

**AMG ELM-1F EX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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, 1 A, 24 V DC
Order No.	<a href="#">2082040000</a>
Type	AMG ELM-1F EX
GTIN (EAN)	4050118419580
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
Operating temperature, min.	-25 °C	Operating temperature, max.	70 °C

## Input

Current consumption (full load)	I <sub>OUT</sub> +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	10,000 µF	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	Yes		
Function key	Activation time < 3s, Reset, ON		
MTTF	According to Standard	SN 29500	
	Operating time (hours), min.	3.063 Mh	
	Ambient temperature	40 °C	
	Input voltage	24 V	
	Output power	24 W	
	Duty cycle	100 %	
Power loss, idling	415 mW		
Power loss, nominal load	469 mW		
Protection degree	IP20		
Relay to activate the output	No		
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 (+ / -)

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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. (ATEX)	DEMKO17ATEX1870X	Certificate no. (cULus)	E258476
Certificate no. (cULusEX)	E470829	Institute (cULus)	CULUS
Institute (cULusEX)	CULUSEX	Institute(ATEX)	DEMKOATEX

### Classifications

ETIM 6.0	EC002057	ETIM 7.0	EC002057
ETIM 8.0	EC002057	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

### 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
Certificate no. (cULusEX)	E470829

### Downloads

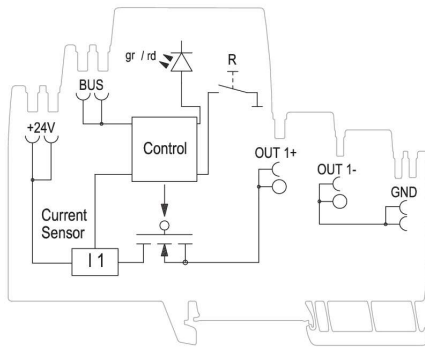
Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">EPLAN</a>
Product Change Notification	<a href="#">Release-Notes</a>
User Documentation	<a href="#">Manual_maxGUARD</a> <a href="#">Operating instructions</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

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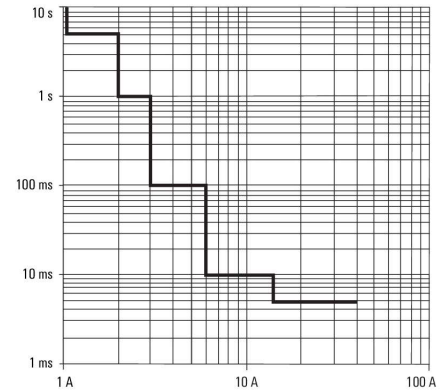
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Drawings



Schematic circuit diagram

Tripping characteristic normal



Tripping characteristic