Reliable Protection.
Simplified Wiring.

CI-K enclosure system

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Powering Business Worldwide

The CI-K Enclosure System –
Reliable Protection. Simplified Wiring.

The main job of an enclosure is to protect the devices inside it. That is why enclosure designs focus on providing protection against environmental factors such as dust, moisture, mechanical impacts, and chemicals. And, of course, on protecting operators by means of total insulation. As important as this is, we wanted even more from the enclosures we offer. That is why CI-K small enclosures are also designed to significantly reduce your installation costs.

Reliable protection anywhere

CI-K units are versatile small enclosures that can be used for virtually all switchgear and automation devices on systems and machines regardless of the location.

All types of devices can be flexibly installed in these enclosures, which permit mounting on a DIN-rail, mounting plate, or flush mounting plate. Not only that, but the enclosures also provide reliable protection for cam switches, pilot devices, miniature circuit-breakers, variable frequency drives, motor starters, and control relays, just to name a few examples.

Together with outstanding material properties designed to provide ruggedness and chemical resistance, a high degree of protection of IP65 ensures that these enclosures can be used for a broad variety of applications. Whether at logistics centers, shopping malls, airports, or in the chemical industry – CI-K small enclosures are used everywhere.

Quality for the most stringent requirements

Glass fiber-reinforced polycarbonate provides ruggedness and excellent chemical resistance. In addition, the high-quality gasket in the enclosures, which provides an IP65 degree of protection, guarantees that devices will enjoy the best protection possible. Likewise, the enclosures' total insulation provides ideal protection for operators. Finally, lead seals can be used to protect against unauthorized access.

Basic enclosure for North America

CI-K small enclosures are rated UL/CSA Type 1, 3R, 4X, 12, 13, making them perfect for providing protection in indoor and outdoor applications. In addition, they are classified as industrial control panels in accordance with UL 508A. There are four sizes available for the North American market: Size K2X enclosures come with four hard ½ inch knockouts, while sizes CI-K3X, CI-K4X, and CI-K5X feature smooth exterior walls.

Wiring without cable glands

Flexible push-through cable entry diaphragms make it extremely easy to use CI-K1 and CI-K2 enclosures. All it takes is pushing the cable directly through the flexible membrane, without the need for any tools. Once the cable is pushed through, the high-quality material will enclose the cable, forming a tight seal with an IP65 degree of protection. This means you always have the choice of using metric cable glands or diaphragms as necessary for your specific application.
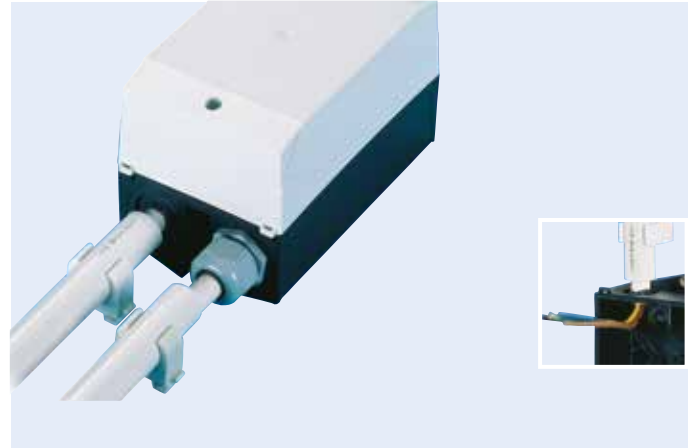
Installation advantages

Protecting your devices with CI-K small enclosures is a smart way to reduce installation costs and save time. Thanks to pre-assembled mounting rails, mounting plates, or even special adapter plates for contactors, CI-K units make it possible to install your devices directly. In other words, the fact that the mounting system you need will already be installed means that the enclosure will be ready to go without any need for additional preparation, resulting in shorter installation times and minimizing costs in the process.

Lead seals

You can use lead seals with CI-K small enclosures in order to protect your systems against unauthorized access. This means that the CI-K enclosure system not only provides reliable protection against environmental factors, but against tampering as well.
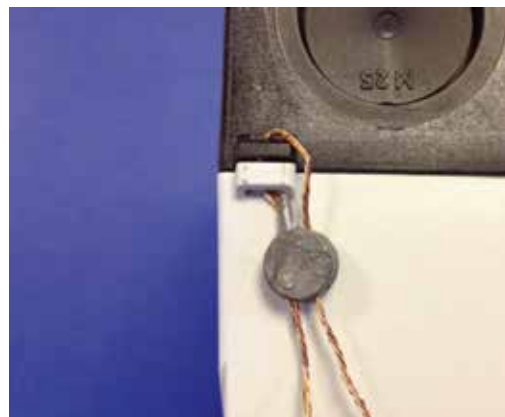
Technical Information

Data sheet

The following overview provides information on the detailed characteristics of the CI-K enclosure system. It includes both general and size-specific data.
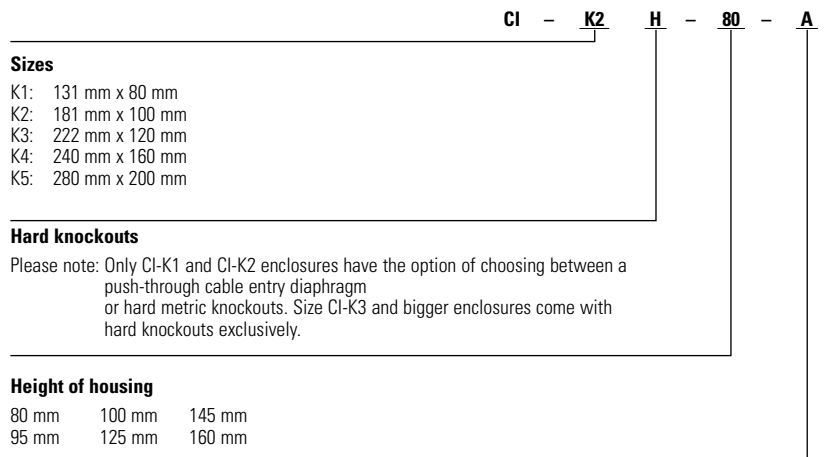
		CI-K1	CI-K2	CI-K2…-80-A	CI-K2…-80-K	CI-K3	CI-K4	CI-K5
General								
Standards and regulations		DIN EN 62208						
		DIN EN 60529						
Climatic proofing		Damp heat, constant, to DIN EN 60068-2-78						
		Damp heat, cyclic, to IEC 60068-2-30						
Ambient air temperature	°C	-25 to +70						
Ambient air temperature with push-through cable entry	°C	-25 to +40						
Degree of protection		IP 65	IP 65	IP20_x	IP 54	IP 65	IP 65	IP 65
Material properties								
Material (base and cover)		Glass-fibre reinforced polycarbonate						
Material (enclosure screws)		Stainless steel, rust-free						
Halogen free		Yes						
Surface treatment		Corrosion-resistant						
Color (base)		RAL 9005, black (matt)						
Color (cover)		Enclosure cover RAL 7035, light grey (matt)						
Creepage resistance to IEC 60112		CTI 175						
Surface resistance to IEC 60093	$\Omega \times 10^{13}$	>1						
Insulation resistance to IEC 60243-1	kV/mm	30						
Continuous thermal stability (enclosure)	°C	-40 to +120						
Continuous thermal stability (gasket)	°C	-40 to +80						
Impact resistance as per EN 50102		IK 04	IK 06	IK 06	IK 06	IK 06	IK 06	IK 06
Weight of fitted components per mounting rail	kg	0.5	0.7	0.7	0.7	0.85	0.9	1
Weight of fitted components with mounting plate	kg	-	0.7	0.7	0.7	0.85	0.9	1
Chemical resistance (base and cover)		Resistance to acids < 10 %, mineral oil, gasoline, greases, saline solutions Partly resistant to acids > 10 %, alcohol Not resistant to alkalis, benzene						
Chemical resistance (push-through membrane and sealing material)		Resistant to acids < 10 %, alkalis, alcohol, saline solutions Partly resistant to acids > 10 %, greases, alcohol Not resistant to mineral oil, gasoline						
Saline spray		IEC 60068-2-11						
UV resistance		Beneath protective canopy						
Water absorption to EN ISO 62	%	0.29						
Glow-wire test as per VDE 0471 Part 2 (base and cover)	°C	960/1 mm thick						
Glow-wire test as per UL 94 (base and cover)		V0/thickness 1.5 mm						
Glow-wire test as per VDE 0471 Part 2 (push-through membrane and sealing material)	°C	650/1 mm thick						
Glow-wire test as per UL 94 (push-through membrane and sealing material)		HB						

Catalog number selection & range

Standard versions

The following tables provide an overview of the part numbers and range of products for CI-K base enclosures.

This information is designed to make it easier to use our main and online catalogs.

```
CI  –  K2   H  –  80  –  A
```

Sizes

K1:	131 mm x 80 mm
K2:	181 mm x 100 mm
K3:	222 mm x 120 mm
K4:	240 mm x 160 mm
K5:	280 mm x 200 mm

Hard knockouts

Please note: Only CI-K1 and CI-K2 enclosures have the option of choosing between a push-through cable entry diaphragm or hard metric knockouts. Size CI-K3 and bigger enclosures come with hard knockouts exclusively.

Height of housing

80 mm	100 mm	145 mm
95 mm	125 mm	160 mm

Option

M:	mounting plate
TS:	mounting rail
AD:	adapter plate for DILE contactor with ZE
A:	mounting rail with cutout in enclosure cover
K:	mounting rail with hinged cover

Part no.	Article no.	Std. pack
CI-K1-95-TS	206881	1 off
CI-K1H-95-TS	105853	1 off
CI-K2-80-A	211107	1 off
CI-K2H-80-A	229309	1 off
CI-K2-80-K	211108	1 off
CI-K2H-80-K	229310	1 off
CI-K2-100-TS	206882	1 off
CI-K2H-100-TS	229304	1 off
CI-K2-100-M	206893	1 off
CI-K2H-100-M	229306	1 off

Part no.	Article no.	Std. pack
CI-K2-145-TS	206883	1 off
CI-K2H-145-TS	229305	1 off
CI-K2-145-M	206894	1 off
CI-K2H-145-M	229307	1 off
CI-K2-145-AD	207632	1 off
CI-K2H-145-AD	229308	1 off
CI-K3-125-TS	206884	1 off
CI-K3-125-M	206895	1 off
CI-K3-160-TS	206885	1 off
CI-K3-160-M	206896	1 off

Part no.	Article no.	Std. pack
CI-K4-125-TS	206886	1 off
CI-K4-125-M	206897	1 off
CI-K4-160-TS	206890	1 off
CI-K4-160-M	206898	1 off
CI-K5-125-TS	206891	1 off
CI-K5-125-M	206899	1 off
CI-K5-160-TS	206892	1 off
CI-K5-160-M	206900	1 off

```
CI  –  K3X  –  125  –  M  –  NA
```

Sizes

K2X:	181 mm x 100 mm
K3X:	222 mm x 120 mm
K4X:	240 mm x 160 mm
K5X:	280 mm x 200 mm

Height of housing

100 mm	145 mm
125 mm	160 mm

Option

M:	mounting plate
TS:	mounting rail

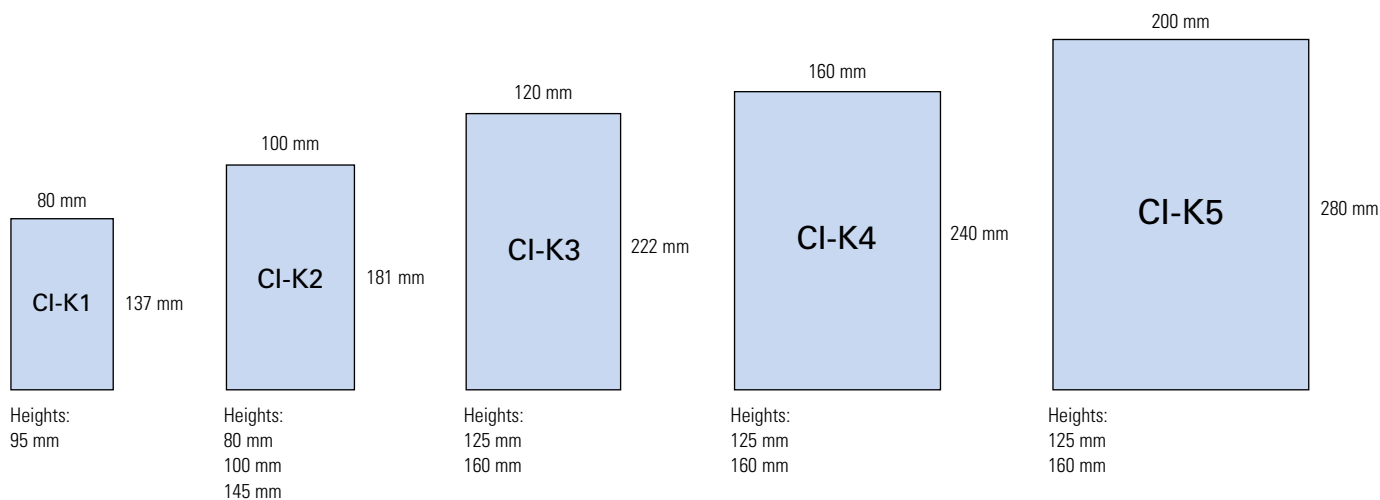**UL/CSA version**

North American versions

For the North American market, there are special enclosures with their own part numbers. All enclosures for the North American market feature smooth exterior walls. (exception: size K2X features four hard knockouts)

Part no.	Article no.	Std. pack
CI-K2X-100-TS-NA	231220	1 off
CI-K2X-100-M-NA	231228	1 off
CI-K2X-145-TS-NA	231221	1 off
CI-K2X-145-M-NA	231229	1 off
CI-K3X-125-TS-NA	231222	1 off
CI-K3X-125-M-NA	231230	1 off

Part no.	Article no.	Std. pack
CI-K3X-160-TS-NA	231223	1 off
CI-K3X-160-M-NA	231231	1 off
CI-K4X-125-TS-NA	231224	1 off
CI-K4X-125-M-NA	231232	1 off
CI-K4X-160-TS-NA	231225	1 off
CI-K4X-160-M-NA	231233	1 off

Part no.	Article no.	Std. pack
CI-K5X-125-TS-NA	231226	1 off
CI-K5X-125-M-NA	231234	1 off
CI-K5X-160-TS-NA	231227	1 off
CI-K5X-160-M-NA	231236	1 off

Sizes & accessories

Sizes

With five different sizes, which can be combined with different enclosure heights, the CI-K enclosure system provides maximum flexibility. As a result, these small enclosures are suitable for virtually any application.

|	80 mm	100 mm	120 mm	160 mm	200 mm
	CI-K1 137 mm	CI-K2 181 mm	CI-K3 222 mm	CI-K4 240 mm	CI-K5 280 mm
Heights:	95 mm	80 mm / 100 mm / 145 mm	125 mm / 160 mm	125 mm / 160 mm	125 mm / 160 mm

Accessories

| Comment	Features		Usable	Part no.	Article no.	Std. pack
mounting rails	Height 7.5 mm, with fixing screws	-	CI-K1	**TS-CI-K1**	206901	10 off
		-	CI-K2	**TS-CI-K2**	206902	10 off
		-	CI-K3	**TS-CI-K3**	206903	10 off
		-	CI-K4	**TS-CI-K4**	206904	10 off
		-	CI-K5	**TS-CI-K5**	206905	10 off
Mounting plates	2 mm sheet steel with fixing screws	-	CI-K2	**M-CI-K2**	206906	10 off
		-	CI-K3	**M-CI-K3**	206907	10 off
		-	CI-K4	**M-CI-K4**	206908	10 off
		-	CI-K5	**M-CI-K5**	206909	10 off
Spacer	4 required for mounting plate / 2 required for mounting rail	25 mm	-	**HS25-CI**	002291	25 off
		50 mm	-	**HS50-CI**	002292	25 off
		10 mm	-	**ADT200-190**	002289	10 off
		15 mm	-	**ADT125-110**	002290	10 off
Exterior mounting-angle brackets	4 angle brackets per set	-	CI-K4, CI-K5	**AB-CI-K4/5**	206914	1 off
Mounting rail adapter	For mounting the enclosure on rails	-	CI-K1	**TB-CI-K**	206918	1 off
blanking strips	For blanking a space unit	-	CI-K2-80-A	**VST1**	211258	5 off
Terminals	-	1-4 mm²	CI-K1, CI-K2	**K-CI-K1/2**	207451	20 off
		1-10 mm²	CI-K3	**K-CI-K3**	206915	20 off
		1.5-16 mm²	CI-K4	**K-CI-K4**	206916	20 off
		10-35 mm²	CI-K5	**K-CI-K5**	218488	20 off
Protective caps	For push-through membrane	M20	CI-K1	**SK-CI-K1**	226766	100 off
		M25	CI-K2	**SK-CI-K2**	226767	100 off
Diaphragm grommets	With integral push-through diaphragm	M20	-	**KT-M20**	207602	100 off
		M25	-	**KT-M25**	207603	100 off
		M32	-	**KT-M32**	207604	100 off
Cable glands	With lock nut and built-in strain relief	M20	CI-K1	**V-M20**	206910	20 off
		M25	CI-K2, CI-K3	**V-M25**	206911	20 off
		M32	CI-K4	**V-M32**	206912	10 off
		M50	CI-K5	**V-M50**	206913	5 off

Accessories

The CI-K range of products features a comprehensive selection of accessories designed to ensure that you will be able to equip your enclosure as necessary for any application. The table to the left provides an overview of the available accessories.
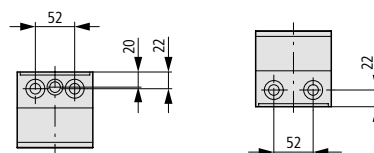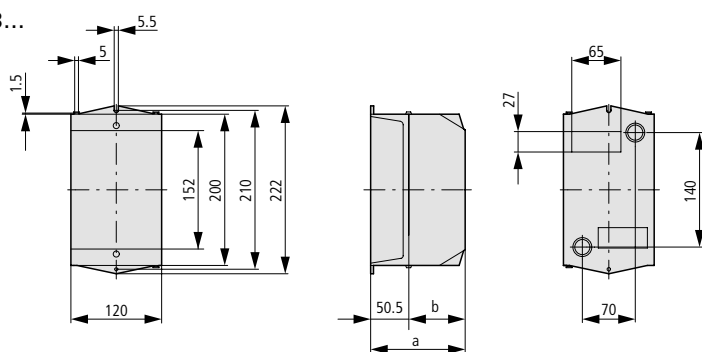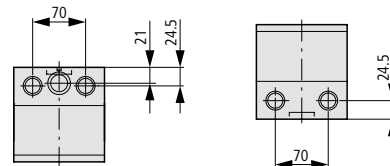
Dimension drawings

CI-K1...
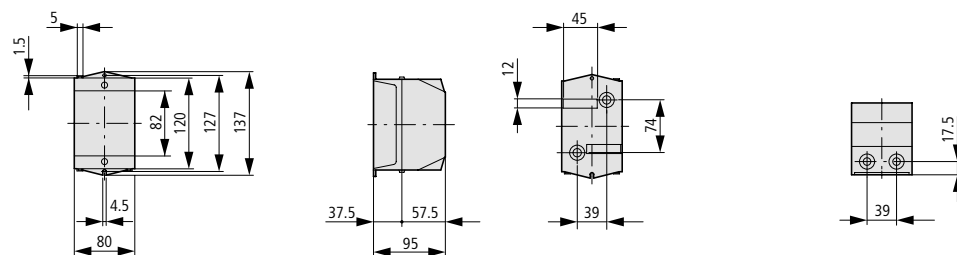
CI-K2...
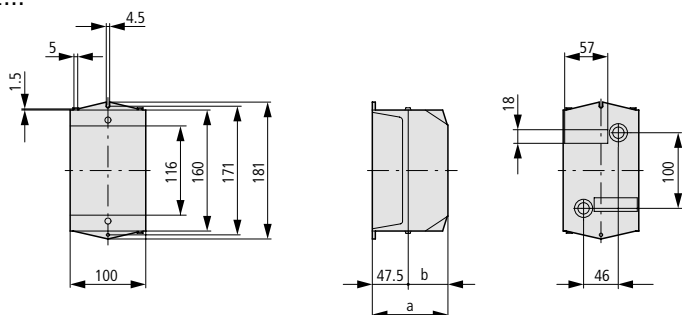
Part no.	a	B
CI-K2-100-...	100 mm	52.5 mm
CI-K2-145-...	145 mm	97.5 mm

CI-K3...

Part no.	a	B
CI-K3-125-...	125 mm	74.5 mm
CI-K3-160-...	160 mm	109.5 mm

CI-K4...
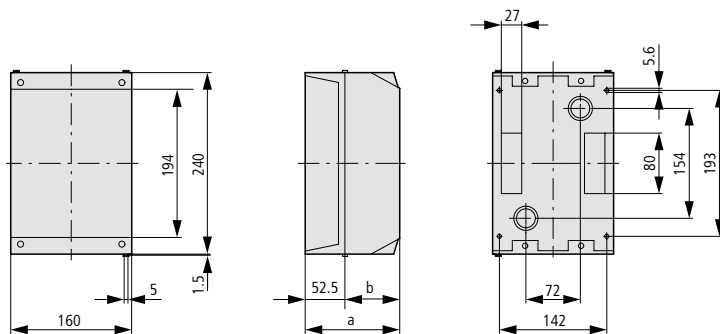
Part no.	a	B
CI-K4-125-...	125 mm	72.5 mm
CI-K4-160-...	160 mm	107.5 mm
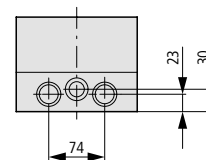
CI-K5...
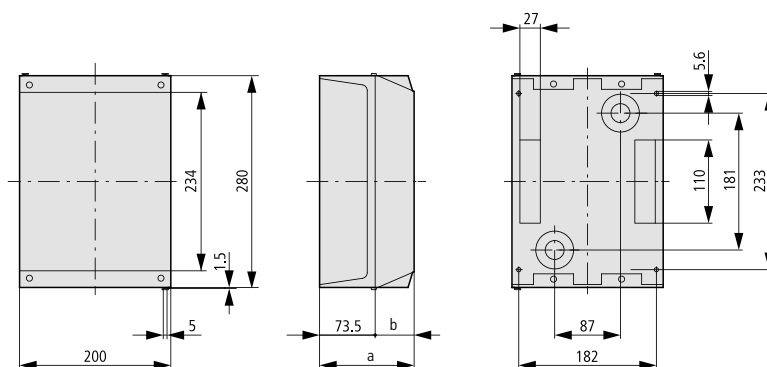
Part no.	a	B
CI-K5-125-...	125 mm	51.5 mm
CI-K5-160-...	160 mm	86.5 mm
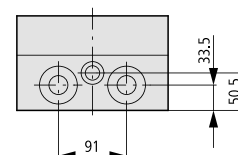
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