

Technische Daten

Eingangsdaten		
Nenneingangsspannung	24 V DC	
Eingangsspannungsbereich DC	18...30 V DC	
Ausgangsdaten		
Spitzenstromabgabe	lastabhängig	
Erholzeit des Kondensators	ca. 1 s	
Spannungsüberwachung	ja	
Schaltschwellen	21,6 V DC, Relais an für power good 20,4 V DC, Relais ab für power fail	
Potentialfreie Kontakte	max. 30 V DC / 0,5 A, Wechsler	
Allgemeine Daten		
Länge x Breite x Höhe	150 x 34 x 130 mm	
Gewicht	0,4 kg	
Umgebungstemp. Betrieb / Lagerung (Transport)	-25...+70 °C / -40 °C...+85 °C	
Max. zul. Luftfeuchtigkeit (Betrieb)	5 %...95 % RH	
Schutzart	IP20	
Schutzklasse	III, ohne PE Anschluss, für SELV	
Verschmutzungsgrad	2	
Isolationsspannung E/A gegen Gehäuse	0,5 kV	
MTBF	> 500.000 h nach IEC 1709 (SN29500)	
Einbaulage, Montagehinweis	waagerecht auf Tragschiene TS35, oben und unten 50 mm Abstand für freie Luftzufuhr, ohne Abstand anreichbar	
EMV / Schock / Vibration		
Störabstrahlung nach EN55022	Klasse B	
Störfestigkeitsprüfungen nach	EN61000-4-2 (ESD), EN61000-4-3 und EN61000-4-8 (Fields), EN61000-4-4 (Burst), EN61000-4-5 (Surge), EN61000-6 (conducted), EN61000-4-11 (Dips)	
Festigkeit gegen Vibration / Schock	1 g nach EN50178 / 15 g in allen Richtungen	
Elektrische Sicherheit (angewandte Normen)		
Elektrischer Ausrüstung von Maschinen	nach EN60204	
Ausrüstungen mit elektronischen Betriebsmitteln	nach EN50178 / VDE0160	
Schutzkleinspannung	SELV nach EN60950, PELV nach EN60204	
Zulassungen		
CE, TUV, cULus, GL		
Zulassungen in Vorbereitung	GOST	
Anschlussdaten		
Eingang		Ausgang
Anschlussart	Schraubanschluss	Schraubanschluss
Anzahl Klemmen	4 (+++)	3 (Wechselkontakt)
Leiterquerschnitt starr min/max	0,5 / 6 mm ²	0,5 / 6 mm ²
Leiterquerschnitt flexibel min/max	0,5 / 4 mm ²	0,5 / 2,5 mm ²
Leiterquerschnitt AWG/kcmil min/max	26 / 12	26 / 12
Bestelldaten		
Typ VPE Best.-Nr.	CP M CAP 1 1222240000	

Technical data

Input data		
Rated input voltage	24 V DC	
Input voltage range DC	18...30 V DC	
Output data		
Peak current output	Depending on load	
Recovery time for the capacitor	approx. 1 s	
Voltage monitoring	yes	
Switching thresholds	21.6 V DC, relay is on for Power Good 20.4 V DC, relay is off for Power Fail	
Potential free, floating contacts	Max. 30 V DC / 0.5 A, CO contact	
General data		
Length x width x height	150 x 34 x 130 mm	
Weight	0.4 kg	
Ambient temperature (operational) / Storage temperature	-25...+70 °C / -40 °C...+85 °C	
Max. permitted humidity (operational)	5 %...95 % RH	
Degree of protection	IP20	
Class of protection	III, without PE connection, for SELV	
Pollution degree	2	
Insulation voltage I/O to housing	0.5 kV	
MTBF	> 500.000 h according to IEC 1709 (SN29500)	
Mounting position, installation notice	Horizontal on TS35 mounting rail, with 50 mm space at top and bottom. Direct side by side mounting allowed.	
EMC / shock / vibration		
Noise emission acc. to EN55022	Class B	
Noise immunity tests acc. to	EN61000-4-2 (ESD), EN61000-4-3 and EN61000-4-8 (Fields), EN61000-4-4 (Burst), EN61000-4-5 (Surge), EN61000-6 (conducted), EN61000-4-11 (Dips)	
Resistance against vibration and shock	1 g according to EN50178 / 15 g in all directions	
Electrical safety (applied standards)		
Electrical equipment of machines	according to EN60204	
Safety transformers for switched-mode power units	according to EN50178 / VDE0160	
Safety extra low voltage	SELV according to EN60950, PELV according to EN60204	
Approvals		
Approvals pending	CE, TUV, cULus, GL	
Connection data		
Input		Output
Conductor connection system	Screw connection	Screw connection
Number of terminals	4 (+++)	3 (Changeover contact)
Conductor cross section, rigid min/max	0.5 / 6 mm ²	0.5 / 6 mm ²
Conductor cross section, flexible min/max	0.5 / 4 mm ²	0.5 / 2,5 mm ²
Conductor cross section, AWG/kcmil min/max	26 / 12	26 / 12
Ordering data		
Type Qty. Order No.	CP M CAP 1 1222240000	

CP M CAP 1222240000



R.T.Nr. 1338550000/00/11.11

Sicherheits- und Warnhinweise

Das Gerät ist nur für die in der Bedienungsanleitung beschriebene Anwendung bestimmt.

WARNING

Eine andere Verwendung ist unzulässig und kann zu Unfällen oder Zerstörung des Gerätes führen.

Derartige Anwendungen führen zu einem sofortigen Erlöschen jeglicher Garantie- und Gewährleistungsansprüche des Bedieners gegenüber dem Hersteller.

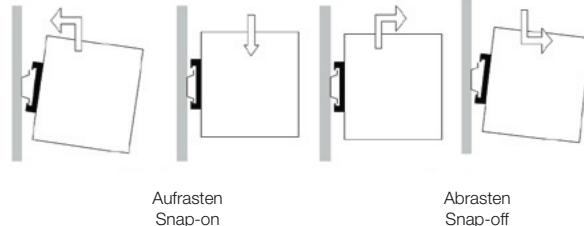
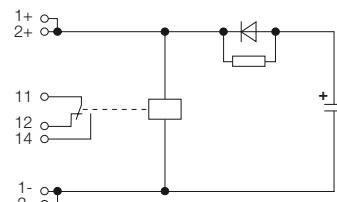
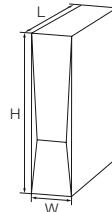
Safety Notices and Warnings

This device is only intended for use as described in the operating instructions.

WARNING

Any other type of usage is forbidden and can lead to accidents or destruction of the device.

Using the device in non-approved applications will lead immediately to the expiration of all guarantee and warranty claims on the part of the operator against the manufacturer.



Aufrasten
Snap-on

Abrasten
Snap-off

Impulsauslösung von Leitungsschutzschaltern mit dem Weidmüller Kapazitätsmodul

Tabellenangaben unter folgenden Randbedingungen:

- Umgebungstemperatur 20 °C
- Innenwiderstand der Sicherungsautomaten ist berücksichtigt
- Der halbe Nennstrom fließt vor Entstehung des Kurzschlusses in benachbarte Stromkreise
- DC – taugliche Sicherungsautomaten: z.B. Siemens 5SY-Serie

Sicherungsauslösung

Leistungsquerschnitt	B6	B10	B16
0,75 mm ²	10 m		
1,0 mm ²	14 m	6 m	
1,5 mm ²	20 m	9 m	4 m
2,5 mm ²	30 m	15 m	6 m
4 mm ²	50 m	24 m	10 m
6 mm ²		16 m	
C2	C4	C6	C10
0,75 mm ²	11 m	6 m	3 m
1,0 mm ²	14 m	8 m	3,5 m
1,5 mm ²	21 m	12 m	5,5 m
2,5 mm ²	34 m	19 m	9 m
4 mm ²		32 m	14 m
6 mm ²			8 m
			12 m

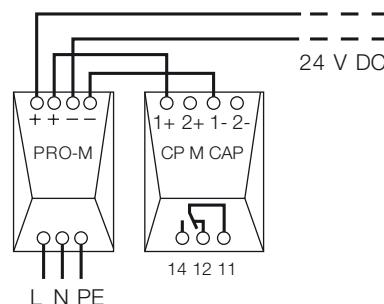
Pulse triggering for cable circuit breakers: with the Weidmüller capacitance module

The following conditions apply to the table entries:

- Ambient temperature of 20 °C
- Inner resistance of the circuit breakers is taken into account
- Half of the rated current flows to a neighbouring circuit before the short circuit is formed
- DC-compatible circuit breakers: Siemens 5SY series

Tripping circuit breakers

Wire gauge	B6	B10	B16
0.75 mm ²	10 m		
1.0 mm ²	14 m	6 m	
1.5 mm ²	20 m	9 m	4 m
2.5 mm ²	30 m	15 m	6 m
4 mm ²	50 m	24 m	10 m
6 mm ²		16 m	
C2	C4	C6	C10
0.75 mm ²	11 m	6 m	3 m
1.0 mm ²	14 m	8 m	3,5 m
1.5 mm ²	21 m	12 m	5,5 m
2.5 mm ²	34 m	19 m	9 m
4 mm ²		32 m	14 m
6 mm ²			8 m
			12 m



Anschluss Kapazitätsmodul
Connection diagram of capacity module

Usage

The PRO-M capacity module is a build-in installation unit featuring IP20 protection and is made for the operation at 24 V DC SELV voltages (acc. EN60950) of the PRO-M power supply family. The integrated energy storage serves for buffering the 24 V DC system voltage and is able to cover occurring peak loads. It can be used e.g. for improving motor start-up, switch on high capacitive loads or for tripping circuit breakers (figure 2 + 3). The integrated alarm relay monitors the voltage of the input and provides a status supervision (optical via red/green LED and as potential-free contact for remote control).

Installation

The electrical facility should be setup by qualified specialists in compliance with the applicable electrical regulations. All regulations and standards which apply locally should be followed. In particular, this includes the following measures:

- Protection against electrical shock
- Arrangements for a switching or disconnecting mechanism to isolate the power-supply circuit
- Sufficient space for fusing and connection lines
- Allocation of sufficient ventilation (50-mm clearance for air intake from above and below)
- Installation on a mounting rail (in compliance with DIN 50022-35) in housing that is appropriate for the environmental conditions. Be sure to install in a vertical position.

The units can be snapped onto the mounting rail with no need for tools. (refer to figure 1). They should be installed in appropriate enclosure (such as an electrical cabinet or distribution box) which provides a sufficient level of protection so that live current-carry components cannot be touched and so that dust and water cannot penetrate the unit.

Connection

The electrical connection should be carried out by a qualified technician. The following points must be observed:

- The entire electrical facility should be disconnected from the power supply before the installation begins.
- You must ensure that the facility remains voltage-free (i.e., power supply cannot be reconnected)
- Use a screwdriver with the proper blade width)
- All connection lines should be seated and fastened securely. Pay particular attention to the protective earth connection.

Power supply and fusing

The device is designed for operation at 24 V DC voltages (18...30 V DC). The device is fit with an internal fuse for protection against overloading.

NOTE

Be sure that the correct poles are connected. Wrong polarity can destroy the device!

HINWEIS

Es ist unbedingt auf polrichtigen Anschluss zu achten. Bei Falschpolung kann das Gerät zerstört werden!

Alarmrelais

The integrated Alarmrelais monitor each relative DC input voltage. The relay and green LED will be switched on at 21.6 V DC voltage and the appropriate alarm contact is closed. The alarm relay is switched off at voltages below 20.4 V DC so that „power failure“ is recognized. The alarm contact is opened and the LED switch-over from green to red.