

COMPACT

MICO PRO®

CURRENT MONITORING MODULARIZED

Mico Pro is the intelligent electronic circuit protection system from Murrelektronik. The modular system enables you to adapt systems precisely to suit specific applications – offering a favorable cost/benefit ratio while also being economical in their use of space.

Mico Pro monitors the load circuit consistently and switches it off as late as it's safe, but as safe as possible if there is a short circuit or overload. The patented tripping process assures optimum machine availability. An additional benefit: an integrated concept for potential distribution that significantly declutters the control cabinet wiring.

The intelligent electronic circuit protection system Mico Pro ensures reliable power supply and a high level of machine availability.

Mico Pro stands for:

- **Modularity** – precise right down to the last channel
- **Integrated potential distribution concept** – significantly simplifies control cabinet wiring
- **Fast and intuitive assembly** – saves time and space
- **Diagnostics** – on the module or via the PLC
- **Channel-specific switching** – replaces the coupling level
- **Full power** – integrated AC/DC power supply

Murrelektronik offers AC/DC power supplies, which are specially designed to be integrated in Mico Pro stations. The power supply replaces the power module and increases the space available in the control cabinet.

With our practical bridging system, the power supplies are mounted within a few steps and therefore reducing installation time.



Class 2
UL1310/NEC 725

Mico Pro®



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MODULARITY – Precise down to the last channel

- Modular system for 12 and 24VDC operating voltages
 - Tool-free assembly for a closed system
 - Pre-fixed modules with 1, 2 or 4 channels for tripping currents of 2, 4, 6, 8, 10 und 16 A – a tamper-proof solution
 - Flexibly adjustable modules with 1, 2 or 4 channels for tripping currents of 1 to 10 A or 11 to 20 A – adjustable by pressing of a button
 - Minimum space required: only 8, 12 and/or 24 mm per module
 - Switch-mode power supply from 5 A to 20 A
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CONVENIENT HANDLING – Assembly without tools

- Innovative bridging system connects the system
- Trim the bridge with pliers and snap into place
- Signal contacts for diagnostics and control signal via lateral spring contacts
- Push-in spring clamp terminals
- Clear view of all labels and the status of the LEDs



DIAGNOSTICS – On the module or via the controls

- LED status display on each channel
- Group diagnostics on the power module for the entire system
- Modules with flexible settings offer channel-specific diagnostic signals
- 90 percent early warning when current load is reached
- Reactivate of tripped channels with the push of a button or control signal



FULL POWER – Integrated power supply

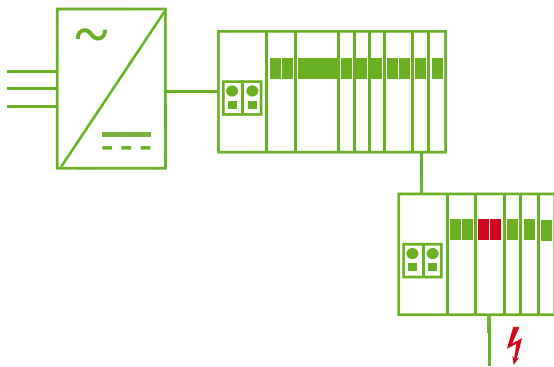
- Eliminate the power module and save space
- Full range of functions group alarm, 90 percent early warning, control signal for remote control
- Fast installation using simple bridges
- Supplies up to 20 A (2x10 A) with parallel mode
- Highly efficient



Mico Pro®

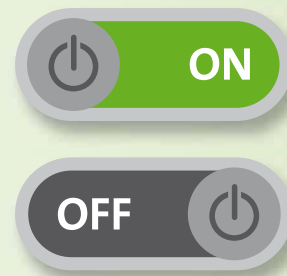
PRACTICAL FUNCTIONS IN THE DETAILS

- Monitoring of channel currents of up to 20 A in a modular system
- Perfect protection for M12-power cordset (L-coded)
- Optimum label options to keep the control cabinet layout clear and simple
- High inrush capacities of up to 30 mF per channel at full load
- Operation possible with 5 A power supply units
- Time delayed start of individual channels on multiple-channel modules to prevent current peaks



FULL SELECTIVE INSTALLATION – in two levels

- Another Mico Pro station can be connected on a Mico channel with a tripping current of more than 10 A
- Fully selective shutdown, for example in a downstream control cabinet



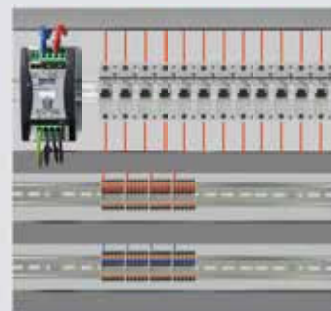
CHANNEL-PRECISE SWITCHING – Replaces the coupling level

- Channel-specific switching function via a PLC signal on the flex modules
- Implementation of short switching frequencies (up to 10 Hz) as well as longer standby periods (e.g. for machine areas during non-production times)

INTEGRATED – Concept for potential distribution

- Connection options for +24 V and 0 V on every channel
- External terminals are now a thing of the past – the 0V/GND potential is now connected directly by Mico Pro
- Declutters installations, reduces the amount of wiring needed, saves space in the control cabinet
- Connection of up to 2x12 potentials with potential distributors possible

HIGH TOTAL COSTS



SAVES SPACE AND COSTS





Order data for Mico Pro®

Power module	Description	Art. No.	
Mico Pro PM 24 V DC/40 A	Power module, max. 40 A	9000-41190-0000000	
Power supply	Description	Art. No.	
Mico Pro PS 10-100-240/24	Switch-mode power supply single phase 10 A	9000-41190-0000110	
Mico Pro PS 5-100-240/24	Switch-mode power supply single phase 5 A	9000-41190-0000105	
Modules with pre-fixed tripping current	Number of channels	Tripping current (pre-fixed)	Art. No.
Mico Pro fix 1.2	1	2 A Class 2	9000-41011-0200000
Mico Pro fix 1.4	1	4 A	9000-41011-0400000
Mico Pro fix 1.4 CL2	1	4 A Class 2	9000-41011-0400001
Mico Pro fix 1.6	1	6 A	9000-41011-0600000
Mico Pro fix 1.8	1	8 A	9000-41011-0800000
Mico Pro fix 1.10	1	10 A	9000-41011-1000000
Mico Pro fix 1.16	1	16 A	9000-41011-1600000
Mico Pro fix 2.2	2	2 A Class 2	9000-41012-0200000
Mico Pro fix 2.4	2	4 A	9000-41012-0400000
Mico Pro fix 2.6	2	6 A	9000-41012-0600000
Mico Pro fix 4.2	4	2 A Class 2	9000-41014-0200000
Mico Pro fix 4.4	4	4 A	9000-41014-0400000
Mico Pro fix 4.4 CL2	4	4 A Class 2	9000-41014-0400001
Mico Pro fix 4.6	4	6 A	9000-41014-0600000
Modules with adjustable tripping current	Number of channels	Tripping current (flexible adjustment)	Art. No.
Mico Pro flex 1.10	1	1-2-3-4-5-6-7-8-9-10 A	9000-41091-0101000
Mico Pro flex 1.20	1	11-12-13-14-15-16-17-18-19-20 A	9000-41091-1102000
Mico Pro flex 2.10	2	1-2-3-4-5-6-7-8-9-10 A	9000-41092-0101000
Mico Pro flex 4.10	4	1-2-3-4-5-6-7-8-9-10 A	9000-41094-0101000
Accessories	Description	Art. No.	
Mico Pro PD 2x12	Potential distributors, 2x12 potentials, max 20 A	9000-41000-0000212	
Mico Pro PD 2x2x06	Potential distributors, 2x2x06 potentials, max 2x20 A	9000-41000-0002206	
Mico Pro Plug-In link 2x blue	Endless Plug-In link max. 40 A, 500 mm length	9000-41000-0000000	
Mico Pro Plug-In link 2x red	Endless Plug-In link max. 40 A, 500 mm length	9000-41000-0000001	
Mico Pro Plug-In link 1x blue, 1x red	Endless Plug-In link max. 40 A, 500 mm length	9000-41000-0000002	
Packages	Description	Art. No.	
Power Pack Mico Pro	Mico Pro PM + 2x Mico Pro Flex 4.10 + Mico Pro Plug-In link	9101200	
Power Pack PS5	Mico Pro PS 5-100-240/24 + 1x Mico Pro Flex 2.10 + Mico Pro Plug-In link	9101201	
Power Pack PS10	Mico Pro PS 10-100-240/24 + 1x Mico Pro Flex 4.10 + Mico Pro Plug-In link	9101203	