

EU DECLARATION OF CONFORMITY

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

Product name: MULTICAL® 603
Product description: Calculator for Heat, Cooling and Heat/Cooling applications
Type number: 603XXXXXXXXXXXX (Note 1 and Table 1 applies)
Serial number: XXXXXXXX/XX/18

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	603-XXXXXXXX00XX / 603-XXXXXXXXXX00
Data + Pulse inputs (A, B)	603-XXXXXXXX10XX / 603-XXXXXXXXXX10
Data + Pulse outputs (C, D)	603-XXXXXXXX11XX / 603-XXXXXXXXXX11
M-Bus + Pulse inputs (A, B)	603-XXXXXXXX20XX / 603-XXXXXXXXXX20
M-Bus + Pulse outputs (C, D)	603-XXXXXXXX21XX / 603-XXXXXXXXXX21
M-Bus Thermal disconnect	603-XXXXXXXX22XX / 603-XXXXXXXXXX22
Analog outputs 0/4-20 mA	603-XXXXXXXX40XX / 603-XXXXXXXXXX40
Analog inputs 0-20 mA/0-10 V	603-XXXXXXXX41XX / 603-XXXXXXXXXX41
KNX communication	603-XXXXXXXX42XX / 603-XXXXXXXXXX42
LonWorks FTT-10A + Pulse inputs (A, B)	603-XXXXXXXX60XX / 603-XXXXXXXXXX60
BACnet MS/TP + Pulse inputs (A, B)	603-XXXXXXXX66XX / 603-XXXXXXXXXX66
Modbus RTU + Pulse inputs (A, B)	603-XXXXXXXX67XX / 603-XXXXXXXXXX67

Standards:

- EN 61000-6-2: 2005 EMC Immunity for 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

Radio Equipment Directive (RED)

2014/53/EU

Type numbers in the table applies:

Communication (Module)	Type number of meter (X = Irrelevant)
Wireless M-Bus + Pulse inputs (A, B)	603-XXXXXXXX30XX / 603-XXXXXXXXXX30
Wireless M-Bus + Pulse outputs (C, D)	603-XXXXXXXX31XX / 603-XXXXXXXXXX31
Kamstrup Radio + Pulse inputs (A, B)	603-XXXXXXXX50XX / 603-XXXXXXXXXX50
High Power Radio Router + Pulse inputs (A, B)	603-XXXXXXXX84XX / 603-XXXXXXXXXX84

Standards:

- EN 300 220-2 v.3.1.1: 2016
- EN 301 489-1 v2.1.1: 2016
- EN 301 489-3 v2.1.0: 2017
- 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: 2015
- Welmec 7.2

Type certificate number: DK-0200-MI004-040

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: 2017-12-22, Skanderborg**Quality Assurance Manager:** _____

Viggo Andersen

Note 1. The type number of the meter

The type number consists of two parts a 7-digit static part and an 8-digit dynamic part. The static part of the type number is printed on the front of the meter, while the dynamic part of the type number can be viewed in the display.

To evoke the dynamic part of the type number, press the primary key and hold it down for 5 seconds until the text 1-USER becomes visible in the display. Release the primary key and use the arrow keys to navigate to the text 2-TECH subsequently use a single press on the primary key to enter the TECH loop. Use the arrow keys to navigate to index number 2-025 in the display. Now use a single press on the primary key to enter the sub loop and use the arrow keys to navigate to index number 2-025-09 in the display, release the keys and the dynamic part of the type number will be visible in the display with reference N° 21 in the upper right corner.



Table 1 – Type number

MULTICAL® 603 type number

Static data
603-xxxx
Written on the meter's front

Dynamic data
xxxxxxxx
Can be displayed

Type 603 -					□	-	□	-	□□	-	□	-	□□	-	□	-	□□	-	□□
Calculator type																			
Pt100 2-wire	t1-t2	V1	w/ int. wired M-Bus	A															
Pt100 4-wire	t1-t2	V1	w/ int. wired M-Bus	B															
Pt500 2-wire	t1-t2	V1	w/ int. wired M-Bus	C															
Pt500 4-wire	t1-t2	V1	w/ int. wired M-Bus	D															
Pt500 2-wire	t1-t2-t3	V1-V2		E															
Pt500 2-wire	t1-t2-t3	V1-V2	w/ backlight	F															
Pt500 4-wire	t1-t2	V1 (24 V active pulses)	w/ int. wired M-Bus	G															
Meter type																			
Heat meter		MID module B		1															
Heat meter		MID module B+D		2															
Heat/cooling meter		MID module B+D & TS 27.02	ΘHC = OFF	3															
Heat meter		National approval		4															
Cooling meter		TS 27.02+BEK1178		5															
Heat/cooling meter		MID module B+D & TS 27.02	ΘHC = ON	6															
Volume meter				7															
Energy meter				9															
Country code																			
See paragraph 3.3																			XX
Flow sensor connection type																			
Delivered with one ULTRAFLOW®																			1
Delivered with two identical ULTRAFLOW®																			2
Prepared for one ULTRAFLOW®																			7
Prepared for two identical ULTRAFLOW®																			8
Prepared for flow sensor with fast and bounce-free electronic pulses																			C
Prepared for flow sensor with slow and bounce-free electronic pulses																			J
Prepared for flow sensor with slow pulses with bounce																			L
Prepared for flow sensor with 24 V active pulses																			P

Temperature sensor set

No temperature sensors			00
Pt500 temperature sensor pair			
Short direct sensor pair	27.5 mm	1.5 m	11
Short direct sensor pair	27.5 mm	3.0 m	12
Short direct sensor pair (3 pairs)	27.5 mm	1.5 m	15
Short direct sensor pair (3 pairs)	27.5 mm	3.0 m	16
Short direct sensor pair	38.0 mm	1.5 m	21
Short direct sensor pair	38.0 mm	3.0 m	22
Pocket sensor pair	ø5.8 mm	1.5 m	31
Pocket sensor pair	ø5.8 mm	3.0 m	32
Pocket sensor pair	ø5.8 mm	5.0 m	33
Pocket sensor pair	ø5.8 mm	10.0 m	34
Pocket sensor pair (3 pairs)	ø5.8 mm	1.5 m	35
Pocket sensor pair (3 pairs)	ø5.8 mm	3.0 m	36
Pocket sensor pair (3 pairs)	ø5.8 mm	5.0 m	37
Pocket sensor pair (3 pairs)	ø5.8 mm	10.0 m	38
Pt100 temperature sensor pair			
Short direct sensor pair	27.5 mm	2.0 m	J1
Short direct sensor pair	38.0 mm	2.0 m	J2

Supply

No supply			0
Battery, 1 x D-cell			2
230 VAC high-power SMPS			3
24 VAC/VDC high-power SMPS			4
230 VAC power supply			7
24 VAC power supply			8
Battery, 2 x A-cells			9

Communication module (2 module slots)

No module			00	00
Data + 2 pulse inputs (In-A, In-B)			10	10
Data + 2 pulse outputs (Out-C, Out-D) + pulse transmitter (V1+V2)			11	11
M-Bus, configurable + 2 pulse inputs (In-A, In-B)			20	20
M-Bus, configurable + 2 pulse outputs (Out-C, Out-D)			21	21
M-Bus, configurable w/ Thermal Disconnect			22	22
Wireless M-Bus, EU, configurable, 868 MHz + 2 pulse inputs (In-A, In-B)			30	30
Wireless M-Bus, EU, configurable, 868 MHz + 2 pulse outputs (Out-C, Out-D)			31	31
Analog output module 2 x 0/4...20 mA			40	40
Analog input module 2 x 0/4...20 mA			41	41
KNX Communication			42	42
Kamstrup Radio + 2 pulse inputs (In-A, In-B)			50	50
LON FT-X3 + 2 pulse inputs (In-A, In-B)			60	60
BACnet MS/TP (RS-485) + 2 pulse inputs (In-A, In-B)			66	66
Modbus RTU (RS-485) + 2 pulse inputs (In-A, In-B)			67	67
High Power Radio Router + 2 pulse inputs (In-A, In-B)			84	84