KOHLER POWER SYSTEMS

Converter Modbus®/Ethernet

ISO 9001 KOHLER POWER SYSTEMS NATIONALLY REGISTERED

Applicable to the Following Kohler® Controllers:

Decision-Maker™ 550 generator set controller

Decision-Maker™ 340 generator set controller

Decision-Maker™ 3+ generator set controller w/communications

MPAC™ 1000 automatic transfer switch controller

M340 and M340+ automatic transfer switch controllers

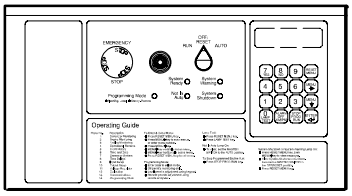
PM340 Power Monitor

Standard Features and Functions

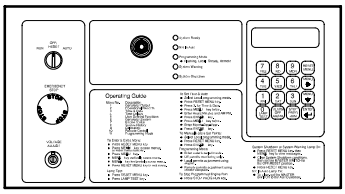
- Converts Modbus® RTU protocol to Modbus® TCP/IP for communication via an Ethernet network.
- A single converter can support one or more controllers in an RS-485 network.
- Software (included) programs IP address and configures communication parameters.
- LEDs indicate status:
  - Power
  - Data received
  - Data transmitted
- NEMA type 1 enclosure
- Standard RJ45 jack for Ethernet connection
- Terminal block for RS-485 Modbus® connection
- Baud rate:
  - Selectable 9600 or 19.2k on Modbus® RTU side
  - Standard 10/100 Ethernet
- FCC Class A compliant
- Universal AC power adapter included

Modbus® is a registered tradmark of Schneider Electric.

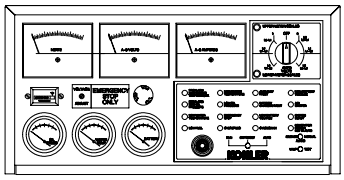
Applicable Controllers



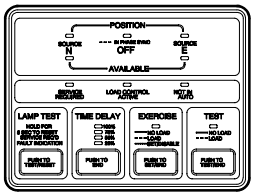
Decision-Maker™ 550
Generator Set Controller



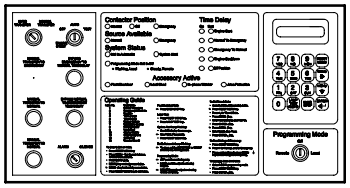
Decision-Maker™ 340
Generator Set Controller



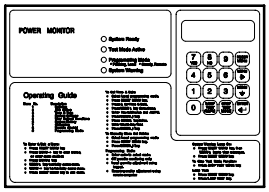
Decision-Maker™ 3+
Generator Set Controller



MPAC™ 1000
Transfer Switch Controller



M340+ Transfer Switch Controller
(shown with available options)



PM340 Power Monitor

Specifications

Environmental Specifications	
Operating Temperature:	
Converter module	-40° to 70° C (-40° to 158° F)
Optional AC adapter	0° to 40° C (32° to 104° F)
Storage temperature:	
Converter module	-40° to 85° C (-40° to 185° F)
Optional AC adapter	-20° to 85° C (-4° to 185° F)
Humidity	5% to 95% non-condensing

Application Data	
Connections:	
Modbus RTU	Terminal block *
Ethernet	Standard RJ45 jack †
Power:	
Supply voltage	10-30 VDC or 120 VAC ‡
Maximum power draw	2 W

* Belden #9841 or equivalent shielded twisted-pair cable recommended, not supplied.

† Mating connector and cable not supplied

‡ Universal AC adapter provided.

Dimensions and Weight			
Dimensions mm (in.)	L *	W	H
	111.1 (4.4)	78.8 (3.1)	31.8 (1.25)
Weight kg (lb.)	0.45 (1 lb.)		

* Length includes 13 mm (1/2 in.) mounting tabs

Ethernet Networks

Many facilities use Ethernet networks to connect computers and equipment. The Modbus®/Ethernet converter can be used to connect a single power system device or network of devices to an existing Ethernet network. Any remote PC connected to that Ethernet network can then monitor the device(s).

A single converter can provide an Ethernet connection to an RS-485 network. See Figure 2. Multiple devices are connected together using RS-485 connections and connected to the Ethernet network through the Modbus®/Ethernet converter. The converter is assigned a unique IP address to identify the connected device or network of devices.

The PC can be located anywhere the site's Ethernet network can be accessed. The PC used to monitor the device(s) must be equipped with a network interface card (NIC). Setting up the Ethernet network and connected computers is the responsibility of the user.

Alternatively, multiple converters can be used to connect individual devices or multiple device networks to the Ethernet. See Figure 3.

Ethernet Connections

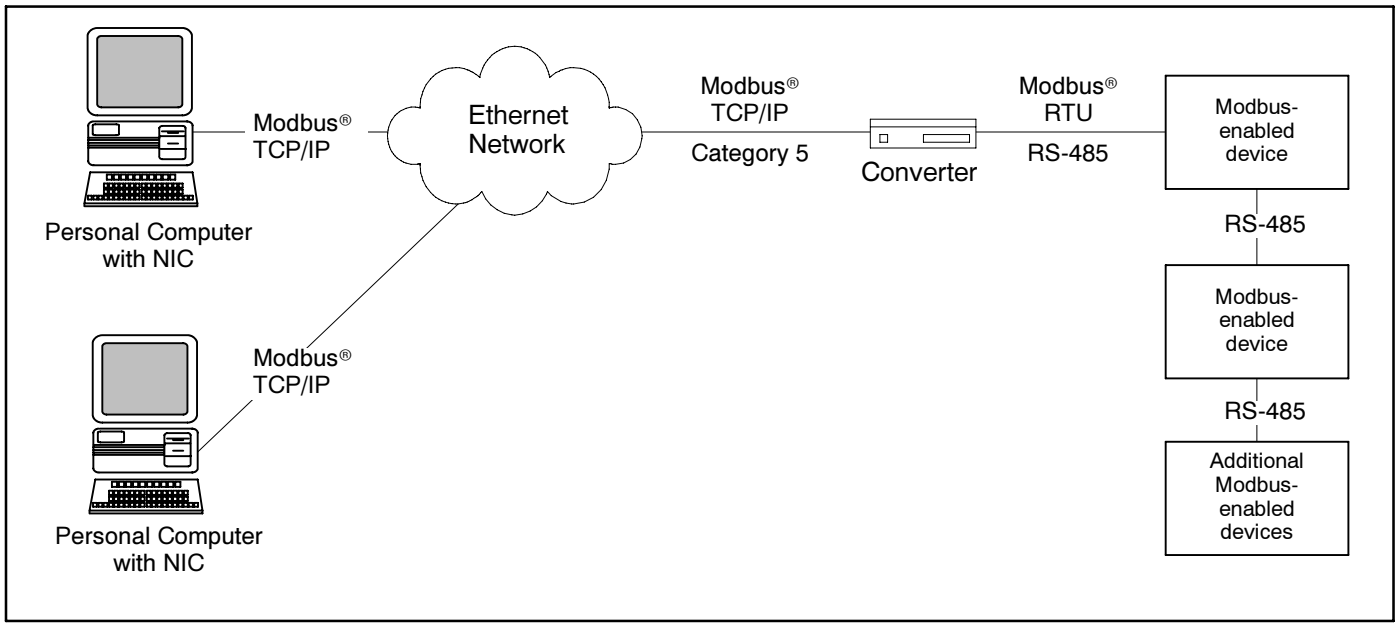


Figure 2 Single Converter Connected to an RS-485 Network

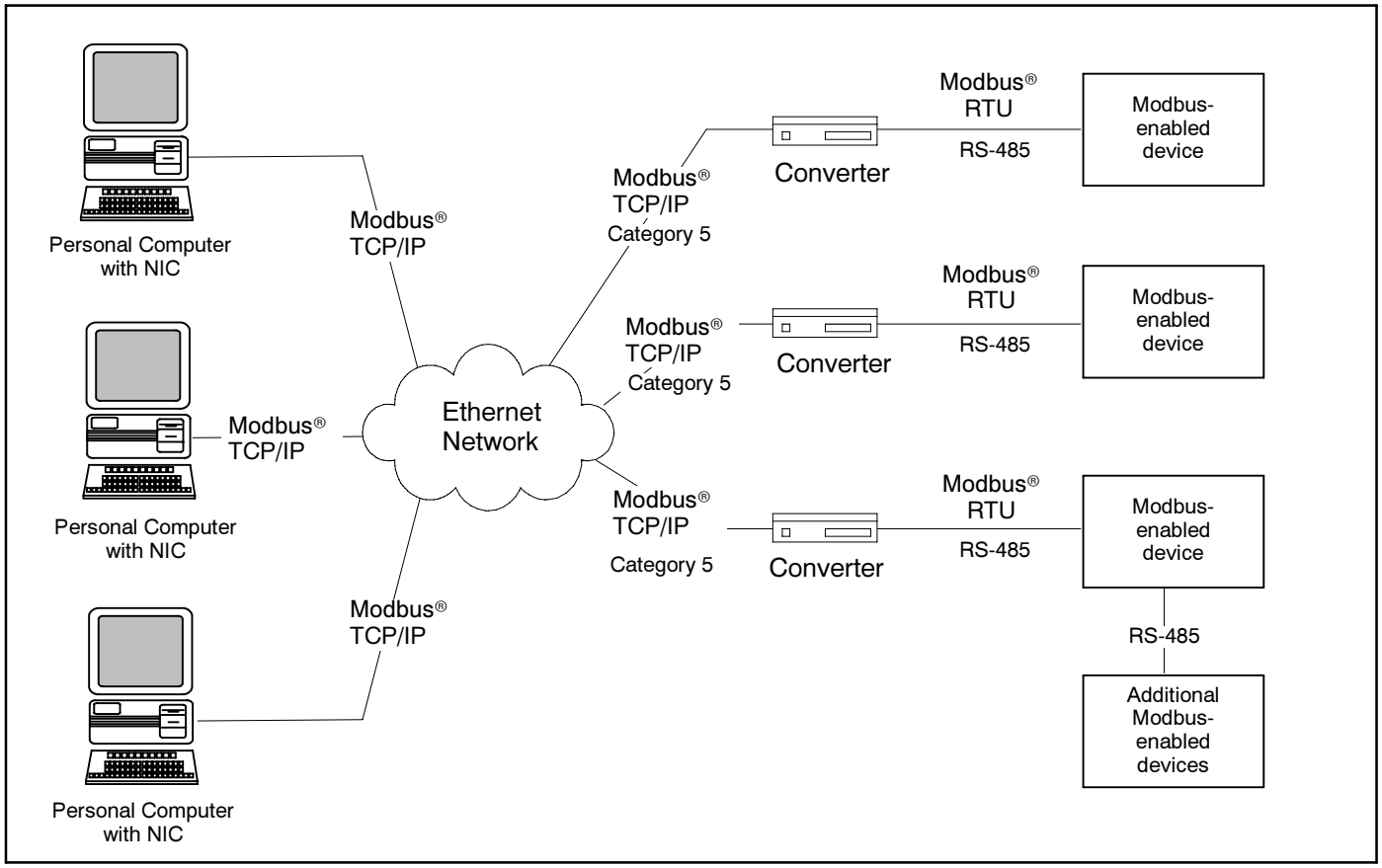


Figure 3 Multiple Converters

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Phone 920-565-3381, Fax 920-459-1646
For the nearest sales and service outlet in the
US and Canada, phone 1-800-544-2444
KohlerPowerSystems.com

Kohler Power Systems
Asia Pacific Headquarters
7 Jurong Pier Road
Singapore 619159
Phone (65) 6264-6422, Fax (65) 6264-6455

Communication Products and Accessories

- ❑ Modbus®/Ethernet converter kits (required for Ethernet connections) (GM41143-KP2)
- ❑ Modbus®/KBUS converter kits* for the following devices (required for Modbus® communication) (GM41143-KP3):
  - ❑ Decision-Maker™ 340 generator set controller
  - ❑ M340 and M340+ transfer switch controller
  - ❑ PM340 power monitor
- ❑ Modbus® communication board for Decision-Maker™ 3+ generator set controllers (required for Modbus® communication) (GM32644-KA1/KP1)
- ❑ RS-232/RS-485 port converter (GM41143-KP1)
- ❑ Monitor III software kit with hardware key (GM41141-KP1)
- ❑ Monitor III software kit with hardware key and 60 Hz device modem (GM41141-KP2)

* Modbus®/KBUS converter kits are not required for the Decision-Maker™ 550, Decision-Maker™ 3+, or MPAC™ 1000 controller.

DISTRIBUTED BY:

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