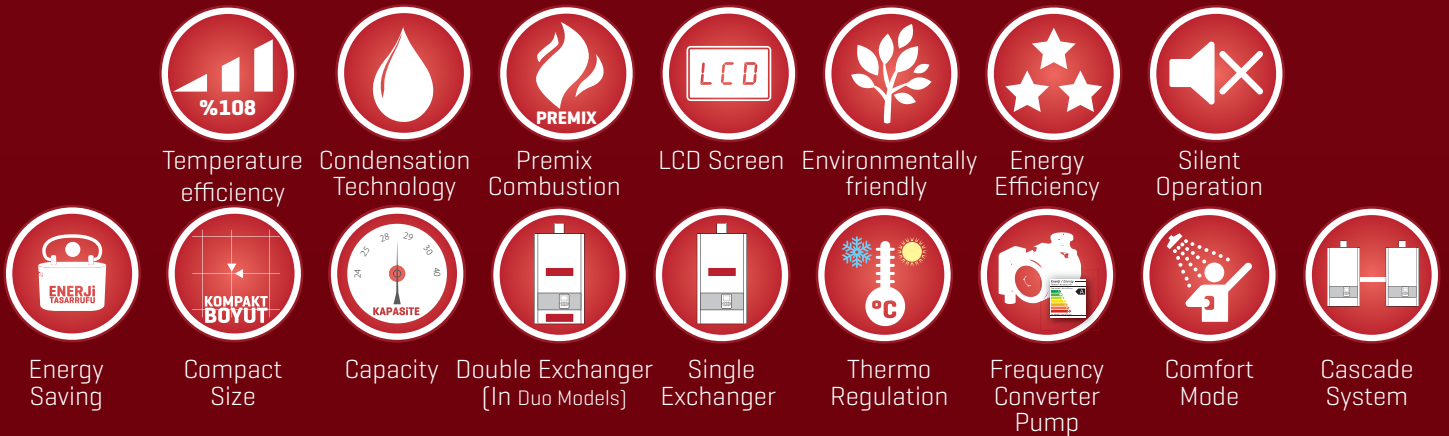


Airfel Safe Heating



Airfel combi boiler heats with its 13 safety sensors.

1- Automatic air purger 2- Safety valve 3- Three-way valve anti-blockage system 4- Anti-overheating function 5- Automatic by-pass system 6- Pump anti-blockage system 7- Flue gas safety system 8- Ionization flame control 9- Drain stopcock 10- Anti-freeze function 11- Operation without water safety system 12- IPx5D electrical protection system 13- Low-voltage safety system



Head Office Hürriyet Mah. Yakacık D-100 Kuzey Yan Yol No:49/1-2 Kartal İSTANBUL Tel: (+90216) 453 27 00 Fax: (+90216) 671 06 00
Fabrika Sakarya 2. Organize Sanayi Bölgesi Hendek SAKARYA Tel: (+90264) 616 27 00 Fax: (+90264) 654 58 46

 **airfel**