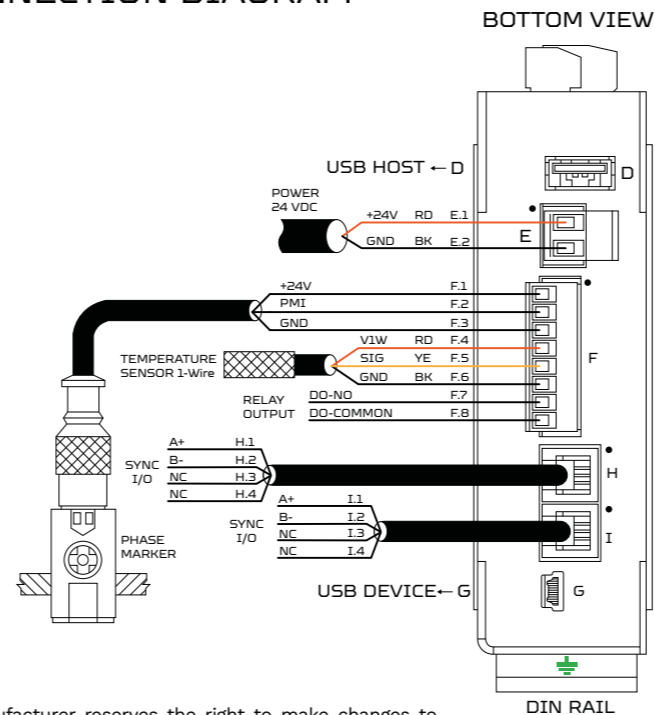


CONNECTION DIAGRAM



The manufacturer reserves the right to make changes to the guide. The latest and valid version of this document is the electronic version available on elmodis.com/downloads

23.08.10



ELMODIS

WE MAKE INDUSTRY SMARTER

SDMS-MMS

Electro Module

Quick Reference Guide

ELMODIS Sp. z o.o.
www.elmodis.com

Aleja Pokoju 1
31-548 Kraków, Poland

elmodis@elmodis.com
tel. +48 531 507 668

The SDMS-MMS device is part of the Elmodis system for monitoring of machines driven by induction electric motors. The device provides measurement of AC electrical parameters: current and voltage and optionally RPM/shaft angle of the monitored machine. Measured, collected, processed raw values and KPIs are sent to the cloud/host environment. The SDMS-MMS has an Ethernet TCP/IP interface used for local data distribution and sharing informations to the Elmodis cloud based app.

MAIN FEATURES

- Direct connection of motor supply voltage measurement (3 phases)
- Motor current measurement connection via Rogowski coils transducers (3 phases)
- Connection of rotation sensor signal (inductive or photoelectric sensor)
- Input/output for synchronizing measurements with other modules
- Ethernet interface
- Support for MQTT and MODBUS TCP/IP protocol
- Two-state output (relay)
- Power supply 24 VDC
- DIN rail mounting

SAFETY



Installation can be performed only by qualified personnel.

Before starting installation work, read the installation and commissioning manual of the ELMODIS system. Before starting installation work, it is strictly required to turn off the electrical power supply in the switchgear of the machine at which the Elmodis system is installed. Not complying with the above requirement may result in an electric shock dangerous to humans. During installation, take special care not to damage existing equipment or interrupt its operation.



The symbol designating selective collection of electronic equipment. It is forbidden to dispose used equipment with other waste.

Symbol	Status	Description
		Failure-free operation of the system
		Service required - contact Elmodis customer service
		Stable communication with the Cloud
		No communication with the Cloud
		No Internet access
		Collecting electrical measurements
		No electrical measurements
		Correct operation of the key phasor
		Key phasor high
		Temperature measurement by sensors
		No response from a sensor
		Communication
		No communication
		Machine OK
		Module identification
		Machine-related alarm

OPERATION



Intermittent Static

TECHNICAL DATA

Measurement category:	300V CATIII
Nominal measurement voltage:	Three-phase four-wire systems (U_{LN}/U_{LL}): 277/480V Three-phase three-wire systems unearthed (U_{LL}): 480V
Measurement current range:	3.5 kA (RMS) for coils with sensitivity 100mV/kA @ 50Hz 3 kA (RMS) for coils with sensitivity 120mV/kA @ 60Hz
Accuracy:	1.5% per measurement range
Temperature measurement:	up to 8 1-WIRE sensors (DS18B20+ standard)
Relay output [SELV]:	1 A / 30 VDC (resistive)
Phase marker:	NPN/PNP sensors support
Power supply [SELV]:	24 VDC
Power consumption:	< 6 W
Ethernet:	10/100 Mbit
Operating temperature:	-20 ÷ 50 [°C]
Storage temperature:	-20 ÷ 70 [°C]
Operating humidity range:	5% to 90% without condensation
Pollution degree:	2
Maximum altitude:	2000 m
Mounting method:	TH 35 rail (acc. to PN-EN 60715 standard)
Dimensions:	37 x 115 x 125 [mm]
Weight:	0.3 kg