

CLASSIC AND MATIC PRODUCT OVERVIEW

Temperature control and cooling units



CLASSIC PRODUCT RANGE

Our CLASSIC temperature control and cooling units are perfect as stand-alone solutions. They are both robust and easy to maintain. The use of proven technologies guarantees the durability of this product group.

Our CLASSIC range of temperature control units comes with digital networking capabilities. Units from our CLASSIC range are ideal solutions for applications in which your temperature control unit's main function is to control the temperature of the circulation medium.

Features and benefits of the CLASSIC range

- Service-friendly
- Robust and reliable
- User-friendly thanks to a minimalist user interface

Standard controller MP-888

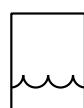
Your temperature control unit contains a digital temperature controller. This ensures precise temperature control even at high temperatures. It displays the current and target temperature. The controller monitors the circulation of the medium and triggers an alarm if the flow rate drops. The digital temperature controller can be operated in °F or °C units and features analogue interfaces of 0–5 V, 0–10 V and 4–20 mA as standard.

Digital interface controller MP-988

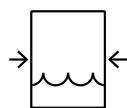
In addition to the standard digital controller we also offer a digital interface controller with RS-485, RS-232, 20 mA current loop, CAN-bus, Profibus and Profinet interfaces. These interfaces are accessible without having to insert any additional cards. Also included is a temperature difference display and over 30 integrated machine protocols.



1 Universal temperature control units
CLASSIC Duo, Heat transfer medium water and oil up to 90°C/150°C



2 Water temperature control units
CLASSIC Water, Heat transfer medium water up to 90°C



3 Pressurised water temperature control units
CLASSIC Water, Heat transfer medium water up to 160°C



4 Oil temperature control units
CLASSIC Oil, Heat transfer medium oil up to 360°C



5 Cooling units
CLASSIC Chill from -25°C up to +40°C

MATIC PRODUCT RANGE

The MATIC temperature control units product range covers all needs for production environments that use digital networks. The MATIC product range features the new Iris controller and comes with an OPC-UA interface as standard. The new device controller comes with a web server to connect with any network by WLAN or LAN. This gives users a broad range of location-independent operating options. It also meets the ever increasing demands for process monitoring and documentation required by

ISO standards. Data recorded by the unit can be easily read out at any time.

Temperature control units in the Matic range put our economic goals into practice. The energy-saving eco mode and predictive maintenance functions proactively help keep energy consumption of the temperature control process as low as possible and minimise downtimes.

Features and benefits of the MATIC temperature control units

- OPC-UA interface
- Web interface (LAN cable, WLAN per update Q2/2024 available)
- Intuitive user interface - quick to learn
- Precise and robust control
- Designed for energy efficiency and precision
- Economic thanks to new ECO mode
- Easily configured behaviour
- Fully-automated sub-steps and formula memory
- Information available at any time
- Constant data monitoring and validation
- Electronically accessible process documentation: optimum support for meeting ISO requirements



1 Universal temperature control units
MATIC Duo, Heat transfer medium water or oil up to 90°C/150°C



2 Water temperature control units
MATIC Water, Heat transfer medium water up to 90°C



3 Pressurized water temperature control units
MATIC Water, Heat transfer medium water up to 160°C



4 Oil temperature control units
MATIC Oil, Heat transfer medium oil up to 360°C

1 Universal temperature control units

CLASSIC Duo, MATIC Duo, Heat transfer medium water and oil
up to 90°C/150°C

Product	Temperature range Water		Temperature range Oil		Filling amount max.	Heating capacity Water	Heating capacity Oil	Pump capacity	Pump pressure	Cooling system	Tubular heat exchanger	At flow temperature	Suction capacity vacuum	Controller	Temperature sensor
	°C	°C	l	kW	kW	l/min.	bar								
CLASSIC Duo TT-181	90	150	7	9	3	60	4			35	90	8			
CLASSIC Duo TT-188	90	150	7	9	3	60	4			35	90	8			
CLASSIC Duo TT-168 E	90	150	20	12	6*	60	4			45	90	8	MP-888	FeKo Typ J	
CLASSIC Duo TT-168 H	90	150	20	12	6*	60	7			45	90	8			
MATIC Duo 90/150 9 E	90	150	7	9	3*	60	4	Indirect		35	90	8			
MATIC Duo 90/150 18 E	90	150	20	18	6*	60	4			45	90	8	IRIS	Pt-100	
MATIC Duo 90/150 18 H	90	150	20	18	6*	60	7			45	90	8			

* with booster function and when using Tool-Therm SH3 up to 3 times the capacity

■ standard, □ optional, - not possible

I/O Modul 1, Manufacturer protocols (RS-232, RS-485, CAN, Current-Loop)

I/O Modul 2, Profinet, EtherNet/IP, Profibus

I/O Modul 3, 3 x Digital output (changeover switch), 2 x Digital input (on/off), 2 x Analog output, 2 x Analog input, 1 x ext. Temperature sensor

¹ included in I/O module 1, ² included in I/O module 2, ³ included in I/O module 3

up) Update available per Q2/2024

2 Water temperature control units

CLASSIC Water, **MATIC** Water, Heat transfer medium water up to 90°C

Product	Temperature range	Filling amount max.	Heating capacity	Pump capacity	Pump pressure	Cooling system	Tubular heat exchanger	Plate heat exchanger	Direct cooling	Suction capacity vacuum	Controller	Temperature sensor
	°C	l	kW	l/min.	bar	kW	kW	kW	kW	At flow temperature	mWS	
CLASSIC Water TT-170 L	90	5	3	19	2.9	a)	30	-	-	90	-	
CLASSIC Water TT-1548 E	90	20	12	60	4	b)	5	-	-	70	8	
CLASSIC Water TT-108 E	90	20	6	60	4	c)	-	-	100	90	8	
CLASSIC Water TT-108 E	90	20	12	60	4	c)	-	-	100	90	8	
CLASSIC Water TT-108 E	90	20	18	60	4	c)	-	-	100	90	8	
CLASSIC Water TT-108 K	90	40	18	200	4.3	c)	-	-	260	90	8	
CLASSIC Water TT-108 K	90	40	27	200	4.3	c)	-	-	260	90	8	
CLASSIC Water TT-108 K	90	40	36	200	4.3	c)	-	-	260	90	8	
CLASSIC Water TT-108 K	90	40	45	200	4.3	c)	-	-	260	90	8	
CLASSIC Water TT-1500 W	90	75	48	285	4.6	c)	-	-	285	80	-	
CLASSIC Water TT-1368 W	90	70-100	24	250	4.5	a)	-	400	-	70	-	
CLASSIC Water TT-1368 W	90	70-100	48	250	4.5	a)	-	400	-	70	-	
CLASSIC Water TT-1368 W	90	70-100	72	250	4.5	a)	-	400	-	70	-	
CLASSIC Water TT-1368 W	90	70-100	96	250	4.5	a)	-	400	-	70	-	
CLASSIC Water TT-1368 V	90	100	72	580	4.1	a)	-	400	-	80	-	
CLASSIC Water TT-1368 V	90	100	96	580	4.1	a)	-	400	-	80	-	
CLASSIC Water TT-1368 V	90	100	144	580	4.1	a)	-	400	-	80	-	
MATIC Water 90 18 E PHE	90	20	18	60	4	a)	50	130	-	90	8	
MATIC Water 90 18 H PHE	90	20	18	60	7	a)	50	130	-	90	8	
MATIC Water 90 18 K PHE	90	40	18	200	4.3	a)	200	400	-	90	8	IRIS
MATIC Water 90 27 K PHE	90	40	27	200	4.3	a)	200	400	-	90	8	
MATIC Water 90 36 K PHE	90	40	36	200	4.3	a)	200	400	-	90	8	
MATIC Water 90 45 K PHE	90	40	45	200	4.3	a)	200	400	-	90	8	

a) indirect, b) air cooled, c) direct, ■ standard, □ optional, - not possible

I/O Modul 1, Manufacturer protocols (RS-232, RS-485, CAN, Current-Loop)

I/O Modul 2, Profinet, EtherNet/IP, Profibus

I/O Modul 3, 3 x Digital output (changeover switch), 2 x Digital input (on/off), 2 x Analog output, 2 x Analog input, 1 x ext. Temperature sensor

¹ included in I/O module 1, ² included in I/O module 2, ³ included in I/O module 3

^{up} Update available per Q2/2024

MP-888 FeKo Typ J

Pt-100

3 Pressurised water temperature control units

CLASSIC Water, **MATIC** Water, Heat transfer medium water up to 160°C

Product	Temperature range °C	Heating capacity kW	Pump capacity l/min.	Pump pressure bar	with booster pump	Cooling system	Tubular heat exchanger kW	Plate heat exchanger kW	Direct cooling kW	Suction capacity vacuum mWS	Controller	Temperature sensor
CLASSIC Water TT-1398 N	140	6	110	5	-	a)	20	-	-	-		
CLASSIC Water TT-142 N	140	12	110	5	-	a)	60	-	-	8		
CLASSIC Water TT-137 N	140	12	110	5	-	a), c)	50	-	60 at 50°C	8		
CLASSIC Water TT-138 N	140	18	110	5	-	a), c)	70	-	60 at 60°C	8	MP-888	FeKo Typ J
CLASSIC Water TT-138 N	140	24	110	5	-	a), c)	70	-	60 at 60°C	8		
CLASSIC Water TT-1358 W	130	24	250	4.5	-	a)	180	400 at 70°C	-	-		
CLASSIC Water TT-1358 W	130	48	250	4.5	-	a)	180	400 at 70°C	-	-		
CLASSIC Water TT-30/160												
Cold water circuit	90	6	75	6.5	x	a)		200 at 90°C			MP-888	FeKo Typ J
Hot water circuit	160	12	75	6.5	x	a)	80 at 160 °C					
CLASSIC Water TT-DW 160	160	9	36	5	x	a)	-	40 at 150°C	-	-	MP-888	FeKo Typ J
CLASSIC Water TT-DW 160	160	18	36	5	x	a)	-	40 at 150°C	-	-		
MATIC Water 160 12 B BP	160	12	75	6.5	x	a), c)	65	-	60 at 50°C	8	IRIS	Pt-100
MATIC Water 160 24 B BP	160	24	75	6.5	x	a), c)	85	-	60 at 60°C	8		

^{a)} indirect, ^{b)} air cooled, ^{c)} direct, ■ standard, □ optional, - not possible

I/O Modul 1, Manufacturer protocols (RS-232, RS-485, CAN, Current-Loop)

I/O Modul 2, Profinet, EtherNet/IP, Profibus

I/O Modul 3, 3 x Digital output (changeover switch), 2 x Digital input (on/off), 2 x Analog output, 2 x Analog input, 1 x ext. Temperature sensor

¹ included in I/O module 1, ² included in I/O module 2, ³ included in I/O module 3

^{up)} Update available per Q2/2024

4 Oil temperature control units

CLASSIC Oil, **MATIC** Oil, Heat transfer medium oil up to 360°C

Product	Temperature range °C	Filling amount max. l	Expansion volume l	Heating capacity kW	Pump capacity l/min.	Pump pressure bar	Axial face sealed			Plate heat exchanger kW	At flow temperature °C	Suction capacity vacuum mWS	Controller	
							■	□	○					
CLASSIC Oil TT-248	200	8	6	8	100	5.5	■	○	20	-	200	8		
CLASSIC Oil TT-288	250	9	11	8	100	5.5	■	○	60	-	250	8		
CLASSIC Oil TT-OIL 300	300	9	17	12	100	5.5	■	○	60	-	290	8		
CLASSIC Oil TT-390 Z	360	15	16	16	100	5.5	■	○	90	-	360	8		
CLASSIC Oil TT-390 Z	360	21	16	24	100	5.5	■	○	90	-	360	8	MP-888 FEKO Typ J	
CLASSIC Oil TT-508 X	300	75	75	48	260	4	■	○	480	-	300	-		
CLASSIC Oil TT-510 X	300	125	100	96	260	4	■	○	480	-	300	-		
CLASSIC Oil TT-708 Y	300	100	100	72	500	4	■	○	600	-	300	-		
CLASSIC Oil TT-708 Y	300	200	100	120	500	4	■	○	600	-	300	-		
CLASSIC Oil TT-708 Y	300	200	100	144	500	4	■	○	600	-	300	-		
CLASSIC Oil TT-407 Z	240	11	16	8	100	5.5	■	○	67	143 at 80°C	230	-		
CLASSIC Oil TT-409 Z	240	60	36	24	100	5.5	■	○	93	150 at 80°C	230	-	MP-988 Pt-100	
CLASSIC Oil TT-410 X	240	75	75	48	260	4	■	○	150	175 at 80°C	230	-		
CLASSIC Oil TT-608 Z														
Hot oil circuit	300	50	75	24	100	5.5	■	-	-	-	-	-		
Cold oil circuit	80	50		-	100	5.5	■	○	93	90	-		MP-888 FEKO Typ J	
CLASSIC Oil TT-608 Z														
Hot oil circuit	300	50	75	48	100	5.5	■	-	-	-	-	-		
Cold oil circuit	80	50		-	100	5.5	■	○	93	90	-			
MATIC Oil 360 16	360	15	16	16	100	5.5	■	□	○	90	-	360	8	
MATIC Oil 360 24	360	21	16	24	100	5.5	■	□	○	90	-	360	8	
MATIC Oil 360 32	360	27	36	32	100	5.5	■	□	○	160	-	360	8	
MATIC Oil 360 48	360	70	36	48	100	5.5	■	□	○	230	-	360	8	
Dual units														
CLASSIC Oil TT-288/2	250	16	6	2 x 8	2 x 100	5.5	■	○	2 x 20		200	8		
CLASSIC Oil TT-388/2 16	360	30	16	2 x 16	2 x 100	5.5	■	□	○	2 x 90	-	360	8	MP-888 FEKO Typ J
CLASSIC Oil TT-388/2 24	360	42	16	2 x 24	2 x 100	5.5	■	□	○	2 x 90	-	360	8	

^{a)} indirect, ^{b)} air cooled, ^{c)} direct, ■ standard, □ optional, - not possible

I/O Modul 1, Manufacturer protocols (RS-232, RS-485, CAN, Current-Loop)

I/O Modul 2, Profinet, EtherNet/IP, Profibus

I/O Modul 3, 3 x Digital output (changeover switch), 2 x Digital input (on/off), 2 x Analog output, 2 x Analog input, 1 x ext. Temperature sensor

¹ included in I/O module 1, ² included in I/O module 2, ³ included in I/O module 3

^{up)} Update available per Q2/2024

5 Cooling units

CLASSIC Chill, from -25°C up to +40°C

Product	Temperature range °C	Ambient temperatures		Refrigerating agent	Heating switchable	Content water tank l	Cooling capacity nominal kW	Pump system	Motor kW	Pump pressure max. bar	Flow capacity max. l/min.	Flow capacity internal max. l/min.	Compressor	Condenser Air-cooled	Condenser Water-cooled	Air volume m³/h
		kW	l													
CLASSIC Chill TT-5'500 E	+10°C to +40°C	+45°C	R-134a	5	25	5	E	0.75	4.5	75			■ -	1'700		
CLASSIC Chill TT-14'500 H	+10°C to +40°C	+45°C	R-134a	6	50	14	H	1.5	8.5	75			■ □	2'850		
CLASSIC Chill TT-28'500	+10°C to +40°C	+45°C	R-134a	9	150	28	CR5-7	1.1	5	145			■ □	5'700		
CLASSIC Chill TT-29'800 WK	-25°C to +25°C	+45°C	R-404a	-	170	54	CR5-7	1.5	4.8	140			■ -			
CLASSIC Chill TT-54'500	+10°C to +40°C	+45°C	R-134a	12	250	54	CR10-6	2.2	6.2	250			■ □	8'000		
CLASSIC Chill TT-108'000	+10°C to +40°C	+45°C	R-134a	-	360	108	CR10-6	2.2	6/4	100/200	200		hermetically s.		■ □	2x8'000
CLASSIC Chill TT-216'000	+10°C to +40°C	+45°C	R-134a	-	600	216	CR15-4	4	5/3.5	200/400	500		■ □	4x8'000		
CLASSIC Chill TT-300'000	+10°C to +15°C	-	-	-	-	300	CR32-2	3		600	-	-	■ -	4x8'000		

■ standard, □ optional, - not possible

Power consumption kW	Controller		heating/cooling model																
	MP-888	Pt-100	Temperature sensor	Flow control	Version without tank	Water-cooled variant	Leakstopper device	Level control	Visual fault indications	Acoustic warning	Pressure regulation	0-10 V input/output	4-20 mA input	4-20 mA output	RS-232, RS-485, Current-Loop, CAN	Profinet interface	Ethernet/IP	OPC-UA interface	Web interface (LAN cable, WiFi)
6/4	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
8/5	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
11.3/6	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
-/15	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
18/14	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
-/35	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
-/66	-	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-
6.8	□	-	-	■	■	■	■	-	-	-	-	■	■	■	-	-	-	-	-

Notes



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