

CE INSTALLATION INSTRUCTIONS

Technical Data

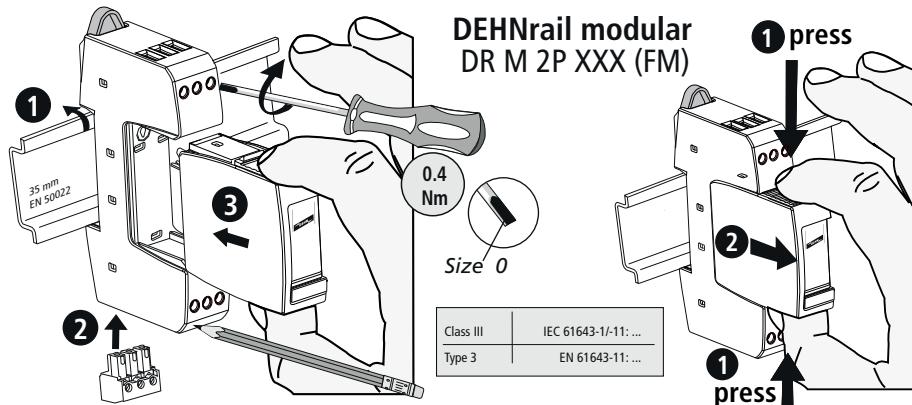
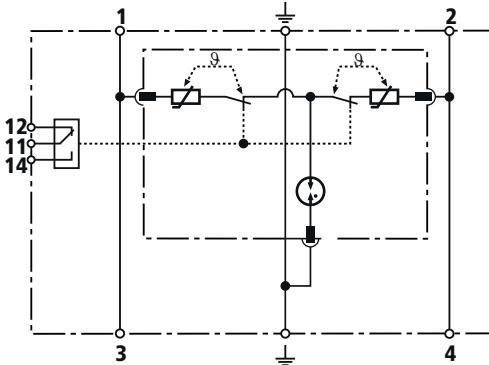


Fig. 1 Serial connection / Durchgangsverdrahtung

Technical data / Technische Daten

| | |
|--|---------------------------------------|
| Application: for control circuits only/ Anwendung: nur für Steuerkreise | |
| Typ | 30 60 75 150 255 |
| U _c | 30 V 60 V 75 V 150 V 255 V |
| → | max. 25 A gL/gG (B 25 A) |
| 9° C | -40°C ... +80°C |
| IP-Code | 20 |
| | |
| | 10 mm |
| | 10 mm |
| min. □ 1,2,3,4, <u> </u> | 0.5 mm ² |
| max. □ 1,2,3,4 <u> </u> | 2.5 mm ² 4 mm ² |

Basic circuit diagram / Prinzipschaltbild



Backup fuse / Vorsicherung

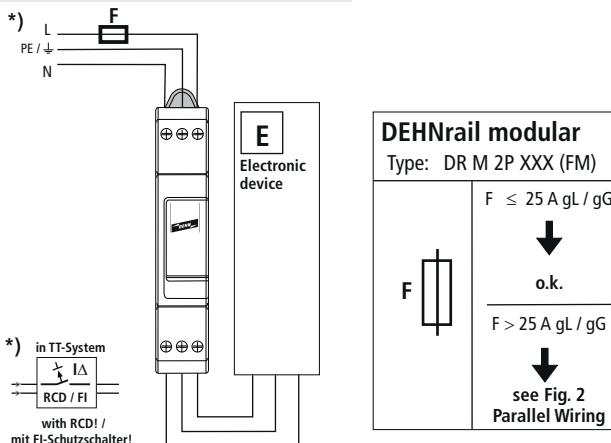
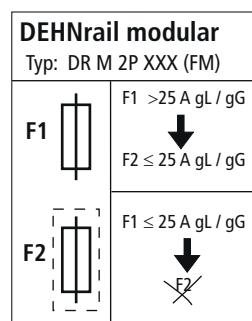
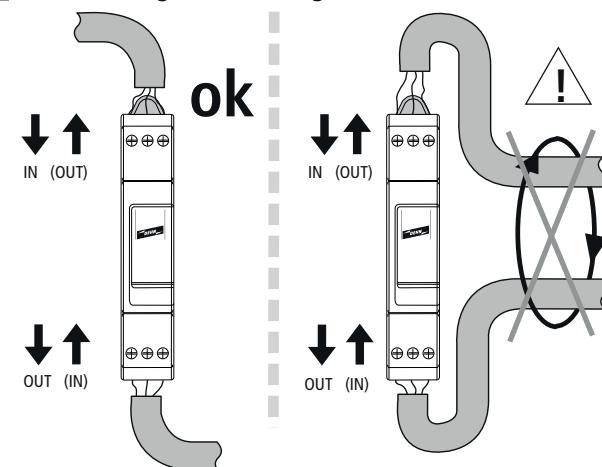


Fig. 2 Parallel connection / Stichverdrahtung

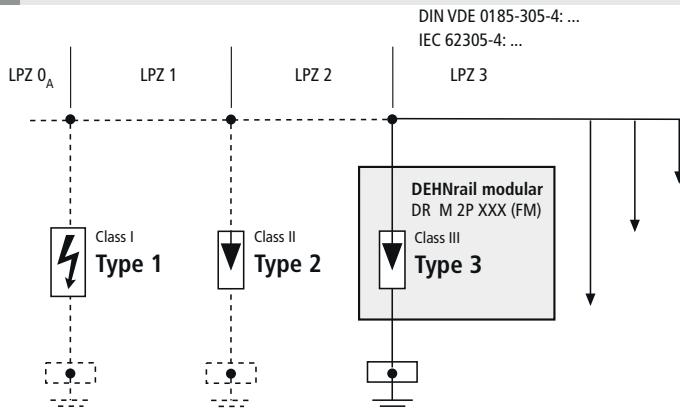
Backup fuse / Vorsicherung



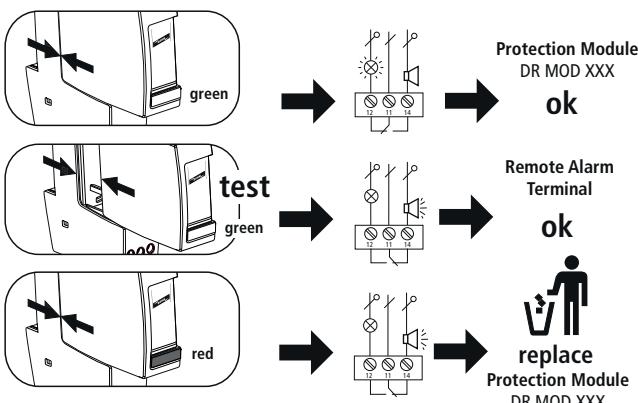
Cable routing / Kabelführung



Coordination / Koordination



Fault indication / Defektanzeige



Remote signalling contact / Fernmeldekontakt

| DEHNRail modular DR M 2P XXX FM | |
|---------------------------------|--|
| 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 ² | |



Instruções de segurança

PT

Informazioni di sicurezza

IT

A ligação e a montagem do aparelho apenas devem ser efectuadas por electricistas. Cumprir as normas nacionais e as disposições de segurança (DIN VDE 0100-534... / IEC 60364-5 534...).

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.

L'allacciamento ed il montaggio dell'apparecchiatura possono essere effettuati solo da personale qualificato. Sono da osservare le prescrizioni e le disposizioni di sicurezza nazionali (DIN VDE 0100-534... / IEC 60364-5 534...).

Prima del montaggio, controllare che l'apparecchiatura non presenti danneggiamenti all'esterno. Nel caso in cui dovesse essere constatato un danneggiamento o un altro difetto, non montare l'apparecchiatura.

L'impiego dell'apparecchiatura è consentito esclusivamente in presenza delle condizioni menzionate ed indicate in queste istruzioni sul montaggio. In caso di carico superiore ai valori dimostrati, l'apparecchiatura e l'impianto elettrico collegativo possono subire gravi danneggiamenti. Interventi o modifiche all'apparecchiatura comportano la perdita del diritto di garanzia.

Veiligheidsvoorschriften

NL

Sikkerhedshenvisninger

DK

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

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

Voor de montage dient het apparaat op uitwendige schade nagekeken te worden. Indien schade of een andere fout vastgesteld wordt, mag het apparaat niet gemonteerd worden.

Het gebruik van het apparaat is alleen toegelaten binnen het kader van de in deze montagehandleiding opgenoemde en getoond 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 het verlies van het recht op waarborg.

Tilslutning og montering af afflederen må kun udføres af en fagkyndig. Forskrifter og sikkerhedsbestemmelser skal overholdes.

Se SB Afsnit 6, Del 5, Kap 53 - 534.

Før monteringen kontrolleres afflederen for udvendige skader. Hvis der konstateres skader eller andre mangler, må affledere ikke monteres. Afflederen må kun monteres og anvendes i overensstemmelse med denne montage vejledning.

Ved belastninger der overskrider de anførte værdier, kan afflederen såvel som de tilsluttede installationer og apparater beskadiges.

Afnæring og indgreb i afflederen medfører bortfald af enhver garanti.

Indicaciones de seguridad

ES

La conexión y el montaje del aparato sólo deben ser realizados por un electricista especializado.

Deben observarse las normativas y disposiciones de seguridad nacionales (DIN VDE 0100-534... / IEC 60364-5 534...).

Antes de iniciar el montaje, debe comprobarse que el aparato no presente daños externos. En caso de observar daños u otros defectos, no debe efectuarse el montaje del aparato.

El empleo del aparato está limitado a las condiciones indicadas y mostradas en estas instrucciones de servicio. Si las cargas superan los valores indicados, puede dañar tanto el aparato como los medios de producción eléctricos conectados al mismo.

La manipulación interior o la modificación del aparato invalidan el derecho de garantía.

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Consignes de sécurité

FR

Montage et branchement de l'appareil à faire effectuer exclusivement par un électricien qualifié. Respecter les normes et les prescriptions de sécurité en vigueur localement (DIN VDE 0100-534... / IEC 60364-5 534...).

Avant montage, procéder à un contrôle visuel extérieur de l'appareil. Ne pas monter celui-ci en cas de dommage manifeste ou si tout autre défaut est présent.

La mise en œuvre de l'appareil n'est autorisée que pour la destination et aux conditions présentées et explicitées dans les présentes instructions de service. Des charges non comprises dans les plages de valeurs indiquées pourront abîmer l'appareil ainsi que les matériels électriques qui lui sont raccordés. Toute revendication en garantie sera exclue dans le cas d'une intervention sur l'appareil ou d'une transformation de celui-ci.

The device may only be connected and installed by an electrically skilled person. National standards and safety regulations must be observed (see IEC 60364-5-53 (VDE 0100 Part 534....)).

The device must be checked for external damage before installation. If any damage or other faults are detected in this check, the device must not be installed.

Its use is only permitted within the limits shown and stated in these installation instructions. The device and the equipment connected to it can be destroyed by loads exceeding the values stated.

Opening or tampering with the device invalidates the warranty.

Yποδείξεις ασφαλείας

GR

H σύνδεση και η συναρμολόγηση της συσκευής επιτρέπεται να δεσχάσουν μόνο από κάποιον/κάποια ηλεκτρολόγο.

Πρέπει να προτρύνεται οι εθνικές διατάξεις και οδηγίες ασφαλείας (DIN VDE 0100-534... / IEC 60364-5 534...).

Πριν τη συναρμολόγηση της συσκευής πρέπει να ελέχτει για τυχόν εξωτερικές βλάβες. Δεν επιτρέπεται η συναρμολόγηση της συσκευής σε περίπτωση που εξαρθρώσεται κάποια ζημιά ή άλλο ελάττωμα.

Η χρήση της συσκευής επιτρέπεται μόνο στο πλαίσιο των όρων που αναφέρονται σε αυτές τις οδηγίες συναρμολόγησης. Σε περίπτωση επιθεώρυνσεων που υπερβαίνουν τις προδιαγραμμένες τιμές μπορεί να καταστραφούν η συσκευή και οι συνδεσμένοι μ' αυτήν πόροι.

Επειδήσσεις και μετατροπές στη συσκευή οδηγούν στην απώλεια των οδιώσεων που απορρέουν από την εγγύηση.

Sicherheitshinweise

DE

Der Anschluss und die Montage des Gerätes darf nur durch eine Elektrofachkraft erfolgen. Die nationalen Vorschriften und Sicherheitsbestimmungen sind zu beachten (siehe auch DIN VDE 0100-534... bzw. IEC 60364-5 534...).

Vor der Montage ist das Gerät auf äußere Beschädigung zu kontrollieren. Sollte eine Beschädigung oder ein sonstiger Mangel festgestellt werden, darf das Gerät nicht montiert werden.

Der Einsatz des Gerätes ist nur im Rahmen der in dieser Einbauanleitung genannten und gezeigten Bedingungen zulässig. Bei Belastungen, die über den ausgewiesenen Werten liegen, können das Gerät sowie die daran angeschlossenen elektrischen Betriebsmittel zerstört werden.

Eingriffe und Veränderungen am Gerät führen zum Erlöschen des Gewährleistungsanspruches.

Special technical information referred to UL 1449 3rd edition:

1. Safety Instructions

The DEHNrail 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 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. **Problem Diagnostics:** If there should be any problem please contact your local DEHN representative.

| DR M 2P ... | ... 30 (FM) | ... 60 (FM) | ... 75 (FM) | ... 150 (FM) | ... 255 (FM) |
|------------------------------|-------------|-------------|-------------|--------------|-----------------------------------|
| Mode | L-L : L-G | L-L : L-G | L-L : L-G | L-L : L-G | L-L : L-G |
| Rated Voltage [V] (50/60 Hz) | 24 : 12 | 48 : 24 | 60 : 30 | 120 : 60 | 240 : 120 |
| MCOV [V] | 30 : 15 | 60 : 30 | 75 : 37 | 150 : 75 | 255 : 127 |
| VRP [V] | 330 : 600 | 330 : 700 | 400 : 800 | 700 : 700 | 1200 : 1200 |
| Rated Current [A] | | | | 20 | |
| g | | | | 0°C...+85°C | |
| Conductors | AWG | | | | 14-20 Cu Stranded; 12-20 Cu Solid |
| Torque | | | | | 3.5 Lbs-in |
| Remote | AWG | | | | 14-22 Cu |
| Indicator | Torque | | | | 3 Lbs-in |
| SPD classification | | | | | Component Type 4 SPD |