



Variable Chassis Drawer / Variable Stand Alone

The versatile VCD/VSA chassis are available in black or silver with a variety of options, including hinged panels and a fully adjustable card cage. The VCD/VSA models permit conversion from the rack to the desktop and

facilitate machining as a result of flat-panel construction.

## VCD KITS

The Variable Chassis Drawer rackmount kit offers larger interior working space with its sturdy 12-piece frame construction.

## VSA KITS

The Variable Stand Alone kit is a desktop-designed chassis consisting of the same construction as the VCD kit.



## VCD KITS STANDARD PARTS

### Variable Chassis Drawer (VCD)

These components are the standard parts used in our VCD series. Each part is outlined on the following pages along with various options for customizing your enclosure.

*Components include:*

- SFP Standard Front Panel
- SSP Structural Side Panels
- T/BC Top/Bottom Covers
- TPF Twelve Piece Frame
- RFBOBP Rear Panel
- DCH Die Cast Handles

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## KIT SELECTION



### HOW TO ORDER BY KIT

Although the scheme for ordering kits initially may seem complex and daunting, it effectively conveys a variety of kit options. We're confident that you'll quickly get the hang of our alphabetic and numeric acronyms.

1. Rackmount or Stand Alone? If rackmount, start your kit code with the letters VCD (Variable Chassis Drawer). If stand alone, start with the letters VSA (Variable Stand Alone).
2. What height? Choose any of the EIA panel heights from 3.47" to 13.97". Translate to the whole-number code 3, 5, 7, 8, 10, 12 or 14. Add a dash before the number and a letter H after it. Example: Your kit code could become VCD-10H.
3. What front-to-back depth? Choose any of the four depths — 10,13,17 or 22 inches. Add a dash and the letter D for Depth. Your kit develops: VCD-10H-17D.
4. What color selection? Components are available in clear-coated brushed aluminum or black anodized. Combinations may be utilized to achieve a two-tone effect. Example of codes: CF/H=Clear Frame & Handles, BF/H=Black Frame & Handles, CP=Clear Panels, BP=Black Panels.

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## DESIGNATING KIT SUBSTITUTIONS & DELETIONS

- *The addition of the following codes to VCD/VSA part numbers permits enclosure modification.*

- BHFP: Substitute Bottom-Hinged Front Panel in place of an SFP Standard Front Panel.
- OFF: If kit is a VSA, the RFBOBP, Recessed Front Panel, is replaced by an OFF, Outside Front Panel.
- NH: No Handles.
- NFP: No Front Panel. Other parts may be omitted by using their part codes with an N in front.

- *Kit dash codes for TOP/BOTTOM COVER Substitutions*

- 1:T/BC.OTP: One Top/Bottom Cover, One Third Perforated, replaces one of the T/BC.P fully Perforated covers on the VCD.
  - 2:T/BC.OTP: Replaces both covers on the VCD.
  - 1:T/BC.NP: One Top/Bottom Cover, Non-Perforated, replaces one of the T/BC.P fully Perforated covers on the VCD or one of the T/BC.OTP One-Third Perforated covers on the VSA.
  - 2:T/BC.NP: Replaces both covers on the VCD or VSA.
  - 1 T/BC.P: One Top/Bottom Cover, fully Perforated, replaces one of the T/BC.OTP One Third Perforated covers on the VSA.
  - 2 T/BC.P: Replaces both covers on the VSA.
- (Two of the "substitute 1" dash codes can be added to get two covers different from each other.)

- *Kit dash codes for CHASSIS BASE ASSEMBLY*

- 1:CBA.O: One Chassis Base Assembly (recessed internal plate) for use with Standard Front Panels and Outside Front Panels. Replaces bottom cover on the VCD.
- 1:CBA.R: One Chassis Base Assembly for use with RFBOBP, Recessed Front or Rear Panels. Replaces bottom cover on the VCD/VSA.

- *Kit dash code for TWELVE PIECE FRAME OPTION*

- TPF.S.H.: Twelve Piece Frame for use with Slides and Handles.

- *Kit dash codes for Colors*

To designate color scheme add two of the following color dash codes:

- CF/H: Clear Frame and Handles
- BF/H: Black Frame and Handles
- CP: Clear Panels
- BP: Black Panels

## VCD/VSA PRODUCT LINE



### CARD CAGE PARTS

#### ▪ Card Guide Rails (CGR)

Techmar offers four card guide rails to accommodate your choice of .20" or .25" connector pitches. The CGR series includes adjustable brackets, which permit the cage to be assembled for front, back, top or bottom loading. By choosing the appropriate length of card guide, you can accommodate any card size that will fit within the enclosure space. In the following table, dot H designates Holes and dot S Slots.

PART CODE	GUIDE	SPACING	MULTIPLES OF:
	CGR.H-	.20	
	CGR.S-	.20	
	CGR.H-	.25	
	CGR.S-	.25	

#### ▪ Card Guides (CG)

Techmar offers card guides in several lengths with a choice of two sizes of slot depths. Both types have standard .075"-wide slots and are made from tough, natural-colored nylon.

GUIDE PART CODE:	CG4.S	CG4.5.S	CG6.S	CG4.5.D	CG6.5.D	CG8.D	CG10.D
GUIDE LENGTH:	4	4.5	6	4.5	6.5	8	10
PEGS PER GUIDE:	2	2	2	2	2	3	3
SLOT DEPTH:	S in part code = Shallow = .075"			D in part code = Deep = .125"			

Where guides have 2 pegs, 2 each CGR.H and 2 each CGR.S are needed. Where guides have 3 pegs, 2 each CGR.H and 4 each CGR.S are needed.

#### ▪ Card Connector Rails (CCR)

These are made of brushed stainless steel and are available in two pitch spacings: .20" and .25". They are furnished with brackets, which allow horizontal and vertical adjustment to accommodate your choice of card connectors.

PART NUMBER:	CCR.20	CCR.25
CONNECTOR SCREW SLOT SPACING:	0.20"	0.25"

The following pages are various parts and accessories that may be used when building your Variable Chassis Drawer and Variable Stand Alone enclosure.

#### ▪ Card Cage Parts & Accessories

In addition to the many options that make up the VCD/VSA kits, we offer General Purpose Card Cages that permit continuous adjustment and variability to accommodate a wide range of circuit cards.

#### GPCC.NBP KIT General Purpose Card Cage with No Back Plane

Components include: CGR.H-.25 (2 ea.)  
 CGR.S-.25 (2 ea.)  
 CCR.25 (2 ea.)  
 CCB (12 ea.)  
 (GPCC.NBP also available with .20" spacing)

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## VCD/VSA PRODUCT LINE

The following kit components may be used when customizing your VCD or VSA enclosure.

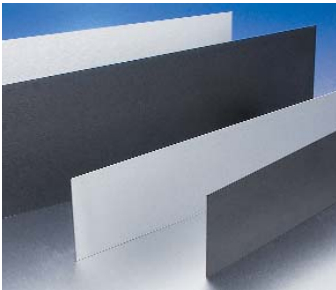
### Bottom Hinged Front Panel (BHFP)



- *Option for VCD/VSA*

Consists of a 16.05"-wide Bottom Hinged section and two Flat Panel Ears for rackmount or trimmers for stand alone. Latch assemblies and lanyards included.

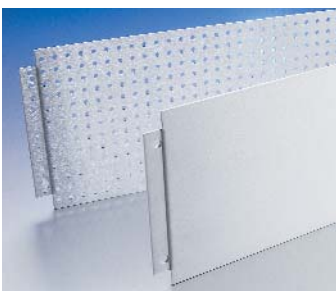
### Side Covers (SC)



- *Standard for VSA only*

Side Covers effectively add decorum and protection to the VSA desktop enclosure. Material is 6061-T6 aluminum alloy. Surface is grained and light etched. Finish clear or black anodized.

### Structural Side Panels (SSP)



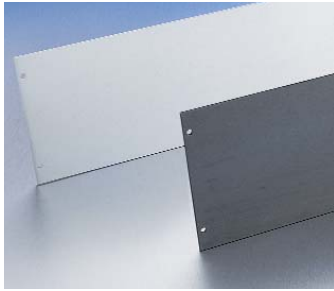
- *Standard for VCD/VSA*

The SSP Structural Side Panels are perforated with a hole center spacing of .4375 (7/16") both horizontally and vertically. Material is .090"-thick 5052-H32 aluminum alloy. Finish is clear chemical film. Also available solid without perforations, SSP.NAH

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## VCD/VSA PRODUCT LINE

### Recessed Front/Back/Outside Back Panel (RFBOBP)



Standard Rear Panel for VCD

Standard Recessed Front Panel and Rear Panel for VSA

The unique RFBOBP may be utilized and configured as either a protective Recessed Front Panel or Recessed Back Panel and also as a standard Outside Back Panel. May be used in conjunction with an SFP or BHFP.

Material: .125"-thick 6061-T6 aluminum alloy

### Top/Bottom Covers (T/BC)



T/BC.P standard for VCD

T/BC.OTP standard for VSA

T/BCs are offered in three distinct styles: Perforated (T/BC.P), One Third Perforated (T/BC.OTP) or Non-Perforated (T/BC.NP). All have side flanges that assemble into frame member grooves.

Cover material is .063"-thick 5052-H32 aluminum alloy. Surface is grained and light-etched.

Finish: Clear or black anodized

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## VCD/VSA PRODUCT LINE

### Transverse Mounting Bars and Angles



- Transverse Mounting Bars – TMB
- Transverse Mounting Angles – TMA

The TMB Mounting Bars and TMA Mounting Angles can be installed to support and position subassemblies and components within the chassis.

Material: 6061-T6 aluminum alloy

*TMB part codes*

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TMB-.25x.75  
TMB-.25x1.5  
TMB-.25x2.0  
TMB-.5x.75

*TMA part codes*

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TMA-.25x.75x1.25  
TMA-.25x1.25x1.25  
TMA-.25x1.50x1.50

### Slides



Slides include your choice of smooth action, heavy weight-accommodating ball-bearing models or the economical solid-bearing series. Ordered in pairs, they assemble to side frames with flat mounting adapters, which are provided. Please use the slide selection chart to order.

- *QDLS-SB Series: Quick Disconnect Locking Slides – Solid Bearing*

Material: Cold-rolled steel  
Thickness: .291" overall  
Surface: Etched in Chromite  
Height: 1.69"  
Finish: Poxylube® coated  
Hardware: Adapters and screws

- *QDLS-BB Series: Quick Disconnect Locking Slides – Ball Bearing*

Material: Cadmium plated steel  
Thickness: .38" overall  
Surface: Iridite dipped  
Height: 3.25" (should not be used with 3.47" side frames)  
Hardware: Adapters and screws



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## VCD/VSA PRODUCT LINE

### VCD Kits



The following is a list of standard parts used in the Variable Chassis Drawer. Optional parts are interchangeable to customize your enclosure for various applications.

*Components include:*

- SFP Standard Front Panel
- TPF Twelve Piece Frame
- SSP Structural Side Panels
- RFBOBP Rear Panel
- T/BC.P Top/Bottom Covers, Perforated
- DCH Die Cast Handles

### Back Panel with Fan Cutouts (BP.FC)



- *Option for VCD/VSA*

Optional Back Panels for fan mounting are available featuring fan holes 4.3" square with one, two or three cutouts located in the center, side, adjacently or separated.

Material: .125"-thick 6061-T6 aluminum alloy

### Vertical/Horizontal Mounting Panel Assembly (V/H.MPA)



- *Accessory for VCD/VSA*

Similar in design to the CBA, the smaller V/H.MPA mounting panels can be oriented either vertically or horizontally.

Material: .090"-thick 6061-T6 aluminum alloy

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## VCD/VSA PRODUCT LINE

### Chassis Base Assembly (CBA.O) (CBA.R)



- *CBA.O Option for VCD only*
- *CBA.R Option for VCD/VSA*

This heavy-duty .090"-thick interior mounting plate effectively supports electronic components utilizing separate edge reinforcing angle bars that bolt to the VCD enclosure's Structural Side Panels. Flat-panel construction without bent flanges facilitates machining. The CBA.O accommodates usage of the Standard Front Panel while the CBA.R supports usage of a Recessed Front Panel. Chassis Base Assemblies are available in all of the four VCD enclosure depths.

Materials: 6061-T6 aluminum alloy

### Die Cast Handles (DCH)



- *Standard for VCD/VSA*

Elegant DCH, Die Cast Handles are available in five heights painted silver or black.

### Card Guides (CG)



- *Accessory for VCD/VSA*

Techmar offers card guides in several lengths with a choice of two sizes of slot depth. Both types have standard .075"-wide slots and are made from tough, natural-colored nylon.



## VCD/VSA PRODUCT LINE

### VSA Kits



#### Variable Stand Alone

VSA is a stand alone kit for use on a desktop that utilizes most of the same parts as the VCD Kit with a few exceptions. The components used in the standard VSA Kit are as follows:

- TPF Twelve Piece Frame
- SSP Structural Side Panels
- RFBOBP Rear Panel
- T/BC.OTP Top/Bottom Covers, One Third Perforated
- SC Side Covers
- DCH Die Cast Handles
- SORF Rubber Feet

#### Recessed Front/Back/Outside Back Panel (RFBOBP)



Standard Recessed Front Panel and Rear Panel for VSA.

#### Outside Front Panel (OFP)



- *Option for VSA only*  
The OFP is a non-recessed front panel for the VSA.

#### Front Trimmers (FT)



- *Option for VSA only*  
Trim strips of aluminum alloy used for Panel Ear replacement on the VSA chassis when using a Bottom Hinged Front Panel.

#### Die Cast Handles (DCH)



- *Standard for VCD/VSA*  
Elegant DCH, Die Cast Handles are available in five heights painted silver or black.

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## VCD/VSA PRODUCT LINE

### Twelve Piece Frame (TPF)

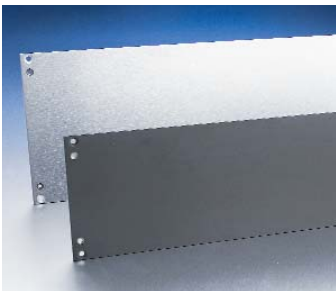


- *Standard for VCD/VSA*

The VCD's individual Twelve Piece Frame members can be ordered separately and are available painted either black or silver. Material is 6063-T5 aluminum alloy. Painted finish is epoxy polyurethane. Hardware is stainless steel.

<u>Part Code</u>	<u>Part Name</u>
LFM	Longitudinal Frame Member
TFM	Transverse Frame Member
TFMF.BHFP	Transverse Frame Member for Bottom Hinged Front Panel
VFM.B	Vertical Frame Member Back
VFM.BS	Vertical Frame Member Back for Slides
VFM.F	Vertical Frame Member Front
VFM.F-NH	Vertical Frame Member Front for No Handles & Recessed Front Panel

### Standard Front Panel (SFP)



- *Standard for VCD only*

These are standard EIA 19"-wide Front Panels with assembly holes.

Thickness is 1/8", with optional 3/16" available.

Material: 6061-T6 aluminum alloy

### Recessed Front/Back/Outside Back Panel (RFBOBP)



- *Standard Rear Panel for VCD*

- *Standard Recessed Front Panel and Rear Panel for VSA*

The unique RFBOBP may be utilized and configured as either a protective Recessed Front Panel or Recessed Back Panel and also as a standard Outside Back Panel. May be used in conjunction with an SFP or BHFP.

Material: .125"-thick 6061-T6 aluminum alloy