

kamstrup

Declaration of conformity

- MULTICAL® 402 3
- Pt500 Temperature sensors 15
- Kamstrup Temperature sensors 19

MULTICAL® 402

No.: 5518300_B1



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EU DECLARATION OF CONFORMITY

We, Kamstrup A/S declare under our sole responsibility that the product

- Product name:** MULTICAL® 402
- Product description:** Ultrasonic Heat, Cooling and Heat/Cooling meter
- Type number:** 402XXXXXXXXX (Table 1 applies)
- Serial number:** XXXXXXXX/XX/17

Conforms to the European directives as marked below:

Electromagnetic Compatibility Directive (EMC) 2014/30/EU

Type numbers in the table applies:

Communication (Module)	Type number of meter (X = Irrelevant)
No module	402-X00XXXXXXXX
Data + 2 pulse inputs (VA, VB)	402-X10XXXXXXXX
Data + 2 pulse outputs (CE, CV)	402-X11XXXXXXXX
M-Bus + 2 pulse inputs (VA, VB)	402-X20XXXXXXXX
M-Bus + 2 pulse outputs (CE, CV)	402-X21XXXXXXXX
M-Bus + 2 pulse in (VA, VB), MCIII Data Package	402-X29XXXXXXXX

Standards:

- EN 61000-6-1:2007 EMC Immunity for residential, commercial & light-industrial environments
- EN 61000-6-3:2007 EMC Emission for residential, commercial & light-industrial environments

Low Voltage Directive (LVD) 2014/35/EU

Standards:

- EN 61010-1:2010
- EN 62311:2008

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Pressure Equipment Directive (PED)
2014/68/EU

DN sizes in the table applies:

Fluid	Group 2		
Category	4§3		I
Module	N/A		A
Maximum allowable pressure PS	25	16	25
Nominal bore	DN15-DN40	DN15-DN50	DN50-DN125
Notified body, Inspection	N/A	N/A	N/A
Notified body, Quality system ISO 9001	DNV GL Tuborg Parkvej 8, 2. DK-2900 Hellerup		

Conformity assessment procedures according to directive 2014/68/EU, Annex III.

Products that fall under Article 4§3 shall not be CE-marked according to directive 2014/68/EU.

Radio & Telecommunication Terminal Equipment Directive (R&TTE)
1999/5/EC

Type numbers in the table applies:

Module	Type number of meter (X = Irrelevant)
wM-Bus, EU, 868 MHz, C1 (Ind. Key)	402-X30XXXXXXXX
wM-Bus, EU, 868 MHz, T1 OMS (Ind. Key)	402-X31XXXXXXXX
wM-Bus, EU, 868 MHz, C1 (Ind. Key) Alt. Reg. + VA, VB	402-X35XXXXXXXX
wM-Bus, EU, 868 MHz, T1 (Common Key)	402-X37XXXXXXXX
wM-Bus, C1, Fixed Network (Ind. Key)	402-X38XXXXXXXX
Radio, EU, 434 MHz, int. ant., NET0	402-X40XXXXXXXX
Radio, EU, 434 MHz, int. ant., NET1	402-X41XXXXXXXX
Radio, EU, 434 MHz, int.+ext. ant., NET0 + VA, VB	402-X42XXXXXXXX
Radio, EU, 434 MHz, int.+ext. ant., NET0 + CE, CV	402-X43XXXXXXXX
Radio, EU, 434 MHz, int.+ext. ant., NET1 + VA, VB	402-X44XXXXXXXX
Radio, EU, 434 MHz, int.+ext. ant., NET1 + CE, CV	402-X45XXXXXXXX
Radio, SE, 444 MHz, int. ant., NET0 + VA, VB	402-X50XXXXXXXX
Radio, SE, 444 MHz, int. ant., NET1 + VA, VB	402-X52XXXXXXXX
Radio, SE, 444 MHz, ext. ant., NET0 + VA, VB	402-X54XXXXXXXX
Radio, SE, 444 MHz, ext. ant., NET1 + VA, VB	402-X56XXXXXXXX

Standards:

- EN 300 220-2 v.2.4.1 : 2012
- EN 301 489-1 v1.9.2 : 2011
- EN 301 489-3 v1.6.1 : 2013
- EN 61010-1:2010
- EN 62311:2008

Measuring Instrument Directive (MID)
2014/32/EU

Applies for products marked with CE marking and supplementary metrology marking according to Article 21 in directive 2014/32/EU.

Standards:

- EN 1434-4:2007
- Welmec 7.2

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Type certificate number: DK-0200-MI004-013

Notified Body, Module D Certificate:

Force Certification A/S
EU Notified Body number: 0200
Park Allé 345, 2605 Brøndby
Denmark

RoHS Directive (Restriction of Hazardous Substances)
2011/65/EU

References:

Kamstrup procedure 5509-016, linked with supplier statement in 5509-045

Date: 2016-12-23, Skanderborg

Quality Assurance Manager: _____



Viggo Andersen

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Table 1 – Type number

		Type	402-	□	□□	□	□□	□	□	□□
Sensor connections										
Pt100			V							
Pt500			W							
RT500	(with condensation protected flow sensor for cooling)		T							
Modules										
No module					00					
Data + 2 pulse inputs (VA, VB)					10					
Data + 2 pulse outputs (CE, CV)					11					
M-Bus + 2 pulse inputs (VA, VB)					20					
M-Bus + 2 pulse outputs (CE, CV)					21					
M-Bus + 2 pulse inputs (VA, VB), MCH Data Package					29					
Wireless M-Bus, EU, 868 MHz, Mode C1 (Ind. Key)					30					
Wireless M-Bus, EU, 868 MHz, Mode T1 QMS (Ind. Key)					31					
Wireless M-Bus, EU, 868 MHz, Mode C1 (Ind. Key) Alt. Reg. +VA, VB					35					
Wireless M-Bus, EU, 868 MHz, Mode T1 (Common Key)					37					
Wireless M-Bus, C1, Fixed Network, (Ind. Key)					38					
Radio, EU, 434 MHz, int. ant., NET0					40					
Radio, EU, 434 MHz, int. ant., NET1					41					
Radio, EU, 434 MHz, int.+ext. ant., NET0 + 2 pulse inputs (VA, VB)					42					
Radio, EU, 434 MHz, int.+ext. ant., NET0 + 2 pulse outputs (CE, CV)					43					
Radio, EU, 434 MHz, int.+ext. ant., NET1 + 2 pulse inputs (VA, VB)					44					
Radio, EU, 434 MHz, int.+ext. ant., NET1 + 2 pulse outputs (CE, CV)					45					
Radio, SE, 444 MHz, int. ant., NET0 + 2 pulse inputs (VA, VB)					50					
Radio, SE, 444 MHz, int. ant., NET1 + 2 pulse inputs (VA, VB)					52					
Radio, SE, 444 MHz, ext. ant., NET0 + 2 pulse inputs (VA, VB)					54					
Radio, SE, 444 MHz, ext. ant., NET1 + 2 pulse inputs (VA, VB)					56					
Supply										
No module					0					
Battery, 2 x AA					1					
Battery, D-cell					2					
230-VAC supply module					7					
24-VAC supply module					8					
Pt500 sensor sets										
No sensor set									00	
Pocket sensor pair with 1.5 m cable									0A	
Pocket sensor set with 3.0 m cable									0B	
Short direct sensor set with 1.5 m cable									0F	
Short direct sensor set with 3.0 m cable									0G	
Flow sensor	Connection	Length [mm]	CCC	CCC						
qp [m ² /h]			Heat	Cooling						
0,6	G½B (R½)	110	416	416					1	
0,6	G1B (R½)	190	416	416					3	
1,5	G½B (R½)	110	419	407					4	
1,5	G½B (R¼)	165	419	407					5	
1,5	G1B (R½)	190	419	407					7	
1,5	G1B (R¼)	165	419	407					8	
1,5	G1B (R½)	190	419	407					9	
2,5	G1B (R¼)	190	498	498					A	
2,5	G1B (R½)	190	498	498					B	
3,5	G5/4B (R1)	260	451	436					D	
6,0	G5/4B (R1)	260	437	438					F	
6,0	DN25	260	437	438					G	
10	G2B (R1½)	300	478	483					H	
10	DN40	300	478	483					J	
15	DN50	270	420	485					K	
Meter type										
Heat meter	(MID: module B+D)									2
Heat meter	(MID: module B+D)			402-T only						3
Heat meter										4
Cooling meter				402-T only						5
Heat/cooling meter				402-T only						6
Volumemeter	(Hot)									7
Volumemeter	(Cold)			402-T only						8
Energy meter										9
Country code (language on label etc.)										XX

Pt500 Temperature sensors

MINA