

**AMG ELM-12 EX****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, 12 A, 24 V DC
Order No.	<a href="#">2082010000</a>
Type	AMG ELM-12 EX
GTIN (EAN)	4050118419344
Qty.	1 items

## AMG ELM-12 EX

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## Technical data

### Approvals

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate no. (cULus)	E258476
Certificate no. (cULusEX)	E470829

### Dimensions and weights

Depth	96.5 mm	Depth (inches)	3.7992 inch
Height	125 mm	Height (inches)	4.9212 inch
Width	12.2 mm	Width (inches)	0.4803 inch
Net weight	60 g		

### Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
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### Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	a7fff16c-85aa-4fb0-a206-7be03f41b0b7

### Input

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

### Output

Connection system	PUSH IN	Surge protection	Suppressor diode
Switch-on delay	1 s	Capacitive load	20,000 µF
Adjustable rated current	Yes	Rated current	12 A
Triggering characteristic	see characteristic curve		

### General data

Protection degree	IP20	
Surge voltage category	III	
MTTF	According to Standard	SN 29500
	Operating time (hours), min.	2490000 h
	Ambient temperature	40 °C
	Input voltage	24 V
	Output power	288 W

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## Technical data

	Duty cycle	100 %
Conformal coating	Yes	
Function key	Activation time <3s, Reset, ON	
Power loss, idling	492 mW	
Power loss, nominal load	2292 mW	
Relay to activate the output	No	

### Insulation coordination

Surge voltage category	III
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### Connection data (output)

Connection system	PUSH IN	Number of terminals	4 (++ / -)
Conductor cross-section, AWG/kcmil , max.	12 AWG	Conductor cross-section, AWG/kcmil , min.	26 AWG
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>
Screwdriver blade	0.6 x 3.5		

### Signalling

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

### Classifications

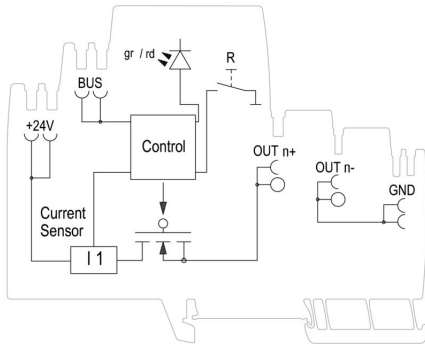
ETIM 8.0	EC003538	ETIM 9.0	EC003538
ETIM 10.0	EC003538	ECLASS 14.0	27-37-10-16
ECLASS 15.0	27-37-10-16		

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**Drawings**

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Schematic circuit diagram

Tripping characteristic normal



Tripping characteristic

Tripping characteristic lag



Slow tripping characteristic

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## Accessories

### Standard version for machine construction



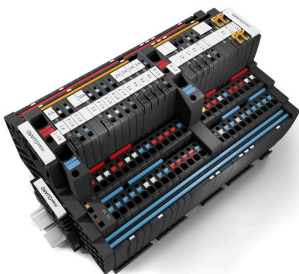
Efficient machine and facility operation calls for fail-safe and maintenance-friendly control voltage distribution that can be installed in a time and space-saving manner. With the new maxGUARD system, the terminal blocks (previously installed separately) for distributing potential to the outputs of 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.	<a href="#">2123000000</a>	Partition plate	
GTIN (EAN)	4050118425338		
Qty.	40 ST		

### 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 ST		
Type	AMG MD EX	Version	
Order No.	<a href="#">2495040000</a>	Potential distributor	
GTIN (EAN)	4050118504804		
Qty.	10 ST		
Type	AMG OD EX	Version	
Order No.	<a href="#">2495090000</a>	Potential distributor	
GTIN (EAN)	4050118504781		
Qty.	10 ST		
Type	AMG PD EX	Version	
Order No.	<a href="#">2495070000</a>	Potential distributor	
GTIN (EAN)	4050118504767		
Qty.	10 ST		

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## Accessories

### End bracket

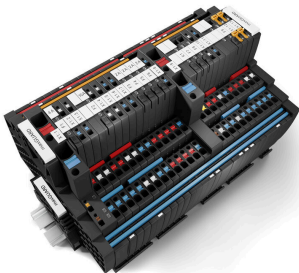


Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

### General ordering data

Type	WEW 35/2 V0 GF SW	Version	
Order No.	<a href="#">1479000000</a>	End bracket, black, TS 35, V-0, Wemid, Width: 8 mm, 130 °C	
GTIN (EAN)	4050118286779		
Qty.	50 ST		

### Standard version for machine construction



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### General ordering data

Type	AMG EP 20 10	Version	
Order No.	<a href="#">2495380000</a>	Fastening element	
GTIN (EAN)	4050118505306		
Qty.	30 ST		

### 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.

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## Accessories

### General ordering data

Type	WS 10/6 M MC NE WS	Version	
Order No.	<a href="#">1818400000</a>	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,	
GTIN (EAN)	4032248310876	Allen-Bradley, white	
Qty.	600 ST		

### Cross-connections



The distribution or multiplication of a potential to adjoining terminal blocks is realized via a cross-connection. Additional wiring effort can be easily avoided. Even if the poles are broken out, contact reliability in the terminal blocks is still ensured. Our portfolio offers pluggable and screwable cross-connection systems for modular terminal blocks.

### General ordering data

Type	ZQV 4N/2	Version	
Order No.	<a href="#">1527930000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:	
GTIN (EAN)	4050118332766	2, Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm	
Qty.	60 ST		
Type	ZQV 4N/2 BL	Version	
Order No.	<a href="#">1528040000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 2,	
GTIN (EAN)	4050118332773	Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm	
Qty.	60 ST		
Type	ZQV 4N/2 RD	Version	
Order No.	<a href="#">2460450000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 2,	
GTIN (EAN)	4050118476149	Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm	
Qty.	60 ST		
Type	ZQV 4N/3	Version	
Order No.	<a href="#">1527940000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:	
GTIN (EAN)	4050118332865	3, Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm	
Qty.	60 ST		
Type	ZQV 4N/3 BL	Version	
Order No.	<a href="#">1528080000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 3,	
GTIN (EAN)	4050118333008	Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm	
Qty.	60 ST		
Type	ZQV 4N/3 RD	Version	
Order No.	<a href="#">2460810000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 3,	
GTIN (EAN)	4050118476231	Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm	
Qty.	60 ST		
Type	ZQV 4N/4	Version	
Order No.	<a href="#">1527970000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:	
GTIN (EAN)	4050118332889	4, Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 mm	
Qty.	60 ST		
Type	ZQV 4N/4 BL	Version	
Order No.	<a href="#">1528120000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 4,	
GTIN (EAN)	4050118332872	Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 mm	
Qty.	60 ST		

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Type	ZQV 4N/4 RD	Version
Order No.	<a href="#">2460800000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 4,
GTIN (EAN)	4050118476224	Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 mm
Qty.	60 ST	
Type	ZQV 4N/5	Version
Order No.	<a href="#">1527980000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332759	5, Pitch in mm (P): 6.10, Insulated: Yes, Width: 28.2 mm
Qty.	60 ST	
Type	ZQV 4N/5 BL	Version
Order No.	<a href="#">1528140000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 5,
GTIN (EAN)	4050118333015	Pitch in mm (P): 6.10, Insulated: Yes, Width: 28.2 mm
Qty.	60 ST	
Type	ZQV 4N/5 RD	Version
Order No.	<a href="#">2460790000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 5,
GTIN (EAN)	4050118476217	Pitch in mm (P): 6.10, Insulated: Yes, Width: 28.2 mm
Qty.	60 ST	
Type	ZQV 4N/6	Version
Order No.	<a href="#">1527990000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332919	6, Pitch in mm (P): 6.10, Insulated: Yes, Width: 34.3 mm
Qty.	20 ST	
Type	ZQV 4N/6 BL	Version
Order No.	<a href="#">1528170000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 6,
GTIN (EAN)	4050118332926	Pitch in mm (P): 6.10, Insulated: Yes, Width: 34.3 mm
Qty.	20 ST	
Type	ZQV 4N/6 RD	Version
Order No.	<a href="#">2460780000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 6,
GTIN (EAN)	4050118476200	Pitch in mm (P): 6.10, Insulated: Yes, Width: 34.3 mm
Qty.	20 ST	
Type	ZQV 4N/7	Version
Order No.	<a href="#">1528020000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332780	7, Pitch in mm (P): 6.10, Insulated: Yes, Width: 40.4 mm
Qty.	20 ST	
Type	ZQV 4N/7 BL	Version
Order No.	<a href="#">1528180000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 7,
GTIN (EAN)	4050118333114	Pitch in mm (P): 6.10, Insulated: Yes, Width: 40.4 mm
Qty.	20 ST	
Type	ZQV 4N/7 RD	Version
Order No.	<a href="#">2460770000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 7,
GTIN (EAN)	4050118476194	Pitch in mm (P): 6.10, Insulated: Yes, Width: 40.4 mm
Qty.	20 ST	
Type	ZQV 4N/8	Version
Order No.	<a href="#">1528030000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332841	8, Pitch in mm (P): 6.10, Insulated: Yes, Width: 46.5 mm
Qty.	20 ST	
Type	ZQV 4N/8 BL	Version
Order No.	<a href="#">1528190000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 8,
GTIN (EAN)	4050118332858	Pitch in mm (P): 6.10, Insulated: Yes, Width: 46.5 mm
Qty.	20 ST	
Type	ZQV 4N/8 RD	Version
Order No.	<a href="#">2460760000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 8,
GTIN (EAN)	4050118476187	Pitch in mm (P): 6.10, Insulated: Yes, Width: 46.5 mm
Qty.	20 ST	

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Type	ZQV 4N/9	Version
Order No.	<a href="#">1528070000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332797	9, Pitch in mm (P): 6.10, Insulated: Yes, Width: 52.6 mm
Qty.	20 ST	
Type	ZQV 4N/9 BL	Version
Order No.	<a href="#">1528220000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 9,
GTIN (EAN)	4050118333107	Pitch in mm (P): 6.10, Insulated: Yes, Width: 52.6 mm
Qty.	20 ST	
Type	ZQV 4N/9 RD	Version
Order No.	<a href="#">2460750000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 9,
GTIN (EAN)	4050118476170	Pitch in mm (P): 6.10, Insulated: Yes, Width: 52.6 mm
Qty.	20 ST	
Type	ZQV 4N/10	Version
Order No.	<a href="#">1528090000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332896	10, Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
Qty.	20 ST	
Type	ZQV 4N/10 BL	Version
Order No.	<a href="#">1528230000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 10,
GTIN (EAN)	4050118333138	Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
Qty.	20 ST	
Type	ZQV 4N/10 RD	Version
Order No.	<a href="#">2460740000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 10,
GTIN (EAN)	4050118476163	Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
Qty.	20 ST	
Type	ZQV 4N/50	Version
Order No.	<a href="#">1528130000</a>	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332902	50, Pitch in mm (P): 6.10, Insulated: Yes, Width: 303.7 mm
Qty.	5 ST	
Type	ZQV 4N/50 BL	Version
Order No.	<a href="#">1528240000</a>	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 50,
GTIN (EAN)	4050118333121	Pitch in mm (P): 6.10, Insulated: Yes, Width: 303.7 mm
Qty.	5 ST	
Type	ZQV 4N/50 RD	Version
Order No.	<a href="#">2460730000</a>	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 50,
GTIN (EAN)	4050118476156	Pitch in mm (P): 6.10, Insulated: Yes, Width: 303.7 mm
Qty.	5 ST	

## 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.

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### General ordering data

Type	SDIS SL 0.6X3.5X100	Version	
Order No.	<a href="#">1274660000</a>	Screwdriver, Mounting tool	
GTIN (EAN)	4050118072631		
Qty.	1 ST		