B-NIMIS **MC-I/O**
INFORMATION **TECHNICAL DATA**

B-Nimis MC-I/O				
Description	**MC-Bus coupler 3A**	**MC-BK Di 16/DO16**	**MC-Extender 2 Port**	**MC-CAN**
Order number	**S-01030203-0100**	**S-01030203-0200**	**S-01030203-0300**	**S-01030203-0500**
Dimensions WxHxD [mm]	25 x 124 x 83	42 x 120 x 92	25 x 124 x 83	25 x 124 x 83
Weight	approx. 150 g			
Mounting	Rail mounting NS 35/7,5 EN 50022			
Certification	CE (EN 61131-2) / $_c$UL$_{us}$ (UL 61010-2-201)			
Development environment	CODESYS V3 (IEC61131-3)			
Communication interfaces	1x EtherCAT In, RJ45 1x EtherCAT Out, RJ 45 1x EtherCAT, LVDS		2x EtherCAT out, RJ45 1x EtherCAT, LVDS	1x CAN
Protocols	EtherCAT Slave			
Digital I/O´s	-	16x digital In 16x digital Out 1ms / 0,5A	-	-
Supply voltage	+24 VDC (-20% / +25%) SELV max. AC voltage component 5% with reverse voltage protection			
Current consumption	Typ. 0,2 A, max. 0,2 A at +24 VDC			
Current consumption I/Os	max. 3 A (approx. 20 modules)	max. 2 A (approx. 11 Modules)	Typ. 0,16 A for Out1 max. 0,21A for Out1+Out2	
Operating conditions transport / storage	Ambient temperature: operational: 0 ºC to 50 ºC / transport -25 ºC to +70 ºC Relative humidity: max. 95%, non-condensing			
EMC, protection type				
Emitted interference	EN 61000-6-4, industrial area			
Immunity to interference	EN 61000-6-2, industrial area			
Protection class	III			
Insulation strength	EN 61131-2			
Protection type	IP20			
Vibration	Sinusodial (EN 60068-2-6) test: Fc; 10 … 150 Hz, 1 G (Operation mode)			
Shock resistance	15 G (ca. 150 m/s^2), 10 ms duration, half-sine (EN 60068-2-27) test: Ea			

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B-Nimis MC-I/O				
Description	**MC-DI 16 1ms**	**MC-DI 32 1ms**	**MC-DO 16 0,5A**	**MC-DI/DO 16/16**
Order number	**S-01030201-0100**	**S-01030201-0200**	**S-01030201-0300**	**S-01030201-0400**
Dimensions WxHxD [mm]	25 x 124 x 92			
Weight	approx. 150 g			
Mounting	Rail mounting NS 35/7,5 EN 50022			
Certification	CE (EN 61131-2) / $_c$UL$_{us}$ (UL 61010-2-201)			
Development environment	CODESYS V3 (IEC61131-3)			
Communication interfaces	1x EtherCAT, LVDS			
Protocols	EtherCAT Slave			
Digital I/O´s	16x digital In	32x digital In	16x digital Out	16x digital In 16x digital Out
	1 ms	1 ms	0,5 A	1ms / 0,5A
Supply voltage	+24 VDC (-20% / +25%) SELV max. AC voltage component 5% with reverse voltage protection			
Current consumption I/Os	Protection depending on I/O load max. 12 A			
Operating conditions transport / storage	Ambient temperature: operational: 0 ºC to 50 ºC / transport -25 ºC to +70 ºC Relative humidity: max. 95%, non-condensing			
EMC, protection type				
Emitted interference	EN 61000-6-4, industrial area			
Immunity to interference	EN 61000-6-2, industrial area			
Protection class	III			
Insulation strength	EN 61131-2			
Protection type	IP20			
Vibration	Sinusodial (EN 60068-2-6) test: Fc; 10 ... 150 Hz, 1 G (operation mode)			
Shock resistance	15 G (approx. 150 m/s^2), 10 ms duration, half-sine (EN 60068-2-27) test: Ea			

B-NIMIS **MC-I/O**
INFORMATION **TECHNICAL DATA**

B-Nimis MC-I/O				
Description	**MC-Relais No 24V**	**MC-Relais No 230VAC**	**MC-AI4-I 12 Bit CoE**	**MC-AI8-I 12 Bit CoE**
Order number	**S-01030205-0100**	**S-01030205-0200**	**S-01030202-0100**	**S-01030202-0200**
Dimensions WxHxD [mm]	25 x 124 x 92			
Weight	approx. 150 g			
Mounting	Rail mounting NS 35/7,5 EN 50022			
Certification	CE (EN 61131-2) / $_c$UL$_{us}$ (UL 61010-2-201)			
Development environment	CODESYS V3 (IEC61131-3)			
Communication interfaces	1x EtherCAT, LVDS			
Protocols	EtherCAT Slave			
Digital I/O´s	8x Relais Out NO (lockable)		-	-
	Switching voltage: max. 24VAC / 24 VDC	Switching voltage: max. 230VAC / 24VDC	-	-
Analog I/O´s	-	-	4x analog In Current 0(4)...20mA Resolution: 12 Bit	8x analog In Current 0(4)...20mA Resolution: 12 Bit
Supply voltage	+24 VDC (-20% / +25%) SELV max. AC voltage component 5% with reverse voltage protection			
Current consumption I/Os	Protection depending on I/O load max. 12 A		Typ. 0,2 A, max. 0,2 A at +24 VDC	
Operating conditions transport / storage	Ambient temperature: operational: 0 ºC to 50 ºC / transport -25 ºC to +70 ºC Relative humidity: max. 95%, non-condensing			
EMC, protection type				
Emitted interference	EN 61000-6-4, industrial area			
Immunity to interference	EN 61000-6-2, industrial area			
Protection class	III			
Insulation strength	EN 61131-2			
Protection type	IP20			
Vibration	Sinusodial (EN 60068-2-6) test: Fc; 10 ... 150 Hz, 1 G (operation mode)			
Shock resistance	15 G (ca. 150 m/s^2), 10 ms duration, half-sine (EN 60068-2-27) test: Ea			

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B-NIMIS **MC-I/O**
INFORMATION **TECHNICAL DATA**

B-Nimis MC-I/O				
Description	**MC-AI4/8-U 13 Bit CoE**	**MC-AI 8/16-U 13 Bit CoE**	**MC-AI4-Thermo 16 Bit CoE**	**MC-AI8-Thermo 16 Bit CoE**
Order number	**S-01030202-0300**	**S-01030202-0400**	**S-01030204-0200**	**S-01030204-0100**
Dimensions WxHxD [mm]	25 x 124 x 92			
Weight	approx. 150 g			
Mounting	Rail mounting NS 35/7,5 EN 50022			
Certification	CE (EN 61131-2) / $_c$UL$_{us}$ (UL 61010-2-201)			
Development environment	CODESYS V3 (IEC61131-3)			
Communication interfaces	1x EtherCAT, LVDS			
Protocols	EtherCAT Slave			
Analog I/O´s	4x differential or 8x single ended analog In	8x differential or 16x single ended analog In	4x Temperature In	8x Temperature In
	Voltage 0(-10)...10V; -5...5V; -2,5...2,5V Resolution: 13 Bit		PT100 / Ni100 oder PT1000 / Ni1000 or Thermo / Typ J, K or mV Resolution: 16 Bit	
Supply voltage	+24 VDC (-20% / +25%) SELV max. AC voltage component 5% with reverse voltage protection			
Current consumption	Typ. 0,2 A, max. 0,2 A at +24 VDC		Typ. 0,15 A, max. 0,2 A at +24 VDC	
Operating conditions transport / storage	Ambient temperature: operational: 0 ºC to 50 ºC / transport -25 ºC to +70 ºC Relative humidity: max. 95%, non-condensing			
EMC, protection type				
Emitted interference	EN 61000-6-4, industrial area			
Immunity to interference	EN 61000-6-2, industrial area			
Protection class	III			
Insulation strength	EN 61131-2			
Protection type	IP20			
Vibration	Sinusodial (EN 60068-2-6) test: Fc; 10 ... 150 Hz, 1 G (operation mode)			
Shock resistance	15 G (ca. 150 m/s^2), 10 ms duration, half-sine (EN 60068-2-27) test: Ea			

B-NIMIS MC-I/O
INFORMATION TECHNICAL DATA

B-Nimis MC-I/O				
Description	**MC-AO4-U/I 16 Bit CoE**	**MC-XR01**	**MC-XR02**	**MC-Counter/Posi 2 5V**
Order number	**S-01030202-0500**	**S-01030207-0100**	**S-01030207-0200**	**S-01030206-0100**
Dimensions WxHxD [mm]	25 x 124 x 92			
Weight	approx. 150 g			
Mounting	Rail mounting NS 35/7,5 EN 50022			
Certification	CE (EN 61131-2) / $_c$UL$_{us}$ (UL 61010-2-201)			
Development environment	CODESYS V3 (IEC61131-3)			
Communication interfaces	1x EtherCAT, LVDS			
Protocols	EtherCAT Slave			
Digital I/Os		8x digital In or Out (4x capture in) 8x digital In (configurable as up/ down counter or quadratur encoder)	8x digital In or Out (4x capture In) 8x digital In (2x up/ down counter and 2x quadratur encoder)	8x digital In 2x digital Out 2x Counter In (A, B, Ref)
		1ms / 0,5A max. 10 kHz counter frequency per counter In (yields a counting frequency of 40 kHz for quadrature encoders)		1ms 2,0A Encodertype: RS422, 24 VDC max. 200 KHz
Analog I/Os	4x universal analog Out	4x analog In 4x universal analog In-/Out	-	2x analog Out
	0(-10)...10V 0(4)...20mA	- 10..10V | -20..20mA	-	10...10V
	Resolution Outputs: 16 Bit	Resolution In: 22 Bit Resolution Out: 16 Bit	-	Resolution Out: 12 Bit
Supply voltage	+24 VDC (-20% / +25%) SELV max. AC voltage component 5% with reverse voltage protection			
Current consumption I/Os	Protection depending on I/O load max. 12 A			
Operating conditions transport / storage	Ambient temperature: operational: 0 ºC to 50 ºC / transport -25 ºC to +70 ºC Relative humidity: max. 95%, non-condensing			
EMC, Protection type				
Emitted interference	EN 61000-6-4, industrial area			
Immunity to interference	EN 61000-6-2, industrial area			
Protection class	III			
Insulation strength	EN 61131-2			
Protection type	IP20			
Vibration	Sinusodial (EN 60068-2-6) test: Fc; 10 ... 150 Hz, 1 G (operation mode)			
Schock resistance	15 G (ca. 150 m/s^2), 10 ms duration, half-sine (EN 60068-2-27) test: Ea			

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