



since 1971
the power to control

50 Years

Fleischmann
unitro[®]
STÖRMEDESYSTE

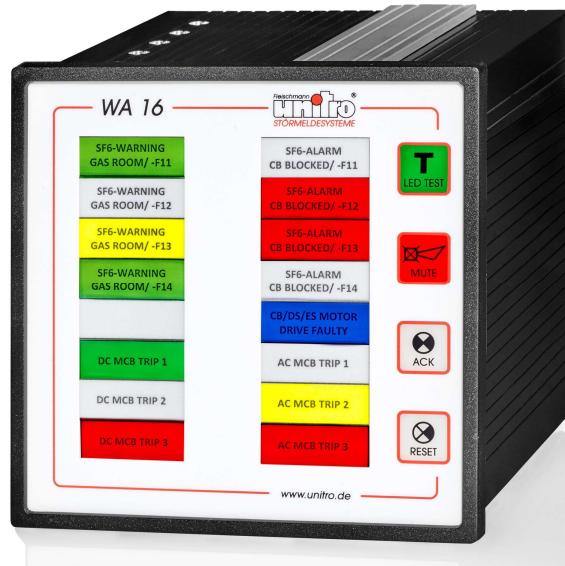
WA 16 integral logic annunciator

Type designation:

WA 16

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 or NFC



Controls and displays

- Bright 12,5 x 32mm **RGB light field displays**
- Easily exchangeable label strips
- Integrated mini horn and 4 **RGB backlit function buttons** with status display

Parameterization

- Integrated **Mini USB** or **NFC interface** for parameterization (Windows 7 Pro (Android 6) or higher)
- Acknowledgeable new alert/first alert flash warning, all sequences ISA-18.1-1979 (R2004) and DIN 19235
- Quiescent - operating current / relevant - not relevant / new alert - first alert, adjustable per message
- 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)
- **Light field displays: selectable colors (red/green/yellow/blue or 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 $\geq 1\text{ms}$
- EMC-values: Higher immunity levels to UNITRO-PSC-Standard
- Potential-free **outputs 2-pole**: contactless opto-mos switch max. 300V DC, 100mA (resolution $\geq 1\text{ms}$), or normally open relay max. 5A 250V AC, 3A 30V DC (resolution $\geq 10\text{ms}$)
- Electrically isolated horn / test- and group signal output (max. 5A 250V AC, 3A 30V DC)
- States saved to memory on power failure
- **History with ring buffer**, over **320 events**, chronologically in real time with RTC clock

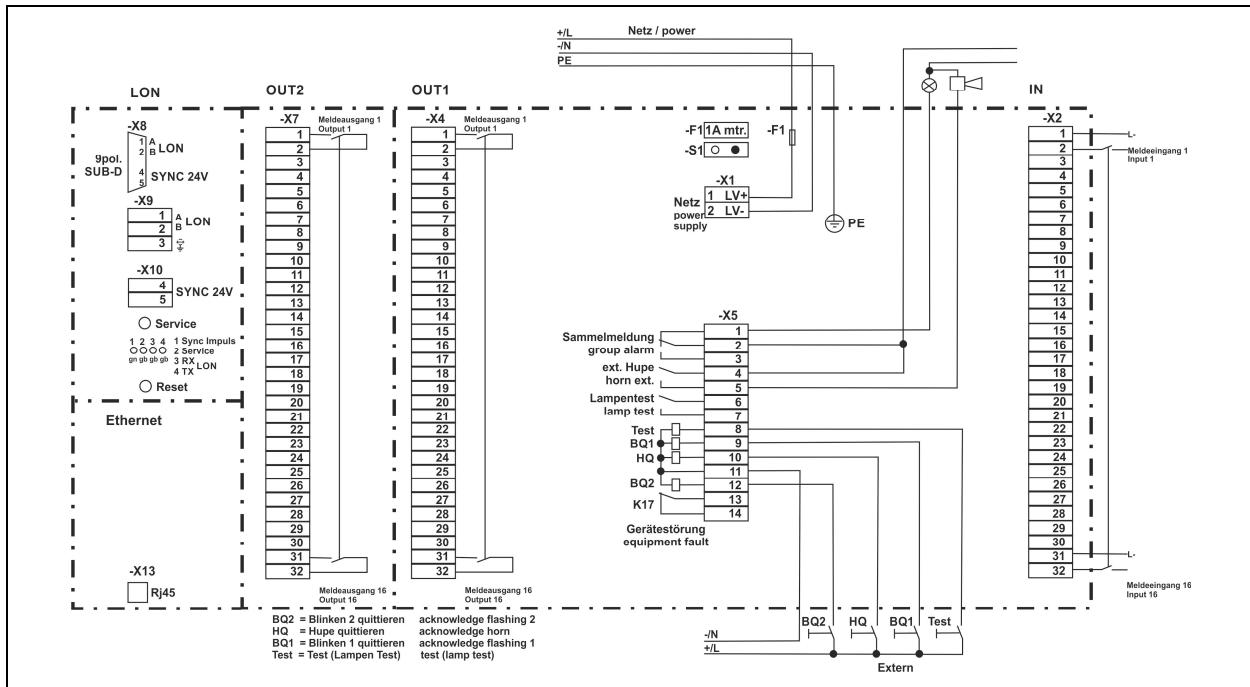
Mechanical characteristics

- 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. 2.5mm²

Options

- Additional printed circuit for 16 output contacts
- or 2-wire bus link (LON bus)
- or Industrial Ethernet interface **with IEC 61850 protocol and IEC 60870-5-104 protocol**

Connection diagram WA 16



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 mm²
- 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 ±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:**
≥ 1ms (opto-mos)
≥ 10ms (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 or **NFC** interface
for parameterization with software, used
with Windows 7 Pro (Android 6) 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



Combinations WA 16

WA 16	Power supply Card freely selectable	Input Card freely selectable	Option: + 2. Output Card
			<p>Opto-mos OUT (2-pin) 300V DC, 100mA</p> <p>or</p> <p>Relay OUT (2-pin) 250V, 5A</p> <p>or</p> <p>LON-Bus FTX Interface-card</p> <p>or</p> <p>IEC 61850 and IEC 60870-5-104 Interface-card</p>
	<p>Power supply 24V AC/DC, ± 10-15%</p> <p>or</p> <p>Power supply 48/60V DC, ± 10-15%</p> <p>or</p> <p>Power supply 110/125V DC ± 10-15%</p> <p>or</p> <p>Power supply 220V DC, ± 10-15%</p> <p>or</p> <p>Power supply 230V AC ± 10-15%</p>	<p>digital IN (2-pin) 24V AC/DC, ± 10-15%</p> <p>or</p> <p>digital IN (2-pin) 48/60V DC, ± 10-15%</p> <p>or</p> <p>digital IN (2-pin) 110/125V DC ± 10-15%</p> <p>or</p> <p>digital IN (2-pin) 240V DC, ± 10-15%</p> <p>or</p> <p>digital IN (2-pin) 230V AC ± 10-15%</p>	<p>Option: + 2. Output Card</p> <p>Opto-mos OUT (2-pin) 300V DC, 100mA</p> <p>or</p> <p>Relay OUT (2-pin) 250V, 5A</p> <p>or</p> <p>LON-Bus FTX Interface-card</p> <p>or</p> <p>IEC 61850 and IEC 60870-5-104 Interface-card</p>
			USB cable for parameterization

basic module

Parameterization

