



The **MK73-R/T/Z22** couplers are used to isolate and condition discrete signals in applications that require high component density. Vertical isolation results in a width of 9 mm per channel.

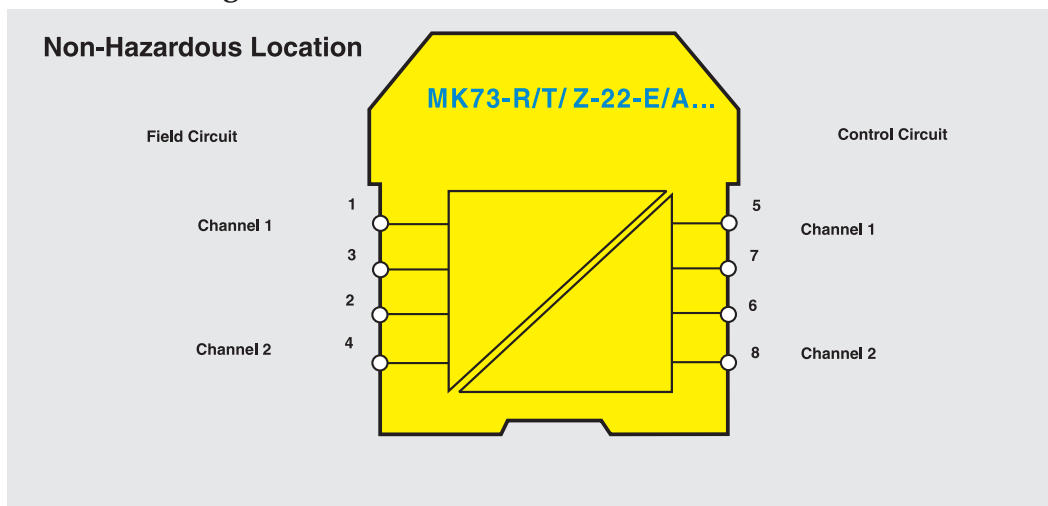
Field circuits are wired to the bottom terminals (1/3 and 2/4). Control circuits are wired to the top terminals (5/7 and 6/8). This configuration simplifies wiring by keeping control and field circuits separate.

The couplers are available with relay, transistor or Triac outputs for a wide variety of applications. Transistor outputs are short-circuit and reverse-polarity protected.

These devices were designed with minimal options to provide high operational integrity at low cost, making them an ideal interface at the best price/function ratio. A comprehensive range of options is also available for special applications.

- MK73-R22E/...**
- MK73-T22E/...**
- MK73-R22A/...**
- MK73-T22A/...**
- MK73-Z22A/...**

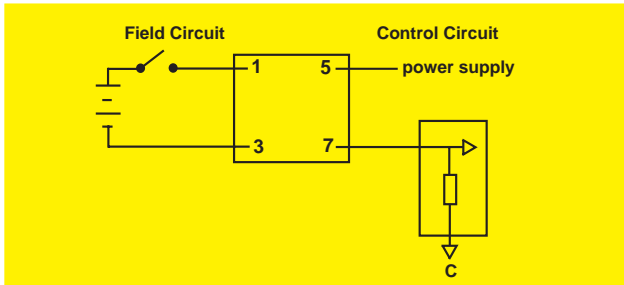
### Connection Diagram



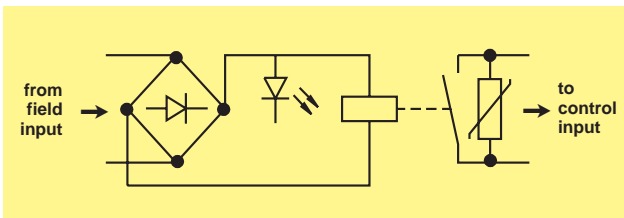
## Input or Output Coupler 2 Channel MK73-R22 (A/E)/... MK73-T22 (A/E)/...

### Input Coupler....

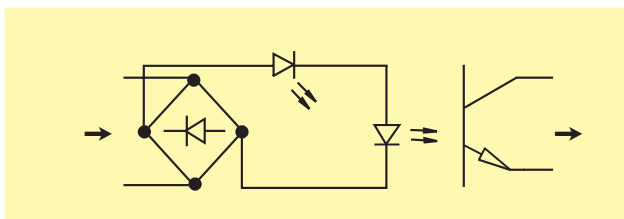
Example Application



...with Relay output (R22E)

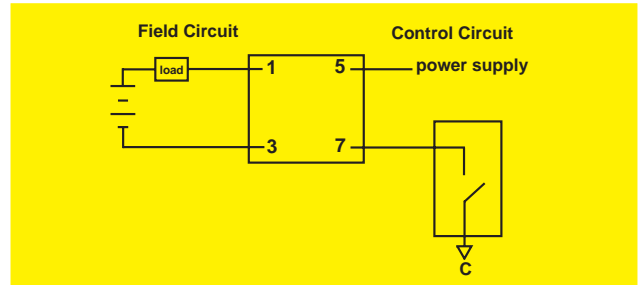


...with Transistor output (T22E)

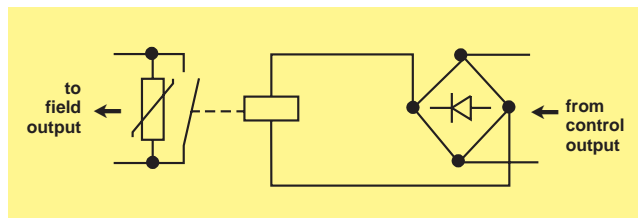


### Output Coupler....

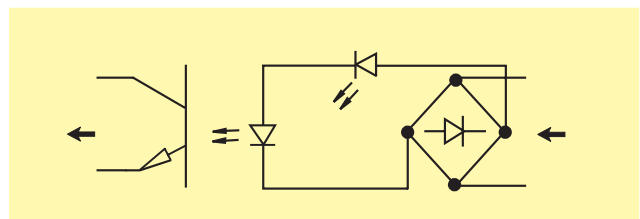
Example Application



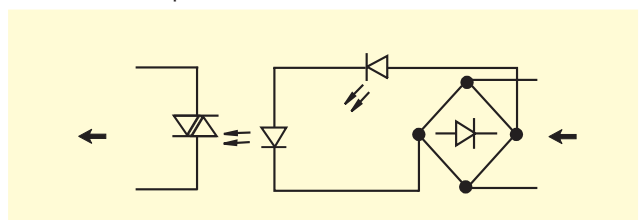
...with Relay output (R22A)



...with Transistor output (T22A)



...with Triac output (Z22A)



## Input Coupler

Output	Relay	Transistor
Channels	2	2
Field input voltage		
12 V (±20%)	MK73-R22E/12VUC	MK73-T22E/12VDC
24 V (±20%)	MK73-R22E/24VUC	MK73-T22E/24VDC
30-120 VDC		MK73-T22E/60VDC
80-200 VAC		MK73-T22E/115VAC
130-250 VAC		MK73-T22E/230VAC
Control current / channel	≤20 mA	≤10 mA
Switching frequency		
DC version		20 kHz / 10 kHz with 60 V version
UC version	5 Hz	
Clearances and creepage distances		
Between control circuit and contacts	8 mm / 4 kV	8 mm / 4 kV
Between contacts	4 mm / 2 kV (output circuits)	4 mm / 2 kV
Circuit to control input	one N.O. contact	one transistor
Switching voltage	250 V	40 VDC
Switching current	2 A	0.11 A
Switching capacity	500 VA / 60 W	
Voltage drop at maximum load		≤2 V
Contact material	silver alloy + 3 μ Au	
Contact protection	varistor	
Short-circuit and reverse polarity protection		5 x I <sub>nom</sub> / yes

Part Numbers	ID Numbers	Part Numbers	ID Numbers
MK73-R22E/12VUC	M7530002	MK73-T22E/12VDC	M7530102
MK73-R22E/24VUC	M7530004	MK73-T22E/24VDC	M7530104
		MK73-T22E/60VDC	M7530111
		MK73-T22E/115VAC	M7530106
		MK73-T22E/230VAC	M7530108

## Output Coupler

Output	Relay	Transistor	Triac
<b>Channels</b>	2	2	2
<b>Voltage from control</b> 12 V (±20%)	MK73-R22A/12VUC	MK73-T22A/12VDC	MK73-Z22A/12VDC
24 V (±20%)	MK73-R22A/24VUC	MK73-T22A/24VDC	MK73-Z22A/24VDC
30-120 VDC		MK73-T22A/60VDC	MK73-Z22A/60VDC
80-200 VAC		MK73-T22A/115VAC	MK73-Z22A/115VAC
130-250 VAC		MK73-T22A/230VAC	MK73-Z22A/230VAC
Control current/channel	≤20 mA	≤10 mA	≤10 mA
<b>Switching frequency</b>			
DC version		20 kHz / 10 kHz with 60 V version	20 Hz
UC version	5 Hz		
AC version		20 Hz	20 Hz
<b>Clearances and creepage distances</b>			
Between control circuit and contacts	8 mm / 4 kV	8 mm / 4 kV	8 mm / 4 kV
Between contacts	4 mm / 2 kV	4 mm / 2 kV	4 mm / 2 kV
<b>Circuit to input of field output device</b>	one N.O. contact	one transistor	one Triac
Switching voltage	250 V	40 VDC (80 VDC version.../K20)	250 VAC
Switching current	2 A	0.1 A (1 A version.../K20)	0.3 A <sub>RM</sub> S
Switching capacity	500 VA / 60 W		
Minimum current / leakage current			1.5 mA
Voltage drop at maximum load		≤2 V	
Contact material / protection	silver alloy + 3 μ Au / varistor		
Short circuit / reverse polarity protection		5 x I <sub>nom</sub> / yes	

Part Numbers	ID Numbers	Part Numbers	ID Numbers	Part Numbers	ID Numbers
MK73-R22A/12VUC	M7530022	MK73-T22A/12VDC	M7530122	MK73-Z22A/12VDC	M7530222
MK73-R22A/24VUC	M7530024	MK73-T22A/24VDC	M7530124	MK73-Z22A/24VDC	M7530224
		MK73-T22A/24VDC/K20	M7530134	MK73-Z22A/60VDC	M7530225
		MK73-T22A/60VDC	M7530125	MK73-Z22A/115VAC	M7530226
		MK73-T22A/60VDC/K20	M7530135	MK73-Z22A/230VAC	M7530228
		MK73-T22A/60VUC	M7530131		
		MK73-T22A/115VAC	M7530126		
		MK73-T22A/115VAC/K20	M7530136		
		MK73-T22A/230VAC	M7530128		