

**maxGUARD
AMG ELM-6 EX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

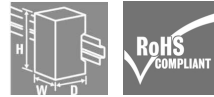
D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

www.weidmueller.com



Efficient machine and facility operation calls for fail-safe and maintenance-friendly control voltage distribution that can be installed in a time and space-saving manner.

With the new maxGUARD system, the terminal blocks (previously installed separately) for distributing potential to the outputs of the electronic load monitors become an integral part of a 24 V DC control voltage distribution system.

The innovative combination of load monitoring and potential distribution saves time during installation, increases safety against failure and reduces the amount of space required on the terminal rail by 50%.

General ordering data

| | |
|------------|---|
| Type | AMG ELM-6 EX |
| Order No. | 2082000000 |
| Version | Electronic load monitoring, 6.00 A, 24 V DC |
| GTIN (EAN) | 4050118419450 |
| Qty. | 1 pc(s). |

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Technical data**Dimensions and weights**

| | | | |
|------------|---------|-----------------|------------|
| Width | 6.1 mm | Width (inches) | 0.24 inch |
| Height | 125 mm | Height (inches) | 4.921 inch |
| Depth | 96.5 mm | Depth (inches) | 3.799 inch |
| Net weight | 40 g | | |

Temperatures

| | | | |
|-----------------------------|----------------|-----------------------------|----------------|
| Operating temperature, max. | 55 °C | Operating temperature, min. | -25 °C |
| Storage temperature, max. | 85 °C | Storage temperature, min. | -40 °C |
| Operating temperature | -25 °C...55 °C | Storage temperature | -40 °C...85 °C |

Probability of failure

| | |
|------|-----------|
| MTTF | 290 Years |
|------|-----------|

Input

| | | | |
|--|-------------------------|----------------------------|------------------|
| Current consumption (full load) | I _{OUT} +30 mA | Current consumption (idle) | 25 mA |
| DC input voltage range | 18...30 V DC | Input fuse (internal) | Yes |
| Rated input voltage | 24 V DC | Surge protection | Suppressor diode |
| max. admissible residual ripple at the input | 100 mVpp | | |

output

| | | | |
|--------------------------|-----------|---------------------------|--------------------------|
| Capacitive load | 15,000 µF | Connection system | PUSH IN |
| Rated current | 6 A | Surge protection | Suppressor diode |
| Switch-on delay | 1 s | Triggering characteristic | see characteristic curve |
| adjustable rated current | Yes | | |

General data

| | | | |
|------------------------|---------------------------------|------------------------------|----------------|
| Adjustable range | 1- 6 A | Conformal coating | Yes |
| Function key | Activation time < 3s, Reset, ON | Operating temperature | -25 °C...55 °C |
| Power loss, idling | 492 mW | Power loss, nominal load | 1,128 mW |
| Protection degree | IP20 | Relay to activate the output | No |
| Surge voltage category | III | | |

Insulation coordination

| | |
|------------------------|-----|
| Surge voltage category | III |
|------------------------|-----|

Connection data (output)

| | | | |
|---|---------------------|---|----------------------|
| Conductor cross-section, AWG/kcmil , max. | 12 | Conductor cross-section, AWG/kcmil , min. | 26 |
| Conductor cross-section, flexible , max. | 2.5 mm ² | Conductor cross-section, flexible , min. | 0.14 mm ² |
| Conductor cross-section, rigid , max. | 2.5 mm ² | Conductor cross-section, rigid , min. | 0.14 mm ² |
| Connection system | PUSH IN | Number of terminals | 2 (+ / -) |
| Screwdriver blade | 0.6 x 3.5 | | |

Data sheet

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Technical data

Signalling

| | | | |
|---------------------------------------|---|---------|---|
| LED green | Operation (failure-free), Early warning: I Out > 90% I Rated (flashing) | LED red | Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing) |
| Transistor output, positive-switching | Pre-warning, Alarm | | |

Approvals

| | | | |
|---------------------|--|---------------------------|------------------|
| Institute(ATEX) | ATEX | Certificate No. (ATEX) | DEMKO17ATEX1870X |
| Institute (cULus) |  | Certificate no. (cULus) | E258476 |
| Institute (cULusEX) |  | Certificate no. (cULusEX) | E470829 |

Ratings IECEx/ATEX/cUL

| | | | |
|------------------------|------------------|-------------------------|------------------|
| Certificate No. (ATEX) | DEMKO17ATEX1870X | Certificate No. (IECEX) | IECEXULD17.0018X |
|------------------------|------------------|-------------------------|------------------|

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 6.0 | EC002057 | eClass 6.2 | 27-37-15-02 |
| eClass 9.1 | 27-37-10-16 | | |

Approvals

Approvals



| | |
|------|---------|
| ROHS | Conform |
|------|---------|

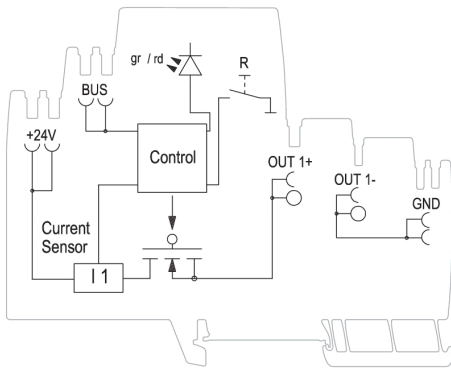
Downloads

| | |
|--------------------|---|
| Engineering Data | EPLAN |
| User Documentation | Manual_maxGUARD Operating instructions |

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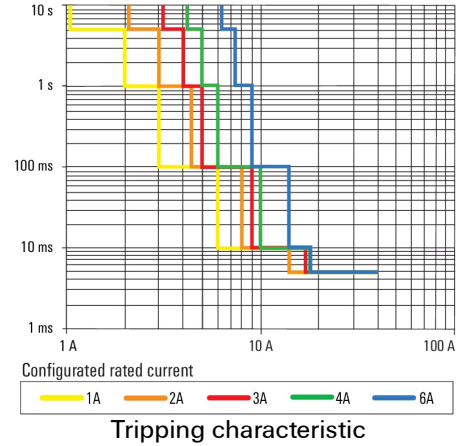
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Drawings



Schematic circuit diagram

Tripping characteristic normal



Tripping characteristic lag

