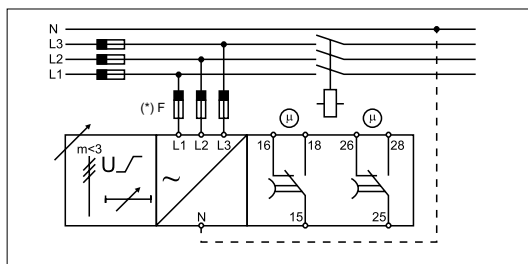




Connections

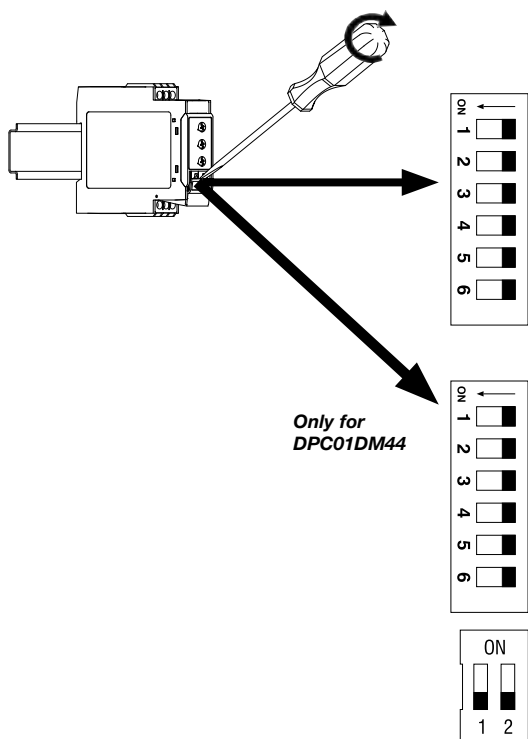


Connect the 3-phase power supply and the neutral (if present) taking care of the sequence. Connect the relay output according to the ratings.

**Keep power OFF while connecting!**

DPC01	Terminals	Tightening torque
L1, L2, L3, N	Power supply	Max 0.5 Nm
15, 16, 18	Relay 1 output	
25, 26, 28	Relay 2 output	
Each terminal can accept up to 2 x 2.5 mm ² wires		

Settings



To access the DIP switches open the plastic cover using a screwdriver as shown on the left.

**Do not open the DIP switches cover if the power supply is ON**

SW1: Power ON delay
ON: 6 s ± 0.5 s
OFF: 1 s ± 0.5 s

SW2: Mains type
ON: 3P+N
OFF: 3P

SW3	SW4	Nominal voltages				
Models		M11	M23	M48	M49	M69
ON	ON	100 V	208 V	380 V	440 V	600 V
ON	OFF	100 V	220 V	400 V	440 V	600 V
OFF	ON	115 V	230 V	415 V	480 V	690 V
OFF	OFF	115 V	240 V	480 V	480 V	690 V

SW5: Output configuration
ON: 2 x SPDT (relays operate independently each connected to a single set point)
OFF: 1 x DPDT (relays operate together)

SW6: Function configuration
ON: Asymmetry / Tolerance
OFF: Overvoltage / Undervoltage

Setting only for DPC01DM44

SW1: Power ON delay
ON: 6 s ± 0.5 s
OFF: 1 s ± 0.5 s

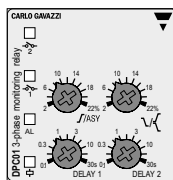
SW2: Mains type
ON: 3P+N
OFF: 3P

Nominal voltages	208 V	220 V	230 V	240 V	380 V	400 V	415 V	440 V	480 V	600 V	690 V
SW3	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
SW4	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON
SW5	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
SW6	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON

SW1: Output configuration
ON: 2 x SPDT (relays operate independently each connected to a single set point)
OFF: 1 x DPDT (relays operate together)

SW2: Function configuration
ON: Asymmetry / Tolerance
OFF: Overvoltage / Undervoltage

Adjustment



$\overset{\curvearrowright}{\cup}$ = Overvoltage
ASY = Asymmetry
 $\underset{\curvearrowleft}{\cup}$ = Undervoltage
TOL = Tolerance
Delay 1 = Delay time for $\overset{\curvearrowright}{\cup}$ /ASY
Delay 2 = Delay time for $\underset{\curvearrowleft}{\cup}$
 ⬆ and ⬇ = Yellow LEDs
AL = Red LED
 ⬆ = Green LED

Ensure the input voltage range is correct. Adjust upper ($\overset{\curvearrowright}{\cup}$) and lower ($\underset{\curvearrowleft}{\cup}$) voltage levels or asymmetry (ASY) and tolerance (⬆) by turning, respectively, the upper left and right dials. Turn the lower dials to set the delay times (0.1 to 30 s).

Turn power ON. The bottom LED turns ON green.

DPC01 operates when mains are present with proper sequence and values.

If the phase sequence is wrong or one phase is lost both the output relays release, and the yellow LEDs turn off, immediately (only 200 ms delay occurs).

This failure is indicated by the red "AL" LED which flashes 5 Hz as long as the alarm condition is occurring. (*)

Other alarms operate as per one of two following examples according to setting:

Example 1: 2 x SPDT relays, over and undervoltage monitoring.Both relays and their respective yellow LEDs operate as long as the input voltage is within the set upper ($\overset{\curvearrowright}{\cup}$) and lower ($\underset{\curvearrowleft}{\cup}$) set points.

When one or more phases drops below the lower set point for more than the specific set delay time (DELAY 2) the second relay (terminals 25, 26, 28 / 8, 9, 10) and the upper yellow LED turn OFF, the red LED (flashing 2 Hz during the delay time) turns ON.

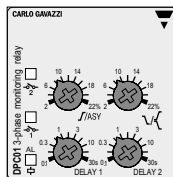
When one or more phases exceeds the upper set point for more than the specific set delay time (DELAY 1) the first relay (terminals 15, 16, 18 / 1, 3, 4) and the lower yellow LED turn OFF, the red LED (flashing 2 Hz during the delay time) turns ON. (*)

Example 2: 1 x DPDT relay, asymmetry and tolerance monitoring.Both relays and their respective yellow LEDs operate as long as the input asymmetry is within the set limits (ASY) and the input voltages are within the set tolerance (⬆).

When the asymmetry exceeds the set limit for more than the specific set delay (DELAY 1) both relays and yellow LEDs turn OFF (provided that they aren't already OFF), the red LED (flashing 2 Hz during the delay time) turns ON.

When one or more phases leave the allowed range (⬆ = nominal voltage - tolerance to nominal voltage + tolerance) for more than the specific set delay time (DELAY 2) both relays and yellow LEDs turn OFF (provided that they aren't already OFF), the red LED (flashing 2 Hz during the delay time) turns ON. (*)

400HZ



(*) In case of 400HZ model using (DPC01DMXX400HZ) power supply and alarm indications are provided by one LED only.

Mounting

Hang the device to the DIN-Rail being sure that the spring closes. Use a screwdriver to remove the product.

Packaging

The packing material should be kept for redelivery in case of replacement or repair.

CE-marking and approvals




EN WARNINGS

⚠ DANGER! Live parts. Heart attack, burns and other injuries. Disconnect the power supply and load before installing the device. The device should only be installed by qualified/authorized personnel.

These instructions are an integral part of the product. They should be consulted for all situations tied to installation and use. They should be kept within easy reach of operators, in a clean place and in good conditions.

RESPONSIBILITY FOR DISPOSAL

 The product must be disposed of at the relative recycling centers specified by the government or local public authorities. Correct disposal and recycling will contribute to the prevention of potentially harmful consequences to the environment and persons.

SERVICE AND WARRANTY


In the event of malfunction, fault or for information on the warranty, contact the CARLO GAVAZZI branch or distributor in your country.

FR AVERTISSEMENTS

⚠ DANGER! Pièces sous tension. Crise cardiaque, brûlures et autres blessures. Débranchez l'alimentation électrique et chargez le dispositif avant d'installer le produit. Le produit doit être installé par un personnel qualifié/agréé.

Ces instructions sont partie intégrante du produit. Elles doivent être consultées pour toutes les situations liées à l'installation et à l'utilisation. Elles doivent être conservées de manière à être facilement accessibles aux opérateurs, dans un endroit propre et en bon état.

RESPONSABILITÉ EN MATIÈRE D'ÉLIMINATION

 Éliminer selon le tri sélectif avec les structures de récupération indiquées par l'État ou par les organismes publics locaux. Bien éliminer et recycler aidera à prévenir des conséquences potentiellement néfastes pour l'environnement et les personnes.

ENTRETIEN ET GARANTIE


En cas de dysfonctionnement, de panne ou de besoin d'informations sur la garantie, contactez la filiale ou le distributeur CARLO GAVAZZI de votre pays.

ES ADVERTENCIAS

⚠ PELIGRO! Elementos sometidos a tensión. Ataque al corazón, quemaduras u otras lesiones. Desconecte la fuente de alimentación y carga antes de instalar el equipo. El equipo sólo lo debe instalar personal cualificado/ autorizado.

Estas instrucciones forman parte integral del producto. Se tienen que consultar para todo lo que tenga que ver con la instalación y el funcionamiento. Se deben guardar donde estén accesibles para los operarios, en un lugar limpio y en buenas condiciones.

RESPONSABILIDAD DE ELIMINACIÓN

 Eliminar mediante recogida selectiva a través de las estructuras de recogida indicadas por el gobierno o por los entes públicos locales. La correcta eliminación y el reciclaje ayudarán a prevenir consecuencias potencialmente negativas para el medioambiente y para las personas.

REPARACIÓN Y GARANTÍA



Si se producen fallos o anomalías en el funcionamiento o quiere conocer las condiciones de garantía póngase en contacto con CARLO GAVAZZI filial o distribuidor de su país.

IT AVVERTENZE

⚠ PERICOLO! Parti sotto tensione. Arresto cardiaco, bruciature e altre lesioni. Scollegare l'alimentazione e il carico prima di installare il dispositivo. L'installazione del dispositivo deve essere eseguita solo da persone qualificate/autorizzate.

Queste istruzioni sono parte integrante del prodotto. Devono essere consultate per tutte le situazioni legate all'installazione e all'uso. Devono essere conservate in modo che siano accessibili agli operatori, in un luogo pulito e mantenuto in buone condizioni.

RESPONSABILITÀ DI SMALTIMENTO


 Smaltire con raccolta differenziata tramite le strutture di raccolte indicate dal governo o dagli enti pubblici locali.  Il corretto smaltimento e il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per le persone.

ASSISTENZA E GARANZIA



In caso di malfunzionamento, guasto o informazioni sulla garanzia contattare la filiale CARLO GAVAZZI o il distributore nel paese di appartenenza.

DE SICHERHEITSHINWEISE

⚠ GEFAHR! Spannungsführende Teile. Gefahr von Herzstillstand, Verbrennungen und sonstigen Verletzungen. Vor Beginn der Installation des Gerät elektrische Versorgung und Last trennen. Die Installation des Gerät darf nur von qualifizierten und befugten Personen ausgeführt werden.

 Diese Anweisungen sind fester Bestandteil des Produkts. Sie müssen vor der Installation und Verwendung sorgfältig gelesen werden. Diese Anweisungen sicher an einem sauberen Ort aufbewahren und für Bedienpersonen jederzeit verfügbar halten.

VERANTWORTLICHKEIT FÜR ENTSORGUNG


 Dieses Produkt muss bei einem geeigneten von der Regierung oder lokalen öffentlichen Autoritäten  anerkannten Recyclingbetrieb entsorgt werden. Ordnungsgemäße Entsorgung und Recycling tragen zur Vermeidung möglicher schädlicher Folgen für Umwelt und Personen bei.

KUNDENDIENST UND GARANTIE



Bei Störungen oder Fehlern bzw. wenn Sie Auskünfte bezüglich der Garantie benötigen, kontaktieren Sie bitte die Niederlassung von CARLO GAVAZZI oder den zuständigen Vertriebspartner in Ihrem Land.

DK ADVARSLER

⚠ FARE! WSpændingsførende dele. Hjerteanfald, forbrændinger og andre kvæstelser. Afbryd strømtilførslen og belastning, inden enheden installeres. Enheden må kun installeres af fagkyndigt/autoriseret personale.

 Disse instruktioner er en integreret del af produktet. De skal altid konsulteres i alle situationer, som drejer sig om installation og brug. De skal være tilgængelige for operatørerne, opbevares på et rent sted og holdes i god stand.

ANSVAR FOR BORTSKAFFELSE


 Produktet skal bortskaffes på en lokal, godkendt genbrugsstation. Korrekt bortskaffelse og genbrug vil  bidrage til at mindske eventuelle skadelige konsekvenser for miljøet, mennesker og dyr.

SERVICE OG GARANTI


Hvis der opstår fejlfunktioner og defekter, eller hvis der er brug for oplysninger om garantien, bedes du kontakte den lokale CARLO GAVAZZI-forhandler eller afdeling.

ZH 警告

⚠ 危险! 带电部件。可能导致心脏病发作、烧伤及其他伤害。在安装设备之前,请先断开电源和负荷。T设备只能由合格/授权人员安装。

 这些说明书是本产品不可或缺的重要组成部分。有关安装和使用的所有情况都应查阅本说明书。这些说明应便于操作人员取得,并置于整洁位置且保持良好状况。

处理责任

 产品必须在当地政府或公共机构所指定的相关回收中心内进行处理。正确处理和回收可以防止对环境 and 人身安全造成潜在的危害。

维修和保修

如果发生故障或需要了解保修信息,请联系 CARLO GAVAZZI 在您所在国家/地区的分公司或经销商。

General warnings

- Read carefully the present instruction manual. If the device is used in a manner not specified by the manufacturer the protection function may be impaired.
- All operations concerning installation, or unmounting, of device or modules shall be carried out by qualified personnel and after having disconnected all power sources.
- A readily accessible overcurrent protection (fuse or circuit breaker) shall be incorporated in the building installation wiring.

UL NOTES

- Use 60 or 75°C copper (CU) conductor and wire size No. 30-14 AWG, stranded or solid (DIN models only)
- Terminal tightening torque of 4.4Lb-In” (DIN models only).
- Being these devices Overvoltage Category III they are: “For use in a circuit where devices or system, including filters or air gaps, are used to control overvoltages at the maximum rated impulse withstand voltage peak of 6.0 kV. Devices or system shall be evaluated using the requirements in the Standard for Transient Voltage Surge Suppressors, UL 1449 and shall also withstand the available short circuit current in accordance with UL 1449.
- The devices shall be installed in a pollution degree 2 environment (or better).

Avertissements généraux

- Lire attentivement ce manuel d’instructions. Si le dispositif est utilisé d’une manière autre que celle spécifiée par le fabricant, la fonction de protection peut être altérée.
- Toutes les opérations concernant l’installation, le démontage du dispositif et des modules doivent être effectuées par du personnel qualifié et uniquement après avoir déconnecté les sources d’alimentation et de puissance.
- Une protection contre les surintensités facilement accessible (fusible ou disjoncteur) doit être intégrée au câblage d’installation du bâtiment.

NOTES UL

- Utilisez un conducteur en cuivre (CU) à 60 °C ou à 75 °C, calibre de fil AWG30 à AWG14 (0.06mm² à 2.1mm²) toronné ou solide (modèles DIN uniquement).
- Couple de serrage des bornes de 4.4Lb-In (0.5Nm), (modèles DIN uniquement).
- S’agissant de ces dispositifs de catégorie de surtension III, ils sont: «Pour une utilisation dans un circuit où des dispositifs ou un système, y compris des filtres ou des éclateurs, sont utilisés pour contrôler les surtensions au maximum de la tension de tenue nominale aux impulsions de 6,0 kV. Les appareils ou systèmes doivent être évalués conformément aux exigences de la norme UL 1449 pour les limiteurs de surtension transitoire certifiés pour le Canada, et doit également résister à court courant du circuit conformément à la norme UL 1449.
- Le dispositif doit être installé dans un environnement de degré de pollution 2 (ou mieux) et seulement par des gens qualifiés.