Herkules RESOTEC
Elektronik GmbH

REMOD

Operating modules with push buttons and rotary pulse generators

OM 2032-F
OM 2032
OM 2008
OM 2002

With the system of the REMOD series you can simply, fast and economically realize your operating structure for a wide range of applications.

For single machine operation or decentralized stations within large manufacturing lines, the modules guarantee fastest interaction with your process and increase your flexibility in machine and plant control.

- Easy installation, ready to use, individual labelling
- Integrated switch for Industrial Ethernet
- Robust short-stroke keys, rotary encoder with scalable grid
- Up to 60% time saving during mounting and installation compared to single keys
- Five-color LED luminous keys with adjustable brightness, energy-efficient and durable
- F-variant incl. safety functionality for emergency stop or other fail-safe signals via PROFIsafe
- Simple control with high functionality via optional industrial networks and fieldbus systems
- Direct connection to control and signal devices
- System assembling by modular extensions
- Designed for rough industrial environments with extended temperature, durable and maintenance-free
- Compact design with high-quality materials and components
- Quick exchange without new programming, high process availability
- Optimized for low power consumption

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Herkules RESOTEC
Elektronik GmbH

Herkules-Resotec Elektronik GmbH
Eisenstraße 7
D-34225 Baunatal
Phone +49 561 / 94987-0
www.herkules-resotec.de
info@herkules-resotec.de

Subject to technical changes

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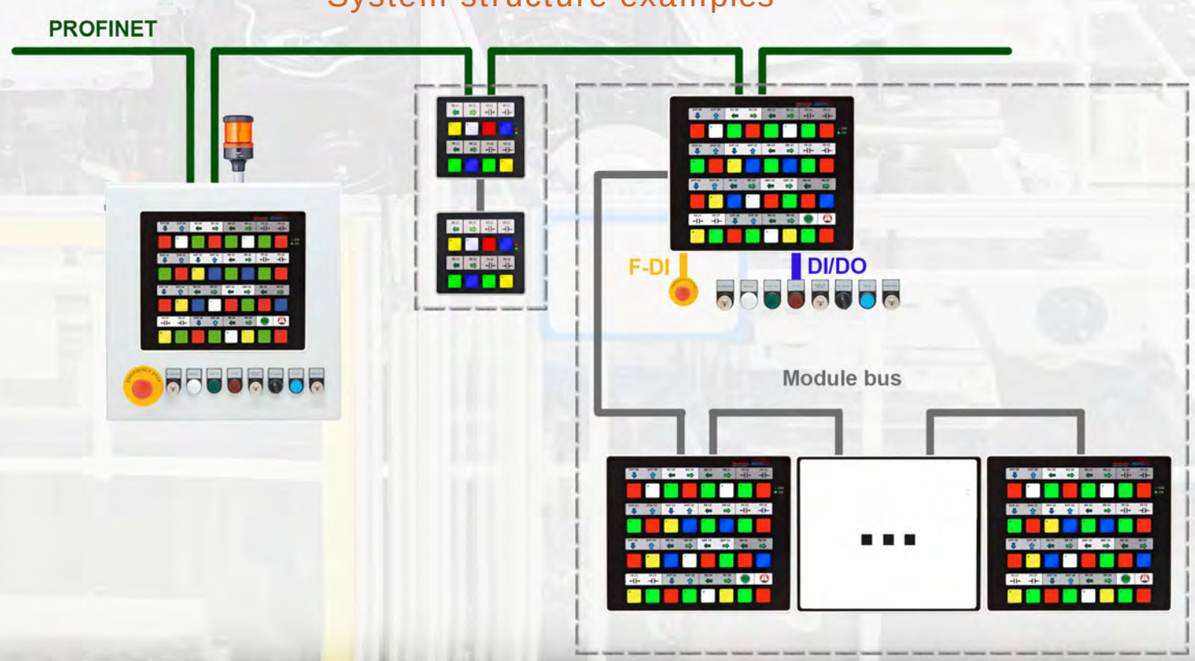
Flexible operation - modular combination

Various interfaces - safety integrated

PROFINET
PROFIsafe
EtherNet/IP
PROFIBUS
Modbus
EtherCAT

System structure examples



Background image: Volkswagen AG

Special strengths

Quality pays off

Applications

Conveyor systems

Plants with extensive transport routes require numerous operator panels, each for a designated area to overview, and all together for uninterrupted production.
Examples within the automobile production are electric trailer lifts, skid conveyor systems or moving platforms, including lifters for transportation in various hall levels.

The REMOD operation modules are best suited for this purpose. Cost-effective, quickly put into operation, maintenance-free and easy to replace in the event of a fault.

Machines and production cells

Many self-sufficient machines are also operated via key modules.
Whether a new design, exchange of older modules or retrofit from single buttons are required.

The REMOD operation modules offer an enormous potential regarding saving time and costs in comparison to single wired push buttons.

Process equipment

Complex production lines with linked process steps require decentralized operating units in addition to a central operating and visualization system. They support the set-up and operation of the plant.

The REMOD system with its flexible system structure is best prepared for this.

In-house logistics

The supply of material or even the flexibility of transport of the goods to the very production area experience an increase of automation to a high degree.

One example is driverless transport systems or automatic guided vehicles (AGV). For this, the compact modules can be installed in both the vehicles itself and the central communication station. This easy to use solution is very flexible in case some requirements change within the logistic chain.

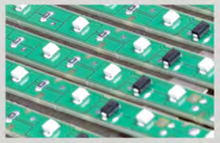
Development and production at the same location

Our products bear the label Made in Germany. A dedicated and highly motivated team works to complete the product process. From development to own manufacturing and service plus support you get all from one hand.

Made
in
Germany

Quality-awareness

High-quality components ensure reliable long-term operation in industrial environments.



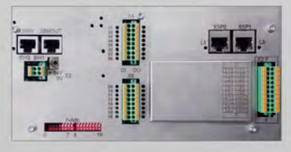
Electronic components

Aluminum front

Stainless steel housing

Application oriented

Our systems are designed for a practical application in automation systems. We pay attention to details and value the easy, simple and efficient handling for the user - both during installation and operation.



Connection diversity

Insertion strips

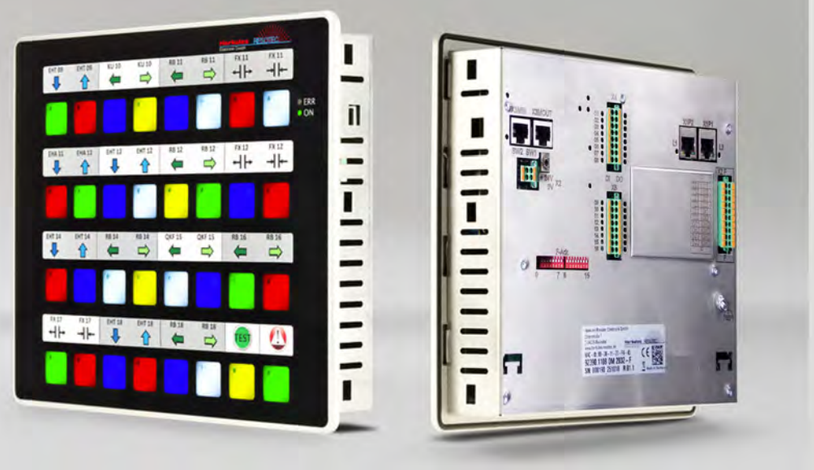
Environment awareness

All our products are developed and manufactured according to the current quality and environmental standards. Sophisticated production processes ensure an environmentally friendly production.

The REMOD systems contain energy-efficient LEDs according to the latest technology standards. The operating modules are designed for a low-cost operation by means of a minimum current consumption, thus ensuring low operating costs for the machines and systems

LED technology

Energy efficiency



Very easy

Projecting and installlation

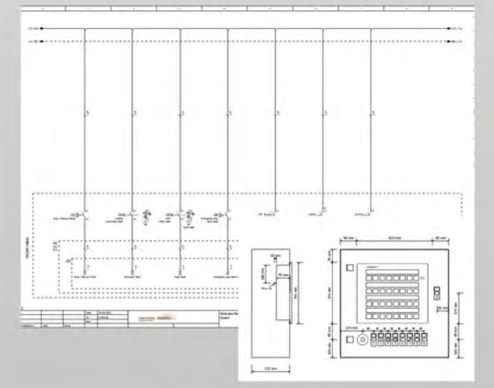
The REMOD operation modules are installed and ready in a short time with only a few steps

For example OM 2032 with PROFINET®-IO

1. Hardware construction

Here, the control unit is inserted into the circuit diagram of the system. The device requires only the connections to the power supply and the network cable. Command- and signaling devices are placed directly to the digital inputs and outputs.

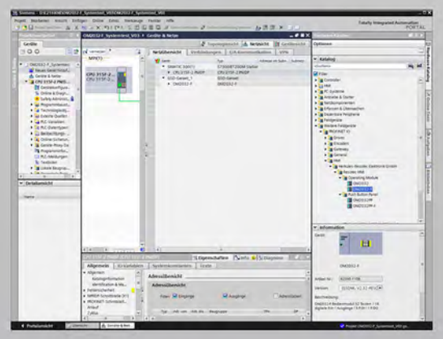
The device is installed in a control box or control cabinet mounted by mounting clamps.
Only a rectangular cut-out is required.



2. Integration into the PROFINET® system

The device is transferred into the PROFINET®-System via the associated configuration file (GSDML)

Steps: Install the device, assign IP adress and device name. Address areas for keys and inputs / outputs - ready



3. Signal processing in the PLC

After the PROFINET® configuration has been carried out in step 2, all signals of the OM 2032 are available in a defined I/O area of the PLC.

Now you only need to process these signals in the program of the plant as required. To make this easier you can also use ready-made function blocks.

Technical Data

	 OM 2032-F	 OM 2032	 OM 2008	 OM 2002
Operating elements				
Short-stroke keys	32	32	8	2
LED 5-colored	32	32	8	2
Status LED red	32	32	8	2
Rotary pulse encoder	-	-	-	2
Interfaces				
Resotec module bus	yes			
Digital I/O	16/16	16/16	-	-
Fail-safe digital I/O, each with 2 channels	3/1	-	-	-
Fieldbus interfaces				
PROFINET® IO Device[1)]	yes	yes	yes	-
Modbus® RTU[5)]	-	-	yes	yes
Ethernet/IP® Device [3)]	-	yes*	yes	-
PROFIBUS®-DP Slave [2)]	-	yes	yes	-
EtherCAT® Slave [4)]	-	yes	-	-
Electrical Connection				
Power supply	24 V DC, -15 % to +20 % acc. to EN 61131-2			
Current drawn	<300 mA	<300 mA	<100 mA	<100 mA
Power consumption	Approx. 7,5 W	Approx. 7,5 W	Approx. 2,5 W	Approx. 2,5 W
Protection				
Front	IP 65			
Rear	IP 20			
Environmental Conditions				
Operating temperature	0 to 55 °C			
Storage temperature	-20 to 60 °C			
Relative humidity	<80 %			
Housing				
Overall dimensions (W x H) in mm	240 x 204	240 x 204	125 x 115	125 x 115
Cut-out dimensions (W x H) in mm	226^{-2} x 190^{-2}	226^{-2} x 190^{-2}	115^{-2} x 105^{-2}	115^{-2} x 105^{-2}
Mounting depth	Approx. 50 mm without connector			
Front panel	Aluminum front panel with design foil			
Housing lid	Stainless steel			
Weight in kg	Approx. 1,2	Approx. 1,2	Approx. 0,5	Approx. 0,5

* in preparation