

## Data sheet

### maxGUARD AMG ELM-1F

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

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

Type	AMG ELM-1F
Order No.	<a href="#">2080420000</a>
Version	Electronic load monitoring, 1.00 A, 24 V DC
GTIN (EAN)	4050118419412
Qty.	1 pc(s).

Creation date 21 April 2020 10:45:35 CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

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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	350 Years
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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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### Input

Current consumption (full load)	$I_{OUT} + 30 \text{ mA}$	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	10,000 $\mu\text{F}$	Connection system	PUSH IN
Rated current	1 A	Surge protection	Suppressor diode
Switch-on delay	1 s	Triggering characteristic	see characteristic curve
adjustable rated current	No		

### General data

Conformal coating	No	Function key	Activation time < 3s, Reset, ON
Operating temperature	-25 °C...55 °C	Power loss, idling	415 mW
Power loss, nominal load	469 mW	Protection degree	IP20
Relay to activate the output	No	Surge protection input, output, bus	Suppressor diode
Surge voltage category	III		

### Insulation coordination

Surge voltage category	III
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### 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 <sup>2</sup>	Conductor cross-section, flexible , min.	0.14 mm <sup>2</sup>
Conductor cross-section, rigid , max.	2.5 mm <sup>2</sup>	Conductor cross-section, rigid , min.	0.14 mm <sup>2</sup>
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)		

### Approvals

Institute (cULus)		Certificate no. (cULus)	E258476
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### Classifications

ETIM 6.0	EC002057	ETIM 7.0	EC002057
eClass 9.0	27-37-10-16	eClass 9.1	27-37-10-16
eClass 10.0	27-37-10-16		

### Approvals

Approvals



ROHS Conform

### Downloads

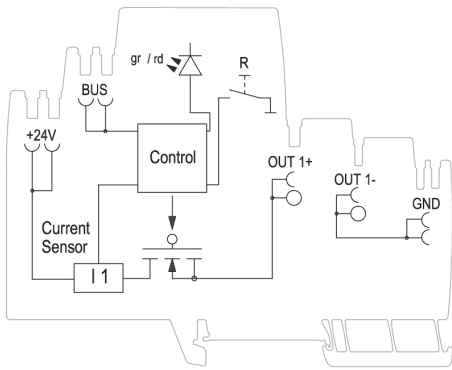
Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">EPLAN, WSCAD, Zuken E3.S</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Manual_maxGUARD</a> <a href="#">Operating instructions</a>

**Data sheet**

**maxGUARD  
AMG ELM-1F**

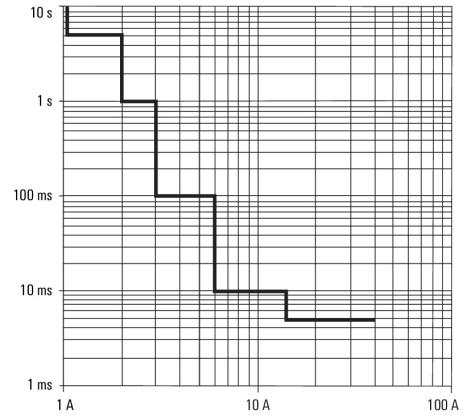
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**Drawings**



Schematic circuit diagram

**Tripping characteristic normal**



Tripping characteristic



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