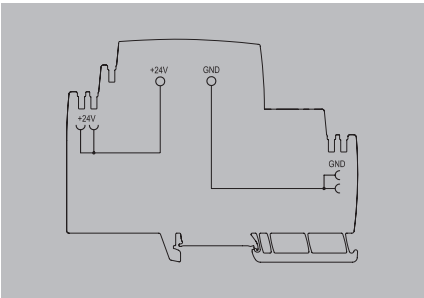


maxGUARD

maxGUARD – power-feed module

Passive power-feed module

AMG FIM-0



Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
max. admissible residual ripple at the input
General data
Protection degree
Control inputs
Overvoltage category
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

No
18...30 V DC
24 V DC
100 mVpp
IP20
No
III
2 (+,-)
18...6 AWG
0.75...16 mm ²
0.75...10 mm ²
1.2 x 6.5
CE; cULus; TUEV; UKCA

Ordering data

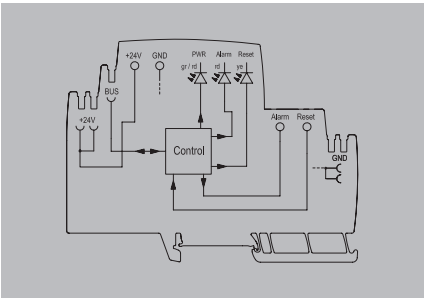
Rated current
Note

Type	Qty.	Order No.
AMG FIM-0	1	2081870000

maxGUARD – power-feed module

Active power-feed module with reset and alarm function

AMG FIM-C



Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
General data
Protection degree
Control inputs
Surge protection input, output, bus
Overvoltage category
Signalling
Yellow LED
LED green
Red LED
Transistor output, positive-switching
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

No
18...30 V DC
24 V DC
20 mA
120 mA
100 mVpp
IP20
Reset
Suppressor diode
III
External reset is signalled, Alarm is signalled
Operating voltage OK
Alarm
Alarm
2 (+,-)
18...6 AWG
0.75...16 mm²
0.75...10 mm²
1.2 x 6.5
CE; cULus; TUEV; UKCA

Ordering data

Rated current
Note

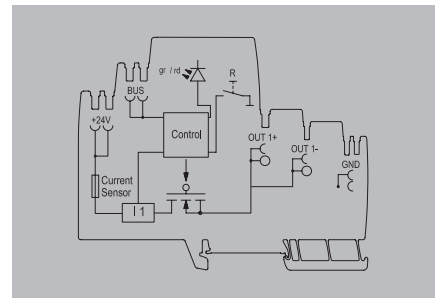
Type	Qty.	Order No.
AMG FIM-C	1	2081880000

maxGUARD

maxGUARD – load monitoring (fixed value)

Electronic load monitoring with fixed current (without I > 90% function > 90 %)

AMG ELM - xF



Technical data

Input

Input fuse (internal)	
DC input voltage range	
Rated input voltage	
Current consumption (idle) / Current consumption (full load)	
max. admissible residual ripple at the input	

Output

Connection system
Triggering characteristic
Switch-on delay
Capacitive load

Function key

LED initial state

Pressing the button

LED, subsequent state
Output, subsequent state

General data

Relay to activate the output
Surge protection input, output, bus
Protection degree / Overvoltage category

Signalling

LED green
Red LED

Connection data

Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade

Approvals

Approvals

Note

Ordering data

Rated current	
	1 A
	2 A
	4 A
	6 A

Note

Accessories

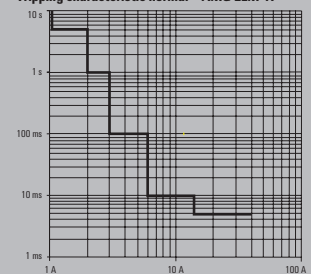
Note

Yes		
18...30 V DC		
24 V DC		
25 mA / $I_{OUT} + 30$ mA		
100 mVpp		
PUSH IN		
see characteristic curve		
1 s		
2080420000: 10,000 μ F; 2080480000: 10,000 μ F; 2080490000: 10,000 μ F; 2080500000: 15,000 μ F		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
Suppressor diode		
IP20 / III		
Operation (failure-free)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
2 (+ / -)		
26...12 AWG		
0.14...2.5 mm ²		
0.14...2.5 mm ²		
0.6 x 3.5		
CE; cULus; TUEV; UKCA		

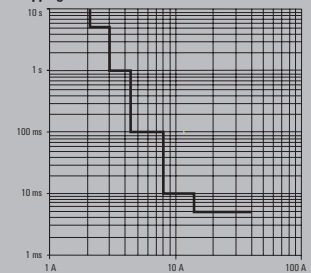
Type	Qty.	Order No.
AMG ELM-1F	1	2080420000
AMG ELM-2F	1	2080480000
AMG ELM-4F	1	2080490000
AMG ELM-6F	1	2080500000

Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000

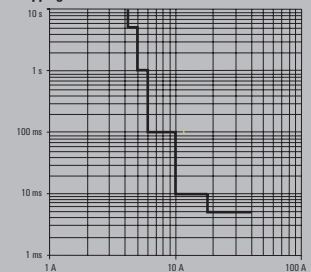
Tripping characteristic normal – AMG ELM-1F



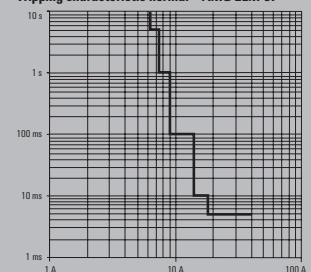
Tripping characteristic normal – AMG ELM-2F



Tripping characteristic normal – AMG ELM-4F



Tripping characteristic normal – AMG ELM-6F



maxGUARD

maxGUARD – load monitoring (fixed value)

Electronic load monitoring with fixed rated current
(without I > 90 % pre warning > 90 %)

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Switch-on delay
Capacitive load
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree
Surge protection input, output, bus
Overvoltage category
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current	
	8 A
	10 A
Note	

Accessories

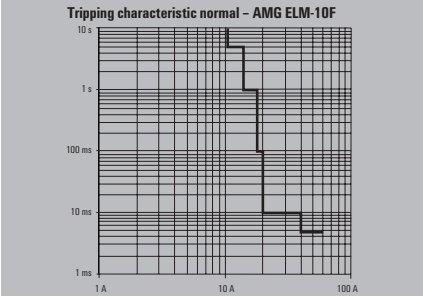
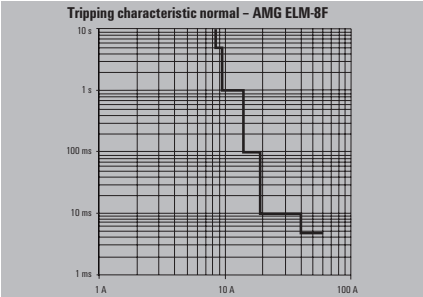
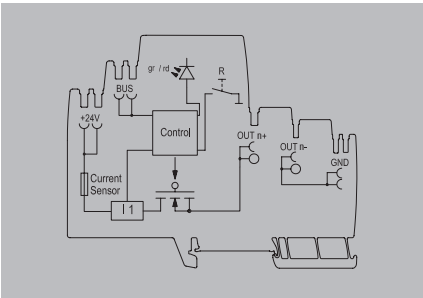
Note

AMG ELM - xF

		
Yes		
18...30 V DC		
24 V DC		
25 mA		
I _{OUT} +30 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
1 s		
2080600000: 15,000 µF;		
2080650000: 20,000 µF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20		
Suppressor diode		
III		
Operation (failure-free)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
4 (++) / -)		
26...12 AWG		
0.14...2.5 mm ²		
0.14...2.5 mm ²		
0.6 x 3.5		
CE; cULus; TUEV; UKCA		

Type	Qty.	Order No.
AMG ELM-8F	1	2080600000
AMG ELM-10F	1	2080650000

Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000



maxGUARD

maxGUARD – load monitoring (fixed value),
Class 2

Electronic load monitoring with fixed rated current
(without I > 90 % pre warning)

- Class 2 Approval

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Switch-on delay
Capacitive load
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree
Surge protection input, output, bus
Overvoltage category
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current	
1 A	
2 A	
4 A	
Note	

Accessories

Note

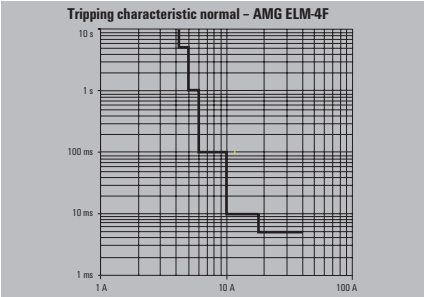
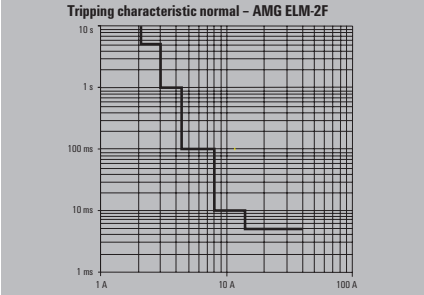
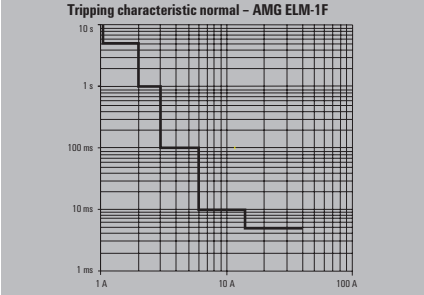
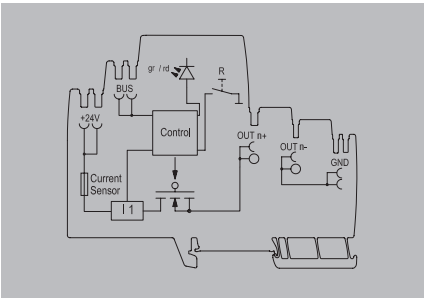
AMG ELM - xF CL2



Yes		
18...30 V DC		
24 V DC		
25 mA		
I _{OUT} +30 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
1 s		
2491270000: 4.700 µF;		
2491280000: 4.700 µF;		
2491290000: 4.700 µF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20		
Suppressor diode		
III		
Operation (failure-free)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
2 (+ / -)		
26...12 AWG		
0.14...2.5 mm²		
0.14...2.5 mm²		
0.6 x 3.5		
CE; cULus; TUEV; UKCA		

Type	Qty.	Order No.
AMG ELM-1F CL2	1	2491270000
AMG ELM-2F CL2	1	2491280000
AMG ELM-4F CL2	1	2491290000

Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000



maxGUARD

maxGUARD – load monitoring adjustable

Electronic load monitoring with adjustable triggering current and triggering characteristic

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Adjustable range
Switch-on delay
Capacitive load
Adjustable rated current
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree
Surge protection input, output, bus
Overvoltage category
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current	6 A
Note	

Accessories

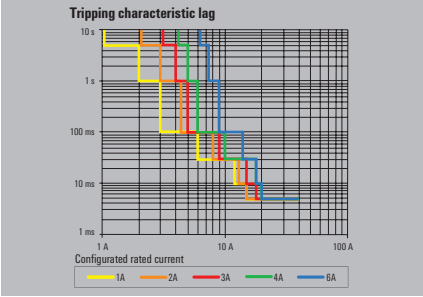
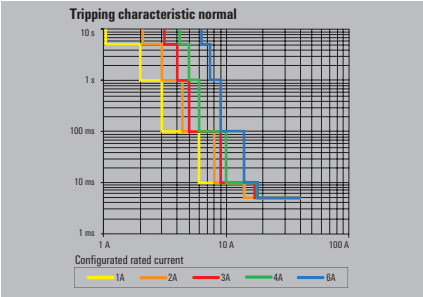
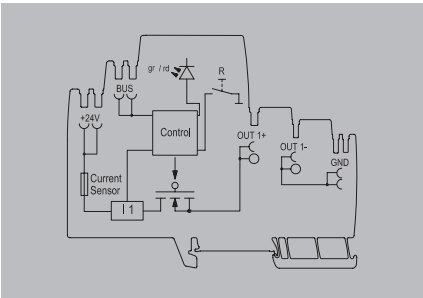
Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000
Note		

AMG ELM-6

		
Yes		
18...30 V DC		
24 V DC		
25 mA		
I _{OUT} +30 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
1, 2, 3, 4, 6 A		
1 s		
15,000 µF		
Yes		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20		
Suppressor diode		
III		
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
2 (+ / -)		
26...12 AWG		
0.14...2.5 mm ²		
0.14...2.5 mm ²		
0.6 x 3.5		
CE; cULus; TUEV; UKCA		

Type	Qty.	Order No.
AMG ELM-6	1	2080360000

Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000



maxGUARD

maxGUARD – load monitoring adjustable

Electronic load monitoring with adjustable trigger current and characteristic (with I > 90 % pre warning > 90 %)

Technical data

Input	
Input fuse (internal)	
DC input voltage range	
Rated input voltage	
Current consumption (idle)	
Current consumption (full load)	
max. admissible residual ripple at the input	
Output	
Connection system	
Triggering characteristic	
Adjustable range	
Switch-on delay	
Adjustable rated current	
Capacitive load	
Function key	
LED initial state	
Pressing the button	
LED, subsequent state	
Output, subsequent state	
General data	
Relay to activate the output	
Protection degree	
Surge protection input, output, bus	
Overvoltage category	
Signalling	
LED green	
Red LED	
Connection data	
Number of terminals	
Wire cross-section, AWG/kcmil min/max	
Wire cross-section, flexible min/max	
Wire cross-section, rigid min/max	
Screwdriver blade	
Approvals	
Approvals	
Note	

Ordering data

Rated current	12 A
Note	

Accessories

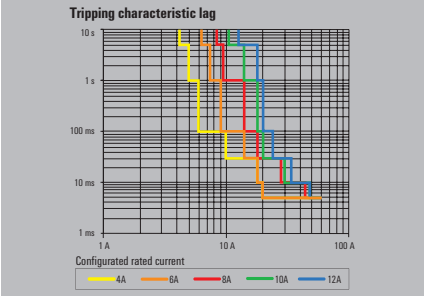
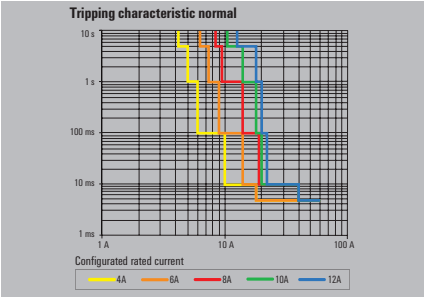
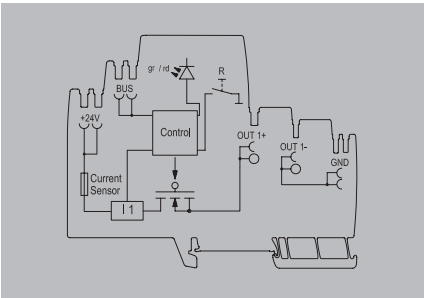
Note	

AMG ELM-12

		
Input		
Yes		
18...30 V DC		
24 V DC		
25 mA		
I _{OUT} +30 mA		
100 mVpp		
Output		
PUSH IN		
see characteristic curve		
4, 6, 8, 10, 12 A		
1 s		
Yes		
20,000 µF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20		
Suppressor diode		
III		
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
4 (++) / -)		
26...12 AWG		
0.14...2.5 mm²		
0.14...2.5 mm²		
0.6 x 3.5		
CE; cULus; TUEV; UKCA		

Type	Qty.	Order No.
AMG ELM-12	1	2080410000

Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000



maxGUARD

maxGUARD – load monitoring with relay

Electronic load monitoring with 2-pole output relay for all-pole load disconnection; triggering current and triggering characteristic adjustable.

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Adjustable range
Switch-on delay
Adjustable rated current
Capacitive load
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree / Surge protection
Conformal coating
Surge protection input, output, bus
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current	6 A
	10 A
Note	

Accessories

Note

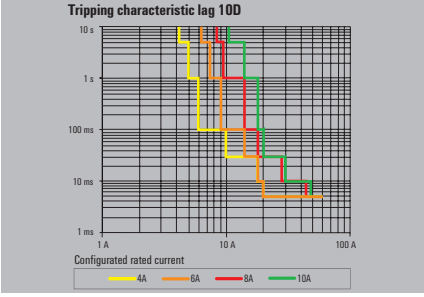
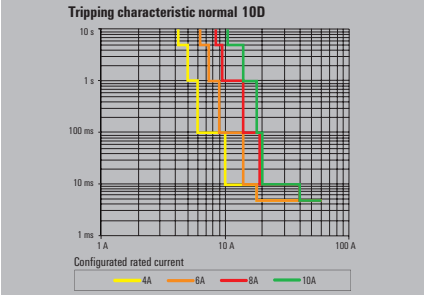
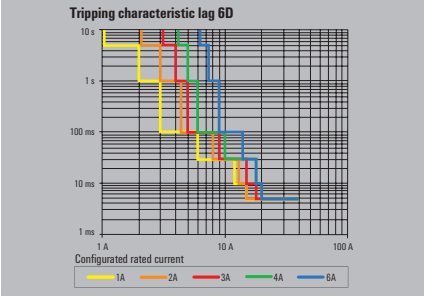
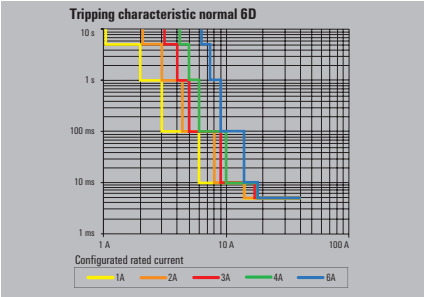
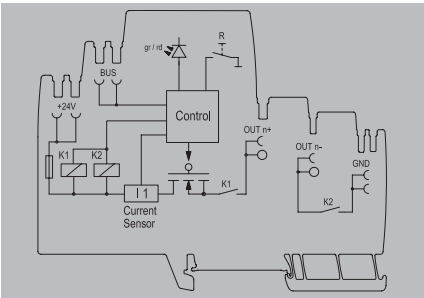
AMG ELM – adjustable with output relay



Yes		
18...30 V DC		
24 V DC		
40 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
2082470000: 4- 10 A		
2082440000: 1- 6 A		
1 s		
Yes		
2082470000: 20,000 µF		
2082440000: 15,000 µF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
Yes		
IP20 / Suppressor diode		
Yes		
Suppressor diode		
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
6 (3x + / 3x -)		
26 AWG...12 AWG		
0.14...2.5 mm²		
0.14...2.5 mm²		
0.6 x 3.5		
ABS; BURVER; CE; cULus; DETNORVER; LLOYDSREG; RINA; TUEV; UKCA		

Type	Qty.	Order No.
AMG ELM-6D CO	1	2082440000
AMG ELM-10D CO	1	2082470000

Type	Qty.	Order No.
AMG DIS	10	2123050000
AMG MD	10	2122930000
AMG OD	10	2122910000
AMG PD	10	2122920000



maxGUARD

maxGUARD – load monitoring adjustable with current limitation

Electronic load monitoring with current-limited characteristic curve, tripping current and tripping characteristic adjustable (with I > 90 % function).

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Adjustable range
Switch-on delay
Adjustable rated current
Capacitive load
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree / Surge protection
Conformal coating
Surge protection input, output, bus
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

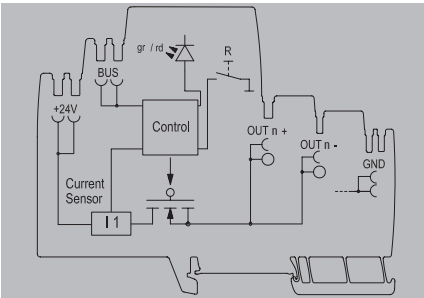
Rated current	1 A
Note	

AMG ELM – adjustable with current limitation



Yes		
18...30 V DC		
24 V DC		
25 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
2838530000: 0.1, 0.2, 0.5, 0.8, 1.0 A		
1 s		
Yes		
2838530000: max. 3000 µF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20 / Suppressor diode		
No		
Suppressor diode		
Operation (failure-free)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
2 (+ / -)		
26 AWG...12 AWG		
0.14...2.5 mm²		
0.14...2.5 mm²		
0.6 x 3.5		
CE; cULus; DEMKOATEX; IECEXULD; UKCA		

Type	Qty.	Order No.
AMG ELM-1 LIM CL2 EX	1	2838530000



Electronic load monitoring

B

maxGUARD

maxGUARD – control module

Control module with extended control function: alarm, reset, I >90% connection/disconnection

Technical data

Input
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
General data
Relay to activate the output
Protection degree
Control inputs
Surge protection input, output, bus
Overvoltage category
Signalling
LED green
Red LED
Transistor output, positive-switching
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current
Note

Accessories

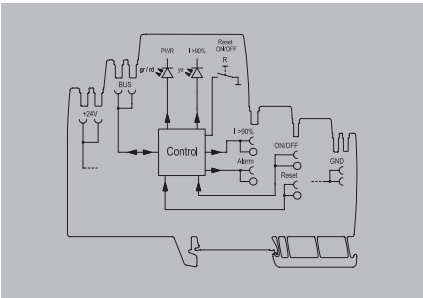
Plug-in cross-connection
50-pole
50-pole / red
50-pole / blue
2-pole
2-pole/ red
2-pole / blue
Note

AMG CM


18...30 V DC
24 V DC
25 mA
225 mA
100 mVpp
PUSH IN
No
IP20
ON/ OFF, Reset
Suppressor diode
III
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)
Pre-warning, Alarm
2 (Reset / ON)
26...12 AWG
0.14...2.5 mm²
0.14...2.5 mm²
0.6 x 3.5
CE; cULus; TUEV; UKCA

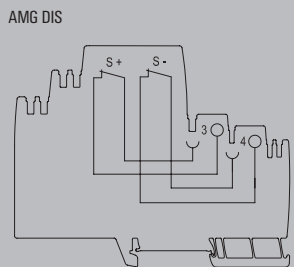
Type	Qty.	Order No.
AMG CM	1	2081900000

Type	Qty.	Order No.
ZQV 4N/50	5	1528130000
ZQV 4N/50 RD	5	2460730000
ZQV 4N/50 BL	5	1528240000
ZQV 4N/2	60	1527930000
ZQV 4N/2 RD	60	2460450000
ZQV 4N/2 BL	60	1528040000



Electronic load monitoring

B

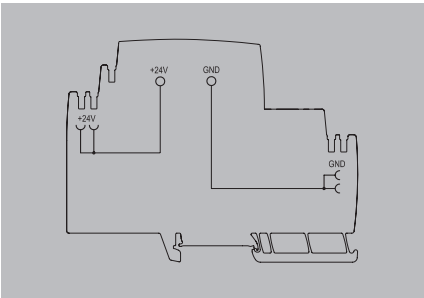


maxGUARD

maxGUARD – power-feed module

Passive power-feed module

AMG FIM-0 Ex



Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
max. admissible residual ripple at the input
General data
Protection degree
Control inputs
Overvoltage category
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

No
18...30 V DC
24 V DC
100 mVpp
IP20
No
III
2 (+,-)
18...6 AWG
0.75...16 mm²
0.75...10 mm²
1.2 x 6.5
ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA

Ordering data

Rated current
Note

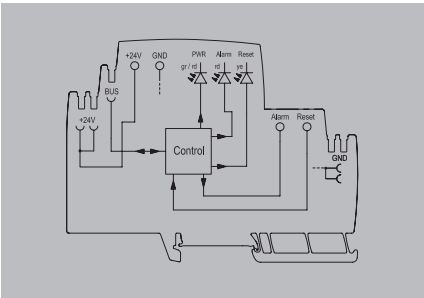
Type	Qty.	Order No.
AMG FIM-0 EX	1	2082530000

maxGUARD

maxGUARD – power-feed module

Active power-feed module with reset and alarm function

AMG FIM-C Ex



Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
General data
Protection degree
Control inputs
Surge protection input, output, bus
Overvoltage category
Signalling
Yellow LED
LED green
Red LED
Transistor output, positive-switching
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

No
18...30 V DC
24 V DC
20 mA
120 mA
100 mVpp
IP20
Reset
Suppressor diode
III
External reset is signalled, Alarm is signalled
Operating voltage OK
Alarm
Alarm
2 (+,-)
18...6 AWG
0.75...16 mm²
0.75...10 mm²
1.2 x 6.5
ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA

Ordering data

Rated current
Note

Type	Qty.	Order No.
AMG FIM-C EX	1	2082540000

maxGUARD

maxGUARD – load monitoring (fixed value)

Electronic load monitoring with fixed current (without I > 90% function)

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle) / Current consumption (full load)
max. admissible residual ripple at the input

Output
Connection system
Triggering characteristic
Switch-on delay
Capacitive load

Function key
LED initial state

Pressing the button

LED, subsequent state
Output, subsequent state

General data
Relay to activate the output
Surge protection input, output, bus
Protection degree / Overvoltage category

Signalling
LED green
Red LED

Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade

Approvals
Approvals

Note

Ordering data

Rated current
1 A
2 A
4 A
6 A

Note

Accessories

Note

AMG ELM - xF Ex



Yes
18...30 V DC
24 V DC
25 mA / I _{OUT} +30 mA
100 mVpp
PUSH IN
see characteristic curve
1 s
2082040000: 10,000 µF;
2082050000: 10,000 µF;
2082060000: 10,000 µF;
2082310000: 15,000 µF

LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)

Red LED switched off	Red LED switched off	LED green switched on
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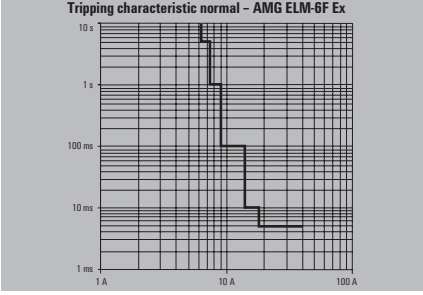
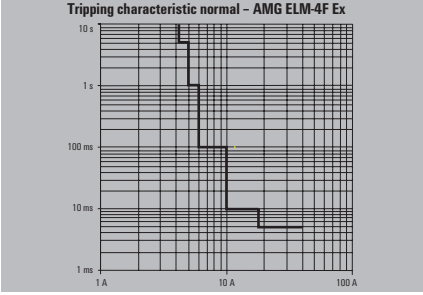
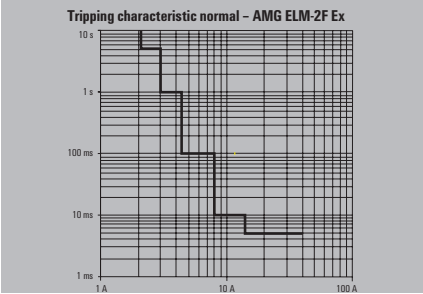
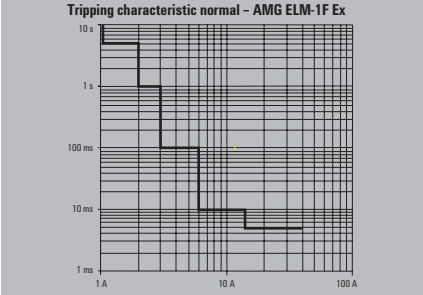
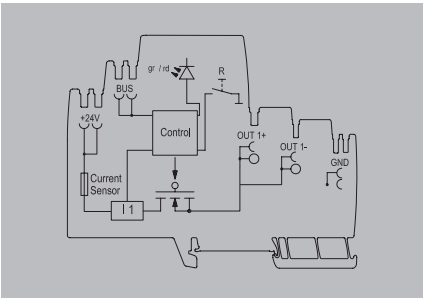
No
Suppressor diode
IP20 / III
Operation (failure-free)
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)

2 (+ / -)
26...12 AWG
0.14...2.5 mm²
0.14...2.5 mm²
0.6 x 3.5

ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA

Type	Qty.	Order No.
AMG ELM-1F EX	1	2082040000
AMG ELM-2F EX	1	2082050000
AMG ELM-4F EX	1	2082060000
AMG ELM-6F EX	1	2082310000

Type	Qty.	Order No.
AMG OD EX	10	2495090000
AMG PD EX	10	2495070000
AMG MD EX	10	2495040000
AMG XMD EX	10	2495080000
AMG DIS EX	10	2495100000



3004660000

Weidmüller

B.27

Electronic load monitoring

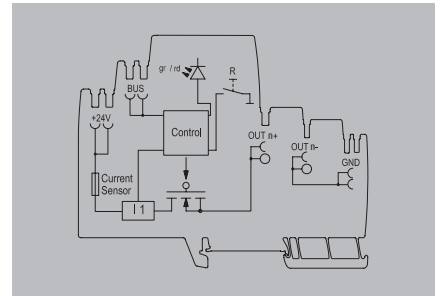
B

maxGUARD

maxGUARD – load monitoring (fixed value)

Electronic load monitoring with fixed rated current
(without $I > 90\%$ pre warning)

AMG ELM - xF Ex



Technical data

Input

Input fuse (internal)	
DC input voltage range	
Rated input voltage	
Current consumption (idle)	
Current consumption (full load)	
max. admissible residual ripple at the input	

Output

Connection system
Triggering characteristic
Switch-on delay
Capacitive load

Function key

LED initial state

Pressing the button

LED, subsequent state
Output, subsequent state

General data

Relay to activate the output
Protection degree
Surge protection input, output, bus
Overvoltage category

Signalling

LED green
Red LED

Connection data

Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade

Approvals

Approvals

Note

Ordering data

Rated current

8 A
10 A

Note

Accessories

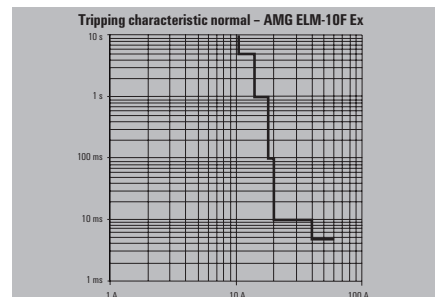
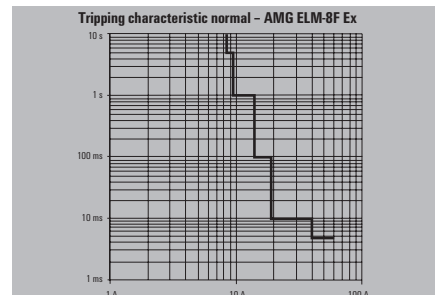
114

Note

Yes		
18...30 V DC		
24 V DC		
25 mA		
I _{OUT} +30 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
1 s		
2082320000: 15,000 µF;		
2082430000: 20,000 µF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20		
Suppressor diode		
III		
Operation (failure-free)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
4 (++ / -)		
26...12 AWG		
0.14...2.5 mm ²		
0.14...2.5 mm ²		
0.6 x 3.5		
ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA		

Type	Qty.	Order No.
AMG ELM-8F EX	1	2082320000
AMG ELM-10F EX	1	2082430000

Type	Qty.	Order No.
AMG OD EX	10	2495090000
AMG PD EX	10	2495070000
AMG MD EX	10	2495040000
AMG XMD EX	10	2495080000
AMG DIS EX	10	2495100000



maxGUARD

maxGUARD – load monitoring adjustable

Electronic load monitoring with adjustable triggering current and triggering characteristic

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Adjustable range
Switch-on delay
Capacitive load
Adjustable rated current
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree
Surge protection input, output, bus
Overvoltage category
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current
6 A
Note

Accessories

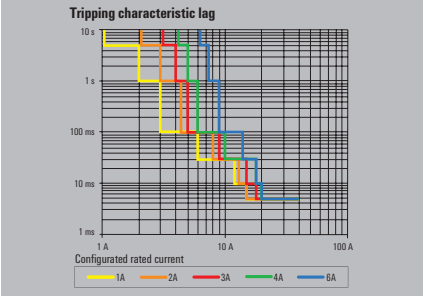
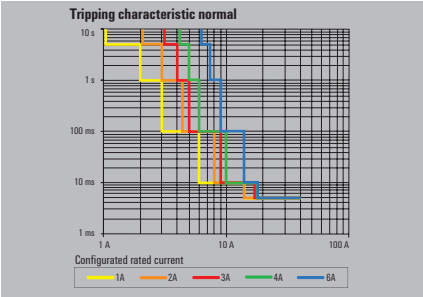
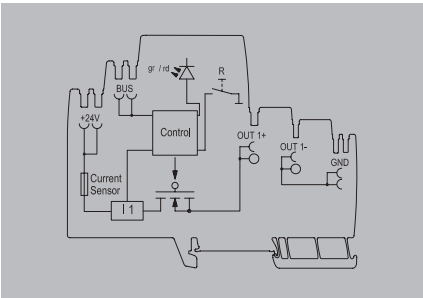
Note

AMG ELM-6 Ex


Yes
18...30 V DC
24 V DC
25 mA
I _{OUT} +30 mA
100 mVpp
PUSH IN
see characteristic curve
1, 2, 3, 4, 6 A
1 s
15,000 µF
Yes
LED green, in operation
LED flashing red, load monitoring has triggered (disconnected)
LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)
> 0.1 to 2 s (confirm and reset)
> 0.1 to 2 s (restart)
Red LED switched off
Red LED switched off
LED green switched on
No
IP20
Suppressor diode
III
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)
2 (+ / -)
26...12 AWG
0.14...2.5 mm²
0.14...2.5 mm²
0.6 x 3.5
ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA

Type	Qty.	Order No.
AMG ELM-6 EX	1	2082000000

Type	Qty.	Order No.
AMG OD EX	10	2495090000
AMG PD EX	10	2495070000
AMG MD EX	10	2495040000
AMG XMD EX	10	2495080000
AMG DIS EX	10	2495100000



maxGUARD

maxGUARD – load monitoring adjustable

AMG ELM-18 Ex

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
Triggering characteristic
Adjustable range
Switch-on delay
Adjustable rated current
Capacitive load
Function key
LED initial state
Pressing the button
LED, subsequent state
Output, subsequent state
General data
Relay to activate the output
Protection degree
Surge protection input, output, bus
Overvoltage category
Signalling
LED green
Red LED
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current
18 A
Note

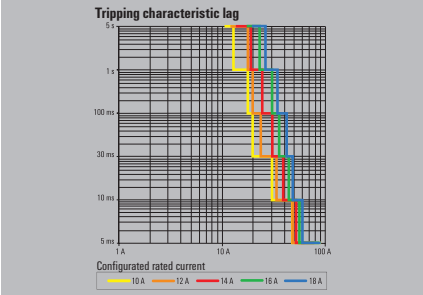
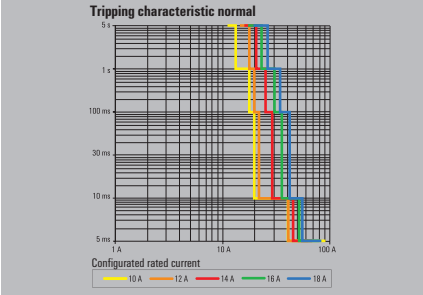
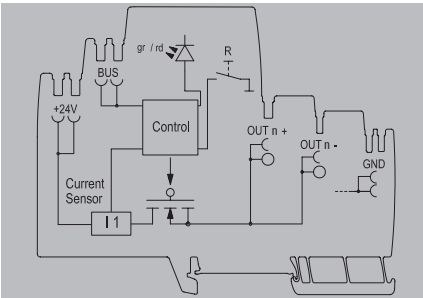
Accessories

Note

Yes		
18...30 V DC		
24 V DC		
25 mA		
I _{OUT} +30 mA		
100 mVpp		
PUSH IN		
see characteristic curve		
11, 12, 14, 16, 18 A		
1 s		
Yes		
50 mF		
LED green, in operation	LED flashing red, load monitoring has triggered (disconnected)	LED red (permanently lit)
> 0.1 to 2 s (manual disconnect)	> 0.1 to 2 s (confirm and reset)	> 0.1 to 2 s (restart)
Red LED switched off	Red LED switched off	LED green switched on
No		
IP20		
Suppressor diode		
III		
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)		
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)		
4 (++) / -)		
26...12 AWG		
0.14...2.5 mm²		
0.14...2.5 mm²		
0.6 x 3.5		
CE; cULus; DEMKOATEX; IECEXULD; UKCA		

Type	Qty.	Order No.
AMG ELM-18 EX	1	2838520000

Type	Qty.	Order No.
AMG OD EX	10	2495090000
AMG PD EX	10	2495070000
AMG MD EX	10	2495040000
AMG XMD EX	10	2495080000
AMG DIS EX	10	2495100000



maxGUARD

maxGUARD – Alarm module

Alarm module with potential-free contacts for the “Alarm” and “I>90%” signals.

Technical data

Input
Input fuse (internal)
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
General data
Protection degree
Surge protection input, bus
Overvoltage category
Signalling
Yellow LED
Red LED
Floating contact
Status relay (max. load)
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

Ordering data

Rated current
Note

Accessories

Plug-in cross-connection
50-pole
50-pole / red
50-pole / blue
2-pole
2-pole/ red
2-pole / blue
Note

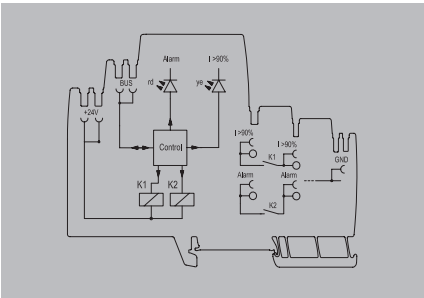
AMG AM CO



No
18...30 V DC
24 V DC
25 mA
30 mA
100 mVpp
IP20
Suppressor diode
III
Current > 90% Inom (flashing)
Alarm
Yes
Alarm (24 V / 0.1 A), I > 90 % (24 V / 0,1 A)
4 (2 x NO)
26...12
0.14...2.5 mm²
0.14...2.5 mm²
0.6 x 3.5
ABS; BURVER; CE; cULus; DETNORVER; LLOYDSREG; RINA; TUEV; UKCA

Type	Qty.	Order No.
AMG AM CO	1	2082770000

Type	Qty.	Order No.
ZQV 4N/50	5	1528130000
ZQV 4N/50 RD	5	2460730000
ZQV 4N/50 BL	5	1528240000
ZQV 4N/2	60	1527930000
ZQV 4N/2 RD	60	2460450000
ZQV 4N/2 BL	60	1528040000

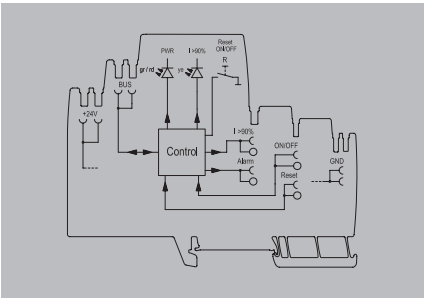


maxGUARD

maxGUARD – control module

Control module with extended control function: Alarm, Reset, I>90%, ON/OFF

AMG CM Ex



Technical data

Input
DC input voltage range
Rated input voltage
Current consumption (idle)
Current consumption (full load)
max. admissible residual ripple at the input
Output
Connection system
General data
Relay to activate the output
Protection degree
Surge protection input, output, bus
Control inputs
Oversvoltage category
Signalling
LED green
Red LED
Transistor output, positive-switching
Connection data
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade
Approvals
Approvals
Note

18...30 V DC
24 V DC
25 mA
225 mA
100 mVpp
PUSH IN
No
IP20
Suppressor diode
ON/ OFF, Reset
III
Operation (failure-free), Early warning: I Out > 90% I Rated (flashing)
Load monitoring has disconnected, Load monitoring has triggered (flashing), Internal error (rapid flashing)
Pre-warning, Alarm
2 (Reset / ON)
26...12 AWG
0.14...2.5 mm²
0.14...2.5 mm²
0.6 x 3.5
ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA

Ordering data

Rated current
Note

Type	Qty.	Order No.
AMG CM EX	1	2083360000

Accessories

Plug-in cross-connection
50-pole
50-pole / red
50-pole / blue
2-pole
2-pole/ red
2-pole / blue
Note

Type	Qty.	Order No.
ZQV 4N/50	5	1528130000
ZQV 4N/50 RD	5	2460730000
ZQV 4N/50 BL	5	1528240000
ZQV 4N/2	60	1527930000
ZQV 4N/2 RD	60	2460450000
ZQV 4N/2 BL	60	1528040000

maxGUARD

maxGUARD – Potential distributor

Potential distribution in combination with the electronic load monitoring.

Technical data

General data
Protection degree
Total current load per potential

Current load per contact point

Connection data
Connection system
Number of terminals
Wire cross-section, AWG/kcmil min/max
Wire cross-section, flexible min/max
Wire cross-section, rigid min/max
Screwdriver blade

Approvals
Approvals

Note

Ordering data

||
||
||

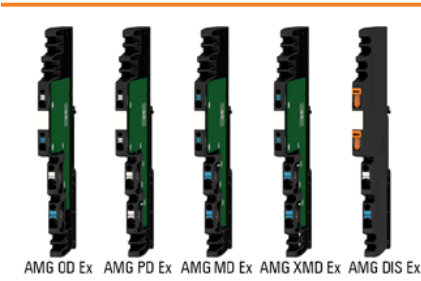
Note

Accessories

Plug-in cross-connection
50-pole
50-pole / red
50-pole / blue
2-pole
2-pole/ red
2-pole / blue

Note

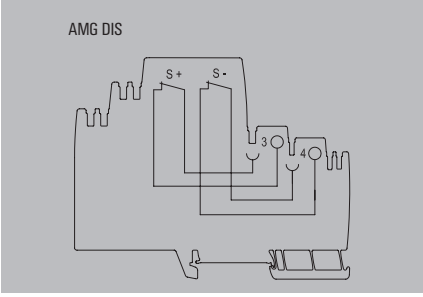
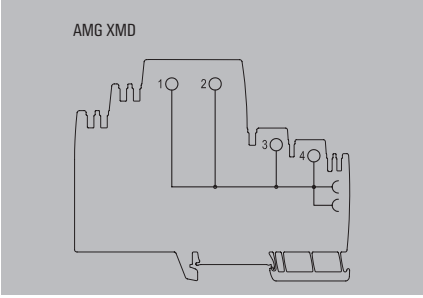
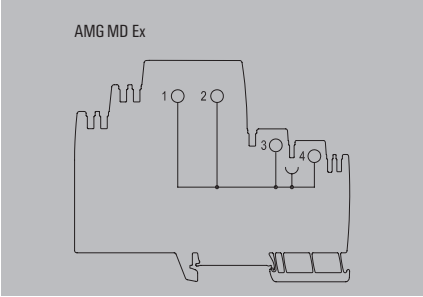
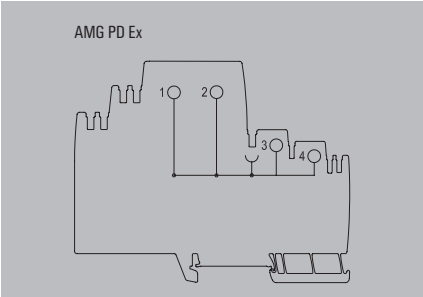
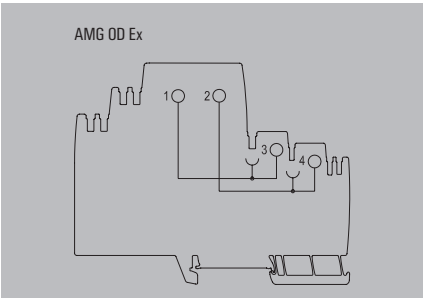
AMG



General data
IP20
2495090000: 12 A;
2495070000: 12 A;
2495040000: 12 A;
2495080000: 24 A;
2495100000: 12 A
Current load per contact point
12 A
Connection data
PUSH IN
4 (++) / -, 2 x 1.5 mm², 2 x 2.5 mm²
26...12 AWG
0.14...2.5 mm²
0.14...2.5 mm²
0.6 x 3.5
Approvals
ABS; BURVER; CCCEX; CE; cULus; cULusEX; DEMKOATEX; DETNORVER; IECEXULD; LLOYDSREG; RINA; TUEV; UKCA

Type	Qty.	Order No.
AMG OD EX	10	2495090000
AMG PD EX	10	2495070000
AMG MD EX	10	2495040000
AMG XMD EX	10	2495080000
AMG DIS EX	10	2495100000

Type	Qty.	Order No.
ZQV 4N/50	5	1528130000
ZQV 4N/50 RD	5	2460730000
ZQV 4N/50 BL	5	1528240000
ZQV 4N/2	60	1527930000
ZQV 4N/2 RD	60	2460450000
ZQV 4N/2 BL	60	1528040000



topGUARD & maxGUARD – accessories

GUARD Series – accessories

Cross-connector orange



Type	Qty.	Order No.
2-pole	60	1527930000
3-pole	60	1527940000
4-pole	60	1527970000
5-pole	60	1527980000
6-pole	20	1527990000
7-pole	20	1528020000
8-pole	20	1528030000
9-pole	20	1528070000
10-pole	20	1528090000
50-pole	5	1528130000

Type	Qty.	Order No.
ZQV 4N/2	60	1527930000
ZQV 4N/3	60	1527940000
ZQV 4N/4	60	1527970000
ZQV 4N/5	60	1527980000
ZQV 4N/6	20	1527990000
ZQV 4N/7	20	1528020000
ZQV 4N/8	20	1528030000
ZQV 4N/9	20	1528070000
ZQV 4N/10	20	1528090000
ZQV 4N/50	5	1528130000

Cross-connector blue



Type	Qty.	Order No.
ZQV 4N/2 BL	60	1528040000
ZQV 4N/3 BL	60	1528080000
ZQV 4N/4 BL	60	1528120000
ZQV 4N/5 BL	60	1528140000
ZQV 4N/6 BL	20	1528170000
ZQV 4N/7 BL	20	1528180000
ZQV 4N/8 BL	20	1528190000
ZQV 4N/9 BL	20	1528220000
ZQV 4N/10 BL	20	1528230000
ZQV 4N/50 BL	5	1528240000

Cross-connector red



Type	Qty.	Order No.
ZQV 4N/2 RD	60	2460450000
ZQV 4N/3 RD	60	2460810000
ZQV 4N/4 RD	60	2460800000
ZQV 4N/5 RD	60	2460790000
ZQV 4N/6 RD	20	2460780000
ZQV 4N/7 RD	20	2460770000
ZQV 4N/8 RD	20	2460760000
ZQV 4N/9 RD	20	2460750000
ZQV 4N/10 RD	20	2460740000
ZQV 4N/50 RD	5	2460730000

GUARD Series – accessories

End brackets



Type	Qty.	Order No.
WEW 35/2 SW	50	1061210000
WEW 35/2 V0 GF SW	50	1479000000

Type	Qty.	Order No.
WEW 35/2 SW	50	1061210000
WEW 35/2 V0 GF SW	50	1479000000

Cutting tool for ZQV



Type	Qty.	Order No.
KT 14	1	1157820000

Endplate and separation plate



Type	Qty.	Order No.
AMG PP	40	2123000000
AMG EP 2010	30	2495380000
AMG EP KIT	1	2500760000

topGUARD – accessories

Communication module



Type	Qty.	Order No.
PRO COM IO-LINK	1	2587360000

Type	Qty.	Order No.
PRO COM IO-LINK	1	2587360000