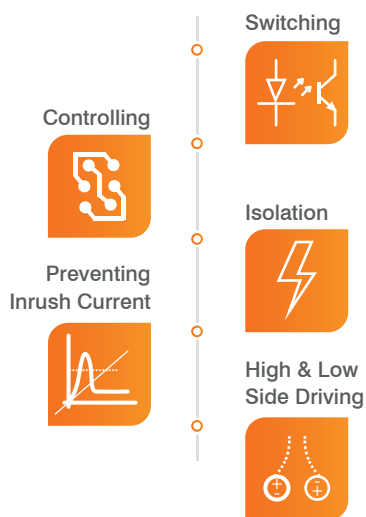


OPK-EKI Optocoupler Modules

Defining OPK-EKI modules in simple terms

OPK-EKI is an optocoupler module that uses a short optical transmission path to transfer an electrical signal between circuits or elements of a circuit, while keeping them electrically isolated from each other. They can be used to switch loads like mechanical relays but they are much more than simply switching...

Which actions are executed?



OPK-EKI module is an electrically operated **switch** that is used where it is necessary to **control** a circuit by a low-power signal.

The main purpose of an optocoupler is to prevent rapidly changing voltages or high voltages on one side of a circuit from distorting transmissions or damaging components on the other side of the circuit. It uses light waves to provide complete electrical **isolation** between control and controlled circuits while transferring an electrical signal.

Zero volt switching circuit **prevents inrush current** so loads can be switched more stable.

High side and low side switching option allows **driving** a load in two different ways.

Which market are they used frequently?

- PLC automation systems
- Industrial Machines
- Control and safety systems
- Energy management systems
- Electric power plants
- Medium voltage modular cabinets

Benefits and Advantages

- A widely range of voltage input from 5V to 220V
- Providing high switching frequency due to short switch-on and switch-off times
- Long service life
- Quite working
- No contact arcing
- Resistant to vibration and shock
- Preventing inrush current
- High side and low side switching options
- AC and DC load switching options
- Cage clamp connection
- Saving space with 6.2mm design
- Saving wiring time with plug-in bridges
- LED status indicator in order to see actual movement of the contacts
- Labeling with terminal block marking materials
- Self-Extinguishing plastic housing
- <500µsn response time
- Up to 5 DC or up to 0,5A AC current switching
- 24-260V AC or 5-48V, 3-30V DC voltage switching

Industrial Applications



ISOLATION and
AMPLIFICATION
All models



Optocoupler modules are used in industrial environments where high voltages, magnetic fields and noise are commonly present, reliability is critical to avoid downtime and ensure data accuracy. In this environment circuit designers use optocouplers to insulate high voltages and isolate unwanted signals. Klemsan presents OPK-EKI modules that are designed to meet the stringent requirements of industrial applications.

Under Vibration



SWITCHING
All models



Klemsan OPK-EKI modules compensate the bad effects of vibration and shock and continue to switch current and voltage thanks to their cage clamp connection and having no moving parts like electromechanical relays. They ensure continuous and uninterrupted operation for any system.

Solid State Relay Applications

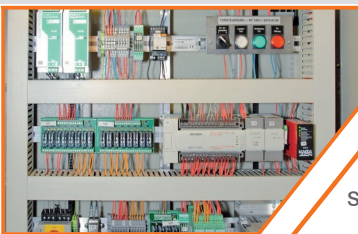


I/O CONTROL
models



OPK-EKI modules can be used instead of solid state relays due to high switching frequency, short switch-on and switch-off times, no contact bouncing, noiseless switching, long operation life, etc.

Narrow Cabinets



SPACE SAVING
All Models



Only 6.2 mm wide, thus saving considerable space in your enclosures. OPK-EKI modules are particularly suitable for the modification and extension of equipment and machinery, where it helps to make optimum use of the limited space available in switchgear cabinets.

Definition	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	Optocoupler module	
Order Number	112010N	112110N	112220N	112320N	112420N	112520N	112620N	112710N	112720N	112730N	
Package Unit	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.	
Width/Depth/Height (mm)	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	6.2/56/81.9	
Connection	Cage clamp	Cage clamp	Cage clamp	Cage clamp	Cage clamp	Cage clamp	Cage clamp	Cage clamp	Cage clamp	Cage clamp	
Mounting	Rail Mount	Rail Mount	Rail Mount	Rail Mount	Rail Mount	Rail Mount	Rail Mount	Rail Mount	Rail Mount	Rail Mount	
Input Voltage	5V AC/DC	12V AC/DC	24V AC/DC	48V AC/DC	60V AC/DC	110V AC/DC	220V AC/DC	9-72V DC	9-72V DC	9-72V DC	
Output	Switching Voltage Range	5-48V DC	5-48V DC	5-48V DC	5-48V DC	5-48V DC	5-48V DC	5-48V DC	3-30V DC	3-30V DC	24-260V AC
	Maximum Switching Current	0.65A DC	0.65A DC	0.65A DC	0.65A DC	0.65A DC	0.65A DC	0.65A DC	5A DC	5A DC	0.5A AC
Switching Type	High Side	High Side	High Side	High Side	High Side	High Side	High Side	High Side	High Side	Low Side	High Side
Zero volt switching circuit	-	-	-	-	-	-	-	-	-	-	available
Response time	<10msec	<10msec	<10msec	<10msec	<10msec	<10msec	<10msec	<10msec	<500μsec	<500μsec	<500μsec
Schematics											

Accessories and Components

Definition	End Plate	Plug in bridge for 2 hole	Plug in bridge for 3 hole	Plug in bridge for 4 hole	Plug in bridge for 5 hole	Plug in bridge for 10 hole	DG 6/5 - Label	DB 5 - Label	11.2 Strip label
Order Number	450389	470112	470113	470114	470115	470119	505330	505850	1020100
Package Unit	10 pcs.	25 pcs.	20 pcs.	15 pcs.	10 pcs.	5 pcs.	440 pcs.	500 pcs.	1 pc.
									NOTE: This product is only compatible with below items: -112710N -112720N -112730N