DIN Enclosures

Package Your Product For the World Market

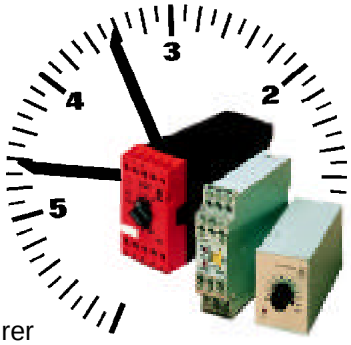
Build or maintain your competitive edge in the world markets. Enhance the value of your products and devices by packaging them attractively with enclosures from Altech/Dold. Applications are limitless. Our compact DIN enclosures are ideal for housing electrical, electronic and electromechanical devices including relays, sensing and monitoring devices, timers, transducers, printed circuit boards and more.

We offer the most comprehensive selection of DIN enclosures available. These versatile housings are economical, easy to assemble and install. They provide protection and integral, ready-to-wire terminals in one attractive package. And at a level of quality that meets or exceeds national and international standards for performance and safety.

- Wide Range of Sizes and Designs
- Choice of Cover Styles
- Terminal-To-Board Connection Options
- 35mm DIN Rail or Panel Mount

Only flame retardant, maintenance free materials are used for safety, and to insure that your control devices look good for many years to come.

Customizing is easy. We can cut special holes and cutouts for operating, setting or indicating components that you may wish to install into the front panel. Terminals can be marked for quick identification and efficient field wiring. Instructions and custom markings can be imprinted. Our enclosures can even be molded in custom colors and custom configurations (OEM quantities). Whatever your requirements may be, we will do our best to help you meet them.



- ➤ DIN Rail or Panel Mount
- ➤ Compact, Contempory Design
- ➤ Integral, Touch Protected Terminals
- ➤ Printed Circuit Board Guides
- ➤ International Acceptance
- ➤ Customization is Welcome

Dold has been world renown as a leading German innovator and manufacturer of control devices and relays for over 60 years. In order to market their devices, Dold's team of engineers designed their own nonmetallic electronic enclosures. Using their in-house tool and mold making capabilities, along with modern plastics molding facilities, they began producing Dold enclosures many years ago.

Other manufacturers saw the advantage of packaging their devices in compact, DIN rail mount enclosures as Dold had. So, Dold made them available to other OEMs and the demand grew rapidly. Now, Dold and Altech have teamed up to bring these quality electronic enclosures home.

K70

K70 series enclosures include a range of small to medium size DIN enclosures, complete with 6 to 32 terminals. They offer cost effective solutions for many applications.

The K70s are supplied with integral pressure plate terminals for reliable connections. Terminal-to-board connections include fixed and pluggable solutions.

- DIN Rail or Panel Mount
- Integral PC Board Guides
- Snap-On Covers
- Fixed and Pluggable Designs
- Standard Color: Light Gray

For technical information and Ordering Tables, refer to pages 6–7.

KO4700

Our most popular enclosures, the KO4700 series offer a wide range of sizes and single and double level terminal configurations. They can be used for a wide range of applications.

Complete with 8 to 132 terminals, select from pressure plate or cage clamp terminations with fixed or pluggable terminal-to-board connections.

Several cover designs add to the versatility of this series.

- DIN Rail or Panel Mount
- Fixed and Pluggable Designs
- Snap-On Keyed Covers
- Integral PC Board Guides
- Standard Color: Black Housing Shell with Tan Cover

For technical information and Ordering Tables, refer to pages 10–13.

KO4070

Compact, cost effective enclosures are ideal for I/O circuits, relays, timers and other small control devices.

The KO4070 series enclosures are available in three widths with single and multi-level terminals. They are supplied complete with 4 to 16 cage clamp type terminals that are machine solderable.

- DIN Rail Mount
- Machine Solderable Terminals
- Compact, Snap-Together
- Integral PC Board Guides
- Standard Color: Light Gray

For technical information and Ordering Tables, refer to pages 14–15.

KU4000

The versatile KU4000 series enclosures feature generous internal space for printed circuit boards and electronic components.

High density, double level snap-in terminals are of the pressure plate design for gastight, vibration proof connections. Straight or angled solder pins offer flexibility in board layout. Some versions have machine solderable terminals.

KU4000 housings fit into standard 45mm (1.77 in.) high international style cutouts.

- DIN Rail or Panel Mount
- Integral PC Board Guides
- Front Fits 45mm (1.77 in.) Cutouts
- Terminal Cover Plugs Available
- Standard Color: Light Gray

For technical information and Ordering Tables, refer to pages 18–19.

Additional Information

This catalog introduces you to the Altech/Dold DIN Enclosures. It was designed to help you make a selection for your enclosure application. Data Sheets with additional information are available. They include detailed dimensional information and drawings, and show printed circuit board cuts. We will be happy to fax them or mail them to you upon request. Please refer to the Ordering Tables in this catalog and request Data Sheets by number for the enclosure type(s) you are considering.

K70 Enclosures

The K70 series enclosures are small to medium in size and offer cost effective solutions for many applications.

They can accommodate 6 to 32 terminals for field wire connections. Pressure plate terminals are standard with both the fixed and pluggable versions.

MATERIALS
Housing
Housing Shell: ABS
Housing Cover: Polycarbonate, 10% Glass Filled
Terminals
Pressure Plate: Zinc Plated, Yellow Chromated Steel
Terminal Screw: Zinc Plated, Yellow Chromated Steel
Connector Contact: Tin Plated Bronze

Temperature Rating: 80°C (176°F) UL94VO
Standard Color: Light Gray

PROTECTION
K7O enclosures have an IP10 rating (hand protected) . By using optional terminal covers the protection rating can be increased to IP20 (finger protected). VBG4 and other European accident prevention requirements are met.

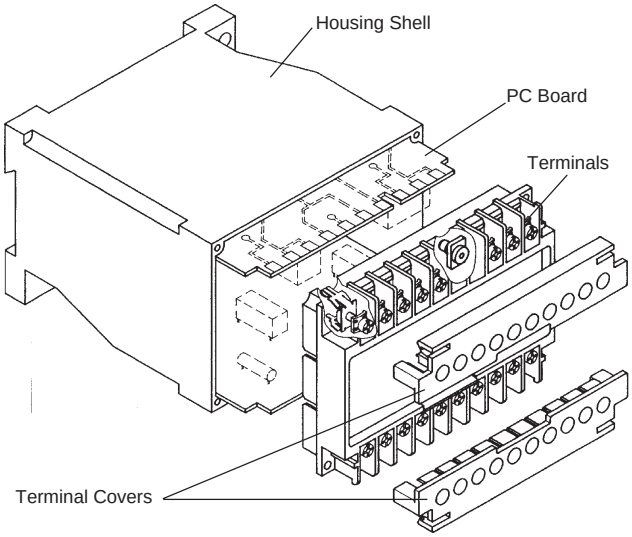
CONSTRUCTION
The K70 enclosures are supplied as unassembled kits. Each kit consists of a housing shell and a snap-on cover, complete with integral terminals and terminal-to-board connection provisions.

Integral printed circuit board guides are molded into the housing shell to save time when inserting boards, to prevent misconnections and to keep the boards in place. Integral tabs on the bottom of the shell further help to hold the boards in place and eliminate lateral movement and warpage.

Printed circuit boards can be mounted in three ways:
- Vertically
- Horizontally
- Behind the Front Cover

Boards can be placed vertically (perpendicular to the DIN rail) and/or horizontally (parallel with the DIN rail). (*Refer to the Ordering Tables, request Data Sheets for board patterns and location of board guides.*)

Enclosures with plug-in covers can accept an additional board mounted directly behind the front cover. This board is ideal for mounting indicating devices such as LEDs, LCDs for monitoring, switches and potentiometers for setting and adjusting purposes.



The housing cover snaps onto the housing shell. Two tabs lock the cover firmly in place. Removal of the cover is possible for service and repair. Potting is possible.

The K70 housing covers have external and internal barriers between terminals to increase creepage distance and to help prevent accidental touching of live potentials that may be present. Optional terminal covers that decrease the size of the opening are available as accessories.

TERMINALS
Pressure Plate terminals with either fixed or pluggable terminal-to-board connections are offered in the K70 enclosures. The pressure plate, which is captive to the terminal screw, automatically rises when the screw is loosened. One or two wires of equal or different sizes up to 2.5mm^2 (12 AWG) can be terminated in each terminal. The grooved corners of the pressure plate ensure positive wire retention. The flat bottom of the terminal extends to the inside of the enclosure and provides the terminal-to-board connection. The terminal screws can be turned by a flat tip or a #1 or #2 Philips screwdriver.

Upon request, terminals can be loaded in selected positions only.

TERMINAL-TO-BOARD CONNECTIONS

The K70 series offers fixed and pluggable terminal-to-board connection possibilities. *(Refer to the Table on the following page for a selection guide.)*

Fixed Connections

Fixed terminal-to-board connections can be made by Wire Jumper, Fast On tabs or Machine Solderable Pins (K7022.5C only).

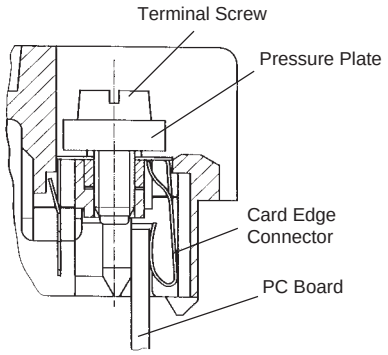
Fast On tabs, 2.8mm (.11 in.) accept industry standard Fast On connectors crimped onto wire jumpers.

Wire Jumper connections can also be made by soldering a wire jumper between the center holes of the Fast On tab and the printed circuit board(s).

Machine Solderable Pins (offered only with type K7022.5C) can be removed from the enclosure and machine soldered to the the board in the same step as other components, saving assembly time.

Pluggable Connections

Pluggable terminal-to-board connections are made by using ***Card Edge*** connectors. They are an integral part of the covers of K7075P, K70100P and K70150P and plug directly onto the board(s). ***Solder Tabs*** are also provided in these three enclosures for terminal-to-board connections when mounting an additional board directly behind the front cover. A **Wire Jumper** can be soldered to these tabs as well.



Pluggable connection with card edge connector

For better retention, the plug-in type covers have captive screws at the corners that insert into brass bushings, molded into the housing shell. The pluggable versions are ideal whenever quick connections and replacement are important. They also reduce the danger of misconnected wires and downtime.

MOUNTING

The K70 Enclosures mount easily by snapping onto standard 35mm DIN Rail. They can also be panel mounted using corner mounting holes which accept two M4 or M5 (#6 or #10) screws.

These mounting holes are molded into two corners of the housing shell base and do not increase the height or width of the enclosure, thus insuring a compact, high density arrangement when multiple enclosures are installed adjacent to each other. Enclosure types K7022.5A, K7022.5B and K7022.5C have two integral pull-out tabs on the base of the enclosure for panel mounting. *(Refer to Enclosure Mounting Procedures on page 17.)*

MARKING

The K70 enclosures have an area on the front of the cover for marking and mounting of components such as switches, potentiometers, LEDs or LCD indicators. Custom imprinted plates can be inserted as well, allowing imprinting of plates separate from the enclosure, reducing cost and delays.

ACCESSORIES

Terminal Covers
35 x 7.5mm DIN Rail
Pull-Out Panel Mounting Tabs

CUSTOMIZATION

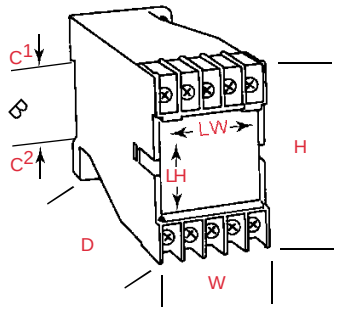
Enclosures can be customized with cutouts and holes for potentiometers, switches, LEDs, LDCs and other devices. Using state of the art machining, we can punch, drill or cut to your most exacting specifications. Custom colors and special markings are also available. Please let us know what your requirements are.

K70 Enclosures

- 6-32 Terminals
- Temperature Range: to 60°C (140°F)
- Housing Material: Polycarbonate and ABS
- Standard Color: Light Gray

K7022.5A K7045C K7022.5B K7022.5C

ENCLOSURE TYPE		K7022.5A	K7045C	K7022.5B	K7022.5C
Ratings **Voltage/Current**+		300V/25A	300V/25A	300V/25A	300V/25A
Max. Wire Size–AWG++		12 AWG	12 AWG	12 AWG	12 AWG
Number of Terminals		8	10	12	12
Max. No. of Printed Circuit Boards per Mounting Position					
	Horizontal (parallel) (*Fig*. A)				
	Vertical (perpendicular) (*Fig*. B)	2	10	2	2
	Vertical Behind Cover (parallel) (*Fig*. C)				
Terminal Type	Pressure Plate	●	●	●	●
Terminal-to-Board Connections					
Fixed	Wire Jumper	●	●	●	●
	Solder Tab				
	Fast On	●		●	
	Machine Solderable Pins		●		●
Pluggable	Card Edge				
Enclosure Mounting	35mm DIN Rail (7.5mm Deep)	●	●	●	●
	Panel, Corner Screws		●		
	Panel, Pull Out Tabs[1]	●	●	●	●
ORDERING INFORMATION		**Cat. No.**	**Cat. No.**	**Cat. No.**	**Cat. No.**
K70 Enclosure, without terminal covers		**90.001**	**90.010**	**90.020**	**90.030**
K70 Enclosure, with terminal covers[2]					
Accessories					
Terminal Covers[2] (if two Cat. Nos. appear, order one of each)		**90.001.1 / 90.001/2**	**90.010.1**	**90.020.1 / 90.020.2**	**90.030.1**
DIN Rail 35x 7.5mm, 1m (3'-3") lengths		**2094.0/1m**	**2094.0/1m**	**2094.0/1m**	**2094.0/1m**
Extra Panel Mount Tab[1]		**93.001.2**	**93.001.2**	**93.001.2**	**93.001.2**
Data Sheet No.		**K7022.5A**	**K7045C**	**K7022.5B**	**K7022.5C**
Approximate Dimensions mm (in.)	Enclosure				
	H	75.0 (2.95)	75.0 (2.95)	75.0 (2.95)	75.0 (2.95)
	W	22.5 (.89)	45.0 (1.77)	22.5 (.89)	22.5 (.89)
	D	97.0 (3.82)	112.0 (4.41)	97.0 (3.82)	97.0 (3.82)
	C[1]	38.0 (1.50)	35.0 (1.38)	38.0 (1.50)	36.5 (1.44)
	C[2]	38.0 (1.50)	35.0 (1.38)	38.0 (1.50)	38.0 (1.50)
	Label Area				
	LH	21.0 (.83)	40.0 (1.57)	21.0 (.83)	21.5 (.85)
	LW	22.0 (.87)	35.0 (1.38)	22.0 (.87)	30.0 (1.18)
	Set Back	.4	.4	.4	.0



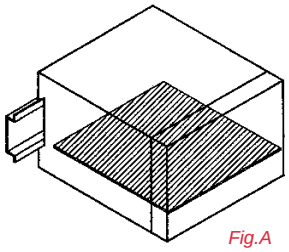


Fig.A

+ Voltage rating can be increased, please consult Altech.
++ 1 or 2 wires can be terminated with Pressure Plate terminals.

[1] One tab is supplied with each enclosure (except K7022.5C which has two tabs), Additional tabs are available. Refer to Data Sheet for maximum number of tabs.
[2] K7045D2 has factory equipped terminal covers.


K7055

K7075P


K7045D1


K7045D2 K70100A

K70100P


K70150P

K7055	K7075P	K7045D1	K7045D2	K70100A	K70100P	K70150P
300V/25A	300V/25A	300V/25A	300V/25A	300V/25A	300V/25A	300V/25A
12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG
12	16	20	20	20	20	32
	6			6	6	4
5	7	10	10	4	4	8
	1				1	1
●	●	●	●	●	●	●
●	●	●	●	●	●	●
	●				●	●
		●	●	●		
	●				●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
90.040	90.050	90.060		90.080	90.090	90.100
			90.070			
90.040.1	90.050.1	90.060.1		90.080.1	90.090.1	90.100.1
2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.01/m	2094.0/1m	2094.0/1m
93.001.2	93.001.2	93.001.2	93.001.2	93.001.2	93.001.2	93.001.2
K7055	K7075P	K7045D1	K7045D2	K70100A	K70100P	K70150P
73.0 (2.87)	73.0 (2.87)	74.0 (2.91)	77.0 (3.03)	73.0 (2.87)	74.0 (2.91)	73.0 (2.87)
55.0 (2.17)	75.0 (2.95)	45.0 (1.77)	45.0 (1.77)	100.0 (3.94)	100.0 (3.94)	150.0 (5.91)
114.0 (4.49)	114.0 (4.49)	124.0 (4.88)	128.0 (5.04)	114.0 (4.49)	114.0 (4.49)	113.0 (4.45)
35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)
35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)
48.0 (1.89)	68.0 (2.68)	43.5 (1.71)	43.5 (1.71)	95.0 (3.74)	95.0 (3.74)	143.0 (5.63)
36.0 (1.42)	36.0 (1.42)	18.5 (.73)	18.5 (.73)	35.5 (1.40)	35.5 (1.40)	36.0 (1.42)
.4	.4	.4	.4	.4	.4	.4

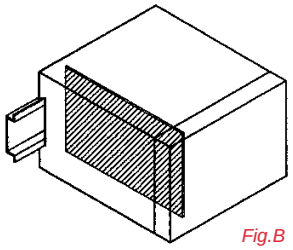


Fig.B

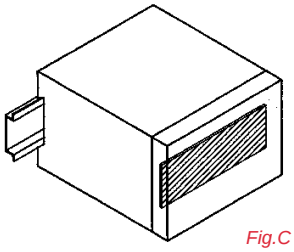


Fig.C

KO4700 Enclosures

Ideal for industrial applications. Small to large in size, KO4700s can accommodate 8 to 132 terminals for field wire connections. Series KO4700 enclosures can be customized to the exact number of terminals required. Standard enclosures are equipped with the maximum number of terminal strips and terminals.

The KO4700 series are available with two types of terminations for connecting external wires. The Pressure Plate type terminals, with a center line spacing of 9mm (.35 in.) and the Cage Clamp design, which has a 5mm (.19 in.) center line spacing for much higher density.

MATERIALS

Housing
Housing Shell: Polycarbonate
Cover: Polycarbonate, 10% Glass Filled
Cover Panel: Polycarbonate
Terminals
Pressure Plate: Zinc Plated, Yellow Chromated Steel
Terminal Screw: Zinc Plated, Yellow Chromated Steel
Cage Clamp: Nickel Plated Brass
Busbar: Tin Plated Bronze
Connector Contact: Beryllium Copper, Tin Plated (gold plating available)

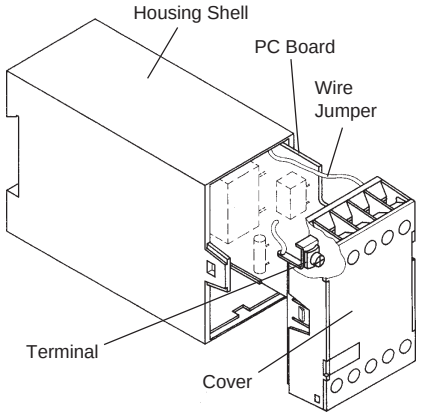
Temperature Rating: 110°C (230°F), UL94VO
Standard Color: Housing Shell: Black, Terminal Cover: Tan

PROTECTION

KO4700 enclosures have an IP20 rating (finger protected) and meet VBG4 and other European accident prevention requirements.

CONSTRUCTION

The KO4700 enclosure series consists of a black housing shell and a tan cover with integral terminals and terminal-to-board connections. They are supplied unassembled.



The housing shell has molded printed circuit board guides to save time when inserting printed circuit boards, prevent misconnections and to keep the boards from moving. Integral tabs on the bottom of the shell further help to hold boards in place, eliminating lateral movement. KO4700 housing shells can be potted.

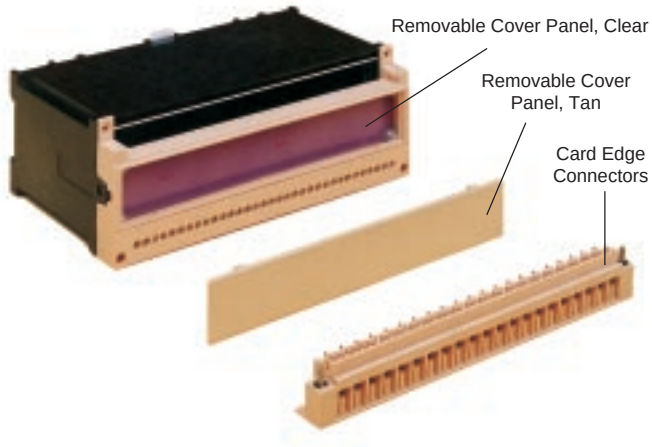
Printed circuit boards can be mounted in three ways:
- Behind the Front Cover
- Horizontally
- Vertically

Depending on the enclosure type, one board can be mounted directly behind the front cover (parallel to the DIN rail). Boards can also be mounted horizontally (parallel to the DIN rail) or vertically (perpendicular to the DIN rail). (*Refer to the Ordering Tables, request Data Sheets for board patterns and location of board guides.)*

The housing cover snaps onto the housing shell. Two keyed tabs lock the cover firmly in place. Removal of the cover is possible for service and repair.

Select from several cover and termination designs:

➤ Single piece, tan color covers are typically used with the smaller enclosures. They incorporate terminals and connections to the inside of the enclosure. In some of the smaller enclosures, the cover doubles as a plug.



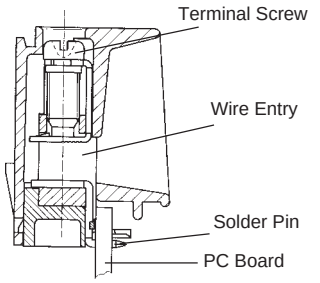
A printed circuit board can be mounted directly behind the front cover. This board is ideal for mounting components used for setting, adjusting and monitoring such as switches, potentiometers, LEDs and LCDs. There is no interferance with any other boards mounted within the enclosure.

➤ Modular covers consist of a one-piece tan frame with matching flat front panel. Some versions have a front cover panel that is removable and offered in matching tan or clear. The front covers can be custom imprinted or marking plates can be produced and installed behind the transparent front cover panel.

TERMINALS

Select from Pressure Plate or Cage Clamp terminals, and fixed or pluggable terminal-to-board connections. *(Please refer to the Ordering Table).* Removable fixed or pluggable terminal strips can be replaced by Terminal Cover Strips if not all of the external connections of the standard enclosure are needed. The terminal screws used with both the pressure plate and cage clamp designs can be operated with a flat tip or a #1 or #2 Philips type screwdriver.

Pressure Plate Termination
This type terminal consists of a pressure plate (captive to the terminal screw) and the terminal bottom. The pressure plate rises automatically when the screw is loosened. One or two wires, of equal or different sizes up to 2.5mm² (12 AWG) can be terminated. The grooved corners of the pressure plate ensure positive retention of wire(s). The flat bottom of the terminal extends to the inside of the enclosure and connects the terminal to the board(s) inside.



Fixed connection with machine solderable pin

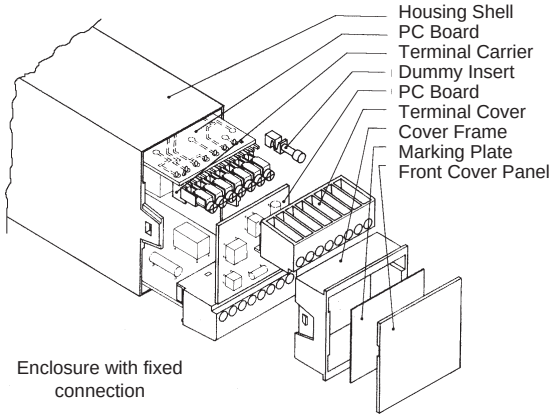
Cage Clamp Termination
The cage clamp terminal accepts wires up to 2.5mm² (12 AWG). When the terminal screw is tightened, the serrated bottom of the cage pushes the wire to be terminated against the serrated underside of the busbar. The busbar extends to the inside of the enclosure to provide the terminal-to-board connection.

TERMINAL-TO-BOARD CONNECTIONS
The KO4700 Series offers fixed and pluggable terminal-to-board connection possibilities. *(Please refer to the Ordering Tables on the following pages for your selection guide.)*

Fixed Connections
Fixed terminal-to-board connections can be made by Wire Jumper, Fast On tabs, Solder tabs, or Machine Solderable Pins.

Fast On tabs, 2.8mm (.11 in.) accept industry standard Fast On connectors. Use with wire jumpers to connect to board(s).

Wire Jumper connections can also be made by soldering a wire jumper between the center hole of the Fast On tab and the printed circuit board(s).



Enclosure with fixed connection

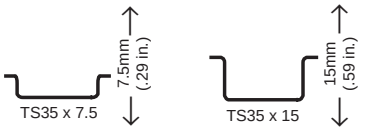
Solder Tab can be hand soldered to the board.

Machine Solderable Pins can be machine soldered to the board in the same step as the other components, saving assembly time. The metal parts of the terminals are supplied as separate strips which snap into the terminal housing after soldering.

Pluggable Connections
The pluggable terminal strips of the KO4700 series fit across the width of the enclosure and plug directly into the board(s) by using a ***Card Edge*** connector. Enclosures equipped with pressure plate terminals also provide ***Solder Tabs*** for terminal-to-board connections when mounting an additional board directly behind the front cover. A ***Wire Jumper*** can be soldered to these tabs as well.

For better retention, the strips have captive screws at each end that insert into brass bushings, molded into the housing shell. Up to four terminal strips can be used per enclosure. The pluggable versions are ideal whenever quick connections and replacement of boards and devices is important. They also reduce the danger of misconnected wires and downtime.

MOUNTING
The KO4700 Series enclosures are designed to be mounted on standard 35 x 7.5mm DIN rail but will also fit on the 35 x 15mm DIN rail. The extra high enclosures should be mounted on the deeper, 35 x 15mm DIN rail. *(Refer to the Tables on the following pages to determine the correct size rail for the enclosure you select.)*



KO4700 series enclosures can also be panel mounted using pull-out tabs on the base of the enclosure. One tab is factory installed on each enclosure. Up to a total of 6 pull-out mounting tabs can be installed (See Accessories) *(Refer to page 17 for mounting instructions.)*

MARKING
KO4700 enclosures have a flat center area on the cover for marking and mounting of components. Several types have removable front cover panels, which can be marked at a separate location. Imprinted marking plates can be used in conjunction with the transparent, removable cover panel.

ACCESSORIES
Terminal Cover Strips
Pull-Out Panel Mounting Tabs
Screws for Mounting Printed Circuit Board
35 x 7.5mm DIN Rail
35 x 15mm DIN Rail

CUSTOMIZATION
Enclosures can be customized to the exact number of terminals needed. We can punch, drill or cut custom cutouts and holes for potentiometers, switches, LEDs or LDCs . Custom colors and special markings are also available. Please call us for further information.

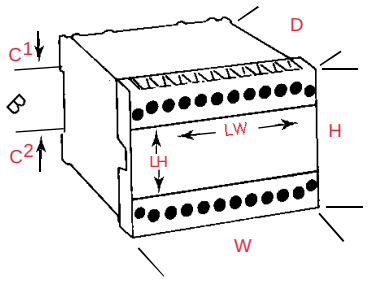
KO4700 Enclosures
Small to Medium Size

- 8-30 Terminals
- Temperature Range: to 110°C (230°F)
- Selection of Cover Designs
- Housing Shell Material: Polycarbonate
- Cover Material: Glassfilled Polycarbonate
- Standard Color: Black Housing with Tan Cover

K04762

K04763A

ENCLOSURE TYPE		KO4712	KO4762	KO4714P	KO4763A
Ratings					
Voltage/Current+		300V/25A	300V/25A	300V/25A	300V/25A
Max. Wire Size–AWG++		12 AWG	12 AWG	12 AWG	12 AWG
Number of Terminals		8	10	14	16
Max. No. of Printed Circuit Boards per Mounting Position					
	Horizontal (parallel) (*Fig*. A)	2		5	2
	Vertical (perpendicular) (*Fig*. B)	2	2		2
	Vertical Behind Cover (parallel)[1] (*Fig*. C)	1		1	1
Terminal Type	Pressure Plate		●	●	
	Cage Clamp	●			●
Terminal-to-Board Connections					
Fixed	Wire Jumper		●	●	
	Solder Tab	●		●	
	Fast On		●		
	Machine Solderable Pins	●			●
Pluggable	Card Edge			●	
Enclosure Mounting	35mm DIN Rail (7.5mm Deep)	●	●	●	●
	35mm DIN Rail (15mm Deep)	●	●	●	●
	Panel, Pull Out Tabs[2]				
ORDERING INFORMATION		**Cat. No.**	**Cat. No.**	**Cat. No.**	**Cat. No.**
Enclosure		**90.201**	**90.230**	**90.260**	**90.290**
Enclosure, with removable cover panel, tan					**90.291**
Enclosure, with removable cover panel, clear					**90.292**
Accessories					
Terminal Cover Strips					
B2.9 x 6.5 (DIN 7981) Screws for Mounting Printed Circuit Board (4)					
35 x 7.5mm DIN Rail, 1m (3'-3") lengths		**2094.0/1m**	**2094.0/1m**	**2094.0/1m**	**2094.0/1m**
35 x 15mm DIN Rail, 1m (3'-3") lengths		**2095.0/1m**	**2095.0/1m**	**2095.0/1m**	**2095.0/1m**
Extra Panel Mount Tab[2]		**93.001.2**	**93.001.2**	**93.001.2**	**93.001.2**
Data Sheet No.		**KO4712**	**KO4762**	**KO4714P**	**KO4763A**
Approximate Dimensions mm (in.)	Enclosure				
	H	[3]	74.0 (2.91)	[3]	74.0 (2.91)
	W	[3]	45.0 (1.77)	[3]	45.0 (1.77)
	D	[3]	119.0(4.69)	[3]	119.0 (4.69)
	C[1]	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)
	C[2]	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)
	Label Area				
	LH	42.0 (1.65)	42.0 (1.65)	33.0 (1.30)	42.0 (1.65)
	LW	21.0 (.83)	42.0 (1.65)	73.0 (2.87)	43.0 (1.69)
	Set Back	.2	.2	.2	.2



+ Voltage rating can be increased, please consult Altech.
++ 1 or 2 wires can be terminated with Pressure Plate terminals.
[1] This board position is possible in enclosures that have covers with a removable cover panel (Fig. C).
[2] One tab is supplied with each enclosure, order additional tabs separately. Refer to Data Sheet for maximum number of tabs.
[3] Enclosure in development, please consult Altech for dimensions.

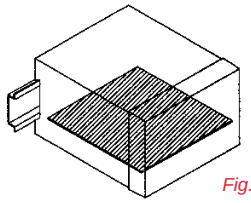


Fig. A

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K04763P K04718P K04713A K04713P K04717A K04717P

KO4763P	KO4718P	KO4713A	KO4713P	KO4717A	KO4717P
300V/25A	300V/25A	300V/25A	300V/25A	300V/25A	300V/25A
12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG
16	20	22	22	30	30
2	5	5	5	5	5
1	1	1	1	1	1
	●				
●		●	●	●	●
	●				
	●				
		●		●	
●	●		●		●
●	●	●	●	●	●
●	●	●	●	●	●
	●	●	●	●	●
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
90.320	90.350	90.380	90.410	90.440	90.470
90.321	90.351	90.381	980.411	90.441	90.471
90.322	90.352	90.382	90.412	90.442	90.472
	93.001.1	93.001.1	93.001.1	93.001.1	93.001.1
2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m
2095.0/1m	2095.0/1m	2095.0/1m	2095.0/1m	2095.0/1m	2095.0/1m
93.001.2	93.001.2	93.001.2	93.001.2	93.001.2	93.001.2
KO4763P	KO4718P	KO4713A	KO4713P	KO4717A	KO4717P
74.0 (2.91)	74.0 (2.91)	74.0 (2.91)	74.0 (2.91)	74.0 (2.91)	74.0 (2.91)
45.0 (1.77)	100.0 (3.94)	75.0 (2.95)	75.0 (2.95)	100.0 (3.94)	100.0 (3.94)
119.0 (4.69)	19.0 (4.69)	119.0 (4.69)	119.0 (4.69)	119.0 (4.69)	119.0 (4.69)
37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)
37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)
42.0 (1.65)	33.0 (1.30)	42.0 (1.65)	33.0 (1.30)	42.0 (1.65)	33.0 (1.30)
43.0 (1.69)	98.0 (3.86)	73.0 (2.87)	73.0 (2.87)	73.0 (2.87)	98.0 (3.86)
.2	.2	.2	.2	.2	.2

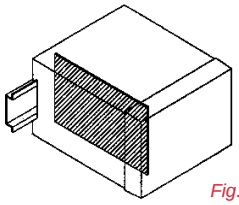


Fig. B

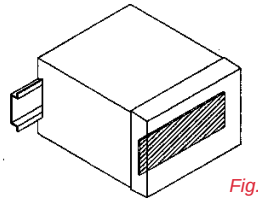
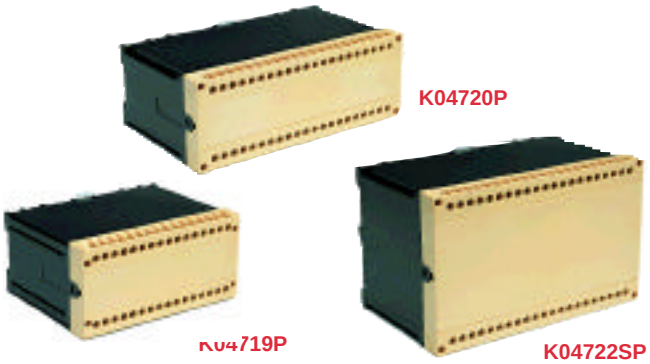


Fig. C

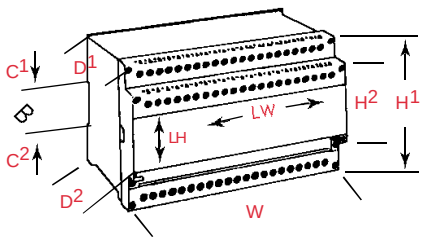
KO4700 Enclosures
Medium to Large Size

- 32-132 Terminals
- Temperature Range: to 110°C (230°F)
- Selection of Cover Designs
- Housing Shell Material: Polycarbonate
- Cover Material: 10% Glassfilled Polycarbonate
- Standard Color: Black Housing with Tan Cover



ENCLOSURE TYPE		KO4719P	KO4720P	KO4722SP	KO4716A
Ratings **Voltage/Current+**		300V/25A	300V/25A	300V/25A	300V/25A
Max. Wire Size–AWG++		12 AWG	12 AWG	12 AWG	12 AWG
Number of Terminals		32	42	42	50
Max. No. of Printed Circuit Boards per Mounting Position					
	Horizontal (parallel) (*Fig.* A)	5	5	11	5
	Vertical (perpendicular) (*Fig.* B)				
	Vertical Behind Cover (parallel)[1] (*Fig.* C)	1	1		1
Terminal Type	Pressure Plate	●	●	●	
	Cage Clamp				●
Terminal-to-Board Connections					
Fixed	Wire Jumper	●	●	●	
	Solder Tab	●	●	●	●
	Fast On				
	Machine Solderable Pins				●
Pluggable	Card Edge	●	●	●	
Enclosure Mounting	35mm DIN Rail (7.5mm Deep)	●	●	●	●
	35mm DIN Rail (15mm Deep)	●	●	●	●
	Panel, Pull Out Tabs[2]	●	●	●	●
ORDERING INFORMATION		**Cat. No.**	**Cat. No.**	**Cat. No.**	**Cat. No.**
Enclosure		**90.500**	**90.530**	**90.560**	**90.590**
Enclosure, with removable cover panel, tan		**90.501**	**90.531**		**90.591**
Enclosure, with removable cover panel, clear		**90.502**	**90.532**		**90.592**
Accessories					
Terminal Cover Strips			**90.530.1**	**90.560.1**	
B2.9 x 6.5 (DIN 7981) Screws for Mounting Printed Circuit Board (4)		**93.001.1**	**93.001.1**		**93.001.1**
35 x 7.5mm DIN Rail, 1m (3'3") lengths		**2094.0/1m**	**2094.0/1m**	**2094.0/1m**	**2094.0/1m**
35 x 15mm DIN Rail, 1m (3'3") lengths		**2095.0/1m**	**2095.0/1m**	**2095.0/1m**	**2095.0/1m**
Extra Panel Mount Tab[2]		**93.001.2**	**93.001.2**	**93.001.2**	**93.001.2**
Data Sheet No.		**KO4719P**	**KO4720P**	**KO4722SP**	**KO4716A**

Approximate Dimensions mm (in.)



Enclosure				
H[1]/H[2]	71.0 (2.80)	73.0 (2.87)	122.0 (4.80)	[3]
W	152.0 (5.98)	200.0 (7.87)	200.0 (7.87)	[3]
D[1]/D[2]	118.0 (4.65)	118.0 (4.65)	118.0 (4.65)	[3]
C[1]	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)
C[2]	37.0 (1.46)	37.0 (1.46)	86.0 (3.39)	37.0 (1.46)
Label Area				
LH	33.0 (1.30)	33.0 (1.30)	83.0 (3.27)	42.0 (1.65)
LW	150.0 (5.91)	198.0 (7.80)	198.0 (7.80)	150.0 (5.91)
Set Back	.2	.2	.2	.2

+ Voltage rating can be increased, please consult Altech.

++ 1 or 2 wires can be terminated with Pressure Plate terminals.

[1] This board position is possible in enclosures that have covers with a removable cover panel (Fig. C).
[2] One tab is supplied with each enclosure, order additional tabs separately. Refer to Data Sheet for maximum number of tabs.
[3] Enclosure in development, please consult Altech for dimensions.

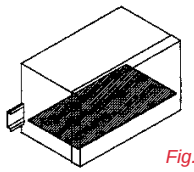
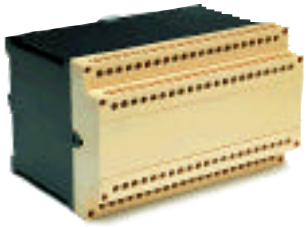


Fig.A

K04721P

K04723SP



K04722DP

K04723DP

KO4716P	KO4721A	KO4721P	KO4723SP	KO4722DP	KO4723DP
300V/25A	300V/25A	300V/25A	300V/25A	300V/25A	300V/25A
12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG
50	66	66	66	84	132
5	5	5	11	11	11
1	1	1			
				●	
●	●	●	●		●
●		●	●	●	●
	●		●	●	●
	●				
●		●	●	●	●
●	●	●			
●	●	●	●	●	●
●	●	●	●	●	●
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
90.620	90.650	90.680	90.710	90.740	90.770
90.621	90.651	90.681			
90.622	90.652	90.682			
	90.650.1	90.680.1	90.710.1	90.740.1	90.770.1
93.001.1	93.001.1	93.001.1			
2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m
2095.0/1m	2095.0/1m	2095.0/1m	2095.0/1m	2095.0/1m	2095.0/1m
93.001.2	93.001.2	93.001.2	93.001.2	93.001.2	93.001.2
KO4716P	KO4721A	KO4721P	KO4723SP	KO4722DP	KO4723DP
[3]	[3]	72.0 (2.83)	123.0 (4.84)	82.0 (3.23) / 123.0 (4.84)	82.0 (3.23) / 123.0 (4.84)
[3]	[3]	200.0 (7.87)	200.0 (7.87)	200.0 (7.87)	200.0 (7.87)
[3]	[3]	118.0 (4.65)	118.0 (4.65)	118.0 (4.65) / 136.0 (5.35)	118.0 (4.65) / 136.0 (5.35)
37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	37.0 (1.46)
37.0 (1.46)	37.0 (1.46)	37.0 (1.46)	86.0 (3.39)	86.0 (3.39)	86.0 (3.39)
33.0 (1.30)	42.0 (1.65)	33.0 (1.30)	83.0 (3.27)	42.0 (1.65)	42.0 (1.65)
150.0 (5.91)	198.0 (7.80)	198.0 (7.80)	198.0 (7.80)	198.0 (7.80)	198.0 (7.80)
.2	.2	.2	.2	.2	.2

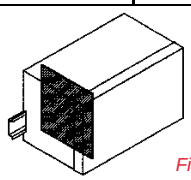


Fig.B

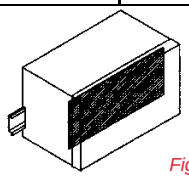


Fig.C

K04070 Enclosures

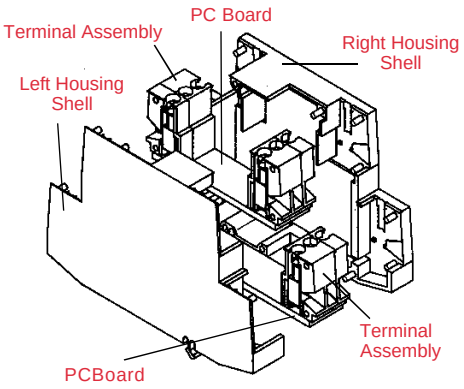
Economical, compact KO4070 enclosures are supplied as easy to assemble kits. They are ideal for housing I/O circuits, relays, timers and other small devices. Each kit consists of two identical housing half shells and 4 to 16 machine solderable terminals with standard or extended length pins.

MATERIALS
Housing Shells: Polycarbonate
Cage Clamp: Tinned Bronze

Temperature Rating:
110°C (230°F) UL94 VO
Standard Color: Light Gray

PROTECTION
KO4070 enclosures have an IP20 rating (finger protected) and meet VBG4 and other European accident prevention requirements.

CONSTRUCTION
The KO4070 enclosures consist of two identical housing shells that snap together, and sectional, snap-together terminals. The maximum preassembled number of terminals are part of the enclosure kit. Potting is not recommended.



BOARD PLACEMENT
Each enclosure can accept two boards, each up to 1.5mm (.0625 in.) thick, inserted vertically (parallel to the DIN rail) facing the terminals. These boards can be machine soldered to the terminals. Enclosure types KO4074 through KO4079, accept larger boards that can be screwed to the sidewalls of the housing shells (vertically, perpendicular to the DIN rail) using molded-in standoffs and 2 screws. Boards mounted on the sides can be 1mm (.04 in.) thick and require a wire jumper connection. (*Refer to Ordering Tables, request Data Sheets for board patterns.)*

TERMINALS
Cage clamp design terminal blocks are used with the KO4070 series enclosures. Wire(s) to be terminated are squeezed between the bottom of the clamp and the busbar for reliable, gastight connections. The terminal blocks can be machine soldered to the board in the same step as the other components to save time and labor. Enclosures with extended length pins increase enclosure cavity for large components.

All terminals have funnel shaped wire openings to eliminate wire fraying. The terminal screws can be turned with a flat tip or a #1 or #2 Philips screwdriver.

MOUNTING
The KO4070 series have integral mounting feet that snap onto standard 35mm DIN rail. They cannot be panel mounted.

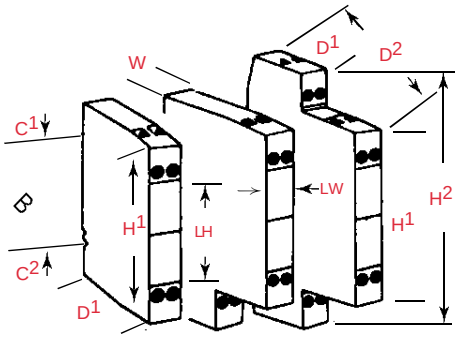
MARKING
Silk screen or attach label to the face of the enclosure.

- Cost Effective Kits
- 4 to 16 Terminals
- Temperature Range: 110°C (230°F)
- Housing Material: Polycarbonate
- Standard Color: Light Gray

ENCLOSURE TYPE	
Ratings	
Voltage/Current	
Max. Wire Size–AWG	
Number of Terminals	
Max. No. of Printed Circuit Boards per Mtg. Position	
Vertical, Sidewall (perpendicular) (Fig. B)	
Vertical, Facing Terminals (parallel) (Fig. C)	
Terminal Type	Cage Clamp
Terminal-to-Board Connection	
Fixed	Solder Pin
Enclosure Mounting	35mm DIN Rail (7.5mm Deep)

ORDERING INFORMATION
Enclosure, with Standard Length Pins
Enclosure, with Extended Length Pins
Accessories
M2X3 (DIN 89) Screws for Mtg. Printed Circuit Boards (4)
DIN Rail 35 x 7.5mm, 1m (3'-3") lengths
Data Sheet No.

Approximate Dimensions mm (in.)



Enclosure
W
H^1
H^2
D^1
D^2
C^1
C^2
Label Area
LH
LW

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K04071


K04072


K04074


K04073


K04077


K04075


K04076


K04078


K04079

KO4071	KO4072	KO4074	KO4073	KO4077	KO4075	KO4076	KO4078	KO4079
300V/16A	300V/16A	300V/16A	300V/16A	300V/16A	300V/16A	300V/16A	300V/16A	300V/16A
12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG
4	6	6	8	8	9	12	12	16
		1	1	2	1	1	2	2
2	2	2	2	2	2	2	2	2
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
91.001	91.010	91.020	91.030	91.040	91.050	91.060	91.070	91.080
91.002	91.011	91.021	91.031	91.041	91.051	91.061	91.071	91.081
93.001.3	93.001.3	93.001.3	93.001.3	93.001.3	93.001.3	93.001.3	93.001.3	93.001.3
2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m
KO4071	KO4072	KO4074	KO4073	KO4077	KO4075	KO4076	KO4078	KO4079
12.5 (.49)	12.5 (.49)	20.5 (.81)	12.5 (.49)	28.5 (1.12)	20.5 (.81)	20.5 (.81)	28.5 (1.12)	28.5 (1.12)
60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)
—	75.0 (2.95)	—	90.0 (3.54)	—	75.0 (2.95)	90.0 (3.54)	75.0 (2.95)	90.0 (3.54)
60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)
—	31.0 (1.22)	—	31.0 (1.22)	—	31.0 (1.22)	31.0 (1.22)	31.0 (1.22)	31.0 (1.22)
30.0 (1.18)	30.0 (1.18)	30.0 (1.18)	45.0 (1.77)	30.0 (1.18)	30.0 (1.18)	45.0 (1.77)	30.0 (1.18)	45.0 (1.77)
30.0 (1.18)	45.0 (1.22)	30.0 (1.18)	45.0 (1.77)	30.0 (1.18)	45.0 (1.77)	45.0 (1.77)	45.0 (1.77)	45.0 (1.77)
33.0 (1.30)	33.0 (1.30)	33.0 (1.30)	33.0 (1.30)	33.0 (1.30)	33.0 (1.30)	33.0 (1.30)	33.0 (1.30)	33.0 (1.30)
10.5 (.41)	10.5 (.41)	10.5 (.41)	19.0 (.75)	27.0 (1.06)	19.0 (.75)	19.0 (.75)	27.0 (1.06)	27.0 (1.06)

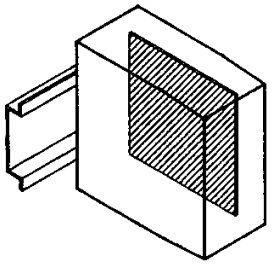


Fig. B

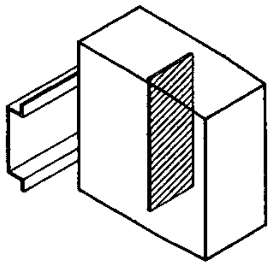


Fig. C

KU4000 Enclosures

Versatile, compact enclosures are ideal for applications with space constraints and for mounting within large international style enclosures with 45mm (1.77 in.) cutouts, such as Altech's EK and AK series non metallic enclosures. Small to medium in size, KU4000 enclosures offer 8 to 64 terminals for field wire connections. Pressure plate terminals are standard.

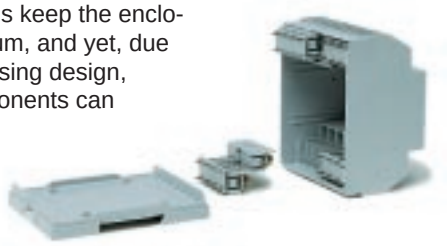
The KU4000 series are equipped with double level terminals which provide a maximum number of external connections in a minimum amount of space. Standard enclosures are supplied as kits, containing the base, cover and the maximum number of terminals.

MATERIALS
Housing
Housing Shell: Polycarbonate, 10% Glass Filled
Base: Polycarbonate, 10% Glass Filled
Terminals
Pressure Plate: Zinc Plated, Yellow Chromated Steel
Terminal Screws: Zinc Plated, Yellow Chromated Steel

Temperature Rating: 110˚C (230˚F) UL94VO
Standard Color: Light Gray

PROTECTION
KU4000 enclosures have an IP20 rating (finger protected) and meet VBG4 and other European accident prevention requirements.

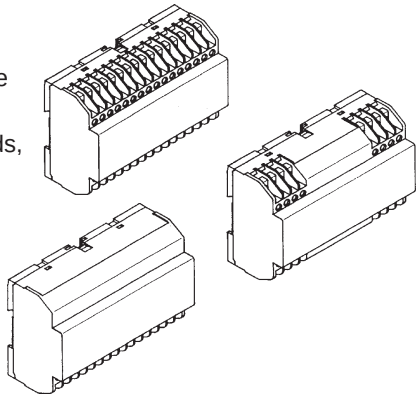
CONSTRUCTION
The KU4000 series housings are supplied as unassembled kits. Each kit consists of a flat base, a housing cover and 8, 16, 32 or 64 terminals, supplied in assemblies of four terminals each. Double level terminals keep the enclosure size to a minimum, and yet, due to the innovative housing design, relatively large components can be mounted inside.



The terminals are machine solderable and have straight or right angle pins, depending on enclosure type (Type C has straight pins, Type B has right angle pins). We can supply enclosures with fewer than the maximum number of terminals in increments of four, please contact us with your requirements.

The KU4000 series are available in four widths, and are supplied with terminals in three standard positions:

- Terminals on top and bottom
- Terminals on one side only
- Terminals at both ends, the center area has no terminals.



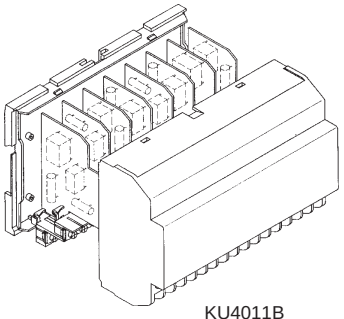
Cover plugs are available as accessories and can be plugged into unused screw holes and wire entries. Plugs are offered as sets, consisting of one screw-hole cover and one wire entry cover *(Refer to Accessories in the Ordering Table).*

Integral printed circuit board guides are molded into the housing cover to save time when inserting boards. They also prevent misconnections and keep the boards from moving.

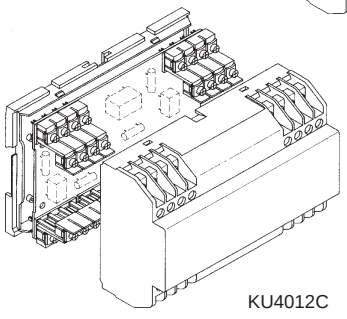
Printed circuit boards can be mounted in three ways:

- To the Base
- Vertically
- Horizontally

One large board can be mounted to the base of the enclosure (parallel to the DIN rail) with 4 screws (not possible with KU4001B) and using terminals with straight solder pins. Boards can also be mounted vertically (perpendicular to the DIN rail) by using terminals with right angle solder pins, or horizontally (parallel to the DIN rail) by using a wire jumper connection. (*Refer to the Ordering Tables, request appropriate Data Sheets for board patterns and location of board guides.*)



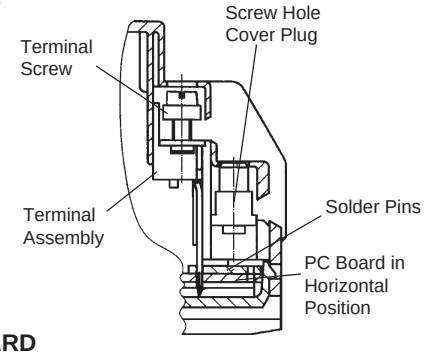
KU4011B



KU4012C

The face of the cover is 45mm (1.77 in.) high, and can be mounted into standard DIN distribution systems which have 45mm cutouts. Mount the KU4000 enclosures together with circuit breakers and other DIN rail mount devices which also meet the 45mm standard. Removal of the housing cover is possible for service and repair after disconnecting the wires. KU4000 covers cannot be potted without taking special steps.

TERMINALS
Pressure plate terminals are standard for the KU4000 enclosure and ensure a vibration proof connection. The pressure plate, which is captive to the terminal screw, automatically rises when the screw is loosened. One or two wires of equal or different sizes up to 2.5mm^2 (12 AWG) can be terminated in each terminal. The grooved corners of the pressure plate ensure positive retention of the wires.
The flat bottom of the terminal extends to the inside of the enclosure and provides the terminal-to-board connection. The terminal screws can be turned by a flat tip or a #1 or #2 Philips screwdriver.



TERMINAL-TO-BOARD CONNECTIONS
The KU4000 series offers several fixed terminal-to-board connection possibilities. *(Refer to the Ordering Table on the following page for a selection guide.)*

Wire Jumper connections can be made by soldering a wire jumper between the center hole of the right angle solder pins and the printed circuit board(s). Upon soldering, the board is installed into the enclosure complete with terminals and other components.

All KU4000 terminals have ***Machine Solderable Pins***, which can be machine soldered to the board(s) in the same step as the other components, saving assembly time.

MOUNTING
The KU4000 enclosures snap onto standard 35mm DIN rail or can be panel mounted. Mount one or several enclosures together, or mix them with other DIN rail mounted devices such as terminal blocks, circuit breakers, etc. The choice is yours.

MARKING
The KU4000 series have large marking areas on the front of the cover.

ACCESSORIES
Cover Plugs for Screw Holes and Wire Entries
Screws for Mounting Printed Circuit Board
Pull-Out Panel Mounting Tabs
35mm DIN Rail

CUSTOMIZATION
We can supply the KU4000 series enclosure kits with the exact number of terminals in increments of four to meet your requirements. Enclosures can also be customized with cutouts and holes. Custom colors and special markings are also available. Please contact us for further information.

Enclosure Mounting Procedures

DIN Rail Mounting
The top of the enclosure base has notches molded onto the sides. The bottom of the base has one spring-loaded tab that is factory installed into a molded guide for DIN rail mounting.

When mounting, tilt the bottom of the enclosure slightly away from the rail until the notches grab onto the top flange of the DIN rail. Push the bottom of the enclosure forward towards the DIN rail. The spring-loaded tab will snap onto the bottom of the rail and hold the enclosure firmly in place.

To remove the enclosure from the DIN rail, insert a screwdriver into the exposed slot in the tab and pull the tab down. Pull enclosure forward and remove from the rail.

Panel Mounting
To mount enclosures on a panel or any flat surface, at least one tab must be in place on the top and on the bottom of the enclosure base in the panel mount position. Standard enclosures are supplied with one tab on the bottom for DIN rail mounting.

Install one or more additional tabs (see Accessories in the Ordering Table) into molded tab guides on the back of the enclosure base. Move the pre-installed bottom tab from the DIN rail position to the panel mount position.

To move the tab, insert a screwdriver under the spring pin, lift it and pull the tab forward until it extends approximately 6mm (.25 in.) from the enclosure. Release pin and lock the tab in the panel mount position.

We can supply the enclosures already set up for panel mounting if desired. (Please specify when ordering.)

KU4000 Enclosures

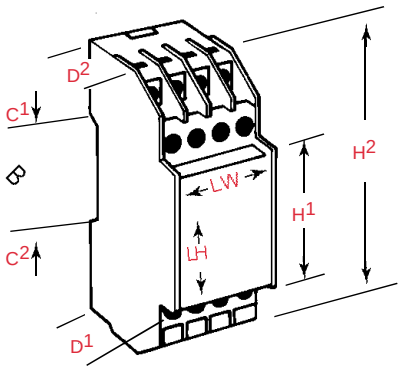
- 8 to 64 Machine Solderable Terminals
- High Density Double Level Terminals
- Ample Interior Component Space
- Temperature Range: to 110°C (230°F)
- Housing Material: Polycarbonate
- Standard Color: Light Gray

KU4001B

KU4002C

KU4003C

ENCLOSURE TYPE	KU4001B	KU4002C	KU4002B	KU4003C
Ratings				
Voltage/Current+	300V/10A	300V/10A	300V/10A	300V/10A
Max. Wire Size–AWG++	12 AWG	12 AWG	12 AWG	12 AWG
Number of Terminals	8	16	16	32
Max. No. of Printed Circuit Boards per Mounting Position				
Horizontal (parallel) (*Fig*. A)		1		1
Vertical (perpendicular) (*Fig*. B)	1		2	
Base Mount (parallel) (*Fig*. C)		1	1	1
Terminal Type Pressure Plate	●	●	●	●
Terminal-to-Board Connections				
Wire Jumper	●	●	●	●
Machine Solderable Pins, Straight		●		●
Machine Solderable Pins, Right Angle			●	
Enclosure Mounting 35mm DIN Rail (7.5mm Deep)	●	●	●	●
Panel, Pull Out Tabs[1]	●	●	●	●
ORDERING INFORMATION	**Cat. No.**	**Cat. No.**	**Cat No.**	**Cat. No.**
Enclosure, Equipped for Board Placement B	**91.201**		**91.240**	
Enclosure, Equipped for Board Placement C		**91.220**		**91.260**
Accessories				
Screw-Hole and Wire Entry Cover Plug Set	**91.201.1**	**91.220.1**	**91.240.1**	**91.260.1**
M2x3 Screws (DIN 89) for Mounting Printed Circuit Boards (4)	**93.001.3**	**93.001.3**	**93.001.3**	**93.001.3**
DIN Rail 35x 7.5mm, 1m (3'-3") lengths	**2094.0/1m**	**2094.0/1m**	**2094.0/1m**	**2094.0/1m**
Extra Panel Mount Tab[1]	**93.001.2**	**93.001.2**	**93.001.2`**	**93.001.2**
Data Sheet No.	**KU4001B**	**KU4002C**	**KU4002B**	**KU4003C**
Approximate Dimensions mm (in.) Enclosure				
W	17.5 (.69)	35.3 (1.39)	35.3 (1.39)	71.7 (2.82)
H^1	45.0 (1.77)	45.0 (1.77)	45.0 (1.77)	45.0 (1.77)
H^2	89.7 (3.53)	89.7 (3.53)	89.7 (3.53)	89.7 (3.53)
D^1	47.4 (1.87)	47.4 (1.87)	47.4 (1.87)	47.8 (1.88)
D^2	57.7 (2.27)	58.0 (2.28)	58.0 (2.28)	58.6 (2.28)
C^1	44.0 (1.73)	44.0 (1.73)	44.0 (1.73)	44.0 (1.73)
C^2	44.0 (1.73)	44.0 (1.73)	44.0 (1.73)	44.0 (1.73)
Label Area				
LH	38.0 (1.50)	39.0 (1.54)	39.0 (1.54)	39.0 (1.54)
LW	17.5 (.69)	32.7 (1.29)	32.7 (1.29)	69.0 (2.72)



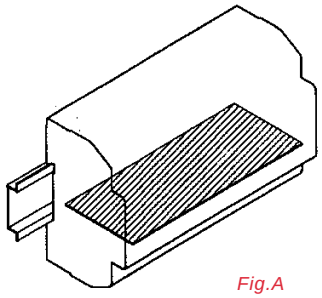


Fig.A

+ Voltage rating can be increased, please consult Altech.
++ 1 or 2 wires can be terminated with Pressure Plate terminals.

[1] One tab is supplied with each enclosure, order additional tabs separately. Refer to Data Sheet for maximum number of tabs.

KU4003B

KU40011C, KU4011B

KU40012C, KU4012B

KU40013C, KU4013B

KU4003B	KU4011C	KU4011B	KU4012C	KU4012B	KU4013C	KU4013B
300V/10	300V/10A	300V/10A	300V/10A	300V/10A	300V/10A	300V/10A
12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG	12 AWG
32	32	32	32	32	64	64
	1		1		1	2
4		8		4		8
1	1	1	1	1	1	1
●	●	●	●	●	●	●
●	●	●	●	●	●	●
	●		●		●	
●		●		●		●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
91.280		91.320		91.360		91.400
	91.300		91.340		91.380	
91.280.1	91.300.1	91.320.1	91.340.1	91.360.1	91.380.1	91.400.1
93.001.3	93.001.3	93.001.3	93.001.3	93.001.3	93.001.3	93.001.3
2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m	2094.0/1m
93.001.2	93.001.2	93.001.2	93.001.2	93.001.2	93.001.2	93.001.2
KU4003B	KU4011C	KU4011B	KU4012C	KU4012B	KU4013C	KU4013B
71.7 (2.82)	140.0 (5.51)	140.0 (5.51)	140.3 (5.52)	140.3 (5.52)	140.3 (5.52)	140.3 (5.52)
45.1 (1.78)	44.6 (1.76)	44.6 (1.76)	44.6 (1.76)	44.6 (1.76)	44.6 (1.76)	44.6 (1.76)
89.7 (3.53)	88.6 (3.49)	88.6 (3.49)	88.6 (3.49)	88.6 (3.49)	88.6 (3.49)	88.6 (3.49)
47.8 (1.88)	47.5 (1.87)	47.5 (1.87)	48.0 (1.89)	48.0 (1.89)	48.0 (1.89)	48.0 (1.89)
58.6 (2.31)	59.5 (2.34)	59.5 (2.34)	59.0 (2.32)	59.0 (2.32)	59.0 (2.32)	59.0 (2.32)
44.0 (1.73)	44.0 (1.73)	44.0 (1.73)	44.4 (1.73)	44.4 (1.73)	44.4 (1.73)	44.4 (1.73)
44.0 (1.73)	44.0 (1.73)	44.0 (1.73)	44.4 (1.73)	44.4 (1.73)	44.4 (1.73)	44.4 (1.73)
39.0 (1.54)	42.0 (1.65)	42.0 (1.65)	42.8 (1.69)	42.8 (1.69)	42.8 (1.69)	42.8 (1.69)
69.0 (2.72)	137.8 (5.43)	137.8 (5.43)	137.8 (5.43)	137.8 (5.43)	137.8 (5.43)	137.8 (5.43)

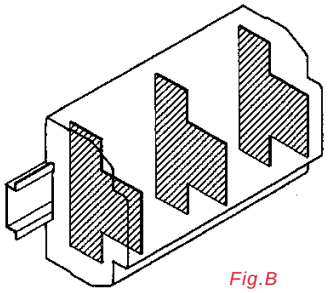


Fig.B

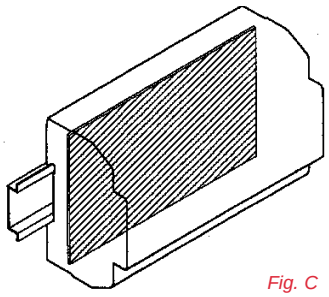


Fig. C