

**maxGUARD  
AMG ELM-2F EX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

Fon: +49 5231 14-0

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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-2F EX
Order No.	<a href="#">2082050000</a>
Version	Electronic load monitoring, 2.00 A, 24 V DC
GTIN (EAN)	4050118419467
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	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	2 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
Operating temperature	-25 °C...55 °C	Power loss, idling	415 mW
Power loss, nominal load	565 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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## Technical data

### Signalling

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

### Approvals

Institute(ATEX)	<b>ATEX</b>	Certificate No. (ATEX)	DEMKO17ATEX1870X
Institute (cULus)		Certificate no. (cULus)	E258476
Institute (cULusEX)		Certificate no. (cULusEX)	E470829

### 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

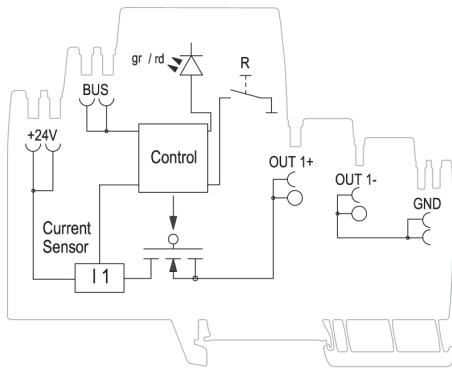
Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">EPLAN</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Manual_maxGUARD</a> <a href="#">Operating instructions</a>

**Data sheet**

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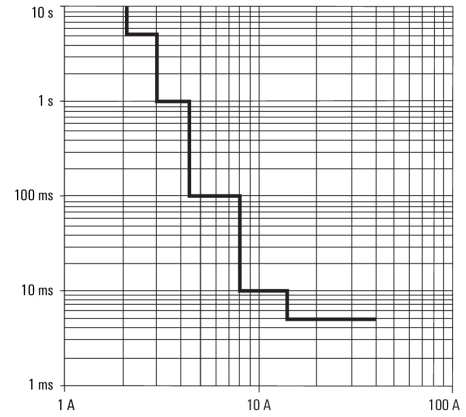
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**Drawings**



Schematic circuit diagram

**Tripping characteristic normal**



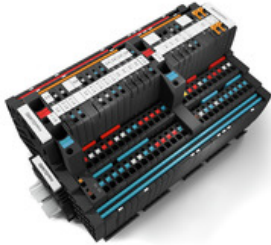
Tripping characteristic

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# Accessories

### 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.

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### General ordering data

Type	AMG PP	Version
Order No.	<a href="#">2123000000</a>	Seperation plate
GTIN (EAN)	4050118425338	
Qty.	40 pc(s).	

### Extended version for shipbuilding and EX applications



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### General ordering data

Type	AMG DIS EX	Version
Order No.	<a href="#">2495100000</a>	Potential distributor
GTIN (EAN)	4050118504798	
Qty.	10 pc(s).	
Type	AMG OD EX	Version
Order No.	<a href="#">2495090000</a>	Potential distributor
GTIN (EAN)	4050118504781	
Qty.	10 pc(s).	

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Type	AMG PD EX	Version
Order No.	<a href="#">2495070000</a>	Potential distributor
GTIN (EAN)	4050118504767	
Qty.	10 pc(s).	
Type	AMG MD EX	Version
Order No.	<a href="#">2495040000</a>	Potential distributor
GTIN (EAN)	4050118504804	
Qty.	10 pc(s).	

## ZQV 4N



### Spring connection with PUSH IN Technology

The innovative PUSH IN technology reduces the amount of time you spend on wiring to a minimum. Direct insertion guarantees high conductor pull-out forces and simple handling for all conductor types.

### General ordering data

Type	ZQV 4N/4 RD
Order No.	<a href="#">2460800000</a>
GTIN (EAN)	4050118476224
Qty.	60 pc(s).
Type	ZQV 4N/8
Order No.	<a href="#">1528030000</a>
GTIN (EAN)	4050118332841
Qty.	20 pc(s).
Type	ZQV 4N/9
Order No.	<a href="#">1528070000</a>
GTIN (EAN)	4050118332797
Qty.	20 pc(s).
Type	ZQV 4N/7 BL
Order No.	<a href="#">1528180000</a>
GTIN (EAN)	4050118333114
Qty.	20 pc(s).
Type	ZQV 4N/2 RD
Order No.	<a href="#">2460450000</a>
GTIN (EAN)	4050118476149
Qty.	60 pc(s).
Type	ZQV 4N/50 RD
Order No.	<a href="#">2460730000</a>
GTIN (EAN)	4050118476156
Qty.	5 pc(s).
Type	ZQV 4N/2
Order No.	<a href="#">1527930000</a>
GTIN (EAN)	4050118332766
Qty.	60 pc(s).

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Type	ZQV 4N/3 BL
Order No.	<a href="#">1528080000</a>
GTIN (EAN)	4050118333008
Qty.	60 pc(s).
Type	ZQV 4N/50 BL
Order No.	<a href="#">1528240000</a>
GTIN (EAN)	4050118333121
Qty.	5 pc(s).
Type	ZQV 4N/10 RD
Order No.	<a href="#">2460740000</a>
GTIN (EAN)	4050118476163
Qty.	20 pc(s).
Type	ZQV 4N/9 BL
Order No.	<a href="#">1528220000</a>
GTIN (EAN)	4050118333107
Qty.	20 pc(s).
Type	ZQV 4N/5 RD
Order No.	<a href="#">2460790000</a>
GTIN (EAN)	4050118476217
Qty.	60 pc(s).
Type	ZQV 4N/10
Order No.	<a href="#">1528090000</a>
GTIN (EAN)	4050118332896
Qty.	20 pc(s).
Type	ZQV 4N/5
Order No.	<a href="#">1527980000</a>
GTIN (EAN)	4050118332759
Qty.	60 pc(s).
Type	ZQV 4N/6 RD
Order No.	<a href="#">2460780000</a>
GTIN (EAN)	4050118476200
Qty.	20 pc(s).
Type	ZQV 4N/2 BL
Order No.	<a href="#">1528040000</a>
GTIN (EAN)	4050118332773
Qty.	60 pc(s).
Type	ZQV 4N/10 BL
Order No.	<a href="#">1528230000</a>
GTIN (EAN)	4050118333138
Qty.	20 pc(s).
Type	ZQV 4N/6
Order No.	<a href="#">1527990000</a>
GTIN (EAN)	4050118332919
Qty.	20 pc(s).
Type	ZQV 4N/5 BL
Order No.	<a href="#">1528140000</a>
GTIN (EAN)	4050118333015
Qty.	60 pc(s).
Type	ZQV 4N/50
Order No.	<a href="#">1528130000</a>
GTIN (EAN)	4050118332902
Qty.	5 pc(s).

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Type ZQV 4N/9 RD  
 Order No. [2460750000](#)  
 GTIN (EAN) 4050118476170  
 Qty. 20 pc(s).

Type ZQV 4N/3 RD  
 Order No. [2460810000](#)  
 GTIN (EAN) 4050118476231  
 Qty. 60 pc(s).

Type ZQV 4N/6 BL  
 Order No. [1528170000](#)  
 GTIN (EAN) 4050118332926  
 Qty. 20 pc(s).

Type ZQV 4N/4  
 Order No. [1527970000](#)  
 GTIN (EAN) 4050118332889  
 Qty. 60 pc(s).

Type ZQV 4N/7 RD  
 Order No. [2460770000](#)  
 GTIN (EAN) 4050118476194  
 Qty. 20 pc(s).

Type ZQV 4N/3  
 Order No. [1527940000](#)  
 GTIN (EAN) 4050118332865  
 Qty. 60 pc(s).

Type ZQV 4N/8 RD  
 Order No. [2460760000](#)  
 GTIN (EAN) 4050118476187  
 Qty. 20 pc(s).

Type ZQV 4N/4 BL  
 Order No. [1528120000](#)  
 GTIN (EAN) 4050118332872  
 Qty. 60 pc(s).

Type ZQV 4N/8 BL  
 Order No. [1528190000](#)  
 GTIN (EAN) 4050118332858  
 Qty. 20 pc(s).

Type ZQV 4N/7  
 Order No. [1528020000](#)  
 GTIN (EAN) 4050118332780  
 Qty. 20 pc(s).



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# Accessories

## End brackets



### Klippon® Connect with clamping yoke Technology

The high reliability and variety of designs of the terminal blocks with clamping yoke connections make planning easier and optimises operational safety. Klippon® Connect provides a proven response to a range of different requirements.

### General ordering data

Type	WEW 35/2 V0 GF SW	Version
Order No.	<a href="#">1479000000</a>	W-Series, End bracket
GTIN (EAN)	4050118286779	
Qty.	100 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.	<a href="#">1274660000</a>	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118072631	
Qty.	1 pc(s).	