



REOTRON

Key Facts About REOTRON

The REOTRON portfolio features power control devices based on thyristor controllers, switch-mode power supplies, and external control systems. These products serve a wide range of applications, from testing and medical technology to laser systems, thermal and chemical production processes, and cathodic corrosion protection.

REO's unmatched expertise in both inductive and electronic components sets it apart in the industry, making it a true standout. This unique position allows us to deliver top-tier quality and efficiency—not only across our standard portfolio, but also in customized solutions tailored to your needs.

REOTRON SMP switching power supplies provide dependable, stable, and adjustable power for use in process engineering systems, ensuring exceptional quality. The REOTRON SMP DC power supply series features primary-switched power supplies with complete galvanic isolation between input and output. These units can be used as voltage, current, or power controllers.

Single-phase thyristor power controllers are perfectly suited for process industry applications, especially in thermal systems. They offer phase-angle or burst-firing operation modes, and are equipped with built-in voltage, current, and power regulators.

The 3-phase thyristor power controllers are widely used in industrial process engineering, especially in thermal processing systems. These controllers are available both as phase angle controllers and burst firing controllers, and they come equipped with built-in voltage, current, and power regulation—ensuring stable output power even under demanding conditions.

The MDZ ignition and control units are designed for managing external power semiconductors and rectifier systems, such as those used in electroplating technology. Each unit includes a regulator for both current and voltage control. When operating in voltage control mode, the output voltage setpoint is maintained at a constant level by an internal control loop, so changes in load or fluctuations in supply voltage do not affect the output voltage.

Service



Training

At REO AG, we see ourselves as your comprehensive partner for inductive, resistive, and electronic components as well as complete solutions. As part of this partnership, we offer a wide range of training services designed to make commissioning new devices or systems straightforward and to ensure smooth operation throughout the entire product lifecycle. [We can provide training either at your production site or at our REO AG facilities.](#) Our in-house trainers will guide your staff through the technical details and offer valuable tips for safe and proper use of REO components. Whether you use our standard solutions or highly customized components, we tailor our training to fit your needs. In addition, our digital, easy-to-follow materials complement the training and make it accessible internationally.



Warranty

Quality you can count on – enjoy extra peace of mind with the extended REO manufacturer's warranty.

We stand behind the quality of our in-house products and trust in the durability of every component we use, which is why we extend the legal [warranty from one to two years.](#)



Safety

We provide you with top-quality devices designed for maximum operational safety. If you ever encounter unexpected issues with any of our products, our expert first responders are available to assist you by phone—free of charge. And if your situation can't be resolved over the phone, our skilled and certified technicians will deliver on-site technical support to help you get back on track.



Repair

After a quick call and receipt of your faulty products, we can even offer you [express repair](#) if needed. This helps minimize downtime and ensures a fast replacement in case of any disruption.



Hotline

Our REO sales specialists are happy to provide expert advice and support. Reach out to your REO contact person or call our hotline for details about our service and training offerings, or to learn more about the REO product portfolio.

Catalog Overview

REOTRON SMP Primary Switched Adjustable Power Supplies	pp. 5–17
REOTRON MEW Single-Phase Thyristor Power Controller	pp. 18–20
REOTRON MDW Three-Phase Thyristor Power Controller	pp. 21–23
REOTRON MDZ Ignition and Control Unit for External Semiconductors	pp. 24–26
REOTRON Complete Solutions	p. 27



REOTRON SMP



REOTRON SMP

Primary Switched-Mode Power Supplies

Good to Know	p. 7
REOTRON SMP-ESM	pp. 8–10
REOTRON SMP-KMA	Pp. 11-12
REOTRON SMP-KMB Compact Module	Pp. 13-14
REOTRON SMP-SMB Control Cabinet Installation Module	Pp. 15-17

REOTRON SMP: Key Facts at a Glance

The flexible DC power supply from REO

For decades, REO has specialized in the efficient conversion of energy—both inductively and electronically—covering current, voltage, and power. REOTRON SMP switch-mode power supplies deliver reliable and stable power for process engineering systems, ensuring top-tier quality. The REOTRON SMP DC power supply series features primary-switched units with galvanic isolation between input and output. These devices can function as voltage, current, or power regulators.

The devices and combinations shown below serve as general examples of the available electrical parameter ranges and housing options. Detailed designs tailored to your specific application can be provided upon request.

Operation

Operation can be managed via an internal display, external control signals (0–10 V DC or 0(4)–20 mA), or, optionally, through a fieldbus interface such as Profibus-DP, CAN bus, EtherCAT, EtherNet/IP, ProfiNet, or DeviceNet.

Device Input

The device input is designed for connection to a 3-phase network at 3 x 400 V, 50/60 Hz, or 230 V at 50/60 Hz. An integrated input-side line filter ensures compliance with EMC standards.

Construction

Depending on configuration and power rating, the units can be supplied as 19" rack-mount enclosures, ready-to-install cabinet modules, compact modules, or as benchtop (lab) versions. Cooling options include air or water.

Connection

Connections are made using screw terminals, and for high output currents, copper busbars are used. Custom application requirements can also be accommodated. Additionally, the devices feature voltage compensation to offset line losses and, as an option, impedance monitoring for the connected load.

High Power Ranges

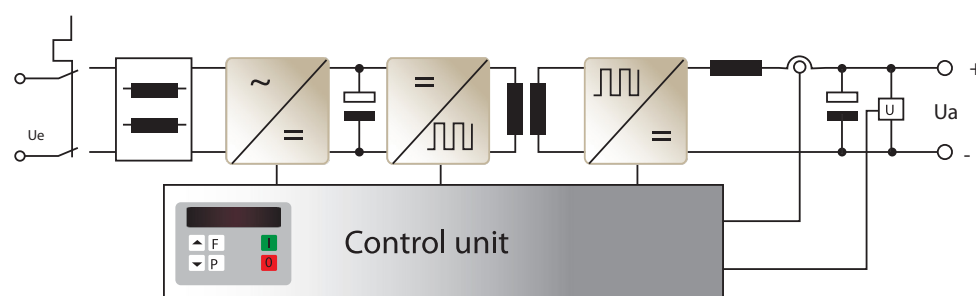
By combining multiple devices, you can achieve high power density. These units can be connected in series or parallel to increase capacity, creating larger power supply systems.

Custom Solutions

Thanks to our extensive in-house manufacturing and our expertise in developing inductive components, we're able to design and produce power supplies tailored to your specific needs.

Advantages

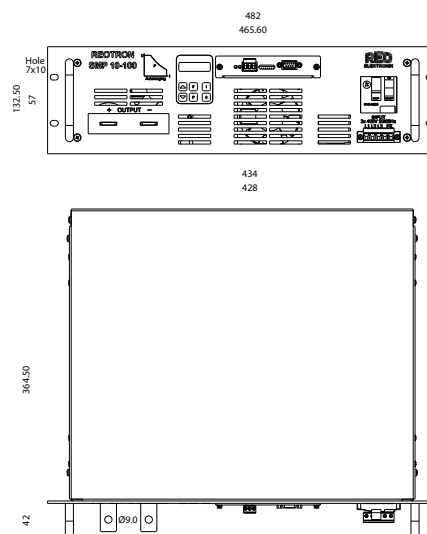
- Excellent power factor ϕ
- Power factor correction (KMA, KMB models)
- Compact design
- Series or parallel configuration
- Air or water cooling
- Extensive combinations for different requirements with other REO product lines



REOTRON SMP-ESM

19" plug-in module

REOTRON SMP-ESM



Example: 1kW with Profibus-DP Interface

Cable Specifications

REOTRON SMP-ESM	
Model	REOTRON SMP-ESM Slide-In Module
Input Voltage	3 x 400 V, +/- 10%, 50/60 Hz
Ripple Voltage (p-p)	100 mV / 200 mV
Setpoint Input	0...+10 V DC, 0(4)...20 mA, 10 kOhm potentiometer, internal via control display
Actual Value Output	0...+10 V DC, 0(4)...20 mA, internal via control display
Interfaces (Optional)	ProfiBus-DP, DeviceNet, CAN-Bus, ProfiNet, EtherNet/IP, EtherCAT
Control Accuracy	1% of nominal value (higher accuracy available upon request)
Enable	24 V DC or contact
Protection rating	Control cabinet installation, IP20
2 status relays	Changeover, 250 V, 1A
Efficiency	> 85%
Power factor	0.9
Operating temperature	0 to 40 °C
Standards	EN 50178, EN 61000-6-2, EN 61000-6-4

REOTRON SMP-ESM

19" Slide-In Module

REOTRON SMP-ESM				
REO Series	SMP-ESM 25-40	SMP-ESM 25-100	SMP-ESM 25-200	SMP-ESM 25-300
Output Power [W]	0...1000	0...2500	0...5000	0...7500
Output Voltage [V]	0...25	0...25	0...25	0...25
Output Current [A]	0...40	0...100	0...200	0...300
Dimensions [W x D x H]	482x406/3U	482x406/3U	482x406/3U	482x406/6U

REOTRON SMP-ESM					
REO Series	SMP-ESM 50-20	SMP-ESM 50-50	SMP-ESM 50-100	SMP-ESM 50-150	SMP-ESM 50-200
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000
Output Voltage [V]	0...50	0...50	0...50	0...50	0...50
Output Current [A]	0...20	0...50	0...100	0...150	0...200
Dimensions [W x D x H]	482x406/3U	482x406/3U	482x406/3U	482x406/6U	482x406/6U

REOTRON SMP-ESM					
REO Series	SMP-ESM 80-13	SMP-ESM 80-31	SMP-ESM 80-63	SMP-ESM 80-94	SMP-ESM 80-125
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000
Output Voltage [V]	0...80	0...80	0...80	0...80	0...80
Output Current [A]	0...13	0...31	0...63	0...94	0...125
Dimensions [W x D x H]	482x406/3U	482x406/3U	482x406/3U	482x406/6U	482x406/6U

REOTRON SMP-ESM					
REO Series	SMP-ESM 150-7	SMP-ESM 150-17	SMP-ESM 150-33	SMP-ESM 150-50	SMP-ESM 150-67
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000
Output Voltage [V]	0...150	0...150	0...150	0...150	0...150
Output Current [A]	0...7	0...17	0...33	0...50	0...67
Dimensions [W x D x H]	482x406/3U	482x406/3U	482x406/3U	482x406/6U	482x406/6U

REOTRON SMP-ESM

19" rackmount module

REOTRON SMP-ESM					
REO Series	SMP-ESM 250-4	SMP-ESM 250-10	SMP-ESM 250-20	SMP-ESM 250-30	SMP-ESM 250-40
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000
Output Voltage [V]	0...250	0...250	0...250	0...250	0...250
Output Current [A]	0...4	0...10	0...20	0...30	0...40
Dimensions [WxDxH]	482x406/3U	482x406/3U	482x406/3U	482x406/6U	482x406/6U

REOTRON SMP-ESM					
REO Series	SMP-ESM 400-2.5	SMP-ESM 400-6.25	SMP-ESM 400-13	SMP-ESM 400-19	SMP-ESM 400-25
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000
Output Voltage [V]	0...400	0...400	0...400	0...400	0...400
Output Current [A]	0...2.5	0...6.25	0...13	0...19	0...25
Dimensions [WxDxH]	482x406/3U	482x406/3U	482x406/3U	482x406/6U	482x406/6U

Higher output available upon request

The device combinations shown here are just examples and are not standard production units.

REOTRON SMP-KMA

Wall Mounting



Technical Specifications

REOTRON SMP-KMA	
Model	REOTRON SMP-KMA Wall Mounting
Input Voltage	230 V, ±10%, 50/60 Hz,
Ripple p-p	100 mV / 200 mV
Setpoint Input	0...+10 V DC, 0(4)...20 mA, 10 kOhm potentiometer, adjustable via control display
Actual Value Output	0...+10 V DC, 0(4)...20 mA, adjustable via control display
Interfaces (Optional)	ProfiBus-DP, DeviceNet, CAN-Bus, ProfiNet, EtherNet/IP, EtherCAT
Control Accuracy	1 % of rated value (higher upon request)
Enable Signal	24 V DC or contact
Protection Type	Control cabinet installation, IP20
2 x Status Relays	Changeover contact 250 V, 1A
Efficiency	> 85%
Power Factor $\cos \phi$	0.95
Operating Temperature	0 .. 40 °C
Standards	EN 50178, EN 61000-6-2, EN 61000-6-4

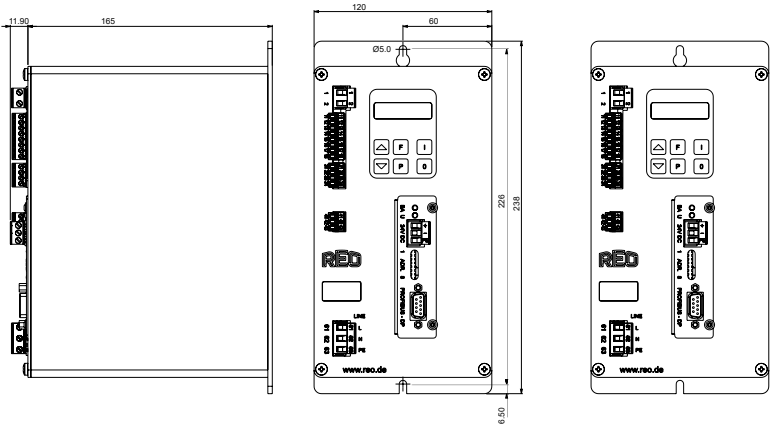
The device combinations shown are examples only and are not standard products.

REOTRON SMP-KMA

REOTRON SMP-KMA					
REO Series	SMP-KMA 10-2	SMP-KMA 10-5	SMP-KMA 20-2	SMP-KMA 20-5	SMP-KMA 24-5
Output Power [W]	0-20	0-50	0-40	0-100	0-120
Output Voltage [V]	0-10	0-10	0-20	0-20	0-24
Output Current [A]	0...2	0...5	0...2	0...5	0...5
Dimensions [W x D x H]*	120 x 238 x 177 70 x 238 x 177	120 x 238 x 177 70 x 238 x 177	120 x 238 x 177 70 x 238 x 177	120 x 238 x 177	120 x 238 x 177

REOTRON SMP-KMA		
REO Series	SMP-KMA 30-2	SMP-KMA 40-2
Output Power [W]	0...60	0...80
Output Voltage [V]	0...30	0-40
Output Current [A]	0...2	0...2
Dimensions [W x D x H]*	120 x 238 x 177 70 x 238 x 177	120 x 238 x 177 70 x 238 x 177

Higher output ratings available upon request



*Dimensions may vary depending on supply voltage and selected features. The device combinations shown are examples and may not be available as standard models.

REOTRON SMP-KMB Compact Module

Mounting on installation wall

REOTRON SMP-KMB Compact Module



Cable Data

REOTRON SMP-KMB Compact Module	
Model	REOTRON SMP-KMB Compact Module
Input Voltage	230 V, +/- 10%, 50/60 Hz
Ripple p-p	100 mV / 200 mV
Setpoint Input	0...+10 V DC, 0(4)...20 mA, 10 kOhm potentiometer built-in via control display
Actual Value Output	0...+10 V DC, 0(4)...20 mA, output via control display
Interfaces (Optional)	ProfiBus-DP, DeviceNet, CAN-Bus, ProfiNet, EtherNet/IP, EtherCAT
Control Accuracy	1% of rated value (higher on request)
Enable	24 V DC or contact
Protection Class	Control cabinet installation IP20
2 x status relays	Changeover contact 250 V, 1A
Efficiency	> 85%
Power factor $\cos \phi$	0.95
Operating temperature	0 ... 40 °C
Standards	EN 50178, EN 61000-6-2, EN 61000-6-4

REOTRON SMP-KMB Compact Module

REOTRON SMP-KMB Compact Module		
REO Series	SMP-KMB 10-10	SMP-KMB 10-20
Output Power [W]	0...100	0...200
Output Voltage [V]	0...10	0...10
Output Current [A]	0...10	0...20
Dimensions [W x D x H]	154 x 330 x 217.5	154 x 330 x 217.5

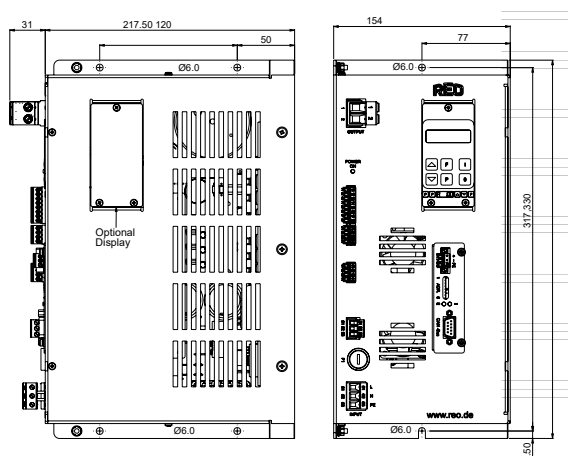
REOTRON SMP-KMB Compact Module		
REO Series	SMP-KMB 20-10	SMP-KMB 20-20
Output Power [W]	0...200	0...400
Output Voltage [V]	0...20	0...20
Output Current [A]	0...10	0...20
Dimensions [W x D x H]	154 x 330 x 217.5	154 x 330 x 217.5

REOTRON SMP-KMB Compact Module				
REO Series	SMP-KMB 30-10	SMP-KMB 30-20	SMP-KMB 40-10	SMP-KMB 40-20
Output Power [W]	0...300	0...600	0...400	0...800
Output Voltage [V]	0...30	0...30	0...40	0...40
Output Current [A]	0...10	0...20	0...10	0...20
Dimensions [W x D x H]	154 x 330 x 217.5	154 x 330 x 217.5	154 x 330 x 217.5	154 x 330 x 217.5

REOTRON SMP-KMB Compact Module			
REO Series	SMP-KMB 50-10	SMP-KMB 50-20	SMP-KMB 60-10
Output Power [W]	0...500	0...1000	0...600
Output Voltage [V]	0...50	0...50	0...60
Output Current [A]	0...10	0...20	0...10
Dimensions [W x D x H]	154 x 330 x 217.5	154 x 330 x 217.5	154 x 330 x 217.5

Higher power available upon request

Example with 1kW + Profibus-DP interface



REOTRON SMP-SMB

Control Cabinet Mounting Module

Mounting on installation panel

REOTRON SMP-SMB



Technical Specifications

REOTRON SMP-SMB	
Type	REOTRON SMP-SMB Control Cabinet Mounting Module
Input Voltage	3x400V, +/- 10%, 50/60 Hz,
Ripple p-p	100 mV / 200 mV
Setpoint Input	0...+10 V DC, 0(4)...20 mA, 10 kOhm potentiometer, internal via control display
Actual Value Output	0...+10 V DC, 0(4)...20 mA, internal via control display
Interfaces (Optional)	ProfiBus-DP, DeviceNet, CAN-Bus, ProfiNet, EtherNet/IP, EtherCAT
Control Accuracy	1% of nominal value (higher on request)
Enable	24 V DC or contact
Protection Class	Control cabinet installation IP20
2 x Status Relays	Changeover 250 V, 1A
Efficiency	> 85 %
Power Factor $\cos \phi$	0.95
Operating Temperature	0 .. 40 °C
Compliance Standards	EN 50178, EN 61000-6-2, EN 61000-6-4

Dimensions

REOTRON SMP-SMB			
Size	Width	Height	Depth
Small (S)	300	400	230
Medium (M)	330	450	250
Large (L)	400	480	300
Extra Large (XL)	600	600	300

The device combinations shown are examples only and are not standard production models.

REOTRON SMP-SMB

REOTRON SMP-SMB					
REO Series	Small (S)		Medium (M)	Large (L)	Extra Large (XL)
	SMP-SMB 25-40	SMP-SMB 25-100	SMP-SMB 25-200	SMP-SMB 25-300	SMP-SMB 25-500
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...12500
Output Voltage [V]	0...25	0...25	0...25	0...25	0...25
Output Current [A]	0...40	0...100	0...200	0...300	0...500

REOTRON SMP-SMB							
REO Series	Small (S)		Medium (M)	Large (L)		Extra Large (XL)	
	SMP-SMB 50-20	SMP-SMB 50-50	SMP-SMB 50-100	SMP-SMB 50-150	SMP-SMB 50-200	SMP-SMB 50-250	SMP-SMB 50-300
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000	0...12500	0...15000
Output Voltage [V]	0...50	0...50	0...50	0...50	0...50	0...50	0...50
Output Current [A]	0...20	0...50	0...100	0...150	0...200	0...250	0...300

REOTRON SMP-SMB							
REO Series	Small (S)		Medium (M)	Large (L)		Extra Large (XL)	
	SMP-SMB 80-13	SMP-SMB 80-31	SMP-SMB 80-63	SMP-SMB 80-94	SMP-SMB 80-125	SMP-SMB 80-156	SMP-SMB 80-188
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000	0...12500	0...15000
Output Voltage [V]	0...80	0...80	0...80	0...80	0...80	0...80	0...80
Output Current [A]	0...13	0...31	0...63	0...94	0...125	0...156	0...188

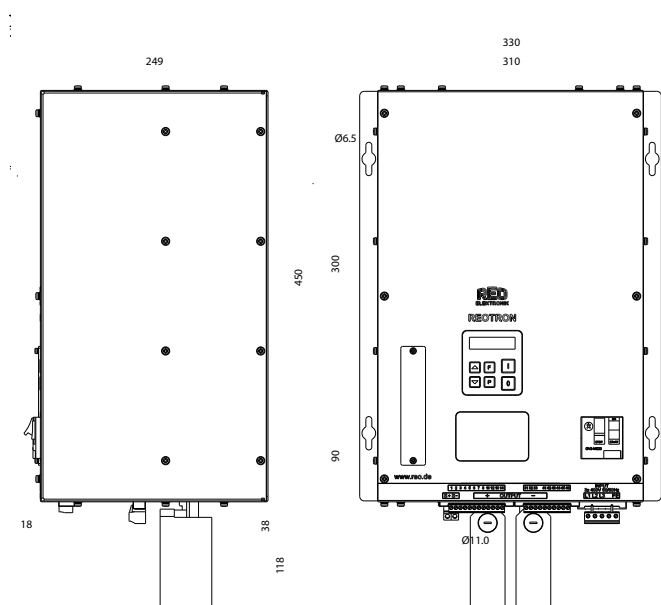
REOTRON SMP-SMB							
REO Series	Small (S)		Medium (M)	Large (L)		Extra Large (XL)	
	SMP-SMB 150-7	SMP-SMB 150-17	SMP-SMB 150-33	SMP-SMB 150-50	SMP-SMB 150-67	SMP-SMB 150-83	SMP-SMB 150-100
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000	0...12500	0...15000
Output Voltage [V]	0...150	0...150	0...150	0...150	0...150	0...150	0...150
Output Current [A]	0...7	0...17	0...33	0...50	0...67	0...83	0...100

REOTRON SMP-SMB							
REO Series	Small (S)		Medium (M)	Large (L)		Extra Large (XL)	
	SMP-SMB 250-4	SMP-SMB 250-10	SMP-SMB 250-20	SMP-SMB 250-30	SMP-SMB 250-40	SMP-SMB 250-50	SMP-SMB 250-60
Output Power [W]	0...1000	0...2500	0...5000	0...7500	0...10000	0...12500	0...15000
Output Voltage [V]	0...250	0...250	0...250	0...250	0...250	0...250	0...250
Output Current [A]	0...4	0...10	0...20	0...30	0...40	0...50	0...60

REOTRON SMP-SMB							
REO Series	Small (S)		Medium (M)	Large (L)		Extra Large (XL)	
	SMP-SMB 400-2.5	SMP-SMB 400-6.25	SMP-SMB 400-12.5	SMP-SMB 400-18.75	SMP-SMB 400-25	SMP-SMB 400-31.25	SMP-SMB 400-37.5
Output Power [W]	0...1000	0...2800	0...5200	0...7600	0...10000	0...12800	0...15000
Output Voltage [V]	0...400	0...400	0...400	0...400	0...400	0...400	0...400
Output Current [A]	0...2.5	0...6.25	0...13	0...19	0...25	0...32	0...37.5

REOTRON SMP-SMB							
REO Series	Small (S)		Medium (M)	Large (L)		Extra Large (XL)	
	SMP-SMB 600-2	SMP-SMB 600-4	SMP-SMB 600-8	SMP-SMB 600-13	SMP-SMB 600-17	SMP-SMB 600-21	SMP-SMB 600-25
Output Power [W]	0...1200	0...2400	0...4800	0...7800	0...10200	0...12600	0...15000
Output Voltage [V]	0...600	0...600	0...600	0...600	0...600	0...600	0...600
Output Current [A]	0...2	0...4	0...8	0...13	0...17	0...21	0...25

Higher output available upon request





Single-Phase Thyristor Power Controller



Single-Phase Thyristor Power Controller

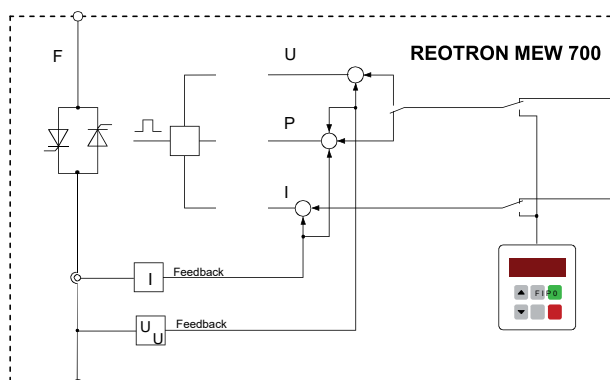
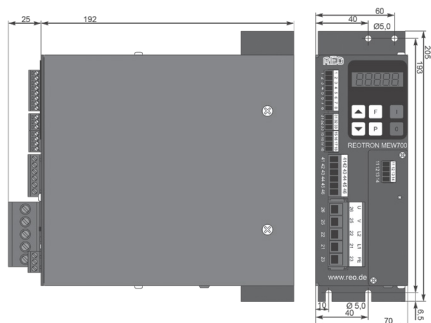
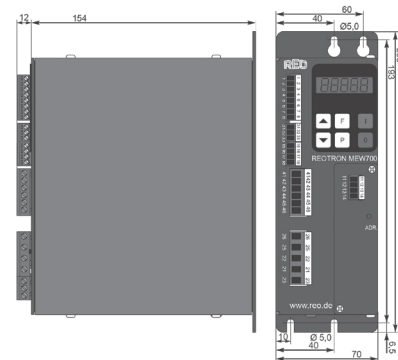
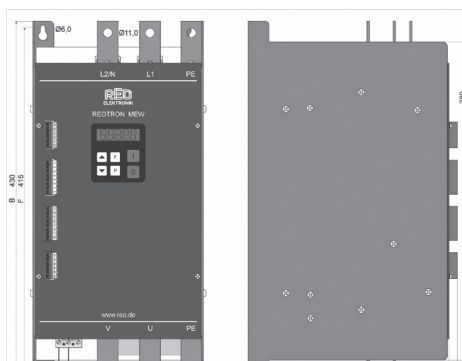
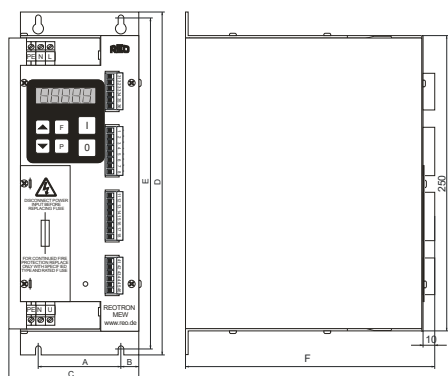
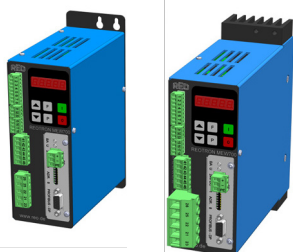
REOTRON MEW power controllers are ideally suited for use in process industries, especially in thermal systems. These thyristor controllers can operate in phase-angle or burst firing modes and come equipped with internal voltage, current, and power regulators. The devices can control loads directly (e.g., infrared heaters) or be used as primary controllers for transformers to adjust voltage and ensure safe isolation (e.g., for graphite heating elements).

The MEW series thyristor controllers are microprocessor-controlled and come with integrated measurement systems for actual values.

To process actual values in external system components, outputs (actual value monitor) are available with 0...+10V DC. Devices can be controlled via analog interfaces, potentiometers, or fieldbus systems. Additionally, various internally adjustable parameters allow the controllers to be tailored to specific load requirements.

The REOTRON MEW 700 thyristor controllers are designed for installation in control cabinets (protection class IP 20). Cooling is by air; models from 150 A and up include integrated fans.

REOTRON MEW 700



Technical Specifications

Single-Phase Thyristor Power Controller			
	Input Voltage	Output Voltage Mains -3 V	Output Current
REOTRON MEW 700-10	230 V AC, +/- 10 % 400 V AC, +/-10 % 50/60 Hz	0...230 V 0...400 V	10 A
REOTRON MEW 700-25			25 A
REOTRON MEW 700-50			50 A
REOTRON MEW 700-80			80 A
REOTRON MEW 700-110			110 A
REOTRON MEW 700-150			150 A
REOTRON MEW 700-200			200 A
REOTRON MEW 700-300			300 A
Load Type	Resistive / Inductive		
Setpoint: Current, Voltage, Power	0...+10 V, DC 0(4)...20 mA Integrated Keypad		
Interface: (Optional)	Profibus-DP, CAN Bus, DeviceNet, EtherCAT, EtherNet/IP, ProfiNet		
Enable Input	24 V DC, External Contact (potential-free)		
Status: Ready for Operation; Status: Power On	Relay, Changeover Contact; Relay, Changeover Contact		
External Actual Value Feedback for Current and Voltage	0...+5 V DC		
Operating Temperature	0...+45°C		
Storage / Transport Temperature	-10...+70°C		
Degree of Protection	IP20		

Control via analog interface, potentiometer, or fieldbus system; phase-angle or burst-fire control; built-in actual value detection; suitable for control cabinet installation

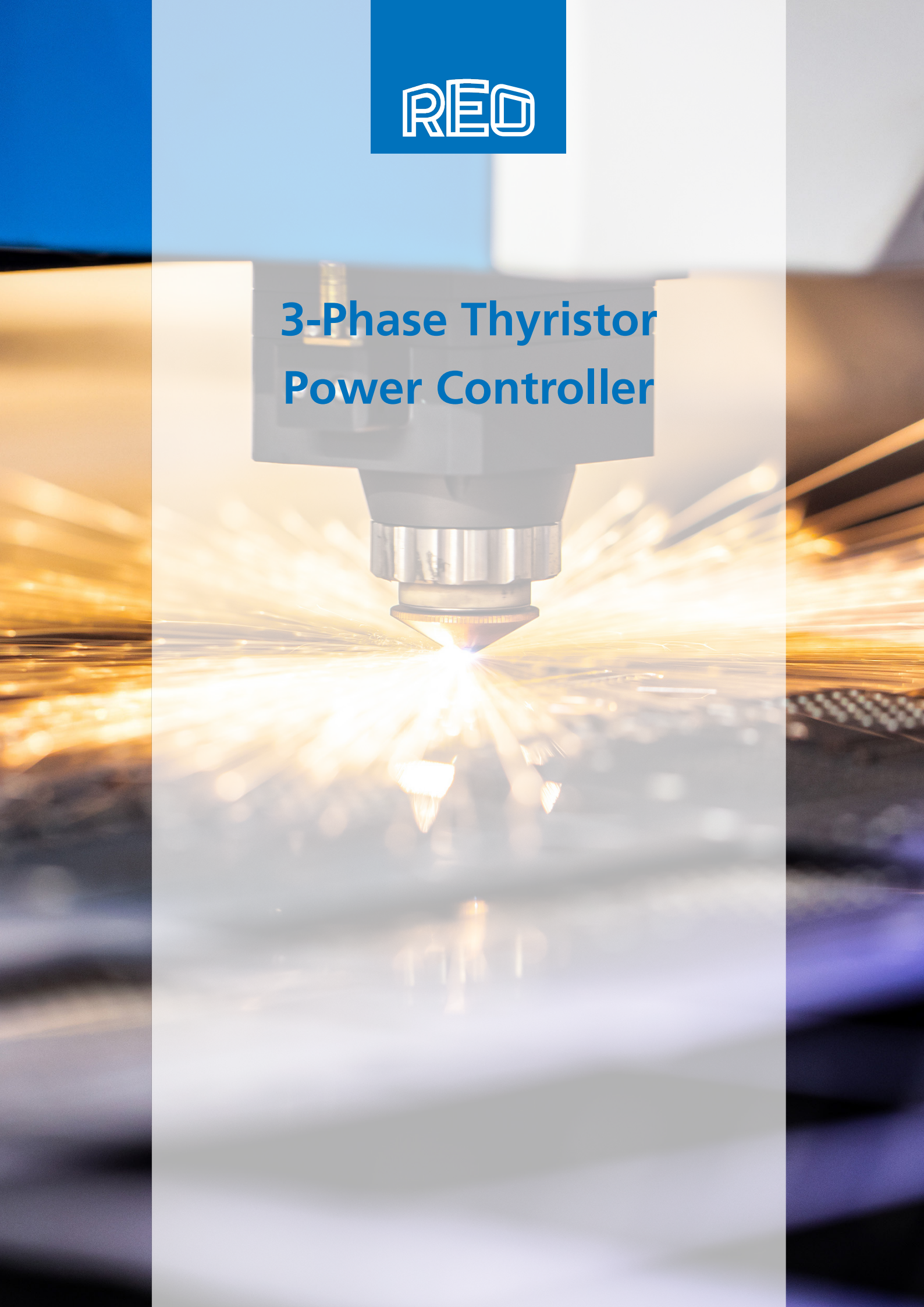
Applications include: industrial furnaces, metal evaporators, melting crucibles, IR emitters/drying systems, heating systems, fan equipment/wind tunnel systems

Dimensions in mm

Single-Phase Thyristor Power Controller						
Type / mm	A	B	C	D	E	F
MEW 25	70	15	110	290	280	215
MEW 25 with Interface	90		130			
MEW 50	70		110			
MEW 50 with Interface	90		130			
MEW 80	60	30	1250	320	304	
MEW 80 with Interface	90		180			
MEW 110						
MEW 110 with Interface						
MEW 200	204	430	250	1802	12	415
MEW 200 with Interface						
MEW 300						
MEW 300 with Interface						



3-Phase Thyristor Power Controller



Three-Phase Thyristor Power Controller

REOTRON MDW power controllers are used in industrial process technology, especially in thermal systems. These thyristor controllers are available as phase angle controllers and with period group control, and are equipped with built-in voltage, current, and power regulators—ensuring stable output even under demanding conditions. The devices can be installed directly at the load to be regulated (e.g., infrared heaters) or used as primary controllers for transformers to adjust voltage and provide safe separation (e.g., graphite heating elements).

Thyristor controllers of the REOTRON MDW series (three controlled phases) are modern, microprocessor-controlled devices with integrated measurement units for real-time voltage and current transformer values. For processing these values in external system components, outputs (actual value monitor) with 0...+10V DC are available.

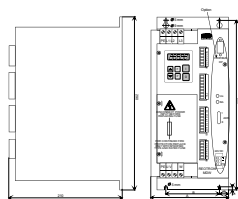
Communication with the devices can be established via analog interfaces (0...+10V DC, 0(4)...20mA, potentiometer) or fieldbus systems such as Profibus-DP, CAN-Bus, DeviceNet, EtherNet/IP, ProfiNet, and EtherCAT, allowing easy integration into existing bus systems. Parameters like U_{max} , I_{max} , P_{max} , as well as ramp-up and ramp-down settings, can be adjusted internally to suit specific load requirements.

The REOTRON MDW 700 thyristor controllers are designed as switch cabinet installation devices with IP20 protection for mounting on a panel. Standard cooling is by air; fans are included from 150A and above. The REOTRON MDW-WK series is designed for water cooling and can be easily integrated into an existing water circuit.

Three-Phase Thyristor Power Controller

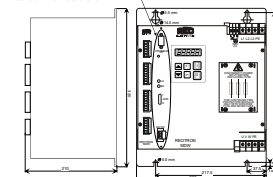


MDW 700, 10A / 25A

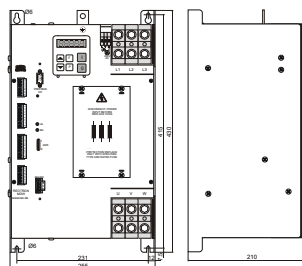


MDW 700, 50A / 80A

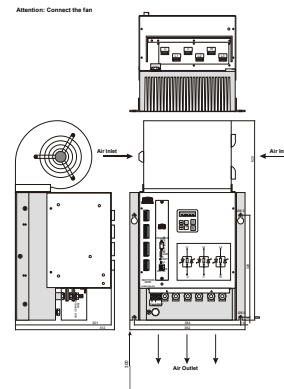
Attention: Connect the fan



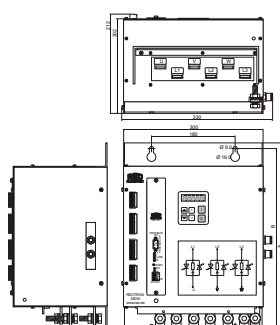
MDW 700, 110A / 150A / 200A



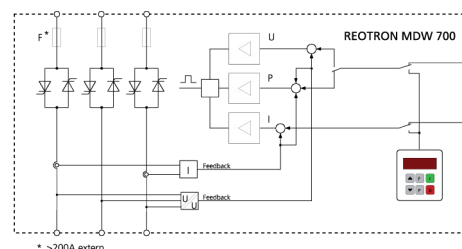
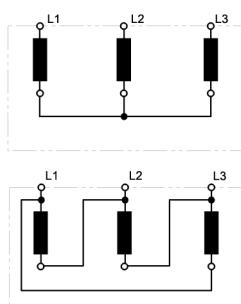
MDW 700, 300A



MDW 700 WK (water-cooled)



Load Switching



* >200A extern

Technical Specifications

3-Phase Thyristor Power Controller			
Model	Input Voltage	Output Voltage	Output Current
REOTRON MDW 700-10	3 x 400 VAC, +/-10 % 50/60 Hz	3 x 0...400V	3 x 10 A
REOTRON MDW 700-25			3 x 25 A
REOTRON MDW 700-50			3 x 50 A
REOTRON MDW 700-80			3 x 80 A
REOTRON MDW 700-110			3 x 110 A
REOTRON MDW 700-150			3 x 150 A
REOTRON MDW 700-200			3 x 200 A
REOTRON MDW 700-300			3 x 300 A
REOTRON MDW-WK 700-115 *			3 x 115 A
REOTRON MDW-WK 700-160 *			3 x 160 A
REOTRON MDW-WK-700-250 *			3 x 250 A
REOTRON MDW-WK 700-350 *			3 x 350 A
REOTRON MDW-WK 700-450 *			3 x 450 A
Load Type	Resistive / Inductive		
Setpoint: Current, Voltage, Power	0...+10 V DC, 0(4)...20 mA Internal Keypad		
Interface: (Optional)	Profibus-DP, CAN-Bus, DeviceNet, EtherCAT		
Enable Input	24 V DC, External Contact, (potential-free)		
Status Message: Ready to Operate Status Message: Power On	Relay, Changeover Contact Relay, Changeover Contact"		
External Actual Value Feedback Current Voltage	0...+5 V DC		
Operating Temperature	0...+45°C		
Storage / Transport Temperature	-10...+70°C		
Degree of Protection	IP20		

* With water cooling

Phase angle or burst firing control, built-in actual value monitoring, analog interface or potentiometer or fieldbus operation, air or water-cooled, cabinet mountable device

Ideal for: industrial furnaces, metal evaporators, crucibles, IR emitters / drying systems, heating units, fan systems / wind tunnels

Dimensions in mm

3-Phase Thyristor Power Controller		
Type / mm	A	B
MDW 10	110	70
MDW 10 with Interface	130	90
MDW 25	160	90
MDW 25 with Interface	160	90
MDW - WK 115, 160, 250, 350	400	360
MDW - WK 450, 600	550	530



REOTRON MDZ 2000

REOTRON MDZ 2000

The REOTRON MDZ2000 series controllers are microprocessor-based devices designed to manage power thyristors in six-pulse converter systems. Each unit features control and regulation electronics, as well as ignition pulse generation and output stages.

The converter can function either as a current or voltage regulator, automatically switching to whichever setpoint is lower. Required setpoints can be set using external potentiometers, control signals (0...10 V DC or 0...20 mA / 4...20 mA DC), or directly via the integrated operating display. The standard inputs are designed for +/- 0...40 V rectifier output voltage and +/- 0...75 mV output current, but normalized input signals of 0...10 V DC are also supported.

Function

The REOTRON MDZ control and firing units are designed for managing converter systems. Each unit features a controller for both current and voltage regulation.

When operated in voltage regulation mode, the internal control loop maintains the output voltage setpoint, keeping it stable regardless of load changes or fluctuations in supply voltage. If used as a current regulator, the device compares the output current to the setpoint and adjusts accordingly—the output voltage may rise to its maximum value. Indicator LEDs display when the I_{max} or control limit has been reached. If both setpoints are active, the controller with the lower setpoint always takes precedence. For example, in voltage regulation mode with secondary current regulation, the voltage controller remains active as long as the permitted current is not exceeded; if the current limit is hit, current regulation takes over. To use the device strictly as a voltage or current regulator, the unused setpoint input should be bridged to the reference voltage (10 V DC).

Features

- All 6-pulse converter circuits can be controlled, as well as primary-side transformer control
- Setpoint release (via switch or 24 V DC control signal)
- Pulse release (via switch or 24 V DC control signal)
- Input for over-temperature switch
- Setpoint selection through integrated display, potentiometer, control voltage 0...10 V DC, or 0...20 mA / 4...20 mA DC
- Adjustable ramp-up and ramp-down times
- Additional overcurrent monitor (adjustable from 100% to 150% of maximum current)
- Switchable to actuator mode without control functions
- Compatible with both clockwise and counterclockwise rotating fields (auto-detect)
- Potential-free changeover contact for fault signaling

REOTRON MDZ 2000



Technical Specifications

REOTRON MDZ 2000	
Device Type	REOTRON MDZ 2000
Power Supply	3x 400 V +6%-10% 50/60 Hz
Ignition Pulse Levels	6
Pulse Voltage	approx. 12 V
Pulse Current	500 mA
Transformer Switching Groups	Dd0, Yy0, Dz0, Dy5, Yd5, Yz5, Dd6, Yy6, Dz6, Dy11, Yd11, Yz11 and primary tap
Setpoint Input Voltage	0–10 V DC / 0–20 mA / 4–20 mA / 10 kΩ Potentiometer
Setpoint Input Current	0–10 V DC / 0–20 mA / 4–20 mA / 10 kΩ Potentiometer
Actual Value Input Voltage	±0–40 V (0–10 V DC option)
Actual Value Input Current	±0–100 mV (0–10 V DC option)
Integrator for Forward/Return Flow	Adjustable from 0.1 to 10 seconds
Voltage Controller	PI Controller with Adjustable Proportional Component
Current Controller	PI Controller with Adjustable Proportional Component
Input Impedance for Actual Value Voltage	56 kΩ
Input Impedance for Actual Value Current	5.6 Ω
Pulse Release Control Signal	12–24 V DC / 2.5 mA
Setpoint Lock Control Signal	12–24 V DC / 2.5 mA
Overtemperature Input	Switch 1 mA
Fault Relay	1 changeover contact rated at 250 V, 1 A
Status Relay	1 changeover contact rated at 250 V, 1 A
Permissible Ambient Temperature	0–45 °C
Dimensions (W x H x D)	140 x 290 x 160 mm

REOTRON Complete Solutions

Power Supply with SYSTEM

For decades, REO has specialized in efficient energy conversion—whether through inductive or electronic means. Safety, reliability, and efficiency: the REOTRON SYSTEM brings these qualities together as a comprehensive solution for power supplies in process engineering installations. Combining the highest standards of quality with decades of experience in electrical plant construction and proven REOTRON technology, we're able to deliver not only standard products but also highly customized and tailored system solutions. Whether based on thyristor controllers

REO delivers complete power supply system solutions, whether based on switching power supplies, thyristor controllers, or a combination of both.

Operation

Operation can be managed via external control signals (0–10 V DC or 0(4)–20 mA), or optionally through a fieldbus interface such as Profibus-DP, CAN-Bus, EtherCAT, DeviceNet, EtherNet/IP, or ProfiNet.

Advantages

- Everything from one provider!
- Tailored product solutions
- Air or water cooling options
- Ready to connect

Design

There are various mechanical options for implementing a system solution. Depending on the model and power requirements, devices can be installed as 19" rack-mount enclosures or as control cabinet units. Additionally, our in-house mechanical workshop can collaborate with you to develop custom device mounting systems. From connection technology and power distribution to thermal management with air or water cooling, REOTRON components are designed in close consultation with you, ensuring the best power supply solution for your needs. With REO's broad product range, we can integrate Power Quality components to meet EMC standards and deliver a fully assembled, ready-to-connect system—everything from a single source!



REO AG
Brühler Straße 100 · D-42657 Solingen
Tel.: +49 (0)212 8804 0 · Fax: +49 (0)212 8804 188

E-Mail: info@reo.de
Internet: www.reo.de



DIVISIONS:

REO Vibratory Feeding and Power Electronics Division

Brühler Straße 100 · D-42657 Solingen
Tel.: +49 (0)212 8804 0 · Fax: +49 (0)212 8804 188
E-Mail: info@reo.de

REO Train Technologies Division

Erasmusstraße 14 · D-10553 Berlin
Tel.: +49 (0)30 3670236 0 · Fax: +49 (0)30 3670236 10
E-Mail: zentrale.berlin@reo.de

REO Drives Division

Holzhausener Straße 52 · D-16866 Kyritz
Tel.: +49 (0)33971 485 0 · Fax: +49 (0)33971 485 90
E-Mail: zentrale.kyritz@reo.de

REO Medical and Current Transformer Division

Schuldholzinger Weg 7 · D-84347 Pfarrkirchen
Tel.: +49 (0)8561 9886 0 · Fax: +49 (0)8561 9886 40
E-Mail: zentrale.pfarrkirchen@reo.de

REO Test and PowerQuality Division

Brühler Straße 100 · D-42657 Solingen
Tel.: +49 (0)212 8804 0 · Fax: +49 (0)212 8804 188
E-Mail: info@reo.de

PRODUCTION + SALES:

India

REO GPD INDUCTIVE COMPONENTS PVT. LTD
E-Mail: info@reogpd.com · Internet: www.reo-ag.in

USA

REO-USA, Inc.
E-Mail: info@reo-usa.com · Internet: www.reo-usa.com

SALES:

China

REO Shanghai Inductive Components Co., Ltd
E-Mail: info@reo.cn · Internet: www.reo.cn

France

REO VARIAC S.A.R.L.
E-Mail: reovariac@reo.fr · Internet: www.reo.fr

Great Britain

REO (UK) Ltd.
E-Mail: main@reo.co.uk · Internet: www.reo.co.uk

Italy

REO ITALIA S.r.l.
E-Mail: info@reoitalia.it · Internet: www.reoitalia.com

Poland

REO CROMA Sp. z o.o.
E-Mail: croma@croma.com.pl · Internet: www.croma.com.pl

Spain

REO ESPAÑA 2002 S.A.
E-Mail: info@reospain.com · Internet: www.reospain.com

Switzerland

REO ELEKTRONIK AG
E-Mail: info@reo.ch · Internet: www.reo.ch

Turkey

REO TURKEY ELEKTRONIK San. ve Tic. Ltd. Şti.
E-Mail: info@reo-turkey.com · Internet: www.reo-turkey.com

United Arab Emirates

REO INDUCTIVE COMPONENTS FZCO
E-Mail: info@reo-middle-east.com
Internet: www.reo-middle-east.com