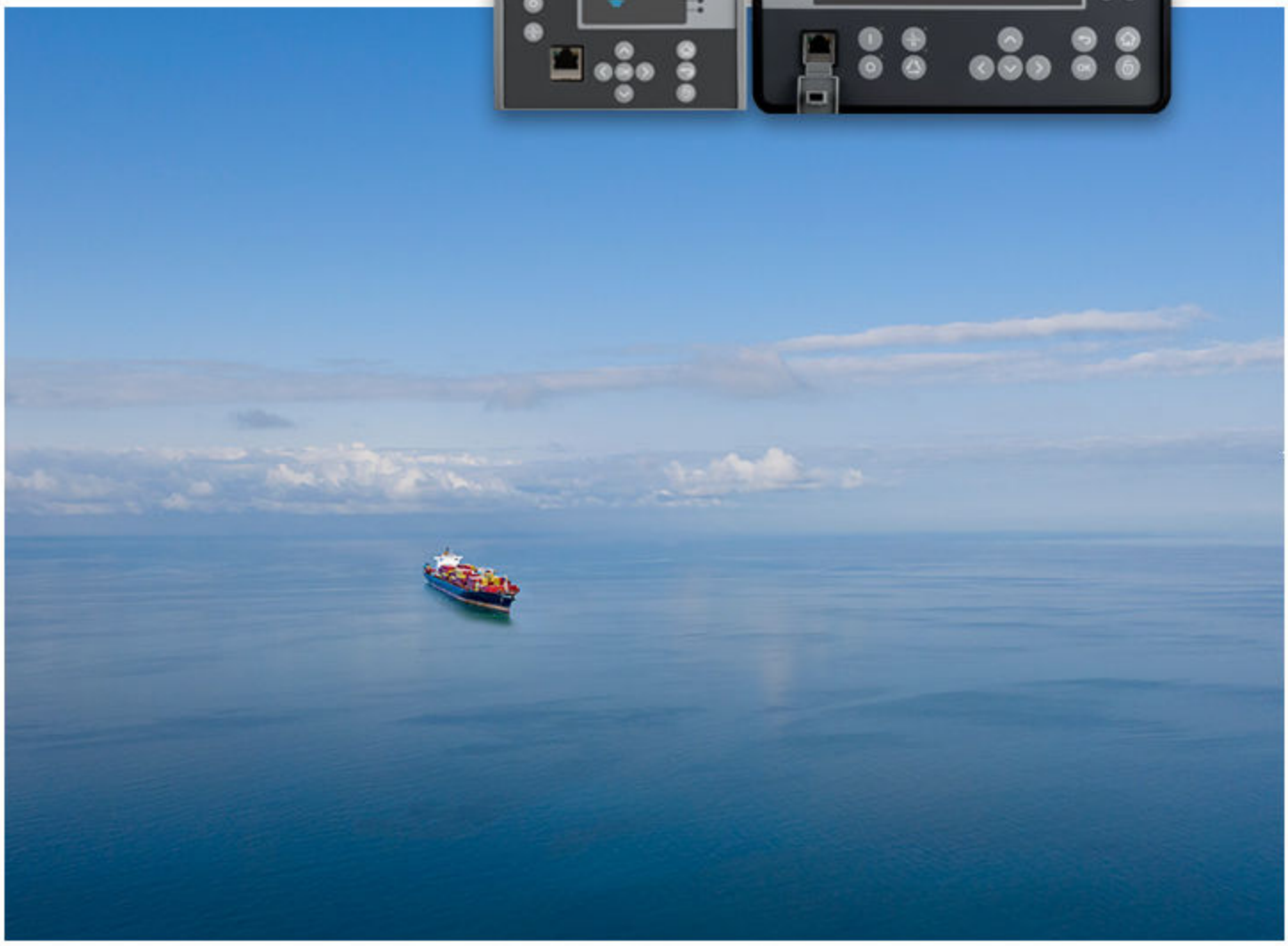
MVR-21x, MVR-25x

4189341408-B

Option D: Arc protection

Description of options

DEIF Improve Tomorrow



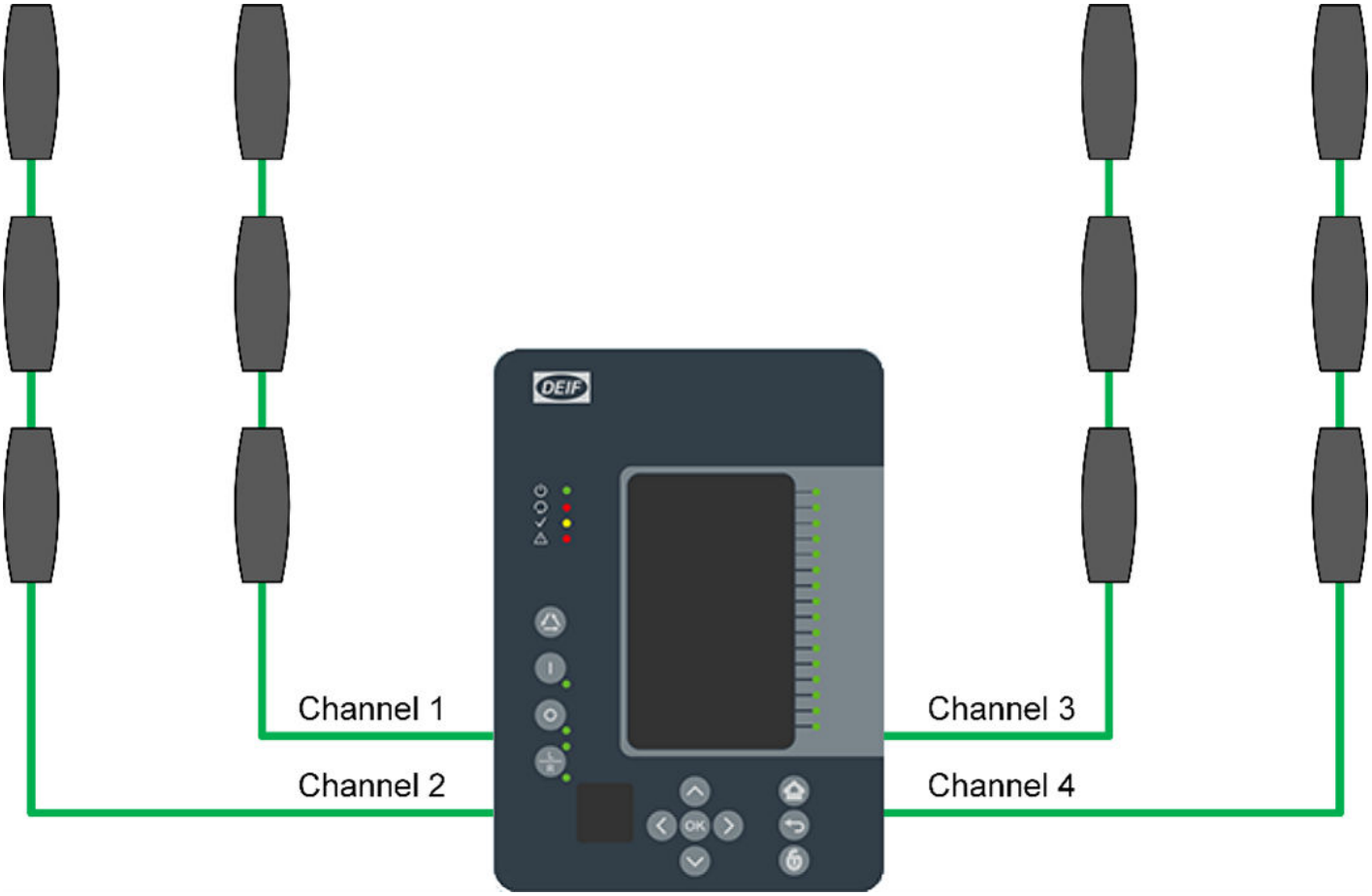
1. Arc protection, option D

1.1 Introduction

Arc faults occur for a multitude of reasons: e.g. insulation failure, incorrect operation of the protected device, corrosion, overvoltage, dirt, moisture, incorrect wiring, or even because of aging caused by electric load. It is important to detect the arc as fast as possible in order to minimize its effects. Using arc sensors to detect arc faults is much faster than merely measuring currents and voltages.

In busbar protection devices with normal protection can be too slow to disconnect arcs within a safe time frame. For example, it may be necessary to delay operation time for hundreds of milliseconds when setting up an overcurrent protection relay to control the feeder breakers to achieve selectivity. This delay can be avoided by using arc protection. The arc protection card has a high-speed output to trip signals faster as well as to extend the speed of arc protection.

1.2 System overview



The module has 4 sensor channels. Each channel supports up to 3 arc point sensors.

The sensors come in 2 variants:

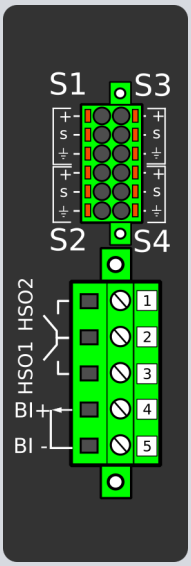
- Light sensing (AFD-L1, AFD-L2, and AFD-L3)
- Light and pressure sensing (AFD-LP1)

The arc sensing can be combined with overcurrent or residual current sensing so that both arc and overcurrent detection are needed to activate the alarm.

1.3 Arc module hardware

The arc protection module is an add-on module with four (4) light sensor channels, two (2) high-speed outputs and one (1) binary input. This module can be ordered directly to be installed into the device in the factory, or it can be upgraded in the field after the device's original installation when required. If even one of the sensor channels is connected incorrectly, the channel does not work. Each channel can have up to three (3) light sensors serially connected to it. The user can choose how many of the channels are in use.

Table 1.1 Module connections

	Connector	Description
	S1	
	S2	Light sensor channels 1...4 with positive ("+"), sensor ("S") and earth connectors.
	S3	
	S4	
	X 1	HSO2 (+, NO)
	X 2	Common battery positive terminal (+) for the HSOs.
	X 3	HSO1 (+, NO)
	X 4	Binary input 1 (+ pole)
	X 5	Binary input 1 (– pole)

The high-speed outputs (HSO1 and HSO2) operate only with a DC power supply. The battery's positive terminal (+) must be wired according to the drawing. The NO side of the outputs 1 or 2 must be wired through trip coil to the battery's negative terminal (–). The high-speed outputs can withstand voltages up to 250 VDC. The operation time of the high-speed outputs is less than 1 ms.

The rated voltage of the binary input is 24 VDC. The threshold picks up at ≥16 VDC. The binary input can be used for external light information or for similar applications. It can also be used as a part of various ARC schemes. Please note that the binary input's delay is 5...10ms.

NOTE BI1, HSO1 and HSO2 are not visible in the *Binary inputs* and *Binary outputs* menus (*Control → Device I/O*), they can only be programmed in the arc matrix menu (*Protection → Arc protection → I/O → Direct output control* and *HSO control*).

2. Functions

2.1 Introduction

The arc protection function includes:

- Light in arc detection
- Pressure in arc detection
- Arc binary input signal status
- Zone trip
- Zone blocked
- Sensor fault signals

The arc protection function uses eight (8) separate setting groups. These can be selected from one common source.

2.2 Outputs

Table 2.1 Output signals of the IArc>/I0Arc> function.

Outputs	Activation condition
Channel 1 Light In Channel 2 Light In Channel 3 Light In Channel 4 Light In	The arc protection card's sensor channel detects light.
ARC Binary input signal	The arc protection card's binary input is energized.
I/I0 Arc> Ph. curr. START I/I0 Arc> Res. curr. START	The measured phase current or the residual current is over the set limit.
I/I0 Arc> Ph. curr. BLOCKED I/I0 Arc> Res. curr. BLOCKED	The phase current or the residual current measurement is blocked by an input.
I/I0 Arc> Zone 1 TRIP I/I0 Arc> Zone 2 TRIP I/I0 Arc> Zone 3 TRIP I/I0 Arc> Zone 4 TRIP	All required conditions for tripping the zone are met (light OR light and current).
I/I0 Arc> Zone 1 BLOCKED I/I0 Arc> Zone 2 BLOCKED I/I0 Arc> Zone 3 BLOCKED I/I0 Arc> Zone 4 BLOCKED	All required conditions for tripping the zone are met (light OR light and current) but the tripping is blocked by an input.
I/I0 Arc> S1 Sensor fault I/I0 Arc> S2 Sensor fault I/I0 Arc> S3 Sensor fault I/I0 Arc> S4 Sensor fault	The detected number of sensors in the channel does not match the settings.

2.3 Operational logics

The operational logic consists of the following:

- Input magnitude selection
- Input magnitude processing
- Threshold comparator
- Two block signal checks output processing

The inputs for the function are the following:

- Operating mode selections

- Setting parameters
- Digital inputs and logic signals
- Measured and pre-processed current magnitudes

The function outputs the TRIP, BLOCKED, light sensing etc. signals which can be used for direct I/O controlling and user logic programming.

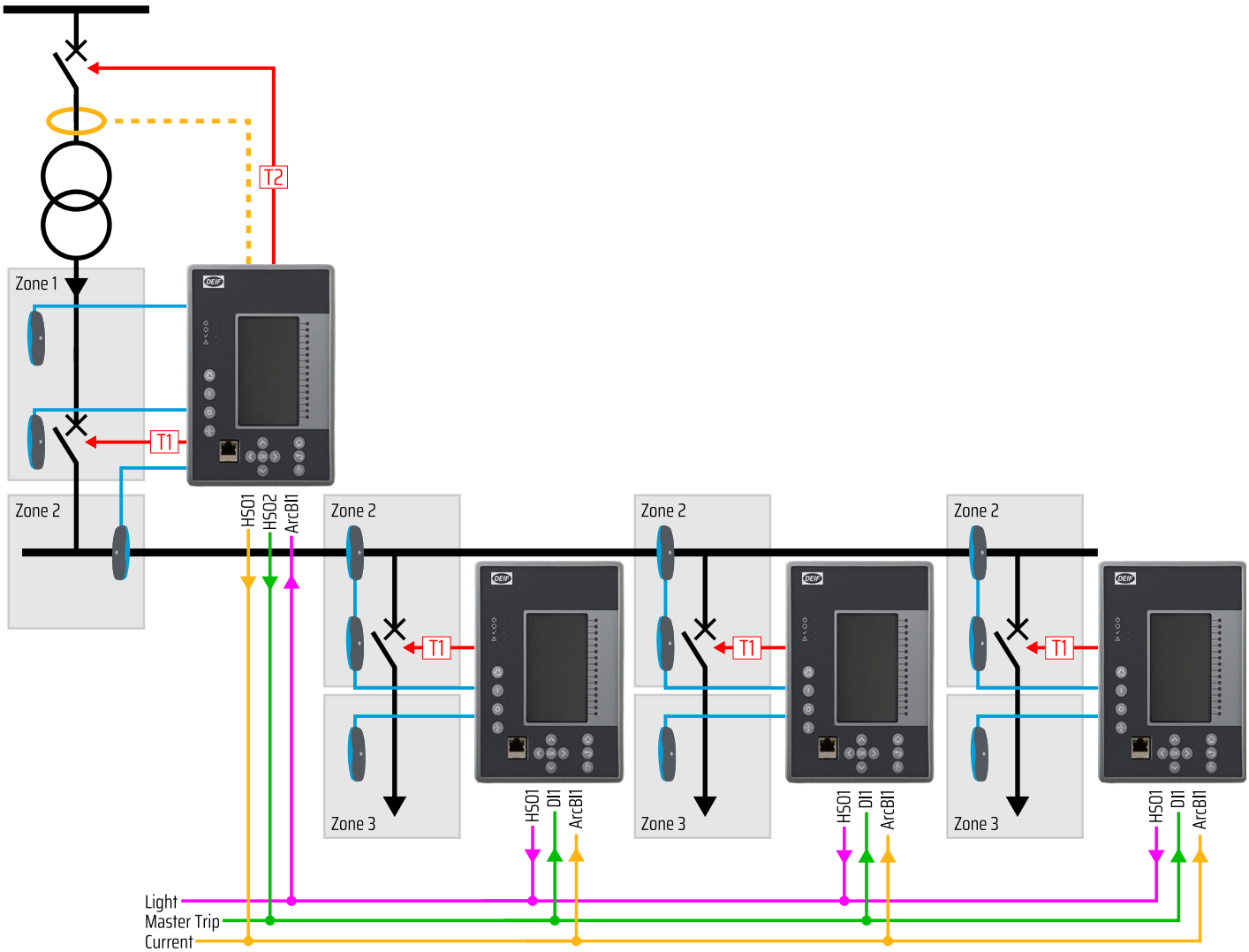
The function generates general time-stamped ON/OFF events to the common event buffer from each of the three (3) output signal.

The time stamp resolution is 1 ms. The function also a resettable cumulative counter for the TRIP and BLOCKED events for each zone.

2.3.1 Example of scheme setting

The following example helps the user better understand how the arc protection function is set.

Figure 2.1 Scheme with protection devices.



To set the zones for the device installed to the incoming feeder, start by enabling the protected zones (in this case, Zones 1 and 2). Then define which sensor channels are sensing which zones:

- Channel 1: Installed to incoming feeder cable compartment. Enabled in Zone 1.
- Channel 2: Installed to incoming feeder circuit breaker compartment. Enabled in Zone 1.

- Channel 3: Installed to busbar. Enabled in Zone 2.

Each outgoing feeder has an MVR-250 protection device, which use these settings:

- Channel 1: Installed to outgoing feeder cable compartment. Enabled in Zone 3.
- Channel 2: Installed to outgoing feeder circuit breaker compartment and the busbar. Enabled in Zone 2.

If either phase overcurrent or residual overcurrent is needed for the tripping decision, they can be enabled in the same way as light sensors in the zone. When a current channel is enabled, the measured current needs to be above the set current limit in addition to light sensing for the zone to trip.

2.4 Measured inputs

Arc protection uses samples based on current measurements. If the required number of samples is found to be above the setting limit, the current condition activates. The arc protection can use either phase currents, residual currents or both.

Table 2.2 Measurement inputs of the U1/U2>/< function.

Signal	Description
I_{L1} samples	Samples received by I_{L1} current measurement channel
I_{L2} samples	Samples received by I_{L2} current measurement channel
I_{L3} samples	Samples received by I_{L3} current measurement channel
I_{01} samples	Samples received by I_{01} current measurement channel
I_{02} samples	Samples received by I_{02} current measurement channel

2.4.1 General settings

The following general settings define the general behavior of the function. These settings are static i.e. it is not possible to change them by editing the setting group.

Table 2.3 General settings of the function.

Name	Range	Default	Description
I/I0 Arc> LN mode	• On • Blocked • Test • Test/Blocked • Off	On	Set mode of ARC block. This parameter is visible only when *Allow setting of individual LN mode* is enabled in *General* menu.
I/I0 Arc> force status to	• Normal • PH curr blocked • PH curr Start • ResCurr Blocked • ResCurr Start • Zone 1 Trip • Zone1 Blocked • Zone2 Trip • Zone2 Blocked • Zone3 Trip • Zone3 Blocked • Zone4 Trip • Zone4 Blocked	Normal	Force the status of the function. Visible only when *Enable stage forcing* parameter is enabled in *General* menu.

Name	Range	Default	Description
Channel 1 sensors	• No sensors • 1 sensor • 2 sensors • 3 sensors	No sensors	Defines the number of sensors connected to the channel (channels 1/2/3/4). Used for supervising the health of the connection.
Channel 2 sensors			
Channel 3 sensors			
Channel 4 sensors			
Channel 1 sensor status	• Sensors OK • Configuration fault state	-	Displays the status of the sensor channel. If the number of sensors connected to the channel does not match with the set "Channel 1/2/3/4 sensors" setting, this parameter will go to the "Configuration fault" state.
Channel 2 sensor status			
Channel 3 sensor status			
Channel 4 sensor status			

2.4.2 Pick-up settings

The pick-up of each zone of the Iarc>/I0arc> function is controlled by one of the following: the phase current pick-up setting, the residual current pick-up setting, or the sensor channels. The pick-up setting depends on which of these are activated in the zone.

Setting group selection controls the operating characteristics of the function, i.e. the user or user-defined logic can change function parameters while the function is running.

Table 2.4 Enabled Zone pick-up settings.

Name	Range	Step	Default	Description
Phase current pick-up	0.05...40.00 x I_n	0.01 x I_n	1.2 x I_n	The phase current measurement's pick-up value (in p.u.).
I0 input selection	• None • I01 • I02	-	None	Selects the residual current channel (I01 or I02).
Res.current pick-up	0.05...40.00 x I_{0n}	0.01 x I_{0n}	1.2 x I_{0n}	The residual current measurement's pick-up value (in p.u.).
ZoneX Enabled	• Disabled • Enabled	-	Disabled	Enables the chosen zone. Up to 4 zones can be enabled.
ZoneX Ph. curr. Enabled	• Disabled • Enabled	-	Disabled	The phase overcurrent allows the zone to trip when light is detected.
ZoneX Res. curr. Enabled	• Disabled • Enabled	-	Disabled	The residual overcurrent allows the zone to trip when light is detected.
ZoneX Light 1 Enabled	• Disabled • Enabled	-	Disabled	Light detected in sensor channel 1 trips the zone.
ZoneX Light 2 Enabled	• Disabled • Enabled	-	Disabled	Light detected in sensor channel 2 trips the zone.
ZoneX Light 3 Enabled	• Disabled • Enabled	-	Disabled	Light detected in sensor channel 3 trips the zone.
ZoneX Light 4 Enabled	• Disabled	-	Disabled	Light detected in sensor channel 4 trips the zone.

Name	Range	Step	Default	Description
	• Enabled			
ZoneX DI Enabled	• Disabled • Light In • Current In	-	Disabled	Arc protection option card digital input function selection. "Light In" mode trips the zone when digital input is active. In "Current In" mode digital input must be active at the same time as any of the sensor channels for the zone to trip.

2.4.3 Read-only parameters

The function's *Info* page displays useful, real-time information on the state of the protection function. It is accessed either through the device's HMI display, or through the setting tool software when it is connected to the device and its Live Edit mode is active.

Table 2.5 Information displayed by the function.

Name	Range	Description
I/I0 Arc> LN behaviour	• On • Blocked • Test • Test/Blocked • Off	Displays the mode of ARC block. This parameter is visible only when *Allow setting of individual LN mode* is enabled in *General* menu.
I/I0 Arc> condition	• Z1 Trip • Z1 Blocked • Z2 Trip • Z2 Blocked • Z3 Trip • Z3 Blocked • Z4 Trip • Z4 Blocked	Displays status of the protection function.
Sensor status	• Ph Curr Blocked • Ph Curr Start • Res Curr Blocked • Res Curr Start • Channel1 Light • Channel1 Pressure • Channel2 Light • Channel2 Pressure • Channel3 Light • Channel3 Pressure • Channel4 Light • Channel4 Pressure • Digital input • I/I0 Arc> Sensor 1 Fault • I/I0 Arc> Sensor 2 Fault • I/I0 Arc> Sensor 3 Fault • I/I0 Arc> Sensor 4 Fault • I/I0 Arc> I/O-unit Fault	Displays the general status of sensors.

2.5 Function blocking

The block signal is checked in the beginning of each program cycle. The blocking signal is received from the blocking matrix in the function's dedicated input. If the blocking signal is not activated when the pick-up element activates, a TRIP signal is generated.

If the blocking signal is active when the pick-up element activates, a BLOCKED signal is generated and the function does not process the situation further.

The variables the user can set are binary signals from the system. The blocking signal needs to reach the device minimum of 5 ms before the set operating delay has passed in order for the blocking to activate in time.

2.6 Events and registers

The arc fault protection function (abbreviated "ARC" in event block names) generates events and registers from the status changes in the events listed below. The user can select which event messages are stored in the main event buffer: ON, OFF, or both. The events triggered by the function are recorded with a time stamp.

The function's outputs can be used for direct I/O controlling and user logic programming. The function also provides a resettable cumulative counter for the events.

Table 2.6 Event messages.

Event block name	Event names
ARC1	Zone 1...4 Trip ON/OFF
ARC1	Zone 1...4 Block ON/OFF
ARC1	Phase current Blocked ON/OFF
ARC1	Phase current Start ON/OFF
ARC1	Residual current Blocked ON/OFF
ARC1	Residual current Start ON/OFF
ARC1	Channel 1...4 Light ON/OFF
ARC1	DI Signal ON/OFF
ARC1	I/I0 Arc> Sensor 1...4 Fault ON/OFF
ARC1	I/I0 Arc> sub-unit count error ON/OFF

The function registers its operation into the last twelve (12) time-stamped registers. The table below presents the structure of the function's register content.

Table 2.7 Register content.

Register	Description
Date and time	dd.mm.yyyy hh:mm:ss.mss
Event	Event name
Phase A current	Trip current
Phase B current	
Phase C current	
Residual current	
Active sensors	1...4
Setting group in use	Setting group 1...8 active

2.7 Arc fault protection (IArc>/I0Arc>; 50Arc/50NArc) (optional)

NOTE Not approved for marine.

Table 2.8 Technical data for the arc fault protection function.

Measurement inputs	
Current inputs	Phase current inputs: I_{L1} (A), I_{L2} (B), I_{L3} (C) Residual current channel I_{01} (Coarse) Residual current channel I_{02} (Fine)
Current input magnitudes	Sample-based phase current measurement Sample-based residual current measurement
Arc point sensor inputs	Channels S1, S2, S3, S4 (pressure and light sensor, or light-only sensor) Up to three (3) sensors* per channel
System frequency operating range	6.00...75.00 Hz
Pick-up	
Pick-up current setting (phase current) Pick-up current setting (residual current) Pick-up light intensity	0.50...40.00 × I_N, setting step 0.01 × I_N 0.10...40.00 × I_N, setting step 0.01 × I_N 8, 25 or 50 kLx (the sensor is selected in the order code)
Starting inaccuracy (IArc> and I0Arc>)	±3 % of the set pick-up value > 0.5 × I_N setting. 5 mA < 0.5 × I_N setting.
Point sensor detection radius	180 degrees
Operation time	
Light only: - Semiconductor outputs HSO1 and HSO2 - Regular relay outputs	 Typically 7 ms (3...12 ms) Typically 10 ms (6.5...15 ms)
Light + current criteria (zone 1...4): - Semiconductor outputs HSO1 and HSO2 - Regular relay outputs	 Typically 10 ms (6.5...14 ms) Typically 14 ms (10...18 ms)
Arc BI only: - Semiconductor outputs HSO1 and HSO2 - Regular relay outputs	 Typically 7 ms (2...12 ms) Typically 10 ms (6.5...15 ms)

More information
* See the **Option D: Arc protection Description of options** for the specifications of these sensors.

2.8 Arc protection module (option card D)

Table 2.9 Technical data for the point sensor arc protection module

Connections	
Input arc point sensor channels	S1, S2, S3, S4 (pressure and light, or light only)
Sensors* per channel	3
Maximum cable length	200 m
Performance	
Pick-up light intensity	8, 25 or 50 kLx (the sensor is selectable in the order code)
Point sensor detection radius	180 degrees
Start and instant operating time (light only)	Typically <5 ms with dedicated semiconductor outputs (HSO) Typically <10 ms regular output relays

More information
* See the **Option D: Arc protection Description of options** for the specifications of these sensors.

Table 2.10 High-Speed Outputs (HSO1...2)

Rated values	
Rated auxiliary voltage	250 VDC
Continuous carry	2 A
Make and carry 0.5 s Make and carry 3 s	15 A 6 A
Breaking capacity, DC (L/R = 40 ms)	1 A/110 W
Control rate	5 ms
Operation delay	<1 ms
Polarity	Normally Off
Contact material	Semiconductor

Table 2.11 Binary input channel

Rated values	
Voltage withstand	265 VDC
Nominal voltage Pick-up threshold Release threshold	24 VDC ≥16 VDC ≤15 VDC
Scanning rate	5 ms
Polarity	Normally Off
Current drain	3 mA

Table 2.12 Terminal block connections

Arc point sensor terminal block connections	
Spring cage terminal block	Phoenix Contact DFMC 1,5/ 6-STF-3,5
Solid or stranded wire Nominal cross section	1.5 mm^2
Binary input and HSO terminal block connections	
Screw connection terminal block (standard)	Phoenix Contact MSTB 2,5/5-ST-5,08
Spring cage terminals block (option)	Phoenix Contact FKC 2,5/10-STF-5,08
Solid or stranded wire Nominal cross section	2.5 mm^2

NOTE The polarity must be correct!

3. Arc sensors

3.1 Introduction

DEIF provides a choice of arc sensors to be used in different units and different switchgear types according to specific application requirements. Available sensor types are arc light point sensors and combined pressure and arc light point sensors. DEIF also supplies a mounting bracket for the arc sensor.

Arc light point sensors are typically installed in metal clad compartments providing quick accurate location of the faulted area.

3.2 Arc light point sensors

AFD-L1, AFD-L2, and AFD-L3 are arc light point sensors. Each sensor has a light sensitive photodiode element activated by arc light.

AFD-L1, AFD-L2, and AFD-L3 arc sensors should be mounted in the switchgear cubicles in such a way that the light sensitive part covers the protected area as completely as possible.

One sensor should be used per closed metal clad compartment. In open spaces, such as the busbar section, arc sensors should be mounted maximum 2 meters apart.

The fixed light sensitivity of the AFD-L1 sensor is 8000 lux. The AFD-L2 sensitivity is 25000 lux, and the AFD-L3 sensitivity is 50000 lux. The sensors do not require user settings. The detection radius is 180 degrees.

Figure 3.1 Arc sensor AFD-L1, AFD-L2, or AFD-L3

The module has 4 sensor channels. Each channel supports up to 3 arc point sensors.

The arc sensing can be combined with an over-current or residual current sensing in such a manner than only sensing of an arc AND over-current will trigger the alarm.

3.2.1 Installation and wiring of light sensors

AFD-L1, AFD-L2, and AFD-L3 are installed either on the compartment wall or through the wall.

When mounting inside the wall, the sensor is placed on the wall with the colored side against the wall. AFD-L1, AFD-L2, and AFD-L3 are fixed to the wall using two screws. When mounting outside the wall the sensor is placed on the wall with the grey side against the wall and the eye is pushed into the drilled compartment hole. Two screws are attached from the back side of the sensor.

No external mounting plates are needed regardless of the mounting type. However, you can use a mounting bracket, such as AFD-MB, for installation. See AFD-MB Mounting bracket for more information.

Figure 3.2 AFD-L1, AFD-L2, or AFD-L3 mounted on a compartment wall

AFD-L1, AFD-L2, and AFD-L3 are supplied without a connection cable. The connection cable installation at site is simple. The cable connectors are located beneath the covers that can be conveniently detached for fastening the sensor wires. The cover must be attached after installing the wires. The cable connectors are located at both ends of the sensor. You can use these for connecting a maximum of three sensors in series (daisy chained).

3.2.2 Technical data for AFD-L1, AFD-L2, and AFD-L3

Light intensity threshold	AFD-L1: 8000 lux AFD-L2: 25000 lux AFD-L3: 50000 lux
Detection radius	180 degrees
Mechanical protection	IP 20
Sensor cable specification	Shielded twisted pair 0.75 mm² (AWG: 18)
Maximum sensor cable length per sensor channel	200 meters
Operating temperature	-20 to +85 C

3.3 Pressure and arc light point sensor

AFD-LP1 is a combined pressure sensor and arc light point sensor with a light-sensitive photodiode element activated by arc light.

AFD-LP1 will only trigger if both pressure threshold and light sensitivity are exceeded.

AFD-LP1 arc sensors should be mounted in the switchgear cubicles in such a way that the light sensitive part covers the protected area as completely as possible.

One sensor should be used per closed metal clad compartment. The sensors cannot be installed in open spaces.

The fixed pressure threshold of the AFD-LP1 is 0.2 bar relative (above ambient pressure).

The fixed light sensitivity of the AFD-LP1 sensor is 8000 lux. The sensor does not require user settings. The light detection radius is 180 degrees.

3.3.1 Installation and wiring of pressure and light sensors

The installation and wiring of the AFD-LP1 is similar to AFD-Lx. However, an AFD-LP1 can only be installed inside the compartment wall, so as not to block the pressure detection, located next to the eye. The sensor is placed on the wall (with the colored side against the wall), and then fixed to the wall with two screws.

No external mounting plates are needed. However, you can use a mounting bracket, such as AFD-MB, for installation. See AFD-MB Mounting bracket for more information.

AFD-LP1 is supplied without a connection cable. The connection cable installation at site is simple. The cable connectors are located beneath the covers that can be conveniently detached for fastening the sensor wires. The cover must be attached after installing the wires. The cable connectors are located at both ends of the sensor. You can use these for connecting a maximum of three sensors in series (daisy chained).

3.3.2 Technical data for AFD-LP1

Light intensity threshold	8000 lux
Detection radius	180 degrees
Pressure threshold (fixed)	0.2 bar relative
Mechanical protection	IP 20
Sensor cable specification	Shielded twisted pair 0.75 mm²
Maximum sensor cable length per sensor channel	200 meters
Operating temperature	-20 to +85 C

3.4 Mounting bracket

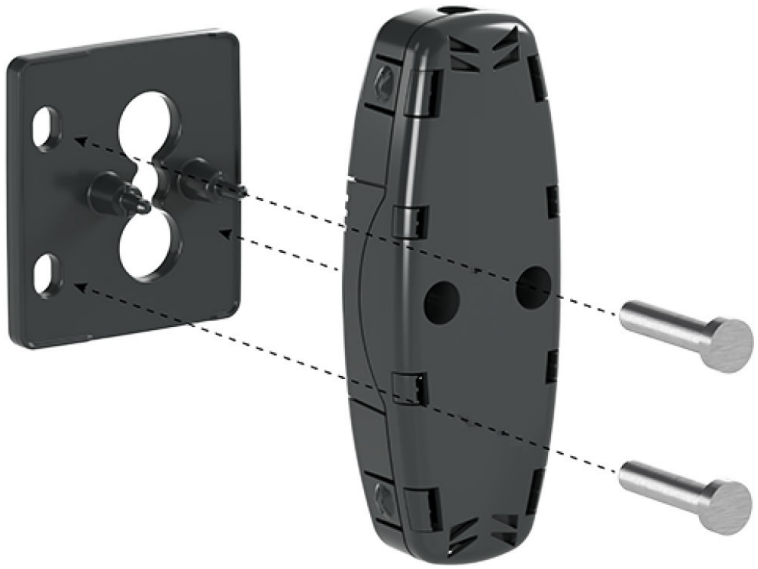
You can buy a plastic mounting bracket (AFD-MB) for easier attachment of the arc flash sensors to the compartment walls.

When using the mounting bracket, begin by situating the bracket correctly with regards to the arc protected space. An AFD-L1/2/3 light sensor can be installed both inside and outside the compartment wall: the sensor's eye can be towards the

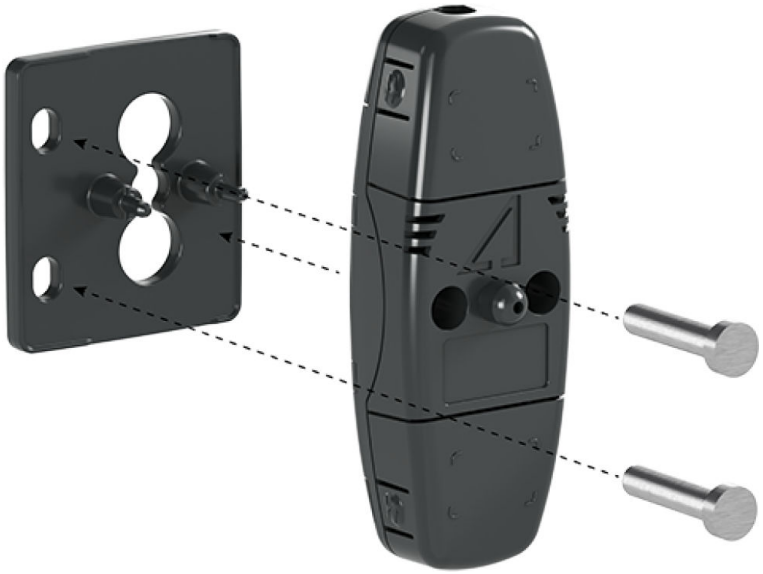
bracket (the first figure below) or facing away from the bracket (the second figure below). However, an AFD-LP light and pressure sensor can only be installed inside the compartment wall with the sensor's eye facing away from the bracket.

To install a point sensor with the sensor bracket, screw the bracket in place by the two holes on the side and then snap the point sensor in the bracket hooks.

Installing a point sensor outside the wall (eye towards the mounting bracket)

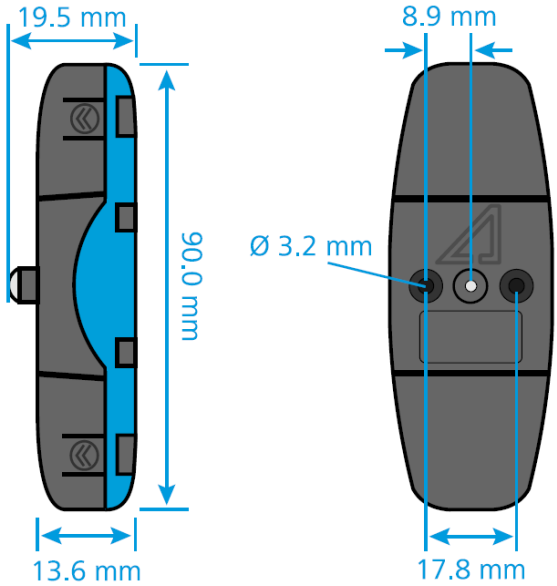


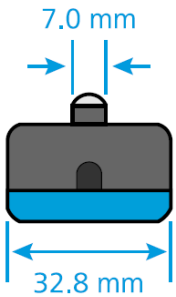
Installing a point sensor inside the wall (eye facing away from the mounting bracket)



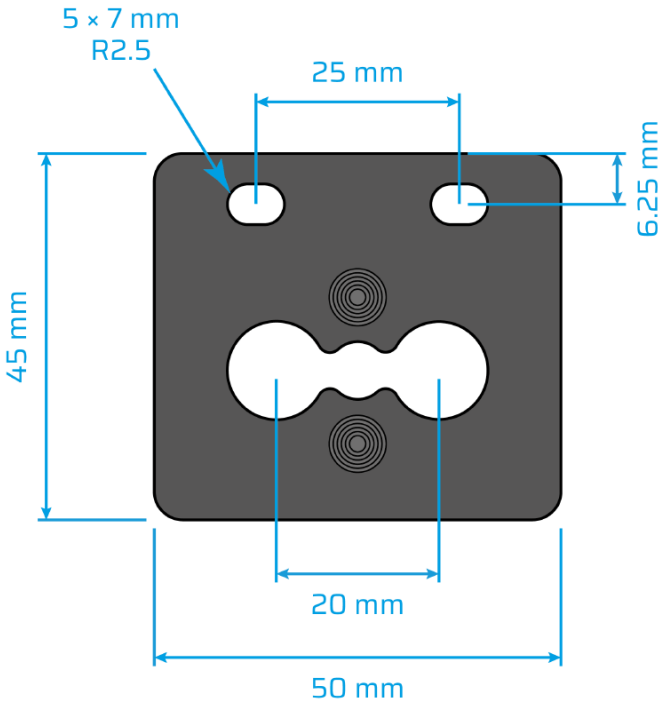
3.5 Dimensions

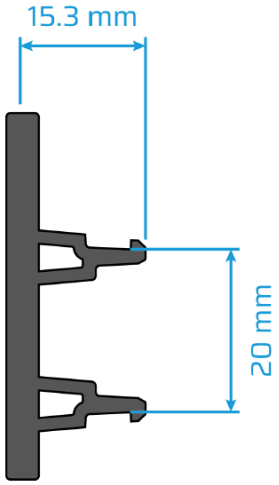
Arc sensors





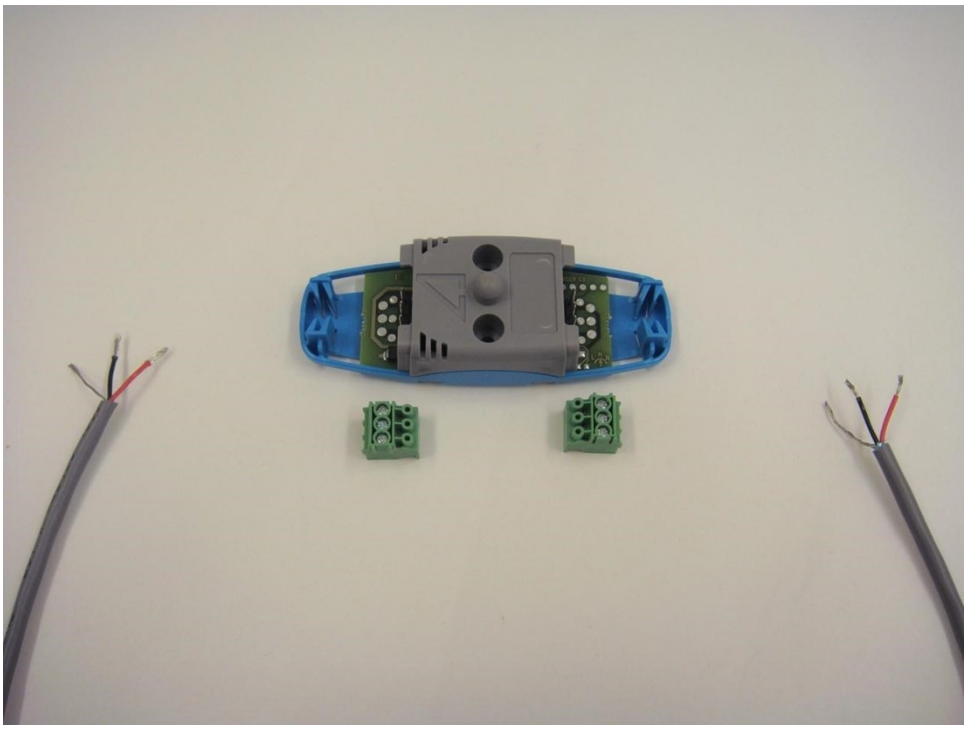
Mounting bracket



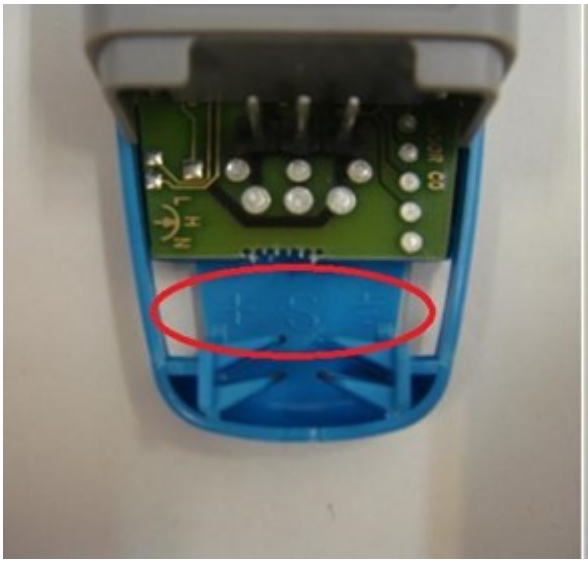


3.6 Connection of sensors

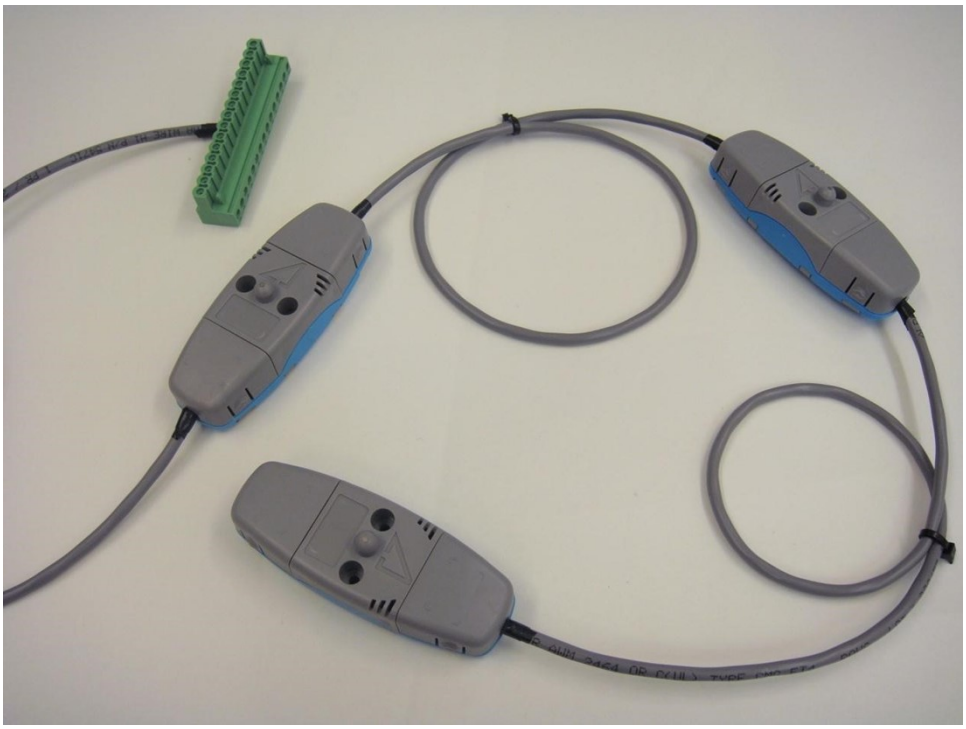
1. Open the sensor side-covers, then detach the pluggable connectors from the sensor PCB, and prepare the three-twisted shielded pair cable connecting.



2. Before connecting the cable to connector, make sure that the connecting order is right (+, signal, shield). The appropriate pins information is shown on the bottom shell of the sensor. Plug the wires into connector and fasten them by using the screw driver.

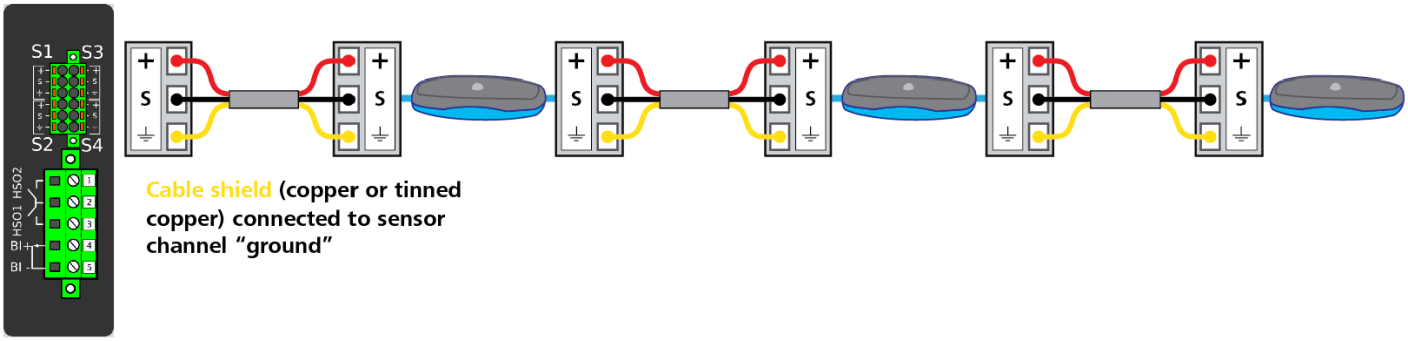


3. Connect the other end of the cable to a sensor channel on MVR Arc Flash module.
4. A maximum of 3 arc sensors can be daisy-chained to the same sensor input on the MVR option D input.



5. The MVR has an Auto Configuration function. This is a part of the Self Supervision Function. This function makes sure that all connections and sensors are fully functional and ready to operate at all times.

3.6.1 Sensor daisy chain with a two-wire cable

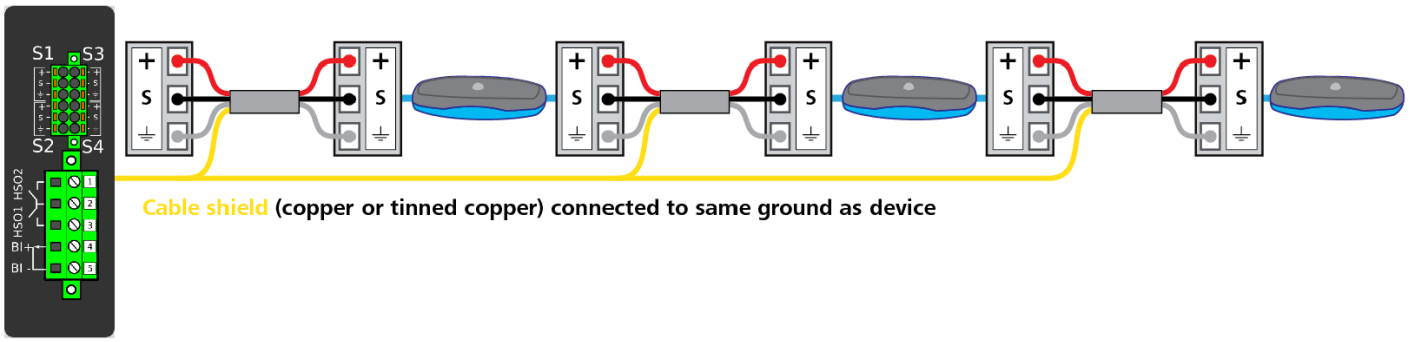


The shield of the cable must be either copper or tinned copper.

NOTE Only connect the cable shield to the ground connector of the sensor channel. Do not connect the cable shield to the same earth as the MVR.

1. Open the sensor covers and detach the connectors.
2. Attach the cable to the connector and to the arc protection device.
3. Reattach the connectors to the sensor.
4. Run the auto-configuration procedure (see the "System setup" chapter in the device manual for further details).

3.6.2 Sensor daisy chain with a three-wire cable



NOTE If the cable has a shield (copper or tinned copper), it is recommended to connect it to same ground as the MVR.

1. Open the sensor covers and detach the connectors.
2. Attach the cable to the connector and to the arc protection device.
3. Reattach the connectors to the sensor.
4. Run the auto-configuration procedure (see the "System setup" chapter in the device manual for further details).

3.7 Ordering codes

Component	Notes
AFD-L1	Arc flash detector, light sensor, 8000 lux
AFD-L2	Arc flash detector, light sensor, 25000 lux
AFD-L3	Arc flash detector, light sensor, 50000 lux
AFD-LP1	Arc flash detector, light and pressure sensor, 8000 lux
AFD-MB	Mounting bracket for arc flash detector

4. Legal information

4.1 Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.

4.2 Copyright