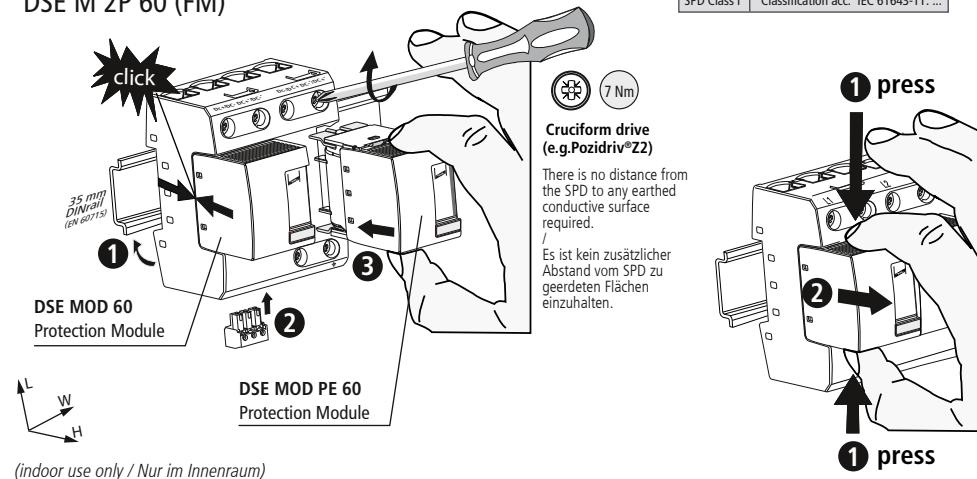


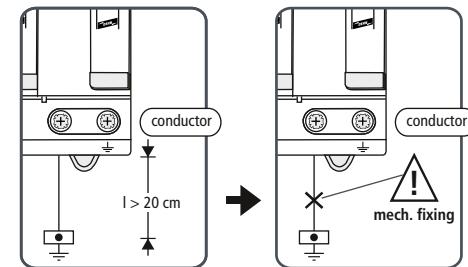
**DEHNsecure®M**  
DSE M 2P 60 (FM)


## Technical Data / Technische Daten

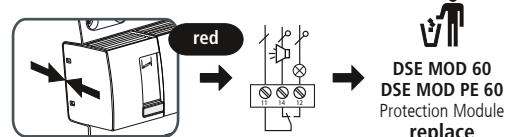
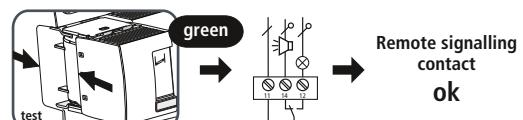
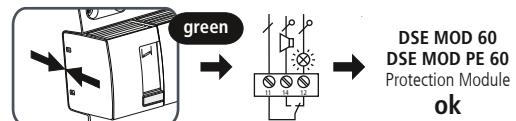
$U_c$	60 V / DC
$I_{SCCR}$	17 kA DC
$I_{imp}$ 10/350 µs	25 kA (DC+/DC $\Rightarrow$ DC-/DC+); 50 kA (DC-/DC+ $\Rightarrow$ $\downarrow$ )
max. $\rightarrow$	125 A gL/gG (Series connection)
max. $\rightarrow$	250 A gL/gG (Parallel connection)
$\vartheta$	-40°C ... + 80°C (... + 60°C Series connections)
$I_{PE}$	<< 10 $\mu$ A
humidity / Feuchte	5% ... 95%
Ports	1
IP Code	IP 20 (built in / eingebaut)
L x W x H	90 mm x 72 mm x 73 mm

16.5 mm	16.5 mm	16.5 mm
max. $\square$ DC+/DC-, $\downarrow$ /DC-	35 mm <sup>2</sup>	50 mm <sup>2</sup>
max. $\square$ DC+/DC-	25 mm <sup>2</sup>	35 mm <sup>2</sup>
min. $\square$ DC+/DC-, DC+/DC-; $\downarrow$ /DC-	10 mm <sup>2</sup>	
$\triangle$	16 mm <sup>2</sup> Cu	$\text{MM} \geq 15.5 \text{ mm}$

## Mechanical fixing / Mechanische Befestigung

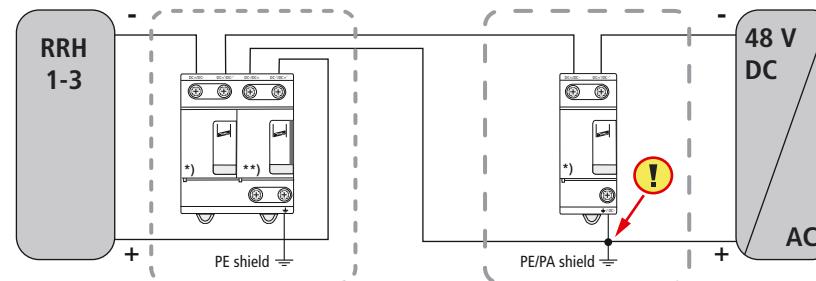


## Fault indication / Defektanzeige



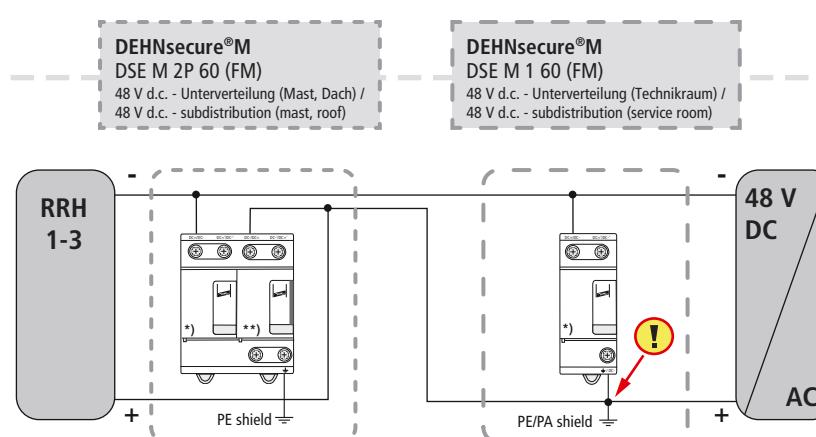
## Series connection

Technische Daten RRH-Anwendung: / Technical data RRH application:		
Max. Gleichspannung / Max. d.c. voltage	$U_{DC\ max.}$	60 V
Nennspannung / Nominal voltage	$U_N$	48 V
Max. Laststrom / Max. load current	$I_{L\ max.}$	125 A



## Parallel connection

Technische Daten RRH-Anwendung: / Technical data RRH application:		
Max. Gleichspannung / Max. d.c. voltage	$U_{DC\ max.}$	60 V
Nennspannung / Nominal voltage	$U_N$	48 V
Max. Laststrom / Max. load current	$I_{L\ max.}$	2000 A

\*) DSE MOD 60  
Protection Module\*\*) DSE MOD PE 60  
Protection Module

$U_N / I_N$	AC: 250 V / 0.5 A
DC:	250 V / 0.1 A 125 V / 0.2 A 75 V / 0.5 A
max. 1.5 mm <sup>2</sup>	



## Instruções de segurança

PT

## Informazioni di sicurezza

IT

## Indicaciones de seguridad

ES

## Consignes de sécurité

FR

## Safety Instructions

GB

## Sicherheitshinweise

DE

A ligação e a montagem do aparelho apenas devem ser efectuadas por electricistas. Cumprir as normas nacionais e as disposições de segurança (IEC 60364-5-53 (VDE 0100 Teil 534...)). Antes da montagem, controlar se o aparelho apresenta danos exteriores. Não se pode proceder à montagem do aparelho, se for detectado um dano ou qualquer outro defeito.

A utilização do aparelho só é permitida no âmbito das condições referidas e indicadas no presente manual de montagem. No caso de cargas superiores aos valores indicados, podem ser causados danos no aparelho, assim como nos meios de produção eléctricos ligados a este. As intervenções e as alterações no aparelho causam a perda do direito à garantia.

## Veiligheidsvoorschriften

NL

## Sikkerhedshenvisninger

DK

## Säkerhetsföreskrifter

SE

## Turvaohjeet

FI

## Υποδείξεις ασφαλείας

GR

## Ważkazówki bezpieczeństwa

PL

Aansluiting en montage van het apparaat mogen enkel door een erkend elektricien uitgevoerd worden.

De nationale voorschriften en veiligheidsbepalingen dienen opgevolgd te worden (IEC 60364-5-53 (VDE 0100 Teil 534...)).

Vor der Montage darf das Gerät auf sichtbare Beschädigungen überprüft werden. Ist ein Schaden oder ein anderer Fehler festgestellt, darf das Gerät nicht montiert werden. Indien Schade von einer anderen Fout vastgesteld wordt, mag das Gerät nicht gemonteerd worden. Het gebruik van het apparaat is alleen toegelaten binnen het kader van de in deze montagehandleiding opgenomen en getoonde omstandigheden. Bij belastingen die hoger liggen dan de getoonde waarden, kunnen zowel het apparaat als de aangesloten elektrische werktuigen beschadigd worden. Verkeerd gebruik en veranderingen aan het apparaat leiden tot verlies van het recht op waarborg.

## Bezpečnostní pokyny

CZ

## Güvenlik uyarıları

TR

## Инструкции по безопасности

RU

## Biztonsági útmutatók

HU

CN

## T安全上の注意事項

JP

Připojení a montáž přístroje smí provést pouze elektrikář. Dodržujte národní předpisy a bezpečnostní ustanovení (viz též IEC 60364-5-53 (VDE 0100 část 534...)).

Před zahájením montáže zkонтrolujte, zda není přístroj zvnějšku poškozen. Pokud zjistíte poškození nebo jiné vady, nesmíte přístroj montovat. Použití přístroje je dovoleno pouze v rámci podmínek uvedených a jmenovaných v návodu k instalaci.

V případě záťatí nad rámcem uvedených hodnot může dojít ke zničení přístroje a připojených elektrických provozních prostředků.

Zásahy do přístroje a změny mají za následek zánik nároku na záruční plnění.

## Special technical information referred to UL 1449 4th edition:

## 1. Safety Instructions

The DEHNsecure series SPD is to be installed only by a qualified personnel and to be done so in compliance with all local and National Electrical Code requirements. For proper system protection coordination with other SPD's must be considered; contact our application engineer for assistance if in doubt. Installation and connection to service must be done only when the system is de-energized. Its application is to be compliant with its rating and therefore must not be installed in a more severe environment subjecting it to higher voltages, currents or energy levels than for which its technical specifications provide. It is designed for indoor applications and must be placed in a suitable rated NEMA enclosure if the system is to be in a harsher environment. Opening or tampering with the thermoplastic enclosure may damage the effective operation of the SPD and is inadvisable and will void the warranty.

## 2. General installation Instructions

Section 250 of the NEC and IEEE Green Book, Standard 142 should be consulted. Local electrical codes and/or the Canadian Electrical code have to be considered. **System voltage:** Make sure that the SPD is correctly rated for the system where the SPD should be applied. The maximum continuous operating voltage (MCOV) must not be exceeded. **Mounting:** Make sure that the SPD is installed as close as possible to the device to be protected. The conductor length for these connections must be kept as short and as straight as possible. The SPDs are to be mounted on the 35 mm DIN rail. The DIN rail is to be securely mounted to the back of the interior of the panel using  $\frac{1}{4}$  inch bolts every 8 inches (200 mm). The SPDs can either be slid on the DIN rail from open end or put on the DIN rail by compressing the spring loaded clamping device on the lower back of each unit. The SPDs shall permit sufficient clearance for conductor power and signaling connections. **Conductor Connections:** Phase connections to the SPD and ground side connections from the SPD to the ground bus must be of the wire size indicated in the technical specifications. Insulation should be stripped back as described on the previous page. All conductor terminal screws shall be tightened to the torque indicated in the technical data. **Grounding:** Make sure that the grounding of the SPD is as short and straight as possible with the specified wire size according to the technical data. Use a local equipotential bonding bar if possible. For proper operation the SPD must be connected to a low impedance ground. **Remote Contact Signaling:** In case of a device with remote contact signaling make sure that the torque is as indicated in the technical data. The remote status indicator (SPDT contact) shall be connected to NEC Class 2 circuits only! **Problem Diagnostics:** If there should be any problem please contact your local DEHN representative.

Type	DSE M 2P 60 (FM)		
Rated Voltage [V] (60 Hz)	65		
Mode	DC+ to G	DC- to DC+	DC- to G
MCOV [V]	65	65	65
PRV [V]	3000	700	3000
Amperage [A]	100		
In [kA]	20		
SCCR [kA]	5		
fuse max.	class J 150 A		
max. Ambient Temp.	+80°C		
Conductors	AWG 2 - 8 Cu Stranded		
	Torque	65 Lbs-in	
Remote	AWG 14-22 Solid/Stranded		
Indicator	Torque	3 Lbs-in	
SPD classification	USR/CNR: Type 2 Component Assembly		