

Technical data

Arc monitor

Current sensing unit

Arc monitor

Triac outputs (Static outputs)	disconnectible terminals	
Largest load current:		
Continuously	0.7 A	
For 200 ms	30 A	
Smallest recommended load current (temperature $\geq 25^\circ\text{C}$)	DC	45 mA at stated polarity
(temperature $\geq -25^\circ\text{C}$)	AC	80 mA
	DC	80 mA at stated polarity
Residual current, I_r at 220 V	VAC at DC	8 mA 0.5 mA
		The output is connected in parallel with 10 ohm in series with 0.1 μF
For other voltages	AC	$I_r = V \times f \times 0.0006$ (mA) V = voltage f = frequency
Peak withstand voltage	600 V	
Power supply voltage	Max. 250 V	
Signal relay outputs		
Thermal rated current, I_{th}	5 A	
Rated operational current, I_o		
Utilization category per IEC 947-5-1:		
AC 15 $V_o = 250$ V	1.5 A	
DC 13 $V_o = 48$ V	1.0 A	
	0.4 A	
	0.2 A	
Optical inputs	Quantity	
For light detectors	9	
From Current Sensing Unit or other Arc Monitor	1	
Optical outputs	Quantity	
To other Arc Monitor	1	
Indications		
Operating voltage available	Decimal point on digital display lights up relay K2 energizes.	
Upon tripping	Digital display lights up. The display shows which detector was activated (1 – 9). Relay K1 energizes	
Control devices/settings:		
<i>External (on door)</i>		
Pushbutton		
- Reset button	Manual resetting	
<i>Internal (on the printed circuit board)</i>		
Change-over switch		
- Switching on and off of Current sensing unit	On/Off	
- Manual reset of signal relay	On/Off	
Trimming potentiometers		
- Sensitivity setting	Normally not to be adjusted	
Supply voltage:	See ordering information	
Permitted variation	+/-20 % at DC +/-10 % at AC 0.8 A delayed (5 x 20 mm) max 10 A fast	
Power consumption	6 W	
Ambient temperature	-25°C thru +55 °C	
Operating times:		
From detection to switched on triac outputs	approx. 1 ms (dependent on light intensity)	
From detection to making relay contact	< 10 ms	
Current conditions from input to output	< 0.3 ms (with 1 m optical cable)	
Degree of protection	NEMA 1 / IP54	
Start-up time for power on	< 50 ms at 60V for AGS-AM240 < 50 ms at 24V for AGS-AM48	

Current sensing unit

Rated current		
Reconnectible, for connection of external current transformers with secondary rated current	1, 2 or 5 A	
Load on the external current transformers	0.2 VA connected for 1 A 0.7 VA connected for 5 A	
The current sensing unit withstands a maximum of:		
Continuously	1 x rated current	
For 1 second	15 x rated current	
Optical outputs:		
To arc monitor/current sensing unit	Quantity: 2	
Optical inputs:	Quantity:	1
From other current sensing unit		
Indications:		
• Signal to arc monitor or current sensing unit	Green LED lights up for normal current level (< set overcurrent level)	
• Pre-warning	Yellow LED lights up for normal current, switched off at > 70% of set overcurrent level	
• Test position	Red LED	
Control devices/settings: (on the printed circuit board)		
Change-over switch		
Test position	On/Off	
Optical input is used or not	On/Off	
Trimming potentiometers		
Setting of overcurrent level	0.5 – 4.5 x rated current	
Simulation of overcurrent level in test position		
Supply voltage	See ordering information	
Permitted variation	+/-20 % at DC +/-10 % at 110-127 VAC +10 % -15 % at 230 VAC	
Power consumption	1 W at 24 V 11 W at 220 V	
Ambient temperature	-25°C thru + 55 °C	
Operating times		
From overcurrent occurring to actuating optical outputs:		
At currents ≥ 2 x set overcurrent level		
3-phase supply.	< 2 ms	
1-phase supply.	< 8 ms	
Current conditions from optical input to optical outputs	< 0.3 ms	
Degree of protection	NEMA 1 / IP54	
Detector spectrum	400 – 850 nm, short plastic fiber 400 – 720 nm, long plastic fiber	
Interference testing	According to EMC publications IEC1000 and Low Voltage Directive 73/23/EEC, the product is CE-marked.	