



ULTRAMESS® 603
MULTICAL® 603 & ULTRAFLOW®





MULTICAL® 603 & ULTRAFLOW®



> 60 °C



230 VAC



16/25/40 bar



	04
	05
	07
	13
	19
	21
	26
	29
	30
	35



https://guides.kamstrup.com/userguides/gb_mc603.htm



<https://www.kamstrup.com/en-en/heat-solutions/meters-devices/meters/multical-603/documents>



<https://www.kamstrup.com/>



1/2

E1

MID ✓ EN 1434 ✓
 θ : 2 °C...180 °C $\Delta\theta$: 3 K...178 K ✓

E3

DK-BEK 1178 ✓ EN 1434 ✓
 θ : 2 °C...180 °C $\Delta\theta$: 3 K...178 K ✓

E1 E3

EN 1434 ✓
 θ : -40 °C...140 °C $\Delta\theta$: 3 K...178 K ✓

ULTRAFLOW®

θ_q : 2 °C...130 °C ✓
 θ_q : 15 °C...130 °C ✓



Ü E1 ✓ E2 ✓

M1 ✓ M2 ✓

5 °C...55 °C ✓

> 25 CM

MULTICAL® 603: IP 54 ✓
 ULTRAFLOW® 44: IP 68 ✓
 ULTRAFLOW® 54: IP 65 ✓



MULTICAL® 603 & ULTRAFLOW®

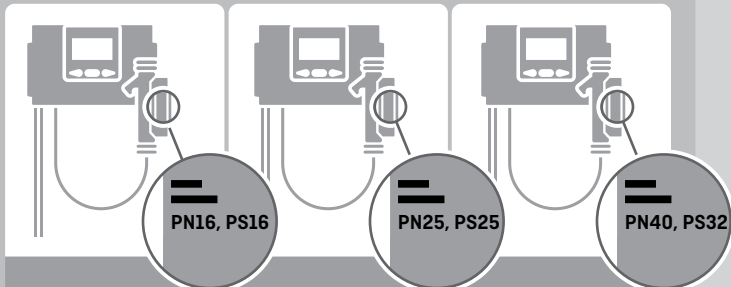


2/2

Data +	HC-003-10	✓	
Data +	HC-003-11	✓	
M-Bus +	HC-003-20	✓	
M-Bus +	HC-003-21	✓	
M-Bus +	HC-003-22	✓	
30			
1xD	HC-993-02	✓	
1xC IoT	HC-993-06	✓	
230 VAC	HC-993-07	✓	
24 VAC	HC-993-08	✓	
2xA	HC-993-09	✓	
31			
DS 27,5 mm	2 x Pt500	✓	
DS 38,0 mm	2 x Pt500	✓	
PL ø5,8 mm	2 x Pt500	✓	
DS 27,5 mm	2 x Pt100	✓	
32			
	MULTICAL® 603-M	2 x Pt500	✓

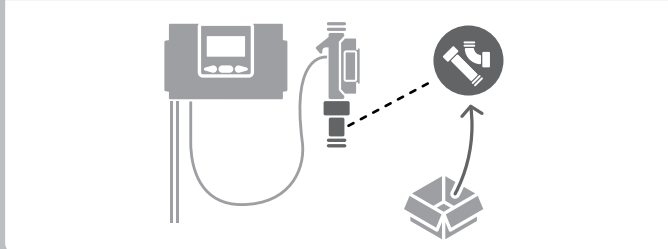


DN15 - DN125



PN16, PS16	PN16, PS16 < DN100	PN16, PS16
PN25, PS25	PN25, PS25	PN25, PS25
PN40, PS32	PN40, PS32	PN40, PS32

PN16, PS16	PN25, PS25	PN40, PS32
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DN20	DN25 / DN15	DN32 / DN10



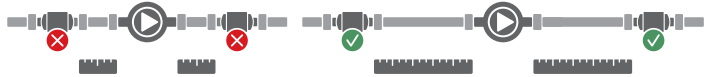
ULTRAFLOW®

11 -		V2
9 +		
69		
11 -		V1
9 +		
10		

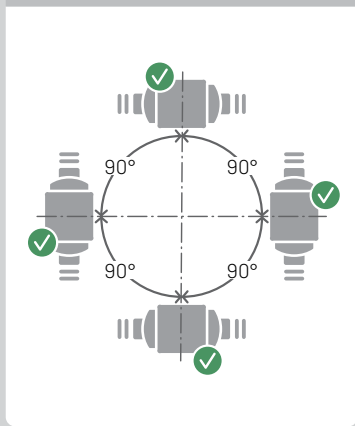
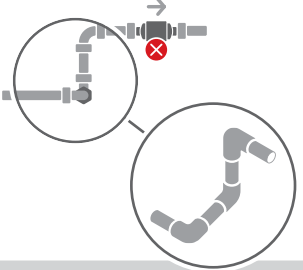
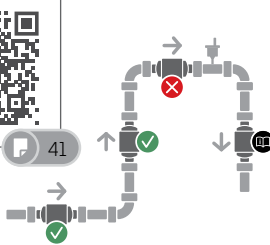


V1		11 -
		10
V2		11 -
		69

V1		11B -
		10B +





41




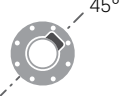
E3  qp 0.6...2.5 m³/h



E3  qp ≥ 3.5 m³/h

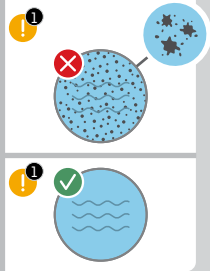
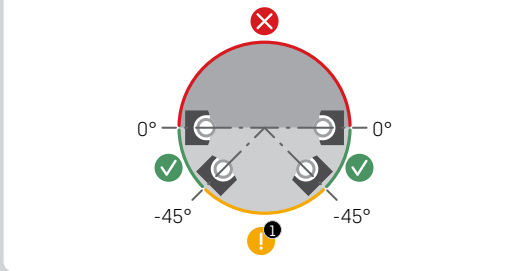


E3  qp ≥ 6.0 m³/h





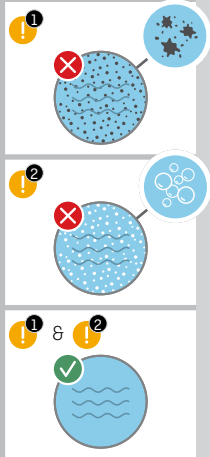
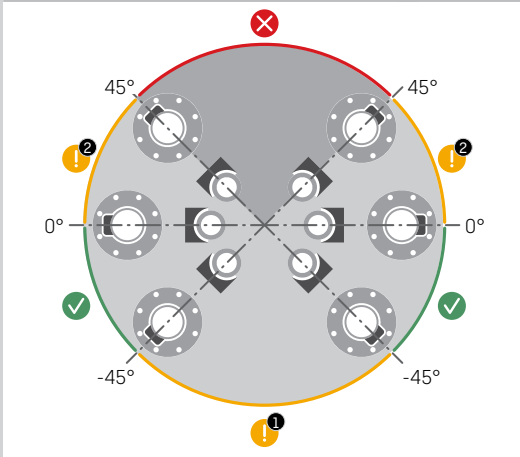
qp 0.6...2.5 m³/h



qp ≥ 3.5 m³/h

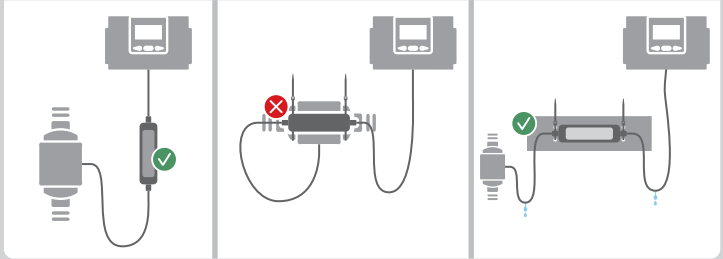


qp ≥ 6.0 m³/h



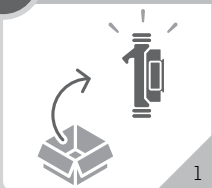
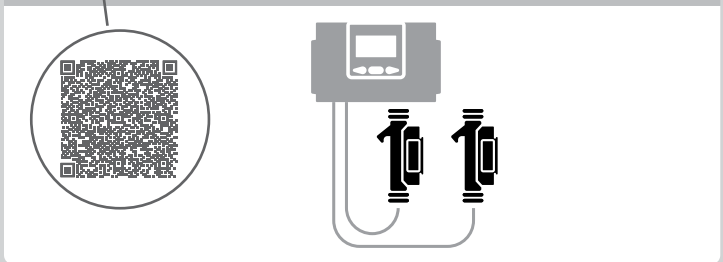


ULTRAFLOW® 44

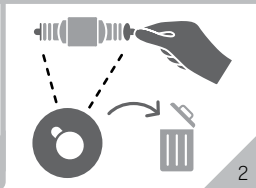


x2 =

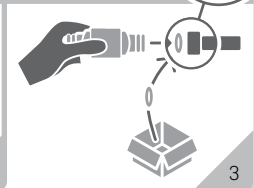
+ V2



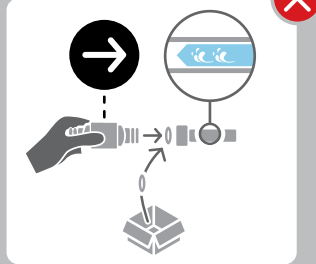
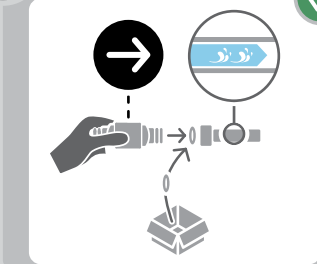
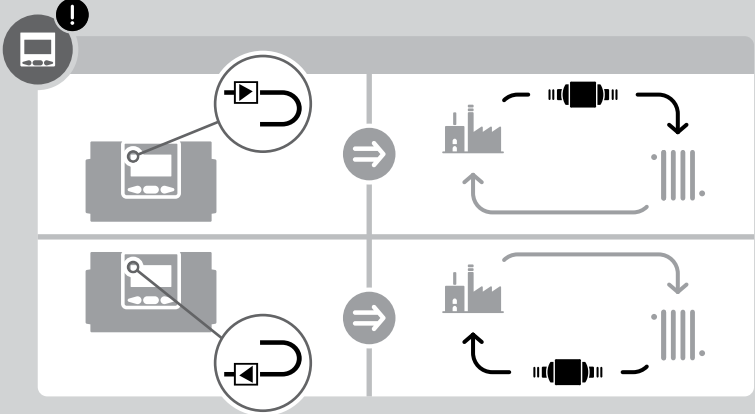
1

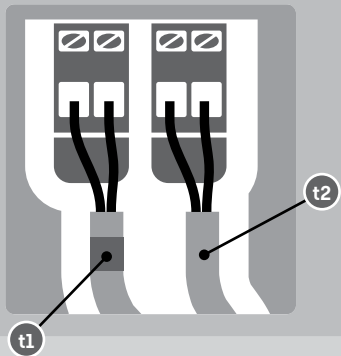
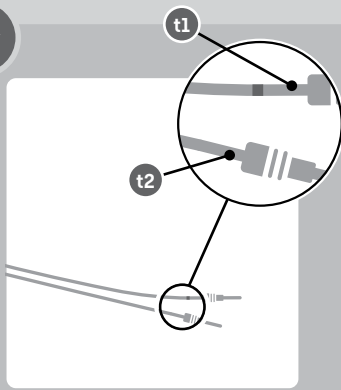
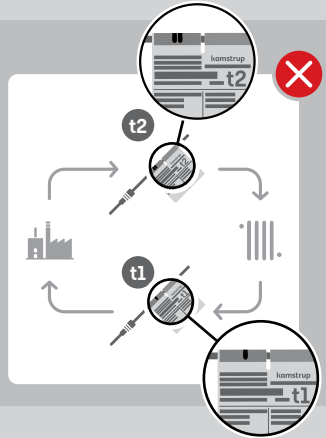
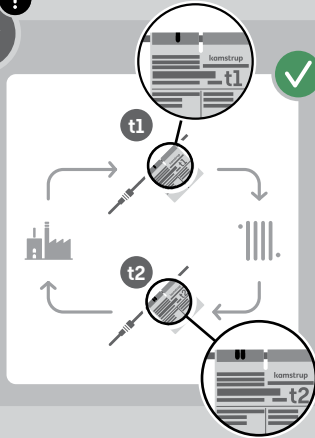


2



3

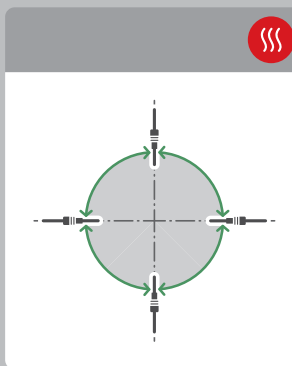
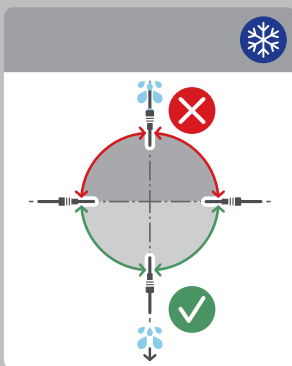
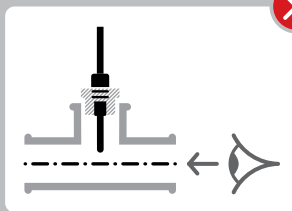
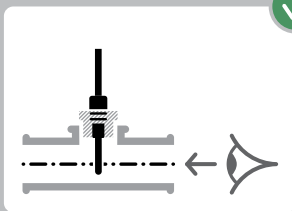






[x1] t1 [x2] t2 [x0] t3

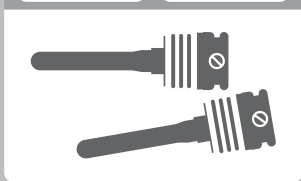
	t1	t2	t3



PN16



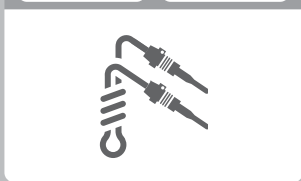
PN25

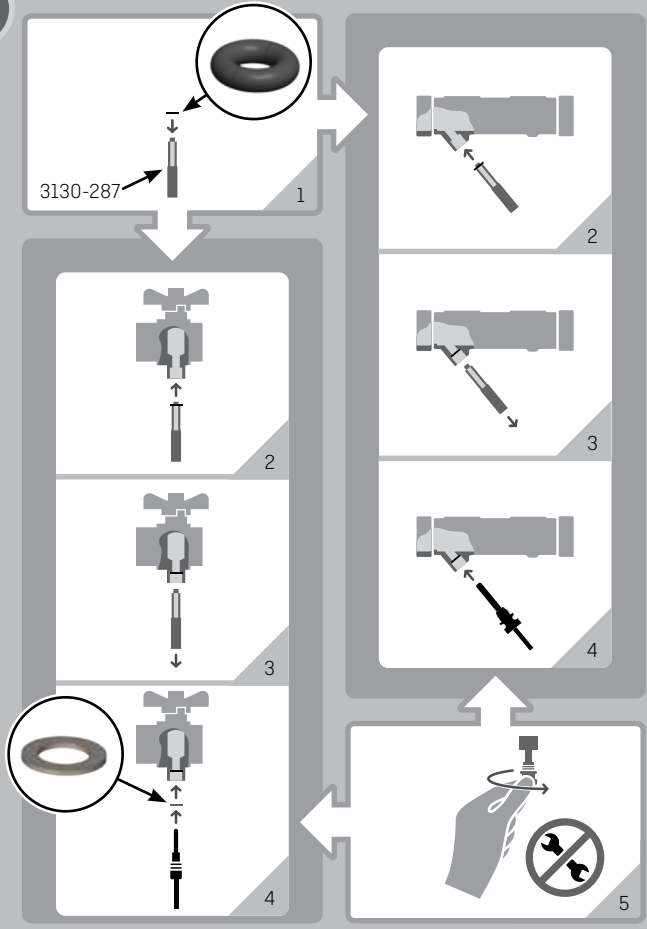


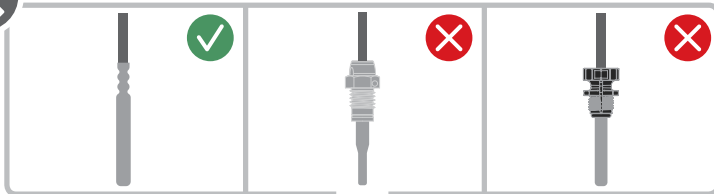
PN16



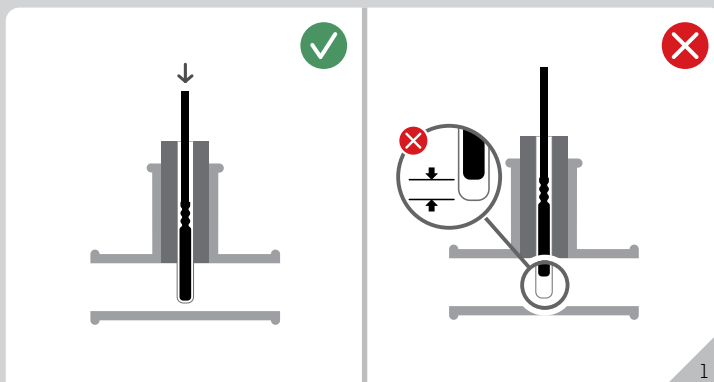
PN25







5/6

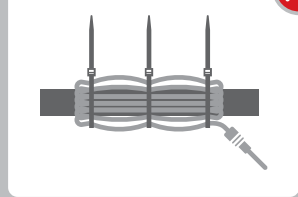
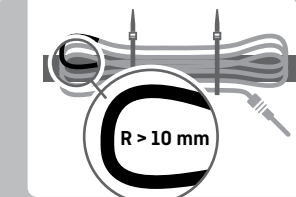
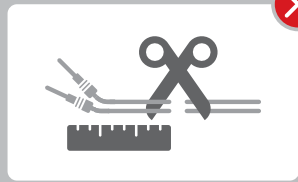
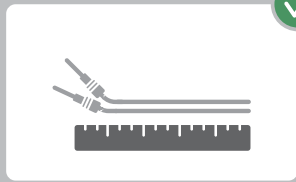
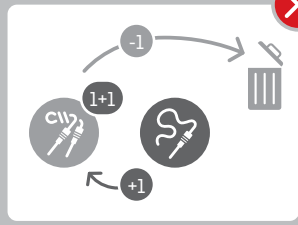
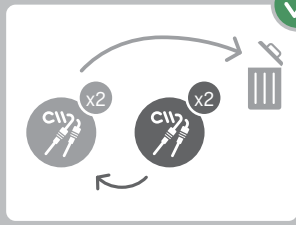


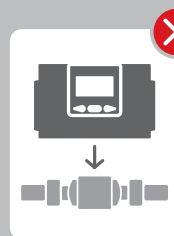
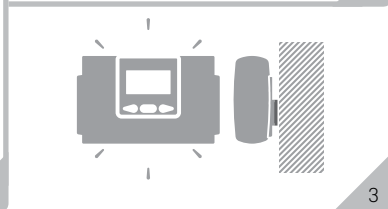
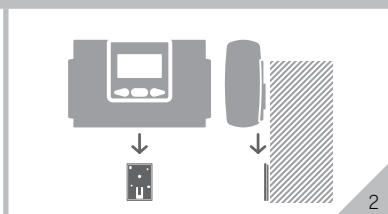
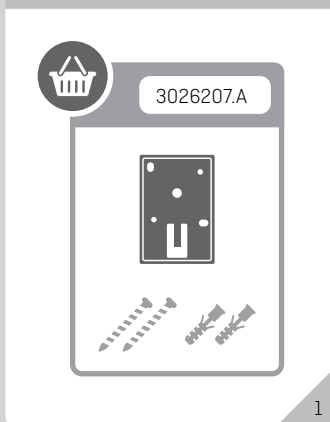
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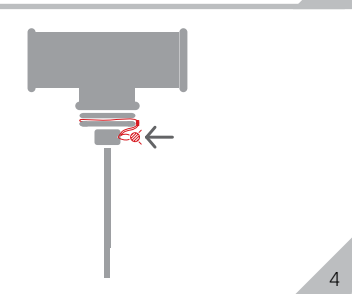
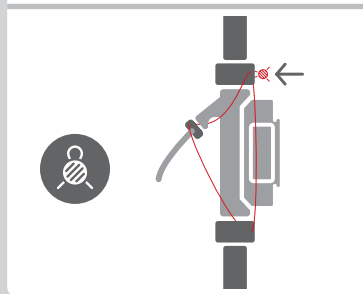
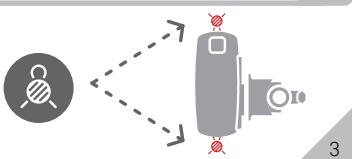
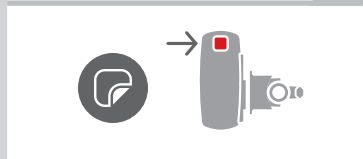
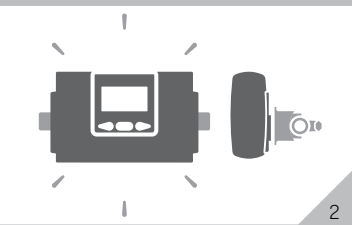
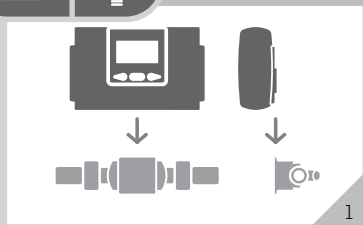


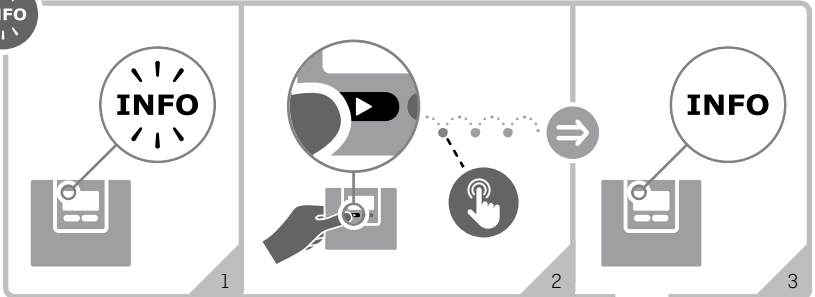
2

3









1/5

The main display shows a numeric keypad with digits 1 through 8. Below the keypad is a data table with the following header row:

Info	t1	t2	0	V1	0	In-A	In-B
1							
2							
9							

The display also shows a large numeric value '10200090' and an 'INFO' label above it. A large white arrow points from the diagram above to the main display.



Info	t1	t2	0	V1	0	In-A	In-B		
	1							t1 > 185 °C	
		1						t2 > 185 °C	
			1					t3 > 185 °C	
	2							t1 < 0 °C	
		2						t2 < 0 °C	
			2					t3 < 0 °C	
	9	9						$\Delta t (t1-t2) = \text{X}$	
						9			
							8		
							9		



INFO

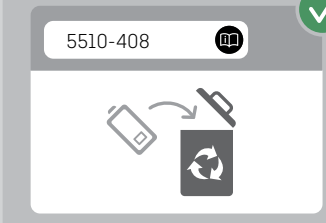
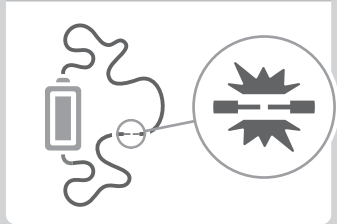
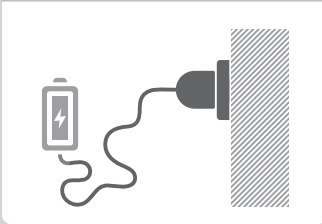
Info	t1	t2	0	V1	0	In-A	In-B	
				1				V1:
				1				V2:
				2				V1: p/I = X
				2				V2: p/I = X
				3				V1:
				3				V2:
				4				V1:



Info	t1	t2	0	V1	0	In-A	In-B
				4			
				6			
				6			
				7			
				7			
				8			
				8			



1	2	3	4	5	6	7	8	Info	t1	t2	O	V1	O	In-A	In-B
						7									A2:
						8									A1:
						9									A1/A2:
						7									B2:
						8									B1:
						9									B1/B2:





230 VAC / 50 Hz / 1 W



230 VAC / 50 Hz / 1 W

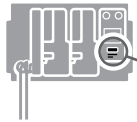
24 VAC / 50 Hz / 1 W



24 VAC / 50 Hz / 1 W

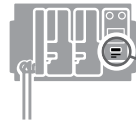
24 VAC/VDC / 50 Hz / 1 W

230 VAC



230 VAC

24 VAC



24 VAC

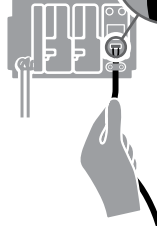


d = 5...8 mm

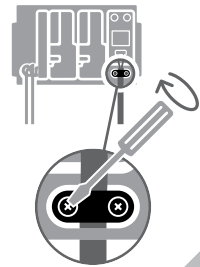


d = 5...8 mm

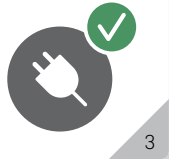
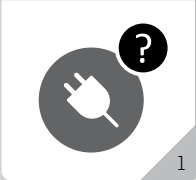
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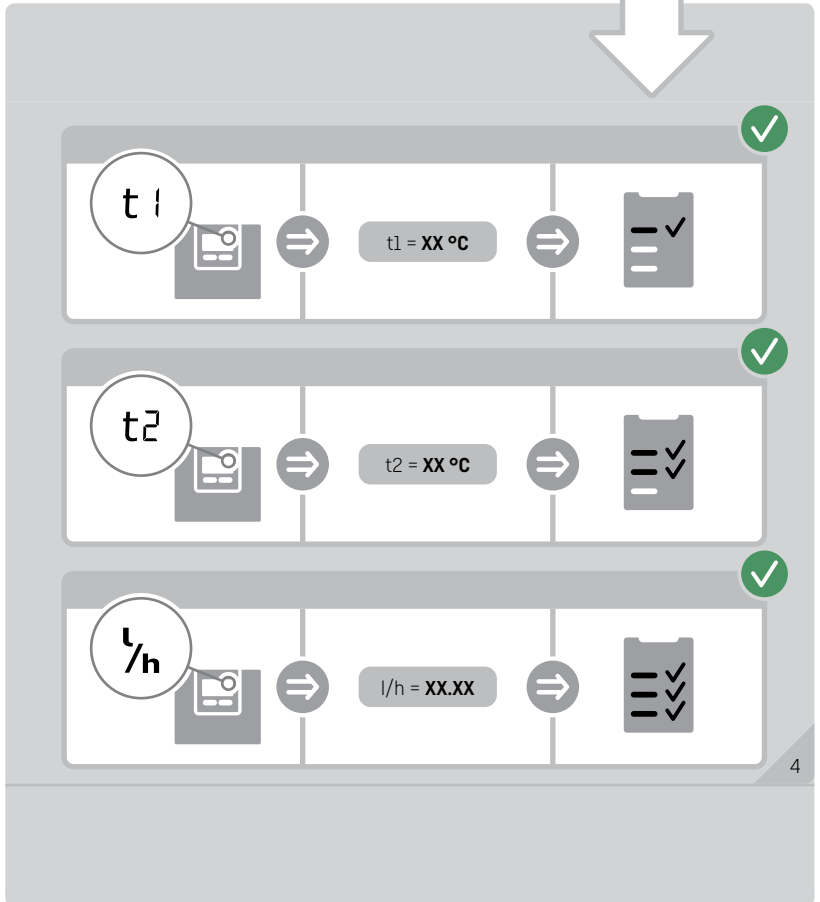
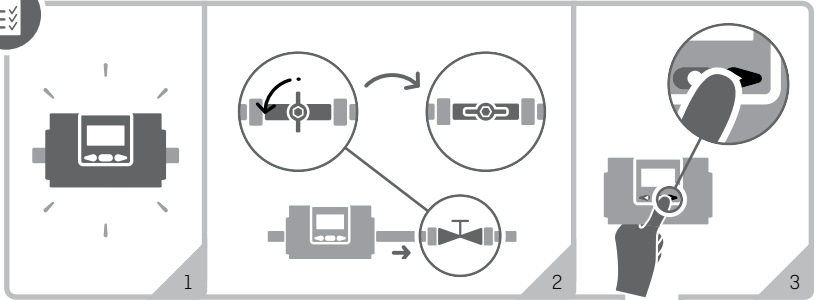


2



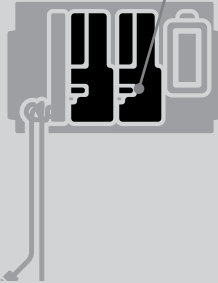
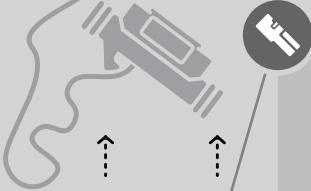
3







<https://www.kamstrup.com/en-en/heat-solutions/meters-devices/meters/multical-603>



Data +	HC-003-10	
Data +	HC-003-11	
M-Bus +	HC-003-20	
M-Bus +	HC-003-21	
M-Bus +	HC-003-22	
wM-Bus +	HC-003-30	
wM-Bus +	HC-003-31	
linkIQ/wM-Bus +	HC-003-32	
linkIQ/wM-Bus +	HC-003-33	
wM-Bus+	HC-003-34	
Analog	HC-003-40	
Analog	HC-003-41	
PQT+	HC-003-43	
Radio +	HC-003-50	
Radio GDPR +	HC-003-51	
NB-IoT +	HC-003-56	
LON TP/FT-10	HC-003-60	
BACnet +	HC-003-66	
Modbus RTU +	HC-003-67	
2G/4G Network	HC-003-80	
BACnet IP +	HC-003-81	
Modbus +	HC-003-82	
READy TCP/IP	HC-003-83	
Kamstrup RF HP	HC-003-84	
Kamstrup RF HP GDPR	HC-003-85	

= In-A / In-B

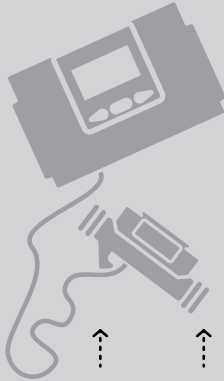
= Out-C / Out-D

= In 1 / In 2

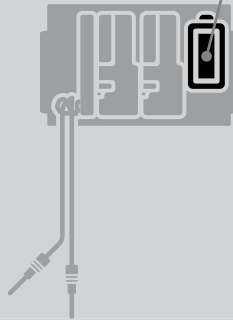
= Out 1 / Out 2



<https://www.kamstrup.com/en-en/heat-solutions/meters-devices/accessories>



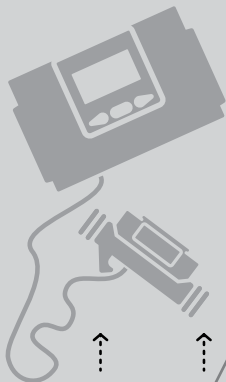
1xD	HC-993-02	✓
230 VAC ⚡	HC-993-03	✓
24 VAC/VDC ⚡	HC-993-04	✓
1xC IoT	HC-993-06	✓
230 VAC	HC-993-07	✓
24 VAC	HC-993-08	✓
2xA	HC-993-09	✓





3/3

<https://www.kamstrup.com/en-en/heat-solutions/meters-devices/temperature-sensors> ✓



2 x Pt500 ✓

DS 27,5 mm L = 1,5 - 3,0 m

DS 38,0 mm L = 1,5 - 3,0 m

PL ø5,8 mm L = 1,5 - 10,0 m

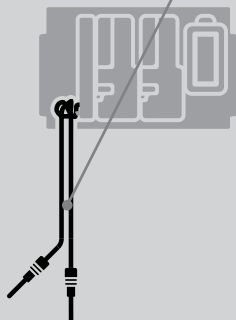
2 x Pt100 ✓

DS 27,5 mm L = 2,0 m

4 x Pt100/Pt500 ✓

PL ø6,0 mm L = 105 - 230 mm

PL ø5,8 mm L = 65 - 180 mm





0009089 MWh TA2

0014958 kWh b i E1

0034732 R i A1

15.7 kW

0959 l/h

0005453 MWh TA3

0003635 MWh TA4

INFO 00000000

11223344 N°

10000 %

1.5 qP=1.5

0046092 MWh E1

0019674 MWh E3

0287706 m³

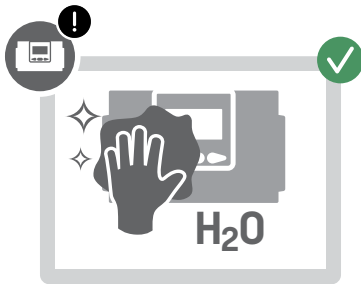
39.38 °C t i2 t1 - t2

27.14 °C t 2 t2

66.52 °C t i t1

0026280 h

h





MULTICAL® 603 & ULTRAFLOW®



Heat meter (E1)
θ: 2 °C ...180 °C
Δθ: 3 K ...178 K

CE M19 0200
DK-0200-M004-040
op. pl: See display



S/N: 80000095/K8/17
Type: 603C219
P1500-EN60751
Battery: 1 x D-cell

Cooling meter (E3)
θ: 2 °C ...180 °C
Δθ: 3 K ...178 K



TS 27.02 012
θhc: See display

kamstrup

Energy 1 x D-cell
P1500-EN60751
Type: 603C219
S/N: 80000095/K8/17

kamstrup