

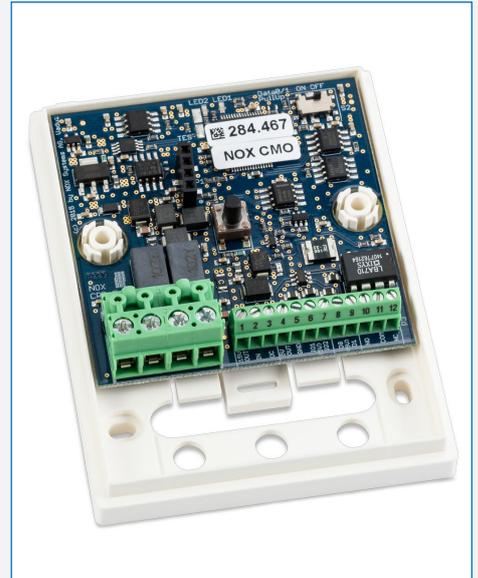
# NOX CMO • N233-G3

## NOX CMO (rev. F)

NOX CMO module is a card reader interface for card readers with OSDP protocol. NOX CMO can handle both in- and out reading in the same module. For every card reader up to 3 LEDs with up to 4 different colors are supported.

### NOX CMO specification

- OSDP card reader interface
- Protocol-directed LED and buzzer (up to 3 LEDs with up to 4 different colors)
- In/Out reading in the same module
- Up to 204 pre-defined cards will be in function even if the communication to the NOX Central is interrupted.
- The 204 cards can be defined as cyclic, absolut or a combination of both.
- 1 programmable resistance supervised input
- 1 programmable solid state relay output
- 1 programmable Open Collector output
- 2 TTL input



### Technical data

	Unit	Min.	Nominal	Max.
<b>Supply voltage</b>	VDC	8.0	15.0	16.0
<b>Current consumption @ 15 VDC (Solid state relay ON)</b>	mA	15	16	27
<b>Operating Temperature range</b>	°C	0	25	40
<b>Air humidity @40°C (Non-condensing)</b>	% RH			93
<b>Input resistance, Absolute Max rating</b>	kΩ	2		300
<b>Input resistance, recommended range</b>	kΩ	3.5	12	50
<b>15 VDC Output, self-resetting fuse (Pin 1) @ 20°C</b>	mA			200
<b>5 VDC Output (Pin 4) continuously</b>	mA			45
<b>5 VDC Output (Pin 4) 5 s</b>	mA			200
<b>5 VDC Output (Pin 4) 10 ms</b>	mA			500
<b>Contact rating relay @ 40°C, continously</b>		max. 30VDC / 0.8A		
<b>Contact rating relay @ 40°C, peak (up to 10 ms)</b>		max. 30VDC / 3A		
<b>Contact on resistance relæ</b>				1
<b>Open collector output (Pin 3)</b>		max. 30 VDC / 350 mA		
<b>Open collector peak current (up to 1 sek.)</b>	mA			500
<b>Open collector leakage current in "Off" state</b>	µA			2
<b>TTL Inputs (Pin 6 and 7)</b>	V		5.0	5.5
<b>Measurements - cabinet (L x B x H)</b>	mm	85 x 66 x 27		
<b>Sabotage sensor, distance to mounting surface</b>	mm	3	10	40
<b>Cable length for inputs / outputs on terminal P3</b>	m			30'
<b>Protection class according to IEC 60529</b>	m	IP20		

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Terminal Assignment						
<b>Terminal P2</b>	<b>+</b>	<b>-</b>	<b>A</b>	<b>B</b>		
<b>Pin</b>	8 - 16VDC	GND	Bus A	Bus B		
<b>Description</b>	Supply voltage (VBUS)		NOX Bus connection			
<b>Terminal P3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Pin</b>	15 V Out	Input	OC	5 V Out	GND	IO1
<b>Description</b>	8-16 VDC Output	Detector input	Open collector output	Power		TTL input 1
<b>Pin</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>Pin</b>	IO2	RS485-A	RS485-B	N.O.	Common	N.C.
<b>Description</b>	TTL inputs	OSDP Card reader		Relay		

NOX CMO functions	
Function	Description
Reader	Both in- and out readers connected on the same RS485 Bus
Communication	RS485 with 9600, 19200 and 38400 baud. CRC with LSB/MSB or MSB/LSB
LED's	Up to 3 LED's per reader with up to 4 different colours (red, green, yellow, blue) Free programmable , including blinking 2 colors
Supervision	Communication between NOX CMO and reader is supervised
I/O on reader	- up to 3 inputs on reader - up to 2 outputs on reader
Buzzer	Free programmable on reader
Tamper	Tamper contact of reader is supported
Keypad	Supported with key 0 to 9, * and #
Setting functions	<ul style="list-style-type: none"> <li>- Card</li> <li>- User code</li> <li>- Fix code + card</li> <li>- User code + card</li> <li>- Pin code + card</li> <li>- Card + fix code</li> <li>- Card+ user code</li> <li>- Card+ pin code</li> <li>- Fix code + card + pin code</li> <li>- Fix code + card + user code</li> </ul>

