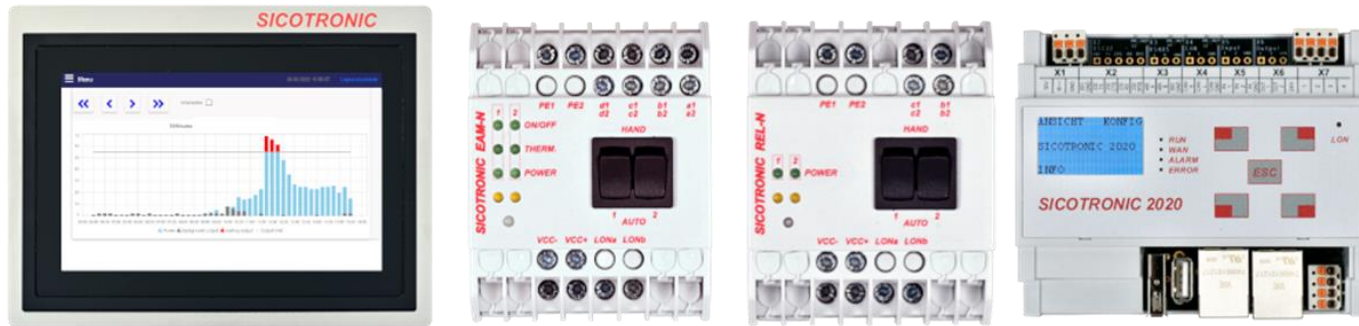


SICOTRONIC GmbH & Co. KG

**The efficient way of reducing peak power
with the innovative commercial kitchen
energy management system**



Robin Wittke, CEO / Owner



- Market leader since 1982 for peak power optimization in commercial kitchens
- Savings between 30 and 50% possible at peak load
- Inventor of **SICOTRONIC** – interface a, b, c, d on commercial kitchen appliances
- DIN 18875, since May 2015 DIN standard describes the interface
- ZE6000 as the newest system released in April 2022
- Manufacturer independent



1980: announcement of the european patent No. 0053383
1982: foundation/inscription of the **SICOTRONIC GmbH**
1983: development **SICOTRONIC 2096**
1987: **SICOTRONIC**- clamped connection in professional kitchenware (standard)
1989: development/delivery **SICOTRONIC 3096**
 easy menu operation / printer with standard paper / regulating strategy
1993: development/delivery **SICOTRONIC COMPACT**
1995: development of **SICOTRONIC 4000** LON-two wire bus-basis
 field modules / tableau technics / temperature control
1998: system **SICOTRONIC 1010**
2002: **20 years SICOTRONIC**, Norbert Wittke, Sales Manager
 market launch Sico-MaCS
2003: expansion of activities to Luxembourg, Switzerland and Italy
2004: new owner and CEO Norbert Wittke
2005: new patent DE19842043
2007 **25 years SICOTRONIC**
2009 first induction optimised with **Sicotronic**
2012 **30 years SICOTRONIC**, new ZE5000 and new ABM1010
2013 new remote connection software S5-Remote
2014 expansion of activities to Slovenia, Poland,
2015 new german standard DIN18875 for connecting professional kitchen appliances
 with intelligent energy optimisation system
2016 new ZE5000 Premium version, able to control five energy areas with different
 power limits
2017 Robin Wittke joins as new service and sales representative
2017 **35 years Sicotronic**
2018 new developement of EAM-ECAR module, Kitchen meets Mobility
2019 cloud connection with software update
2020 expansion of activities to United Kingdom and Ireland with ki-tech solutions
2021 release of ABM2020
2022 **40 years SICOTRONIC**
2022 Robin Wittke takes over the position as Owner and CEO
2022 Release of the ZE6000

honors:

1991: prize "PRIX APRIA" of the french hotel business for the best technical
 innovation in the kitchen sector
2010: VdF prize German Innovation
2015: VdF price „Person“

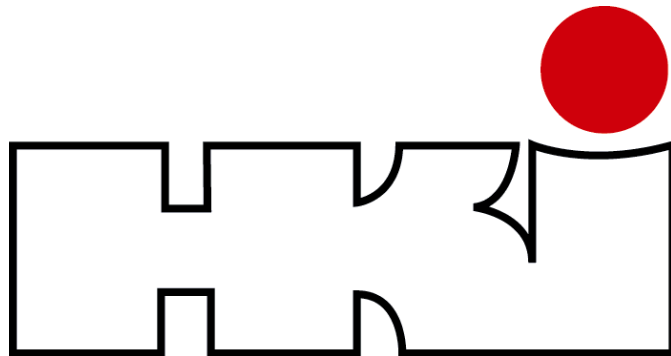
We are member of:



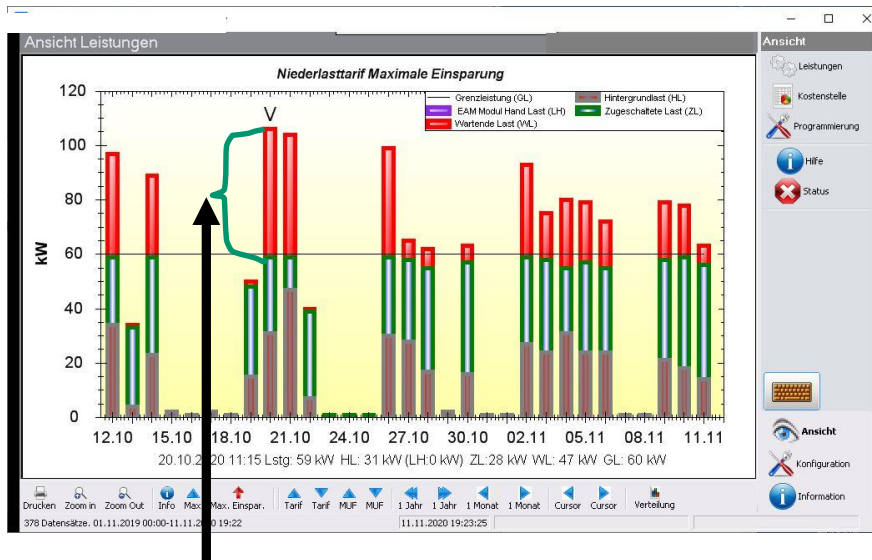
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
Deutschland-Österreich



SICOTRONIC GmbH & Co. KG
Fördermitglied



Saving money

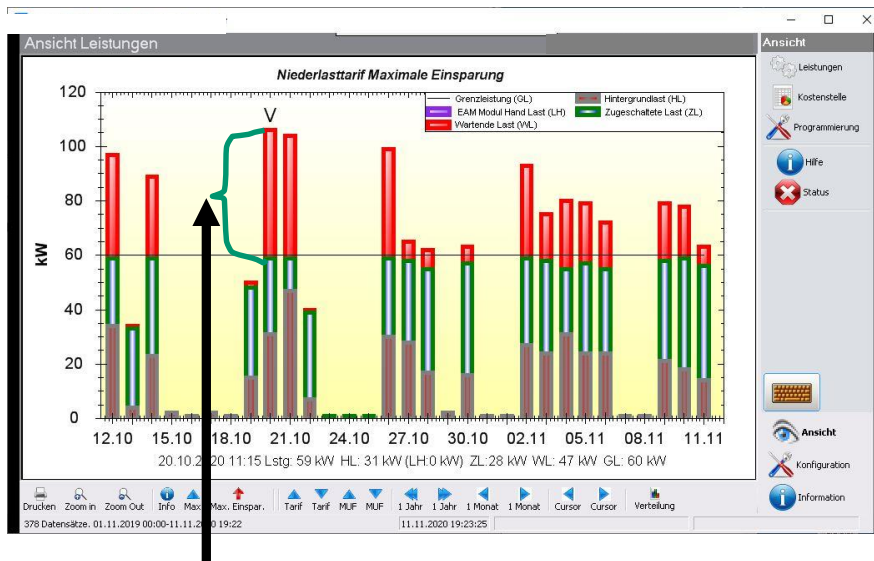


savings of 47 KW here

each saved KW does not have to be paid



New build or existing building



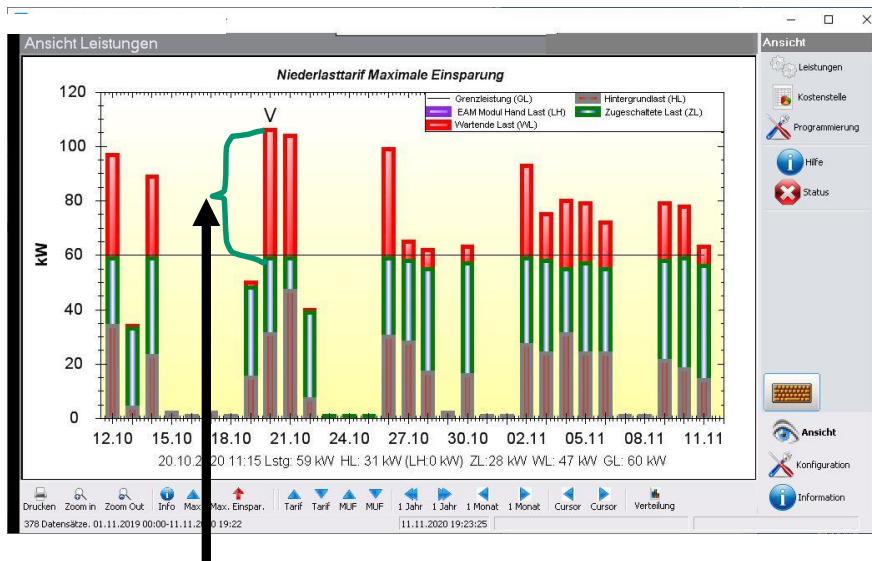
savings of 47 KW here

each saved KW does not affect the fuses





Sustainability, Carbon Footprint



savings of 47 KW here

each saved KW does not have to be produces

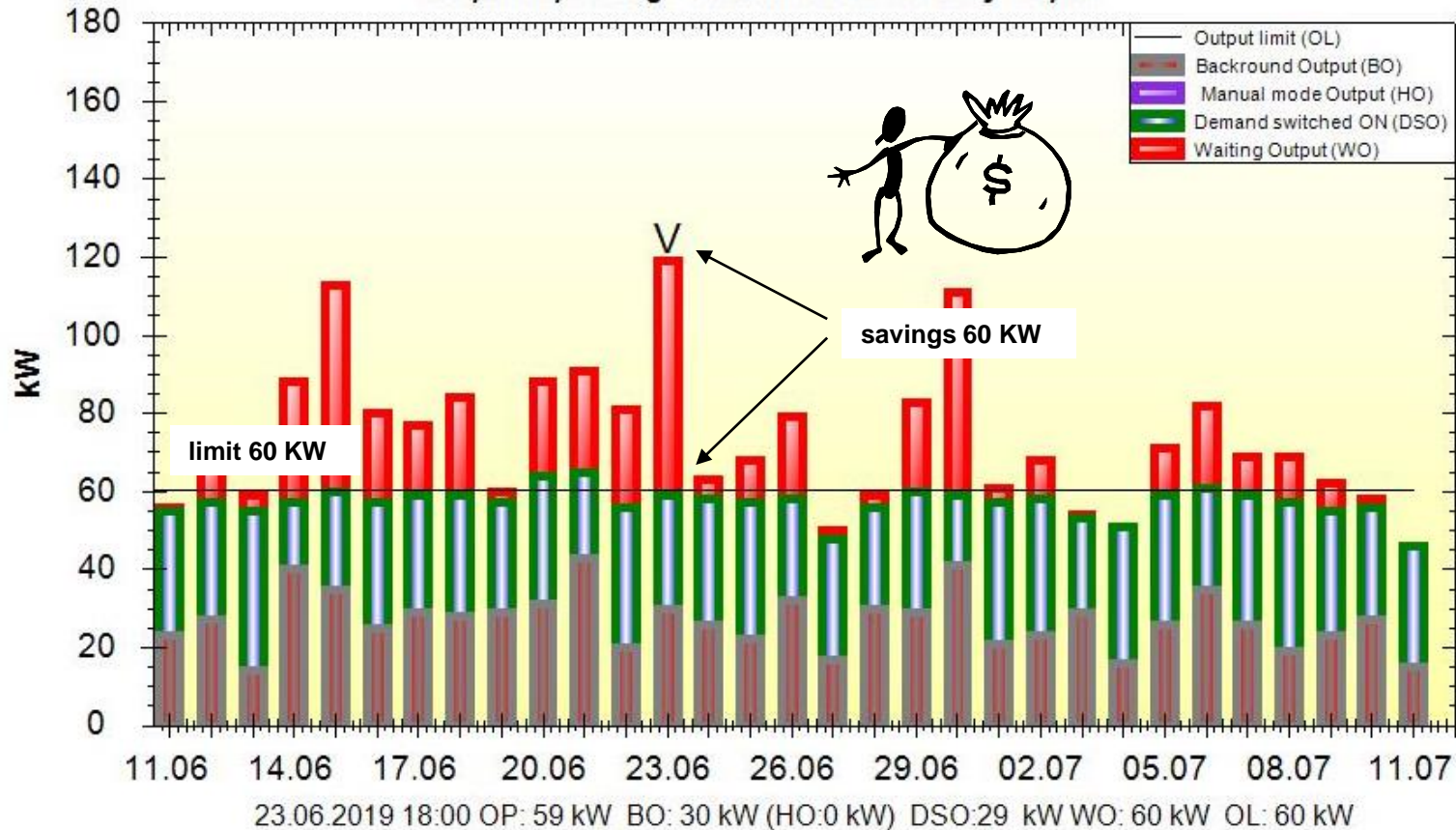
Energy management to avoid peak power and to save money in the monthly energy accounting for the operator of the commercial kitchen.

How does it look like?



View Output

Haupteinspeisung Low Rate Maximum daily output



View

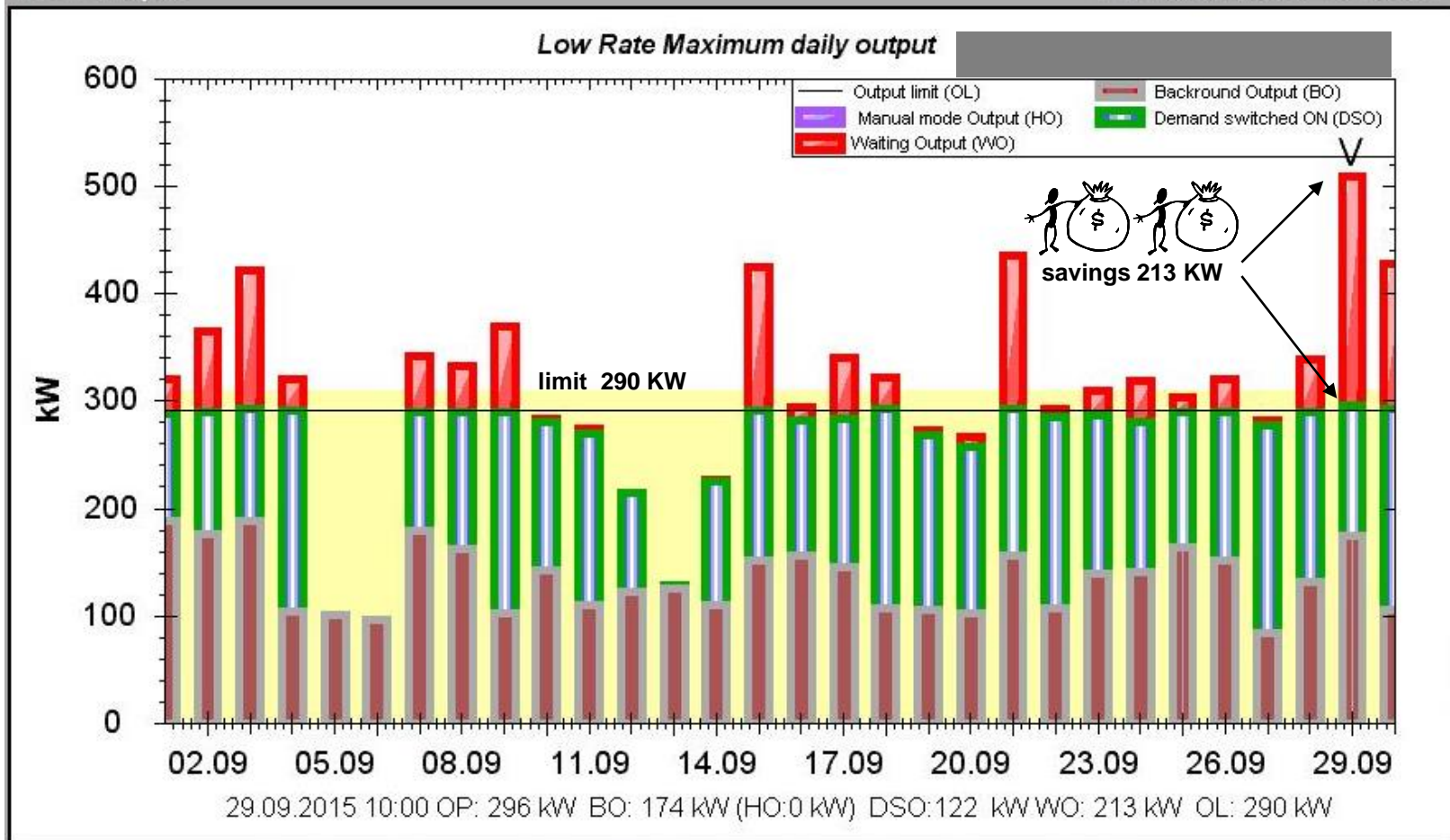
- Output
- Accounts
- Program
- Help
- State

- View
- Configuration
- Information

View Output

Feinkost Käfer, Parsdorf

View



- Output
- Accounts
- Program
- Help
- State



View

Configuration

Information

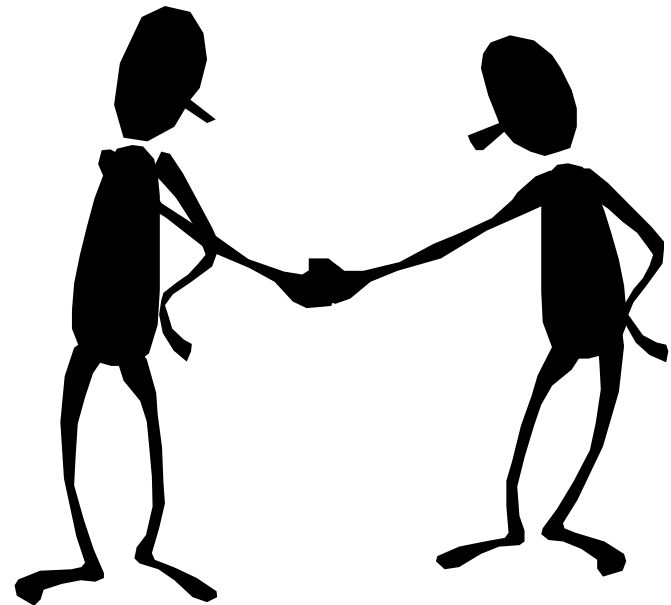
Print Zoom in Zoom Out Info Max Max. Econ. Rate Rate MUF MUF 1 Year 1 Year 1 Month 1 Month Cursor Cursor Distribution

01.08.2015 21:30:00 - 31.08.2015 09:00:00

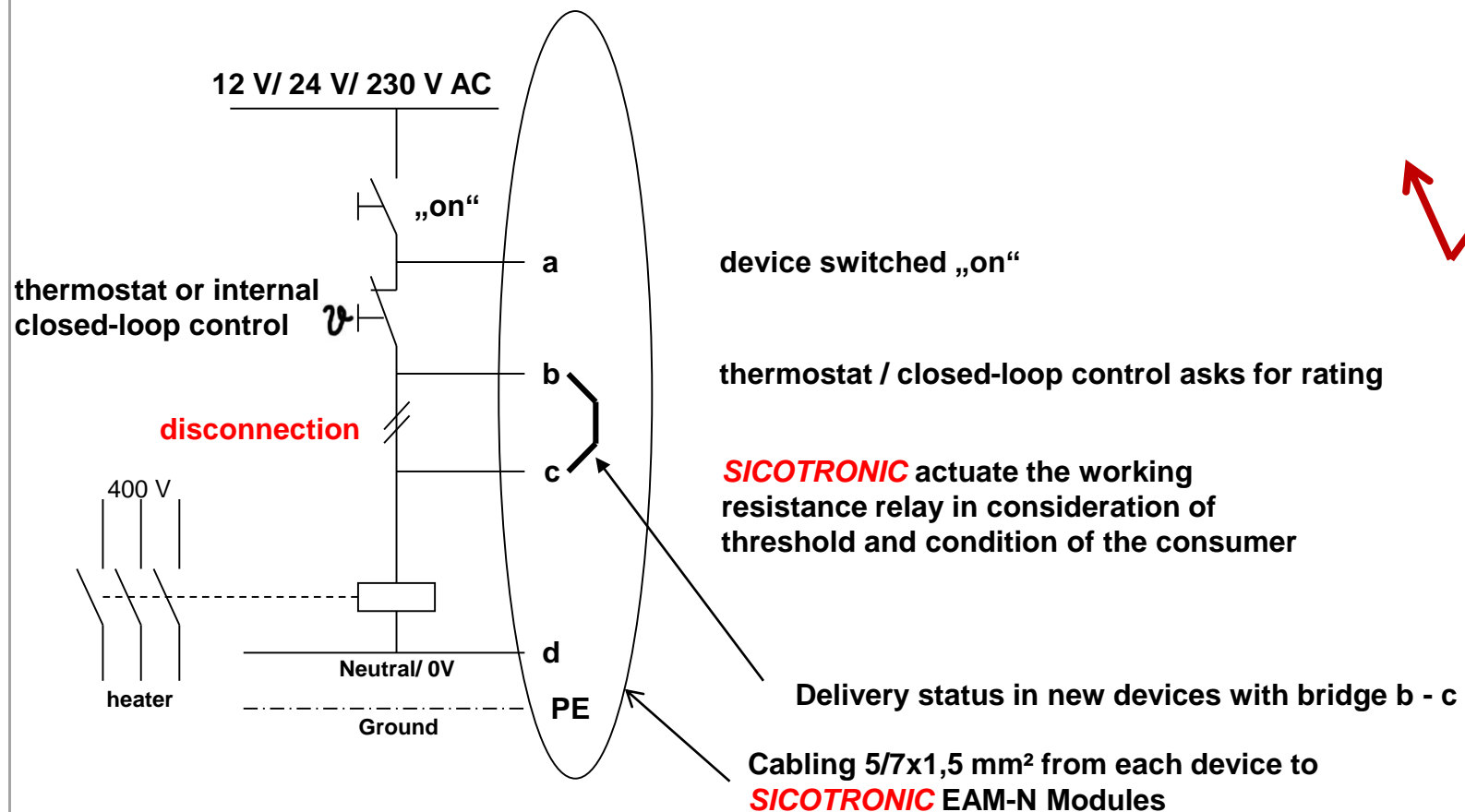
11.07.2019 15:58:43

What is required in each appliance?

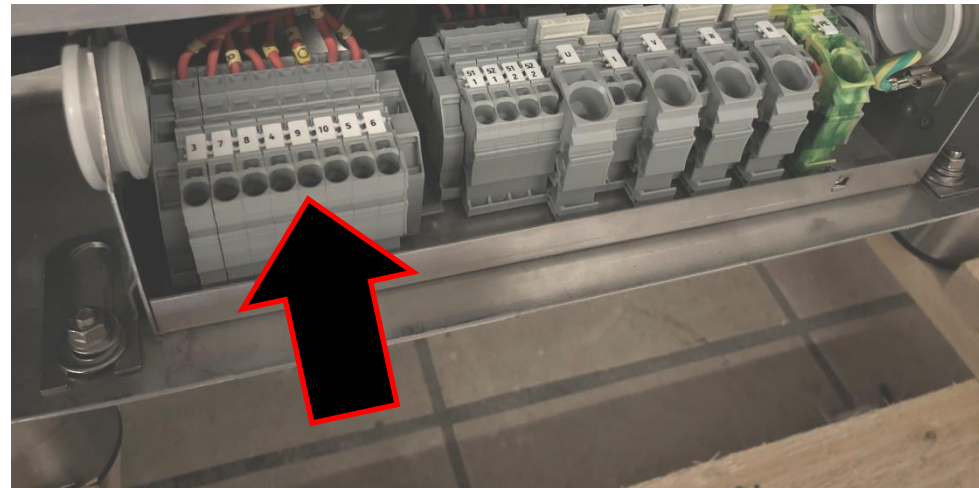
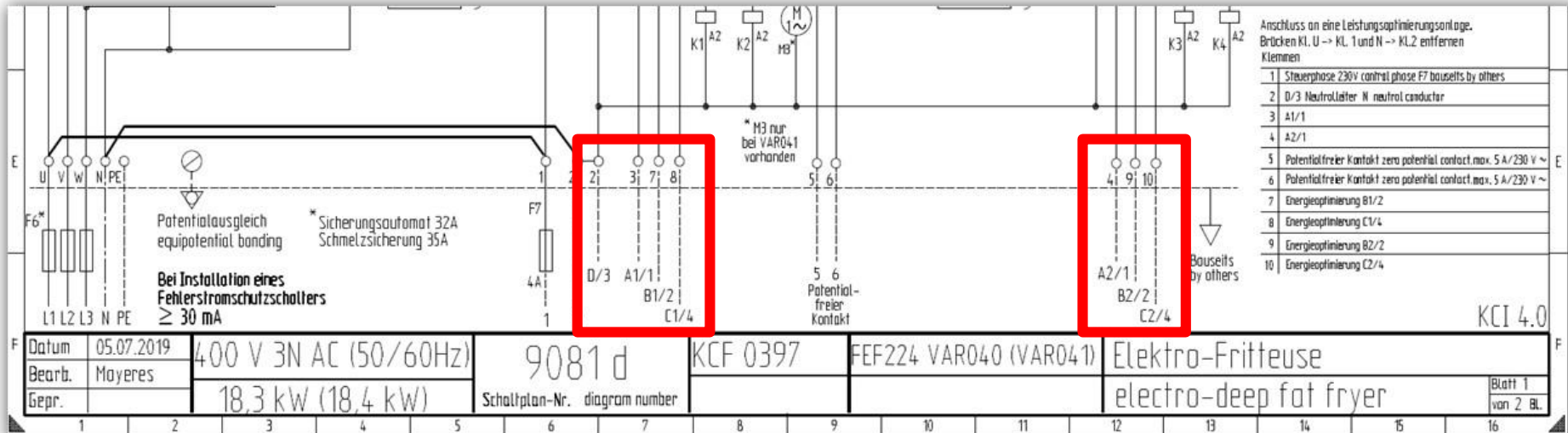
SICOTRONIC-Interface **DIN 18875**



„**SICOTRONIC** - clamp“, DIN 18875



„SICOTRONIC - interface“ in PHOENIX



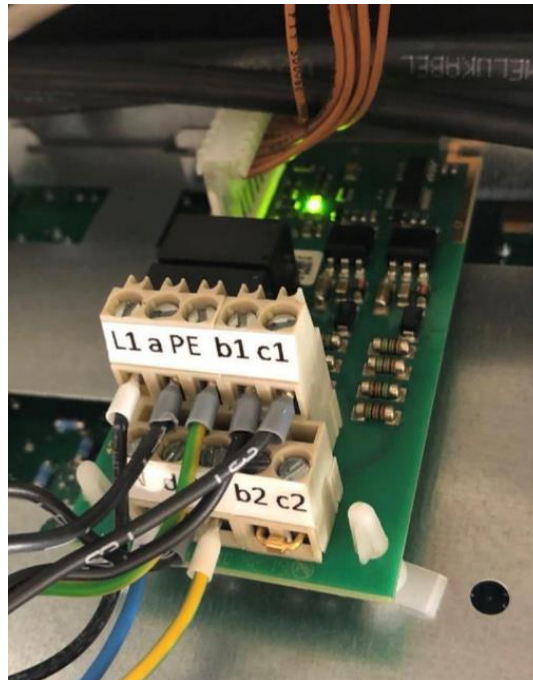
MKN



**SICOTRONIC DIN
18875**

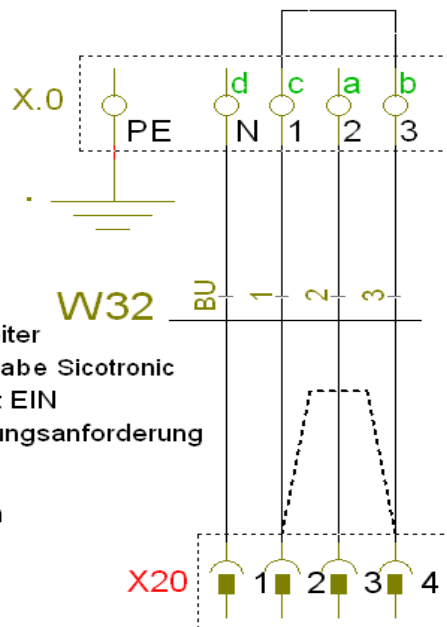


**iCombi, iCombi Pro and
iVario
SICOTRONIC-clamps**

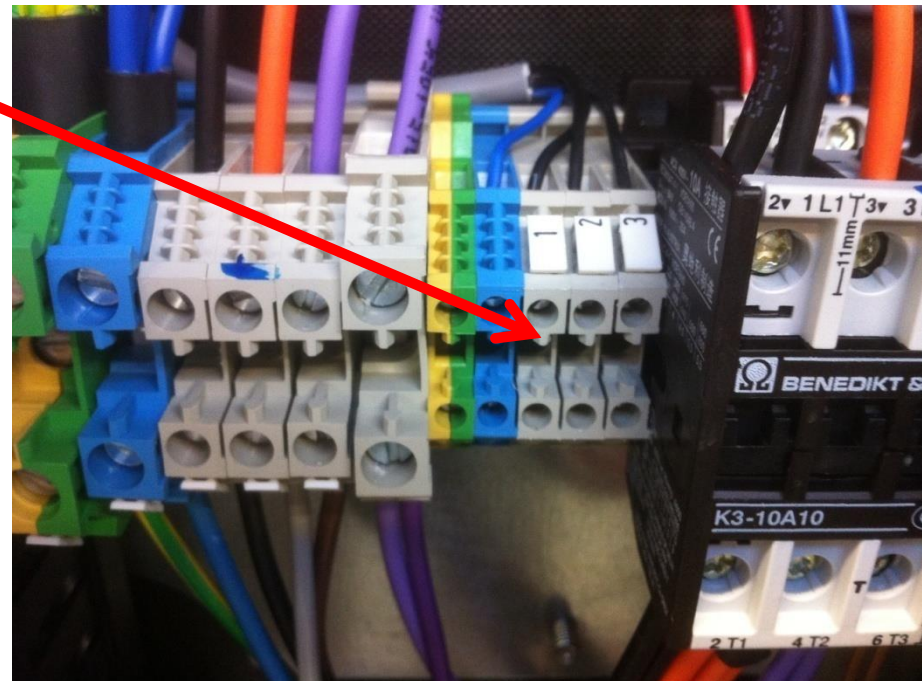


Option Sicotronic system

X0:PE
X0:N (d)
X0:1 Freigabe Sicotronic (c)
X0:2 Gerät EIN (a)
X0:3 Heizungsanforderung (b)



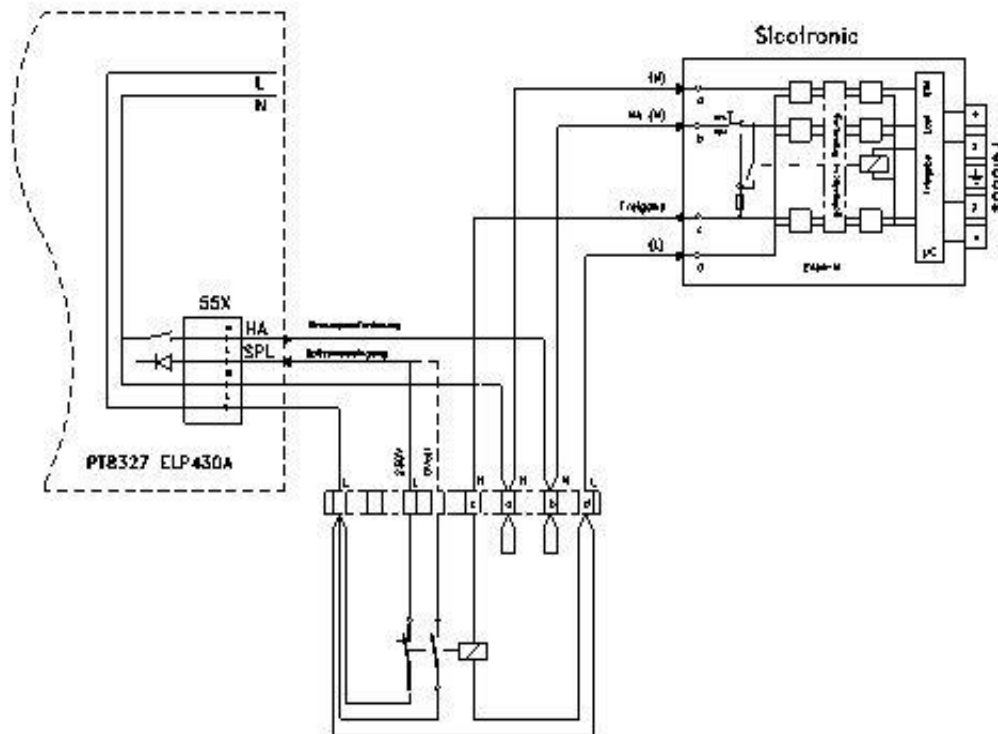
with
SICOTRONIC-clamps



Example

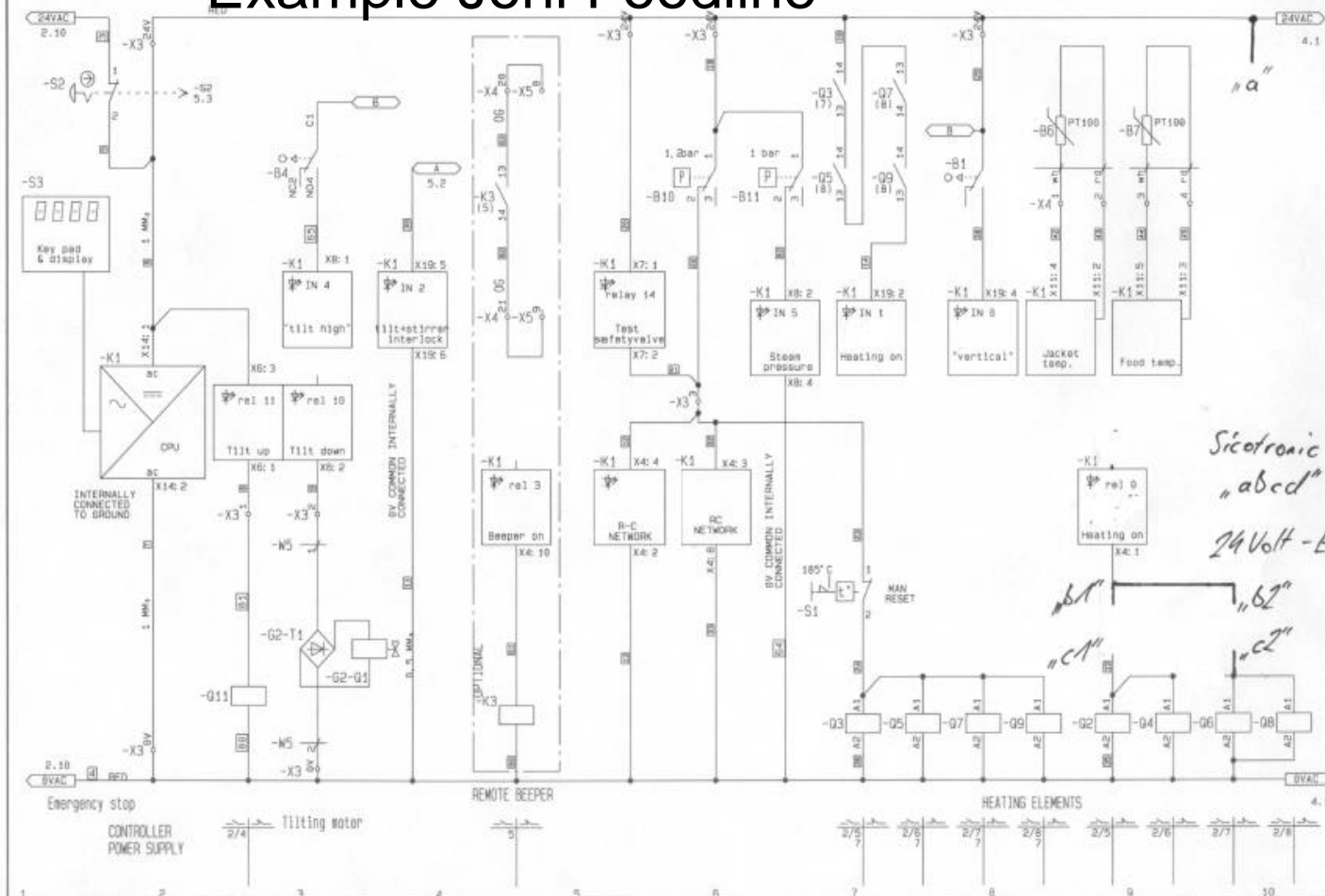
Miele

Ansteuerung Sicotronic-Energiemanagement Anlage mit EAM-N, hier ist die Heizungsanforderung auf N-Potential gelegt.
PT8XX7 mit ELP430A. Programmierung „Spitzenlast aktiv mit 230V oder 0V“ an Spitzenlast-Eingang.





Example Joni Foodline

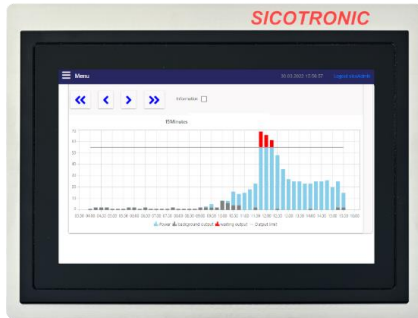


Sicotronic
"abcd"

24 Volt - EAM-N

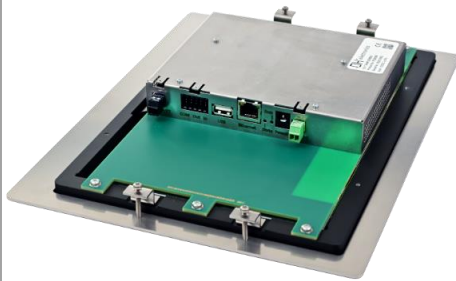
$\delta A''$ $\delta Z''$
 $\delta A''$ $\delta Z''$

 ϕ, d'




ZE6000 central unit

- fits great for hotels, restaurants, canteens, large cruise ships, etc.
- latest software development from Sicotronic
- historical data is saved for 10 years on the system
- Sicotronic cloud connection as option
- easy use through touchscreen
- Data can be transfered to  **kiconn** (kitchen connect)
- Remote maintenance with up-to-date security functions
- Modern web interface for configuration and monitoring

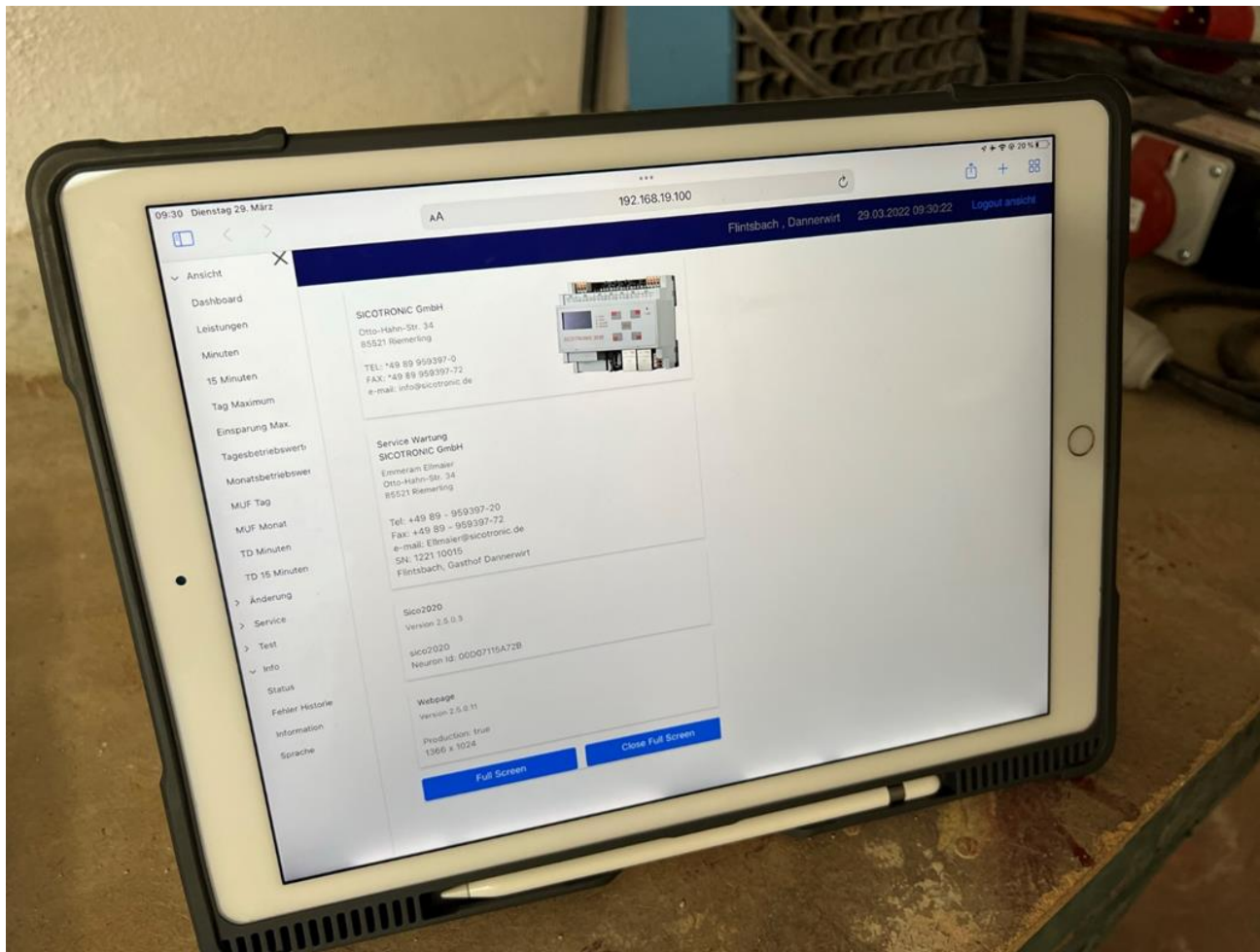


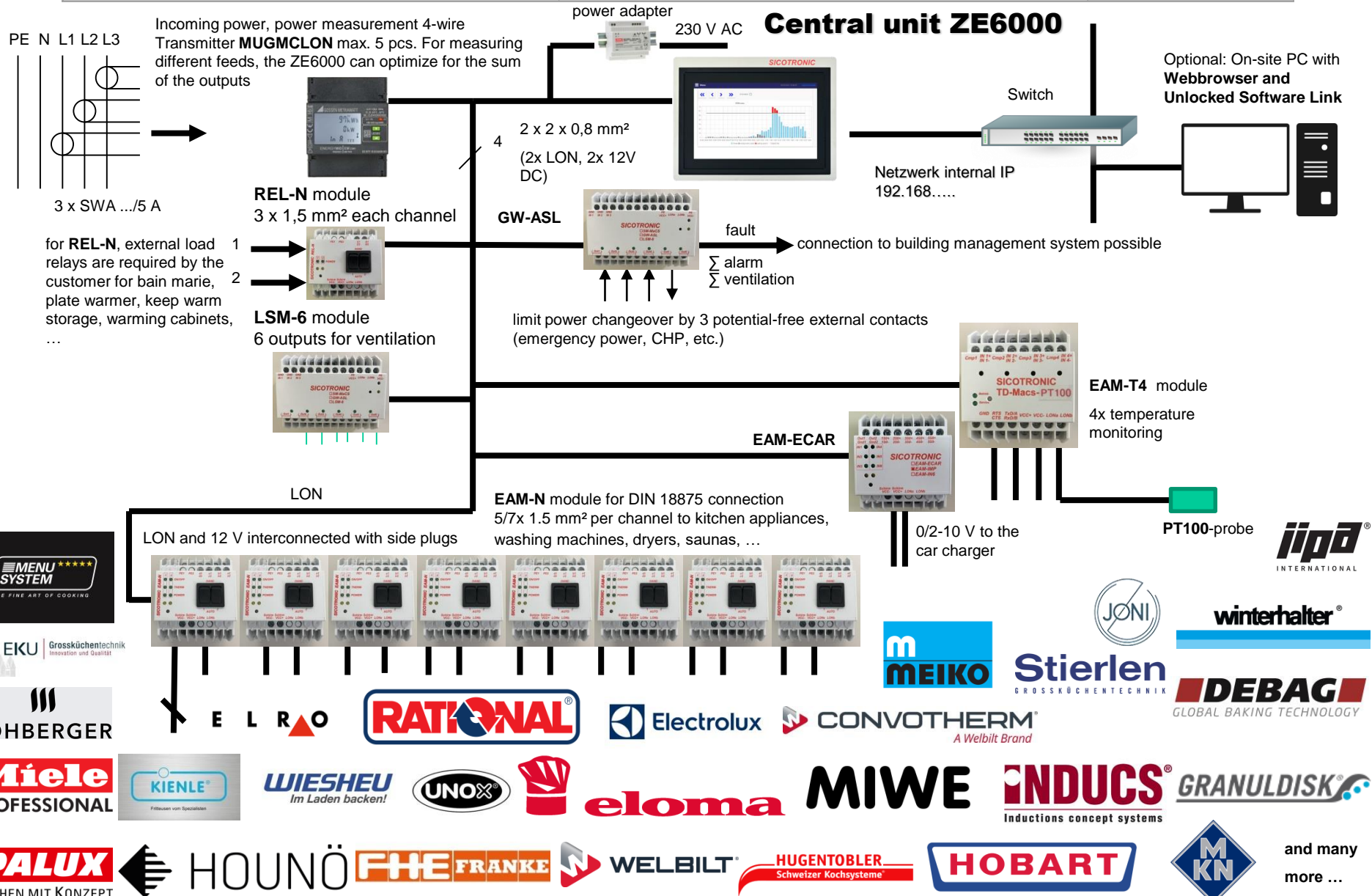


ABM 2020 central unit

- fits great for schools, little shops, smaller restaurants
- latest software development from Sicotronic
- historical data is saved for 10 years on the system
- Sicotronic cloud connection as option
- easy use through touchscreen
- Data can be transfered to  **kiconn** (kitchen connect)
- Remote maintenance with up-to-date security functions
- Modern web interface for configuration and monitoring

remote control / maintenance over the internet





devicelist required for **SICOTRONIC** calculation price and savings

Item 设备编号	Qty 数量	Equipment Name (EN) 设备名称 (英文)	Equipment Name (CH) 设备名称 (中文)	Manufacturer/Brand 品牌	KW 千瓦			Electric Loading 电力负荷	Essential Power 后备电源	kw	kw - total	Cost
					11,70					11,7		
Hot kitchen热灶间 (220m²)												
04	2	Water Wash Hood Control Panel	水混式烟罩控制系统箱		3,00	kw	x 1	220/50/1 Ph		3		
05	10	Single Electric Chinese Cooking Range	单头中式电大炒炉 (900直径)		30,00	kw	x 10	380/50/3+N Ph		300		
06	2	Twin Heads Electric Chinese Cooking Range	双头中式电炒炉		32,00	kw	x 2	380/50/3+N Ph		64		
07	3	Electric Tilting Braatt Pan	平底炒锅	Electrolux	20,60	kw	x 3	380/50/3+N Ph		61,8		
08	9	Electric Steam Cabinet	电蒸柜		12,00	kw	x 18	380/50/3+N Ph		216		
09	4	Roll-in Combi Steamer	推进式万用蒸烤箱	Rational	62,00	kw	x 4	380/50/3+N Ph		248		
10	2	3-Layers Deck Oven	电烤箱		18,00	kw	x 2	380/50/3+N Ph		36		
11	3	Electric Tilting Boiling Pan	电倾斜汤锅	Electrolux	36,00	kw	x 3	380/50/3+N Ph		108		
12	6	Soup/ Rice Warming Trolley	活动暖汤车	Custom Fabricated	2,00	kw	x 6	220/50/1 Ph		12		
13	8	Pasta Cooker (Automatic thermostat electric iron pan) with Equipment Stand	焗饼铛	Custom Fabricated	5,00	kw	x 8	380/50/3+N Ph		40		
14	13	Upright Mobile Warming Trolley	食物保温车	FOSTER	2,60	kw	x 13	220/50/1 Ph		33,8		
15	4	Hand Dryer	烘手机	German Pool	1,80	kw	x 4	220/50/1 Ph		7,2		
16	15	Wall Sconce Insect Killer	灭蚊器	QM (Kill Mosquito)	0,10	kw	x 15	220/50/1 Ph		1,5		
17	1	Oil net smoke hood	油网烟罩									
18	3	Stainless Steel Work Top Open Cabinet with Chop Board Slide and Shelf	不锈钢工作枱柜连砧板存放间及层板	Custom Fabricated						0		
19	1	Stainless Steel Work Top Open Cabinet with Chop Board Slide and Shelf	不锈钢工作枱柜连砧板存放间及层板	Custom Fabricated						0		
20	1	Stainless Steel Work Top Open Cabinet with Chop Board Slide and Shelf	不锈钢工作枱柜连砧板存放间及层板	Custom Fabricated						0		
21	5	Stainless Steel Single Sink Cabinet with Grease Trap	不锈钢单星枱柜连隔油池	Custom Fabricated						0		
22	4	Stainless Steel Twin Sink Table with Grease Trap	不锈钢双星枱柜连隔油池	Custom Fabricated						0		
Western kitchen西餐厨房 (30m²)					1131,30					1131,3		
equipment list / function room												

planing principles

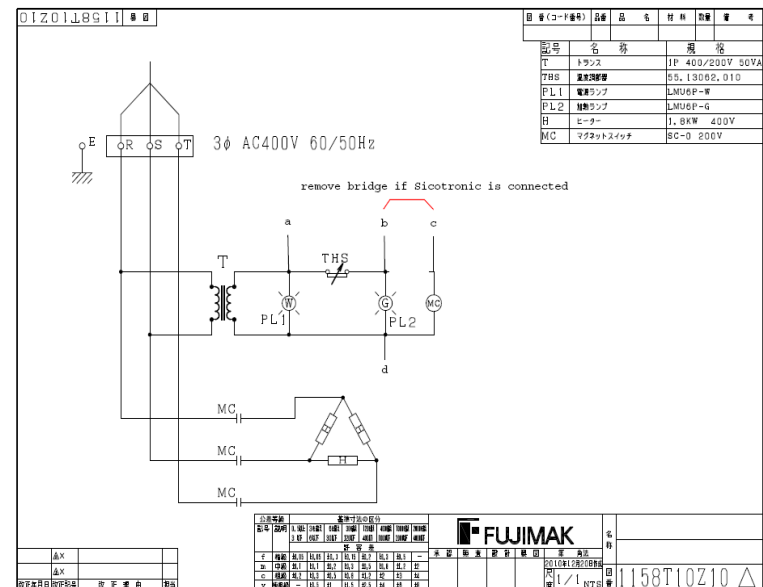
connected load 100%	810,00 kW
optimizable load	678,20 kW
connected load not optimizable with factor 0,7	92,26 kW
optimizable load with factor 0,7 and additional factor 0,7 for Sicotronic	332,32 kW
estimated peak load without Sicotronic	567,00 kW
estimated peak load with Sicotronic	424,58 kW
savings peak load	142,42 kW
price for peak load (97,20€/kw/year)	97,20 €/kw/year*
*depends on electricity provider (in Munich up to 240€)	
savings € (savings peak load * price)	13.843,42 €/year
total cost Sicotronic	25.760,00 €

planning principles

- All appliances are taken into account on a device list with an individual heating power of around 4 KW (sometimes, it depends on the projects, sometimes we select some 1- 4 kW devices too)
- In almost all projects there are other devices to optimize outside of the kitchen (sauna, gutter heating, charging stations, and much more)
- Devices that are not connected are e.g. rotating parts such as motors, rotating kettels (heating already), microwaves
- Some devices have multiple channels such as frying plate, double deep fryer, Rational iCombi, induction
- We recommend always laying control cables 7x1.5mm² per device
- Based on the device list, Sicotronic can prepare a precise needs analysis
- We support you with the planning of a project for Sicotronic

planing principles

- All appliances require the DIN18875 interface
- Appliances without DIN18875 such as plate warmers, warming drawers etc. are connected via an external contactor.
(Load cutting)
- We support manufacturers who do not yet provide a connection for DIN18875



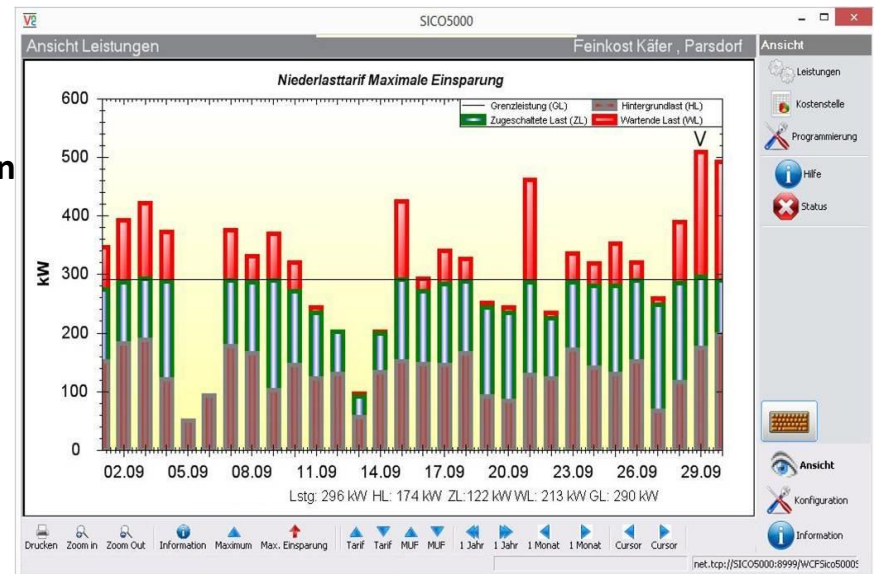
Käfer Catering, Munich Parsdorf, production kitchen

connected appliances

44

**total load connected
limit**

**>700 kw
290 kw**



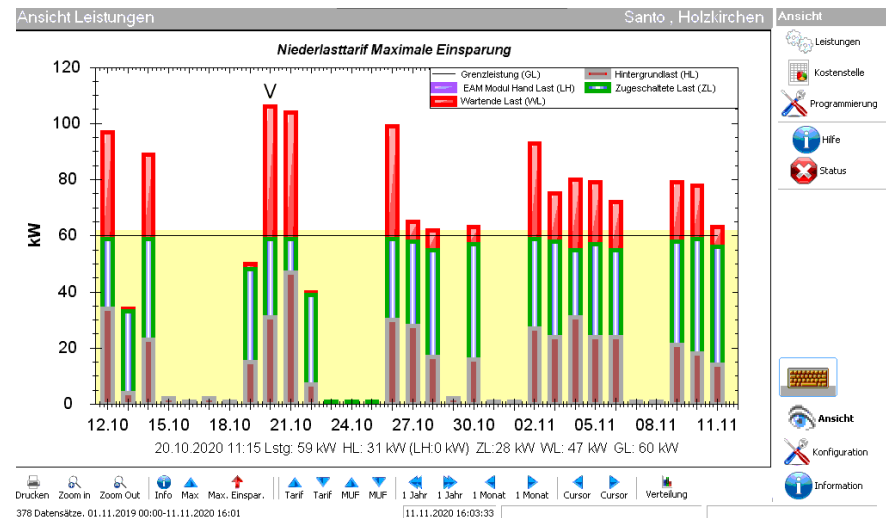
employee canteen

connected appliances

18

total load connected
limit

>140 kw
60 kw



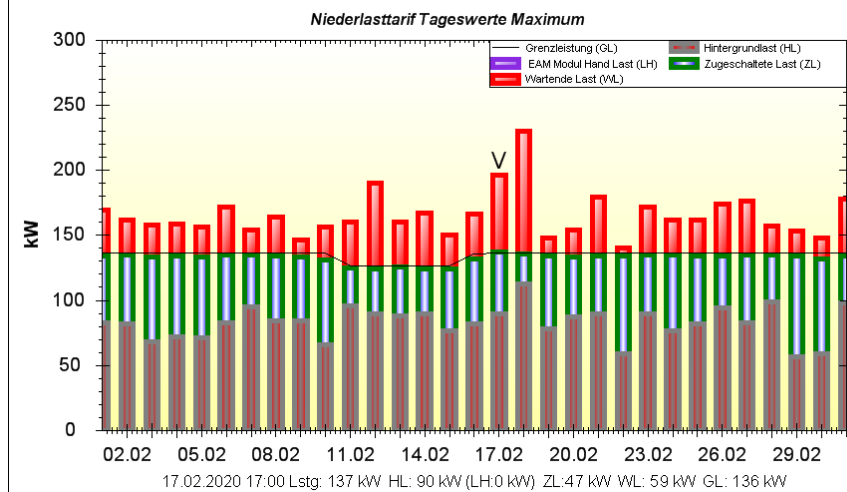
Hotel, Ischgl, Austria

connected appliances

18

**total load connected
limit**

**>255 kW
136 kW**



References

projects in Germany

Röhnklinikum in Bad Neustadt/Saale



Olympus Hamburg



References

projects in Europe

Switzerland: Top of Europe, V-Bahn Grindelwald



Warsaw: Hotel Europejski and others



References

projects in Europe

London: Mission Kitchen Covent Garden



Gstaadt (CH): Club de luge



References

over 5000 projects all over Europe

canteens

schools

production kitchens

hospitals

hotels

retirement homes

Thank you for your attention

Robin Wittke

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vCard

