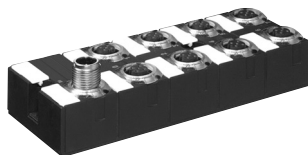


Compact modules

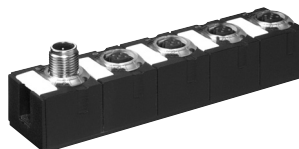
Digital inputs

Protection IP67

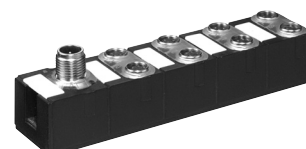
Cube67 DI16 C 8xM12

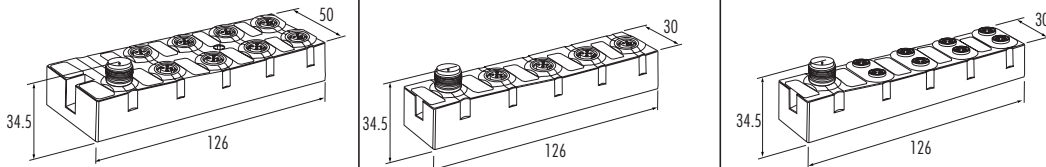


Cube67 DI8 C 4xM12



Cube67 DI8 C 8xM8



Ordering data	Art.-No.	Art.-No.	Art.-No.
	approvals	approvals	approvals
	UL	UL	UL
	56602	56612	56622
Internal communication			
Module supply	via internal system connection		
Status indicator	U _S : sensor supply and internal supply voltage (green = OK.); U _A : actuator supply (green = OK.)		
Current usage	approx. 50 mA		approx. 30 mA
Terminator	integrated		
Configuration			
PIN 2	input/diagnostic	—	
PIN 4	input	—	
Inputs			
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M8/M12 female		
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible		
Status indicator	yellow LED per input		
Input filter	1 ms		
Diagnostic input			
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M12 female		—
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible		—
Status indicator	red LED per port		—
Function	24 V = high = OK. (LED off); 0 V = low = error (LED red)		—
Input filter	1 ms		—
Diagnostic			
Under voltage sensor	U _S < 18 V (red)		
Communication to bus module	U _S blinking green if no data exchange		
Sensor short-circuit	PIN 2 and PIN 4 red LED per M12 port		PIN 4 LED (red) per input
Diagnostic to DESINA® (PIN 2)	PIN 2 diagnostic with red LED per M12 port		—
General data			
Temperature range	0...+ 55 °C (storage temperature - 20...+ 75 °C)		
Mounting method	4-hole screw mounting	2-hole screw mounting	
Dimension	H x W x D	34.5 x 126 x 50 mm	34.5 x 126 x 30 mm
Dimension drawing			
			
Notes			
Accessories, terminators and blind plugs see page 2.1.24. Contact layout see page 2.1.25. Connection cables can be found in chapter 1.4... All housings are potted.			

Compact modules

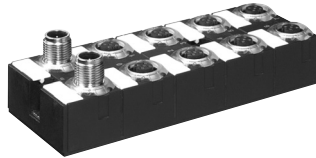
Digital inputs
Digital outputs

Multifunctional
Parameters free definable

Protection IP67

Cube67 DI016 C 8xM12

Cube67 DI016 C 8xM12 1.6A



Ordering data		Art.-No.	Art.-No.
		approvals	approvals
		UL	filed for UL
		56600	56640
Internal communication			
Module supply	via internal system connection		
Status indicator	U _s : sensor supply and internal supply voltage (green = OK.); U _a : actuator supply (green = OK.)		
Current usage	approx. 50 mA		
Terminator	integrated		
Configuration			
PIN 2	input/output/diagnostic		
PIN 4	input/output		
Inputs			
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M12 female		
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible		
Status indicator	yellow LED per input		
Input filter	1 ms		
Diagnostic input			
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M12 female		
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible		
Status indicator	red LED per port		
Function	24 V = high = OK. (LED off); 0 V = low = error (LED red)		
Input filter	1 ms		
Outputs			
Actuator supply (M12 left row)	24 V DC (18...30.2 V), to EN61131-2 via system connection (total max. 4 A)		
Actuator supply (M12 right row)	24 V DC (18...30.2 V), to EN61131-2 via separate supply (total max. 4 A)		
Switching current per output	0.5 A short-circuit and overload protected		1.6 A short-circuit and overload protected
Lamp load	10 W		
Max. switching frequency	resistive load 50 Hz, inductive load 5 Hz		
Status indicator	output activated LED yellow; output short-circuit LED red; fault connection LED red		
Diagnostic			
Under voltage sensor/system	U _s < 18 V (red)		
Under voltage actuator	U _a < 18 V (red) (if parameterized as output)		
Communication to bus module	U _s blinking green if no data exchange		
Actuator short-circuit	PIN 2 and/or PIN 4 red LED per output		
Sensor short-circuit	PIN 2 and/or PIN 4 red LED per input		
Diagnostic to DESINA® (PIN 2)	PIN 2 diagnostic with red LED per M12 port		
Actuator warning	PIN 2 and/or PIN 4 red LED per output		
General data			
Temperature range	0...+ 55 °C (storage temperature - 20...+ 75 °C)		
Mounting method	4-hole screw mounting		
Dimension	H x W x D	34.5 x 126 x 50 mm	
Dimension drawing			
Notes			
		Accessories, terminators and blind plugs see page 2.1.24. Contact layout see page 2.1.25. Connection cables can be found in chapter 1.4... All housings are potted.	

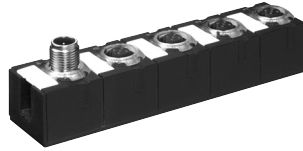
Compact modules

Digital inputs
Digital outputs

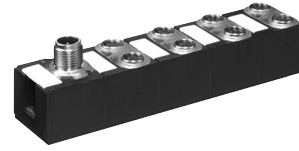
Multifunctional
Parameters free definable

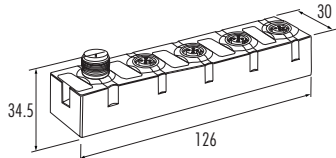
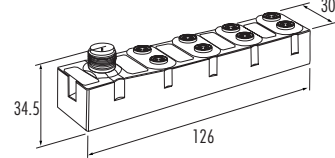
Protection IP67

Cube67 DI08 C 4xM12



Cube67 DI08 C 8xM8



Ordering data	Art.-No.	Art.-No.
	approvals	approvals
	UL	UL
	56610	56620
Internal communication		
Module supply	via internal system connection	
Status indicator	U_s : sensor supply and internal supply voltage (green = OK.); U_A : actuator supply (green = OK.)	
Current usage	approx. 30 mA	
Terminator	integrated	
Configuration		
PIN 2	input/output/diagnostic	
PIN 4	input/output	
Inputs		
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M8/M12 female	
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible	
Status indicator	yellow LED per input	
Input filter	1 ms	
Diagnostic input		
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M12 female	
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible	
Status indicator	red LED per port	
Function	24 V = high = OK. (LED off); 0 V = low = error (LED red)	
Input filter	1 ms	
Outputs		
Actuator supply	24 V DC (18...30.2 V), to EN61131-2 via system connection (total max. 4 A)	
Switching current per output	0.5 A short-circuit and overload protected	
Lamp load	10 W	
Max. switching frequency	resistive load 50 Hz, inductive load 5 Hz	
Status indicator	output activated yellow LED; output short-circuit red LED; fault connection red LED	
Diagnostic		
Under voltage sensor/system	$U_s < 18$ V (red)	
Under voltage actuator	$U_A < 18$ V (red) (if parameterized as output)	
Communication to bus module	U_s blinking green if no data exchange	
Actuator short-circuit	PIN 2 and/or PIN 4 red LED per output	PIN 4 red LED per output
Sensor short-circuit	PIN 2 and/or PIN 4 red LED per input	PIN 4 red LED per input
Diagnostic to DESINA® (PIN 2)	PIN 2 diagnostic with red LED per M12 port	—
Actuator warning	PIN 2 and/or PIN 4 red LED per output	PIN 4 red LED per output
General data		
Temperature range	0...+ 55 °C (storage temperature - 20...+ 75 °C)	
Mounting method	2-hole screw mounting	
Dimension	H x W x D	34.5 x 126 x 30 mm
Dimension drawing		
		
Notes	Accessories, terminators and blind plugs see page 2.1.24. Contact layout see page 2.1.25. Connection cables can be found in chapter 1.4... All housings are potted.	

Function modules

Logic module

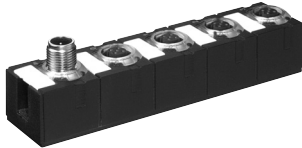
Counter module with process preparation

Protection IP67

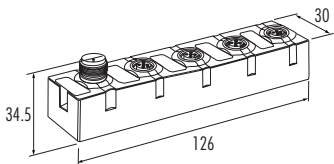
Cube67 Logic E 4xM12



Cube67 CNT 2 C 4xM12



Ordering data	Art.-No.	Art.-No.
approvals		approvals
filed for UL	56771	filed for UL
56750		
Internal communication		
Module supply	via internal system connection	
Status indicator	U _S : sensor supply and internal supply voltage (green = OK.); U _A : actuator supply (green = OK.)	
Current usage	approx. 30 mA	
Inputs		
Sensor supply	24 V DC (18...30.2 V), to EN61131-2, ≤ 200 mA per M12 female	
Type	for 3-wire sensors or mechanical switches, PNP, EN61131-2 compatible	
Status indicator	yellow LED per input	
Input filter	1 ms	
Logic module		
Inputs	6	—
Outputs	2	—
Logical functions	AND/NOR; AND; XOR parameterized	—
Counter		
Counter frequency	—	max. 300 kHz
Counter input	—	to EN61131-2
Count depth	—	32 Bit (31 Bit + sign)
Outputs		
Actuator supply	24 V DC (18...30.2 V), to EN61131-2, total max. 4 A (internal system connection)	
Switching current per output	0.5 A short-circuit and overload protected	1.6 A short-circuit and overload protected
Lamp load	10 W	30 W
Max. switching frequency	resistive load 50 Hz, inductive load 5 Hz	
Status indicator	output activated yellow LED; output short-circuit red LED, fault connection red LED red	
Diagnostic		
Under voltage sensor/system	U _S < 18 V (red)	
Under voltage actuator	U _A < 18 V (red)	
Communication to bus module	U _S blinking green if no data exchange	
Actuator short-circuit	PIN 2 and/or PIN 4 red LED per output	
Sensor short-circuit	PIN 2 and/or PIN 4 red LED per input	
Actuator warning	PIN 2 and/or PIN 4 red LED per output	
General data		
Temperature range	0...+ 55 °C (storage temperature - 20...+ 75 °C)	
Mounting method	2-hole screw mounting	
Dimension	H x W x D	34.5 x 126 x 30 mm
Dimension drawing		



Notes

Accessories, terminators and blind plugs see page 2.1.24. Contact layout see page 2.1.26. Connection cables can be found in chapter 1.4... All housings are potted.

Analog modules for Temperature converter

Analog inputs

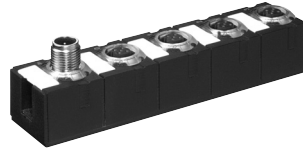
Protection IP67

Cube67 AI C 4xM12 RTD

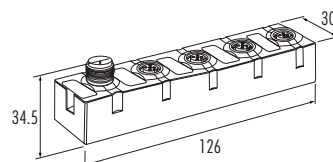
Input module for PT100

Cube67 AI C 4xM12 TH

Input module for thermo elements



Ordering data	Art.-No.	Art.-No.
approvals		approvals
filed for UL	56740	filed for UL
		56748
Internal communication		
Module supply	via internal system connection	
Status indicator	U _S : sensor supply and internal supply voltage (green = OK.); U _A : actuator supply (green = OK.)	
Current usage	approx. 50 mA	
Inputs		
Connection technology	2-, 3-, 4-wire	2-wire
Number of channels	4	4
Accuracy (ambient temperature 0...50 °C)	≤ ± 0.5 %	≤ ± 0.5 %, cold junction combination plug
Technical data		
Sensor types	Pt 100, 200, 500, 1000, Ni 100, 120, 200, 500, 1000, R 0...3000 Ω	K, N, J, E, R
Conversion time	approx. 58 ms per channel	approx. 65 ms per channel
Data format	15 Bit + sign	
Diagnostic		
Under voltage sensor	U _S < 18 V (red)	
Wire-break, upper/low limit	red LED per channel	
General data		
Temperature range	0...+55 °C (storage temperature -20...+75 °C)	
Mounting method	2-hole screw mounting	
Dimension	H x W x D	34.5 x 126 x 30 mm
Dimension drawing		



Notes

Accessories, terminators and blind plugs see page 2.1.24. Contact layout see page 2.1.26. Connection cables can be found in chapter 1.4...
All housings are potted.

Analog modules for current and voltage

Protection IP67

Cube67 AI4 C 4xM12 (I)

Input module
Current

Cube67 AI4 C 4xM12 (U)

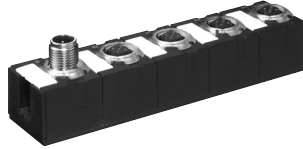
Input module
Voltage

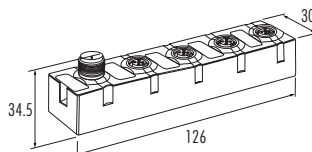
Cube67 AO4 C 4xM12 (I)

Output module
Current

Cube67 AO4 C 4xM12 (U)

Output module
Voltage



Ordering data	Art.-No.	Art.-No.	Art.-No.	Art.-No.
	approvals	approvals	approvals	approvals
	UL 56730	UL 56700	UL 56720	UL 56710
Internal communication				
Module supply	via internal system connection			
Status indicator	U _S : sensor supply and internal supply voltage (green = OK.); U _A : actuator supply (green = OK.)			
Current usage	approx. 50 mA			approx. 75 mA
Inputs/outputs				
Sensor supply	24 V DC (18...30.2 V), ≤ 200 mA		≤ 1.6 A per M12 female via actuator supply	
PIN 2	current input (+)	voltage input (+)	—	—
PIN 4	current input (—)	voltage input (—)	current output	voltage output
Voltage inputs				
Input resistor	—	approx. 1 MOhm, difference input	—	—
Input range	—	± 10 V DC, 0...10 V DC	—	—
Resolution	—	15 Bit + sign	—	—
Conversion time	—	approx. 2 ms per channel	—	—
Current inputs				
Load	approx. 300 Ohm, difference input	—	—	—
Input range	0...20 mA, 4...20 mA	—	—	—
Resolution	15 Bit	—	—	—
Conversion time	approx. 2 ms per channel	—	—	—
Current outputs				
Load	—	—	≤ 500 Ohm	—
Range	—	—	0...20 mA, 4...20 mA	—
Resolution	—	—	11 Bit	—
Conversion time	—	—	approx. 1 ms per channel	—
Voltage outputs				
Load	—	—	—	≥ 500 Ohm
Output range	—	—	—	± 10 V DC, 0...10 V DC
Resolution	—	—	—	11 Bit + sign
Conversion time	—	—	—	approx. 1 ms per channel
Diagnostic				
Under voltage sensor	U _S < 18 V (red)	—	U _A < 18 V (red)	—
Under voltage actuator	—	—	U _A < 18 V (red)	—
Communication	U _S blinking (green) if no data exchange			
Sensor short-circuit	red LED at M12 plug			
Overl./short-circuit/wire-break/upper/low limit	red LED per channel			
General data				
Temperature range	0...+ 55 °C (storage temperature - 20...+ 75 °C)			
Mounting method	2-hole screw mounting			
Dimension	H x W x D	34.5 x 126 x 30 mm		
Dimension drawing				
				
Notes	Accessories, terminators and blind plugs see page 2.1.24. Contact layout see page 2.1.26. Connection cables can be found in chapter 1.4... All housings are potted.			