CONNECT AND PROTECT

VME, VME64X, VXS, VPX

may DISTRIBUTION

nVent SCHROFF

Systems – VME, VME64x, VXS, VPX

OVERVIEW

MAIN KATALOG

Cabinets 1

Wall mounted cases 2

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Front panels, plug-in units 7

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Connectors, front panel component system 11

Appendix 12

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WHAT WE UNDERSTAND TO BE A SYSTEM

We at SCHROFF regard a system as being a combination of mechanical components like a subrack or case with electronic components such as a backplane and power supply unit, a cooling unit where appropriate and a system management module.

A STRONG STANDARD RANGE

Our extensive and highly-developed standard range offers you mechanical, electronic and thermal components in an almost unlimited variety of dimensions and specifications. Simply select a complete ready system or configure your system from our standard components, online or using the catalogue, to your exact requirements.

FLEXIBILITY FOR MODIFICATIONS

Often only small adjustments are needed to create the required solution from a standard product. And we have set ourselves up to offer just that. We can make modifications in accordance with your individual specifications - with our usual speed and reliability.

COMPETENT WITH NEW DEVELOPMENTS

If your requirements cannot be met with standard products or modified standard solutions, our qualified and experienced team will create a customised solution for your system. We have all the necessary development and manufacturing competencies gathered under one roof.

STANDARDS/CERTIFICATIONS

- Inner and outer dimensions in accordance with:
  IEC 60297-3-101 / IEEE 1101.1
  IEC 60297-3-102 / IEEE 1101.10/11
  IEC 60297-3-103
- Ingress protection IP 20 in accordance with IEC 60529
- EMC testing in accordance with IEC 61587-3
- In accordance with VITA 1-1994 and VITA 1.1-1997

MEMBER VITA
Open Standards, Open Markets

AREAS OF APPLICATION

- Measurement, control and instrumentation technology
- Automation technology, machine monitoring
- Aerospace
- Defence technology
- Medical technology
- Test systems

Systems – VME, VME64x, VXS, VPX

OVERVIEW

Overview 8.88

CHASSIS AND TOWER SYSTEMS

- **STANDARD SYSTEMS FROM STOCK**
- **INDIVIDUAL CONFIGURATION WITHIN 9 WORKING DAYS**
- **ROBUST MECHANICS, EFFECTIVE HEAT DISSIPATION AND EMC SHIELDING**

10002001

VME SUBRACK SYSTEMS

- 3 ... 8 U subrack systems, aluminium, silver
- With fan control module (FCM) for fan monitoring and control

VME subrack systems
3 U, 5 slot 8.90
4 U, 8 slot 8.91
7 U, 12 slot 8.92
8 U, 21 slot 8.93

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VME64X SUBRACK SYSTEMS

- Subrack systems
  - 1, 2 U, steel, black (RAL 9005)
  - 3 ... 10 U, aluminium, silver
- With fan control module (FCM) for fan monitoring and control

VME64x subrack systems
1 U, 2 slot 8.95
2 U, 4 slot 8.96
4 U, 8 slot 8.97
7 U, 12 slot 8.98
8 U, 21 slot 8.99
10 U, 21 slot 8.101

10005004

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VME64x VXS

VME64X/VXS TOWER SYSTEMS

- Tower systems, aluminium, RAL 9006, RAL 7016
- With fan control module (FCM) for air monitoring and control
- Chassis suitable for use as a test system

VME64x tower systems
7 slot without rear I/O 8.102
7 slot with rear I/O 8.103

VXS tower system
7 slot with rear I/O 8.104

10011001

VPX CASE SYSTEM

- Case system, 4 U, RAL 9006, RAL 7016
- Well suited as test system

VPX case system
4 U, 5 slot 8.105

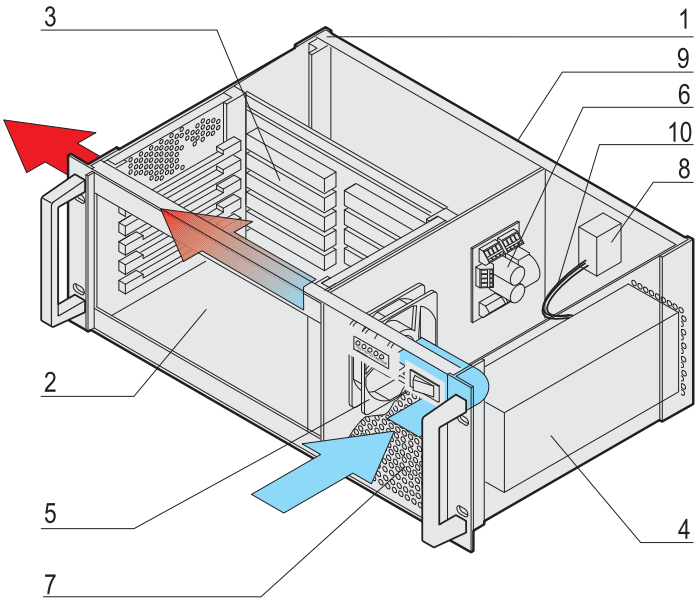
SERVICEPLUS

e.g. individual configuration and assembly
e.g. modifications (integration)
e.g. downloads (CAD drawings, user manuals, test reports)
e.g. custom solutions

Systems – VME subrack systems

3 U, 5 SLOT

10002004



10002050

MEMBER VITA

30402059

- System for horizontal board mounting with board format
  - Front: 6 U, 160 mm deep
- Backplane VME
  - 5 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 250 W
- Heat dissipation by 1 fan, from front to left; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated side panels and front handles (RAL 7016)
2	5	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal board mounting (6 U, 160 mm deep)
3	1	Backplane VME for 6 U boards, 5 slots, J1/J2 monolithic (part no. 23001-065)
4	1	Power supply unit, open frame; 250 W (part no.11098-316)
5	1	Fan; temperature-dependent speed control
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
7	1	Front panel, perforated, 3 U; display module; mains switch
8	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
9	1	Rear panel, Al
10	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
3	132.55	277.5	5	**20836-310**
Accessories				
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

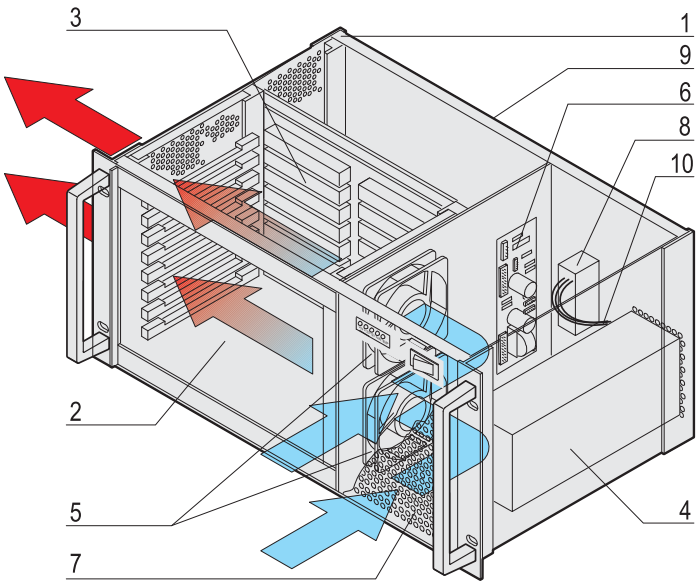
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
  Backplane konform zu VITA 1.1-1994

Systems – VME subrack systems

4 U, 8 SLOT

10002001



10006050

MEMBER VITA

30402059

- System for horizontal board mounting with board format
  - Front: 6 U, 160 mm deep
- Backplane VME
  - 8 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by 2 fans, from front to left; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated side panels; front handles (RAL 7016)
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal board mounting (6 U, 160 mm deep)
3	1	Backplane VME for 6 U boards, 8 slots, J1/J2 monolithic (part no. 23001-068)
4	1	Power supply unit, open frame; 444 W (400 W at < 180 V_{AC}; part no. 11098-267)
5	2	Fan; temperature-dependent speed control
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
7	1	Front panel, perforated, 4 U; display module; mains switch
8	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
9	1	Rear panel, Al
10	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
4	177	277.5	8	**20836-415**
Accessories				
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

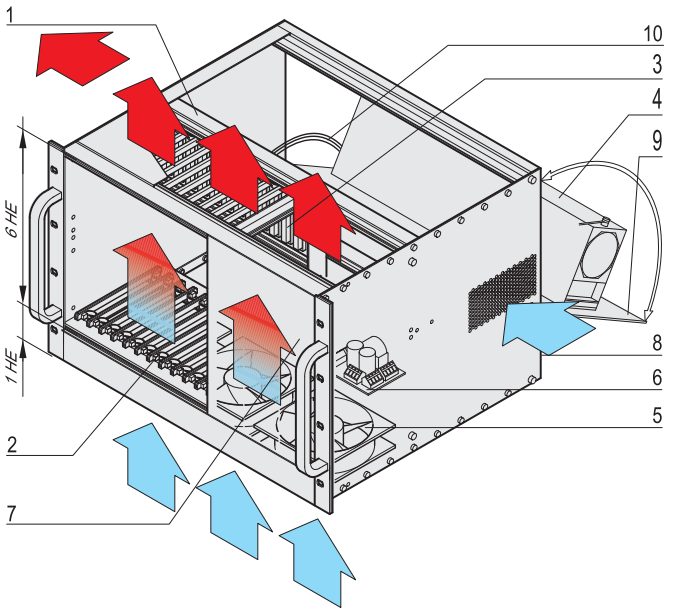
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
  Backplane konform zu VITA 1.1-1994

Systems – VME subrack systems

7 U, 12 SLOT

10002003



10002054

1 HE = 1 U

MEMBER VITA

30402059

- System for vertical board mounting with board format
  - Front: 6 U, 160 mm deep
- Backplane VME
  - 12 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by pull-out hot-swap fan unit, from bottom to top; filter mat; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" bracket, with plain top cover and base plate (RAL 9006); front handles (RAL 7016)
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	1	Backplane VME for 6 U boards, 12 slots, J1/J2 monolithic (part no. 23001-072)
4	1	Power supply unit, open frame; 444 W (400 W at < 180 V_{AC}; part no. 11098-267)
5	1	Hot-swap fan tray with 3 fans, pull-out, 1 U; air filter; temperature-dependent speed control
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-028)
7	1	Front panel 6 U, 36 HP
8	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse, mains switch
9	1	Rear panel, hinged, Al, 6 U, 84 HP
10	1	Cable harness to connect all system components

ORDER INFORMATION

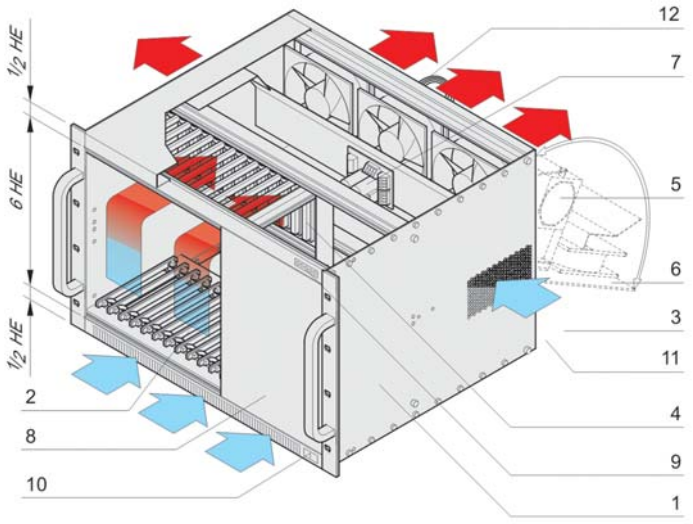
Height U	Height mm	Depth mm	Number of slots	Part no.
7 (1 + 6)	310.35	355	12	20836-715
Accessories				
Air filter consisting of filter holder and filter mat, PU 1 set				**24579-033**
Backplanes				**Page 10.15**
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
  Backplane konform zu VITA 1.1-1994

7 U, 12 SLOT, FOR TRANSITION MODULES

10002002



30402059

- System for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear: 6 U, 12 HP, 80 mm deep; for transition modules
- Backplane VME
  - 12 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by 3 fans, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" bracket, plain top cover and base plate (RAL 9006); front handles (RAL 7016)
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical mounting of transition module (6 U, 80 mm deep) covered with EMC front panel 6 U / 12 HP
4	1	Backplane VME for 6 U boards, 12 slots, J1/J2 monolithic (part no. 23001-072)
5	1	Power supply unit, open frame; 444 W (400 W at < 180 V_{AC}; part no. 11098-267)
6	3	Fan; rear panel, hinged, 5 U, 84 HP; temperature-dependent speed control
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel 6 U, 36 HP
9	1	Display module
10	1	Mains switch
11	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
12	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
7 (1/2 + 6 + 1/2)	310.35	355	12	20836-716

Accessories

Backplanes	**Page 10.15**
Equipment cables	**Page 3.38**
Front panels	**Page 7.5**
Modules to mount drive units	**Page 8.110**
Front panels with handle	**Page 7.18**
Fan control modules (FCM)	**Page 8.108**

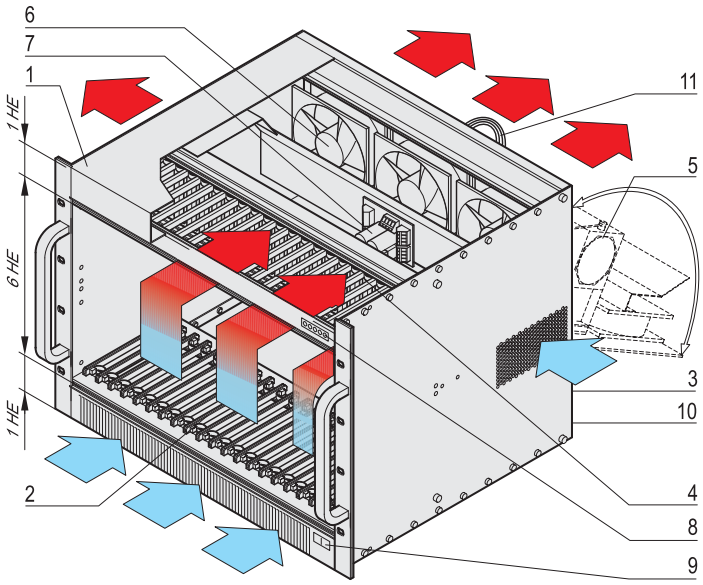
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
  Backplane konform zu VITA 1.1-1994

Systems – VME subrack systems

8 U, 21 SLOT

10002005



10002058

1 HE = 1 U

MEMBER VITA

30402059

- System for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear: 6 U, 12 HP, 80 mm deep; for transition modules
- Backplane VME
  - 21 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 744 W (600 W at < 180 V_{AC})
- Heat dissipation by 3 fans, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" bracket, plain top cover and base plate (RAL 9006); front handles (RAL 7016)
2	21	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical mounting of transition module (6 U, 80 mm deep) covered with EMC front panel 6 U/12 HP
4	1	Backplane VME for 6 U boards, 21 slots, J1/J2 monolithic (part no. 23001-081)
5	1	Power supply unit, open frame; 744 W (600 W at < 180 V_{AC}; part no. 11098-140)
6	3	Fan; rear panel, hinged, 5 U, 84 HP; temperature-dependent speed control
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Display module
9	1	Mains switch
10	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
11	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
8 (1 + 6 + 1)	354.8	355	21	**20836-815**
Accessories				
Backplanes				**Page 10.15**
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

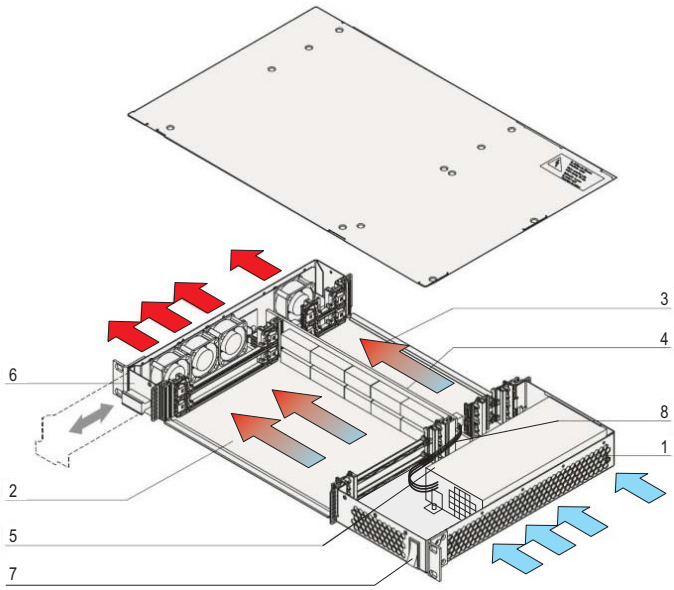
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
  Backplane konform zu VITA 1.1-1994

System – VME64x subrack systems

1 U, 2 SLOT, WITH REAR I/O

10005003



12304055

MEMBER VITA

30402059

- System for horizontal board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
  - 2 slot, 6 U, with P0 plug
- ATX PSU, 250 W
- Heat dissipation by pull-out hot-swap fan unit, from right to left
- Fan monitoring and voltage display

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, steel plate, black powder-coated (RAL 9005)
2	2	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep)
3	2	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 2 slot, with P0 plug, with connector plug for fan unit and ATX PSU
5	1	ATX power supply; 250 W; wide range input 100 ... 240 V_{AC}, output 3.3 V/14 A, 5 V/23 A, 12 V/16 A, -12 V/0.5 A; with IEC connector; mains switch; fan
6	1	Hot-swap fan unit with 4 fans; incl. fan monitoring and voltage display
7	1	DC switch (with LED), switches off only the DC output of the power supply unit, power ON
8	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
1	44.45	277.5	2	**20836-145**

Accessories	
Equipment cables	**Page 3.38**
Front panels	**Page 7.5**
Modules to mount drive units	**Page 8.110**
Front panels with handle	**Page 7.18**

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

System – VME64x subrack systems

2 U, 4 SLOT, WITH REAR I/O

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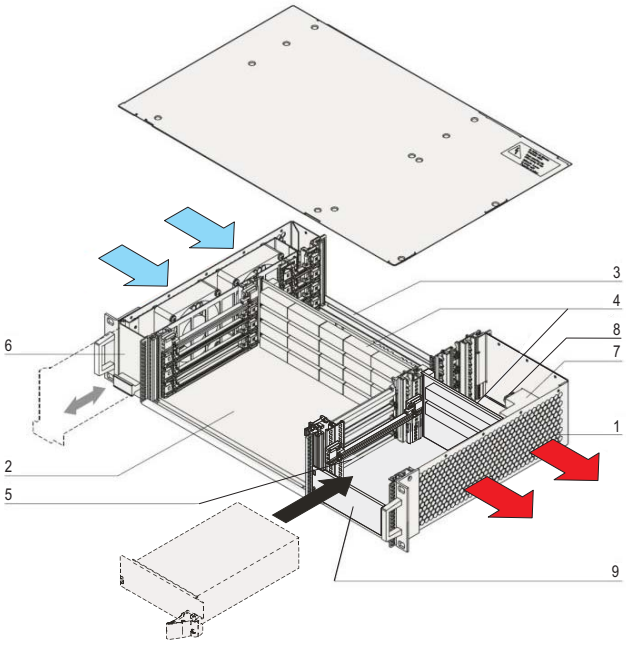

12304057

MEMBER VITA

30402059

- System for horizontal board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
  - 4 slot, 6 U, with P0 plug
- Power backplane to PICMG 2.11 (P 47), prepared for installation of two 19" compatible PSUs, 250 W (3 U, 8 HP)
- Heat dissipation by pull-out hot-swap fan unit, from left to right
- Fan monitoring and voltage display

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, steel plate, black powder-coated (RAL 9005)
2	4	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep)
3	4	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 4 slots, with P0 plug (part no. 23001-534), power backplane, 2 x P47 plug (part no. 23098-115)
5	1	Installation space 3 U, 8 HP for two 19" compatible PSUs
6	1	Hot-swap fan unit with 2 fans (12 V_{DC}); incl. fan monitoring and voltage display
7	1	AC mains input module (IEC 320-C14 plug, mains filter, mains switch, mains fuse)
8	1	Cable harness to connect all system components
9	1	3 U, 8 HP front panel, front mounted

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
2	88.1	277.5	4	20836-245
Accessories				
19" compatible power supply, 250 W, 3 U, 8 HP Technical data see page 9.23				**13100-141**
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11;
  backplane conforms to VITA 1.1-1997

System – VME64x subrack systems

4 U, 8 SLOT, WITH REAR I/O

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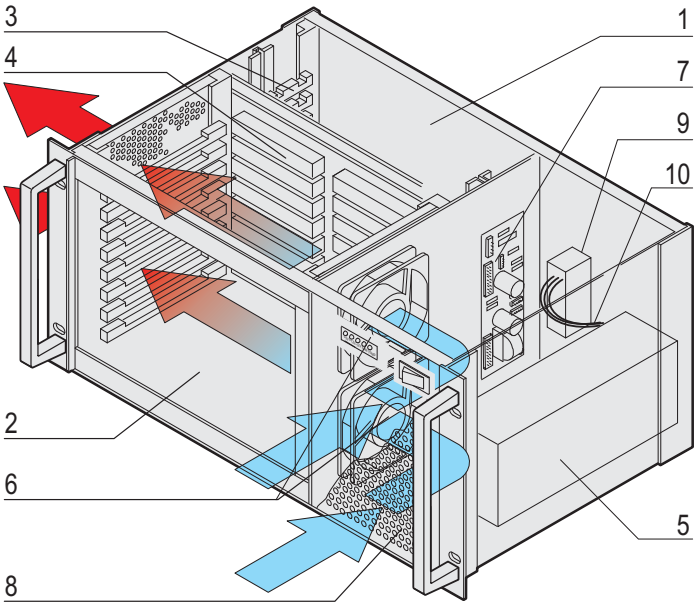


10002052

MEMBER VITA

30402059

- System for horizontal board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
  - 8 slot, 6 U, without P0 plug
- PSU, open frame, 560 W (400 W at < 180 V_{AC})
- Heat dissipation by fan, from front to left
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated side panels and front handles (RAL 7016)
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 8 slots, without P0 plug (part no. 23001-508)
5	1	Power supply unit, open frame; 560 W (400 W at < 180 V_{AC}; part no. 11098-212)
6	2	Fan; temperature-dependent speed control
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel with ventilation openings, 4 U; display module, mains switch
9	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
10	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
4	177	277.5	8	**20836-416**
Accessories				
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

Note

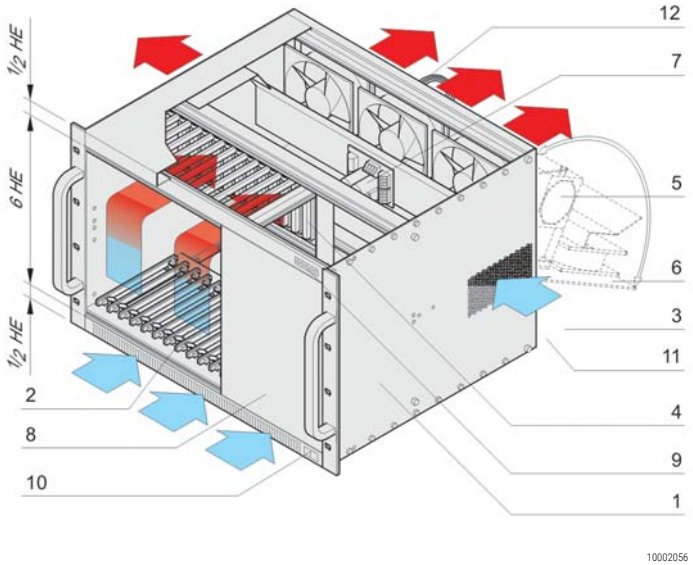
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11;
  backplane conforms to VITA 1.1-1997

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

System – VME64x subrack systems

7 U, 12 SLOT, WITH REAR I/O

10002007



10002056

1 HE = 1 U

MEMBER VITA

30402059

- System for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear: 6 U, for 3 transition modules
- Backplane VME64x
  - 12 slot, 6 U, without P0 plug
- PSU, open frame, 642 W (600 W at < 180 V_{AC})
- Heat dissipation by fan, from front to rear
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; with plain top cover and base plate (RAL 9006); front handle (RAL 7016); 19" bracket
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	3	Rear slot; for transition modules, for vertical board mounting (6 U, 4 HP)
4	1	Backplane VME64x for 6 U boards, 12 slots, without P0 plug (part no. 23001-512)
5	1	Power supply unit, open frame; 642 W (600 W at < 180 V_{AC}; part no. 11098-207)
6	3	Fan; on hinged rear panel; speed control 5 U, 84 HP
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel 6 U, 36 HP;
9	1	Display module
10	1	Mains switch
11	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
12	1	Front panel at rear with textile EMC gasket, 6 U, 12 HP
13	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
7 (1/2+6+1/2)	310.35	355	12	**20836-717**
Accessories				
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

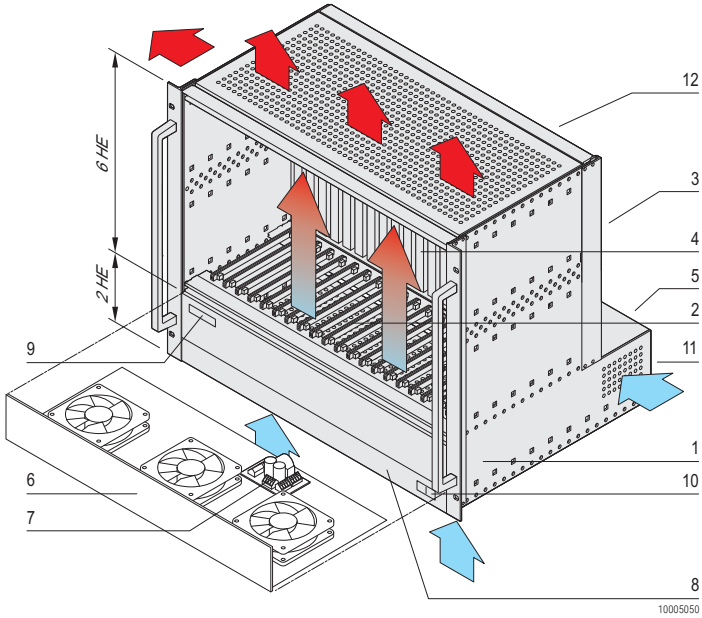
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11;
  backplane conforms to VITA 1.1-1997

System – VME64x subrack systems

8 U, 21 SLOT, WITH REAR I/O

10005001



10005050

1 HE = 1 U

MEMBER VITA

30402059

- System for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
  - 21 slot, 6 U, with P0 plug
- PSU, open frame, 642 W (600 W at < 180 V_{AC})
- Heat dissipation by pull-out fan unit, from bottom to top; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated top cover and base plate; front handles (RAL 7016), 19" bracket, front panels (RAL 9006)
2	21	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	21	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 21 slots, with P0 plug (part no. 23001-551)
5	1	Power supply unit, open frame; 642 W (600 W at< 180 V_{AC}; part no. 11098-207)
6	1	Fan unit with 3 fans, 1.5 U (24 V_{DC}, 250 m³/h each, 148 cfm); temperature-dependent speed control; filter mat
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-028)
8	1	Front panel 0,5 U, 84 HP;
9	1	Display module
10	1	Mains switch
11	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
12	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
8	354.8	412	21	20836-820
Accessories				

Equipment cables	**Page 3.38**
Front panels	**Page 7.5**
Modules to mount drive units	**Page 8.110**
Front panels with handle	**Page 7.18**
Fan control modules (FCM)	**Page 8.108**

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

System – VME64x subrack systems

VME64X RUGGED SYSTEM 10 U, 12 SLOT

10019002

10019001

10019003

10019004

- 10 U system, 84 HP, 490 mm depth
- For rugged applications with increased shock and vibration resistance
- Based mechanically on the Sschroff subrack EuropacPRO type "R"
- Space for up to two pluggable 6 U power supplies, one 6 U power supply included
- 24 V_{DC} input on the back, main switch on the front of the housing
- LED voltage indicator on the front
- 6 U I / O card cage, front and back, with 12-slot VME64x backplane
- Optional mounted telescopic rails
- Optimal EMC protection through hinged front panel and rear with integrated Honeycomp filter

DELIVERY INCLUDES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" angle, closed top and bottom plate; front handles; hinged front panel; hinged rear panel; Honeycombfilter; recessed front and rear board cage
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front bottom), for vertical board mounting (6 U, 160 mm deep)
3	12	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VME64x backplane for 6 U boards, 12 Slot, Monolithic with P0 (Part no. 23001-542)
5	1	Power-Backplane for 6 U plug-in power supplies (Part no. 23098-394)
6	1	Plug-in power supplies, 6 U, 8 HP; 500 W (Part no. 13100-145)
7	3	Fan unit, exchangeable from the front; temperature-dependent speed control
8	1	Fan control module (FCM2) for fan monitoring/regulating (Part no. 23207-140)
9	1	Display module
10	1	Main switch, front side
11	1	DC mains input (IEC 320-C14 connector), mains filter, mains fuse
12	1	Cable harness to connect all system components
13	1	User manaul

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
10	443.7	490	12	20836-280
Accessories				
AC/DC switched mode power supply Quad, 500 W 3.3V / 5V / 12V / -12V 500 W with CPCI signalling				13100-145

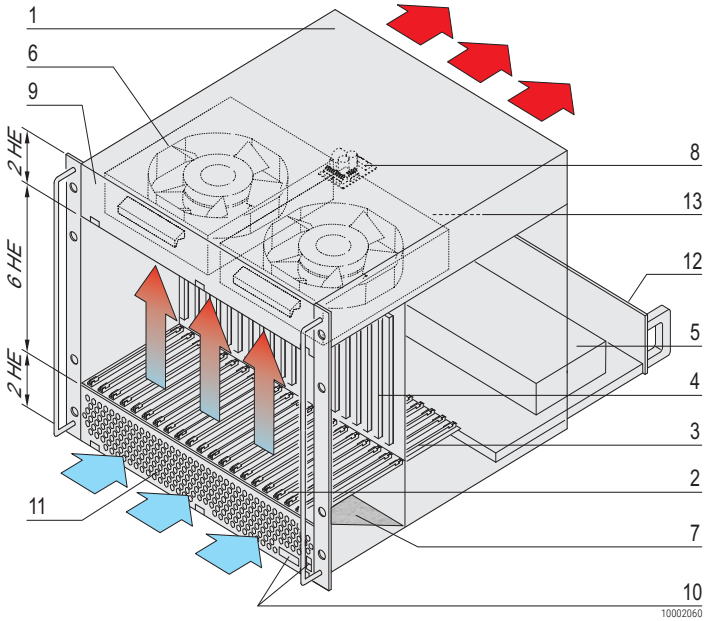
NOTE

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11;
  backplane conforms to VITA 1.1-1997

System – VME64x subrack systems

10 U, 21 SLOT, WITH REAR I/O

10002010



10002060

1 HE = 1 U

MEMBER VITA

30402059

- System for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
  - 21 slot, 6+1 U, with P0 plug
- PSU, open frame, 1000 W
- Heat dissipation by 2 pull-out fan units, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with plain top cover and base plate; front handles (RAL 7016), 19" bracket, front panels (RAL 9006)
2	21	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	21	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VME64x backplane for 6 U boards + 1 U, 21 slots, with P0 connector
5	1	Power supply unit, open frame; 1000 W; wide range input, 100 ... 240 V_{AC} output 3.3 V/60 A, 5 V/120 A, 12 V/17 A, -12 V/17 A; mounted fan
6	2	Fan module with speed-controlled radial fan (500 m³/h = 295 cfm each) for ventilation of boards; mounted behind hinged front panel (2 U)
7	1	Air filter
8	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
9	1	Front panel, hinged, 2 U, 84 HP
10	1	Display module; mains switch, DC
11	1	Front panel, hinged, perforated, 2 U, 84 HP
12	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
13	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Depth mm	Number of slots	Part no.
10	443.7	456.5	21	**20836-220**
Accessories				
Fan module 1 piece				20836-855
Chassis Monitoring Module (CMM) for monitoring of voltage, temperature and digital inputs, 1 kit				20836-223
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

Note

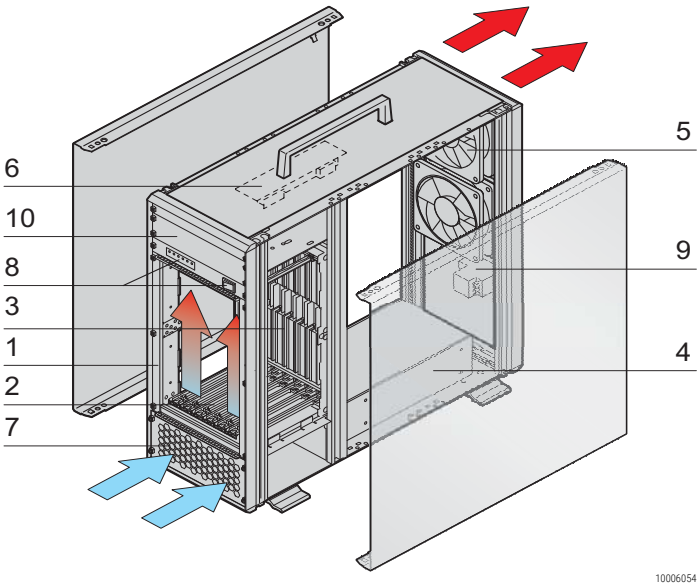
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

Part number in bold face type: ready for shipping within 2 working days
Part number in normal type: ready for shipping within 10 working days

System – VME64x Tower systems

7 SLOT, WITHOUT REAR I/O

10005002



10006054

MEMBER VITA

30402059

- Tower system for vertical board mounting with board format
  - Front: 6 U, 160 mm deep
- Backplane VME64x
  - 7 slot, 6 U, without P0 plug
- PSU, open frame, 560 W (400 W at < 180 V_{AC})
- Heat dissipation by 2 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan alarm
- Option to mount a 5.25" DVD drive unit

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Tower system based on ratiopacPRO case, shielded, 500 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016
2	7	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	1	Backplane VME64x for 6 U boards, 7 slots, without P0 plug (part no. 23001-507)
4	1	Power supply unit, open frame; 560 W (400 W at < 180 V_{AC}; part no. 11098-212)
5	2	Fan; speed-controlled; for ventilation of boards
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
7	1	Front panel, perforated, 4 U
8	1	Display module; mains switch
9	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
10	1	Module to accomodate a 5.25" DVD drive unit
11	1	Cable harness to connect all system components

ORDER INFORMATION

Height mm	Width mm	Depth mm	Number of slots	Part no.
496.25	177.00	500	7	10836-050
Accessories				
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

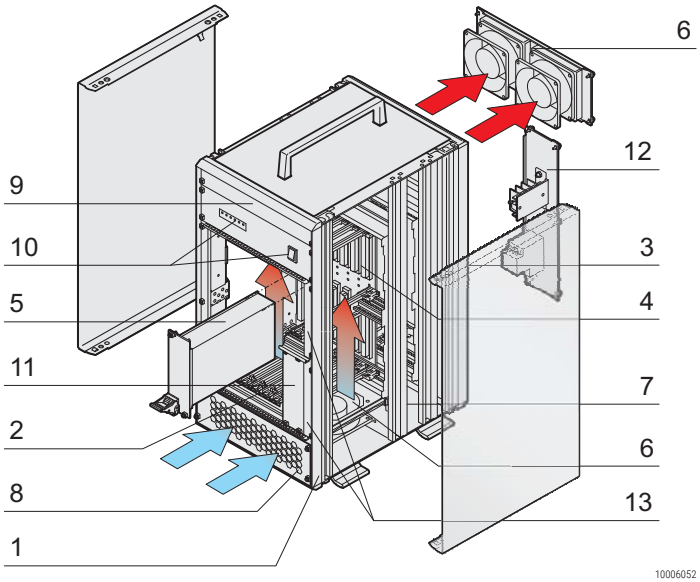
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

System – VME64x Tower systems

7 SLOT, WITH REAR I/O

10005004



10006052

MEMBER VITA

30402059

- Tower system for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
  - 7 slot, 6 U, without P0 plug
- PSU, 19" compatible, 250 W;
  a second PSU can optionally be fitted
- Heat dissipation by 4 fans, from front to rear;
  temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan and temperature alarm
- Option to mount a 5.25" DVD drive unit

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Tower system based on ratiopacPRO case, shielded, 300 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016
2	7	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	7	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VME64x backplane for 6 U boards, 7 slots, without P0 connector
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. 13100-141)
6	4	Fan; speed-controlled; for ventilation of boards
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel, perforated, 5 U
9	1	Module to accomodate a 5.25" DVD drive unit
10	1	Display module; mains switch
11	1	Front panel 3 U, 8 HP; removable, to allow fitting of a further chassis power supply unit
12	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
13	2	Front panel 3 U, 4 HP;
14	1	Cable harness to connect all system components

ORDER INFORMATION

Height mm	Width mm	Depth mm	Number of slots	Part no.
496.25	221.45	300	7	**10836-045**
Accessories				
19" compatible power supply, 250 W, 3 U, 8 HP 1 piece, technical data see page 9.22				**13100-141**
Air filter kit 1 piece				20836-235
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**
Fan control modules (FCM)				**Page 8.108**

Note

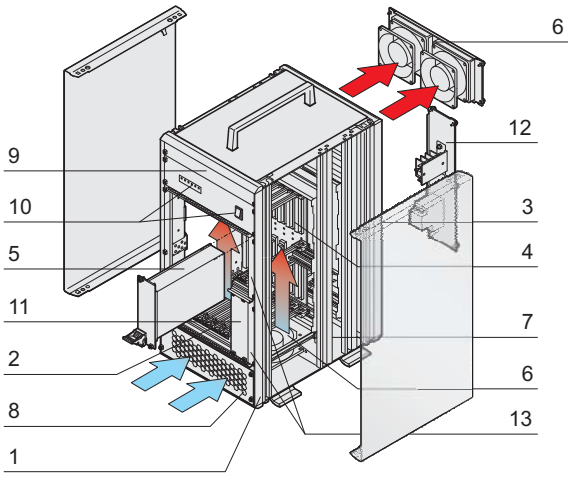
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11;
  backplane conforms to VITA 1.1-1997

Part number in bold face type: ready for shipping within 2 working days
Part number in normal type: ready for shipping within 10 working days

Systems – VXS (VITA 41) Tower systems

7 SLOT, WITH REAR I/O

10006002



10006052

VXS

30407001

- Tower system for vertical board mounting with board formats
  - Front: 6 U, 160 mm deep
  - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VXS/VME64x
  - 4 slot VME64x, 6 U, with P0 plug
  - 3 x VXS payload slots connected as ring
- PSU, 19" compatible, 250 W;
  a second PSU can optionally be fitted
- Heat dissipation by 4 fans, from front to rear;
  temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan and temperature alarm
- Option of fitting a 5.25" DVD drive unit

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Tower system based on ratiopacPRO case, shielded, 300 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016
2	7	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	7	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VXS backplane, 3 slots VME64x, 4 slot; for 6 U boards; with P0 connector; 3 x VXS payload slots, ring connected (part no. 23001-701)
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. 13100-141)
6	4	Fan; speed-controlled; for ventilation of boards
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel, perforated, 5 U
9	1	Module to accomodate a 5.25" DVD drive unit
10	1	Display module; mains switch
11	1	Front panel 3 U, 8 HP; for fitting a further plug-in power supply
12	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
13	2	Front panel 3 U, 4 HP;
14	1	Cable harness to connect all system components

ORDER INFORMATION

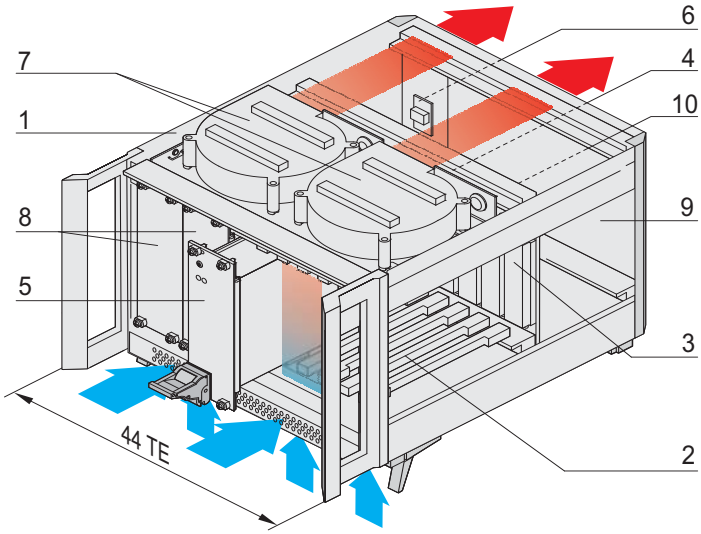
Height mm	Width mm	Depth mm	Number of slots	Part no.
496.25	221.45	300	7	10836-060
Accessories				
19" compatible power supply, 250 W, 3 U, 8 HP 1 piece, technical data page 9.22				**13100-141**
Air filter kit 1 piece				20836-235
Equipment cables				**Page 3.38**
Front panels				**Page 7.5**
Modules to mount drive units				**Page 8.110**
Front panels with handle				**Page 7.18**

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
- Backplane, conforms to VITA 41.0, -41.1, -41.10, -41.11

VPX CASE SYSTEM, 4 U, 5 SLOTS, WITH/WITHOUT REAR I/O

10011001



10011050

MEMBER VITA
Open Standards, Open Markets

- System for vertical board mounting with board format 3 U, 160 mm deep
- VPX backplane, in accordance with VITA 46, 5 slot, 3 U, 0.8" pitch, full mesh topology
- 19" PSU, 250 W, 3 U, 8 HP (further PSU optional)
- Heat dissipation by 2 radial fans, from front to rear

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/ exhaust openings front and rear; front handles RAL 7016
2	5	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (3 U, 160 mm deep)
2a	5	Slot at rear (only with rear I/O version): IEEE guide rails, incl. ESD clips (ESD clips assembled at bottom), for vertical rear I/O boards (3 U, 80 mm deep)
3	1	Backplane for 3 U boards; 5 slot VPX, full mesh topology
4	1	Power backplane, 3 U, 8 HP with 2 x P47 connector
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. 13100-141)
6	1	AC input module, rear, 3 U, 8 HP 110 ... 250 V_{AC}, 50 ... 60 HZ, max. current 10 A; AC line filter, switch, fuse
7	2	Radial fan, 36 m^3/h each, free blowing
8	2	Front panel, front, 3 U, 8 HP
9	1	Front panel, rear, 3 U, 36 HP
10	1	Cable harness to connect all system components

ORDER INFORMATION

Height U	Height mm	Width HP	Depth mm	Number of slots	Version	Part no.
4	177	44	275	5	Without rear I/O	**20836-444**
4	177	44	275	5	With rear I/O	20836-447

Accessories

Equipment cables	**Page 3.38**
Front panels	**Page 7.5**
Modules to mount drive units	**Page 8.108**
Front panels with handle	**Page 7.18**
Fan control modules (FCM)	**Page 8.106**

Note

- Modified systems available on request

Part number in bold face type: ready for shipping within 2 working days
Part number in normal type: ready for shipping within 10 working days

Systems – ServicePLUS

APPLICATION EXAMPLES

12908007

- Hybrid system, modification of a MicroTCA single-module board cage into a 3 U chassis to DIN EN 60297

12908005

- MicroTCA system, 1 U for 6 single mid-size AMC modules; power supply, increased air inlet and exhaust area with inwardly curved side panels

12909001

- MicroTCA chassis with hot-swap fan unit and power supply

12309002

- CompactPCI chassis with hot-swap fan unit and custom finishing

12309001

- CompactPCI chassis with 48 V_{DC} power supply

12709003

- 2 slot, 2 U AdvancedTCA chassis with custom colour