aditec
CONTROLS for FOODTECHNOLOGY

aditec VisuNet
BASE
COMFORT
PREMIUM

| 01 | Saus |
| 02 | Reddenin |

ACTUAL			NOMIN
25.5	🌡	°C	5
20.0	🌡	°C	0
0	☁	%	
00	🕐	h/mln	

N NOT
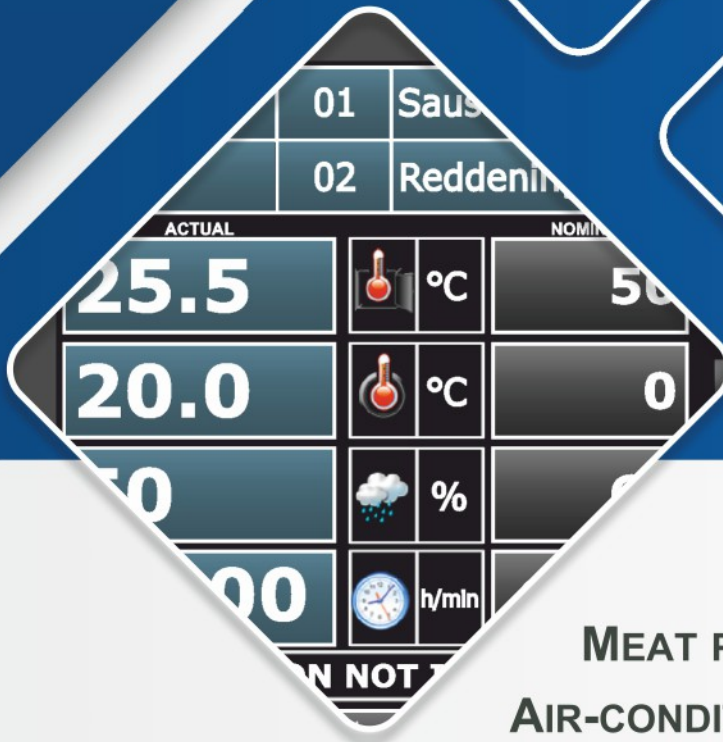
MEAT PROCESSING TECHNOLOGY
AIR-CONDITIONING TECHNOLOGY
PROCESS ENGINEERING
MATURING TECHNOLOGY
BAKING TECHNOLOGY
AGRO TECHNOLOGY

aditec

17

ABOUT US:

aditec was founded in 1982. We specialize in project planning, software development and serial production of micro-processing systems and electronic components for process engineering in the cooking, smoking, baking and refrigeration industry.

aditec´s services include the development of a concept to suit the customer´s needs, the manufacturing of prototypes, serial production including the compilation of programs, backed up by customer support worldwide.

aditec develops and produces process regulators and complex program controllers in accordance with CE conformity and the VDE and EMV regulations. Inspections are run in an independent, accredited test laboratory.

All-in-one solutions

…from sensors to networking

…from technical advice to a programme compiled for and customised to your needs

Everything from a single source !

aditec supplies process regulators and control systems for damp and wet rooms, mainly used in the baking and meat processing industry. All our devices conform to IP65 standard protection requirements or higher.

aditec owes its considerable success to easy operability, flexibility and utmost reliability of its controller and regulator units. While developing our program controllers we have been able to draw on our extensive know-how and experience gained through working with cooking, smoking, refrigerating and air-conditioning technology. We strive to continuously update and broaden our knowledge.

✓ WE OWE OUR SUCCESS TO:
- ■ RELIABILITY & CUSTOMER ORIENTATION
- ■ EASY OPERABILITY
- ■ ABSOLUTE WATER PROTECTION
- ■ ATTRACTIVE PRICES

OUR EMPLOYEES WILL BE GLAD TO ASSIST YOU AND OFFER A SOLUTION FOR YOUR SPECIFIC REQUIREMENTS!

Our services

...OPTIONS...EXPANSIONS...POSSIBILITIES...SERVICE

CONTROLLER, MODULES & ADDITIONAL BOARDS

- aditec develops and produces process regulators and complex programme controllers and offers services include the development of a concept to suit our customer´s needs, the manufacturing of prototypes, serial production including the compilation of programs.

- Our devices can always be expanded through various MODULES and ADDITIONAL BOARDS.

- The number of inputs and outputs can be adapted to suit your specific needs and intended applications - even subsequently.

VISUNET & SERVICE PROGRAM

- The controllers' interfaces enable you to transfer data from the PC to the controller and vice versa. Configuring and programming the controllers is easy and convenient with the **aditec** service program.

- The visualisation program "VisuNet" allows you to connect controllers to a super-ordinate program surveillance system. This enables you to log temperature profiles, monitor processes, analyse operating data and much more.
Comprehensive quality verification of the treated product in accordance with HACCP and IFS (ISO 9000) is guaranteed.

CONTROL CABINETS & MODERNISATION OF OLD PLANTS

- FROM OUTDATED TO NEW - CONTROL CABINET INCLUDED!
Do you have older cooking, smoking, climatic, refrigeration, maturing or tumbler installations? If these installations also have old switching systems or old controllers and/or you cannot see a way to connect them to a modern visualisation and monitoring systems, then we are your competent partner!
We are up for the challenge! We are certain that we can come up with a solution for your requirements!

REPAIR & SUPPORT

- aditec is not only a manufacturer of controllers - we have a lot more to offer!
From technical advice to support via remote maintenance to our repair service, - with us, you get everything from a single source.

- Installation of the recording software "VisuNet" via remote maintenance.

- Creation and adaptation of settings for every system, regardless of the manufacturer.

YOUR WISH IS OUR COMMAND!

- The individual control units are designed to offer a customised, affordable solution for every application.

- Customer-specific programming and visual design of the operating panel (membrane keypad) is available on request!

- CUSTOMER-SPECIFIC DEVELOPMENT:
Customer requests can be realised fast and cost-efficient with our flexible and freely programmable systems.
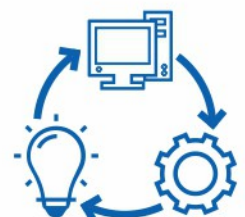
MKA 120 / MKA 500

PROGRAMMABLE MINI CONTROLLERS

CONTROLLERS **MKA 120 / MKA 500** ARE SUITABLE FOR:
COOKING, UNIVERSAL, BAKING, KETTLE, SHOWER UNITS...AND MUCH MORE. THE DEVICES ARE FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS. PROGRAMMING, CONFIGURING WITH THE **aditec** SERVICE PROGRAM AND FIRMWARE UPDATE VIA MINI-USB PORT IS POSSIBLE.

FEATURES **MKA 120**

- 2,7" LED display with 128 x 64 pixels and 16 grey scales

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 90 x 90 mm

- Durable membrane keyboard

- Up to 30 programs are possible

- Degree of protection: IP65 (from the front)

- Freely programmable logic with AND/OR links and timers

- **3 potential-free relay outputs**

- **2 galvanically insulated analogue inputs**

96 x 96 MM | FIG. 60%

FEATURES **MKA 500**

- 2,7" LED display with 128 x 64 pixels and 16 grey scales

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 90 x 90 mm

- Durable membrane keyboard

- Up to 30 programs are possible

- Degree of protection: IP65 (from the front)

- Freely programmable logic with AND/OR links and timers

- **5 potential-free relay outputs**

- **4 galvanically insulated analogue inputs**

96 x 96 MM | FIG. 60%

OPTIONS

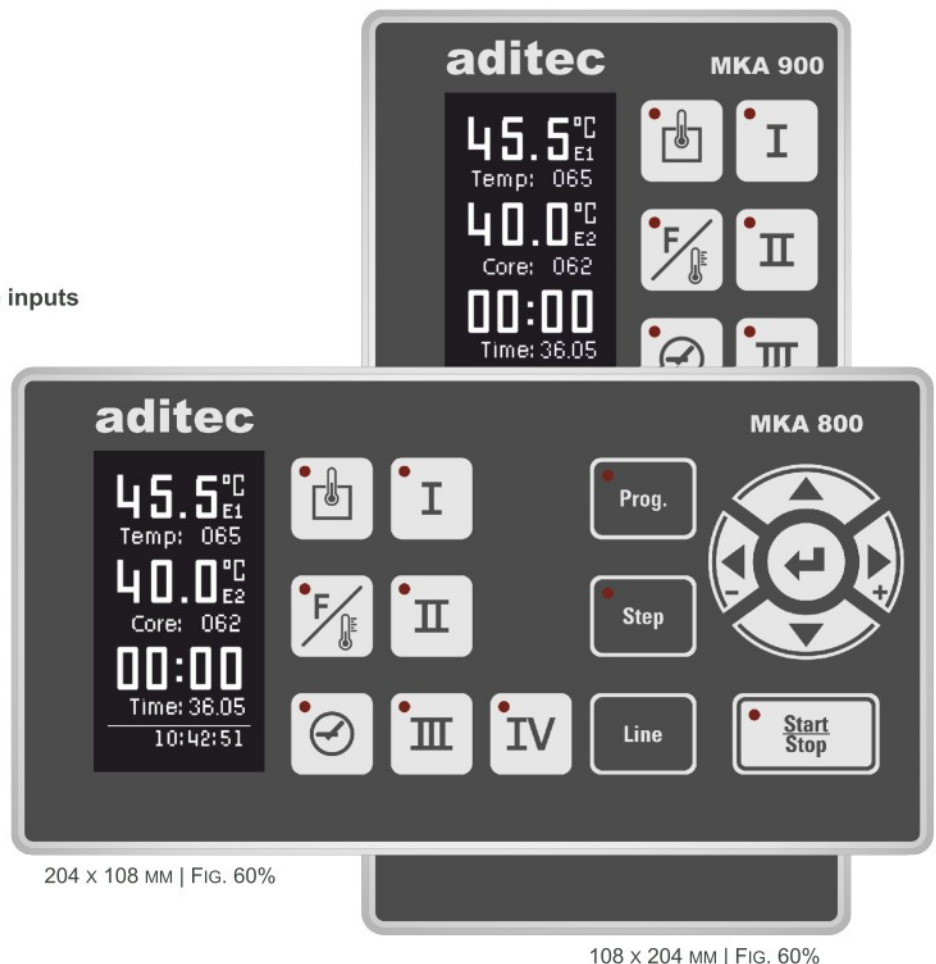|					
ZSL	Additional Ethernet/LAN interface	**ZA2**	2 additional analogue outputs (only MKA 500)	**aditec VisuNet**	Visualisation + recording in accordance with HACCP possible
ZS4	Additional RS485 interface	**ZAV21**	2 additional analogue outputs + 1 additional vacuum input (only MKA 500)		
ZSU	Additional USB host (only MKA 500)	**WD**	Watertight frame, IP67		

MKA 800 (horizontal) / MKA 900 (vertical)

PROCESS CONTROLLERS

PROCESS CONTROLLERS **MKA 800 / MKA 900** ARE SUITABLE FOR:
TUMBLER, CLIMATIC-MATURING CHAMBERS, COOKING, UNIVERSAL, BAKING, KETTLE, SHOWER UNITS...AND MUCH MORE. THE DEVICES ARE FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS. PROGRAMMING, CONFIGURING WITH THE **aditec** SERVICE PROGRAM AND FIRMWARE UPDATE VIA MINI-USB PORT IS POSSIBLE.

FEATURES MKA 800 / MKA 900

- 2,7" LED display with 128 x 64 pixels and 16 grey scales

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 186 x 92 mm or 92 x 186 mm

- Durable membrane keyboard

- Up to 30 programs are possible

- Degree of protection: IP65 (from the front)

- Freely programmable logic with AND/OR links and timers

- **10 potential-free relay outputs**

- **4 galvanically insulated, analogue inputs**

204 x 108 мм | FIG. 60%

108 x 204 мм | FIG. 60%

OPTIONS

ZSL	Additional Ethernet/LAN interface	ZA2	2 additional analogue outputs
ZS4	Additional RS485 interface	ZAV21	2 additional analogue outputs + 1 additional vacuum input
ZSU	Additional USB host	aditec VisuNet	Visualisation + recording in accordance with HACCP possible!

MIC 900
PROCESS CONTROLLER

PROCESS CONTROLLER **MIC 900** IS SUITABLE FOR:
COOKING, UNIVERSAL, SMOKING, CLIMATIC-SMOKE, MATURING CHAMBERS...AND MUCH MORE. THE DEVICE IS FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS. PROGRAMMING, CONFIGURING WITH THE **aditec** SERVICE PROGRAM AND FIRMWARE UPDATE VIA MINI-USB PORT IS POSSIBLE.

FEATURES **MIC 900**

- Brilliant 7" TFT colour screen with touch panel in resistive touch technology

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 137 x 137 mm

- Durable membrane keyboard

- Easy-to-use, systematic configuration settings

- Degree of protection: IP65 (from the front)

- Several different interfaces (LAN, Mini-USB, USB-Host)

- Freely programmable logic with AND/OR links and timers

- Language can be changed

- Number of programs and steps can be customised for your needs

- **16 potential free relay outputs**

- **12 galvanically insulated digital inputs**

- **6 galvanically insulated analogue inputs (4x Pt100, 2x universal)**

194 x 176 MM | FIG. 50%

OPTIONS

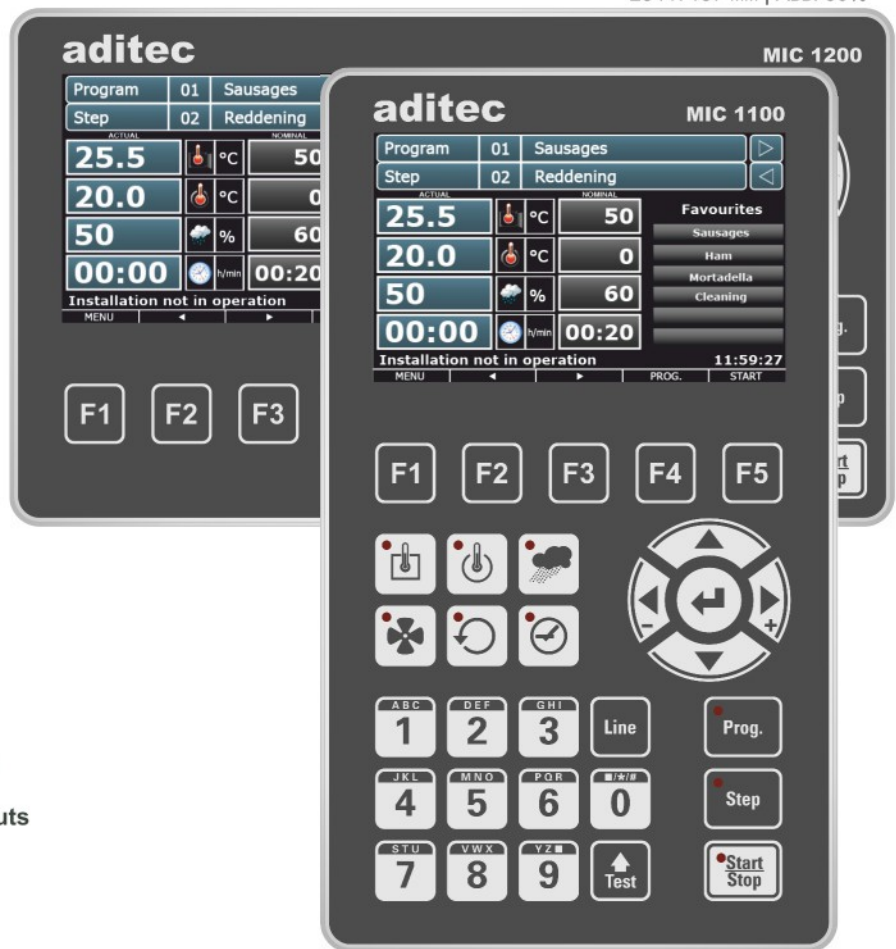|					
ZE2	2 additional analogue inputs (on request)	**ZR8**	8 additional relay outputs (available only once per controller)	**MD12**	Expandable to max. 48 digital inputs (12 inputs per module)
ZA2	2 additional analogue outputs	**MAE24**	Expandable to max. 14 analogue inputs + 6 analogue outputs (4 inputs or 2 outputs per module, respectively)	**MR6**	Expandable to max. 72 relay outputs (6 outputs per module)
ZAV21	2 additional analogue outputs + 1 additional vacuum input			**aditec VisuNet**	Visualisation + recording in accordance with HACCP possible!

MIC 1100 (vertical) / MIC 1200 (horizontal)
PROCESS CONTROLLERS

PROCESS CONTROLLERS **MIC 1100 / MIC 1200** ARE SUITABLE FOR:
UNIVERSAL, SMOKING, CLIMATIC AND MATURING CHAMBERS...AND MUCH MORE. THE DEVICES ARE FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS. PROGRAMMING, CONFIGURING WITH THE **aditec** SERVICE PROGRAM AND FIRMWARE UPDATE VIA MINI-USB PORT IS POSSIBLE.

FEATURES **MIC 1100 / MIC 1200**

- Brillant 5" TFT colour screen with touch panel in resistive touch technology

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 92 x 186 mm or 186 x 92 mm

- Durable membrane keyboard

- Easy-to-use, systematic configuration settings

- Degree of protection: IP65 (from the front)

- Several different interfaces (LAN, Mini-USB, USB-Host)

- Freely programmable logic with AND/OR links and timers

- Language can be changed

- Number of programs and steps can be customised for your needs

- **18 potential free relay outputs**

- **6 galvanically insulated digital inputs**

- **4 galvanically insulated analogue inputs (2x Pt100, 2x universal)**

234 x 137 MM | ABB. 50%

137 x 234 MM | FIG. 50%

OPTIONS

ZE2	2 additional analogue inputs (on request)	**ZR8S**	8 additional relay outputs (on request, available only once per controller)
ZA2	2 additional analogue output	**aditec VisuNet**	Visualisation + recording in accordance with HACCP possible!
ZAV21	2 additional analogue outputs + 1 additional vacuum input		

6

Do not worry about regulations and directives, with aditec *VisuNet* you are always a step ahead!

The key component of any modern control system for an installation in the food industry is a suitable process controller. This controller and its programming directly influence the technological manufacturing process of the product.

Using such devices in the meat industry gives the manufacturer of meat products absolute process control. The product is subject to checks throughout the technological process, which influence quality, yield and shelf- life of the finished product.

The HACCP/IFS quality and hygiene regulations, introduced for the food industry, call for a way of registering, visualising and backing-up of production processes. Basis for a comprehensive quality control is norm EN ISO 9000-9004 (or the German meat and hygiene regulation § 11c Art. 3).

Chose an aditec process controller and aditec VisuNet and you are always abreast of the latest technological developments!

✔ System requirements:

- ■ PC with Pentium processor with a min. 2,4 GHz + 2048 MB RAM

- ■ Min. 80 GB free hard disk storage

- ■ Operating systems:
  WIN 7, Vista, WIN 8 / 8.1 / 10 /
  Windows Server 2008 / 2012 R2 / 2016

- ■ Min. 15" colour monitor,
  min. resolution 1024 x 720

- ■ Colour printer

- ■ Data network:
  RS 485 / USB or Ethernet / LAN

Overview

- ■ Easy networking capability of all aditec controllers with a central computer or server
- ■ Easy installation via a download with extensive installation instructions
- ■ Intuitive operation, no previous knowledge required
- ■ Clearly laid-out display of all actual and nominal values, operating status of the individual systems/installations
- ■ Trend display of all actual and nominal values with product group and processes (as diagram or table) with scaled time axis
- ■ Zoom function
- ■ Process list – Overview table of all actual and nominal values with product name and treatment type (process name), batch number and administrator names
- ■ Back-up of all data in an adjustable time period of up to 10 years
- ■ Alarm lists
- ■ The graphs of all actual values of a program are shown with name and processes in a diagram.
- ■ Sampling times of process values can be changed
- ■ Batch number entry possible
- ■ Remote programming possible via VisuNet Compiling, editing and sending programs via a PC
- ■ Remote control of systems/ installations, starting/stopping via a PC
- ■ Free service program for WIN 7, Vista, WIN 8 / 8.1 / 10, Windows Server 2008 / 2012 R2 / 2016
- ■ Free presentation with no obligation
- ■ Printing of the documents you have compiled (e.g. protocols, labels, etc.), automatic printout at the end of a program possible
- ■ A batch number is generated automatically at the end of a program with the option of printing barcode labels
- ■ Barcode scanner can be used to select a system/ installation, scan the batch number and start a program
- ■ Customer logos can be used

The unique features of *VisuNet*

- ■ Infinitely up-gradable via Ethernet / LAN
- ■ Different networks can be combined: LAN / Ethernet, RS 485 and more...
- ■ Extensive database back-ups with scheduling and administration
- ■ Administrator allocation / user rights
- ■ Programming and remote PC access via the network or internet
- ■ Remote monitoring and tele-control technology with aditec control
- ■ Data export to MS-Excel and CSV format
- ■ Zooming in on graphs. Temperatures, vacuum, pressure and /or the time scale can be adjusted to suit every system
- ■ Sending alarm messages via SMS or Email is possible either via a modem or the internet. A time schedule for sending the messages can be pre-programmed.
- ■ Automatic time synchronisation between controller and PC
- ■ Multiple-user capacity (Client/Server) with VisuNet PREMIUM (can be combined with BASE or COMFORT) Per licence = simultaneous access for up to 3 PCs.
- ■ Acquisition of operating data depends on the individual controller. The various consumption data can be recorded and the related costs can be calculated.
- ■ Transfer of data to a superordinate ERP System via a SQL interface
- ■ Expansion stage BASE or COMFORT can be individually selected for each system, retrospective activation or upgrade is possible
- ■ Event viewer with automatic comparison between the configured program and the how far the program/ process has progressed
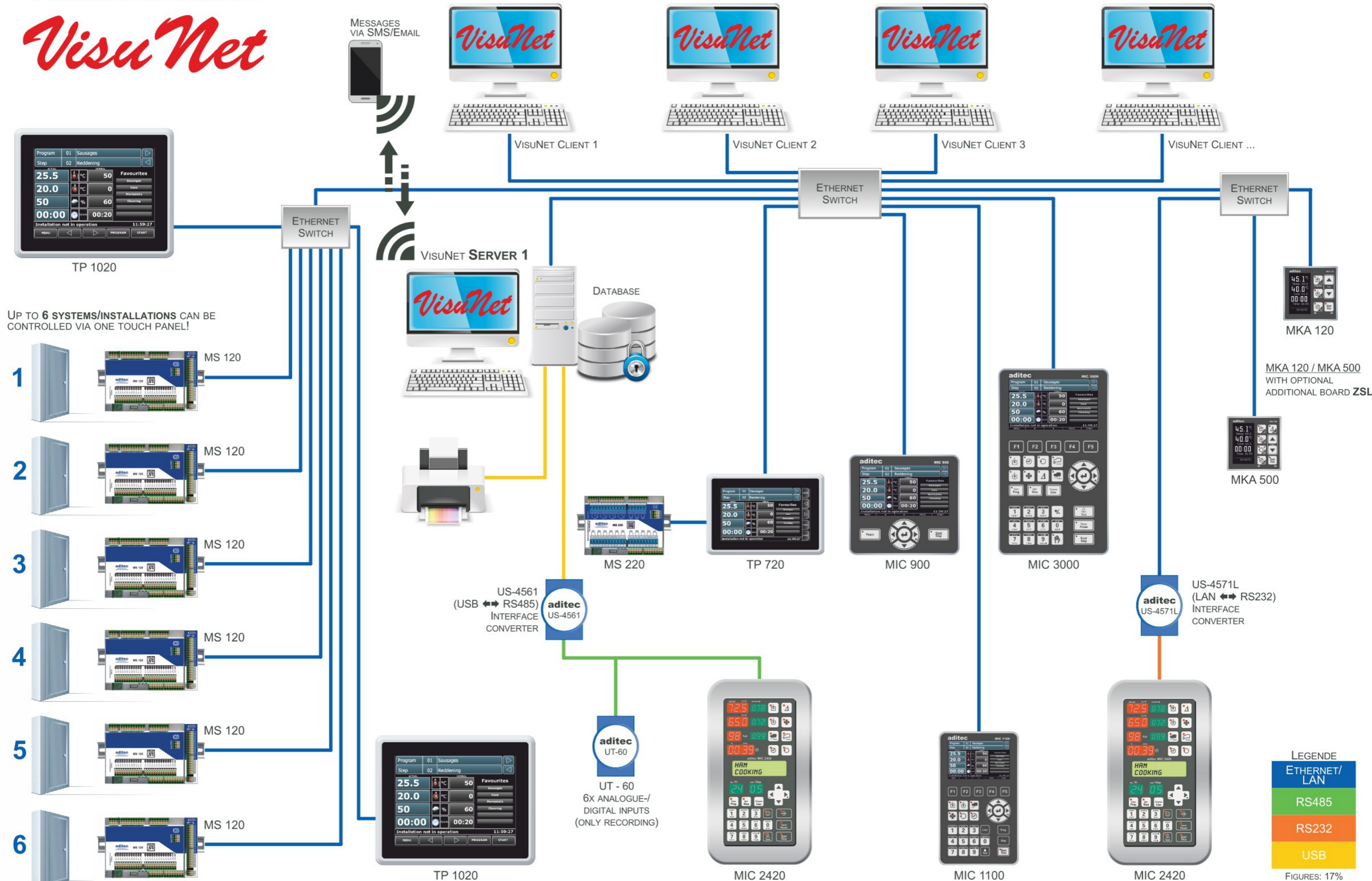
ℹ Special customer requirements can be implemented.
Please approach us with your ideas!

VisuNet

Messages via SMS/Email

VisuNet Client 1

VisuNet Client 2

VisuNet Client 3

VisuNet Client ...

Ethernet Switch

Ethernet Switch

Ethernet Switch

TP 1020

VisuNet Server 1

Database

MKA 120

MKA 120 / MKA 500 WITH OPTIONAL ADDITIONAL BOARD ZSL

MKA 500

Up to **6 systems/installations** can be controlled via one touch panel!

1 MS 120

2 MS 120

3 MS 120

4 MS 120

5 MS 120

6 MS 120

MS 220

TP 720

MIC 900

MIC 3000

US-4561 (USB ↔ RS485) Interface Converter

aditec US-4561

US-4571L (LAN ↔ RS232) Interface Converter

aditec US-4571L

aditec UT-60

UT - 60 6X ANALOGUE-/ DIGITAL INPUTS (ONLY RECORDING)

TP 1020

MIC 2420

MIC 1100

MIC 2420

Legende

Ethernet/ LAN	
RS485	
RS232	
USB	

Figures: 17%

PROGRAMMING SYSTEMS & PROCESSES, AUTOMATED CONTROL PROCESSES, MONITORING, RECORDING AND BACKING-UP IN ACCORDANCE WITH HACCP / IFS

7

8

FEATURE MATRIX

Feature	BASE	COMFORT	PREMIUM
Overview of the current system status (Live view)	■	■	
Recording of programs and processes that have already run, even when VN is switched off[1]	■	■	
Importing programs (which were recorded with the aditec Data logger kit DLK-1) to the database	■	■	
Import programs from the controller[1]	■	■	
Setting up and recording temperature limits, alarms and operating status[1]	■	■	
Write programs to the database at pre-programmable intervals	■	■	
Print the line graph/ measured values or automatic printing of graph at the end of a program	■	■	
Convenient search of already recorded programs in the database (filter function)	■	■	
Line graphs can be set up individually: Zoom, section, representation, temperature and time spans	■	■	
Data synchronisation with controllers[1]	■	■	
Manual or pre-set automatic time synchronisation with controllers[1]	■	■	
Different networks and interfaces can be used to retrieve data from the controller	■	■	
Individual retrieval time intervals for each controller	■	■	
Saving / backing-up of database	■	■	
Setting up and changing programs[1]		■	
Copying, inserting, deleting programs[1]		■	
Sending programs to the controller[1]		■	
Direct connection to the user interface of aditec[1]		■	
Program start/ stop via aditec VisuNet[1]		■	
Exporting recorded programs form the database		■	
Exporting files to a superordinate system (ERP System)[1]		■	
Recording and visualisation of relays and digital inputs in a graph[2]		■	
Changing nominal value and skipping into the next step during operation via aditec VisuNet[1]		■	
Changing the batch number in the database		■	
Exporting measured values to Microsoft Excel or to CSV format		■	
Administrator management and recording via VisuNet[1]		■	
Alarm messages via SMS and Email[1]		■	
Remote maintenance /tele-control technology with aditec-control[1]		■	
Acquiring of operating data to calculate the energy costs[1]		■	
Recording / listing of events that happened during a program run[1]		■	
Multiple-user capacity (Client/Server). Multiple controller management via internet (VPN). Per licence = simultaneous access for up to 3 PCs.			■
Programming / operating the system/installation from all work stations, user rights within VisuNet			■
Barcode scanners are used to identify the system/installation, scanning of batch numbers and starting of programs. Per licence = simultaneous access for up to 3 PCs.			■

ONLY IN COMBINATION WITH *VisuNet* BASE OR COMFORT!

[1] Functions/features depend on the individual device
[2] Only AD-Bus devices, see overview service program

VisuNet EXAMPLE SCREEN SHOTS

DATABASE

Appliance:	PROGRAMM:	BATCH NO.:		DATE:		TIME:	
				From:	01/01/2000	From:	00:00
	→ OK			To:	19/09/2017	To:	23:59

Show programs: All appliances | All

CYCLE NO.▲	Appliance	PROGRAM	BATCH NO.	Start	End	Duration	max Core	Alarms	Events	Comment	St
19	MIC 900	P10:Autoclav 001		11.09.2017, 09:50:09	11.09.2017, 10:37:14	00:47:05		0	6		⊙
18	A1 Smoke house	P01:Smoke 001		30.08.2017, 10:10:06	30.08.2017, 10:53:30	00:43:24	46.5 °C	0	5		⊙
17	MIC 900	P10:Autoclav 001		30.08.2017, 10:07:18	30.08.2017, 10:38:16	00:30:58	50.5 °C	0	5		⊙
16	A1 Smoke house	P01:Smoke 001		30.08.2017, 10:06:03	30.08.2017, 10:09:45	00:03:42	46.5 °C	0	1		⊙
15	A1 Smoke house	P01:Smoke 001		30.08.2017, 09:28:44	30.08.2017, 09:29:57	00:01:13	46.5 °C	0	1		⊙
14	A1 Smoke house	P01:Smoke 001		25.08.2017, 14:32:51	25.08.2017, 14:36:14	00:03:23	46.5 °C	0	3		⊙
13	A1 Smoke house	P01:Smoke 001		25.08.2017, 14:28:44	25.08.2017, 14:29:12	00:00:28	46.5 °C	0	1		⊙
12	A1 Smoke house	P01:Smoke 001		25.08.2017, 14:25:17	25.08.2017, 14:26:22	00:01:05	46.5 °C	2	1		⊙
11	A1 Smoke house	P01:Smoke 001		25.08.2017, 14:22:18	25.08.2017, 14:23:07	00:00:49	46.5 °C	0	4		⊙
10	Uni chamber 3 UG	P19:Lyoner		11.04.2013, 07:31:16	11.04.2013, 12:33:57	05:02:41		0	0		✓
9	Uni chamber 1 UG	P44:Sausages		11.04.2013, 08:42:40	11.04.2013, 11:52:04	03:09:24		0	3		✓
8	Uni chamber 1 UG	P44:Sausages		11.04.2013, 05:14:41	11.04.2013, 08:37:33	03:22:52		0	1		✓
7	Uni chamber 3 UG	P19:Lyoner		11.04.2013, 02:02:19	11.04.2013, 07:14:27	05:12:08		0	0		✓
6	Uni chamber 1 UG	P44:Sausages		11.04.2013, 02:01:41	11.04.2013, 05:06:29	03:04:48		0	0		✓
5	Uni chamber 1 UG	P44:Sausages		11.04.2013, 01:39:06	11.04.2013, 01:56:08	00:17:02		0	2		✓

LINE GRAPH

Unichamber 1 UG   **P44:Sausages**

Change of nominal value Kammer from 60 °C to 90 °C

Duration: 08:40 / 03:09:15 / 11.04...
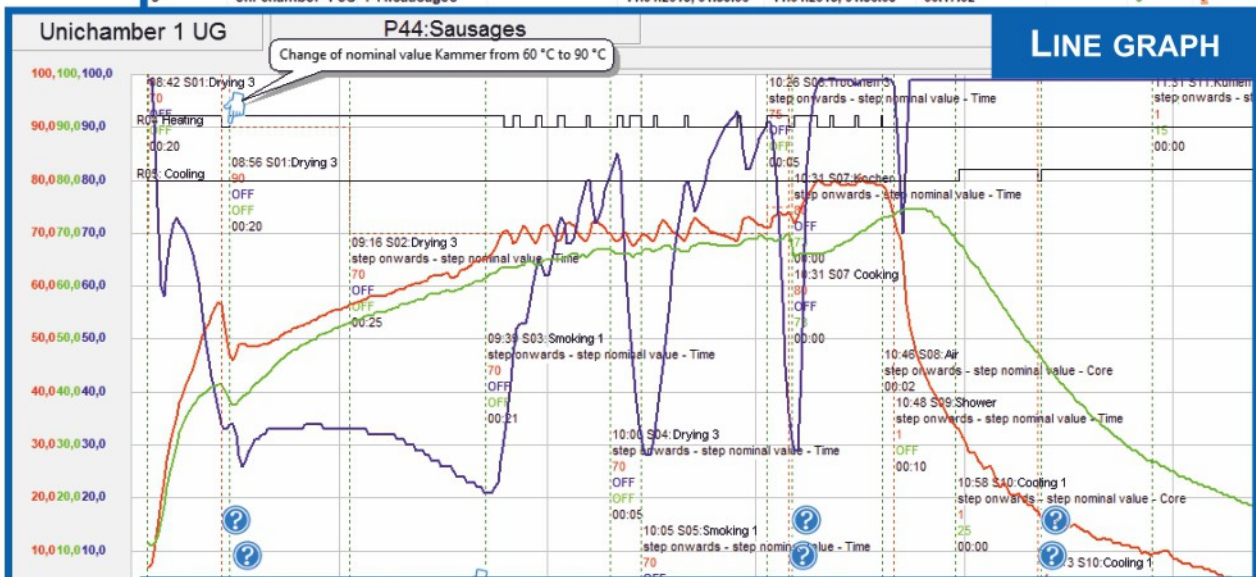
EVALUATION OF OPERATING DATA

cycle no. 10   Appliance: Unichamber 3 UG   Program: P19:Lyoner
Batchno.:

Counter	Formula	Counter day	Price/kWh day	Costs day	Counter night	Price/kWh nig	Costs night	Amount
Heating	10000 W	1:02	0,15 €	1,55 €	00:00	0,00 €	0,00 €	1,55 €
Heating 2	20000 W	0:00	0,15 €	0,00 €	00:00	0,00 €	0,00 €	0,00 €
Air 1	5000 W	2:20	0,15 €	1,75 €	00:00	0,00 €	0,00 €	1,75 €
Air 2	10000 W	2:11	0,15 €	3,28 €	00:00	0,00 €	0,00 €	3,28 €
Air 3	15000 W	0:05	0,15 €	0,19 €	00:00	0,00 €	0,00 €	0,19 €
Cooling	10000 W	2:08	0,15 €	3,20 €	00:00	0,00 €	0,00 €	3,20 €

Heating	1,55
Heating 2	0
Air 1	1,75
Air 2	3,28
Air 3	0,19
Cooling	3,2

Amount day: 9,97 €   **Amount night:** 0,00 €   **Total:** 9,97 €

cycle no. 9   Appliance: Unichamber 1 UG   Program: P44:Sausages   Date/Time: 11.04.2019 / 08:42:40
Batchno.:

Zähler	Formula	Counter day	Price/kWh day	Costs day	Counter night	Price/kWh nig	Costs night	Amount:
Heating	10000 W	1:19	0,15 €	1,98 €	00:00	0,00 €	0,00 €	1,98 €
Heating 2	20000 W	0:49	0,15 €	2,45 €	00:00	0,00 €	0,00 €	2,45 €
Air 1	5000 W	0:10	0,15 €	0,13 €	00:00	0,00 €	0,00 €	0,13 €
Air 2	10000 W	1:45	0,15 €	2,63 €	00:00	0,00 €	0,00 €	2,63 €
Air 3	15000 W	1:06	0,15 €	2,48 €	00:00	0,00 €	0,00 €	2,48 €
Cooling	10000 W	0:51	0,15 €	1,28 €	00:00	0,00 €	0,00 €	1,28 €

Heating	1,98
Heating 2	2,45
Air 1	0,13
Air 2	2,63
Air 3	2,48
Cooling	1,28

Amount day: 10,95 €   **Amount night:** 0,00 €   **Total:** 10,95 €

Summary

Counter	Costs day	Costs night	Amount:
Heating	5,61 €	0,00 €	5,61 €
Heating 2	5,75 €	0,00 €	5,75 €
Air 1	2,01 €	0,00 €	2,01 €
Air 2	8,74 €	0,00 €	8,74 €
Air 3	5,41 €	0,00 €	5,41 €
Cooling	5,86 €	0,00 €	5,86 €

Heating	5,61
Heating 2	5,75
Air 1	2,01
Air 2	8,74
Air 3	5,41
Cooling	5,86

Amount day: 33,38 €   **Amount night:** 0,00 €   **Total:** 33,38 €

print	CSV-Export	Excel-Export	Comment	Close

Barcode scanner

The barcode scanner, e.g. **DT-X200-11E**, with its shock-resistant 2,7" Blanview® LCD display with scratch-resistant touch panel is the perfect handheld device for harsh environments!

Comes with installed aditec barcode app...

- ✓ Direct selection and starting of systems and programs

- ✓ The pre-configured and automatic allocation of programs to specific products (product database), means that errors are avoided

- ✓ Scanning of batch numbers

- ✓ Acknowledgment of the end of a program

- ✓ Status request for all systems

And much more!

Degree of protection IP67
66 x 187 mm | Fig. 50%

For greater mobility and flexibility in your day-to-day work

Complete systems / installations and corresponding shelf/rack trolleys can be labelled with a barcode for identification and to display information (e.g. of the used products and batch numbers).

Since the barcode scanner is not connected to the system, but to the **aditec VisuNet program, one scanner can be used for several systems/installations** and the recorded data can be attributed to a particular member of staff or a department.

MIC 3000

PROCESS CONTROLLER

PROCESS CONTROLLER **MIC 3000** IS SUITABLE FOR:
COOKING, UNIVERSAL, SMOKING, CLIMATIC-SMOKE, MATURING CHAMBERS...AND MUCH MORE. THE DEVICE IS FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS. PROGRAMMING, CONFIGURING WITH THE **aditec** SERVICE PROGRAM AND FIRMWARE UPDATE VIA MINI-USB PORT IS POSSIBLE.

FEATURES **MIC 3000**

- Brilliant 7" TFT colour screen with touch panel in resistive touch technology

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 137 x 282 mm

- Durable membrane keyboard

- Easy-to-use, systematic configuration settings

- Degree of protection: IP65 (from the front)

- Several different interfaces (LAN, Mini-USB, USB-Host)

- Freely programmable logic with AND/OR links and timers

- Language can be changed

- Number of programs and steps can be customised for your needs

- **24 potential free relay outputs**

- **12 galvanically insulated digital inputs**

- **6 galvanically insulated analogue inputs (4x Pt100, 2x universal)**

194 x 327 мм | FIG. 50%

OPTIONS

ZE2	additional analogue inputs (on request)	ZR8	16 additional relay outputs (8 outputs per module, available only twice per controller)	MD12	Expandable to max. 48 digital inputs (12 inputs per module)
ZA2	2 additional analogue outputs	MAE24	Expandable to max. 14 analogue inputs + 6 analogue outputs (4 inputs or 2 outputs per module, respectively)	MR6	Expandable to max. 72 relay outputs (6 outputs per module)
ZAV21	2 additional analogue outputs + 1 additional vacuum input			aditec VisuNet	Visualisation + recording in accordance with HACCP possible!

TP 720 (7") / TP 1020 (10,4")

TOUCH PANEL

TOUCH PANELS **TP 720 / TP 1020** ARE SUITABLE FOR:
COOKING, UNIVERSAL, SMOKING, CLIMATIC-SMOKE, MATURING CHAMBERS...AND MUCH MORE. THE DEVICES ARE FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS.

FEATURES **TP 720 / TP 1020**

Touch panels **TP 720 / TP 1020** are used in combination with the freely programmable controllers **MS 120 or MS 220**

TP 1020 (10,4") 279,6 x 226,8 MM | FIG. 50%

TP 720 (7") 206,9 x 145,9 MM | FIG. 50%

- 7" / 10,4" TFT display in projective-capacitive touch technology (PCT)

- Robust stainless steel housing according to DIN standard / industry standard and glass panel for mounting in harsh environments

- Degree of protection: IP65 (from the front)

- Up to 6 systems/installations can be controlled with one or two (master/slave) touch panels

- Easy-to-use, systematic configuration settings

- Programming, configuring, Firmware update via USB connection

- Several different interfaces for data transfer between the touch panel and a PC: USB, 2x LAN (RJ45), RS232, RS485, MicroSD card slot

- Language can be changed, administrator management, password- protected settings, batch number entry and much more...

- aditec VisuNet Visualisation and recording in accordance with HACCP possible!

MS 120 / MS 220

FREELY PROGRAMMABLE CONTROLLERS

CONTROLLERS **MS 120 / MS 220** ARE SUITABLE FOR:
COOKING, SMOKING, CLIMATIC, MATURING, INTENSIVE COOLING, FREEZER, DEFROSTING CHAMBERS...AND MUCH MORE. THE DEVICES ARE FREELY ADJUSTABLE, FLEXIBLE AND CAN BE ADAPTED FOR MANY APPLICATIONS. THEY ARE MOUNTED ON DIN RAILS IN CONTROL CABINETS.

FEATURES MS 120 / MS 220

- Robust stainless steel housing according to DIN standard / industry standard

- Easy-to-use, systematic configuration settings

- Degree of protection: IP20

- Firmware Update via Mini USB connection

- USB, LAN (RJ45), CAN-BUS (for additional board), MicroSD card slot

- **MS 120: 24 galvanically insulated transistor outputs**

- **MS 220: 18 potential free relay outputs**

- **12 galvanically insulated digital inputs**

- **6 galvanically insulated analogue inputs**

- **2 galvanically insulated analogue outputs**

Controllers **MS 120 / MS 220** are used in combination with aditec Touch panels **TP 720 + TP 1020**!
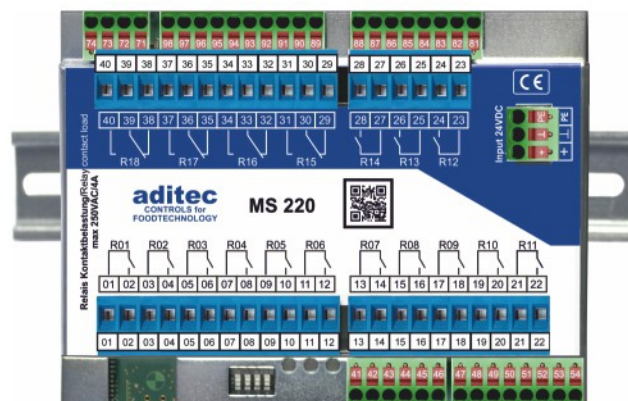
136 x 104 MM | FIG. 50%

OPTIONS

MT16	Expandable to max. 120 transistor outputs (16 outputs per module, **ONLY MS 120**)	**MAE24**	Expandable to max. 14 analogue inputs + 6 analogue outputs (4 inputs or 2 outputs per module)	CODESYS	PLC-programming via CODESYS
MR6	Expandable to max. 120 relay outputs (6 outputs per module, **ONLY MS 220**)	**MW4**	8 additional analogue inputs for Wheatstone bridges (4 inputs per module)	**ZS4/ZAZ**	Additional RS485 interface
MD12	Expandable to max. 48 digital inputs (12 inputs per module)	**MV2**	2 additional vacuum inputs	aditec VisuNet	Visualisation + recording in accordance with HACCP possible!

Modules & Additional boards
FOR EXPANSION...EVEN SUBSEQUENTLY!

MODULES

- For mounting on a DIN rail in control cabinets
- CAN-BUS connection for programming and communication with the basic unit

MT16	MD12	MAE24	MR6	MW4
Transistor output module	**Digital input module**	**Analogue in/output module**	**Relay output module**	**Analogue input module**
16x transistor outputs	**12x** digital inputs	**4x** analogue inputs (can be changed to: Pt100, Thermo-elements, 4-20mA, 0-10V) **2x** analogue inputs (4-20mA / 0-10V)	**6x** relay outputs (4 normally-open NO contacts, 2 changeover contacts)	**4x** analogue inputs (for Wheatstone bridges)
CAN-BUS	CAN-BUS	CAN-BUS	CAN-BUS	CAN-BUS
22,5 x 104 x 106,5 (WxHxD)	22,5 x 104 x 106,5 (WxHxD)	22,5 x 104 x 106,5 (WxHxD)	22,5 x 104 x 106,5 (WxHxD)	22,5 x 104 x 106,5 (WxHxD)
Degree of protection: IP 20	Degree of protection: IP 20	Degree of protection: IP 20	Degree of protection: IP 20	Degree of protection: IP 20

Without illustration: **MV2,** 2 vacuum inputs

These modules can only be used in combination with controllers **MS 120 + MS 220, MIC 900, MIC 3000!**

ADDITIONAL BOARDS

ZSL	ZSU	ZS4	ZA2	ZAV21	ZE2
					ON REQUEST
Additional board	Additional board	Additional board	Additional board	Additional board	Additional board
1x Ethernet/LAN	**1x** USB-Host	**1x** RS485 interface	**2x** analogue outputs	**2x** analogue outputs **1x** vacuum sensor	**2x** analogue inputs

ZSL + ZSU can only be used in combination with controllers **MKA 120/500/800!**
ZS4 can only be used in combination with controllers **MKA 120/500/800 + MS120/220!**
ZA2 + ZAV21 + ZE2 can only be used in combination with controllers **MKA 500/800 + MIC 900/1100/3000!**

Modernisation of old plants
OUR CONTROL CABINET CONSTRUCTIONS

✓ **PROFESSIONAL**
- ■ COOKING
- ■ SMOKING
- ■ BAKING
- ■ CLIMATE CONTROL
- ■ MASSAGING
- ■ MIXING

WE ARE YOUR COMPETENT PARTNER FROM THE CONTROLLER
...UP TO A COMPLETE CONTROL CABINET!

Your system /installation is still working fine but the operating panel/controller is causing problems?
- or is outdated?
- or the repair costs are getting too high?
- or recording in accordance with HACCP/IFS is required?

There are many reasons why it makes sense to look for a new, modern and affordable controller. The conversion of your old installation to incorporate a new controller with a clear layout is easier than you may think!

DO YOU WANT TO PROGRAM, AUTOMATICALLY CONTROL, MONITOR AND RECORD SYSTEMS/INSTALLATIONS AND PROCESSES? DO YOU HAVE QUESTIONS ABOUT OR PROBLEMS WITH YOUR OLD OPERATING PANEL OR CONTROLLER?

PLEASE CONTACT US AND WE ARE HAPPY TO FIND A SOLUTION FOR YOU! WE WILL ADVISE YOU ON THE RIGHT CHOICE OF CONTROLLER, WE WILL HELP YOU WITH THE PROGRAMMING AND INSTALLATION.

ARE YOU PLANNING TO GET QUALITY CERTIFICATION IN ACCORDANCE WITH HACCP/IFS FOR YOUR PLANT/BUSINESS?

Our process controllers and regulators are perfectly suited for the processes used in the meat production and smoking industry.

The recording and visualisation systems created by **aditec** work with standard operating systems that log, document and back up processes and send status messages. We set ourselves higher standards for the *VisuNet* system than are required by HACCP/IFS certifications

MIC 980...FOR STIKKEN OVENS/ROTARY OVENS

MIC 990...FOR RACK OVENS

Bakery

PROCESS CONTROLLERS **MIC 980 / MIC 990** ARE DESIGNED FOR USE IN **STIKKEN/ROTARY OVENS AND RACK OVENS.** THE NUMBER OF RACKS CAN BE SET, FLEXIBLE STEAM AND FLAP TIMES CAN BE SELECTED FOR EACH INDIVIDUAL RACK, NIGHT-TIME PREHEATING FUNCTION WITH READINESS DISPLAY, SYSTEM STATUS MESSAGES, DIFFERENT PROCESS MONITORING FEATURES, E.G. BURNER, THERMAL FUSE, EXHAUST FLAP ETC... PROGRAMMING, CONFIGURING WITH THE **aditec** SERVICE PROGRAM AND FIRMWARE UPDATE VIA MINI-USB PORT IS POSSIBLE.

FEATURES MIC 980 / MIC 990

- Brilliant 7" TFT colour screen with touch panel in resistive touch technology

- Robust stainless steel housing according to DIN standard / industry standard for mounting dimensions 137 x 137 mm

- Durable membrane keyboard

- Easy-to-use, systematic configuration settings

- Degree of protection: IP65 (from the front)

- Several different interfaces (LAN, Mini-USB, USB-Host)

- Freely programmable logic with AND/OR links and timers

- Language can be changed

- Number of racks, programs and steps can be customised for your needs

- **16 potential free relay outputs**

- **12 galvanically insulated digital inputs**

- **6 galvanically insulated analogue inputs (4x Pt100, 2x universal)**

MIC 990

MIC 980

176 x 194 MM | FIG. 50%

OPTIONS

ZE2	2 additional analogue inputs (on request)	**ZR8**	8 additional relay outputs (available only once per controller)	**MD12**	Expandable to max. 48 digital inputs (12 inputs per module)
ZA2	2 additional analogue outputs	**MAE24**	Expandable to max. 14 analogue inputs + 6 analogue outputs (4 inputs or 2 outputs per module, respectively)	**MR6**	Expandable to max. 72 relay outputs (6 outputs per module)
ZAV21	2 additional analogue outputs + 1 vacuum input			**aditec VisuNet**	Visualisation + recording in accordance with HACCP possible!

14

FROM PLANNING TO COMMISSIONING...

...EVERYTHING FROM A SINGLE SOURCE!

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