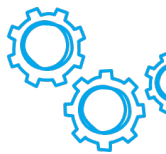


S700 flexible Power-D-Module

The flexible **The Power-D-Module** (PDM) with PCB is a compact power distribution system for the DC 24 V voltage level. It can be easily mounted in the control cabinet by way of mounting plate or as 19" rack with 3 HU. It has 30 channels for plug-in type ESS30 electronic circuit protectors. The supply is provided non-redundantly or redundantly via integral decoupling diodes. The integral group signalling works via quiescent current actuated relay, which drops in the event of tripping or disconnection of a circuit breaker. A free slot does not cause a message. The entire internal circuitry is designed as a printed circuit board. Optionally, the system can be extended with a digital total current display and a cable organizer (1 HE) with shunts.



TYPICAL FEATURES

- Compact design with 3 HU (4 HU with cable management)
- Rated voltage: DC 24 V
- Positive pole protected
- Max. 80 A per supply
- For up to 30 plug-in type ESS30 circuit breakers
- Max. load current up to 12 A
- Redundant or non-redundant set-up
- Group signalling without signal loops
- Connection via spring loaded terminals

YOUR BENEFITS

- Compact, space-saving
- No "internal" wiring required
- Time-saving connection via spring-loaded terminals
- Increased machine uptime through resettable circuit breakers
- Selective disconnection even for long cables through electronic circuit breakers
- Increased operational availability through group signalling
- Information on operating status via current display (optional)

PREFERRED TYPES

Preferred types are E-T-A products, which are most frequently used by our customers. We manufacture these preferred types in substantial quantities. [You can find an overview of our preferred types here \(Page 3\).](#)

TYPICAL APPLICATIONS

Automation, car production, chemical industry, oil and gas, power plant engineering DC 24 V, machine building industry, pharmaceuticals and foodstuffs

COMPLIANCE



WEB LINKS

[Further information](#), [REACH](#), [RoHS](#), [Contact](#)

TECHNICAL DATA

ELECTRICAL DATA

Rated voltage U_n	DC 24 V (19 ... 32 V) max. voltage drop at the decoupling diodes 0.6 V
Protected pole	1-pole plus
Number of loads	Up to 30

MECHANICAL DATA

Mounting dimensions (WxHxD)	Width: 84 HP, 19" (486.72 mm) x Height: 3 HE (88.9 mm) x Depth: 212 mm (incl. ESS30) - 248 mm (R4 for 19" installation) - 198 mm (A4 for 19" installation)
Mass	Approx. 3.8 kg (version PDM-P-L-ESS30-30A4-B2-KA-S700); approx. 6.1 kg (version PDM-P-L-ESS30-30R4-B2-DKA-S700)
Material	Aluminium
Enclosure grounding	Studs (M6)
Cable strain relief	Optional

SUPPLY

Total current per supply	Max. 80 A total current (2 x 40 A / 1 x 80 A)
Terminals / Cable cross section	2 x screw terminals up to 25 mm ² (A4 version) 4 x screw terminals up to 25 mm ² (R4 version)

LOADS

Rated current per load channel	Max. 12 A
Terminals / Cable cross section	Spring-loaded terminals up to 4 mm ² with wire end ferrule

GROUP SIGNALLING

Parallel connection	Break contacts are connected in parallel, relay with change-over contact actuated via quiescent current, signal current max. 0.05 A (gold contact), in the event of excess current the gold layer is destroyed, then max. 0.5 A Push-in terminals 1.5 mm ² with wire end ferrule
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AMBIENT CONDITIONS

Ambient temperature	0...+50 °C
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FURTHER INFORMATION

MOUNTING VALUES - PUSH-IN TERMINAL

Version for 1-pole ESS30 circuit breaker	Terminals on	Supply terminals		Load terminals		Signalling	
		Cross section [mm ²]	Tightening torque [Nm]	Cross section [mm ²]	Stripping length [mm]	Cross section [mm ²]	Stripping length [mm]
PDM-P-L-ESS3030A4-B2-xx-S700	Printed circuit board	4...25	4.0...4.5	0.25...4	15	0.25...1.5	10
PDM-P-L-ESS3030R4-B2-DxxS700	Printed circuit board	4...25	4.0...4.5	0.25...4	15	0.25...1.5	10
Ground terminals (studs)	Front plate	M6	4.0...4.5	-	-	-	-

ORDERING NUMBER CODE

P	D	M	-	P	-	L	-	E	S	S	3	0	-	3	0	R	4	-	B	2	-	D	-	K	-	A	-	S	7	0	0
1							2				3				4		5	6	7	8											

1 TYPE NUMBER

PDM-P-L Power Distribution Module with PCB, plus- pole protected (3 HU)

2 DEVICE TYPES

ESS30 ESS30 electronic circuit breaker

3 SUPPLY/FUNCTION

30A4 Non-redundant supply

30R4 Redundant supply with decoupling diodes

4 SIGNALLING

B2 Group signalling with relay

5 OPTIONS

D Decoupling diodes integrated (with R4 only)

6 CABLE STRAIN RELIEF

K Cable strain relief (1 additional HU)

7 MEASURING VALUE DISPLAY

A Digital total current display

8 IDENTIFIER

S700 Internal ID

Looking for a customer-specific version you cannot find in our ordering number code? Please get in touch with us. Circuit protectors are not included in the delivery scope.

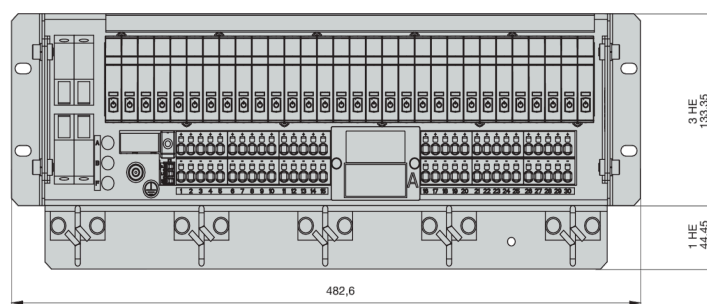
PREFERRED TYPES

Preferred types	Short description
PDM-P-L-ESS30-30A4-B2-KA-S700	Not redundant with power display and cable management
PDM-P-L-ESS30-30R4-B2-DKA-S700	Redundant with decoupling diodes, power display and cable management

DIMENSIONS

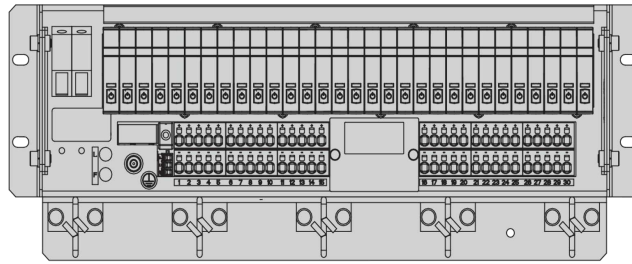
DIMENSIONAL DRAWING

Front view: Redundant version, total current display, cable management, PDM-P-L-ESS30-30R4-B2-DKA-S700



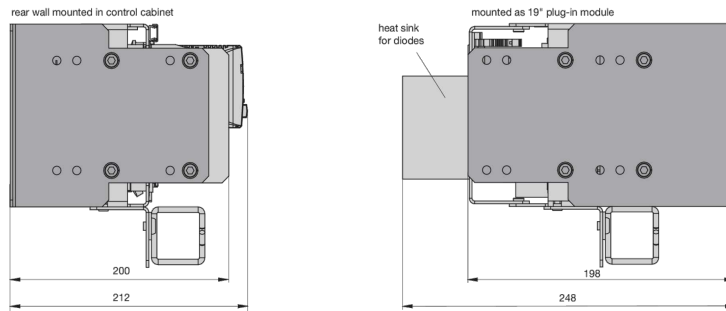
DIMENSIONAL DRAWING

Front view: Non-redundant version, cable management, PDM-P-L-ESS30- 30A4- K-S700



DIMENSIONAL DRAWING

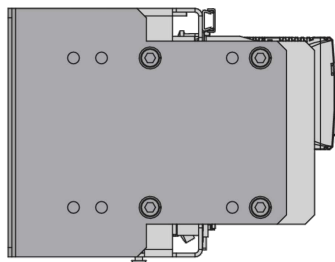
Seitenansicht / Abmessungen: Ausführung redundant (mit Dioden), Kabelmanagement, PDM-P-L-ESS30-30R4-B2-DKx-S700



DIMENSIONAL DRAWING

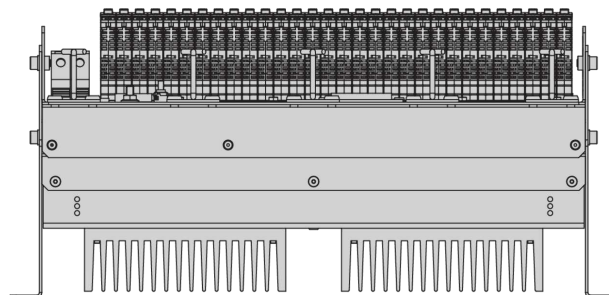
Side view: Version without cable management, PDM-P-L-ESS30-30x4-B2-xx-S700

rear wall mounted in control cabinet



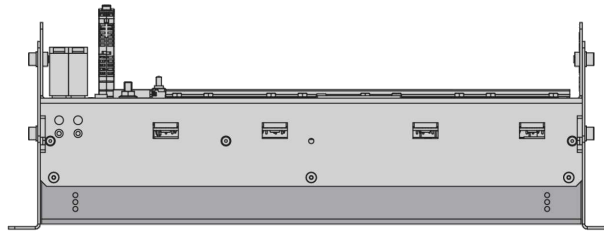
DIMENSIONAL DRAWING

View from the below: Redundant version, cable management, rear wall mounting, PDM-P-L-ESS30-30R4-B2-DKx-S700



DIMENSIONAL DRAWING

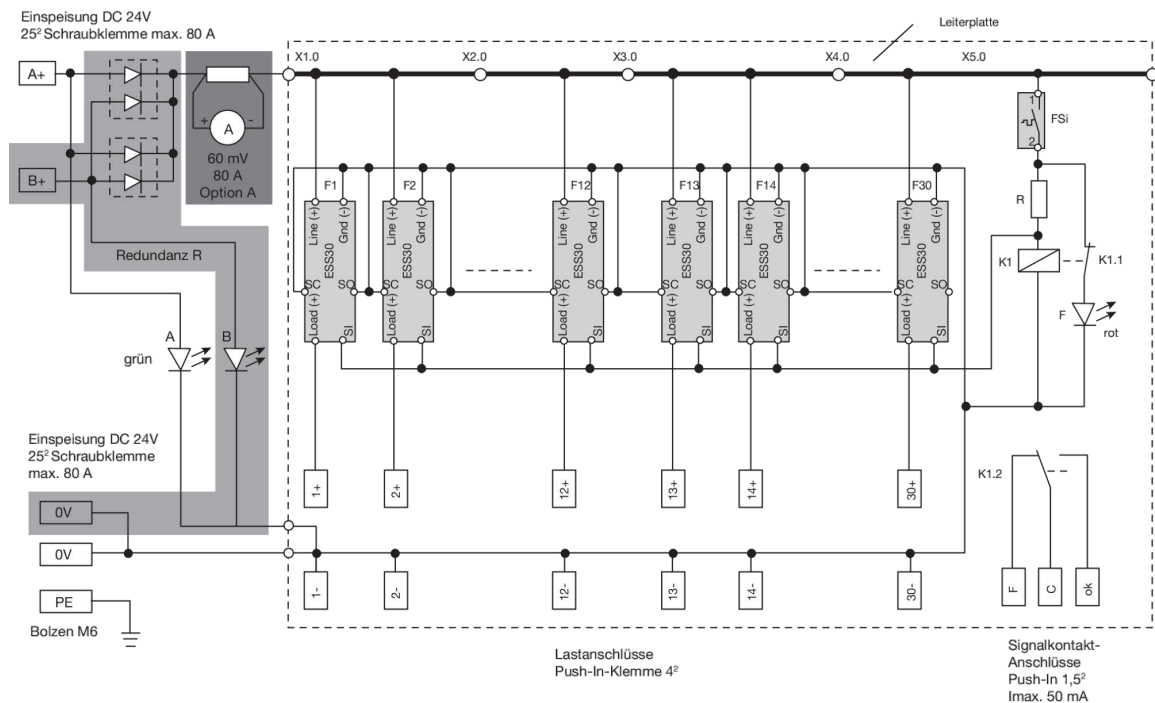
View from the below: Non-redundant version, PDM-P-L-ESS30-30A4-B2-x-S700



SCHEMATIC DIAGRAMS

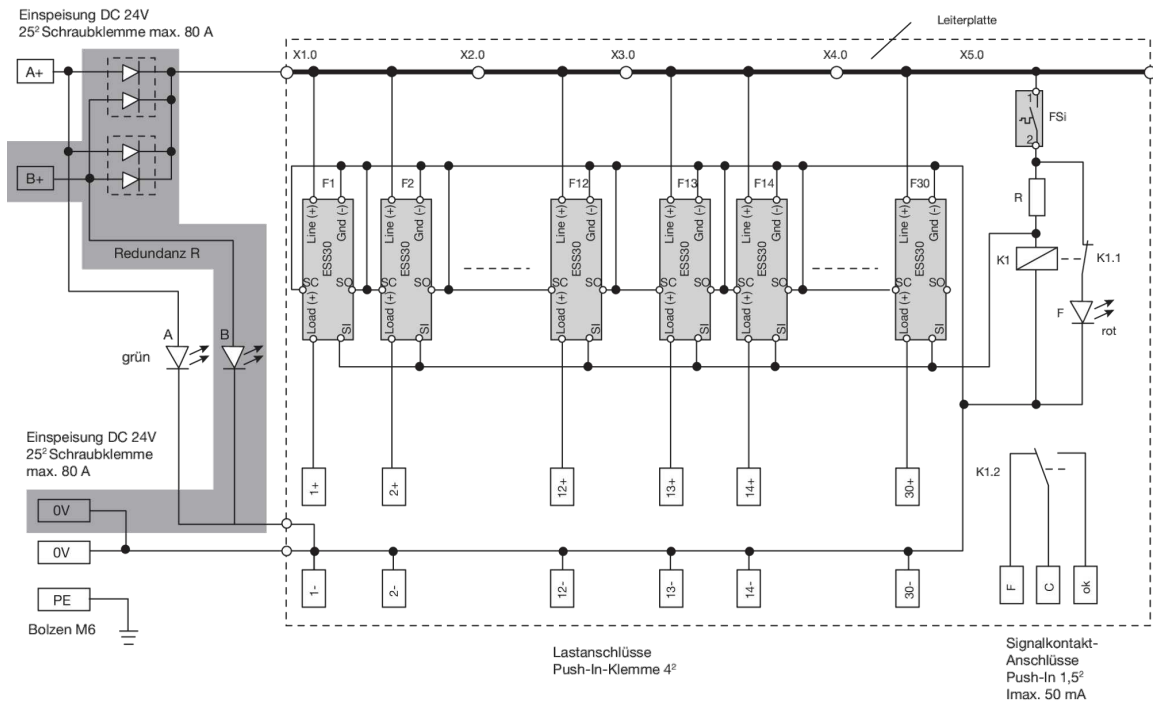
SCHEMATIC DIAGRAMS

Version: Redundant power supply, decoupling diodes, total current display, PDM-P-L-ESS30-30R4-B2-DxA-S700



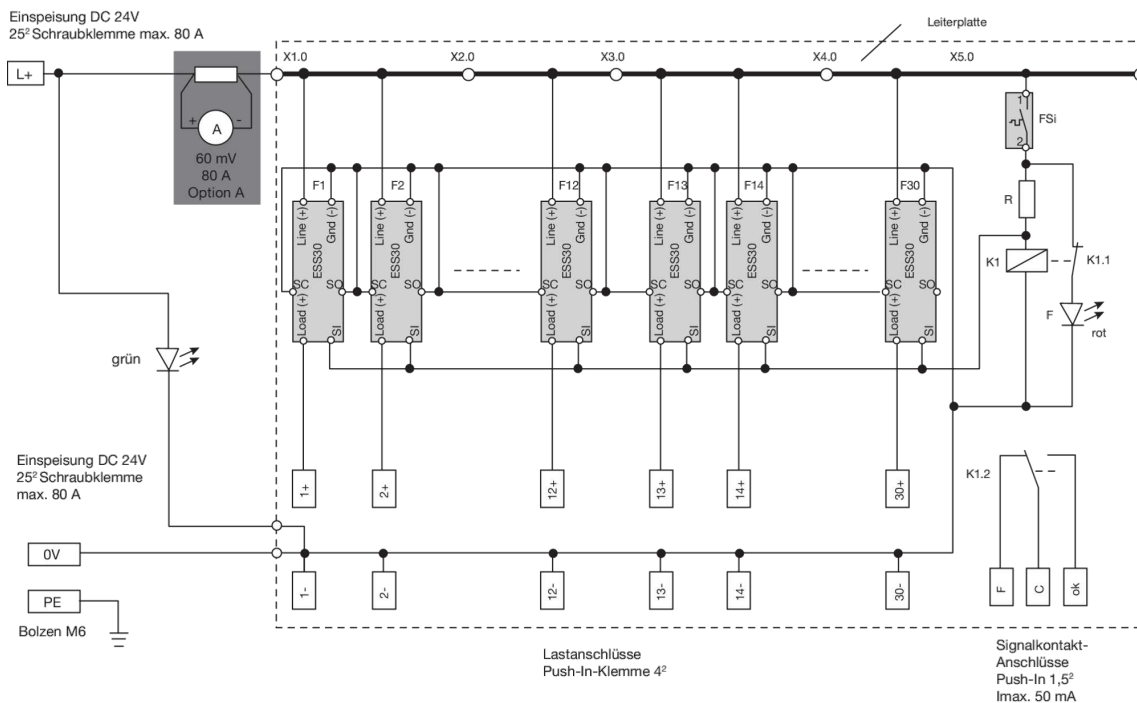
SCHEMATIC DIAGRAMS

Version: Redundant power supply, decoupling diodes, PDM-P-L-ESS30-30R4-B2-Dx-S700



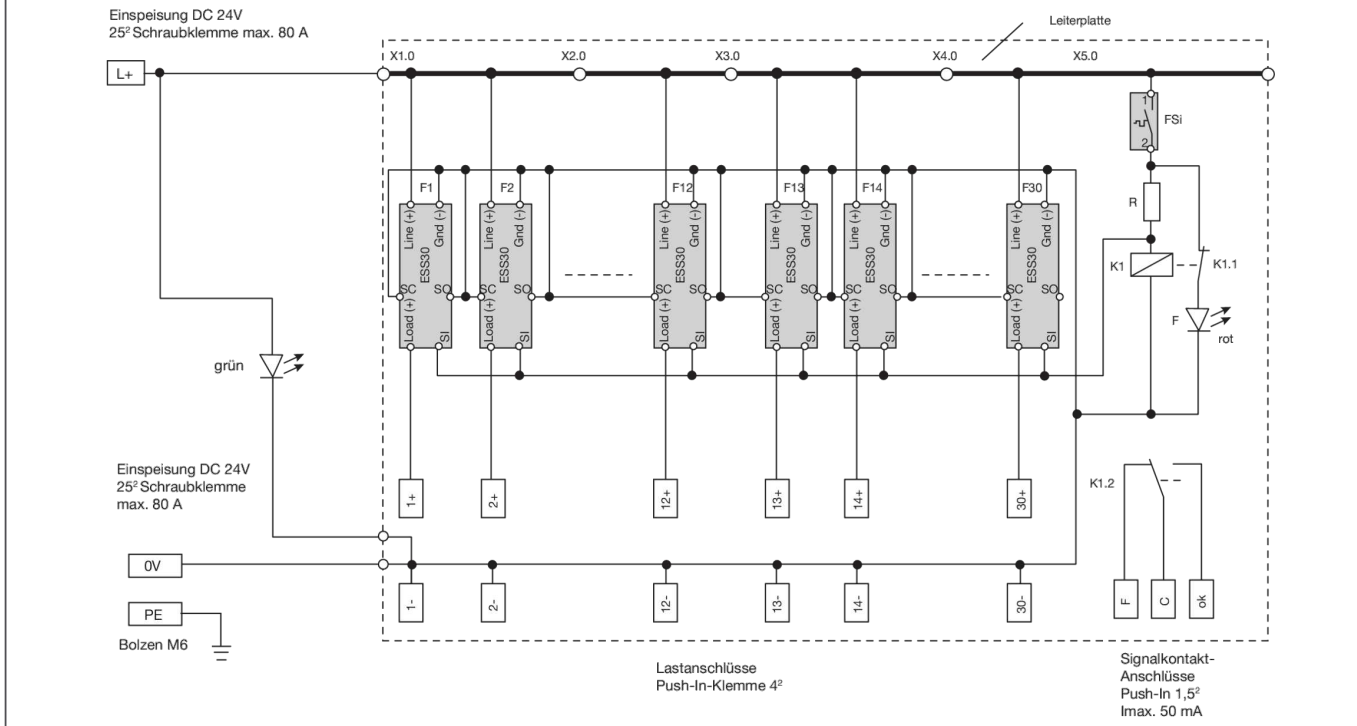
SCHEMATIC DIAGRAMS

Version: Non-redundant supply, PDM-P-L-ESS30-30A4-B2-x-S700



SCHEMATIC DIAGRAMS

Version: Non-redundant supply, PDM-P-L-ESS30-30A4-B2-x-S700



ACCESSORIES

OPTIONAL ACCESSORIES

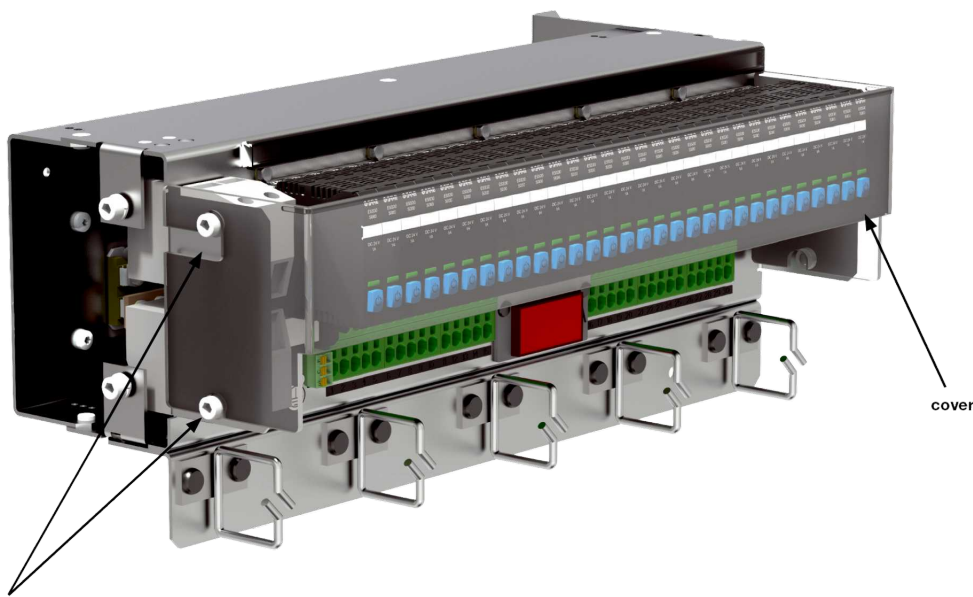
Y31283501	Transparent cover PDM
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FURTHER INFORMATION ABOUT ACCESSORIES (DRAWINGS)

ACCESSORIES

Translucent cover / actuator guard

part number: Y31283501



The cover is pushed over the upper flange fixtures (left and right) from the front and then »latched on« downwards. This allows later mounting even with distribution lines already in place.

FURTHER PRODUCTS

RELATED PRODUCTS

ESS30-S

The electronic circuit protector ESS30-S with physical isolation is the globally unique electronic overcurrent protection for DC 24 V applications as a “low energy breaker”. For the use in decentralised and centralised power supply units, it meets the requirements according to the standards DIN EN 60934, UL1077 as a Supplementary Protector and UL 1310 as “Class2 power unit” (NEC class2). The compact device can be plugged into the terminal blocks 17plus and 18plus and into the SVS power distribution systems and ensures quick and easy installation.



All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of technical improvement. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering part numbers may differ from the device marking.