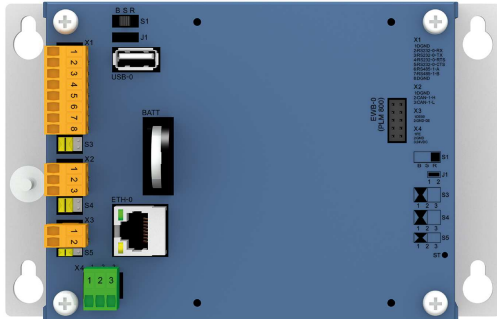


Technical data sheet

Master compact system PLM 854-M



- ARM Cortex-A9 i.MX6 4x800 MHz CPU
- 1 x RS232, 1 x RS485, 1 x CAN
- 1 x USB, 1 x Ethernet, 1 x SD card
- 1 x DI
- Hardware watchdog
- CODESYS programming

System description

The master compact terminals are programmed in CODESYS in accordance with IEC 61131-3 and meet all the requirements for controlling complex systems. The combination of powerful ARM Cortex-A9 i.MX6 Quad 4x800 MHz CPUs and up to date technologies guarantees perfect handling of versatile applications.

The compact master terminals are based on our PLM800 master terminals and share most of their systems technology. They are available in three sizes and two mounting options.

Depending on the model, our master compact terminals could be fitted with one or two back side modules for I/O extension. These expansion modules are also available in three sizes with different features.

Article

Model	Article no.
PLM 854-M (mounting plate)	MKS.854.10
Other models	
PLM 854-H (top hat rail mounting)	MKS.854.20
Expansion options	
24 I/O: 10 DI, 8 DO, 4 AI, 2 AO	EWB.800.10
Accessories	
Battery CR 2032	BTE.002.18

Electrical Data

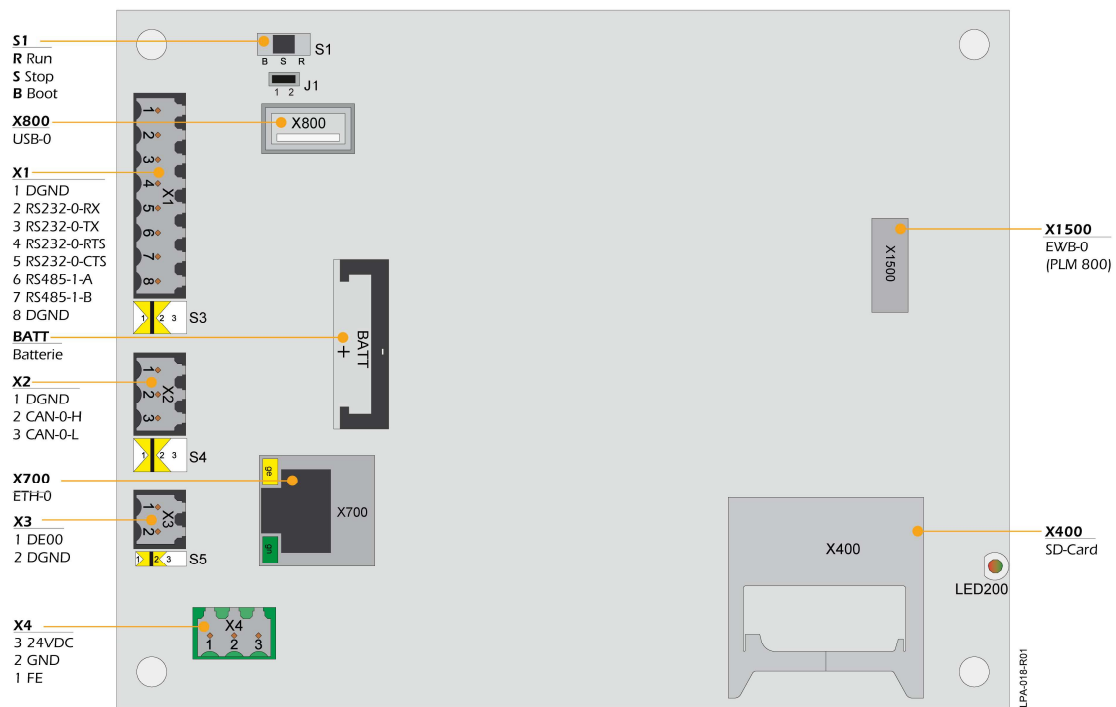
CPU and memory	ARM Coretex-A9 i.MX6 4 x 800 MHz	Battery change interval 2 years *
	1 GB RAM, 1 GB flash, 64 kB retain	Data retention during battery
	1 x SD card slot	change approx. 2 hours.
Interfaces	1 x CAN (CANopen)	PLC programming
	1 x USB	IEC 61131-3 / CODESYS
	1 x Ethernet (Gigabit)	Supply voltage
	1 x RS232 (RX, TX, RTS, CTS)	24 VDC ±10 %
	1 x RS485	max. deviation 150 mV
Digital Input	1 x DI 24 VDC	Current consumption
Hardware watchdog	internal monitoring	device typical 300 mA
Hardware RTC with date	Data retention via battery CR2032	device maximum 500 mA
		Current consumption with EWB
		please consult expansion data sheet
		Grounding connection
		M4 bolt, left side

* see information on page 3

Mechanical data

Dimensions	Width x height x depth		Connectors	Pluggable screw type terminals
	163 x 103 x 45 mm		Protection category	IP 20
Weight	Approx. 480 g		Climatic conditions	Storage temperature -10...+70 °C
Case	Aluminium base plate			Operating temperature -5...+50 °C
	Steel cover			Atmospheric moisture up to 85 %
	For circuit cabinet installation			without condensation
Mounting	Bolting			

Layout









Configuration




S3 Slide switch RS485-1 termination		S4 slide switch CAN-0 bus termination	
	RS485-1 no termination		CAN-0 no termination
	RS485-1 termination with 150 Ohms + 2 x 300 Ohms		CAN-0 termination with 120 Ohms
S5 Reserved		J1 Jumper Watchdog	
	Reserved. Do not move!		Factory setting. Do not remove!

Indication and control elements

LED200 status LED

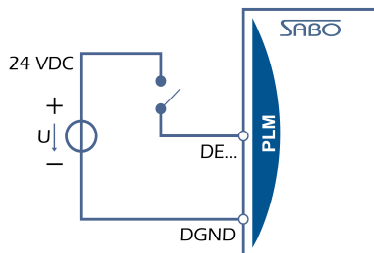
Pattern	Description
	PLC startup or PLC error
	PLC started, CODESYS in STOP mode.
	PLC started, CODESYS boot project in RUN mode.
	Update is running.
	Update error occurred.
	Update ok

S1 slide switch CPU status

	RUN	CODESYS loads and runs the boot project after startup. If there is no boot project available, PLC stays in STOP
	STOP	CODESYS stays in STOP after startup. Boot project will not be loaded. The retain variables will be forced to initialize newly during the next start in RUN.
	BOOT	Device starts with bootloader. Only used for special purposes with special software.

Standard wirings

Digital input (DE00)



Information

Grounding

The master compact system must be connected to protective earth according to applicable standards.

Configuration

Warning! Please note the internal configuration, the firmware version and mounting details before module installation.

Expansion installation

Do not plug an expansion module onto the master terminal while power is supplied. This might result in System damage or data loss.

CAN bus termination

The CAN bus has to be terminated at the beginning (controller or first field bus module) and at the end of the bus line (last field bus module).

Installation advices

Follow the separate information about EMC compatible hardware installation in the systems manual of the SABO Elektronik GmbH. downloadable via <http://www.sabo.de>

Battery change*

The CR2032 buffer battery must not be changed when power is supplied. Observe the polarity (see layout chapter) of the battery!