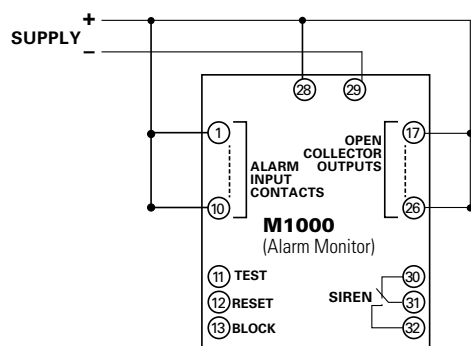


M1000 SERIES

Alarm Monitor



Simplified Circuit Diagram



Features & Benefits

FEATURES	BENEFITS
10 configurable digital inputs	Supports both NO and NC input contacts
11 open collector outputs	Allows external control and remote indication
1 siren relay output	Direct connection of alarm siren
Special indication of first alarm	Provides clear alarm overview in larger systems
Multiple units can be connected as one system	Modular and scalable solution
Voltage and insulation monitoring	Replaces voltage and insulation monitoring relay on the DC system
Dimming of LEDs	Suitable for bridge consoles
Type-approved by marine classification societies	Applicable in harsh environments
Configuration by DIP switches or PC	Easy installation and configuration
RS485 Modbus RTU	Communication with HMI and SCADA systems

Ordering Information

ORDERING NUMBER	CONTROL POWER	FUNCTION
M1000.0040	48-110 Vdc	IP54 front
M1000.0080	12-24 Vdc	IP54 front
M1000.0220	12-24 Vdc	Internal siren, IP54 at front

Description

The M1000 is an alarm panel with 10 digital inputs. Inputs from a dry contact (normally open [NO] or normally closed [NC]) will cause the corresponding LED to flash. Simultaneously a common alarm output and a siren output will be activated as well as an individual output. The unit has separate indications of first alarm, following alarms and acknowledged alarms. It also has dedicated inputs for remote reset and blocking. The unit can be configured for cable monitoring and monitoring of its own supply and insulation level.

Multiple M1000 units can be interconnected to form a large scale alarm system. In this situation functions are available for synchronizing the flashing of the LEDs and enabling global indication of first alarm for all connected units. Alarm related parameters like time delays, reset functions and other features can be configured through 18 programming switches. The M1000 can also be configured via the RS232 interface. A standard ANSI/VT100 terminal is used as programming tool. The M1000 is equipped with a 2-wire RS485 interface supporting MODBUS-RTU communication.

Specifications

Voltage Supply	12-24 Vdc-30%/+30% (8-32 Vdc) 48-110 Vdc-30%/+40% (33-155 Vdc)
Max. Power Consumption	180 mA
Ambient Temp.	-10°C to +70°C (also available for -40°C to +70°C)
Siren Relay Contact Output	220 Vac/2 A; 30 Vdc/2 A, 30 W Max. 150 mA per channel
Resistance in Sensing Cable	Max. 1000 W
Insulation Monitor	25 kW±8 kW (50 kW±10 kW for M1000-11-XXC)
Impulse Test	4.5 kV 1/50 µsec.
EMC	CE according to EN50081-1, EN50082-1, EN50081-2, EN50082-2 and EN61000-2-6
Programming	16 dip-switches or via RS232 interface
Communication	RS485 interface
Weight	0.4 kg
Dimensions	H 144 mm (5.7"); W 144 mm (5.7"); D 35 mm (1.4")
Panel Cut-out	H 138 mm (5.4"); W 138 mm (5.4")
Protection Degree at Front	IP54 (see Type Description)