

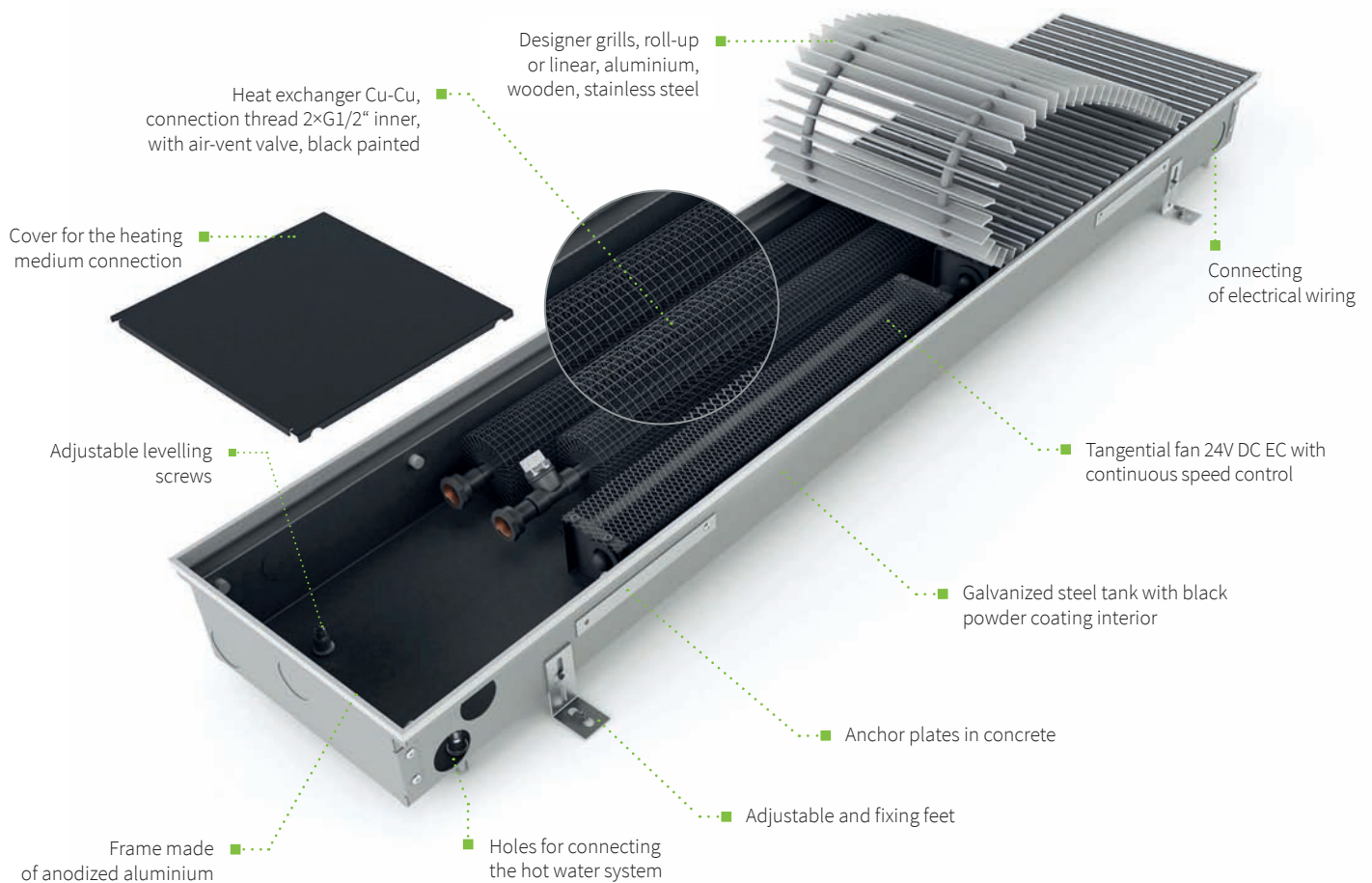
ECO & SAFE | VOLTAGE **24**

New Practic

Version with Cu-Cu wire exchanger

- Cu-Cu wire exchanger resistant to mechanical damage
- Continuous speed control
- Low noise
- Energy saving and safety
- Safe voltage of 24 V DC

Construction

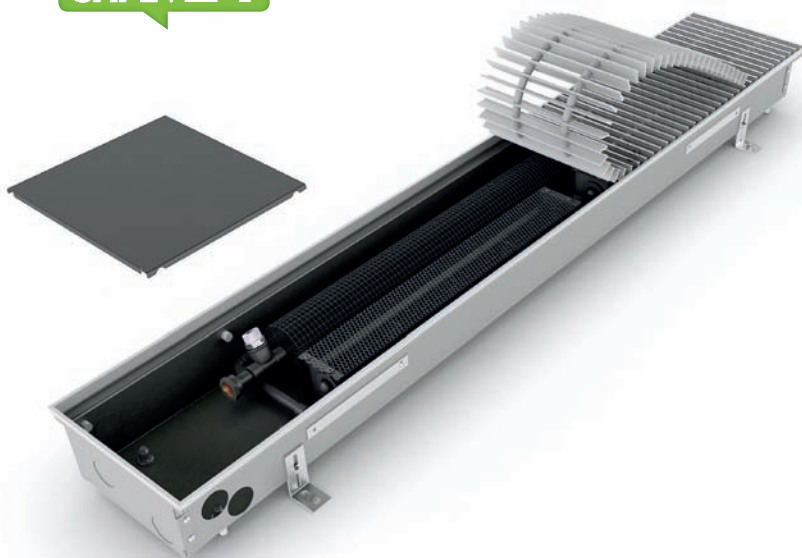


FDT 0090 0200

TRENCH HEATER WITH FAN



- Flats, detached houses, offices, administrative buildings
- Small universal trench heater
- High heating output
- Continuous speed control
- Quiet operation
- Common electricity consumption **3 W/m**
- Using in dry environment



Technical data

Trench heater

Height	H = 90 mm
Width	W = 200 mm
Length	L = 700-4 800 mm in step 100 mm

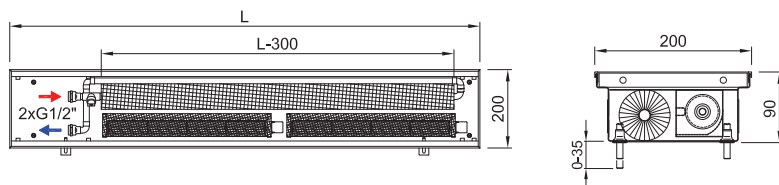
Heat exchanger

Type	Cu-Cu wire
Length	L- 300 mm
Connection thread	2xG1/2" inner

Working conditions

Max. temperature	110 °C
Max. overpressure	1 MPa (10 bar)
Protection	IP 20

Ambient conditions Temp. T = **+2** to **+40** °C
Humidity Rh = **20** to **70**%



Trench heater heating output FDT 0090 0200

Q[W] 75/65/20 °C (ΔT=50 °C)

Temperature exponent 1,1

Length L [mm]	Speed [-] / Heating output [W]			
	1	2	3	4 max.
700	158 W	213 W	246 W	267 W
800	210 W	284 W	328 W	356 W
900	252 W	340 W	394 W	427 W
1000	357 W	481 W	557 W	605 W
1100	357 W	481 W	557 W	605 W
1200	420 W	566 W	656 W	712 W
1300	462 W	624 W	722 W	782 W
1400	515 W	694 W	804 W	872 W
1500	567 W	765 W	886 W	960 W
1600	618 W	833 W	964 W	1 046 W
1700	618 W	833 W	964 W	1 046 W
1800	714 W	964 W	1 115 W	1 209 W
1900	776 W	1 046 W	1 211 W	1 313 W
2000	827 W	1 117 W	1 293 W	1 401 W
2100	870 W	1 173 W	1 358 W	1 473 W
2200	870 W	1 173 W	1 358 W	1 473 W
2300	975 W	1 314 W	1 522 W	1 651 W
2400	975 W	1 314 W	1 522 W	1 651 W
2500	1 038 W	1 399 W	1 621 W	1 757 W
2600	1 080 W	1 457 W	1 686 W	1 828 W
2700	1 121 W	1 513 W	1 752 W	1 900 W
2800	1 184 W	1 598 W	1 850 W	2 006 W
2900	1 235 W	1 666 W	1 929 W	2 091 W
3000	1 235 W	1 666 W	1 929 W	2 091 W
3200	1 393 W	1 879 W	2 175 W	2 358 W
3400	1 445 W	1 950 W	2 257 W	2 447 W
3600	1 592 W	2 147 W	2 486 W	2 696 W
3800	1 645 W	2 219 W	2 568 W	2 785 W
4000	1 739 W	2 346 W	2 716 W	2 945 W
4200	1 853 W	2 499 W	2 893 W	3 137 W
4400	1 950 W	2 630 W	3 044 W	3 301 W
4600	2 062 W	2 783 W	3 222 W	3 493 W
4800	2 105 W	2 839 W	3 287 W	3 564 W

Acoustic pressure [dB(A)]

Length L [mm]	Speed [-] / Acoustic pressure [dB(A)]			
	1	2	3	4 max.
700	< 20 dB(A)	26 dB(A)	34 dB(A)	37 dB(A)
800		27 dB(A)	35 dB(A)	38 dB(A)
900			28 dB(A)	36 dB(A)
1000		29 dB(A)		37 dB(A)
1100			30 dB(A)	38 dB(A)
1200		31 dB(A)		39 dB(A)
1300			32 dB(A)	40 dB(A)
1400		33 dB(A)		41 dB(A)
1500			34 dB(A)	42 dB(A)
1600		35 dB(A)		43 dB(A)
1700	36 dB(A)		44 dB(A)	
1800		37 dB(A)	45 dB(A)	46 dB(A)
1900	38 dB(A)		46 dB(A)	
2000		39 dB(A)	47 dB(A)	47 dB(A)
2100	40 dB(A)		48 dB(A)	
2200		41 dB(A)	49 dB(A)	
2300	42 dB(A)		50 dB(A)	
2400		43 dB(A)	51 dB(A)	
2500	44 dB(A)		52 dB(A)	
2600		45 dB(A)	53 dB(A)	
2700	46 dB(A)		54 dB(A)	
2800		47 dB(A)	55 dB(A)	
2900	48 dB(A)		56 dB(A)	
3000		49 dB(A)	57 dB(A)	
3200	50 dB(A)		58 dB(A)	
3400		51 dB(A)	59 dB(A)	
3600	52 dB(A)		60 dB(A)	
3800		53 dB(A)	61 dB(A)	
4000	54 dB(A)		62 dB(A)	
4200		55 dB(A)	63 dB(A)	
4400	56 dB(A)		64 dB(A)	
4600		57 dB(A)	65 dB(A)	
4800	58 dB(A)		66 dB(A)	

Output 90/70/20 °C = ~ 1,22x75/65/20 °C / Output 70/55/20 °C = ~ 0,84 x 75/65/20 °C / Output 55/45/20 °C = ~ 0,57 x 75/65/20 °C

Heating outputs in accordance with EN442

FDT 0090 0250

TRENCH HEATER WITH FAN



- Flats, detached houses, offices, administrative buildings
- Small universal trench heater
- High heating output
- Continuous speed control
- Quiet operation
- Common electricity consumption **3 W/m**
- Using in dry environment

Technical data

Trench heater

Height	H = 90 mm
Width	W = 250 mm
Length	L = 700–4 800 mm in step 100 mm

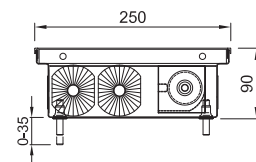
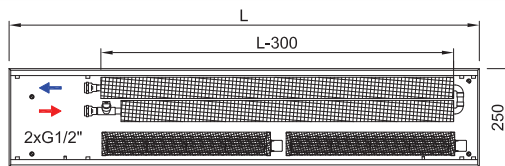
Heat exchanger

Type	Cu-Cu wire
Length	L-300 mm
Connection thread	2xG1/2" inner

Working conditions

Max. temperature	110 °C
Max. overpressure	1 MPa (10 bar)
Protection	IP 20

Ambient conditions Temp. T = +2 to +40 °C
Humidity Rh = 20 to 70%



Heating output FDT 0090 0250

Q[W] 75/65/20 °C (ΔT=50 °C)

Temperature exponent 1,1

Length L [mm]	Speed [-] / Heating output [W]			
	1	2	3	4 max.
700	187 W	342 W	458 W	489 W
800	249 W	457 W	610 W	652 W
900	299 W	548 W	733 W	783 W
1000	424 W	776 W	1 038 W	1 108 W
1100	424 W	776 W	1 038 W	1 108 W
1200	499 W	913 W	1 221 W	1 304 W
1300	549 W	1 005 W	1 344 W	1 434 W
1400	611 W	1 119 W	1 496 W	1 597 W
1500	673 W	1 233 W	1 648 W	1 760 W
1600	733 W	1 343 W	1 795 W	1 917 W
1700	733 W	1 343 W	1 795 W	1 917 W
1800	848 W	1 553 W	2 076 W	2 217 W
1900	921 W	1 685 W	2 253 W	2 406 W
2000	983 W	1 799 W	2 406 W	2 569 W
2100	1 032 W	1 891 W	2 528 W	2 699 W
2200	1 032 W	1 891 W	2 528 W	2 699 W
2300	1 157 W	2 119 W	2 833 W	3 025 W
2400	1 157 W	2 119 W	2 833 W	3 025 W
2500	1 232 W	2 256 W	3 017 W	3 221 W
2600	1 282 W	2 348 W	3 139 W	3 351 W
2700	1 332 W	2 438 W	3 260 W	3 481 W
2800	1 407 W	2 575 W	3 444 W	3 677 W
2900	1 467 W	2 685 W	3 591 W	3 833 W
3000	1 467 W	2 685 W	3 591 W	3 833 W
3200	1 654 W	3 028 W	4 048 W	4 323 W
3400	1 716 W	3 142 W	4 201 W	4 485 W
3600	1 891 W	3 462 W	4 629 W	4 941 W
3800	1 953 W	3 576 W	4 781 W	5 104 W
4000	2 065 W	3 781 W	5 056 W	5 398 W
4200	2 200 W	4 028 W	5 386 W	5 750 W
4400	2 315 W	4 238 W	5 667 W	6 050 W
4600	2 449 W	4 484 W	5 996 W	6 402 W
4800	2 499 W	4 576 W	6 118 W	6 532 W

Acoustic pressure [dB(A)]

Length L [mm]	Speed [-] / Acoustic pressure [dB(A)]																													
	1	2	3	4 max.																										
700	< 20 dB(A)	26 dB(A)	34 dB(A)	37 dB(A)																										
800		27 dB(A)	35 dB(A)	38 dB(A)																										
900			28 dB(A)	36 dB(A)	39 dB(A)																									
1000		29 dB(A)		37 dB(A)	40 dB(A)																									
1100				20 dB(A)	38 dB(A)	41 dB(A)																								
1200			30 dB(A)		39 dB(A)	42 dB(A)																								
1300					21 dB(A)	40 dB(A)	43 dB(A)																							
1400		22 dB(A)				41 dB(A)	44 dB(A)																							
1500						23 dB(A)	42 dB(A)	45 dB(A)																						
1600				24 dB(A)			43 dB(A)		46 dB(A)																					
1700	25 dB(A)						44 dB(A)	47 dB(A)																						
1800			26 dB(A)				45 dB(A)			48 dB(A)																				
1900							27 dB(A)		46 dB(A)		49 dB(A)																			
2000					28 dB(A)				47 dB(A)			50 dB(A)																		
2100								29 dB(A)	48 dB(A)				51 dB(A)																	
2200		30 dB(A)							49 dB(A)					52 dB(A)																
2300									31 dB(A)	50 dB(A)					53 dB(A)															
2400						32 dB(A)				51 dB(A)						54 dB(A)														
2500										33 dB(A)	52 dB(A)						55 dB(A)													
2600				34 dB(A)							53 dB(A)							56 dB(A)												
2700											35 dB(A)	54 dB(A)							57 dB(A)											
2800	36 dB(A)											55 dB(A)								58 dB(A)										
2900												37 dB(A)	56 dB(A)								59 dB(A)									
3000			38 dB(A)										57 dB(A)									60 dB(A)								
3200													39 dB(A)	58 dB(A)									61 dB(A)							
3400							40 dB(A)							59 dB(A)										62 dB(A)						
3600														41 dB(A)	60 dB(A)										63 dB(A)					
3800					42 dB(A)										61 dB(A)											64 dB(A)				
4000															43 dB(A)	62 dB(A)											65 dB(A)			
4200								44 dB(A)								63 dB(A)												66 dB(A)		
4400																45 dB(A)	64 dB(A)												67 dB(A)	
4600		46 dB(A)															65 dB(A)													68 dB(A)
4800																	47 dB(A)	66 dB(A)												

Output 90/70/20 °C = ~ 1,22x75/65/20 °C / Output 70/55/20 °C = ~ 0,84 x 75/65/20 °C / Output 55/45/20 °C = ~ 0,57 x 75/65/20 °C

Heating outputs in accordance with EN442

FDK 0090 0200 / 0250

TRENCH HEATER WITH NATURAL CONVECTION



- Offices, corridors, halls, flats, winter garden
- High heating output of natural convection
- Suitable for combining with other heating systems
- Using in dry environment
- 2pipe system

Technical data

Trench heater

Height	H = 90 mm
Width	V = 200, 250 mm
Length	L = 700-4 800 mm in step 100 mm

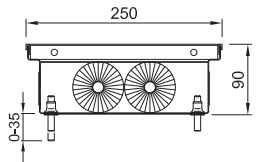
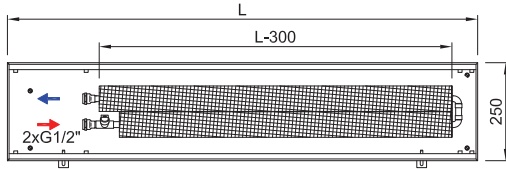
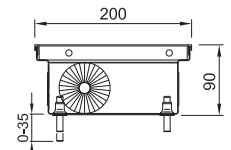
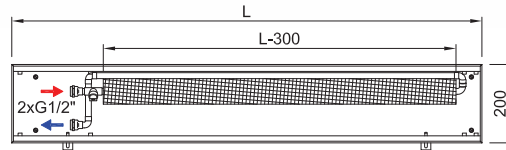
Heat exchanger

Type	Cu-Cu wire
Length	L-300 mm
Connection thread	2×G1/2" inner

Working conditions

Max. temperature	110 °C
Max. overpressure	1 MPa (10 bar)
Protection	IP 20

Ambient conditions	Temp. T = +2 to +40 °C Humidity Rh = 20 to 70%
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Trench heater heating output FDK 0090 0200, FDK 0090 0250

Q[W] 90/70/20°C (ΔT=60°C)

H×V [mm]	0090 0200	0090 0250
L [mm]	n=1,463	n=1,375
700	121 W	167 W
800	151 W	208 W
900	181 W	251 W
1000	212 W	292 W
1100	242 W	333 W
1200	272 W	374 W
1300	302 W	415 W
1400	330 W	456 W
1500	360 W	499 W
1600	392 W	540 W
1700	422 W	581 W
1800	452 W	623 W
1900	480 W	664 W
2000	511 W	704 W
2100	542 W	745 W
2200	572 W	788 W
2300	601 W	829 W
2400	631 W	870 W
2500	661 W	912 W
2600	692 W	953 W
2700	721 W	993 W
2800	751 W	1036 W
2900	781 W	1077 W
3000	811 W	1118 W
3200	871 W	1201 W
3400	931 W	1284 W
3600	990 W	1366 W
3800	1051 W	1449 W
4000	1110 W	1532 W
4200	1171 W	1614 W
4400	1230 W	1697 W
4600	1290 W	1780 W
4800	1351 W	1863 W

Q[W] 75/65/20°C (ΔT=50°C)

H×V [mm]	0090 0200	0090 0250
L [mm]	n=1,463	n=1,375
700	93 W	130 W
800	116 W	162 W
900	139 W	195 W
1000	162 W	227 W
1100	185 W	259 W
1200	208 W	291 W
1300	231 W	323 W
1400	253 W	355 W
1500	276 W	388 W
1600	300 W	420 W
1700	323 W	452 W
1800	346 W	485 W
1900	368 W	517 W
2000	391 W	548 W
2100	415 W	580 W
2200	438 W	613 W
2300	460 W	645 W
2400	483 W	677 W
2500	506 W	710 W
2600	530 W	742 W
2700	552 W	773 W
2800	575 W	806 W
2900	598 W	838 W
3000	621 W	870 W
3200	667 W	935 W
3400	713 W	999 W
3600	758 W	1063 W
3800	805 W	1128 W
4000	850 W	1192 W
4200	897 W	1256 W
4400	942 W	1321 W
4600	988 W	1385 W
4800	1035 W	1450 W

Q[W] 70/55/20°C (ΔT=43°C)

H×V [mm]	0090 0200	0090 0250
L [mm]	n=1,463	n=1,375
700	73 W	104 W
800	91 W	130 W
900	110 W	156 W
1000	128 W	182 W
1100	146 W	207 W
1200	164 W	233 W
1300	182 W	258 W
1400	199 W	284 W
1500	217 W	310 W
1600	237 W	336 W
1700	255 W	361 W
1800	273 W	388 W
1900	290 W	413 W
2000	308 W	438 W
2100	327 W	464 W
2200	345 W	490 W
2300	363 W	516 W
2400	381 W	541 W
2500	399 W	568 W
2600	418 W	593 W
2700	435 W	618 W
2800	453 W	645 W
2900	471 W	670 W
3000	490 W	696 W
3200	526 W	748 W
3400	562 W	799 W
3600	598 W	850 W
3800	635 W	902 W
4000	670 W	953 W
4200	707 W	1 004 W
4400	743 W	1 056 W
4600	779 W	1 108 W
4800	816 W	1 160 W

Q[W] 55/45/20°C (ΔT=30°C)

H×V [mm]	0090 0200	0090 0250
L [mm]	n=1,463	n=1,375
700	45 W	65 W
800	54 W	81 W
900	65 W	97 W
1000	77 W	112 W
1100	88 W	128 W
1200	98 W	144 W
1300	109 W	160 W
1400	120 W	176 W
1500	131 W	192 W
1600	143 W	208 W
1700	152 W	224 W
1800	163 W	240 W
1900	174 W	257 W
2000	185 W	272 W
2100	196 W	288 W
2200	207 W	304 W
2300	218 W	319 W
2400	229 W	335 W
2500	240 W	352 W
2600	250 W	368 W
2700	261 W	383 W
2800	272 W	399 W
2900	283 W	415 W
3000	294 W	431 W
3200	316 W	464 W
3400	338 W	495 W
3600	359 W	526 W
3800	381 W	559 W
4000	403 W	591 W
4200	425 W	622 W
4400	446 W	655 W
4600	468 W	686 W
4800	490 W	718 W

Heating outputs in accordance with EN442