

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Similar to illustration

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

| | |
|------------|--|
| Version | Electronic load monitoring, 6 A, 24 V DC |
| Order No. | 2080500000 |
| Type | AMG ELM-6F |
| GTIN (EAN) | 4050118419528 |
| Qty. | 1 pc(s). |

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Technical data

Dimensions and weights

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

Temperatures

| | | | |
|---------------------|----------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -25 °C...70 °C |
|---------------------|----------------|-----------------------|----------------|

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

| | | | |
|---------------------------|--------------------------|-----------------|-----------|
| Adjustable rated current | No | 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 | | |

General data

| | | |
|------------------------------|--------------------------------|-------------|
| Conformal coating | No | |
| Function key | Activation time <3s, Reset, ON | |
| MTTF | According to Standard | SN 29500 |
| | Operating time (hours), min. | 2,845,000 h |
| | Ambient temperature | 40 °C |
| | Input voltage | 24 V |
| | Output power | 144 W |
| | Duty cycle | 100 % |
| Power loss, idling | 415 mW | |
| Power loss, nominal load | 1,075 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 AWG | Conductor cross-section, AWG/kcmil , min. | 26 AWG |
| 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 | | |

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Signalling

| | | |
|--------------------------|---------|---|
| LED green | Red LED | Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing) |
| Operation (failure-free) | | |

Approbations

| | | | |
|-------------------------|---------|-------------------|-------|
| Certificate no. (cULus) | E258476 | Institute (cULus) | CULUS |
|-------------------------|---------|-------------------|-------|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002057 | ETIM 7.0 | EC002057 |
| ETIM 8.0 | EC002057 | ETIM 9.0 | EC001437 |
| ECLASS 9.0 | 27-37-10-16 | ECLASS 9.1 | 27-37-10-16 |
| ECLASS 10.0 | 27-37-10-16 | ECLASS 11.0 | 27-37-10-16 |
| ECLASS 12.0 | 27-37-10-16 | ECLASS 13.0 | 27-37-10-16 |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | a7fff16c-85aa-4fb0-a206-7be03f41b0b7 |

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E258476 |

Downloads

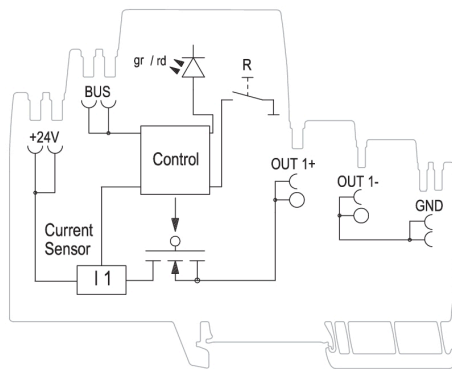
| | |
|---|---|
| Approval/Certificate/Document of Conformity | MaxGuard AMG ELM EX UL 61010-1 .pdf MaxGuard AMG ELM UL 508 CSA C22.2.pdf Declaration of Conformity UK Conformity Assessed |
| Engineering Data | CAD data – STEP |
| Engineering Data | Zuken E3.S |
| Product Change Notification | Release-Notes |
| User Documentation | Manual_maxGUARD Operating instructions |
| Catalogues | Catalogues in PDF-format |

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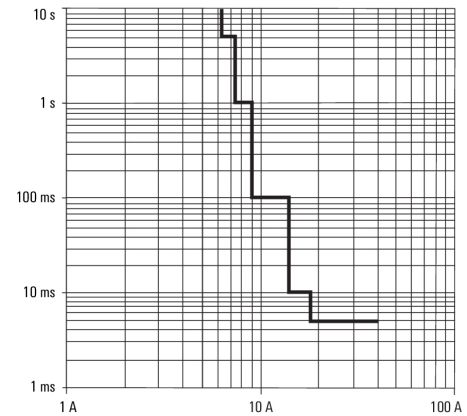
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Drawings



Schematic circuit diagram

Tripping characteristic normal



Tripping characteristic

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Accessories

4 mm²

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | ZQV 4N/8 | Version |
| Order No. | 1528030000 | Cross-connector (terminal), Plugged, Number of poles: 8, Pitch in mm |
| GTIN (EAN) | 4050118332841 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/10 RD | Version |
| Order No. | 2460740000 | Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm |
| GTIN (EAN) | 4050118476163 | (P): 6.10, 32 A, red |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/2 | Version |
| Order No. | 1527930000 | Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm |
| GTIN (EAN) | 4050118332766 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/9 | Version |
| Order No. | 1528070000 | Cross-connector (terminal), Plugged, Number of poles: 9, Pitch in mm |
| GTIN (EAN) | 4050118332797 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/6 RD | Version |
| Order No. | 2460780000 | Cross-connector (terminal), Plugged, Number of poles: 6, Pitch in mm |
| GTIN (EAN) | 4050118476200 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/6 | Version |
| Order No. | 1527990000 | Cross-connector (terminal), Plugged, Number of poles: 6, Pitch in mm |
| GTIN (EAN) | 4050118332919 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/10 BL | Version |
| Order No. | 1528230000 | Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm |
| GTIN (EAN) | 4050118333138 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/10 | Version |
| Order No. | 1528090000 | Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm |
| GTIN (EAN) | 4050118332896 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/8 BL | Version |
| Order No. | 1528190000 | Cross-connector (terminal), Plugged, Number of poles: 8, Pitch in mm |
| GTIN (EAN) | 4050118332858 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/2 BL | Version |
| Order No. | 1528040000 | Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm |
| GTIN (EAN) | 4050118332773 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 60 pc(s). | |

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Accessories

| | | |
|------------|----------------------------|---|
| Type | ZQV 4N/9 RD | Version |
| Order No. | 2460750000 | Cross-connector (terminal), Plugged, Number of poles: 9, Pitch in mm |
| GTIN (EAN) | 4050118476170 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/5 BL | Version |
| Order No. | 1528140000 | Cross-connector (terminal), Plugged, Number of poles: 5, Pitch in mm |
| GTIN (EAN) | 4050118333015 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/50 BL | Version |
| Order No. | 1528240000 | Cross-connector (terminal), Plugged, Number of poles: 50, Pitch in mm |
| GTIN (EAN) | 4050118333121 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 5 pc(s). | |
| Type | ZQV 4N/5 | Version |
| Order No. | 1527980000 | Cross-connector (terminal), Plugged, Number of poles: 5, Pitch in mm |
| GTIN (EAN) | 4050118332759 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/4 | Version |
| Order No. | 1527970000 | Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm |
| GTIN (EAN) | 4050118332889 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/7 BL | Version |
| Order No. | 1528180000 | Cross-connector (terminal), Plugged, Number of poles: 7, Pitch in mm |
| GTIN (EAN) | 4050118333114 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/7 | Version |
| Order No. | 1528020000 | Cross-connector (terminal), Plugged, Number of poles: 7, Pitch in mm |
| GTIN (EAN) | 4050118332780 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/3 BL | Version |
| Order No. | 1528080000 | Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm |
| GTIN (EAN) | 4050118333008 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/2 RD | Version |
| Order No. | 2460450000 | Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm |
| GTIN (EAN) | 4050118476149 | (P): 6.10, 32 A, red |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/9 BL | Version |
| Order No. | 1528220000 | Cross-connector (terminal), Plugged, Number of poles: 9, Pitch in mm |
| GTIN (EAN) | 4050118333107 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/3 RD | Version |
| Order No. | 2460810000 | Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm |
| GTIN (EAN) | 4050118476231 | (P): 6.10, 32 A, red |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/50 RD | Version |
| Order No. | 2460730000 | Cross-connector (terminal), Plugged, Number of poles: 50, Pitch in mm |
| GTIN (EAN) | 4050118476156 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 5 pc(s). | |
| Type | ZQV 4N/3 | Version |
| Order No. | 1527940000 | Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm |
| GTIN (EAN) | 4050118332865 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 60 pc(s). | |

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Catalogue status 18.05.2024 / We reserve the right to make technical changes.

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Accessories

| | | |
|------------|----------------------------|---|
| Type | ZQV 4N/7 RD | Version |
| Order No. | 2460770000 | Cross-connector (terminal), Plugged, Number of poles: 7, Pitch in mm |
| GTIN (EAN) | 4050118476194 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/4 RD | Version |
| Order No. | 2460800000 | Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm |
| GTIN (EAN) | 4050118476224 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/5 RD | Version |
| Order No. | 2460790000 | Cross-connector (terminal), Plugged, Number of poles: 5, Pitch in mm |
| GTIN (EAN) | 4050118476217 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/6 BL | Version |
| Order No. | 1528170000 | Cross-connector (terminal), Plugged, Number of poles: 6, Pitch in mm |
| GTIN (EAN) | 4050118332926 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 20 pc(s). | |
| Type | ZQV 4N/4 BL | Version |
| Order No. | 1528120000 | Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm |
| GTIN (EAN) | 4050118332872 | (P): 6.10, Insulated: Yes, 32 A, blue |
| Qty. | 60 pc(s). | |
| Type | ZQV 4N/50 | Version |
| Order No. | 1528130000 | Cross-connector (terminal), Plugged, Number of poles: 50, Pitch in mm |
| GTIN (EAN) | 4050118332902 | (P): 6.10, Insulated: Yes, 32 A, orange |
| Qty. | 5 pc(s). | |
| Type | ZQV 4N/8 RD | Version |
| Order No. | 2460760000 | Cross-connector (terminal), Plugged, Number of poles: 8, Pitch in mm |
| GTIN (EAN) | 4050118476187 | (P): 6.10, Insulated: Yes, 32 A, red |
| Qty. | 20 pc(s). | |

Slotted screwdriver



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

| | | |
|------------|----------------------------|----------------------------|
| Type | SDIS SL 0.6X3.5X100 | Version |
| Order No. | 1274660000 | Screwdriver, Mounting tool |
| GTIN (EAN) | 4050118072631 | |
| Qty. | 1 pc(s). | |

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Accessories

W-Series



Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | WEW 35/2 V0 GF SW | Version |
| Order No. | 1479000000 | End bracket, Wemid, black, Rail: TS 35, when screwed in |
| GTIN (EAN) | 4050118286779 | |
| Qty. | 50 pc(s). | |

Standard version for machine construction



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 PP | Version |
| Order No. | 2123000000 | Partition plate |
| GTIN (EAN) | 4050118425338 | |
| Qty. | 40 pc(s). | |
| Type | AMG DIS | Version |
| Order No. | 2123050000 | Potential distributor |
| GTIN (EAN) | 4050118425413 | |
| Qty. | 10 pc(s). | |
| Type | AMG OD | Version |
| Order No. | 2122910000 | Potential distributor |
| GTIN (EAN) | 4050118425185 | |
| Qty. | 10 pc(s). | |
| Type | AMG EP 2010 | Version |
| Order No. | 2495380000 | Fastening element |
| GTIN (EAN) | 4050118505306 | |
| Qty. | 30 pc(s). | |

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| | | |
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| Type | AMG MD | Version |
| Order No. | 2122930000 | Potential distributor |
| GTIN (EAN) | 4050118425192 | |
| Qty. | 10 pc(s). | |
| Type | AMG PD | Version |
| Order No. | 2122920000 | Potential distributor |
| GTIN (EAN) | 4050118425321 | |
| Qty. | 10 pc(s). | |

Blank



WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text. WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with PrintJet CONNECT oder/or Plotter is possible.

- Can be fitted in strips or individually
- Markers in proven MultiCard format

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | WS 10/6 M MC NE WS | Version |
| Order No. | 1818400000 | WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller, |
| GTIN (EAN) | 4032248310876 | Allen-Bradley, white |
| Qty. | 600 pc(s). | |