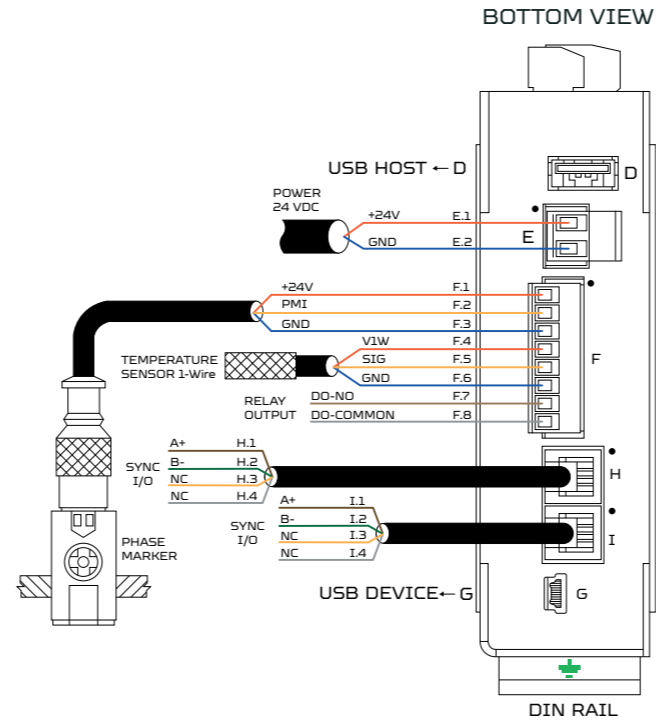


## CONNECTION DIAGRAM



# ELMODIS

WE MAKE INDUSTRY SMARTER

## SDMS-MMS

### Electro Module

Quick Reference Guide

Electro module is a part of Elmodis system used to monitor electric induction motor-supplied machines. Measurements of physical quantities used by the system (current, voltage, key phasor) are connected to the module. The device is used for collecting and processing measurement data, communicating with other SDMS modules and communicating on-line with Elmodis application located in the Cloud.

## BASIC FEATURES

- Direct voltage measurements with the use of voltage dividers
- Connection of motor current measurement through Rogowski coils
- Connection of key phasor signal (inductive or photoelectric sensor)
- Key phasor outlets for synchronization of measurements with other devices
- Ethernet interface used for the communication with the Internet and other SDMS modules
- Two-state output (relay)
- Temperature measurement by 1-Wire standard sensors
- 24 VDC supply
- Installation on DIN TS35 rail

## SAFETY



Installation may only be performed by adequately authorized persons.

Prior to the commencement of installation works read the ELMODIS installation and start-up manual. Prior to the commencement of installation works it is absolutely required to switch off the electrical supply of machine at which the Elmodis system is installed in the switching station. Failure to comply with the above requirement may result in permanent disability or death. Special care should be taken during installation in order not to damage the existing devices or interrupt their 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



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



CASING BACK-LIGHT

## OPERATION



Intermittent Static

## TECHNICAL DATA

ELMODIS.COM

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 ÷ 85 [°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