Configuration sample

19" packaging system CompactPCI 1U

- EMC-shielded CompactPCI system integrated in a 19"-plug-in unit with Rear I/O
- designed for horizontal board assembly with up to two CompactPCI boards 6U, 160mm depth at the front and 80mm at the rear
- 6 U, 2 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
- prepared for the use of one 19" CompactPCI power supply 3U, 8 HP
- active heat dissipation of the boards via convection from side to side
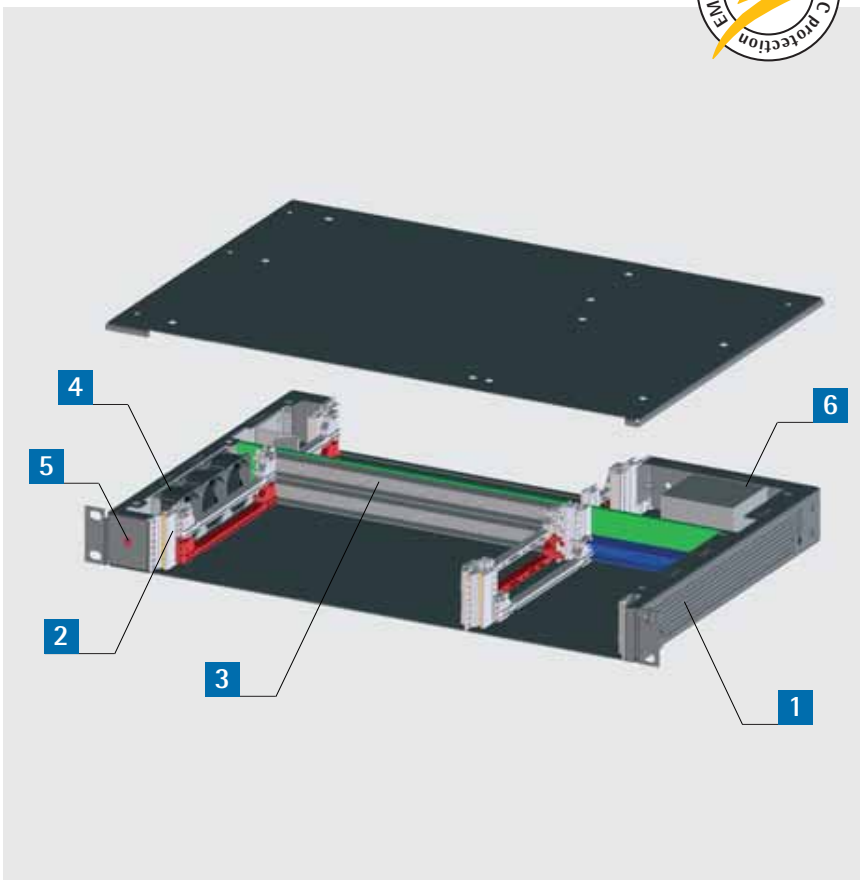- variable cooling solution by the use of up to 4 fans

Dimensions (H x W x D):
44,1 x 482,6 mm x 300 mm

Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19"-plug-in unit, EMC-shielded, with Rear I/O Material: stainless steel Surface: painted RAL 9011 graphite black
2	1	horizontal expansion kit 6 U, 8 HP including IEEE card guides with ESD clips for two slots (6 U, 160 mm depth) at the front and two slots (6 U, 80 mm depth) at the rear
3	1	6U, 2 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
4	3	DC fan 40 x 40 mm, 12 V, 11,8 cfm, 38 dB(A)
5	1	Integrated LED display for fan alarm
6	1	IEC AC socket with line filter, fuse and on / off switch

Order information

Part no.
24-5198-50

Note:
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.

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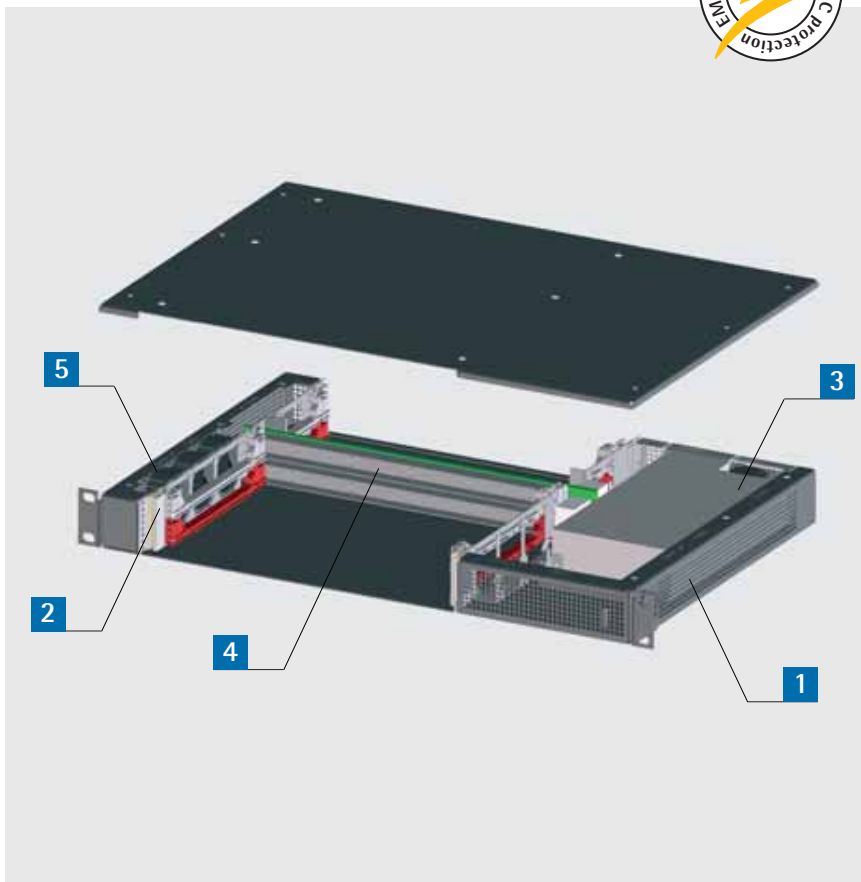## 19″ packaging system CompactPCI 1U (ATX)

- EMC-shielded CompactPCI system integrated in a 19"-plug-in unit with Rear I/O
- designed for horizontal board assembly with up to two CompactPCI boards 6U, 160mm depth at the front and 80mm at the rear
- 6 U, 2 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
- ATX power supply with 200 Watt, wide range input and PFC
- active heat dissipation of the boards via convection from side to side
- variable cooling solution by the use of up to 7 fans

Dimensions (H x W x D):
44,1 x 482,6 mm x 300 mm

Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19"-plug-in unit, EMC-shielded, with Rear I/O Material: stainless steel Surface: painted RAL 9011 graphite black
2	1	horizontal expansion kit 6 U, 8 HP including IEEE card guides with ESD clips for two slots (6 U, 160 mm depth) at the front and two slots (6 U, 80mm depth) at the rear
3	1	ATX power supply with 200 Watt, wide range input and PFC; +3,3 V / 17 A, +5 V / 12 A, +12 V / 10 A, -12 V / 0,5 A
4	1	6U, 2 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
5	3	DC fan 40 x 40 mm, 12 V, 11,8 cfm, 38 dB(A)

Order information

Part no.
24-5198-00

Note:
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.

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19″ packaging system CompactPCI 2 U

- EMC-shielded CompactPCI system integrated in a 19″-plug-in unit with Rear I/O
- designed for horizontal board assembly with up to four CompactPCI boards 6U, 160mm depth at the front and 80mm at the rear
- 6 U, 4 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
- prepared for the use of two 19″ CompactPCI power supply 3U, 8 HP
- active heat dissipation of the boards via convection from side to side
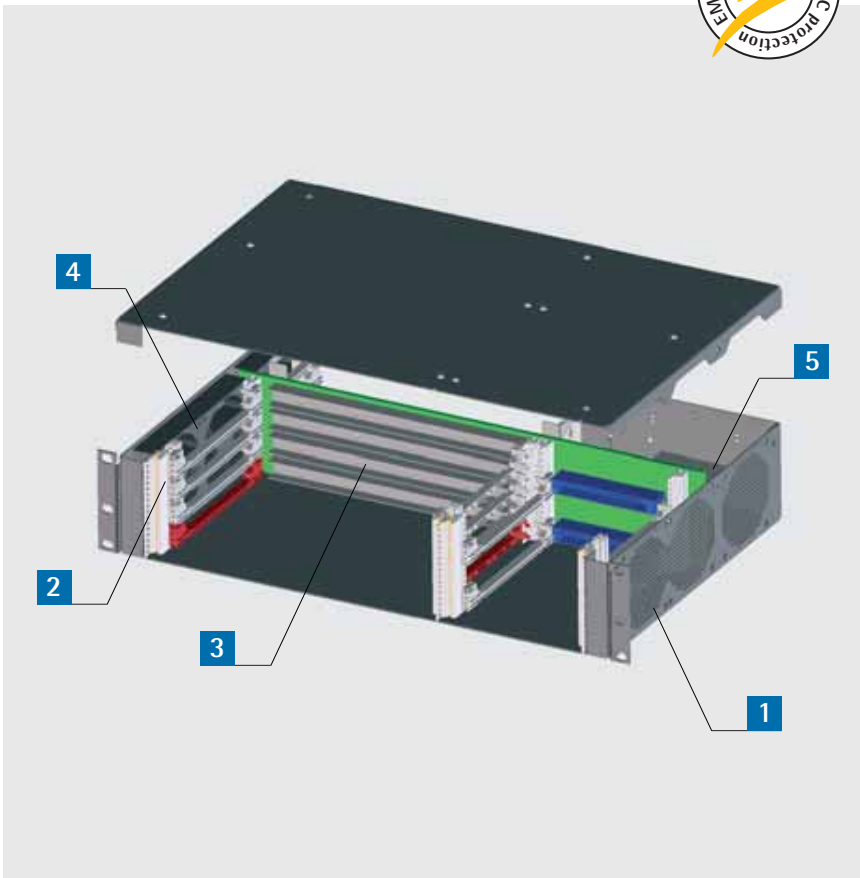- variable cooling solution by the use of up to 6 fans

Dimensions (H x W x D):
88,1 mm x 482,6 mm x 300 mm

Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19″-plug-in unit, EMC-shielded, with Rear I/O Surface: painted RAL 9011 graphite black
2	1	horizontal expansion kit 6 U, 16 HP including IEEE card guides with ESD clips for four slots (6 U, 160 mm depth) at the front and four slots (6 U, 80 mm depth) at the rear
3	1	6 U, 4 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
4	3	DC fan 80 x 80 mm, 12 V, 44,1 cfm, 42 dB(A)
5	1	IEC AC socket with line filter, fuse and on / off switch

Configuration sample

EMC protection

Order information

Part no.
24-5298-00

Note:
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.

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19" packaging system CompactPCI 3 U

- EMC-shielded CompactPCI system integrated in a 19"-subrack
- designed for board assembly with up to eight CompactPCI boards 3 U, 160mm depth at the front and 80mm at the rear
- 3 U, 8 Slot CompactPCI backplane Rev. 3.0, 32 bit, 33 MHz, system slot on the right
- ATX power supply with 300 Watt, wide range input and PFC
- passive heat dissipation of the boards via convection from bottom to top by perforated cover plates

Dimensions (H x W x D):
132,5 mm x 482,6 mm x 276 mm

Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19"-subrack 245, EMC-shielded, with Rear I/O
2	1	vertical expansion kit 3 U including IEEE card guides with ESD clips for eight slots (3 U, 160 mm depth) at the front and eight slots (3 U, 80mm depth) at the rear
3	1	3 U, 8 Slot CompactPCI backplane Rev. 3.0, 32 bit, 33 MHz, system slot on the right PS/2
4	1	ATX power supply with 300 Watt, wide range input and PFC
5	1	front panel 3 U, 16 HP (can be displaced e.g. by a HDD sub-unit)
6		rear panel 3 U, 52 HP

Order information

Part no.
24-5318-60

Note:
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.

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Configuration sample

19″ packaging system CompactPCI 6 U

- EMC-shielded CompactPCI system integrated in a 19″-subrack
- designed for board assembly with up to eight CompactPCI boards 6 U, 160mm depth at the front and 80mm at the rear
- 6 U, 8 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
- prepared for the use of one 19″ CompactPCI power supply 6U, 8 HP
- passive heat dissipation of the boards via convection from bottom to top by perforated cover plates

Dimensions (H x W x D):
265,9 x 482,6 mm x 276 mm

Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19″-subrack 245, EMC-shielded, with Rear I/O
2	1	vertical expansion kit 6 U including IEEE card guides with ESD clips for eight slots (6 U, 160mm depth) at the front and eight slots (6 U, 80mm depth) at the rear
3	1	6 U, 8 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
4	1	front panel 3 U, 32 HP (can be displaced e.g. by drive cassettes)
5	1	front panel 3 U, 12 HP
6	1	rear panel 3 U, 52 HP
7	1	IEC AC socket with line filter, fuse and on / off switch

Note:
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.

Order information

Part no.
24–5618–60

19″ packaging system CompactPCI 7 U

- EMC-shielded CompactPCI system integrated in a 19"-subrack
- EMC-shielded CompactPCI system integrated in a 19"-subrack
- designed for board assembly with up to eight CompactPCI boards 6 U, 160 mm, 220 mm or 280 mm depth at the front
- 6 U, 8 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
- possible power supplies:
  24–5718-X0: ATX power supply with 300 Watt, wide range input and PFC
  24–5718-X5: open frame power supply 900 Watt, wide range input and PFC
- active heat dissipation of the boards via convection from the lower front side up to the rear side
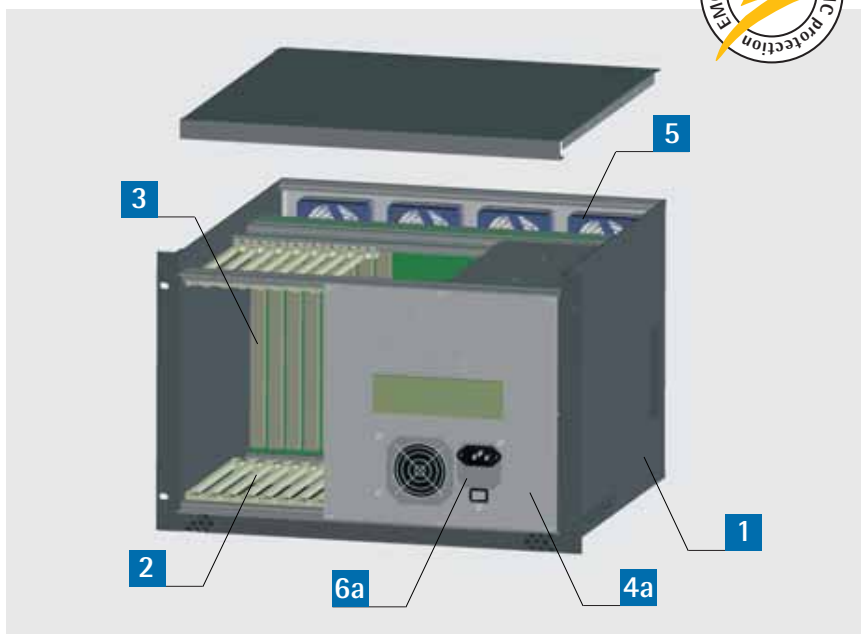
Dimensions (H x W x D):
310,3 x 482,6 mm x 440 mm
Delivery: completely assembled and wired

Configuration sample

Included in Delivery

Item	Pc.	Description
1	1	19"-subrack 245 7U, EMC-shielded, without Rear I/O Surface: painted RAL 9011 graphite black
2	1	vertical expansion kit 6 U including IEEE card guides with ESD clips for eight slots (6 U, 160 mm, 220 mm or 280 mm depth) at the front
3	1	6 U, 8 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
4	1	front panel 3 U, 52 HP at the front side with the possibility to integrate drive cassettes for one 3 1/2" and one 5 1/4" module
4a	1	ATX front panel
4b	1	open frame front panel
5	1	rear panel with four fans 80 x 80 mm, 12 V, 47 cfm, 48 dB(A), elastic mounted
6a	1	ATX power supply with 300 Watt, wide range input and PFC
6b	1	open frame power supply 900 Watt, wide range input and PFC
7	1	DC harness (without fig.)

Order information

Part no.

24-5718-**XY**			
Final digit X: card depth		**Final digit Y: Power supply**	
6	160 mm	0	ATX
7	220 mm	5	Open Frame
8	280 mm		

<u>Note:</u>
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.
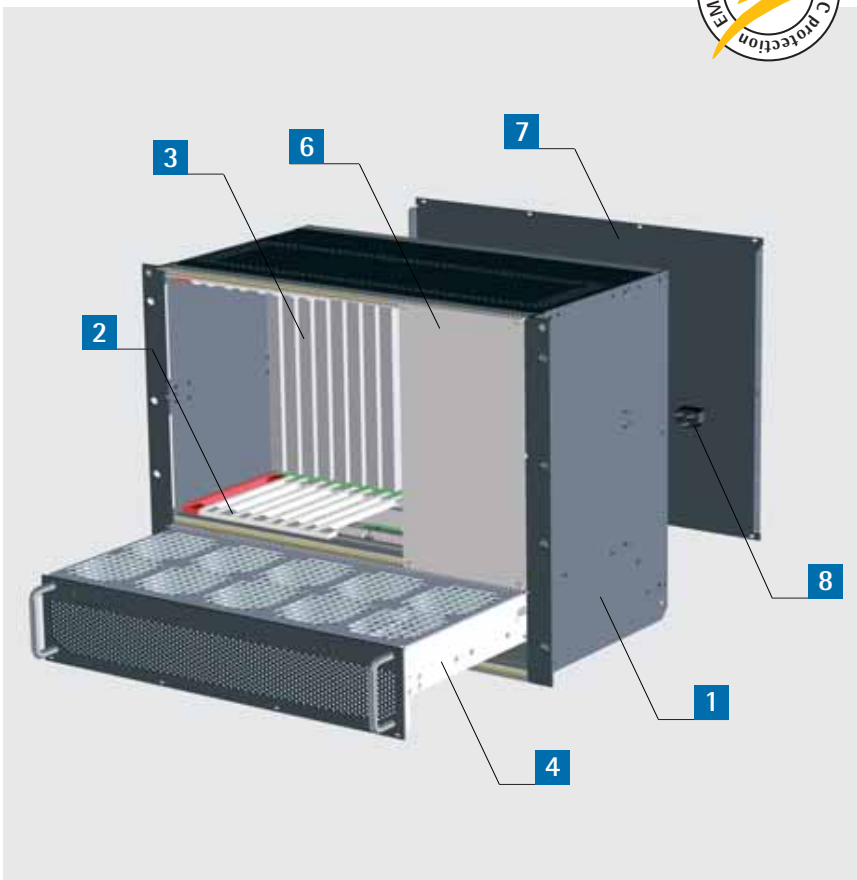
19″ packaging system CompactPCI 6 U

- EMC-shielded CompactPCI system integrated in a 19″-subrack
- designed for board assembly with up to eight CompactPCI boards 6 U, 160mm depth at the front
- 6 U, 8 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
- prepared for the use of one 19″ CompactPCI power supply 6U, 8 HP
- active heat dissipation of the boards via convection from the lower front side up to the top by a pluggable fan tray
- variable cooling solution by the use of up to 10 fans

Dimensions (H x W x D):
354,8 x 482,6 mm x 245 mm

Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19″-subrack 245, EMC-shielded, without Rear I/O Surface: painted RAL 9011 graphite black
2	1	vertical expansion kit 6 U including IEEE card guides with ESD clips for eight slots (6 U, 160 mm depth) at the front
3	1	6 U, 8 Slot CompactPCI backplane Rev. 3.0, 64 bit, 66 MHz, system slot on the left
4	1	fan tray with 5 fans 80 x 80 mm, 12 V, 47 cfm, 48 dB(A) and with detachable air filter
5	1	Integrated LED display for fan alarm at the fan tray (without fig.)
6	1	front panel 6 U, 44 HP
7	1	rear panel
8	1	IEC AC socket with line filter, fuse and on / off switch

Note:
- Also available as VME64x system.
- Depending on your requirements, we will design a customized cooling solution.
- Please ask us for other dimensions or your customized system.

Order information

Part no.
24–5818–60

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19″ desktop system CompactPCI 3 U

- EMC-shielded CompactPCI system integrated in a 19″-desktop enclosure TAMAGO 63 HP
- designed for board assembly with up to eight CompactPCI boards 3 U, 160mm depth at the front and 80mm at the rear
- 3 U, 8 Slot CompactPCI backplane Rev. 3.0, 32 bit, 33 MHz, system slot on the right
- prepared for the use of one 19″ CompactPCI power supply 3U, 8 HP
- active heat dissipation of the boards via convection from bottom to top

Dimensions (H x W x D):
178 mm x 378 mm x 306 mm
Delivery:
completely assembled and wired

Included in Delivery

Item	Pc.	Description
1	1	19″ desk-top enclosure 3U based on enclosure series TAMAGO 285, EMC-shielded, with Rear I/O Surfaces: frame: RAL 5010 gentian blue, top and bottom cover RAL 9011 graphite black
2	1	vertical expansion kit 3 U including IEEE card guides with ESD clips for eight slots (3 U, 160 mm depth) at the front and eight slots (3 U, 80 mm depth) at the rear
3	1	3 U, 8 Slot CompactPCI backplane Rev. 3.0, 32 bit, 33 MHz, system slot on the right
4a	1	front panel 3 U, 7 HP (without fig.)
4b	1	front panel 3 U, 16 HP (without fig.)
5	1	rear panel 3 U, 31 HP (without fig.)
6	3	fan 80 x 80 mm, 12 V, 47 cfm, 48 dB(A), elastic mounted
7	2	handle-bar (optional)
8	1	IEC AC socket with line filter, fuse and on / off switch

Order information

Description	Part no.
without handle-bar	28-5358-60
with handle-bar	28-5358-99

Configuration sample

EMC protection · EMC protection

Accessories

7 Integrated handle-bar

By use of integrated handle-bars in the side wall, the enclosure can be easily handled and transported.
Handles are included in part no – 99

Tip-up and carrying handle

- tip-up angle in 30° increments (can be locked)

Load-carrying capacity: up to 50 kg
Surface: powder coated RAL 9011 graphite black
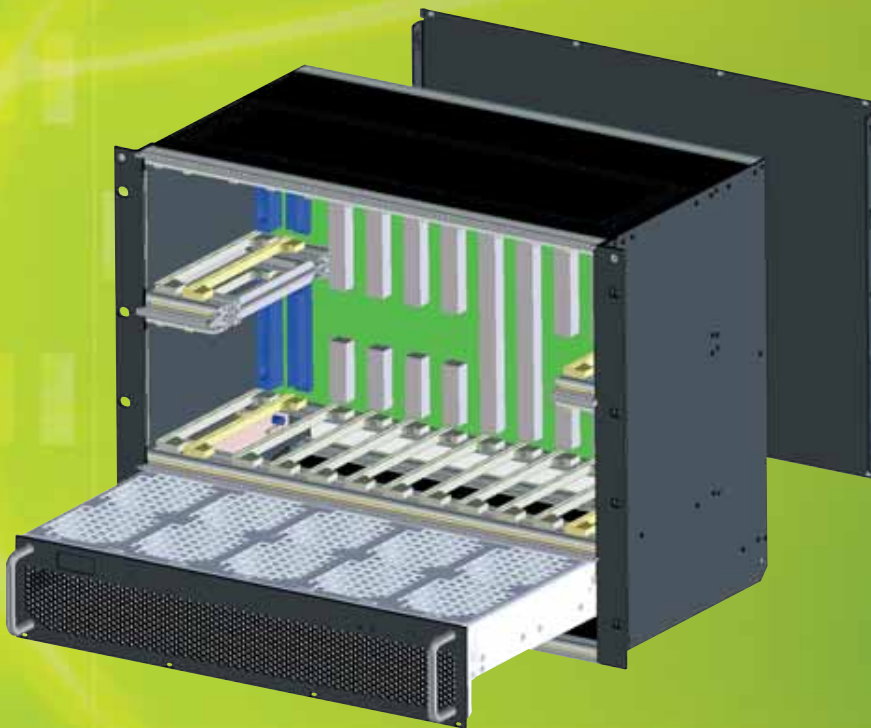
Note: Cannot be used together with handle bar.

Part no.
28-5100-63

Note:
- Also available as VME64x system.
- also available in 84 HP
- Please ask us for other dimensions or your customized system.

System development and system integration with apra-norm

We combine the ideas and requirements of our customers with the know-how of our engineers and develop electronic packaging systems which are more than only a combination of single parts; we design innovative solutions with a solid base of technical specifications and precise workmanship.

VMEbus Technology™

Compact PCI ®

Advanced TCA ™

μTCA ™

Trend: More and more customers get back to their roots and focus on product design and development. They do not have the time and resources to purchase all necessary parts and do the integration work themselves. Instead, they are looking for a reliable partner who is able to offer "plug-and-play" solutions from one hand. With such a partner, they not only safe the time for system development and sourcing for necessary components – they can focus on their key know-how and work.

Development of optimized systems: Apra-norm engineers develop together with their customers complete systems which are optimized for customers requirements. Our extensive know-how combined with the huge variation of manufacturing processes of the apra-group is an optimum base for perfectly engineered products.

Final solutions are optimized combinations of a wide range of mechanical and electromechanical components. Based on our experience and actual standards of EMC-protection, shock and vibration and thermal requirements, apra-norm develops intelligent and cost reduced solutions.

Our high grade of flexibility and our open minds for customers ideas, requirements and needs are a guarantee for the "perfect shell for valuable electronics".