TM4ES4

module network TM4 4 Ethernet switchs





Main

Product or component type	Ethernet unmanaged switch	

Complementary	
Range compatibility	Modicon M241 Modicon M251
Product compatibility	Modicon M241 logic controller Modicon M251 logic controller
Current consumption	360 mA at 5 V DC for communication bus
Integrated connection type	4 RJ45 Ethernet
Transmission rate	10/100 Mbit/s
Port Ethernet	10BASE-T/100BASE-TX - 4 port(s) copper cable
Web services	Web server
Communication service	FTP SNMP DHCP client Modbus TCP server Modbus TCP client IEC VAR ACCESS Modbus TCP slave device Ethernet/IP slave device NGVL Programming Downloading Updating firmware Monitoring
Maximum number of connections	8 Modbus server 16 Ethernet/IP device
Communication port protocol	SNMP TCP (Transmission Control Protocol) UDP (User Datagram Protocol) Ethernet IP/Modbus TCP
Redundancy	No
Local signalling	1 LED green for PWR 1 LED per channel green/yellow for Ethernet link 1 LED per channel green for Ethernet port activity
Electrical connection	RJ45 - 4 connectors for connecting Ethernet network Screw connector - terminal for connecting the functional ground
Marking	CE
Surge withstand	1 kV (power lines (DC)) with common mode protection conforming to EN/IEC 61000-4-5 2 kV (power lines (AC)) with common mode protection conforming to EN/IEC 61000-4-5 2 kV (relay output) with common mode protection conforming to EN/IEC 61000-4-5 1 kV (I/O) with common mode protection conforming to EN/IEC 61000-4-5 1 kV (shielded cable) with common mode protection conforming to EN/IEC 61000-4-5 0.5 kV (power lines (DC)) with differential mode protection conforming to EN/IEC

1 kV (power lines (AC)) with differential mode protection conforming to EN/IEC

61000-4-5

	61000-4-5 1 kV (relay output) with differential mode protection conforming to EN/IEC 61000-4-5 0.5 kV (I/O) with differential mode protection conforming to EN/IEC 61000-4-5
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 Plate or panel with fixing kit
Width	25 mm
Height	90 mm
Depth	90 mm
Product weight	0 125 kg

Environment

Environment	
standards	EN/IEC 61131-2 UL 508
product certifications	C-Tick CULus
resistance to electrostatic discharge	4 kV (on contact) conforming to EN/IEC 61000-4-2 8 kV (in air) conforming to EN/IEC 61000-4-2 8 kV (in air) conforming to Marine specification (LR, ABS, DNV, GL) 6 kV (on contact) conforming to Marine specification (LR, ABS, DNV, GL)
resistance to electromagnetic fields	1 V/m (22.7 GHz) conforming to EN/IEC 61000-4-3 10 V/m (80 MHz1 GHz) conforming to EN/IEC 61000-4-3 3 V/m (1.4 GHz2 GHz) conforming to EN/IEC 61000-4-3
resistance to fast transients	2 kV (power lines) conforming to EN/IEC 61000-4-4 2 kV (relay output) conforming to EN/IEC 61000-4-4 1.5 kV (I/O) conforming to EN/IEC 61000-4-4 1 kV (Ethernet line) conforming to EN/IEC 61000-4-4 1 kV (serial link) conforming to EN/IEC 61000-4-4
resistance to conducted disturbances	10 V (0.1580 MHz) conforming to EN/IEC 61000-4-6 3 V (0.180 MHz) conforming to Marine specification (LR, ABS, DNV, GL) 10 V (spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz)) conforming to Marine specification (LR, ABS, DNV, GL)
electromagnetic emission	Conducted emissions - test level: 12069 dBμV/m QP (power lines) at 10150 kHz conforming to EN/IEC 55011 Conducted emissions - test level: 79 dBμV/m QP/66 dBμV/m AV (power lines (AC)) at 0.150.5 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 73 dBμV/m QP/60 dBμV/m AV (power lines (AC)) at 0.5300 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 63 dBμV/m QP (power lines) at 1.530 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 40 dBμV/m QP class A at 30230 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 6054 dBμV/m QP at 30100 MHz conforming to Marine specification (LR, ABS, DNV, GL) Radiated emissions - test level: 24 dBμV/m QP at 156165 MHz conforming to Marine specification (LR, ABS, DNV, GL) Conducted emissions - test level: 7963 dBμV/m QP (power lines) at 1501500 kHz conforming to EN/IEC 55011 Radiated emissions - test level: 47 dBμV/m QP class A at 2301000 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 8050 dμV/m QP at 15030000 kHz conforming to Marine specification (LR, ABS, DNV, GL) Radiated emissions - test level: 8050 dμV/m QP at 15030000 kHz conforming to Marine specification (LR, ABS, DNV, GL)
ambient air temperature for operation	-1050 °C vertical installation -1055 °C horizontal installation
ambient air temperature for storage	-2570 °C
relative humidity	1095 % without condensation in operation 1095 % without condensation in storage
IP degree of protection	IP20 with protective cover in place
pollution degree	2
operating altitude	02000 m
storage altitude	03000 m
vibration resistance	1 mm at 513.2 Hz on symmetrical rail
	3 gn at 8.7150 Hz on symmetrical rail 1 mm at 513.2 Hz on panel mounting 0.7 gn at 13.2100 Hz on panel mounting



Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1408 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

