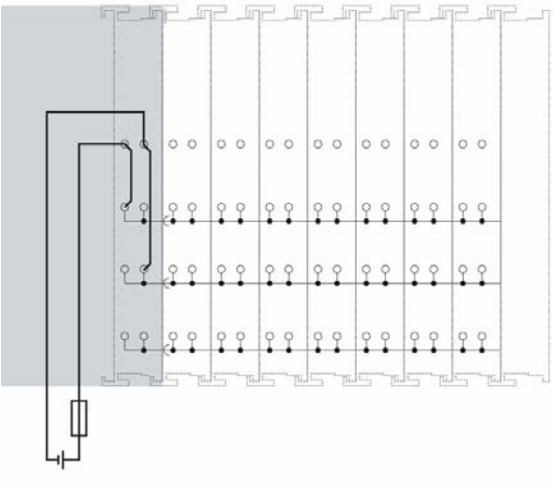
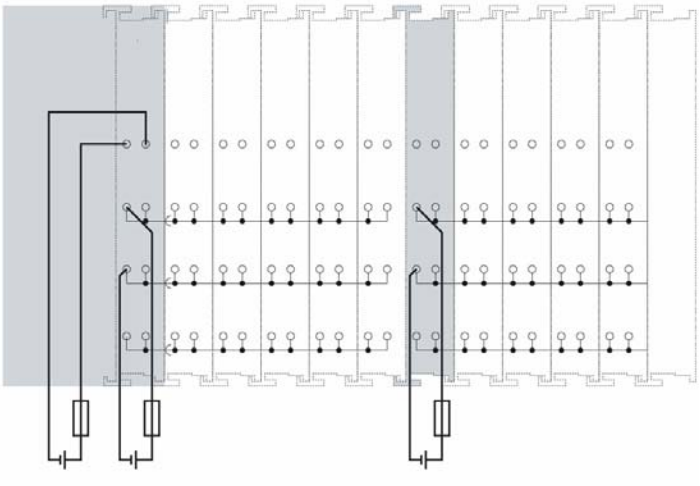
KL91xx, KL92xx - feed terminals

The feed terminals can be inserted anywhere between the input and output terminals in order to construct a further potential group, or in order to supply the terminals that follow to the right with additional current. The feed terminals can be used for voltages up to 230 V_{AC}. The terminals with diagnostics report any voltage failure or short-circuit to the controller. The function and electronic data from the diagnostic terminals appear like a 2-channel input terminal with correlating voltage. In other words, they occupy 2 bits in the automation device's process image.



Infeed via Bus Coupler only, one potential group

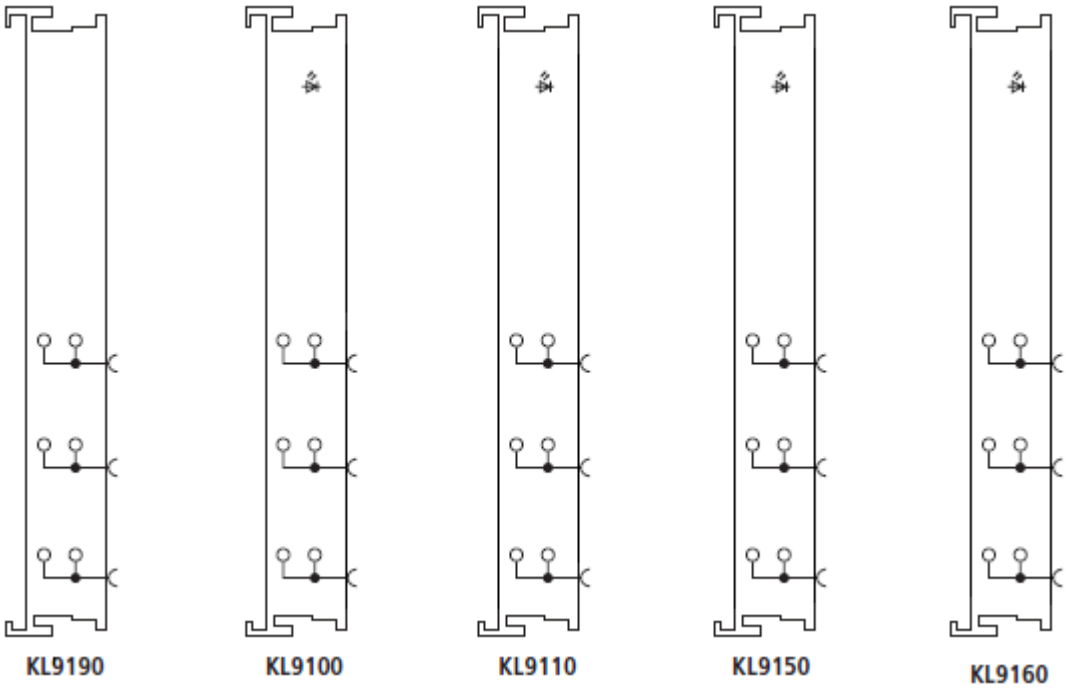


Infeed via Bus Coupler and incoming feeder terminal, three potential groups

The power feed terminals make it possible to set up various potential groups with any desired voltages (KL9190) or with the standard voltages of 24 V_{DC} or 230 V_{AC} (120 V_{AC}). The power feed terminals are available with or without fine-wire fuse. In order to monitor the supply voltage, the terminals with diagnostics report the status of the power feed terminal to the Bus Coupler through two input bits. It is thus possible for the controller to check the distributed peripheral voltage over the fieldbus. The operating point performance conforms to the input terminals KL1002 (24 V) and KL1702 (230 V).

The KL9180, KL9185 and KL9195 Bus Terminals allow the supply voltage to be accessed a number of times via spring force terminals. These Bus Terminals make it unnecessary to use additional terminal blocks on the terminal strip. The KL9195 Bus Terminal can be used for the connection of screens. The KL9195 connects the spring force contacts directly to the DIN rail, and can optimally ground incoming electromagnetic radiation. The two power contacts are looped through by the KL9195, allowing two wires to be connected to each power contact. The KL9010 bus end terminal is necessary for data exchange between the Bus Coupler and the Bus Terminals. Each assembly must be terminated at the right hand end with a KL9010 bus end terminal. The bus end terminal does not have any other function or connection facility. The KL9080 is used to identify potential groups (e.g. 230 V_{AC}/24 V_{DC}). It is inserted between two potential groups, and indicates the separation through an orange colored cover.

General technical data	KL91xx /KS91xx, KL92xx
Current Power Contacts	max. 10 A
Short-circuit-proof	125 A
Voltage	24 V_{DC} or 230 V_{AC}, depending on type
Protection class	IP20
installation position	variable
Pluggable wiring	at all KSxxxx series terminals



Technical data	KL9190, KS9190	KL9100, KS9100	KL9110, KS9110	KL9150, KS9150	KL9160, KS9160
Nominal voltage	arbitrary	24 V_{DC}	24 V_{DC}	230 V_{AC} (120 V_{AC})	
Integrated fine-wire fuse	-	-	-	-	-
Diagnostics	-	-	yes	-	yes
Power LED	-	green	green	green	green
Defect LED	-	-	-	-	-
Reported to K-bus	-	-	yes	-	yes
PE contact	yes	yes	yes	yes	yes
Shield connection	-	-	-	-	-
Renewed infeed	yes	yes	yes	yes	yes
Connection facility to additional power contact	1	1	1	1	1
K-Bus looped through	yes	yes	yes	yes	yes
Process image	-	-	2 Bit	-	2 Bit
Connection to DIN rail	-	-	-	-	-
Electrical isolation	yes	yes	yes	yes	yes
Dimensions (wxhxd)	15mm x 100mm x 70mm (connected width 12 mm)				
Side by side mounting on Bus Terminals with power contact	yes	yes	yes	yes	yes
Side by side mounting on Bus Terminals without power contact	yes	yes	yes	yes	yes
Pluggable wiring	at all KSxxxx series terminals				

Meaning of the diagnostic bits

Bit 0 = 0: no power supply present
Bit 0 = 1: power supply present
Bit 1 = 0: bus function terminal does not have a fuse

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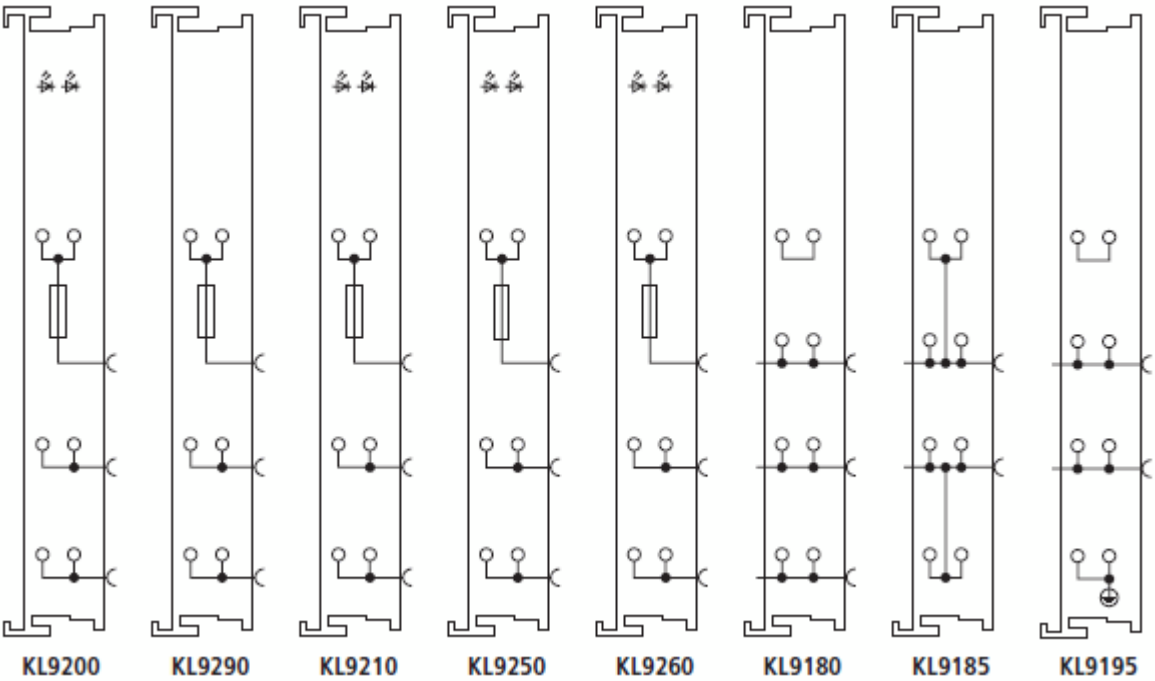

Technical data	KL9200	KL9290	KL9210	KL9250	KL9260	KL9180, KS9180	KL9185, KS9185	KL9195, KS9195
Nominal voltage	24 V_{DC}	arbitrary	24 V_{DC}	230 V_{AC}	230 V_{AC}	up to 230 V_{AC}		
Integrated fine-wire fuse	up to 6,3 A					-	-	-
Diagnostics	-	-	yes	-	yes	-	-	-
Power LED	green	-	green	green	green	-	-	-
Defect LED	red	-	red	red	red			
Reported to K-bus	-	-	yes	-	yes	-	-	-
PE contact	yes	yes	yes	yes	yes	yes	-	-
Shield connection	-	-	-	-	-	-	-	2
Renewed infeed	yes	yes	yes	yes	yes	-	-	-
Connection facility to additional power contact	1	1	1	1	1	2	4	1
K-Bus looped through	yes	yes	yes	yes	yes	yes	yes	yes
Process image	-	-	2 Bit	-	2 Bit	-	-	-
Connection to DIN rail	-	-	-	-	-	-	shield terminal	-
Electrical isolation	yes	yes	yes	yes	yes	-	-	-
Dimensions (wxhxd)	15mm x 100mm x 70mm (connected width 12 mm)							
Side by side mounting on Bus Terminals with power contact	yes	yes	yes	yes	yes	yes	only 2 Power Contacts	
Side by side mounting on Bus Terminals without power contact	yes	yes	yes	yes	yes	-	-	-
Pluggable wiring	-	-	-	-	-	at all KSxxxx series terminals		

Meaning of the diagnostic bits:

Bit 0 = 0: no power supply present
Bit 0 = 1: power supply present
Bit 1 = 0: Fuse o.k
Bit 1 = 1: Fuse faulty

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