

Data sheet
IM 053ML - MECHATROLINK (053-1ML00)
Technical data

Order no.	053-1ML00
Type	IM 053ML - MECHATROLINK
Module ID	-
General information	
Note	-
Features	MECHATROLINK according to IEC 61158, IEC 61784 Up to 64 peripheral modules Supports standard I/O profile (16byte and 64byte mode) Multi slave node with max. 9 stations Max. 492byte input and 492byte output data Integrated DC 24V power supply for power and electronic section supply of the periphery modules Integrated Web server Configuration is done via software tool respectively Web server

Technical data power supply

Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V
Reverse polarity protection	yes
Current consumption (no-load operation)	95 mA
Current consumption (rated value)	0.95 A
Inrush current	3.9 A
I^2t	0.14 A ² s
Max. current drain at backplane bus	3 A
Max. current drain load supply	10 A
Power loss	3 W

Status information, alarms, diagnostics

Status display	yes
Interrupts	yes, parameterizable
Process alarm	yes, parameterizable
Diagnostic interrupt	yes, parameterizable
Diagnostic functions	yes, parameterizable
Diagnostics information read-out	possible
Supply voltage display	green LED
Service Indicator	yellow LED
Group error display	red SF LED
Channel error display	none

Hardware configuration

Racks, max.	1
Modules per rack, max.	64
Number of digital modules, max.	64
Number of analog modules, max.	64

Communication

Fieldbus	MECHATROLINK-III
Type of interface	Ethernet 100 MBit

Connector	2 x RJ45
Topology	-
Electrically isolated	yes
Number of participants, max.	-
Node addresses	-
Transmission speed, min.	100 Mbit/s
Transmission speed, max.	100 Mbit/s
Address range inputs, max.	492 Byte
Address range outputs, max.	492 Byte
Number of TxPDOs, max.	-
Number of RxPDOs, max.	-

Functionality MECHATROLINK-III slave

Supported profile	Standard I/O profiles
Supported transfer cycle	125us, 250us, 500us, 750us, 1ms... 8ms (every 500us)
Cyclic data size per node	16byte (slave), 64byte (peripheral)
Max. Number of nodes	9 (00h : for slave, 01h-08h for modules)
Supported communication method	Cyclic, Event driven, Message
Supported command "Cyclic"	NOP, ID_RD, CONFIG, ALM_RD, ALM_CLR, SYNC_SET, CONNECT, DISCONNECT, DATA_RWA, DATA_RWS
Supported command "Event driven"	NOP, ID_RD, CONNECT, DISCONNECT
Supported command "Message"	Memory read , Read max message size, Download request, Download data, Download complete

Datasizes

Input bytes	492
Output bytes	492
Parameter bytes	-
Diagnostic bytes	-

Housing

Material	PPE / PPE GF10
Mounting	Profile rail 35 mm

Mechanical data

Dimensions (WxHxD)	48.5 mm x 109 mm x 76.5 mm
Net weight	167.5 g
Weight including accessories	167.5 g
Gross weight	185 g

Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

Certifications

UL certification	in preparation
KC certification	in preparation