

AL4003



Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K



Application		
Application	hygienic systems; I/O modules for field applications	
Daisy-chain function	fieldbus interface	
Electrical data		
Operating voltage	[V]	20...28 DC; (US ; to SELV/PELV)
Current consumption	[mA]	200...3900; (cULus: 200 ... 3500; US)
Protection class		III
Max. current load total	[A]	3.6
Overall current rating (UL)	[A]	3.2



Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K

Inputs / outputs		
Number of inputs and outputs	Number of digital inputs: 16	
Inputs		
Number of digital inputs	16; (type 2 according to IEC 61131-2)	
Switching level high [V]	11...30	
Switching level low [V]	0...5	
Digital inputs protected against short circuits	yes	
Software / programming		
Parameter setting options	counter function	
Functions and parameters	function	CTU (Up Counter), CTD (Down Counter), CTUD (Up-Down Counter), CTDIR (Direction Counter)
	number	8 (1 counter for each port)
	count frequency	4500 Hz
	main counter	32 Bit (0...4.294.967.295)
	batch counter	16 Bit (0...65.535)
Interfaces		
Communication interface	Ethernet	
Ethernet - PROFINET		
Transmission standard	100Base-TX	
Transmission rate	100 MBit/s	
Protocol	PROFINET	
Factory settings	IP address: 0.0.0.0	
	subnet mask: 0.0.0.0	
	gateway IP address: 0.0.0.0	
	MAC address: see type label	
Note on interfaces	CC-C (Conformance Class C) (IRT-Switch)	
	S2 redundancy	
	Netload Class III	
	CiR (Configuration in Run)	
	SNMP (Simple Network Management Protocol)	
	MRP (Media Redundancy Protocol)	
	Supported network topologies: line	
	ring	
Operating conditions		
Ambient temperature [°C]	-25...60	
Storage temperature [°C]	-25...85	
Max. relative air humidity [%]	90	
Protection	IP 65; IP 66; IP 67; IP 69K; (operation with stainless steel protective caps: IP 69K)	
Protection rating (NEMA 250)	6P	
Pollution degree	2	
Chemical media	ISO 16750-5	HLP, CC, DB, DC, DD, CA
	NEMA 250 5.13.1	AA



Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K

Tests / approvals		
EMC	EN 61000-6-2	
	EN 61000-6-4	
Shock resistance	DIN EN 60068-2-27	
Vibration resistance	DIN EN 60068-2-64 2009-04	
	DIN EN 60068-2-6 2008-10	
MTTF	[years]	130

Mechanical data		
Weight	[g]	420.6
Materials	housing: PA grey; socket: stainless steel (316L/1.4404)	
Sealing material	EPDM	

Accessories		
Items supplied	Protective cap: 1 x M12, stainless steel, E12542	

Remarks		
Remarks	For further information please see the operating instructions.	
Pack quantity	1 pcs.	

Electrical connection - Ethernet

Connector: M12; coding: D; Sealing: EPDM



IN / OUT X21, X22

1	TX +
2	RX +
3	TX -
4	RX -
5	not used

Electrical connection - Process connection

Connector: M12; coding: A; Sealing: EPDM



Digital Input X01...X08

1	Sensor supply (US) L+
2	digital input 2
3	Sensor supply (US) L-
4	digital input 1
5	functional earth

AL4003



Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K

Electrical connection - power supply

Connector: M12; coding: A



X31	
1	+ 24 V DC (US)
2	not used
3	GND (US)
4	not used