PLC-V8R/ETH-MP/BM - Communication module

1279135

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PLC-INTERFACE Ethernet gateway basic module with 2x RJ45 connection and multi-protocol connection (PROFINET, EtherNet/IP™, and Modbus/TCP) with 8 I/Os, for plug-in connection to 8 digital or analog PLC-INTERFACE terminal blocks, can be extended to 56 I/Os, Push-in connection

Commercial data

Item number	1279135
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C424
Product key	DK62P1
GTIN	4063151476656
Weight per piece (including packing)	103.5 g
Weight per piece (excluding packing)	103.5 g
Customs tariff number	85371098
Country of origin	DE

Technical data

Notes

Notes on operation	For proper use, the specifications of the installation directive (see Downloads) must be observed. For applications or use with third-party products, the specifications, and the safety and warning instructions of the respective third-party manufacturer must also be met.
Notes on operation	Please note any deviating technical data, installation directives, and approvals for the PLC-INTERFACE modules, which can be found with the respective item.
Note regarding laboratory testing	Environmental tests (vibration and shock): Upright non-perforated DIN rail, DIN rail screw-fastened every 10 cm, in-line mounting including upright and screw-fastenable end brackets

Product properties

Product type	Gateways/Proxies
Product family	PLC-INTERFACE
Operating mode	100% operating factor

Insulation characteristics: Air clearances and creepage distances

Insulation	Functional insulation
Overvoltage category	II
Pollution degree	2

Electrical properties

Power consumption	1.25 W (no other inputs and outputs active)
	≤ 1.27 W (no other inputs and outputs active)
	3.3 W (8 x PLC-INTERFACE terminal blocks active)
	≤ 4.5 W (8 x PLC-INTERFACE terminal blocks active)
	10.8 W (Active in combination with 3 x extension modules and 32 x PLC relay slices)
	≤ 18.6 W (Active in combination with 3 x extension modules and 32 x PLC relay slices)

Air clearances and creepage distances

Rated insulation voltage	50 V
Rated surge voltage	0.5 kV

Supply

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Input current	40 mA (no other inputs and outputs active)
	≤ 44 mA (no other inputs and outputs active)
	105 mA (8 x PLC-INTERFACE terminal blocks active)
	≤ 120 mA (8 x PLC-INTERFACE terminal blocks active)
	57 mA (Active in combination with 3 x extension modules and no other inputs and outputs)

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	≤ 67 mA (Active in combination with 3 x extension modules and no other inputs and outputs)
	127 mA (Active in combination with 3 x extension modules and 8 x PLC relay slices)
	≤ 140 mA (Active in combination with 3 x extension modules and 8 x PLC relay slices)
Protective circuit	Reverse polarity protection
	Surge protection

Input data

Digital inputs via PLC-INTERFACE plug-in contacts

Number of inputs	≤ 8
Process data update	< 1.5 ms (Local bus asynchronous)

Analog inputs via PLC-INTERFACE plug-in contacts

Number of inputs	≤ 8
Process data update	< 1 s (Local bus asynchronous)

Output data

Digital outputs via PLC-INTERFACE plug-in contacts

Number of outputs	≤ 8
Process data update	< 1 ms (Local bus asynchronous)

Analog outputs via PLC-INTERFACE plug-in contacts

Number of outputs	≤ 8
Process data update	< 500 ms (Local bus asynchronous)

Connection data

COMBICON connection

Connection method	Push-in connection
Stripping length	9 mm
Number of positions	3
Note	Device supply and functional ground
Conductor cross-section rigid	0.14 mm² ... 1.5 mm²
Conductor cross-section flexible	0.14 mm² ... 1.5 mm²
	0.25 mm² ... 1.5 mm² (Ferrule without plastic sleeve)
	0.25 mm² ... 0.5 mm² (Ferrule with plastic sleeve)
Conductor cross-section AWG	26 ... 16

Ethernet

Connection method	RJ45 jack
Number of connections	2

Interface to the extension modules

Connection method	Insulation displacement connection
Number of connections	1

Number of positions	4

Interfaces

Ethernet

Designation	Ethernet
Number	2 (Switched internally)
Protocol	PROFINET
	Modbus/TCP
	EtherNet/IP™
Transmission speed	10/100 Mbps (full duplex)
Transmission length	≤ 100 m

Local bus

Designation	Local bus
Cycle time	5 ms
	≤ 12 ms
	15 ms
	≤ 35 ms
	28 ms
	≤ 65 ms

Signaling

Status display	PWR LED (green, orange, red)

Dimensions

Item dimensions

Width	50 mm
Height	49 mm
Depth	93 mm

Item dimensions with relay

Width	50 mm
Height	111 mm
Depth	93 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection (Housing)	IP20
Degree of protection (Connection terminal blocks)	IP20
Degree of protection (Installation location)	≥ IP54
Ambient temperature (operation)	-40 °C ... 60 °C (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Altitude	≤ 2000 m
	≤ 3000 m (≤ 52 °C)

	≤ 4000 m (≤ 46 °C)
Max. permissible relative humidity (operation)	95 % (non-condensing)
Shock (operation)	15g (11 ms, 3 axes) (EN 60068-2-27)
Vibration (operation)	5g (5 Hz ... 150 Hz, 3 axes) (EN 60068-2-6)

EMC data

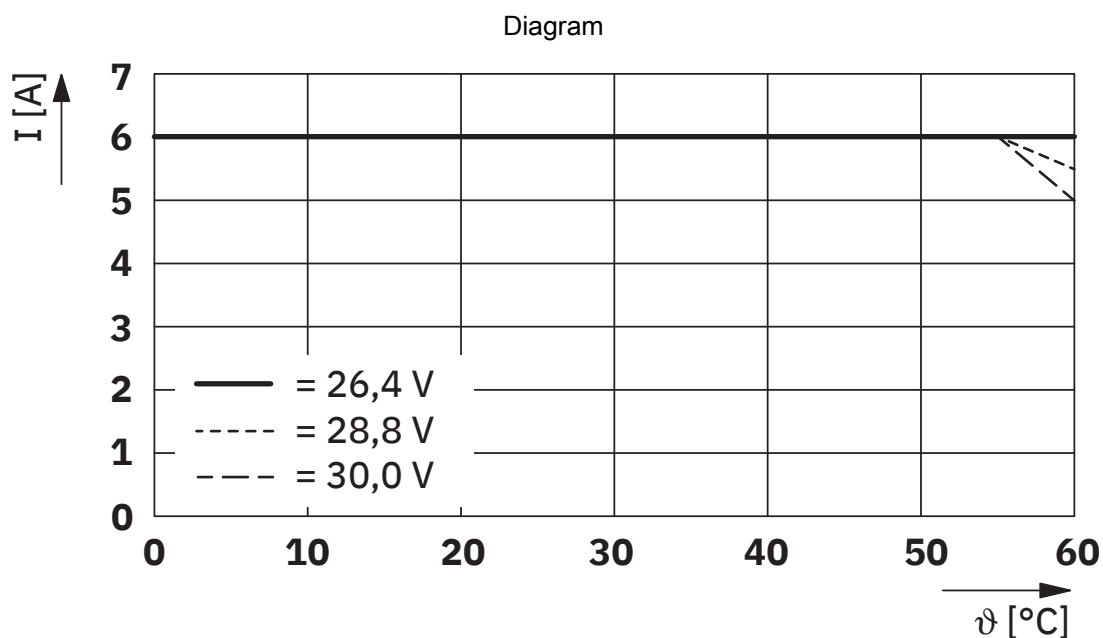|	
Interference emission	EN 55016-2-3 (residential area)
Noise immunity (against electrostatic discharge)	EN 61000-4-2: ±6 kV (contact discharge)
	EN 61000-4-2: ±8 kV (air discharge)
Noise immunity (against electromagnetic fields)	EN 61000-4-3: 10 V/m
Noise immunity (against conducted high frequency)	EN 61000-4-6: 10 V
Noise immunity (against fast transients (bursts))	EN 61000-4-4: ±2 kV supply and signal lines
Noise immunity (against surge current loads (surges))	EN 61000-4-5: 0.5 kV symmetrical on supply line
	EN 61000-4-5: 1 kV asymmetrical on supply line
	EN 61000-4-5: 1 kV asymmetrical on signal line
Noise immunity (Voltage interruptions)	EN 61131-2: 0%, 1 ms/10 ms for 20 tests
	EN 61131-2: 120% U_{nom} for 30 min
	EN 61131-2: 85% U_{nom} for 30 min
Noise immunity (Testing the supply voltage variation)	EN 61131-2: Reduction of UN, 100% between 10 s and 20 s, tested 10 times
	EN 61131-2: Reduction of UN, 95% up to 5 s
	EN 61131-2: Reduction of UN, 95% up to 60 s

Standards and regulations

Air clearances and creepage distances

Standards/regulations	IEC/EN/UL 61010-2-201
	EN IEC 60664-1
Standards/regulations	DIN EN 61131-2

Mounting

Mounting type	Plug-in mounting
Assembly note	can be plugged onto 8 x PLC-INTERFACE terminal blocks
Mounting position	horizontal

Drawings

Diagram

Max. switching current of the PLC-R...24DC/21 and PLC-R...24DC/21EX modules in combination with PLC-V8R...

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1279135

PROFINET
Approval ID: Certificate Z14092

EtherNet/IP CONFORMANCE TESTED TM
Approval ID: File Number 12583.01

cULus Listed
Approval ID: E140324

IECEx
Approval ID: IECEx IBE 16.0029X

cULus Listed
Approval ID: E360692

Classifications

ECLASS

ECLASS-13.0	27242608
ECLASS-15.0	27242608

ETIM

ETIM 9.0	EC001604

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)

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