



since 1971
the power to control

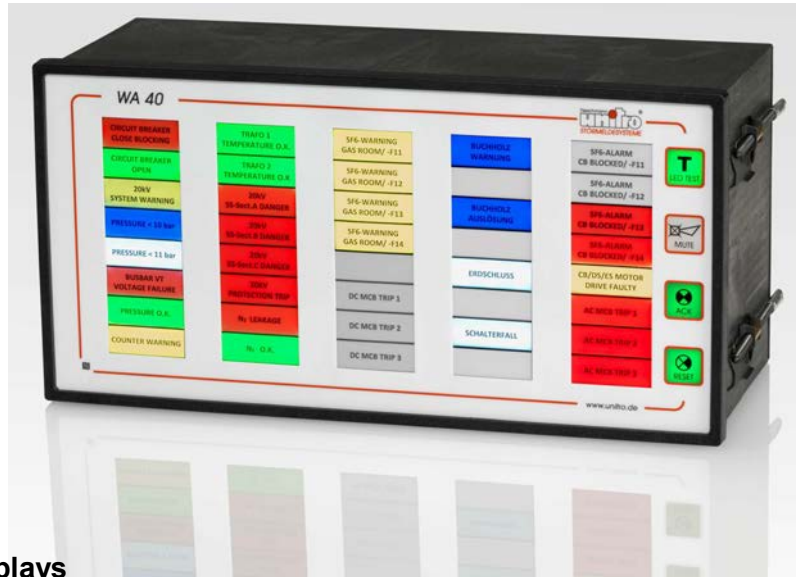
Fleischmann
unitro[®]
STÖRMELDESISTEME

Control board mounting annunciator system WA 40 (M) + WA 40-S

Type designation:

WA 40 / WA 40-S

fault indicating system for 40-200 messages, acknowledgeable new alert - flash warning with 2 flashing frequencies (ISA-18.1/DIN 19235), with signal storage in case of power failure, multifunctional parameterizable via **USB** and **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** (only WA 40 (M))
- Integrated web-page to display the luminous fields (in the color of the display), the message texts and group messages, as well as acknowledgment of the messages
- E-mail remote alarming (SMTP)

Parameterization

- Integrated Mini **USB** and **NFC** 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
- New alert / first alert, Quiescent / operating current – 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)
- **History** with ring memory for **8000 messages**
- Light field displays: selectable colors (red/green/yellow/blue and white)

Electrical characteristics

- 40 signal inputs, common ground (per 8-block) max. 230V AC / 240V DC with filter switching and electrical isolation
- Resolution and switching precision $\geq 10\text{ms}$
- EMC-values: Higher immunity levels to UNITRO-PSC-Standard
- Potential-free outputs: normally open relay max. 2A 250V AC, 0,3A 220V
- 3x group signal outputs: changeover relay max. 2A 250V AC, 0,3A 220V DC (only WA 40 (M))
- States saved to memory on power failure

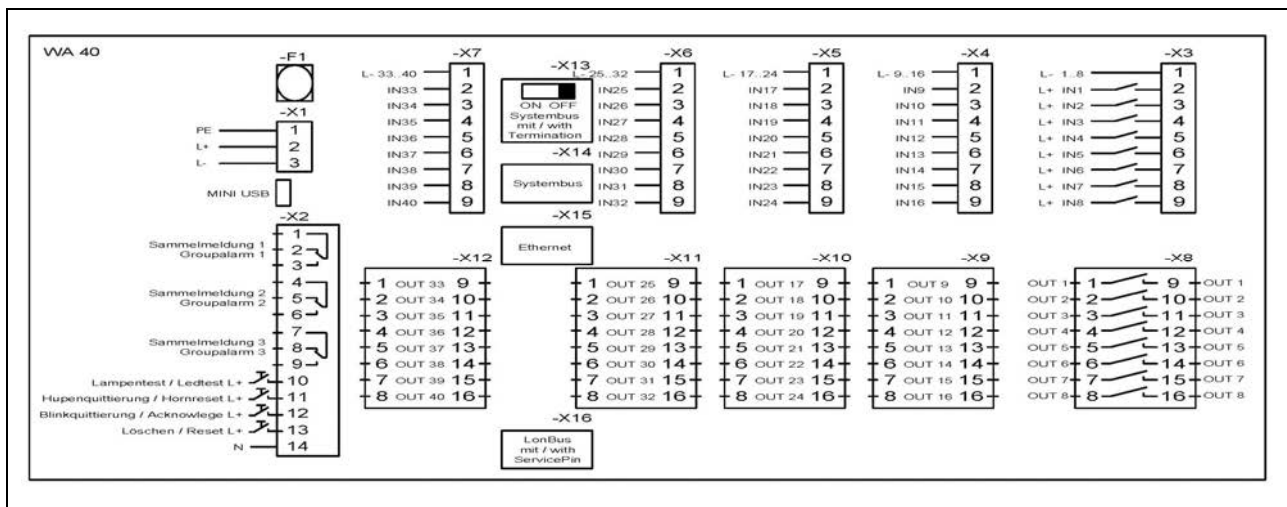
Mechanical characteristics

- Plastic junction housing (288 x 144 x 120 + 25mm)
- Connection: Screw-type terminals, plug connection max. 2.5mm²

Options

- Expandable to max. 200 signal inputs by max. 4 expansion modules WA 40-S
- LON bus interface or Ethernet interface or **TCP/IP IEC 61850 protocol**

Connection diagram WA 40 (M)



Technical data:

- Type of construction:**
control board housing 288 x 144 x 120 + 25mm
(cutting for installation 282 x 138 + 1mm)
- Degree of protection:**
front: IP53
housing: IP20
- Weight:**
WA 40 (M) max. 2600g
- Climatic conditions:**
in accordance with
UNITRO-PSC-Standard
- Connection:**
screw-type terminal/ plug-in connection
max. 2.5mm²
- Supply voltage:**
24V AC/DC or
48-60V AC/DC or
110V AC/125V DC or
230V AC/240V DC
voltage-adapted
- Alarm signal nominal voltage:**
24V AC/DC or
48-60V DC or
110/125V DC or
220/240V DC or
230V AC
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:**
 $\geq 10\text{ms}$ (relay)
- Switch-on delay:**
programmable from 50ms to 10min
(in steps of 50ms, 2s and 1min)
- Minimum signal duration:**
10ms
- First-up discrimination:**
10ms
- Flashing frequencies:**
2Hz / 0.5Hz
- Power loss:**
max. 20W
- Relay outputs:**
max. 2A 250V AC,
0,3A 220V DC
only WA 40-M:
3x group signal outputs, changeover,
max. 2A 250V AC,
0,3A 220V
- Parameterization interfaces:**
Mini USB and NFC interface
for parameterization
- 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 WA 40 (M) + WA 40-S

WA 40	Power supply Card freely selectable	In- / Output Card freely selectable (Supply voltage, independent)	Option: In- / Output Card	Option:	Option:
1 x	1 x Power supply 24V AC/DC, ± 10-15% or Power supply 48/60V DC, ± 10-15% or Power supply 110/125V DC ± 10-15% or Power supply 220V DC, ± 10-15% or Power supply 230V AC ± 10-15%	1 x 8x digital IN 24V AC/DC, ± 10-15% Option : 8x digital OUT or 8x digital IN 48/60V DC, ± 10-15% Option : 8x digital OUT or 8x digital IN 110/125V DC ± 10-15% Option : 8x digital OUT or 8x digital IN 240V DC, ± 10-15% Option : 8x digital OUT or 8x digital IN 230V AC ± 10-15% Option : 8x digital OUT	max. 4 x 8x digital IN 24V AC/DC, ± 10-15% Option : 8x digital OUT or 8x digital IN 48/60V DC, ± 10-15% Option : 8x digital OUT or 8x digital IN 110/125V DC ± 10-15% Option : 8x digital OUT or 8x digital IN 240V DC, ± 10-15% Option : 8x digital OUT or 8x digital IN 230V AC ± 10-15% Option : 8x digital OUT	1 x Busmaster (for max. 4x Slave)	1 x LON FTT or Ethernet or (i.p.) IEC 61850 USB cable for parameterization
<div style="border: 1px solid black; padding: 5px; display: inline-block;">CPU + Bay</div> <div style="margin-left: 20px;">+</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">Power supply 24V AC/DC, ± 10-15%</div> <div style="margin-left: 20px;">+</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">8x digital IN 24V AC/DC, ± 10-15% Option : 8x digital OUT</div> <div style="margin-left: 20px;">+</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">8x digital IN 48/60V DC, ± 10-15% Option : 8x digital OUT</div> <div style="margin-left: 20px;">+</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">8x digital IN 110/125V DC ± 10-15% Option : 8x digital OUT</div> <div style="margin-left: 20px;">+</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">8x digital IN 240V DC, ± 10-15% Option : 8x digital OUT</div> <div style="margin-left: 20px;">+</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">8x digital IN 230V AC ± 10-15% Option : 8x digital OUT</div>					<div style="border-left: 1px solid red; border-right: 1px solid red; height: 20px; width: 100%;"></div> basic module

Parameterization

WA - Programmer 1.00

Open file Save file Send data to PC Send data to device Print Info

Signal subroutine
 First-up signal, single-freq. flashing light
 New-value signal, single-freq. flashing light
 New-value signal, two-freq. flashing light

Device name: WA

Sprache/Language
 deutsch
 english

Version: ---

Settings for: device 1 Factory settings

Signal inputs | Switch-on delay | Outputs | Outputs inverted | Link input/outputs | Link input/group message | LED | Labelling

Signal input settings

Plug-in card 1

Plug-in card 1	relevant
Plug-in card 2	relevant
Plug-in card 3	relevant
Plug-in card 4	relevant
Plug-in card 5	relevant
Input 4 (device 1) - relevant	<input checked="" type="checkbox"/>
Input 5 (device 1) - relevant	<input checked="" type="checkbox"/>
Input 6 (device 1) - relevant	<input checked="" type="checkbox"/>
Input 7 (device 1) - relevant	<input checked="" type="checkbox"/>
Input 8 (device 1) - relevant	<input checked="" type="checkbox"/>

<input type="checkbox"/> Input 1 (device 1) - closed-circuit current
<input type="checkbox"/> Input 2 (device 1) - closed-circuit current
<input type="checkbox"/> Input 3 (device 1) - closed-circuit current
<input type="checkbox"/> Input 4 (device 1) - closed-circuit current
<input type="checkbox"/> Input 5 (device 1) - closed-circuit current
<input type="checkbox"/> Input 6 (device 1) - closed-circuit current
<input type="checkbox"/> Input 7 (device 1) - closed-circuit current
<input type="checkbox"/> Input 8 (device 1) - closed-circuit current

<input type="checkbox"/> Input 1 (device 1) - operating condition
<input type="checkbox"/> Input 2 (device 1) - operating condition
<input type="checkbox"/> Input 3 (device 1) - operating condition
<input type="checkbox"/> Input 4 (device 1) - operating condition
<input type="checkbox"/> Input 5 (device 1) - operating condition
<input type="checkbox"/> Input 6 (device 1) - operating condition
<input type="checkbox"/> Input 7 (device 1) - operating condition
<input type="checkbox"/> Input 8 (device 1) - operating condition

Conditions

<input checked="" type="checkbox"/> Input = relevant
<input type="checkbox"/> Input = irrelevant

<input checked="" type="checkbox"/> Input = Closed-circuit current
<input type="checkbox"/> Input = Working current

<input checked="" type="checkbox"/> Input = operating condition
<input type="checkbox"/> Input = fault indication

Close

WA - Programmer 1.00

Open file Save file Send data to PC Send data to device Print Info

Signal subroutine
 First-up signal, single-freq. flashing light
 New-value signal, single-freq. flashing light
 New-value signal, two-freq. flashing light

Device name: WA

Sprache/Language
 deutsch
 english

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Settings for: device 1 Factory settings

Signal inputs | Switch-on delay | Outputs | Outputs inverted | Link input/outputs | Link input/group message | LED | Labelling

LED colors - device 1

Plug-in card 1

LED 1 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 2 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 3 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 4 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 5 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 6 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 7 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white	LED 8 <input checked="" type="radio"/> red <input type="radio"/> green <input type="radio"/> yellow <input type="radio"/> blue <input type="radio"/> white
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all LED red all LED green all LED yellow all LED blue all LED white

Close