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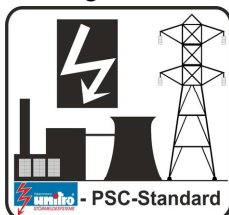
Fleischmann  
**unitro**<sup>®</sup>  
STÖRMELDESYSTEME

## ME 16-P logic integral logic annunciator

### Type designation:

#### ME 16-P logic

acknowledgeable new alert- flash warning with 2 flashing frequencies (ISA-18.1/DIN 19235), with signal storage in case of power failure, for 16 signal inputs, **parameterization via USB**, with logic-functions



*the electronic  
MULTIPLE RELAY  
with data retention  
in the absence of power  
parameterizable  
Option with  
IEC 61850 protocol*

### Controls and displays

- Bright 5mm RGB-LED display
- Separate status indicator (green = Power ON / blue = USB connected)
- Easily exchangeable label strips
- Integrated mini horn and functional buttons

### Parameterization

- Integrated **Mini USB interface** for parameterization using Windows 7 Pro or higher
- Acknowledgeable new alert/first alert flash warning, all sequences ISA-18.1-1979 (R2004) and DIN 19235
- Quiescent / operating current – for each signal
- New alert / first alert – for each signal
- Inputs freely assignable to outputs for each signal
- Response delay variable for each signal from 50ms to 10min (in steps of 50ms, 2s and 1min)
- Selectable LED colors (red/green/yellow/blue/white)
- Anti-tilt monitor

### Electrical characteristics

- **16 signal inputs, 2-pole**, max. 230V AC / 240V DC with filter switching and electrical isolation
- Resolution and switching precision  $\geq 1$ ms
- EMC-values: Higher immunity levels to UNITRO-PSC-Standard
- Potential-free **outputs 2-pole**: contactless opto-mos switch max. 300V DC, 100mA (resolution  $\geq 1$ ms), or normally open relay max. 5A 250V AC, 3A 30V DC (resolution  $\geq 10$ ms)
- Electrically isolated horn / test- and group signal output (max. 5A 250V AC, 3A 30V DC)
- States saved to memory on power failure

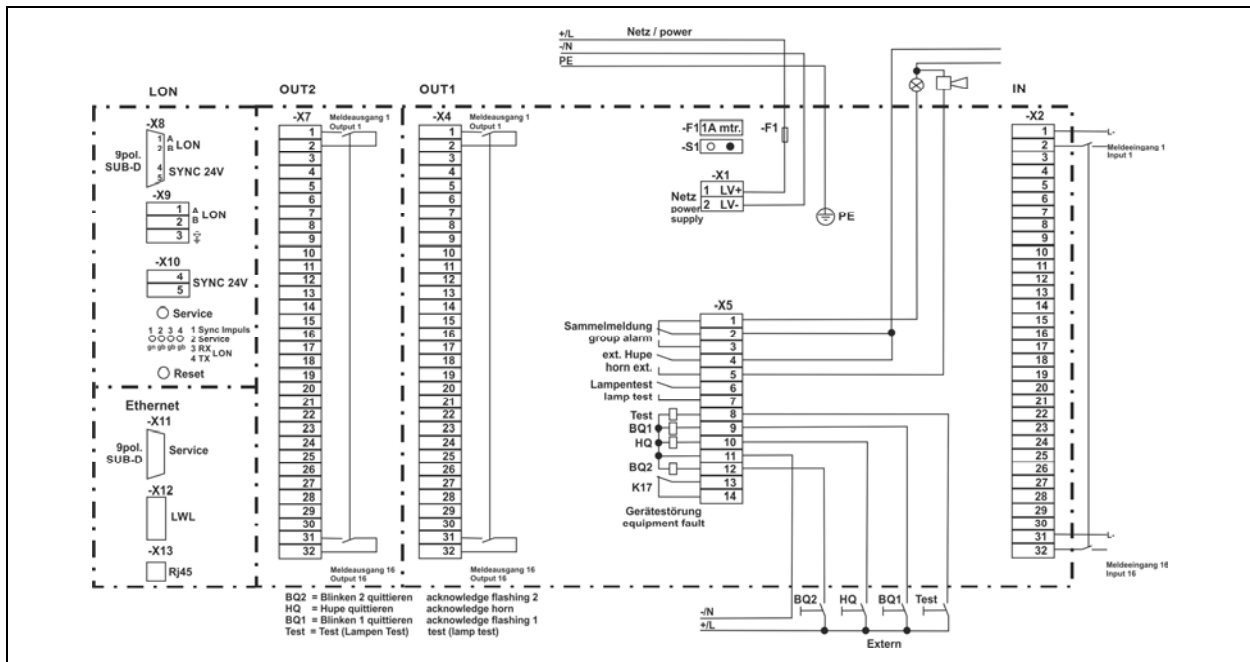
### Mechanical characteristics

- Compact aluminum installation housing to IEC 61554 (144 x 144 x 160 + 25mm)
- Connection: Screw-type terminals, plug connection **with screw flange and strain relief** max. 2.5mm<sup>2</sup>

### Options

- Additional printed circuit for 16 output contacts
- or 2-wire bus link (LON bus)
- or Industrial Ethernet interface (managed switch) **with IEC 61850 protocol**

## Connection diagram ME 16-P logic



### Technical data:

- Type of construction:**  
control board housing aluminum  
144 x 144 x 160 + 25mm  
(cutting for installation 138 x 138 + 1mm)
- Degree of protection:**  
front: IP50, with full-view  
acrylic glass doors IP54  
housing: IP20
- Weight:**  
max. 2000g
- Climatic conditions:**  
in accordance with UNITRO-PSC-Standard
- Connection:**  
screw-type terminals/ plug connection  
connection with screw flange max. 2.5 mm<sup>2</sup>
- Supply voltage:**  
24V AC/DC  
48-60V AC/DC  
110/125V AC/DC  
220/240V AC/DC  
voltage-adapted
- Alarm signal nominal voltage:**  
24V AC to 230V AC  
24V DC to 240V DC  
voltage-adapted, voltage tolerance  $\pm 10\%$
- Input level for signal inputs:**  
at 24V AC / DC 8mA  
at 230V AC 7mA  
at 60V DC 4mA  
at 110 / 125V DC 3mA  
at 240V DC 2mA
- Data retention in the absence of power:**  
20 years
- Resolution:**  
 $\geq 1\text{ms}$  (opto-mos)  
 $\geq 10\text{ms}$  (Relay)
- Switch-on delay:**  
programmable from 50ms to 10min  
(in steps of 50ms, 2s and 1min)
- Minimum signal duration:**  
1ms
- First-up discrimination:**  
1ms
- Flashing frequencies:**  
2Hz / 0.5Hz
- Power loss:**  
max. 6W + 16x 0.5W
- Relay outputs:**  
max. 5A 250V AC,  
3A 30V DC
- Contactless signal outputs:**  
opto-mos switch max. 300V DC, 100mA
- Parameterization interface:**  
Mini USB interface for parameterization  
with software, used with Windows 7 Pro  
or higher
- Leakage distances and clearances:**  
in accordance with  
UNITRO-PSC-Standard
- EMC, immunity to interference:**  
UNITRO-PSC-Standard, immunity higher  
degrees of severity according to the  
actual generic standards DIN EN 61000

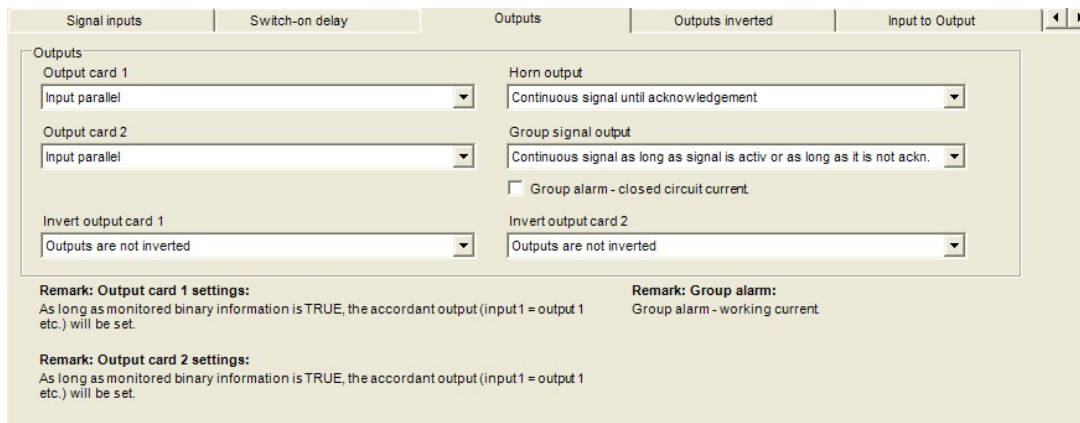
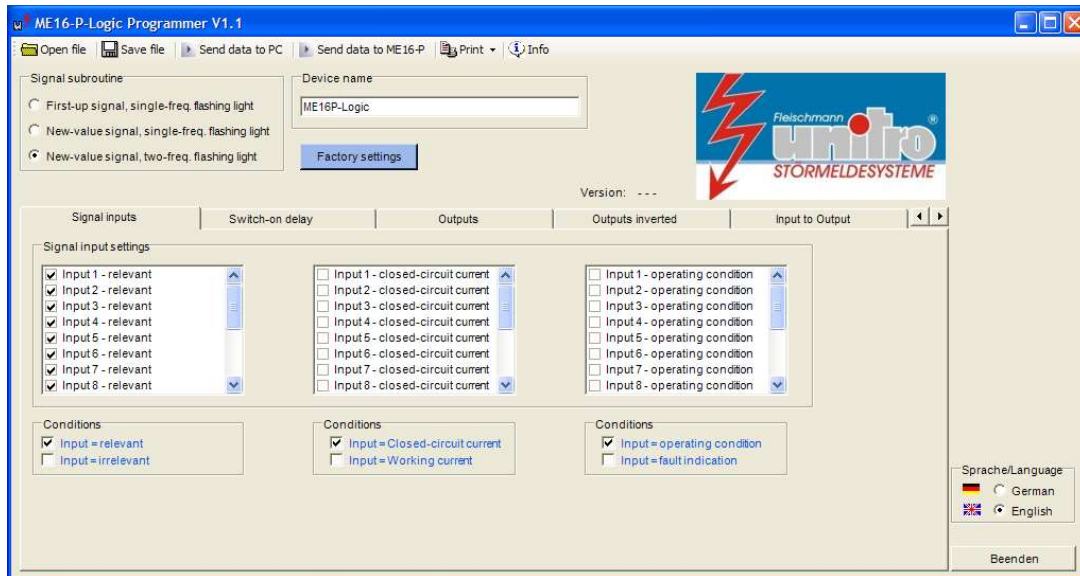


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## Combinations ME 16-P logic

Option: <b>+ 2. Output Card</b>	Option: Output Card	Input Card freely selectable	Power supply Card freely selectable
<p><b>Opto-mos OUT (2-pin)</b> 300V DC, 100mA</p> <p>or</p> <p><b>Relay OUT (2-pin)</b> 250V, 5A</p> <p>or</p> <p><b>LON-Bus FTX</b> Interface-card</p> <p>or</p> <p><b>Industrial Ethernet</b> Interface-card</p> <p>or</p> <p><b>IEC 61850</b> Interface-card</p> <p><b>USB cable</b> for parameterization</p>	<p><b>Opto-mos OUT (2-pin)</b> 300V DC, 100mA</p> <p>or</p> <p><b>Relay OUT (2-pin)</b> 250V, 5A</p>	<p><b>digital IN (2-pin)</b> 24V AC/DC, ± 10-15%</p> <p>or</p> <p><b>digital IN (2-pin)</b> 48/60V DC, ± 10-15%</p> <p>or</p> <p><b>digital IN (2-pin)</b> 110/125V DC ± 10-15%</p> <p>or</p> <p><b>digital IN (2-pin)</b> 240V DC, ± 10-15%</p> <p>or</p> <p><b>digital IN (2-pin)</b> 230V AC ± 10-15%</p>	<p><b>Power supply</b> 24V AC/DC, ± 10-15%</p> <p>or</p> <p><b>Power supply</b> 48/60V DC, ± 10-15%</p> <p>or</p> <p><b>Power supply</b> 110/125V DC ± 10-15%</p> <p>or</p> <p><b>Power supply</b> 220V DC, ± 10-15%</p> <p>or</p> <p><b>Power supply</b> 230V AC ± 10-15%</p> <p><b>basic module</b></p>
		<p><b>CPU + Bay + Back + LED + Buttons</b></p>	

# Parameterization



Signal inputs | Switch-on delay | Outputs | Outputs inverted | Input to Output | Bistable relais 1-8 | Bistable relais 9-16 | LED-colors | History | Labelling

Wobbling signal gate: 1s

Format: year-month-day hour:minute:second.millisecond

Pos.	Upcoming/drop-off	No. of warning	Date	Time since last reset	Time counter
37	---	Reset	2010-10-21 14:31:42.974	0000 00:46:03.862	0000 01:56:39.974
36	---	Reset		0000 01:10:36.112	0000 01:10:36.112
35	upcoming report	2			0000 01:10:09.632
34	---	FQ2			0000 00:00:38.237
33	---	FQ1			0000 00:00:38.050
32	drop-off report	1			0000 00:00:36.966
31	drop-off report	2			0000 00:00:36.598
30	drop-off report	3			0000 00:00:36.243
29	drop-off report	4			0000 00:00:35.859
28	drop-off report	5			0000 00:00:35.501
27	drop-off report	6			0000 00:00:35.146
26	drop-off report	7			0000 00:00:34.850
25	drop-off report	8			0000 00:00:34.496
24	drop-off report	9			0000 00:00:34.148
23	drop-off report	10			0000 00:00:33.843
22	drop-off report	11			0000 00:00:33.524
21	drop-off report	12			0000 00:00:33.184
20	drop-off report	13			0000 00:00:32.827
19	drop-off report	14			0000 00:00:32.450
18	drop-off report	15			0000 00:00:32.059

Load history | Export Historie