Initiator and actuator blocks with tension spring connection



For machine and system control wiring, practice-oriented solutions are preferred that are primarily economical and reliable and thus contribute to the system's operational and functional safety.

fasis KOI was designed to connect the great variety of initiators and actuators to central and remote control systems. The initiator and actuator blocks of type WKF 1,5 KOI have, in particular, been conceived for the requirements in machine and system engineering. They facilitate the wiring task through clearly arranged termination points and an easily accessible and operable tension spring technology.

fasis KOI is a compact and efficient wiring system for connection purposes, potential distribution and transmission of signals from initiators and actuators.



System features and benefits

- Control-compatible system solutions through accurate matching of the connection modules' number of poles to the input and output modules of the PLC.
- Flexible connection module mounting options with either snap-on TS 35 DIN rail mount, or direct mounting to a backplane with screws.
- Application-specific individual terminal block as a link between initiators, actuators and the PLC.



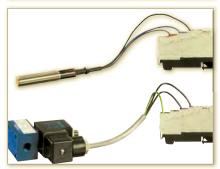
Economically designed

- Low space requirements due to compact dimensioning of the individual terminal blocks and integration of the potential distribution inside the connection module.
- Efficient installation and start-up of the wiring system by simply fitting the connection module with components, making further accessories unnecessary.
- Reduction of the warehousing costs due to a low variety of parts without having to forego flexibility in the application.



Service-friendly operation

- Short maintenance times for modifications of the terminal block assembly by replacing or extending individual blocks without interrupting the power supply of the other initiator and actuator blocks.
- Immediate visual monitoring of the switching states due to integrated light-emitting diodes.
- No maintenance required due to a permanently secure and dynamic tension spring clamp connection system.



Application specific options

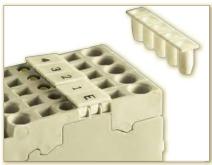
- Power supply to the connection modules through supply blocks, with optional LEDs.
- Potential distribution through connection modules in designs for 9 (1+8) or 18 (2x(1+8)) terminal blocks.
- Initiator blocks, for example for the connection of 3-wire or 4-wire proximity or position switches, with optional LFDs.
- Actuator terminals, for example for the connection of magnetic valves.



Connection module

Collect and distribute potentials

- Potential distribution is achieved quickly and safely as soon as the terminal blocks are snapped on.
- Cross connectors for the plus, minus and ground or screen potential are each integrated in the connection modules.
- The system does not require any additional cross connectors.



Wire entry guides

Connect small cross sections safely

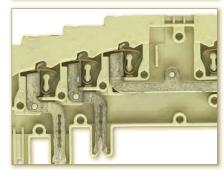
- Wire entry guides prevent the wires from being inserted too deeply (smaller than 1 mm²) and enable an easy, professional and quick installation.
- Ensure the connection of solid and fine-stranded wires smaller than 1 mm².
- Also see the accessories for DIN rail terminal blocks starting at page 124!



Marking system

All clamping points marked clearly

- Marking tags easily readable even with the wires connected.
- Clear assignment of wire to the termination point while wiring.
- Simplified troubleshooting for servicing.
- Customized marking with the wiemarc and wieplot marking systems.



Materials

High-quality materials

- Special alloys enable low feed-through resistance and provide a gas-tight contact area:
 - clamping spring: stainless CrNi steel- current-carrying bar: tin-plated copper
- Polyamide has excellent electrical, chemical and mechanical characteristics:
- temperature resistance: up to 120°Ccreepage resistance: CTI 600
- flammability class: self-extinguishing, UL94-V2



Initiator and actuator blocks with tension spring connection

WKF 1,5 KOI 3L...

- Initiator block with tension spring connection for mounting on TS 35
- Nominal cross section 1.5 mm²



37.702.7453.0 * 65 V/1.5 kV/3



37.702.8453.0 * DC 24 V same as picture, but with LED



Description		Туре	Part No.	Std. Pack
Initiator block, gray		WKF 1,5 KOI 3L	37.702.7453.0	50
Initiator block with LED, gray		WKF 1,5 KOI 3L-PGE	37.702.8453.0	50
General data				
	incl TS 7.5	5 mm / 71 mm / 48 mm		
Width / length / height, incl. TS 7.5 Wire strip length		10 mm		
Approvals		71. (A)		
Technical data		IEC	UL	CSA
		EN 60947-7-1		
Cross section fine-stranded		0.13 - 1.5 mm ²		
Cross section solid/stranded		0.13 – 1.5 mm ²		
Cross section, AWG			22-16	28-16
Rated current		10 A	10 A	10 A
Rated voltage		*	65 V	65 V
Rated impulse voltage				
Pollution degree				
Accessories		Type	Part No.	Std. Pack
Wire entry guide	0.13-0.2 mm ²	LEL 1,5/1 WEISS	05.562.2453.0	100
	0.25-0.5 mm ²	LEL 1,5/2 GRAU	05.562.2553.0	100
	0.75-1.0 mm ²	LEL 1,5/3 SCHWARZ	05.562.2653.0	100
Screwdriver, uninsulated		DIN 5264 B 0,6x3,5	06.502.4000.0	5

WKF 1,5 KOI 3L/SL...

- Initiator block with tension spring connection for mounting on TS 35
- Nominal cross section 1.5 mm²



37.702.7553.0 * 65 V/1.5 kV/3



37.702.8553.0 * DC 24 V same as picture, but with LED



Initiator block, gray		37 702 7553 0	50		
Initiator block with LED, gray			50		
initiator block with LED, gray		37.702.0003.0	50		
Width / length / height, incl. TS 7.5		5 mm / 71 mm / 48 mm			
Wire strip length		10 mm			
	RI (B)				
Approvals Technical data		UL	CSA		
	EN 60947-7-1				
Cross section fine-stranded					
Cross section solid/stranded					
Cross section, AWG		22-16	28-16		
Rated current		10 A	10 A		
Rated voltage		65 V	65 V		
Rated impulse voltage					
	Tuna	Part No	Std. Pack		
0.40.00.0					
			100		
0.25-0.5 mm ²	LEL 1,5/2 GRAU	05.562.2553.0	100		
0.75-1.0 mm ²	LEL 1,5/3 SCHWARZ	05.562.2653.0	100		
Screwdriver, uninsulated		06.502.4000.0	5		
	TS 7.5 0.13-0.2 mm ² 0.25-0.5 mm ²	TS 7.5 5 mm / 71 mm / 48 mm 10 mm 71 @ IEC EN 60947-7-1 0.13 – 1.5 mm ²	Y WKF 1,5 K0I 3L/SL-PGE 37.702.8553.0 TS 7.5 5 mm / 71 mm / 48 mm 10 mm ■ TEC EN 60947-7-1 0.13 – 1.5 mm² 0.13 – 1.5 mm² 0.13 – 1.5 mm² 10 A 10		

WKF 1,5 KOE...

- Supply block with tension spring connection for mounting on TS 35
- Nominal cross section 1.5 mm²



37.702.7753.0 * 65 V/1.5 kV/3



37.702.8753.0 * DC 24 V same as picture, but with LED



Description		Туре	Part No.	Std. Pack
Supply block, black		WKF 1.5 KOE	37,702,7753.0	50
		WKF 1,5 KOE-PGN	37.702.8753.0	50
General data				
Width / length / height,	incl. TS 7.5	5 mm / 71 mm / 48 mm		
Wire strip length		10 mm		
Approvals		91 (R		
Technical data		IEC	UL	CSA
		EN 60947-7-1		
Cross section fine-stran	nded	0.13 - 1.5 mm ²		
Cross section solid/stranded		0.13 - 1.5 mm ²		
Cross section, AWG			22-16	28-16
Rated current		10 A	10 A	10 A
Rated voltage		*	65 V	65 V
Rated impulse voltage				
Pollution degree				
Accessories		Туре	Part No.	Std. Pack
Wire entry guide	0.13-0.2 mm ²		05.562.2453.0	100
	0.25-0.5 mm ²		05.562.2553.0	100
	0.75-1.0 mm ²	LEL 1,5/3 SCHWARZ	05.562.2653.0	100
Screwdriver, uninsulated		DIN 5264 B 0.6x3.5	06.502.4000.0	5

WKF 1,5 KOA 2L...

- Actuator block with tension spring connection for mounting on TS 35
- Nominal cross section 1.5 mm²



37.702.7653.0 * 65 V/1.5 kV/3



37.702.8653.0 * DC 24 V same as picture, but with LED



Description

Description		Туре	Part No.	Std. Pack
Actuator block, gray		WKF 1.5 KOA 2L	37.702.7653.0	50
Actuator block, gray Actuator block with LED, gray		WKF 1,5 KOA 2L/SL-PGE	37.702.8653.0	50
General data				
Width / length / height, incl. TS 7.5		5 mm / 71 mm / 48 mm		
Wire strip length		10 mm		
Approvals		<i>9</i> 1. <i>Q</i> 1		
Technical data		IEC	UL	CSA
		EN 60947-7-1		
Cross section fine-stranded		0.13 - 1.5 mm ²		
Cross section solid/stranded		0.13 – 1.5 mm ²		
Cross section, AWG			28-16	
Rated current		10 A	10 A	
Rated voltage		*	65 V	
Rated impulse voltage				
Pollution degree				
Accessories		Туре	Part No.	Std. Pack
Wire entry guide	0.13-0.2 mm ²		05.562.2453.0	100
	0.25-0.5 mm ²		05.562.2553.0	100
		LEL 1,5/3 SCHWARZ	05.562.2653.0	100
Screwdriver, uninsulated		DIN 5264 B 0.6x3.5	06.502.4000.0	5

VM WKF...

• Connection module for 9 or 18 blocks



Connection module for 9 blocks, black	VM WKF KO9	69.700.0953.0	10
Connection module for 18 blocks, black	VM WKF KO18	69.700.1853.0	5
General data			
Length: 9 pole module	$L = 9 \times 5 \text{ mm} + 1.5 \text{ mm}$		
Length: 18 pole module	$L = 18 \times 5 \text{ mm} + 1.5 \text{ mm}$		
Approvals	91.		
Technical data	IEC	UL	CSA
	EN 000047 7 4		
	EN 60947-7-1		
Cross section fine-stranded	0.13 – 1.5 mm ²		
Cross section fine-stranded Cross section solid/stranded			
	0.13 – 1.5 mm ²		
Cross section solid/stranded	0.13 – 1.5 mm ²	10 A	
Cross section solid/stranded Cross section, AWG	0.13 – 1.5 mm ² 0.13 – 1.5 mm ²	10 A 65 V	
Cross section solid/stranded Cross section, AWG Rated current	0.13 – 1.5 mm ² 0.13 – 1.5 mm ² 10 A		

Туре

Part No.

Std. Pack