

REO vibratory conveyor technology

Solutions for your vibratory conveyors

Phase-angle devices • Frequency converter • Measuring devices • Acceleration sensors • AC-Magnets • Phase-angle devices • Fre

Pure|Power|Perfection

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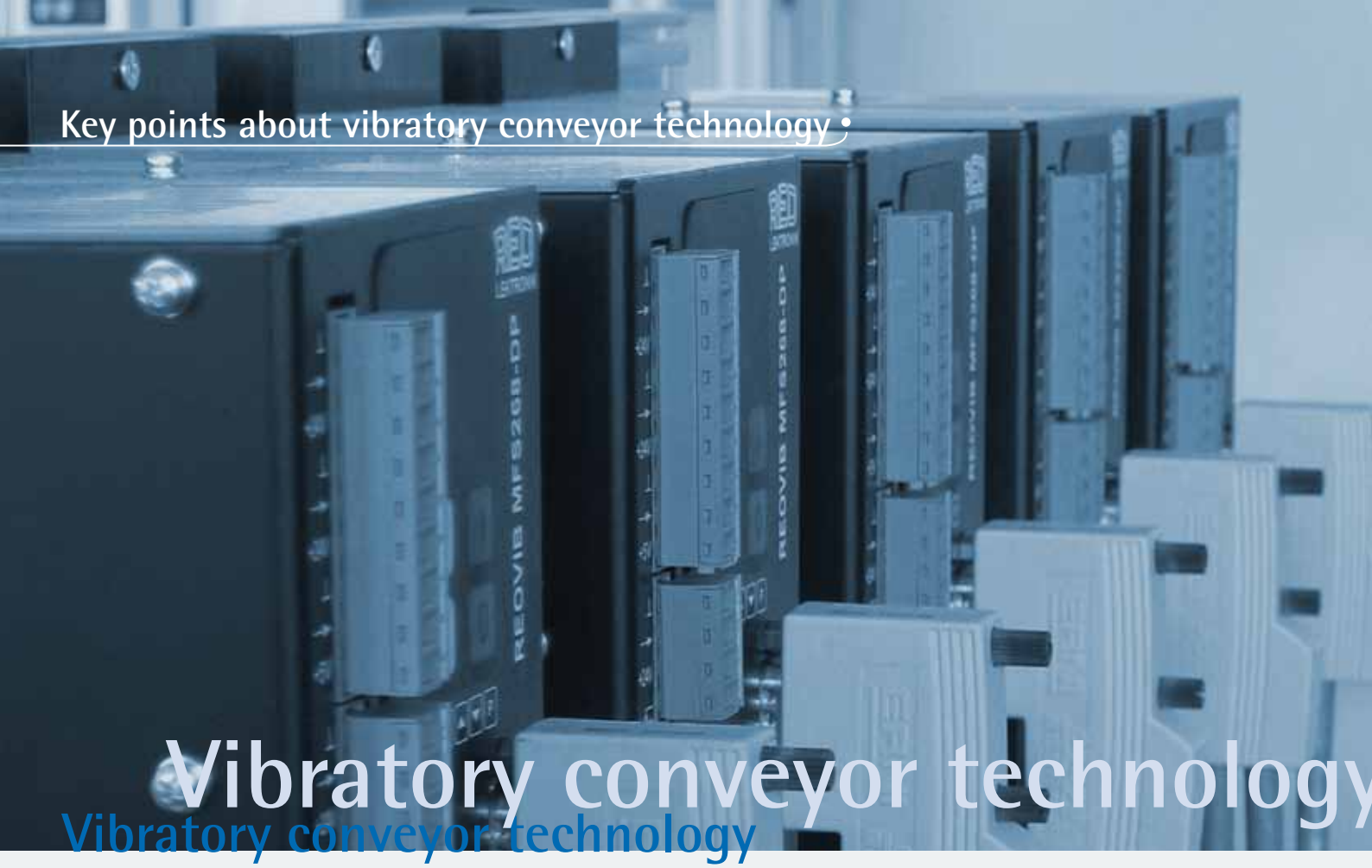


Vibratory conveyor technology

Vibratory conveyor technology

REO – In partnership with manufacturers of vibratory conveyors for more than forty years

- International network that ensures the highest quality and best service
- Control devices to meet all requirements - from cost-effective phase-angle devices to flexible frequency converters with intelligent plug+play technology
- REOplus: REO speaks your language - with our worldwide field sales offices and production sites. REO is always close to clients, so it can react quickly and efficiently
- Personal technical service on site, where you need it most.
- We can provide you with magnets and drive products for vibratory conveyor technology
- Client-specific solutions

Key points about vibratory conveyor technology

Vibratory technology is a specialist field of industrial conveyor systems. It is used for conveying a variety of materials in assembly, packaging and filling machines. Areas of application are extremely wide and varied, for example in industrial assembly automation, pharmaceutical packaging systems, industrial conveyor technology and in food processing and packaging.
For more than forty years, REO ELEKTRONIK AG has been proving solution for manufacturers of vibratory conveyors, and REOVIB control units are recognised worldwide as the market leader.

Complete solutions for controlling vibratory conveyor technology, from control devices to AC magnets and on to special metrology equipment. The unique combination of REO's electronic and inductive knowledge and experience, means that vibration technology is our focus, whether for bowl, linear or hopper conveyors – REO can supply the appropriate solution.

Solutions for your application with REOVIB, VAREOTRON and REO AC magnets

CONVEYOR & ASSEMBLY AUTOMATION

Standalone control units for direct control of conveyor systems
- REOVIB SMART SERIES
- REOVIB RTS SERIES
- REOVIB MTS SERIES
- REOVIB MFS SERIES
- VAREOTRON SERIES
- REOVIB AC-MAGNETS

CONVEYING & GRADING

Great handling capacity
Mains voltages up to 500V
Output currents up to 45 A
Solutions for installation in control cabinets or in standalone housings
- REOVIB SMART SERIES
- REOVIB RTS SERIES
- REOVIB MTS SERIES
- REOVIB MFS SERIES
- REOVIB AC-MAGNETS

FILLING & PACKAGING TECHNOLOGY

Equipment for installation in control cabinets, field bus interface options, installation solutions
- REOVIB SMART SERIES
- REOVIB RTS SERIES
- REOVIB MTS SERIES
- REOVIB MFS SERIES
- VAREOTRON SERIES
- REOVIB AC-MAGNETS

HOPPERS & BILK STORAGE

Motor starters, motor control equipment for motor driven hoppers and inclined conveyors
- VAREOTRON 166 SERIES
- VAREOTRON MFR SERIES

TEST & SERVICE ACCESSORIES

Measuring equipment for service
Workshops equipment for conveyor manufacture and quality assurance
Acceleration sensors
Connecting plugs

MEASUREMENT & MONITORING

Vibration amplitude sensors
Acceleration monitors

Key points about vibratory conveyor technology

Control units for vibratory conveyors

For controlled operation, every vibratory conveyor requires a control unit. The REOVIB range includes various control products to provide all the control characteristics required of a vibratory conveyor for the flow of conveyed product.
These product lines include a large number of control units, starting with simple control systems using triacs or thyristors in phase-angle operation to provide a variable voltage to the magnets, to frequency converters that can generate any desired operating frequency and amplitude for vibratory conveyors.

There are many ways for us to provide solutions, from providing printed circuit assemblies for integration into a client's own housing, through to equipment for installation in control cabinets for DIN rail mounting and on to standalone designs with ingress protection from IP54 to IP65. Individual devices can be linked via control inputs and outputs into systems that operate complete feeder stations. Connections with higher-level control systems can be implemented via analogue signals or through fieldbus couplings such as Profibus, CAN bus, EtherCAT or DeviceNet. Many versions are also available with UL/CSA certification.



The advantages of REOVIB equipment at a glance:

- **Various versions of the control units:**
  Printed circuit assemblies, equipment for installation in control cabinets, or standalone units with protection classes IP54 to IP65.
- **Reliable, high quality control systems with a two-year guarantee**
- **Individual devices can be linked via control inputs and outputs into systems**
- **Field bus interfaces: such as Profibus, CAN bus, EtherCAT or DeviceNet**
- **Service work or training available on site**
- **REOVIB frequency converters require less reactive power from the supply network, so energy efficiency is higher**
- **Patented technology: automatic discovery and operation at the resonant frequency of the vibratory conveyor system with the REOVIB MFS 168 and REOVIB MFS 268, ensures that the conveyor can be easily controlled at its optimum potential. Time consuming tuning of the mechanical system is reduced!**
- **Plug+Play – one button installation for optimal performance.**

* Please contact us!

Key points about vibratory conveyor technology

How the control units work

With REOVIB control units which utilise phase angle technology (SMART, RTS, MTS) the voltage can be adjusted continuously. The mechanical vibration frequency of the conveyor depends on the mains frequency of the input voltage (equal to or double the frequency of the mains voltage) and, in addition, the devices have a wide-range voltage input (switchable or automatic).

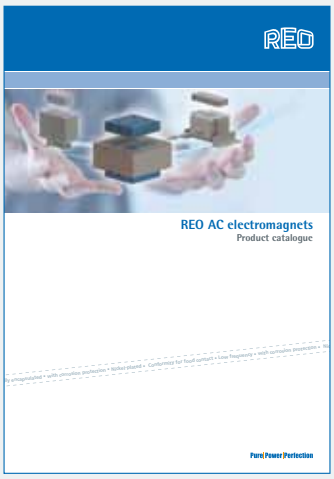
With REOVIB frequency converters (MFS 158, MFS 168, MFS 268) the output frequency of the controller is independent of the mains input frequency and so the operating frequency can be adjusted to the individual vibratory conveyor.
REO frequency converters are particularly suited for vibratory conveyors with low operating frequencies to safely and economically control the product flow.

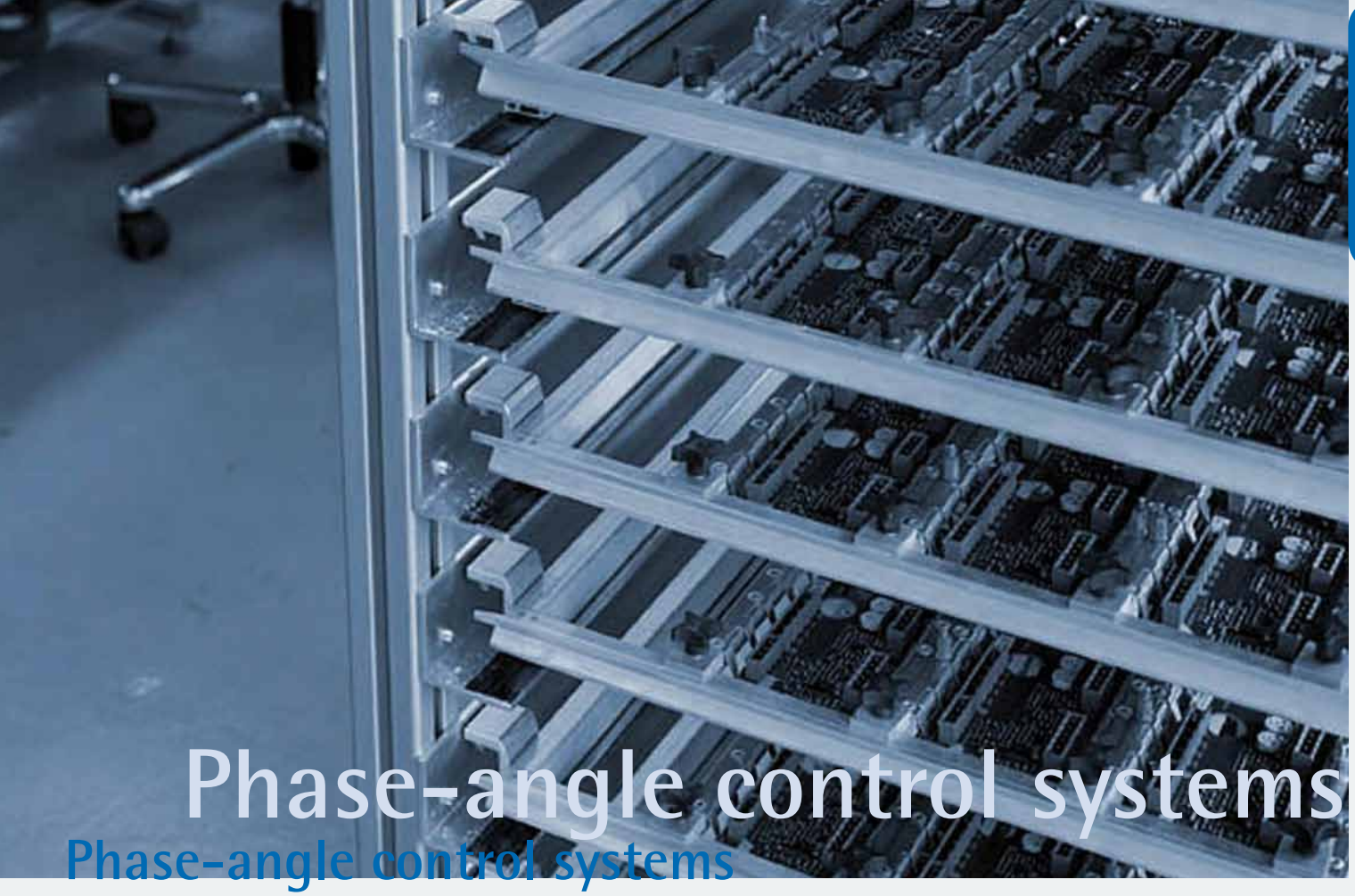
REOVIB measurement and monitoring devices provide a wide range of solutions, for example analog measurment of voltage and current, workshop and diagnostic equipment for the development, construction and quality control of vibratory conveyors or handheld measuring equipment

More information can be found in our REOVIB manual or in the „Sensor Applications" manual. Details of our comprehensive AC-magnets are available in a seperate catalogue.









Phase-angle control systems

Phase-angle control systems

REOVIB Smart series

Phase-angle control equipment for vibratory conveyors
The REOVIB SMART series utilise phase angle technology for use in vibratory conveyor applications.

This equipment provides the most important functions for use in vibratory conveyor technology and provides a cost-effective way to control vibratory conveyors – but without comprising on quality. The equipment is available in various protection classes, from IP00 to IP54 - making the REOVIB SMART series a low-cost solution suitable for many applications.

REOVIB Smart System

Phase-angle control systems

Advantages

- **Cost-effective phase-angle control systems with vital functionality**
- **Can be used as a standalone device or in modular design for control of a complete feed system**
- **Output current up to 6A**
- **DIN rail mounting**
- **Versions available with fill level/overflow control**



REOVIB SMART SINGLE
IP00

REOVIB SMART SYSTEM series

REOVIB SMART SYSTEM basic module in open design for assembly on a DIN rail with an output channel of max. 6A with fill level/overflow control.
The basic module has a supply for expansion modules, so further output modules up to a total current of 10A can be connected.

REOVIB SMART SYSTEM expansion module in open design for DIN rail mounting. An expansion module has an output channel max. 6A with fill level/overflow control and can be set up together with the basic module and several expansion modules.

REOVIB SMART SYSTEM MINI basic module in open design for DIN rail mounting with an output channel of max. 1A.
The basic module has a supply for expansion modules, so further output modules can be connected in series up to a total current of 10A.

REOVIB SMART SYSTEM MINI expansion module in open design for DIN rail mounting. An expansion module has one output channel max. 1A and can be set up together with the basic module and several expansion modules. Individual REOVIB SMART SINGLE device device in open design for DIN rail mounting with an output channel of max. 6A.

Individual REOVIB SMART SINGLE device in open design for assembly on a DIN rail with an output channel of max. 6A.



REOVIB SMART SYSTEM
IP00 basic module



REOVIB SMART SYSTEM
IP00 expansion module



REOVIB SMART SYSTEM
IP00 MINI basic module



REOVIB SMART SYSTEM
MINI IP00 expansion module



Example here: 1 basic module + 2 expansion modules for a 3-channel control system

Typical applications

- **Weighing systems**
- **Multiple-head weighing wagon**
- **Conveyor & assembly automation**
- **Sorting systems**



REOVIB SMART SYSTEM
IP00 expansion module

Technical data

	SMART Single	SMART Basic module	SMART Expansion module	SMART MINI Basic module	SMART MINI Expansion module
Mains input	110 / 230V switchable	110 / 230V switchable	via SMART Basic module	110 / 230V switchable	via SMART MINI Basic module
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	via SMART Basic module	50 / 60 Hz +/- 3 Hz	via SMART MINI Basic module
Output voltage	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V
Output current	max. 6 A	max. 6 A	max. 6 A	max. 1 A	max. 1 A
Vibration frequency	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)
Setpoint value	Potentiometer, 0…10V, 0…20 mA	Potentiometer, 0…10V, 0…20 mA	Potentiometer, 0…10V, 0…20 mA	Potentiometer, 0…10V, 0…20 mA	Potentiometer, 0…10V, 0…20 mA
Ext. Enable	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch
U_{min} / U_{max}	Internal potentiometer	Internal potentiometer	interne Potentiometer	Internal potentiometer	interne Potentiometer
Soft start	Fixed defined	Fixed defined	Fixed defined	Fixed defined	Fixed defined
Max. Output current from all outputs	-	10 A	-	10 A	-
Fill level/overflow control		x	x		
Standards Conformity	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS
Protection class	IP00	IP00	IP00	IP00	IP00
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 421 (6000 1/min, 3000 1/min), WI 621 (6000 1/min, 3000 1/min), WI 211, WE 131				

REOVIB Smart

Phase-angle control systems

RoHS COMPLIANT 2011/EG



REOVIB SMART 6025 IP54

Advantages

- **Cost-effective phase-angle control systems with vital functionality**
- **IP54 design for standalone application or IP20 design for installation in a control cabinet**
- **Versions available with UL approval (SMART RTS 15)**
- **Output current up to 15 A**

REOVIB SMART series

Devices in the REOVIB SMART series are available in various protection classes - as a module for mounting in a switch cabinet IP20 or as a housing design in IP54 for mounting directly on the vibrating machine
The maximum output current is 6 A.

The housing designs with protection class IP54 are available in different versions:

Input cable/output cable
Input cable/output socket
Completely insertable with input plug and output socket

REOVIB SMART 6025 devices are available as standalone units with protection class IP54 and an output current of max. 6A for mounting directly on the vibrating machine.
In addition to the functions and advantages of the REOVIB SMART series, the control device has compensation for mains voltage fluctuations with constant vibration amplitude - and an adjustable soft starting ramp time.

REOVIB SMART RTS 15 devices are available in an IP 54 housing with output currents up to 15 A and are listed by UL.



REOVIB Smart IP 20



REOVIB SMART 6025 IP 54



REOVIB SMART IP54

Typical applications

- Conveyor & assembly automation
- Sorting systems

*Optional Smart RTS 15 with UL-Certification

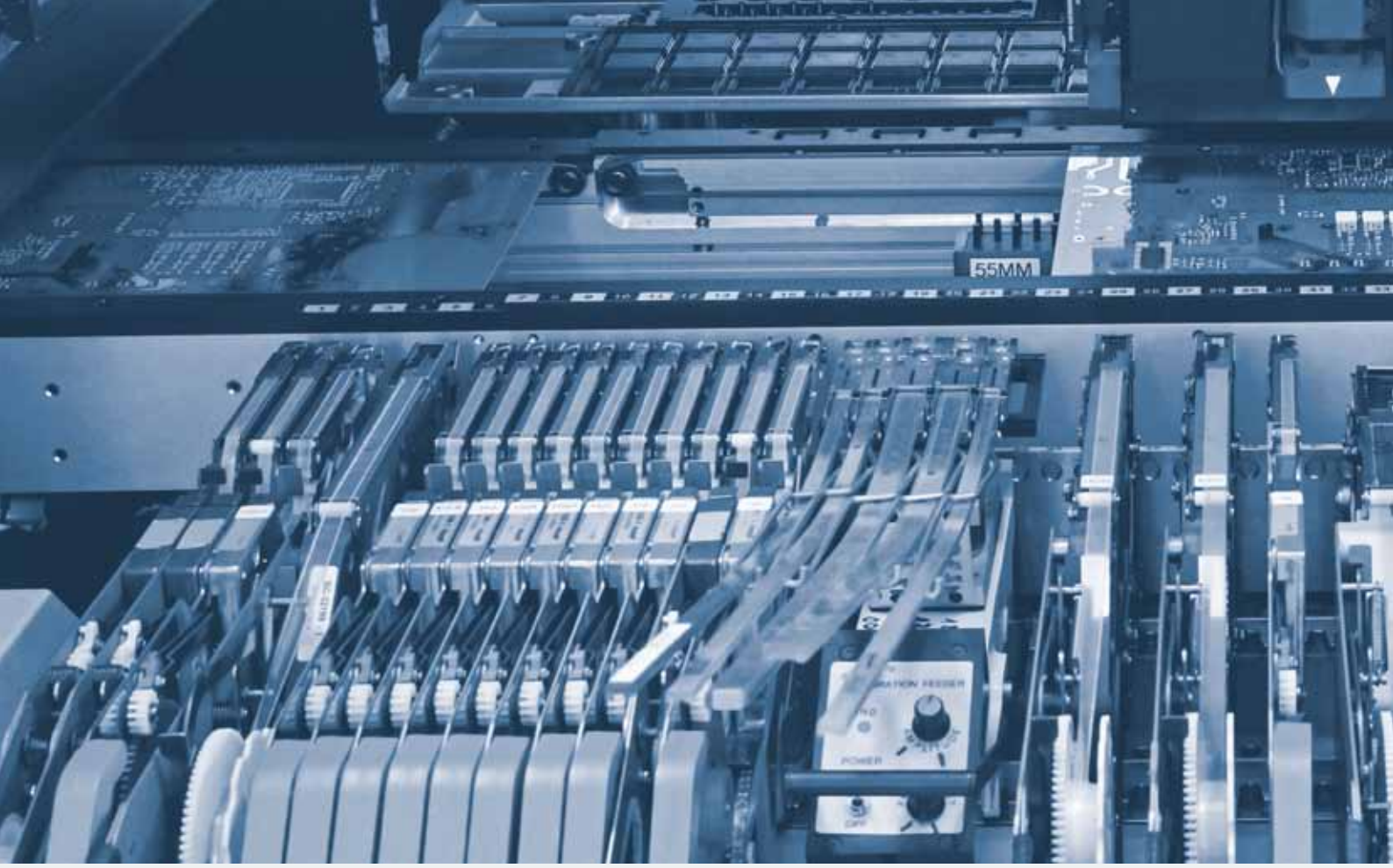


REOVIB SMART RTS 15 IP 54

Technical data

	SMART	SMART 6025	SMART RTS 15
Mains input	110 / 230V switchable	110 / 230V switchable	110 / 230V switchable
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz
Output voltage	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V
Output current	max. 6 A	max. 6 A	max. 15 A
Vibration frequency	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)
Setpoint value	Potentiometer , 0…10V, 0…20 mA	Potentiometer , 0…10V, 0…20 mA	Potentiometer , 0…10V, 0…20 mA
Ext. Enable	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch
U_{min} / U_{max}	Internal potentiometer	Internal potentiometer	Internal potentiometer
Soft start	Fixed defined	Adjustable 0,1…4 Sek.	Fixed defined
Mains voltage compensation		x	
Standards Conformity	CE, RoHS	CE, RoHS	UL, CE, RoHS
Protection class	IP20 / IP54	IP54	IP54
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 421 (6000 1/min, 3000 1/min), WI 621 (6000 1/min, 3000 1/min), WI 211, WE 131		

REOVIB Phase-angle control systems SMART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Phase-angle control systems

Phase-angle control systems

REOVIB RTS series

Phase-angle control equipment for vibratory conveyors
These devices offer the most important functions for use in vibratory conveyor applications and extended functionality such as the soft start time and more extensive control functions such as the implementation of fill level/overflow control

Devices are available in various protection classes from IP00 to IP54 - so it is possible to select the optimal control device for the relevant application from the REOVIB RTS series.

REOVIB RTS System

Phase-angle control systems

Vorteile

- **Cost-effective phase-angle control systems with protection class IP00 for installation in a control cabinet**
- **Can be used as a standalone device or in a modular design for several outputs**
- **Output current up to 6A**
- **Fill level/overflow control**
- **Mains voltage compensation with constant vibration amplitude**
- **Adjustable soft start ramp time**



REOVIB RTS Single IP00

REOVIB RTS system series

RTS SYSTEM basic module in open type of construction for assembly on a DIN rail with an output channel of max. 6A with fill level/overflow control and mains voltage compensation.
The basic module has a supply for the expansion modules, so further output modules up to a total current of 10A can be connected.

RTS SYSTEM expansion module in open design for assembly on a DIN rail. The expansion module has an output channel max. 6A with fill level/overflow control and mains voltage compensation and can be set up together with the basic module and several expansion modules.

Individual REOVIB RTS SINGLE device in open design for assembly on a DIN rail with an output channel of max. 6A, fill level/overflow control and mains voltage compensation.



REOVIB RTS SYSTEM IP00 basic module



REOVIB RTS SYSTEM IP00 expansion module



REOVIB RTS SYSTEM IP00 for DIN rail mounting
Example here: 1 basic module + 2 expansion modules (with filling-level control/part-overflow circuit) for a 3-channel control system

Typical applications

- Conveyor & assembly automation
- Conveyor technology
- Sieving technology



REOVIB RTS SYSTEM IP00 Expansion module

Technical data

	RTS Single	RTS Basic module	RTS Expansion module
Mains input	110 / 230V switchable	110 / 230V switchable	via RTS Basic module
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	via RTS Basic module
Output voltage	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V
Output current	max. 6 A	max. 6 A	max. 6 A
Vibration frequency	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)
Setpoint value	Potentiometer, 0…10V, 0…20 mA	Potentiometer, 0…10V, 0…20 mA	Potentiometer, 0…10V, 0…20 mA
Ext. Enable	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch
U_{min} / U_{max}	Internal potentiometer	Internal potentiometer	Internal potentiometer
Soft start	Adjustable 0,2…5 Sek.	Adjustable 0,2…5 Sek.	Adjustable 0,2…5 Sek.
Max. output current from all outputs	-	10 A	
Mains voltage compensation	x	x	x
Fill level/overflow control	x	x	x
Standards Conformity	CE, RoHS	CE, RoHS	CE, RoHS
Protection class	IP00	IP00	IP00
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 421 (6000 1/min, 3000 1/min), WI 621 (6000 1/min, 3000 1/min), WI 211, WE 131		

REOVIB RTS

Phase-angle control systems

Advantages

- **Inexpensive phase-angle control systems with extended functionality.**
- **IP54 design for mounting directly on the vibrating machine**
- **Output current up to 6 A**
- **Versions available with fill level/overflow control**
- **Mains voltage compensation with constant vibration amplitude**
- **Adjustable soft starting ramp time**



REOVIB RTS R6/539 IP54

REOVIB RTS series

Devices in the REOVIB RTS series are available as housing designs with protection class IP54 for direct assembly to the application.
The maximum output current is 6 A.

Devices have mains voltage compensation with constant vibration amplitude, a relay output for status display, and an adjustable soft starting ramp time, and the REOVIB RTS RS6/539-559 type has fill level/overflow control

The control devices are available in different versions:
- Input cable/output cable
- Input cable/output socket
- Completely insertable with input plug and output socket and a sensor socket (with REOVIB RTS RS6/539-559).

Typical applications

- Conveyor & assembly automation
- Conveyor technology
- Sieving technology

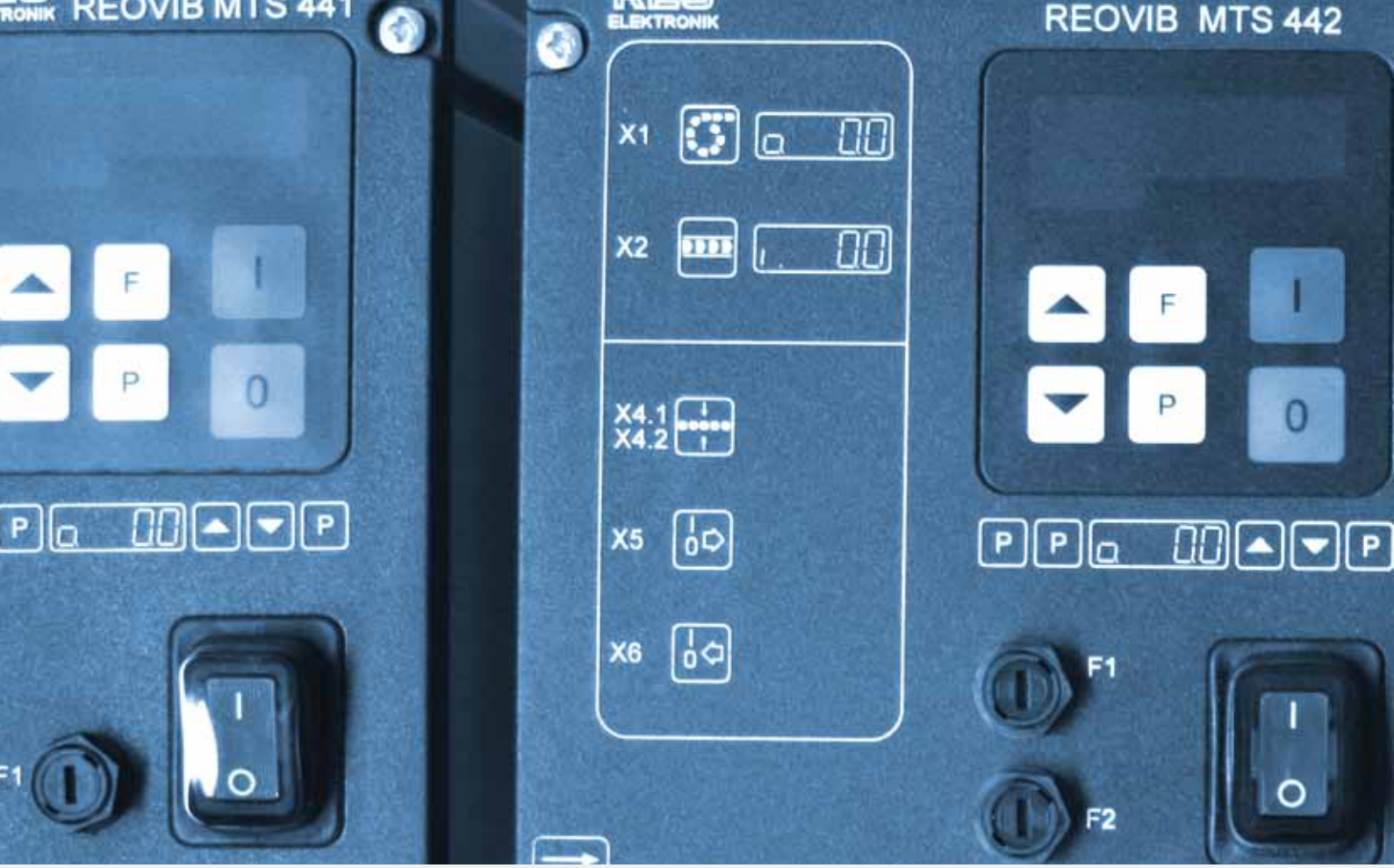


REOVIB RTS R6/539-559
IP54

Technical data

	RTS R6/539	RTS RS6/539-559
Mains input	110 / 230V switchable	110 / 230V switchable
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz
Output voltage	20…100 V / 40…210 V	20…100 V / 40…210 V
Output current	max. 6 A	max. 6 A
Vibration frequency	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)
Setpoint value	Potentiometer , 0…10V, 0…20 mA	Potentiometer , 0…10V, 0…20 mA
Ext. Enable	24 V DC, Switch	24 V DC, Switch
U_{min} / U_{max}	Internal potentiometer	Internal potentiometer
Soft start	Adjustable 0,2…5 Sek.	Adjustable 0,2…5 Sek.
Status relay	x	x
Mains voltage compensation	x	x
Fill level/overflow control	-	x
Standards Conformity	CE, RoHS	CE, RoHS
Protection class	IP54	IP54
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 421 (6000 1/min, 3000 1/min), WI 621 (6000 1/min, 3000 1/min), WI 211, WE 131	

REOVIB phase-angle control systems RTS


REOVIB MTS 441
REOVIB MTS 442
ELEKTRONIK
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X2
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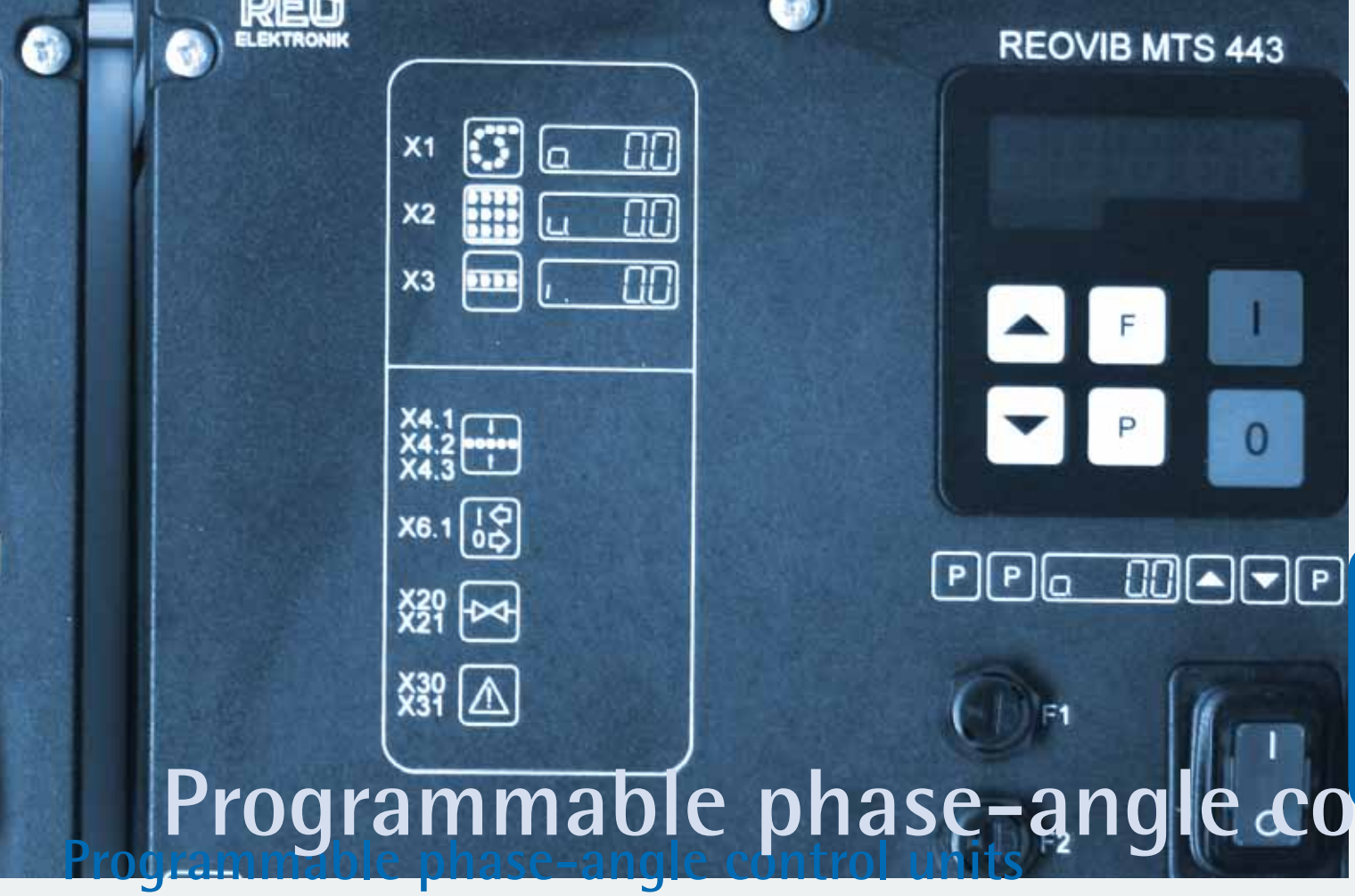


Programmable phase-angle co

Programmable phase-angle control units

REOVIB MTS series

Programmable phase-angle control units

The REOVIB MTS series includes single-channel, two-channel and three-channel control units for vibratory conveyor drives. These are phase-angle control systems with a triac as the power element. The vibration frequency of the conveyor can be the same as or twice the frequency of the input voltage. Plug and socket connections for all inputs and outputs make rapid installation possible and facilitate the combination of several devices with each other or with external control systems. The devices use digital technology and are operated via a LED or LCD display and buttons.

All settings can be made without the housing having to be opened. Standardized plug and socket connections for the same functions enable equipment from other product lines to be combined with the MTS series of devices.

REOVIB MTS

Programmable phase-angle control units

RoHS COMPLIANT 2011/EG



REOVIB MTS 441 IP54

Advantages

- **Phase-angle control with programmable functions Single-channel, two-channel or three-channel control for the optimal control of the complete conveyor system**
- **Digital setting of all parameters via LED display or multiline LCD display (MTS 443 LCD) IP54 or IP20 design (MTS 441, MTS 610)**
- **Automatic mains voltage adjustment**
- **Material flow control**
- **Various sensor logic functions can be set**
- **Adjustable soft start**
- **With fill level/overflow control**
- **Integrated mains voltage compensation with constant vibration amplitude**

REOVIB MTS series

The REOVIB MTS 441 control device enables the desired conveyor speed and all control parameters can be set via a display integrated into the faceplate. Connections with other equipment in the REOVIB MTS series can be implemented quickly and easily. Application-specific settings can be stored and retrieved when required.
The equipment is available in IP 20 and IP54 versions and with various connection options:
- Input cable/output socket
- Complete cable connector for mains, output and control connections

The REOVIB MTS 442 control device has two power outputs that can be linked according to the the application requirements (e.g. bowl and linear conveyors). All parameters can be input via a display integrated into the faceplate. Connections with other equipment in the REOVIB MTS series can be implemented quickly and easily. Application-specific settings can be stored and retrieved when required.The equipment is available in a standalone IP54 housing with various connection options:
- Input cable/output socket
- Complete cable connector for mains, output and control connections

The REOVIB MTS 443 control device has three power outputs that can be linked according to the the application requirements (e.g. hopper, bowl and linear conveyors). Various sensor and valve logic can also be programmed. All parameters can be input via a display integrated into the faceplate. Application-specific settings can be stored and retrieved when required. The equipment is available in a standalone IP54 housing with various connection options:
- Input cable/output socket
- Complete cable connector for mains, output and control connections

REOVIB MTS 443-LCD

Same design as MTS 443, but with LCD display.
The full-text display in various languages makes programming and adjustment easy and intuitive. Important status indications and settings can easily be input and retrieved.

REOVIB MTS 610

Single-channel control device in IP 20 module for mounting in a control cabinet with an output current of max. 25 A.



REOVIB MTS 441 IP20



REOVIB MTS 442 IP54



REOVIB MTS 610 IP20

Typical applications

- **Conveyor & assembly automation**
- **Conveyor technology**
- **Sieving technology**
- **Filling & packaging technology**

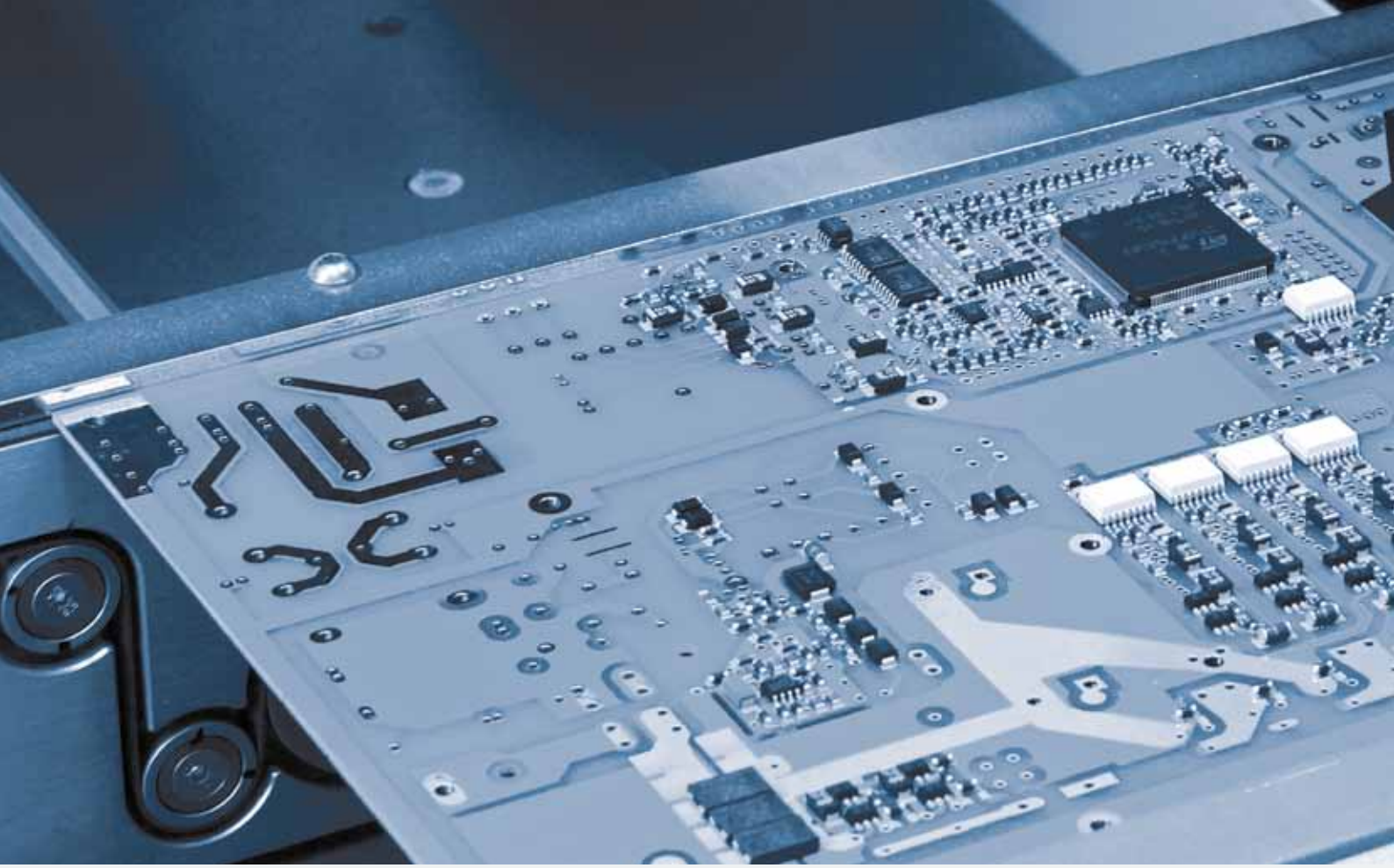


REOVIB MTS 443 IP54 with LCD

Technical data

	MTS 441	MTS 442	MTS 443	MTS 443 - LCD	MTS 610
Mains input	110 / 230V Autom. Detection	110 / 230V Autom. Detection	110 / 230V Autom. Detection	110 / 230V Autom. Detection	230 / 400 V Autom. Detection
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz
Output voltage	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V	20…100 V / 40…210 V	0…210 V / 0…360 V
Output current	max. 6 A, max. 10A (Option)	Per output max. 6 A	Per output max. 6 A	Per output max. 6 A	10 A / 25 A
Number of outputs	1	2	3	3	1
Max. Output current from all outputs	-	10 A	10 A	10 A	-
Vibration frequency	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	50 / 100 Hz (60 / 120 Hz)	16,6 / 25 / 33,3 / 50/ 100 Hz (15 / 30 / 40 / 60 / 120 Hz)
Setpoint value	Display, Potentiometer 0…10V, 0…20 mA	Display, Potentiometer 0…10V, 0…20 mA	Display, Potentiometer 0…10V, 0…20 mA	Display, Potentiometer 0…10V, 0…20 mA	Display, Potentiometer 0…10V, 0…20 mA
Statussignal	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
Ext. Enable	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch
Sensor supply	24 V DC	24 V DC	24 V DC	24 V DC	-
Setting Umin / Umax	Display	Display	Display	Display	Display
Soft start	Adjustable 0…5 sec.	Adjustable 0…5 sec.	Adjustable 0…5 sec.	Adjustable 0…5 sec.	Adjustable 0…60 sec.
With fill level/overflow control	PNP, 24 V DC	Per output PNP, 24 V DC	Per output PNP, 24 V DC	Per output PNP, 24 V DC	PNP, 24 V DC
Mains voltage compensation	x	x	x	x	x
Coarse/fine control	x	x	x	x	-
Selectable timer function	x	x	x	x	-
Sensor time out monitor	x	x	x	x	-
Standards Conformity	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS
Protection class	IP20 / IP54	IP54	IP54	IP54	IP20
REOVIB-AC-Magnets:	WI 111, WI 121, WI 421 (6000 1/min, 3000 1/min), WI 621 (6000 1/min, 3000 1/min), WI 211, WE 131				

REOVIB Programmable phase-angle control units MTS





Frequency converters

Frequency converters

REOVIB MFS series

Frequency converters for vibratory conveyors
REOVIB MFS frequency converters for vibratory conveyors generate a drive voltage and frequency that is independent of the mains input frequency. Any frequency may be selected to ensure that the vibratory conveyor performs perfectly.

REOVIB MFS device are available as a module for mounting in a switch cabinet IP20 or as a housing design in IP54 for mounting directly on the vibrating machine

The devices utilise digital technology and are operated via a LED or LCD display and buttons. All settings can be made externally, without the housing having to be opened.
Thanks to technology patented by REO, it is possible with REOVIB MFS 168 and REOVIB MFS 268 frequency converters to perform an automatic search for and to track the resonant frequency of the vibratory conveyor system.
This reduces the assembly time considerably and also ensures that conveyors provide optimum peformance at all times.

REOVIB MFS 158

Frequency Controllers

Advantages

- **Inexpensive frequency-control devices with the vital functionality**
- **Frequency-control device for controlling a vibratory conveyor independently of the mains input frequency**
- **Conveyor frequencies adjustable between 35...140 Hz**
- **Mains voltage compensation with constant vibration amplitude**
- **All settings can be made using the integrated display**
- **Sinusoidal output current**
- **Can be used on 110 V or 240 V mains, auto sensing.**
- **User settings can be stored**
- **With fill level/overflow control**
- **Versions available in various protection classes and with various connection options**



REOVIB MFS 158 IP54

REOVIB MFS 158 series

Frequency converters in the REOVIB MFS 158 series for vibratory conveyor technology offer the option of operating the vibratory conveyor at an optimal vibration frequency for the material - completely independently of the mains input frequency.
In addition, various sensor and valve logic links can be programmed.

Devices in the REOVIB MFS 158 series are available with a max. output current of 4A, as IP20 versions for installation in control cabinets, and as IP54 standalone versions.
The IP54 housings are available with various connection options:

- Input cable/output socket
- Complete cable connector for mains, output and control connections



REOVIB MFS 158 IP20

Technical data

	MFS 158
Mains input	110 / 230V autom. Detection
Mains frequency	50 / 60 Hz +/- 3 Hz
Output voltage	20…100 V / 40…210 V
Output current	max. 4 A
Vibration frequency	35…140 Hz
Setpoint value	Display, Potentiometer, 0…10V, 0…20 mA
Status signal	24 V DC
Ext. Enable	24 V DC, Switch
Sensor supply	24 V DC
Setting Umin / Umax	Display
Soft start	Adjustable 0…5 Sek.
With fill level/ overflow control	PNP, 24 V DC
Mains voltage compensation	X
Standards Conformity	CE, RoHS
Protection class	IP20 / IP54
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 321, WI 421, WI 621, WI 211, WE 131

REOVIB MFS 168

Frequency Controllers

RoHS COMPLIANT 2011/EG

Patented system



REOVIB MFS 168 IP54

Advantages

- **Frequency-control devices for controlling a vibratory conveyor independently of mains input frequency**
- **Automatic detection of the resonant frequency of the vibratory conveyor system (with additional vibration amplitude sensor) and option to regulate the vibration amplitude – Constant feed rates can be achieved independently of load or changes in the mechnical system**
- **Conveyor frequencies adjustable between 35...140 Hz**
- **Mains voltage compensation with constant vibration amplitude**
- **All settings can be made using the integrated display**
- **Sinusoidal output current**
- **Can be used on 110 V or 240 V mains autom. Detectionion**
- **User settings can be stored**
- **With fill level/overflow control**
- **Versions available in various protection classes and with various connection options**

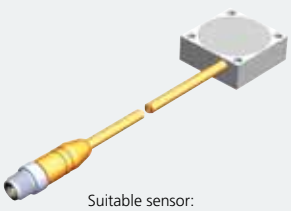
REOVIB MFS 168 series

Frequency controllers in the REOVIB MFS 168 range for vibratory conveyor technology offer the option of operating the vibratory conveyor at an optimal vibration frequency for the material - independently of the mains input frequency.
It is also possible, thanks to the system patented by REO, to determine the resonant frequency of the vibratory system automatically and to regulate the vibration amplitude accordingly.
In addition, various sensor and valve logic links can be programmed.
Devices in the REOVIB MFS 168 series are available with a max. output current of 3A, 6A and 8A and as IP20 versions for installation in control cabinets or as IP54 standalone units.
The IP54 housings are available with various connection options:

- Input cable/output socket
- Complete cable connector for mains, output and control connections



REOVIB MFS 168 IP20



Suitable sensor:
REOVIB SW as an IP54 design

Technical data

	MFS 168
Mains input	110 / 230V autom. Detection
Mains frequency	50 / 60 Hz +/- 3 Hz
Output voltage	0…100 V / 0…205 V
Output current	max. 3 A / 6 A / 8 A
Vibration frequency	30…140 Hz
Setpoint value	Display, Potentiometer , 0…10V, 0…20 mA
Status signal	Changeover relay 250 V, 1A
Ext. Enable	24 V DC, Switch
Sensor supply	24 V DC
Setting Umin / Umax	Display
Soft start	Adjustable 0…5 Sek.
Fill level/overflow control	PNP, 24 V DC (Option)
Coarse/fine control	X (Option)
Vibration amplitude regulation	X (Option)
Resonant frequency search	X (Option)
Mains voltage compensation	X
Standards Conformity	CE, RoHS
Protection class	IP20 / IP54
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 321, WI 421, WI 621, WI 211, WE 131

REOVIB MFS 268

Frequency Controllers

Advantages

- **REO frequency units are able to control a vibratory conveyor independently of the mains input frequency**
- **Automatic search of the resonant frequency of the vibratory conveyor system (with additional vibration amplitude sensor) and option of regulating vibration amplitude –**
- **Able to regulate the vibration amplitude to maintain a constant feedrate irrespective of load or changes in the mechanical system**
- **Can be supplied with field bus interfaces: ProfiBus, CAN-Bus, DeviceNet, EtherCAT, ProfiNet.**
- **Optional versions available with UL/CSA accreditation**
- **Conveyor frequencies adjustable between 5...300 Hz**
- **Mains voltage compensation with constant vibration amplitude**
- **All settings can be made using the integrated display**
- **Sinusoidal output current**
- **Can be used on 110 V or 240 V autom. Detectionion**
- **User settings can be stored**
- **Fill level/overflow control**
- **Versions available in various protection classes and with various connection options**
- **MFS 269 is availble with AC output signal for use with permanent-magnet armature.**



REOVIB MFS 268 LCD IP 54

REOVIB MFS 268 series

Frequency converters in the REOVIB MFS 268 series for vibratory conveyor technology offer the option of operating the vibratory conveyor at an optimal vibration frequency for the material - completely independently of the frequency of the electrical mains supply.
It is moreover possible, thanks to the system patented by REO, to determine the resonant frequency of the vibratory system automatically and to regulate the vibration amplitude to constant values.
In addition, various sensor and valve logic links can be programmed.

Devices can optionally be equipped with field bus interfaces, and are also optionally available as versions with UL/CSA certification.

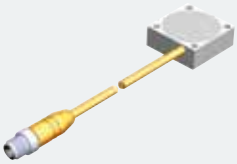
Devices in the REOVIB MFS 268 series are available with a max. output current of 3A, 6A, 8A, as IP20 versions for installation in switch cabinets, and also as IP54 case designs.
The IP54 housing can be supplied with various connection options:

- input cable/output cable
- input cable/output socket
- completely insertable with input plug and sensor sockets

REOVIB MFS 268-LCD are fitted with an LCD display.
The full-text display in various languages makes programming and adjustment easy and intuitive. Important status indications and settings can easily be input and retrieved.



REOVIB MFS 268 IP54
with heat sink, 6A)



Suitable sensor:
REOVIB SW as IP54 design



REOVIB MFS 268 IP20
CAN bus slave interface



REOVIB MFS 268 IP20
DeviceNet slave interface



REOVIB MFS 268 IP20
EtherCAT slave interface



REOVIB MFS 268 IP20
RS 232 interface

Optional UL-certified



REOVIB MFS 268 IP20 with Profibus DP field bus interface

Typical applications

- Conveyor & assembly automation
- Conveyor technology
- Sieving technology
- Abfüll- & Verpackungstechnik

Technical data

	MFS 268	MFS 268-LCD
Mains input	110 / 230V	110 / 230V autom. Detection
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz
Output voltage	0…100 V / 0…205 V	0…100 V / 0…205 V
Output current	max. 3 A / 6 A / 8 A	max. 3 A / 6 A / 8 A
Vibration frequency	5…150 Hz (Optional 300 Hz)	5…150 Hz (Optional 300 Hz)
Setpoint value	Display, Potentiometer, 0…10V, 0…20 mA	Display, Potentiometer, 0…10V, 0…20 mA
Status signal	Changeover relay 250 V, 1A	Changeover relay 250 V, 1A
Ext. Enable	24 V DC, Switch	24 V DC, Switch
Valve output	24 V, 150 mA (Option)	24 V, 150 mA (Option)
Sensor supply	24 V DC	24 V DC
Setting Umin / Umax	LED-Display	LCD-Display
Soft start	Adjustable 0…60 Sek.	Adjustable 0…60 Sek.
Fill level/overflow control	PNP, 24 V DC	PNP, 24 V DC
Coarse/fine control	x	x
Vibration amplitude regulation	x	x
Resonant frequency search	x	x
Selectable timer function	x	x
Sensor time out monitor	x	x
Mains voltage compensation	x	x
Field bus interfaces	RS232, Profibus-DP, CAN-Bus, DeviceNet, EtherCAT (Option)	RS232, Profibus-DP, CAN-Bus, DeviceNet, EtherCAT (Option)
Standard Conformity	UL (Option), CE, RoHS	UL (Option), CE, RoHS
Protection class	IP20 / IP54	IP54
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 321, WI 421, WI 621, WI 211, WE 131	

REOVIB MFS 268 HP

Frequency Controllers

RoHS COMPLIANT 2011/EG

Advantages

- **Idependant of the mains input frequency**
- **Able to automatically determine the resonant frequency of the vibratory conveyor system (with additional vibration amplitude sensor) and regulate the vibration amplitude and maintain a constant feedrate irrespective of load or changes in the mechanical system**
- **Field bus interfaces: ProfiBus, CAN-Bus, DeviceNet, EtherCAT, ProfiNet. (Optional)**
- **Available with UL/CSA approval (Optional)**
- **Conveyor frequencies adjustable between 5...300 Hz**
- **Mains voltage compensation with constant vibration amplitude**
- **All settings can be made using the integrated display**
- **Sinusoidal output current**
- **Can be used on 230 V or 400 V mains input**
- **User settings can be stored**
- **Fill level/overflow control**
- **Versions available in various protection classes and connector options**
- **MFS 269 HP is availble with AC output signal for use with permanent-magnet armature.**



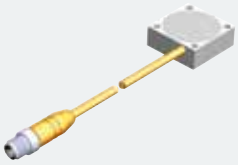
REOVIB MFS 268 HP IP20
(Version 230 V-
12/16 A)

REOVIB MFS 268 HP series

REOVIB MFS 268 HP

High-power version of the REOVIB MFS 268 frequency-control device, can be used for mains voltages of 400 V with max.
8 or 16A output current and for mains voltages of 230 V with max.
12, 16, 32A output current.
Available as IP20 versions for installation in control cabinets and also as IP54 standalone units for 230 V and 12/16A.

We are also delighted to offer you a suitable control cabinet system with client specific requirements.
Special designs of the REOVIB MFS 268 HP can also be implemented if required.



Suitable sensor:
REOVIB SW as IP54 design



REOVIB MFS 268 HP IP 20
(230 V - 32 A or 400 V - 16 A design)



REOVIB MFS 268 HP
(special design)



REOVIB MFS 268 HP
(As a complete control cabinet system)

*Optional UL-zertifiziert

Patented System



REOVIB MFS 268 HP IP54
(230 V - 12/16 A design)

Typical applications

- Conveyor & assembly automation
- Conveyor technology
- Sieving technology
- Filling & packaging technology

Technical data

	MFS 268 HP		
Mains input	115/230 V autom. Detection	115/230 V autom. Detection	230/400 V autom. Detection
Mains frequency	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz	50 / 60 Hz +/- 3 Hz
Output voltage	0…100/0…205 V	0…100/0…205 V	0…205/0…360 V
Output current	max 12/16 A	max. 32 A	max. 8/16 A
Vibration frequency	5…150 Hz	5…150 Hz (Optional 300 Hz)	5…150 Hz (Optional 300 Hz)
Setpoint value	Display, Potentiometer , 0…10V, 0…20 mA	Display, Potentiometer , 0…10V, 0…20 mA	Display, Potentiometer , 0…10V, 0…20 mA
Status signal	250 V changeover relay, 1A	250 V changeover relay, 1A	250 V changeover relay, 1A
Ext. Enable	24 V DC, Switch	24 V DC, Switch	24 V DC, Switch
Valve output	24 V, 150 mA (IP 54)	-	-
Sensor supply	24 V DC	24 V DC	24 V DC
Setting Umin / Umax	Display	Display	Display
Soft starting	Adjustable 0…60 Sek.	Adjustable 0…60 Sek.	Adjustable 0…60 Sek.
Material flow control	PNP, 24 V DC	PNP, 24 V DC	PNP, 24 V DC
Coarse/fine control	X	X	X
Vibration amplitude regulation	X	X	X
Resonant frequency search	X	X	X
Selectable timer function	x	x	x
Sensor time out monitor	x	x	x
Mains voltage compensation	X	X	X
Field bus interfaces	RS232, Profibus-DP, CAN-Bus, DeviceNet, EtherCAT (Option)	RS232, Profibus-DP, CAN-Bus, DeviceNet, EtherCAT (Option)	RS232, Profibus-DP, CAN-Bus, DeviceNet, EtherCAT (Option)
Standards conformity	CE, RoHS, UL/CSA (Option)	CE, RoHS	CE, RoHS
Protection class	IP20/IP54	IP20	IP20
Our experts suggest the following AC-Magnets:	WI 111, WI 121, WI 321, WI 421, WI 621, WI 211, WE 131		





Measuring equipment

Measuring equipment

REOVIB Measuring equipment

REOVIB measurement and monitoring devices are specially developed for vibratory conveyor technology. Starting from checking the current and voltage values of the conveyor, to recording relevant measured data for the development and construction of vibratory conveyors, onto monitoring the performance of a vibratory conveyor in operation, REOVIB measurement and monitoring devices offer a solution for every kind of task.

REOVIB Measuring equipment

Measuring equipment

Our measuring equipment:

- **Testbox 122: Analog measurement instrument for testing vibratory conveyors**
- **REOVIB 6050: Workshop equipment for assistance with development / design in the construction of vibratory conveyors**
- **REOVIB 6100: Workshop and diagnostic unit for development, construction and quality control of vibratory conveyors.**
- **REOVIB SWM 3000: Handheld instrument for testing vibratory conveyors.**
- **REOVIB SWM 1000: Acceleration and vibration amplitude sensors for vibratory conveyors**
- **REOVIB SWM 843: Monitoring device for vibrating feeders**
- **REOVIB BK 032: Monitoring device for vibrating feeders**



REOVIB SWM 3000

REOVIB measuring equipment

The REOVIB Testbox 122 is designed to provide accurate indications of voltage and current, when servicing and testing vibratory conveyors.
The devices are fitted with moving-iron meters and external connectors are provided to allow fast and safe connection of the feeder and controller.

The REOVIB SWM 3000 handheld measurement unit is used to set up, test and service vibratory conveyor equipment. As a battery powered hand-held device, it is particularly suited for mobile work. Frequency [Hz], vibration amplitude [mm], vibrational velocity [cm/s] and vibrational acceleration [g] can be measured with an acceleration sensor. The values are indicated on the integrated LCD display is and can also be stored in the equipment (40 measured values). These stored data can be transmitted to a PC as an xls file via the built-in serial interface for further evaluation.

The REOVIB SWM 1000 sensor is designed to monitor vibratory feeders. The sensor measures the acceleration of a magnetically or motor driven vibrating feeder and supplies 0 (4)… 20 mA outputs for vibrational acceleration [g] and vibration amplitude [mm]. The output of the sensor can be connected directly to a measuring instrument (with 0 (4)… 20 mA input) or to a PLC controller for evaluation or monitoring.

The REOVIB 6050 workshop device contains a REOVIB MFS frequency controller for vibratory conveyors and has been specially developed for use in servicing, construction and design of vibratory conveyors. For rapid control, the desired value of vibration amplitude is adjustable by means of a potentiometer and an integrated ammeter provides indication of the feeder running current.

REOVIB 6100 workshop and diagnostic unit is a microprocessor-controlled device. An integrated REOVIB MFS frequency units controls the feeder, while simultaneously determining vibration frequency [Hz], vibration amplitude [mm], vibrational velocity [cm/s] and vibrational acceleration [g]. The values are shown on the integrated LCD display and can also be stored in the equipment (40 measured values). This stored data can be transmitted to a PC as an xls file via the built-in USB interface for further evaluation. The operating frequency of the conveyor can be set manually or can be determined independently using a vibration amplitude sensor with an automatic frequency search.

The REOVIB SWM 843 monitoring device measures and displays the vibration performance of vibratory feeders. The vibration is monitored using an accelerometer and the instantaneous measured values are indicated on the five-digit seven-segment display, as a value of acceleration [g], vibration amplitude [mm] or vibration frequency [Hz]. The acceleration value is also provided as a 0 (4)… 20 mA analogue output for direct connection to a measurement instrument, or for connection to an external measurement device e.g. a PLC controller for evaluation or monitoring.

The REOVIB BK 032 is a monitoring device which measures the vibration behaviour of vibratory feeders. This evaluation device when used in conjunction with an acceleration sensor, allows an acceptable window of operation to be established using adjustable maximum and minimum limits. If operation outside of this window occurs, which could signal a mechnical problem for example, a associated relay switches over which can be used to trigger an external alarm.



REOVIB 6050



REOVIB Messbox 122



REOVIB SWM 843



REOVIB SWM 1000



REOVIB 6100

Technical data

	Messbox 122	REOVIB 6050	REOVIB 6100	SWM 3000
Description	Analog instrument with moving-iron meters	Workshop equipment used for servicing and manufacturing of vibratory conveyors	Workshop and diagnostic equipment used for the development, construction and quality control of vibratory conveyors	Hand-held instrument for checking and testing vibratory conveyors
Function	Measurement of current and voltage of the drive system	Driving the conveyor with a frequency controller, determining the resonant frequency, measurment of the solenoid current.	Driving the conveyor with a frequency controller, determining the resonant frequency, measurement of the magnet current. Measuring acceleration, vibration amplitude, vibration frequency and theoretical conveyor speed	Independent measurement of vibration frequency, vibration amplitude, vibrational acceleration, and vibrational velocity. No drive

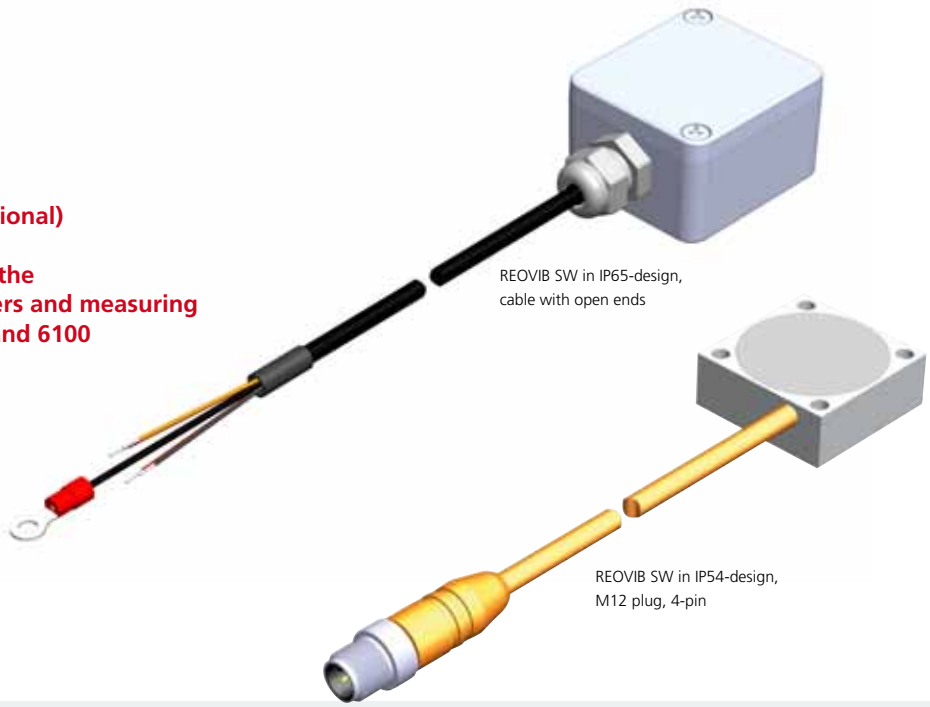
REOVIB Measuring equipment

	SWM 1000	SWM 843	REOVIB BK 032
Description	Acceleration and vibration amplitude sensor for vibrating feeders	Monitoring device for vibrating feeders	Monitoring device for vibrating feeders
Function	Independent measurement of vibration amplitude and vibrational acceleration. An analogue measured value of each is output for display on a measuring instrument or for monitoring by a PLC	Measurement of frequency, amplitude or acceleration. Display of the measured value on an integrated LED display. Output of an analogue measurement signal. Relay outputs to show that adjustable min. and max. values of acceleration have been reached	Measurement of the acceleration of vibrating feeders. Relay outputs to show that adjustable min. and max. values of acceleration have been reached.

REOVIB Measuring equipment

Vorteile:

- **Aluminum housing**
- **Low-cost versions available**
- **Designed for harsh environmental conditions (optional)**
- **Light weight**
- **Plug + Play functionality with the REOVIB MFS 168+268 controllers and measuring devices REOVIB REOVIB 6050 and 6100**



REOVIB SW in IP65-design, cable with open ends

REOVIB SW in IP54-design, M12 plug, 4-pin

REOVIB Accelerometers

Technical data

Protection class	IP65 (die-cast aluminium)						IP65 (die-cast aluminium)
Connection type	Cable with open ends						M12 plug, 4-pin
Types	SW 07	SW 80	SW 40	SW 41	SW 42	SW 09	SW 85
Measurement signal [mV/g]	300	300	600	600	600	2000	300
Frequency range [Hz]	30…150	30…150	10…60	10…60	10…60	5…20	30…150
Cable length [m]	5	16	5	10	15	2	5

Protection class	IP54 (aluminium encapsulation)							
Connection type	Cable with open ends							
Types	SW 61	SW 12	SW 10	SW 22	SW 50	SW 53	SW 15	SW 51
Measurement signal [mV/g]	100	300	300	300	300	300	300	300
Frequency range [Hz]	60…250	30…150	30…150	30…150	30…150	30…150	30…150	30…150
Cable length [m]	5	1	2	2,5	5	5	10	10

Protection class	IP54 (aluminium encapsulation)							
Connection type	Cable with open ends							
Types	SW 52	SW 54	SW 30	SW 29	SW 28	SW 27	SW 26	SW 14
Measurement signal [mV/g]	300	300	600	600	600	600	600	2000
Frequency range [Hz]	30…150	30…150	10…60	10…60	10…60	10…60	10…60	5…20
Cable length [m]	15	30	2	3	5	10	15	10

Protection class	IP54 (aluminium encapsulation)										
Connection type	M12 plug, 4-pin										
Types	SW 62	SW 66	SW 70	SW 69	SW 71	SW 68	SW 67	SW 72	SW 73	SW 74	SW 75
Measurement signal [mV/g]	100	150	300	300	300	300	300	600	600	600	600
Frequency range [Hz]	60...250	60...200	30...150	30...150	30...150	30...150	30...150	10…60	10…60	10…60	10…60
Cable length [m]	5	2	2	3	5	10	15	2	5	10	15

RoHS COMPLIANT 2011/EG

Advantages:

- **Straightforward plug and socket solutions for**
- **REOVIB control and measuring equipment**
- **Various versions (straight/90° angle)**
- **Various types of material (metal, plastic)**



Output plug, black, 90° angle

REOVIB connection accessories

Technical data

	Output plug	Input connector	Sensor plugs
Material	Plastic, grey	Plastic, grey	Plastic, grey
	Plastic, black	Plastic, black	Plastic, black
	Metal	Metal	Metal
Version	Straight	Straight	4 pin M12
	90° angle	90° angle	5 pin M12



Input connector grey, 90° angle



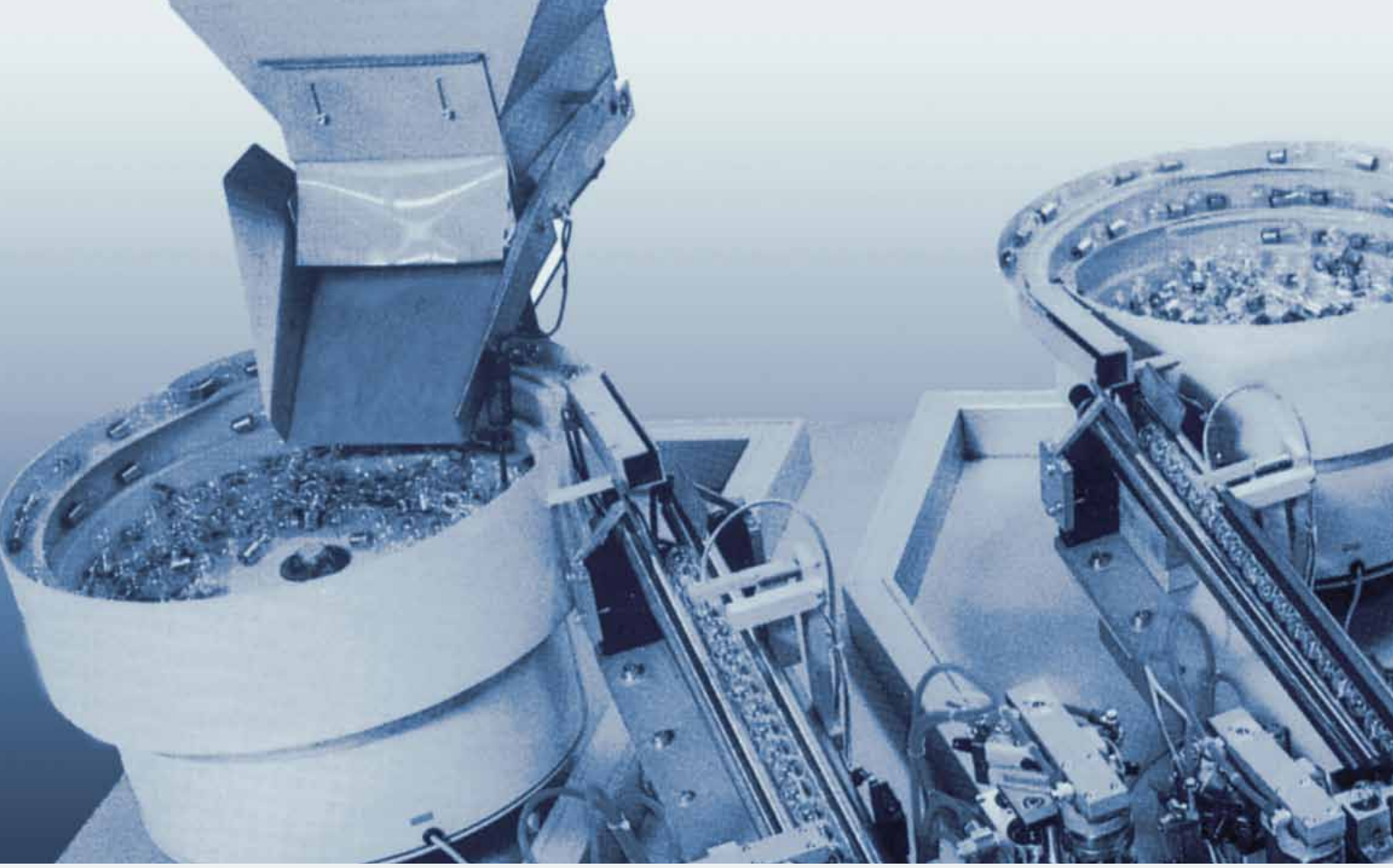
Sensor plug 5 pin M12



Input coupling metal, straight



Sensor plug 4 pin M12





AC magnets

AC magnets

REOVIB AC magnets

AC magnets are intended for installation in vibratory conveyor systems used in material feeding and conveyor technology. A complete vibrating magnet consists of the core carrying the winding and the associated armature.

The vibrating magnet and the armature, together with the spring system, form the actual drive of the vibratory conveyor. The weight proportions of the static and vibrating masses, together with the spring force, result in a resonant vibratory system. Vibratory conveyors can therefore only work in a relatively small frequency range around the point of resonance. All components of the complete drive must be tuned to this frequency. It is important that the vibrating magnet is also to be designed for the right electrical frequency, otherwise the electrical power of the magnet will not be used efficiently or the magnet will be overheated by an excessively high current.

Most vibratory conveyors traditionally operate using control units which have the same or twice the vibration frequency as the supply voltage (50 Hz or 100 Hz in Europe and Asia, 60 Hz or 120 Hz in America). In addition to statements of frequency in Hz, industry specific terms such as full-wave (6000 vibrations/minute) or half-wave (3000 vibrations/minute) are often used to describe the vibration frequency.

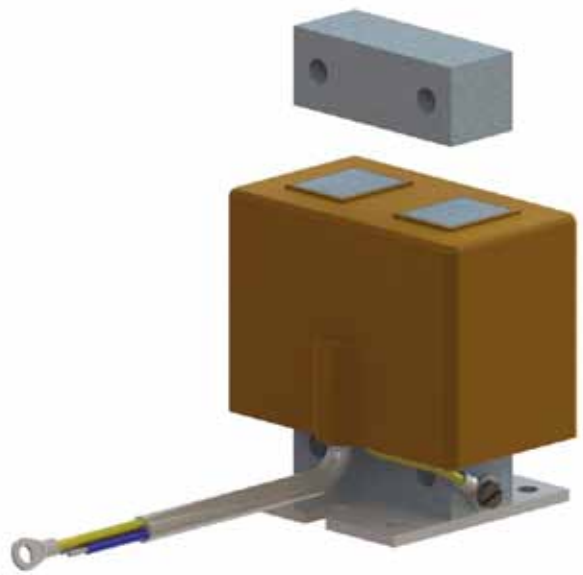
Low-frequency vibratory systems with vibration frequencies typically between 15 and 25 Hz are also used for special applications (to ensure product flow); these systems must be controlled with special frequency converters (REOVIB MFS).
The important thing is that the mechanical vibration frequency of the conveyor system and the type of drive control (output voltage from the control unit) be taken into consideration in the electrical design of AC magnets.

REOVIB AC magnets

RoHS COMPLIANT 2011/EG

Advantages:

- **Power from 5 VA to 4000 VA**
- **Corrosion protection can be provided for use in the food and pharmaceutical industries**
- **Full-wave or half-wave or with changeover between full- and half-wave**
- **All AC magnets are fully encapsulated**
- **Liquid-cooled versions**



Standard REOVIB WI 111 series (design with base plate)

REOVIB AC magnets

AC magnets in the REOVIB WI 111 series can be used with a vibration frequency of 3000 1/min (half-wave) or 6000 1/min (full-wave). The AC magnets are fitted with a standard core and achieve a max. power of 350 VA.

AC magnets in the REOVIB WI 121 series are low profile, they can also be operated on full- or half-wave, and achieve a max. power of 3900 VA.

The REOVIB WI 321 series is designed for use in low-frequency vibratory systems.
The magnets have a maximum power of 2200 VA (full/half-wave).

The REOVIB WI 421 series is nickel-plated and provides corrosion protection that makes it suitable for use in food and pharmaceutical production areas. The magnets achieve maximum power of 1360 VA.

Our novel method of powder coating of the **REOVIB WI 621** provides corrosion protection which conforms to FDA standards.
The AC magnets achieve a power of up to 3900 VA.

You can find the whole range of AC magnets in our new catalogue!





WI 121



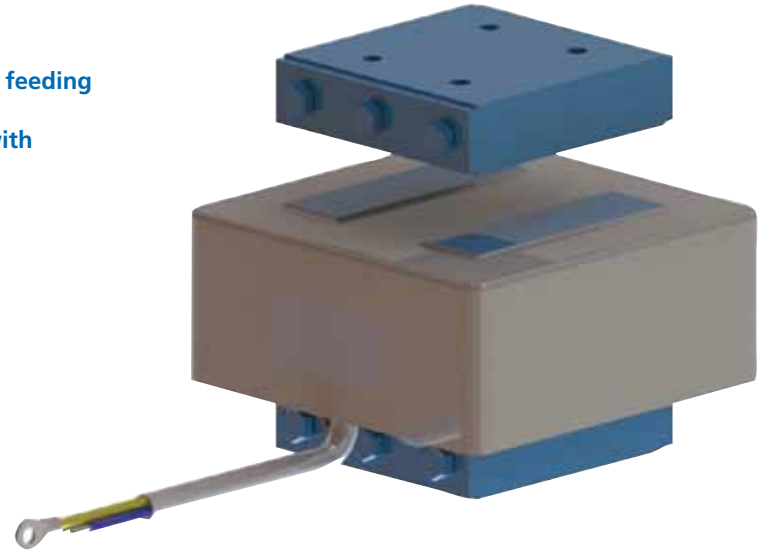
WI 321



WI 421

Typical applications

- **Packaging and weighing industry for feeding and sorting operations**
- **Automation processes using drives with AC magnets**



Standard REOVIB WI 621 series

Technical data*

	REOVIB WI 111	REOVIB WI 121	REOVIB WI 321	REOVIB WI 421	REOVIB WI 621
Power at 3000 1/min	15 - 350 VA	280 - 3900 VA	-	156 - 1265 VA	280 - 3900 VA
Power at 6000 1/min	15 - 350 VA	320 - 3000 VA	-	276 - 920 VA	320 - 3000 VA
Power at 900 1/min	-	-	80 - 1600 VA	78 - 1160 VA	80 - 1600 VA
Power at 1500 1/min	-	-	104 - 2200 VA	134 - 1360	1014 - 2200 VA
Peak tractive power at nominal air gap	5 - 110 N	142 - 6900 N	229 - 8580 N	110 - 8000 N	142 - 8580 N
Nominal air gap	1 - 3 mm	1 - 3 mm	3 mm	3 mm	2 mm
Therm. nominal current	0,065 - 1,5 A	1,2 - 16,9 A	0,4 - 11 A	0,62 - 8 A	0,4 - 16,9 A
Weight of magnet	0,135 - 1,98 kg	2,1 - 28 kg	2,1 - 28 kg	2,1 - 28 kg	2,1 - 28 kg
Weight of armature	0,025 - 0,33 kg	0,34 - 9 kg	0,34 - 9 kg	0,34 - 9 kg	0,34 - 9 kg
Control equipment	REOVIB Smart, RTS, MTS, MFS	REOVIB Smart, RTS, MTS, MFS	REOVIB MFS	REOVIB Smart, RTS, MTS, MFS	REOVIB Smart, RTS, MTS, MFS
Corrosion protection	-	-	-	Vernickelung	Pulverbeschichtung

REOVIB AC magnets

*** Power figures from - to, depending on the design of the series**

Selection guidelines for your REOVIB

Can't find what you are looking for?
No problem!
Simply complete the guideline below, tear it off and send it by e-mail or fax to:

info@reo.de – +49 (0) 212 8804-188

Selection guidelines for your REOVIB control equipment

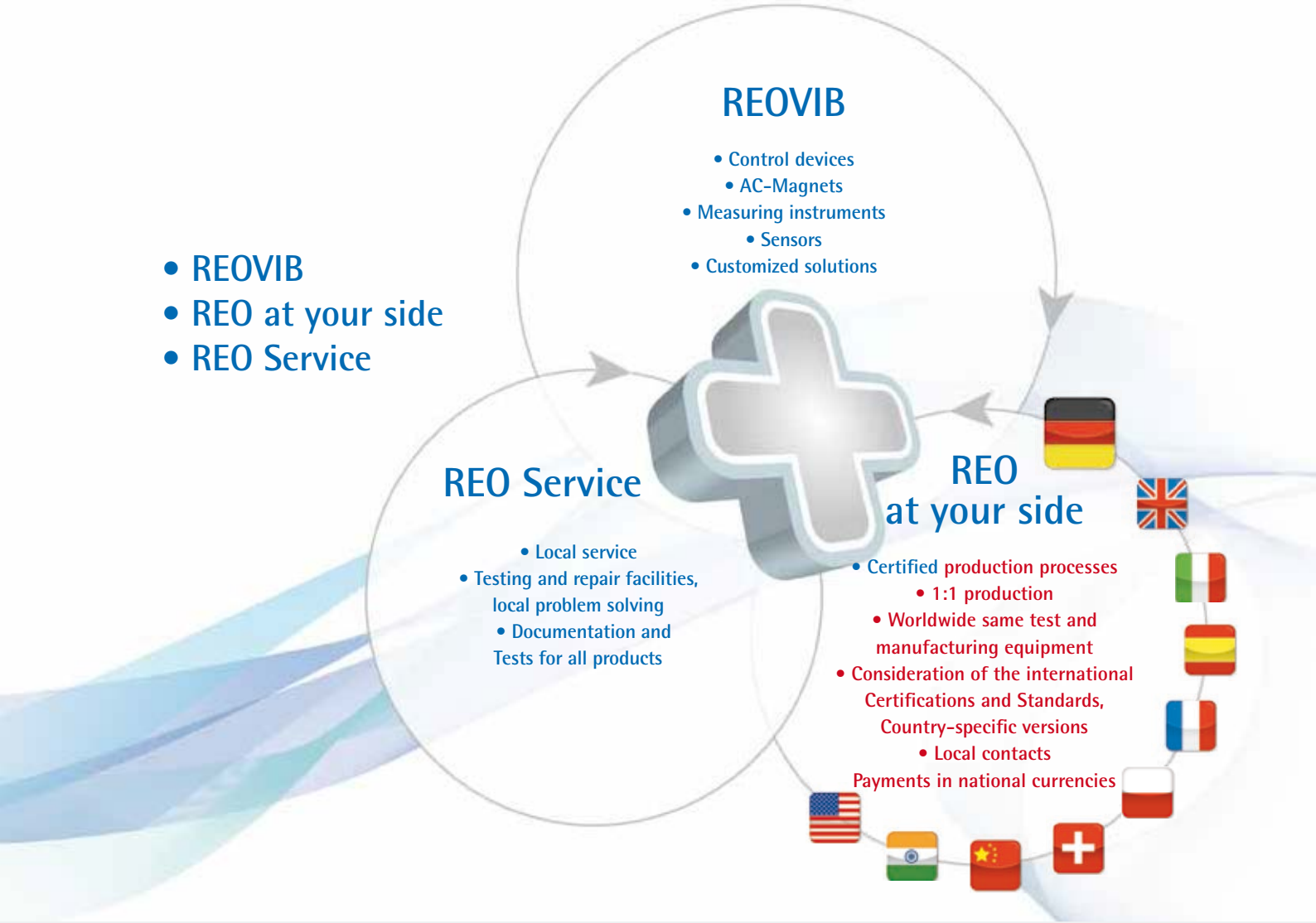
Types of control equipment	Selection	Remarks
Phase-angle control	☐	
Frequency Controller	☐	
Mechanische Ausführung		
Housing version	☐ IP 54 Input cable/output cable	
	☐ IP 54 Input cable/output socket	
	☐ IP 54 Complete cable connector v(Plug and Vib)	
Versions for installation in control cabinets	☐ IP20	
Circuit-board versions	☐ IP00	
Electrical input data		
Input voltage	☐ 110 V	
	☐ 230 V	
	☐ 240 V	
	☐ 400 V	
Input frequency	☐ 50 Hz	
	☐ 60 Hz	
Electrical output data		
Total output current (magnet data)	_____A	
Total output power (magnet data)	_____VA	
Mechanical vibration frequency	☐ 50 Hz	
	☐ 60 Hz	
	☐ 100 Hz	
	☐ 120 Hz	
	☐ 35...140 Hz	
Additional functions		
Fill level/overflow control	☐	
Vibration amplitude regulation (frequency-controllers only)	☐	
Enable input	☐ Contact	
	☐ 24 V DC	
Desired setpoint input	☐ 0...10V	
	☐ 0...20 mA	
	☐ 4...20 mA	
Communications (fieldbus) interface	☐ Profibus	
	☐ Device-Net	
	☐ CAN-Bus	
	☐ Ether-CAT	
	☐ RS 232	

Further information (e.g. test voltage, certifications, assembly guidelines, mechanical requirements):

Number of units

Company	Contact
	Department
Street	Telephone
Place	Fax
Post code	E-mail
Internet	Date

Worldwide sales network



Worldwide Sales Network

With a worldwide sales network and comprehensive product portfolio, REO can react rapidly to your wishes anywhere in the world - no matter what language you speak. Besides our wide selection of standard products, we can of course offer you tailor-made solutions, developed specially to meet your wishes. Our production facilities in China, India and the USA are equipped in exactly the same way as those in Germany, and designed to provide the same product at the same quality. Using the same software and with with development and design in Germany we ensure that REO products are always up to the latest state of the art.

Wherever you are, even after the 1000th production run, a REO product always has the same quality.


REOVIB 6025
REOVIB 6035
www.reo.de

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