

Solutions

Economical solutions for decentralised automation tasks

FieldPower® – the modular solution for system automation

*Key USPs
Modularity,
Easy Engineering &
Installation*



Weidmüller 

Benefit from the possibilities of modularisation

FieldPower® supports you with perfect solutions

Ever shorter product cycles require modular machine and system concepts that can be flexibly modified. FieldPower® provides the answer. With Weidmüller's modular system, classic control cabinet functions can be easily combined into functional units and arranged decentrally in the field.

Your advantages with FieldPower® at a glance



Economical

The modular carry over parts principle offers a wide range of combination options and makes it possible to transition from IP20 to IP65 cost-effectively.



Function-based

Network your automation and digitalisation in the field with decentralised remote I/O systems that let you expand functionality as and when you need it.



Equipped for the future

Take advantage of a comprehensive, ever-expanding product range that meets all relevant safety standards.

Our FieldPower® offer



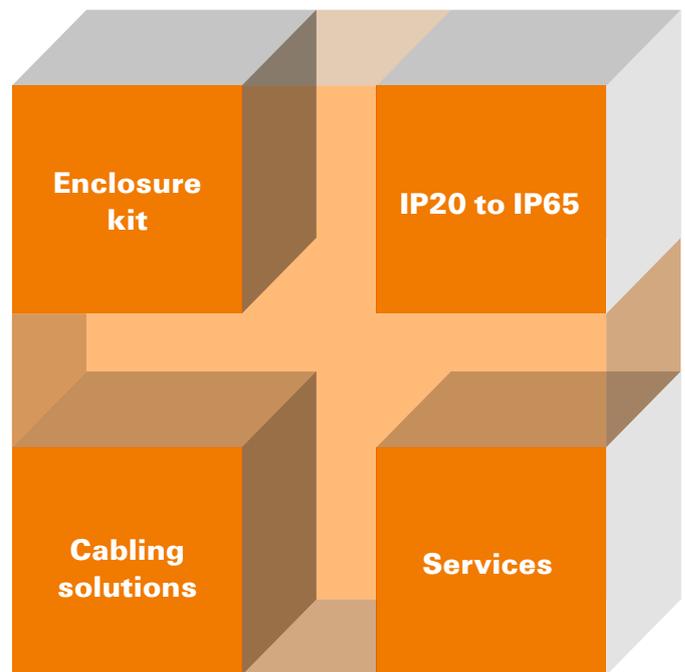
Catalogue items

The range of available catalogue items includes all elements of the FieldPower® modular system as well as ready-made solutions for power distribution and decentralised power supply. This enables you to meet your individual requirements quickly and easily. You will find all the necessary components in our online catalogue at:

www.weidmueller.com/fieldpower

Our modular system kit

The FieldPower® portfolio includes robust IP65 enclosure modules in various sizes with black or transparent plastic lids, as well as aluminium lids for cooling of power electronics. The enclosure modules can be combined for optimum adaptation to individual space requirements. Existing IP20 components can be used almost anywhere in the field due to the FieldPower® enclosure system. For example, control units and power distributors that are typically installed in the control cabinet can be mounted directly on the machine. The FieldPower® wiring concept allows direct connection of uncut power lines, which further increases the flexibility and safety of the system. The innovative sealing system covers a wide range of applications and also enables the use of pre-assembled cables. The range is rounded off by comprehensive services with continuous support from planning to ongoing operation.



Individual solutions

Do you have a special application or cannot find the right products for your specific requirements in our product range? Then we are happy to support you in the development of an individual solution. The modularity of the FieldPower® system offers almost limitless possibilities. Get in touch with us:

www.weidmueller.com/contact

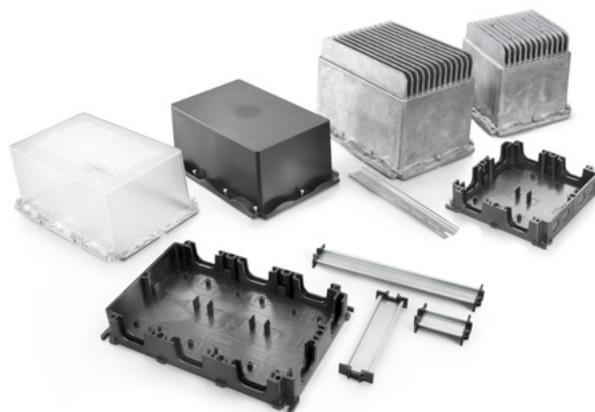
Select enclosure solutions according to requirements

FieldPower® – Enclosure kit



When used in the field, the components usually have to withstand harsh environmental conditions. The possible environmental influences often place high demands on the products. To meet these requirements, the modular FieldPower® system includes robust IP65 enclosure modules.

- Combinable modules in different sizes
- Adaptation of the inside contour of the enclosure without CNC machining
- Wide selection of black and transparent lids
- Optional aluminium lids with cooling fins for power electronics
- Individual modification with operating and signalling elements



Type	Version (Lid)	Dimensions L x W x H [mm]	Enclosure size*	Operating temperature [°C]	Material	Protection degree	Qty.	Order No.
Empty enclosure¹⁾								
FP ENC BSBS 67 1M	flat, black	181 x 104 x 67	1	-40 - 85	PC	IP65	1	2703910000
FP ENC BSBS 129 1M	high, black	181 x 104 x 129	1	-40 - 85	PC	IP65	1	2703920000
FP ENC BSBS 155 2M	high, black	196 x 196 x 155	2	-40 - 85	PC	IP65	1	2659750000
FP ENC BSTS 155 2M	high, transparent	196 x 196 x 155	2	-40 - 85	PC	IP65	1	2659760000
FP ENC BSAS 220 2M	with cooling fins	196 x 196 x 220	2	-40 - 85	PC, Al	IP65	1	2659770000
FP ENC BSBS 155 3M	high, black	196 x 284 x 155	3	-40 - 85	PC	IP65	1	2632930000
FP ENC BSTS 155 3M	high, transparent	196 x 284 x 155	3	-40 - 85	PC	IP65	1	2632940000
FP ENC BSAS 220 3M	with cooling fins	196 x 284 x 220	3	-40 - 85	PC, Al	IP65	1	2632950000
Base								
GH PT6	-	181 x 104 x 42	1	-40 - 85	PC	IP65	10	1070140000
FP ENC BS 042 2B	-	196 x 196 x 42	2	-40 - 85	PC	IP65	1	2659710000
FP ENC BS 042 3B	-	196 x 284 x 42	3	-40 - 85	PC	IP65	1	2632810000
Empty lid								
BG GHDE PT6	flat, black	181 x 104 x 25	1	-40 - 85	PC	IP65	10	1068890000
BG GHDE HO PT6	high, black	181 x 104 x 87	1	-40 - 85	PC	IP65	10	1276220000
FP ENC BS 113 2C	high, black	191 x 191 x 113	2	-40 - 85	PC	IP65	1	2659720000
FP ENC TS 113 2C	high, transparent	191 x 191 x 113	2	-40 - 85	PC	IP65	1	2659730000
FP ENC AS 178 2C	with cooling fins	191 x 191 x 178	2	-40 - 85	Al	IP65	1	2659740000
FP ENC BS 113 3C	high, black	191 x 279 x 113	3	-40 - 85	PC	IP65	1	2632820000
FP ENC TS 113 3C	high, transparent	191 x 279 x 113	3	-40 - 85	PC	IP65	1	2632830000
FP ENC AS 178 3C	with cooling fins	191 x 279 x 113	3	-40 - 85	Al	IP65	1	2632840000
Note: The Layout of the enclosures is divided in 3 sizes: 181 x 104 (Size 1); 196 x 196 (Size 2); 196 x 284 (Size 3)								
¹⁾ with cULus approval								

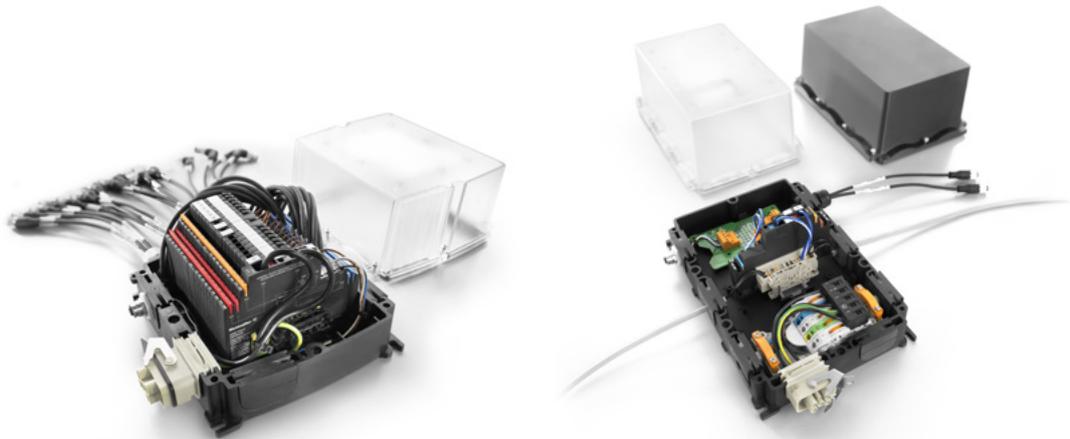
Implement individual functions with a high degree of protection

FieldPower® – IP20 to IP65

IP20 to IP65

Modular plants require the combination of certain plant components with the functions needed there. With the flexible FieldPower® concept, almost any IP20 component from the control cabinet can be brought into the field.

- Tool-free installation of assembled and unassembled terminal rails
- IP20 components can be combined as required
- Integration of electronic circuit boards possible
- Mounting plates offer individual installation options
- Installation of power electronics

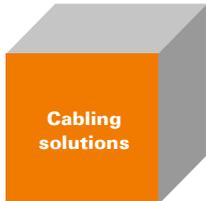


Type	Version	Operating temperature [°C]	Qty.	Order No.
Contact elements¹⁾				
PT6	AC, IDC 2.5 mm ² - 6 mm ² , PUSH IN 0.5 mm ² - 6 mm ² , number of poles: 5	-40 - 55	1	1957620000
PT6 DC	DC, IDC 2.5 mm ² - 6 mm ² , PUSH IN 0.5 mm ² - 6 mm ² , number of poles: 5	-40 - 55	1	1126840000
Plug-in connector¹⁾				
PTS 4	AC, PUSH IN, 0.5 mm ² - 4 mm ² , number of poles: 5	-50 - 120	10	1952120000
PTS 4 DC	DC, PUSH IN, 0.5 mm ² - 4 mm ² , number of poles: 5	-50 - 120	10	1131730000
PTDS 4	AC, 2 connections/pole, PUSH IN, 0.5 mm ² - 4 mm ² , number of poles: 5	-50 - 120	10	1952130000
PTDS 4 DC	DC, 2 connections/pole, PUSH IN, 0.5 mm ² - 4 mm ² , number of poles: 5	-50 - 120	10	1009990000
PTSI 4/LD 400V AC	AC, cartridge fuse, PUSH IN, 0.5 mm ² - 4 mm ² , number of poles: 5	-50 - 120	1	1961770000
PTSI 4/LD 36V AC/DC	AC / DC, cartridge fuse, PUSH IN, 0.5 mm ² - 4 mm ² , number of poles: 5	-50 - 120	1	1252210000
Mounting rails				
TS 35 PT6	7.5 x 54 mm, snap-on mounted in base size 1,2,3	-	10	1170690000
FP ENC DR07 142 XB	7.5 x 142 mm, snap-on mounted in base size 2,3	-	5	2633450000
FP ENC DR07 230 3B	7.5 x 230 mm, snap-on mounted in base size 3	-	5	2633460000
FP ENC DR07 142 XC P	7.5 x 142 mm, for plastic lid size 2,3	-	5	2633510000
FP ENC DR07 230 3C P	7.5 x 230 mm, for plastic lid size 3	-	5	2633520000
FP ENC DR07 080 XC A	7.5 x 80 mm, for aluminium lid size 2,3	-	5	2633730000
FP ENC DR07 110 3C A	7.5 x 110 mm, for aluminium lid size 3	-	5	2633750000
FP ENC DR07 145 3C A	7.5 x 145 mm, for aluminium lid size 3	-	5	2633760000
FP ENC DR07 170 3C A	7.5 x 170 mm, for aluminium lid size 3	-	5	2633780000
FP ENC DR15 68 XC A	15 x 68 mm, for aluminium lid size 2,3	-	5	8000046634

¹⁾ with cURus approval

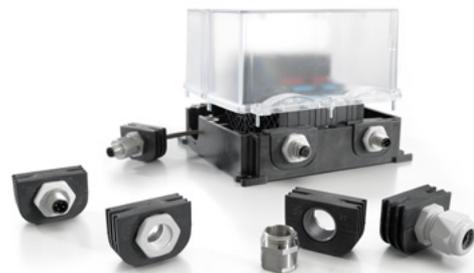
Efficient and error-free wiring and connection

FieldPower® – Cabling solutions



Intelligent cabling solutions can save you valuable time and money. In addition, you prevent errors during installation. The FieldPower® modular system contains the right solution for every cabling task.

- Direct connection of uncut power lines
- Solutions for power distribution with or without plug-in connectors
- Foldable seals for the use of pre-assembled cables
- Seals available with M16 and M20 connection thread
- Integration of operating and signalling devices into the seal possible

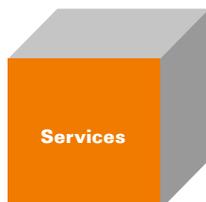


Type	Version	Operating temperature [°C]	Qty.	Order No.
Seals				
DG D0 PT6 ¹⁾	blank seal	-40 - 85	10	4323240000
RKDG 2XD8,5 WG PT6	seal for 2 cables 8.5 - 10.5 mm	-40 - 85	10	1114530000
RKDG D9 PT6 ¹⁾	foldable seal for 1 cable 7 - 9 mm	-40 - 85	10	4329610000
RKDG D11 PT6 ¹⁾	foldable seal for 1 cable 9 - 11 mm	-40 - 85	10	4323210000
RKDG D13 PT6	foldable seal for 1 cable 11 - 13 mm	-40 - 85	10	4323230000
RKDG D15 PT6 ¹⁾	foldable seal for 1 cable 13 - 15 mm	-40 - 85	10	4323220000
RKDG D17 PT6	foldable seal for 1 cable 15 - 17 mm	-40 - 85	10	4324010000
DG M16 PT6	seal with M16 connection thread	-40 - 85	1	2545540000
DG M20 PT6 ¹⁾	seal with M20 connection thread	-40 - 85	1	2545550000
RKDGE D2X6,5 PT6	slotted sealing insert for 2 cables 6,5 mm, insertable in RKDG D17 PT6	-40 - 85	10	2443800000
RKDGE D4X4 PT6	slotted sealing insert for 4 cables 4 mm, insertable in RKDG D17 PT6	-40 - 85	10	2443760000
Adapters for plug-in connectors HQ4/2, HQ8, HQ17				
BG ARGH HQP ALU PT6 ¹⁾	HQ adapter without insert	-40 - 70	1	1532200000
BG ARGH HQP ALU PT6 CS ¹⁾	HQ adapter without insert, lockable	-40 - 70	1	1532210000
FPL PTS 4/ ARGH HQ 4/2 0,15m	HQ adapter with HQ4/2 socket wired to PTS 4	-40 - 70	1	8000021036

¹⁾ with cURus approval

Consistent support from planning to operation

FieldPower® – Services



Are you looking for consistent support in the project planning and implementation of your decentralised and function-oriented concepts? Our wide range of services covers all phases, from planning to operation.

- Support in project planning with mCAD and eCAD models
- Standard-compliant adaptation to international markets – e.g. UL-compliant design
- Production of individually equipped terminal rails and pre-assembled cabling solutions
- Complete assembly of the function modules



**Arrange a date
now!**

Which decentralized function unit do you need?

Make an appointment for a personal consultation:

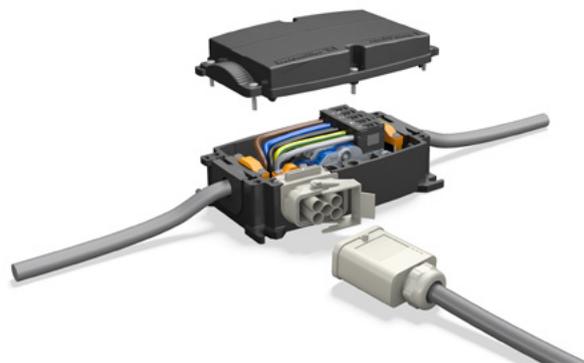
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One system, many possibilities

FieldPower® enables decentralised and function-oriented automation

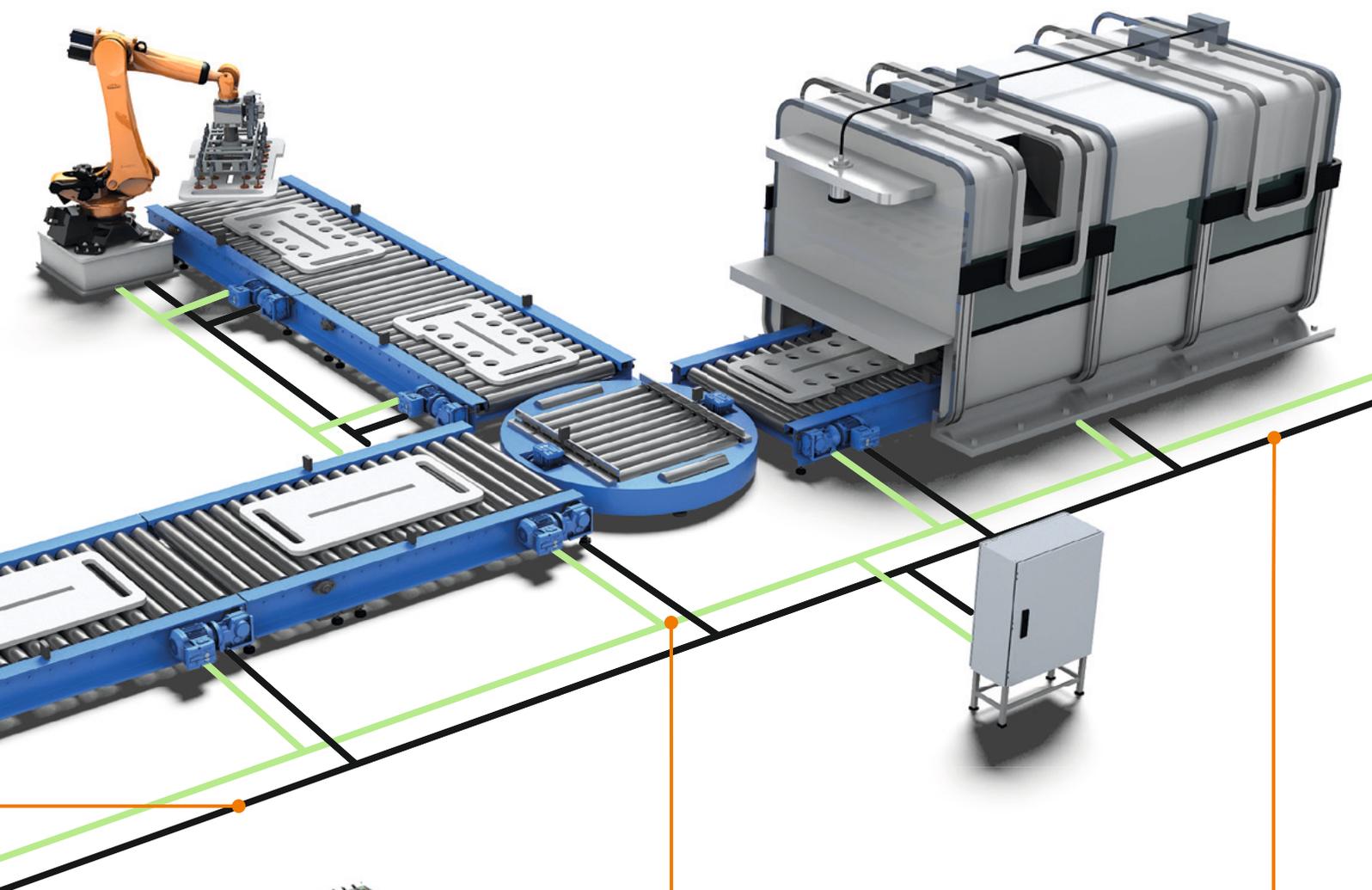
FieldPower®'s modular structure and clever design offer you a number of advantages in the context of decentralised and function-oriented automation. In addition to reduced control cabinet dimensions, this includes optimised wiring of all connected components. During project planning, you also benefit from the use of pre-assembled modules and the reduced number of individual parts. FieldPower® is particularly future-proof due to the option of expanding your system by adding functional units. And because components can be replaced very easily, you also reduce downtimes.

FieldPower® is the perfect solution for decentralisation. Due to the manifold possibilities of the modular system, a wide variety of applications can be realised. The following section shows how FieldPower® can be used to solve various challenges.



Power distribution

FieldPower® offers solutions for branching, switching, and protecting power directly at the plant.



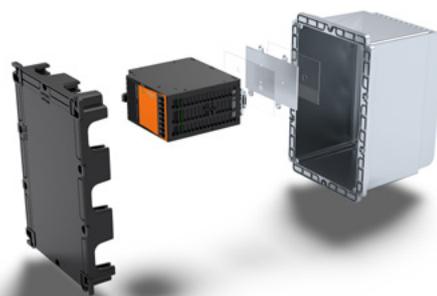
Signals and data

FieldPower® simplifies the setup of a distributed signal and data structure by enabling the installation of any IP20 components in the FieldPower® enclosures.



Decentralised power management

In combination with the PROtop switching power supply, the FieldPower® modular system opens up completely new possibilities for power supply and fusing close to the loads.



Branch, switch, and protect power

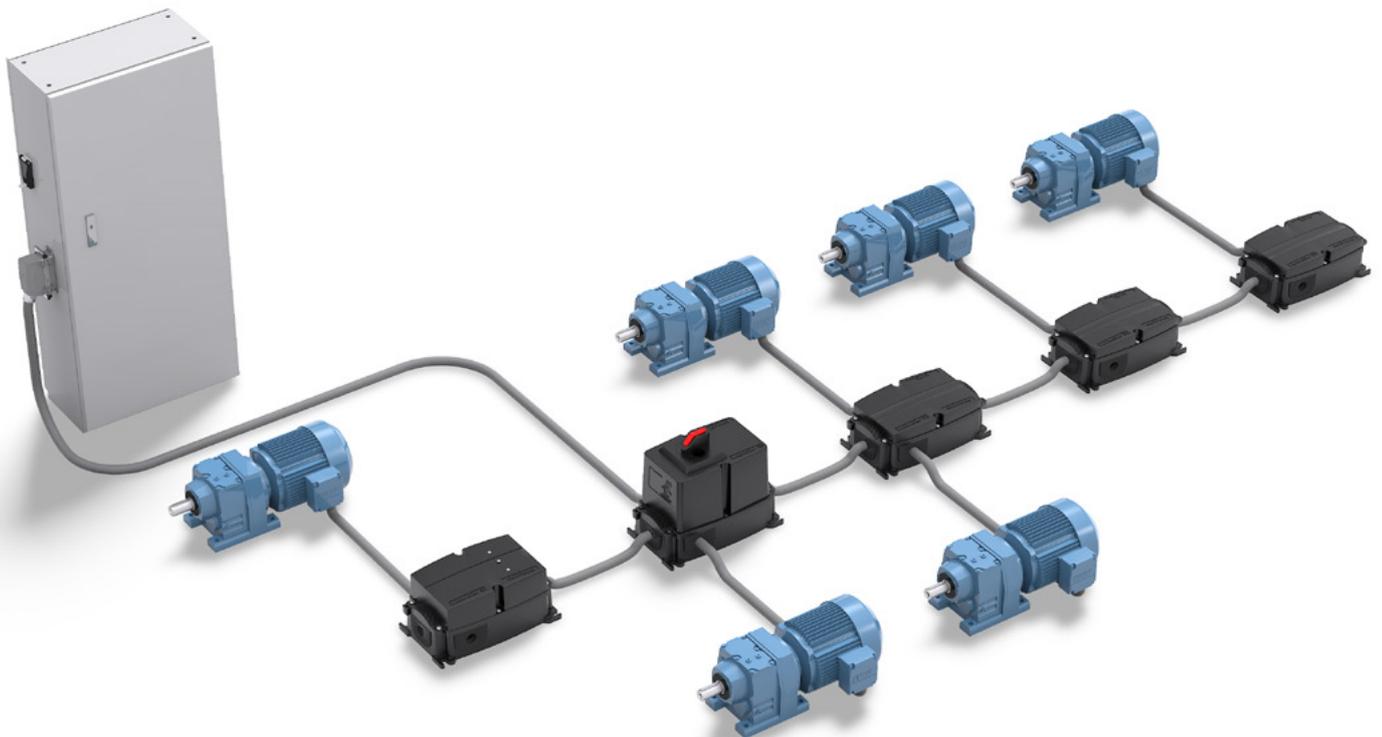
FieldPower® for tailor-made power distribution in the field

Challenge

The power supply is the heart of every plant. With a modular system concept, especially with large dimensions, there are special challenges for the power supply. On one hand, the power distribution must be decentralised and flexibly adaptable. On the other hand, the wiring effort must also be taken into account.

Solution

FieldPower® is the flexible, economical solution for decentralised power distribution in a wide variety of applications. The power is distributed via uncut cables. As a result, the impedance of the power bus line is particularly small and protective devices can operate reliably. Furthermore, the risk of wiring errors is minimised. The innovative modular system comprises solutions for branching, switching, and protecting power as well as the possibility of implementing individual solutions.





Type	Enclosure size	Version	Dimensions H x W x D [mm]	Operation temperature [°C]	Material	Protection degree	Qty.	Order No.
FP BOX ¹⁾	1	AC Box	181 x 104 x 67	-20 °C...45 °C	PC	IP65	1	1957580000
FP BOX DC	1	DC Box	181 x 104 x 67	-20 °C...45 °C	PC	IP65	1	1440920000
FP BOX FUSE ¹⁾	1	AC Box, FUSE	181 x 104 x 86	-20 °C...45 °C	PC	IP65	1	1961780000
FP BOX FUSE DC ¹⁾	1	DC Box, FUSE	181 x 104 x 86	-20 °C...45 °C	PC	IP65	1	8000007924
FP BOX FUSE R ¹⁾	1	AC Box, FUSE, Status	181 x 104 x 86	-20 °C...45 °C	PC	IP65	1	1025060000
FP BOX ON/OFF ¹⁾	1	AC Box, ON/OFF	181 x 104 x 164	-20 °C...45 °C	PC	IP65	1	1003260000
FP BOX ON/OFF VG M20	1	AC Box, ON/OFF, Cable gland	181 x 104 x 164	-20 °C...45 °C	PC	IP65	1	2819530000
FP BOX ON/OFF VG M20 3AN	1	AC Box, ON/OFF, Cable gland, for three motors	181 x 104 x 164	-20 °C...45 °C	PC	IP65	1	8000056232
FP BOX ON/OFF 16A FUSE R	2 ²⁾	AC Box, ON/OFF, FUSE	181 x 192 x 165	-25 °C...45 °C	PC	IP65	1	8000028513
FP BOX 10P ¹⁾	2 ²⁾	AC Box, two AC-contact elements	181 x 192 x 67	-40 °C...55 °C	PC	IP65	1	1957590000
FP BOX 10P 4XVG	2 ²⁾	AC Box, two AC-contact elements, Cable gland, + plug in connector, Sealing inserts	181 x 192 x 67	-40 °C...55 °C	PC	IP65	1	1002900000

¹⁾ with cULus approval
²⁾ Size 2 Generation 1 (see online catalogue "FieldPower® IP 54...IP 65 enclosure")

Your special advantages

- Solutions for branching, switching, and protecting power
- Use of commercially available round cables
- Reduced wiring effort due to branches close to the consumer on the power bus
- Low impedance for reliable protection and low voltage drop
- Minimisation of wiring errors

Decentralised DC power generation and protection

FieldPower® enclosure with integrated power supply PROtop

Challenge

Today, 24/48 VDC power supplies are required for almost all plant areas. Power management and load monitoring usually take place in the control cabinet. In order to avoid voltage drops due to long distances between power supplies and loads, and to optimise wiring, the voltage should be generated as close as possible to the respective load.

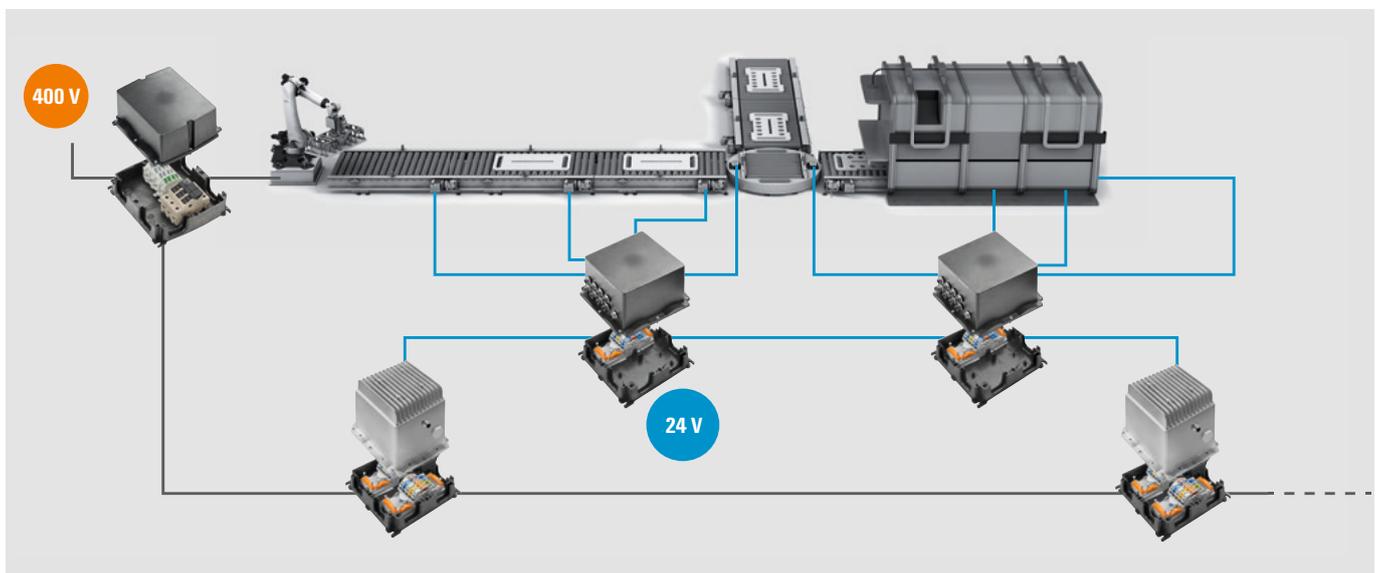
Solution

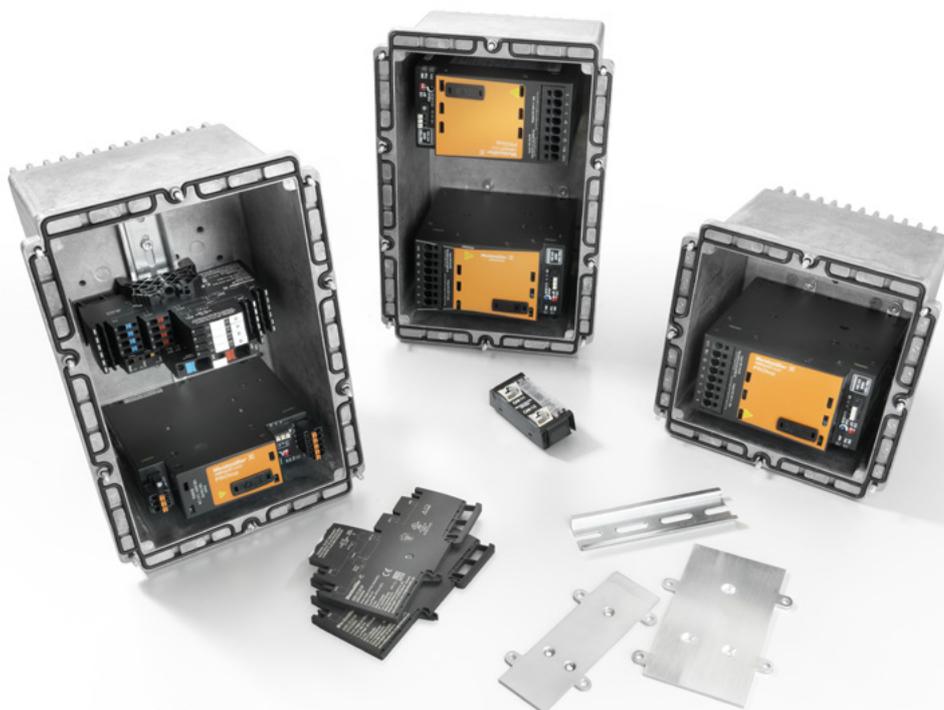
PROtop power supplies offer a wide range of functions with many advantages. These include high energy efficiency, outstanding power reserves, high reliability, and optional communication capability. Thanks to the possibility of integrating our PROtop power supplies into the FieldPower® system, the entire range of functions can be made available in the field – with all the advantages of the FieldPower® modular system.

Innovative 24 VDC power supply structure

In addition to the redundant power supply provided by the PROtop power supplies, our system also offers load monitoring close to the consumer using topGUARD in FieldPower® enclosures.

This gives you a complete solution from the 400 V distribution to the 24 V consumer in the field.





Type	Enclosure size	Rated input voltage	Input fuse internal	Rated output voltage	Nominal output current	Operation temperature [°C]	Start Up	IO-LINK	Protection degree	Qty.	Order No.
Decentralised switched-mode power supply units											
FP PRO TOP3 24/10 2M	2	3 x 400...3 x 500 V AC	nein	24 V DC	10 A	-25 °C ... +50 °C	≥ -40 °C	retrofitable	IP65	1	2887580000
FP PRO TOP3 24/20 2M	2	3 x 400...3 x 500 V AC	nein	24 V DC	20 A	-25 °C ... +45 °C	≥ -40 °C	retrofitable	IP65	1	2887600000
FP PRO TOP3 48/10 2M	2	3 x 400...3 x 500 V AC	nein	48 V DC	10 A	-25 °C ... +45 °C	≥ -40 °C	retrofitable	IP65	1	2887620000
FP PRO TOP3 24/10 3M	3	3 x 400...3 x 500 V AC	nein	24 V DC	10 A	-25 °C ... +50 °C	≥ -40 °C	retrofitable	IP65	1	2887590000
FP PRO TOP3 24/20 3M	3	3 x 400...3 x 500 V AC	nein	24 V DC	20 A	-25 °C ... +50 °C	≥ -40 °C	retrofitable	IP65	1	2887610000
FP PRO TOP3 48/10 3M	3	3 x 400...3 x 500 V AC	nein	48 V DC	10 A	-25 °C ... +50 °C	≥ -40 °C	retrofitable	IP65	1	2887630000
FP PRO TOP3 24/2X20 3M	3	3 x 400...3 x 500 V AC	nein	24 V DC	2 x 20 A	-25 °C ... +45 °C	≥ -40 °C	retrofitable	IP65	1	2887640000
FP PRO TOP3 48/2X10 3M	3	3 x 400...3 x 500 V AC	nein	48 V DC	2 x 10 A	-25 °C ... +45 °C	≥ -40 °C	retrofitable	IP65	1	2887650000
FP PRO TOP3 24/10 2P ¹⁾	2	3 x 400...3 x 500 V AC	ja	24 V DC	10 A	-25 °C ... +50 °C	≥ -40 °C	-	IP65	1	2743440000
FP PRO TOP3 24/20 2P ¹⁾	2	3 x 400...3 x 500 V AC	ja	24 V DC	20 A	-25 °C ... +45 °C	≥ -40 °C	-	IP65	1	2743450000
FP PRO TOP3 24/20 2PIOL ¹⁾	2	3 x 400...3 x 500 V AC	ja	24 V DC	20 A	-25 °C ... +45 °C	≥ -40 °C	integrated	IP65	1	2743460000
FP SOL TOP3 24/10 2 001	2	3 x 400...3 x 500 V AC	ja	24 V DC	3 x 4 A ²⁾ (Class 2) ³⁾	-20 °C ... +40 °C	≥ -40 °C	-	IP65	1	8000050554

¹⁾ with cULus approval
²⁾ mind derating
³⁾ for the use in class-2-circuits according to National Electric Code (NEC)

Type	Enclosure size	Rated input voltage	Input fuse internal	Rated output voltage	Nominal output current	Operation temperature [°C]	Start Up	IO-LINK	Protection degree	Qty.	Order No.
Decentralised electronic load monitoring											
FP TGD 8X4A 2P A IOL	2	24V DC	ja	24 V DC	8 x 4 A (Class 2) ³⁾	-25 °C...50 °C	≥ -25 °C	integrated	IP65	1	2743480000

³⁾ for the use in class-2-circuits according to National Electric Code (NEC)
 As an alternative, the FP BOX FUSE DC (8000007924) can also be used. See page 11

Your special advantages

- Stable load supply with minimum voltage drop
- Fast device replacement in the event of a failure
- Savings on unnecessary wiring costs
- Optional communication capability

Realise flexible signal and data infrastructures

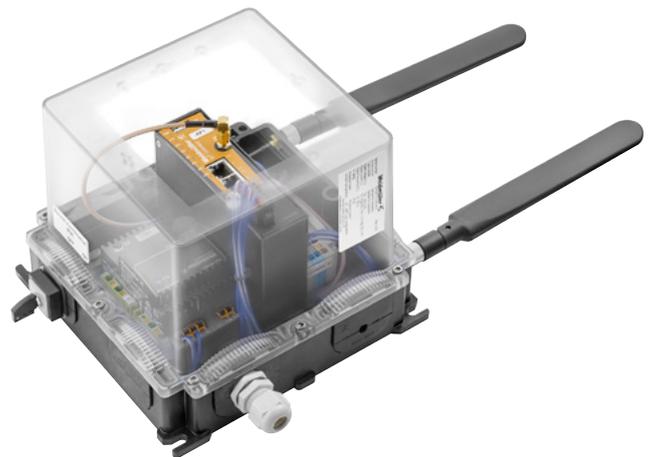
Integrating IP20 components into the FieldPower® system

Challenge

Within a plant many signals and data have to be distributed and processed. The trend towards the Industrial Internet of Things (IIoT) additionally requires the communication of many components with cloud systems. It therefore makes sense to set up flexible infrastructures with the least possible wiring effort near to the plant.

Solution

The FieldPower® modular system offers the possibility of bringing a wide variety of IP20 components for distribution, communication, and processing of signals and data into the field. This means that their advantages and functions can be used decentrally. Typical applications are the installation of our u-remote I/O components or the communication of data via switches and routers within the system or directly into the cloud.



Type	Dimensions H x W x D [mm]	Version	Interfaces	Power supply	Performance data	Operation temperature [°C]	Order No.
FP IOT MD01 LAN S2 00000	221 x 155 x 228	IoT Gateway LAN	2x Ethernet, RS232, RS485, CAN, USB (external memory)		Processor: Dual Core ARM Cortex A9, 600 MHz		8000058603
FP IOT MD01 4EU S2 00000	433 x 155 x 228	IoT Gateway LAN+Funk	2x Ethernet, RS232, RS485, CAN, USB (external memory), LTE/4G (+ 2x Antenne)	AC: 85 ... 264V 1ph DC: 24V	RAM: 1GByte Flash (Memory): 4GByte MMC	-20 °C...40 °C	8000058270
FP IOT MD02 4EU S3 00000	521 x 155 x 228	IoT Gateway LAN+Funk+IE Switch	8x Ethernet, RS232, RS485, CAN, USB (external memory), LTE/4G (+ 2x Antenne)		Software: Node-RED, u-link, Docker"		8000058282

Your special advantages

- Distribution, communication, and processing of signals and data
- Possibility to install different IP20 components
- Low installation effort due to the use of pre-assembled connection cables
- Plug-and-play solutions for retrofitting a machine data acquisition system to existing plants
- Optimised wiring due to the flexible mounting positions

Future-oriented solutions for plant automation

The new variety of FieldPower®

The factory of the future offers growing challenges. This is why the FieldPower® modular system is constantly being expanded and supplemented. By implementing new technologies based on components, at data level or in engineering, FieldPower® solutions create real added value for the machines, plants, and processes of the future.

Control motors directly with variable Frequency drives

Due to the FieldPower® concept, variable frequency drives can be placed close to the motor. Various motor technologies and power levels are supported. In addition, all the advantages of the FieldPower® modular system can be used: Protection to IP65, individual configuration with additional functions and simple expandability – with highly efficient and error-free wiring.

Engineering with the Weidmüller Configurator (WMC)

Plan the assembly of a 54 mm/142 mm/230 mm FieldPower® mounting rail with the components of your choice in the Weidmüller Configurator.

Use of data-based services

The Industrial IoT opens up a wide range of possibilities for data-based control of your plants and processes. Connect the components of your plants and use the data from the field to generate real added value for your operations and services. We are continuously working on innovative and intelligent Industrial IoT solutions. Let's connect.



Weidmüller – Your partner in Smart Industrial Connectivity

As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs. Together we set standards in Industrial Connectivity.

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