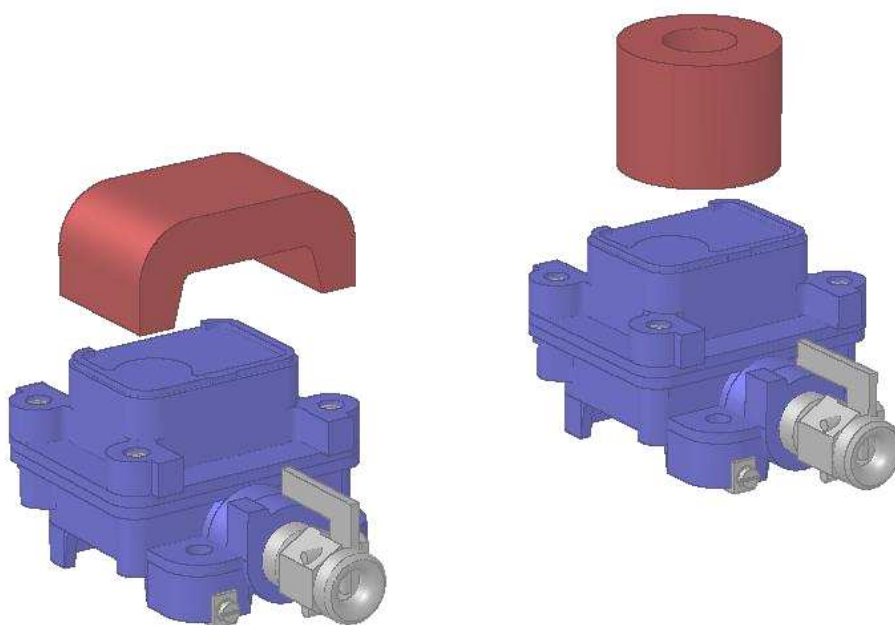


MAGNETIC SWITCHER KFM - 02



I M2
II 2G
EExd/IIBT6 or EExial/IIBT6
KDB04ATEX166X



IM2
II2G
EExd/IIBT6
KDB04ATEX166X

Characteristic:

Magnetic switcher type KFM-02 are purposed for working in signalling and teletype circuits, or to automatize manufacturing processes.

Types of magnetic connectors KFM-023.. and KFM-024.. are purposed for working in electric circuits: only low voltage to 230V;50Hz; 110V DC or only for intrinsic safety devices - **ia** or **ib** level. Types of magnetic connectors type KFM-022.. are assigned for working in low voltage (to 230V; 50Hz or 110V DC) electric circuits

Accordance with standards:

Signal transmitter meet requirements of standards referenced with 94/9/WE Instruction of European Union:

- PN-EN 60079-0: 2006(U)
- PN-EN 60079-1: 2004(U)
- PN-EN 60079-11: 2007(U)

Using conditions:

Magnetic switcher type KFM-02 are adapted for working in underground and superficial mining's with methane or / and carbon dust explosion hazard and in rooms and outer spaces / areas with gases and vapour explosion hazard- class IIB. Devices guarantee high degree of protection accordance with designation:

Types compatible with Table 3
kolumn 2



I M2
II 2G

and accordance with PN-EN 60079-0: 2006(U) standard, marked with the symbol:

EExd/IIBT6 or EExial/IIBT6

Types compatible with Table 3
kolumn 1



IM2
II2G

and accordance with PN-EN 60079-0: 2006(U) standard, marked with the symbol:

EExd/IIBT6

Special using conditions in rooms with explosion hazard

Magnetic switcher type KFM-023.. and KFM-024.. marked with the symbol: EExd/IIBT6 or EExial/IIBT6 can be used in intrinsic-proof or non intrinsic-proof electric circuits, in methane fields of mining's, of "a", "b", "c" methane explosion or "A" or "B" class explosive conditions of coal dust and can be installed in rooms and outer spaces / areas impending of 1 and / or 2 zones gases and vapour with air (II B, temperature T6 class) explosion.

Magnetic switcher type KFM-022..marked with the symbol:

EExd/IIBT6 can be used non intrinsic-proof electric circuits, in methane fields of mining's, of "a", "b", "c" methane explosion or "A" or "B" class explosive conditions of coal dust and can be installed in rooms and outer spaces / areas impending of 1 and / or 2 zones gases and vapour with air (II B, temperature T6 class) explosion.

Technical data

Working voltage:

Intrinsic-proof circuits – 90V (max value) - for connectors KFM-023.. and KFM-024..

Non explosion-proof circuits 230; 50Hz, 110V DC - for connectors KFM-022..,

KFM-023.., KFM-024..

Contacts loading of reed relay (for all types):

0,5A÷3A (depends on the type
- Table 1)

Clamps for connecting conduits(for all types):

to 2,5 mm²

Capacity (for all types):

Ci – negligible

Inductance (for all types):

Li – negligible

Ambient temperature (for all types):

-20°C to + 40°C

Relative humidity (for all types):

to 95%

Position of work (for all types):

optional

Degree of protection (for all types):

IP65

Weight(for all types):

3 kg

Weight of steer magnet (for all types):

1,8 kg

Contacts loading of reed relay (for all types):



Variations of magnetic connector	Max. contacts loading of reed relay
	[A]
KFM-...01	3
KFM-...02	1
KFM-...03	0,5
KFM-...04	0,5
KFM-...05	3
KFM-...06	1

Diameter of insert cable key (for all types):

Insert cable key KVC - 02	
Inside seal diameter Ø [mm]	Diameter of insert cable Ø [mm]
8	6 ÷ 8
12	10 ÷ 12

Variations:

Table 3

Application		Circuit diagram Table 4	Numbers and type of reed relay	Switching characteristic Draw 2.
Can be used in non intrinsic-proof	Can be used in non intrinsic-proof or in intrinsic-proof i_a or i_b level			
Certification mark				
 I M2 II 2G EExdI/IIBT6	 I M2 II 2G EExdI/IIBT6 or EExiaI/IIBT6			
Variations		3	4	5
1	2	3	4	5
KFM-02201	KFM-02301	3	1 NO	Switching in the presence of the steer magnet
	KFM-02401	4		
KFM-02202	KFM-02302	3	1 NC	Switching contacts to the opposite states in the presence of the steer magnet
	KFM-02402	4		
KFM-02203	KFM-02303	3	1 polarised bistable	Switching contacts to the opposite states in the presence of the steer magnet
	KFM-02403	4		
KFM-02204	KFM-02304	3	2 polarised bistable	Switching in the presence of the steer magnet
	KFM-02404	4		
KFM-02205	KFM-02305	3	2 NO	Switching in the presence of the steer magnet
	KFM-02405	4		
KFM-02206	KFM-02306	3	1 NO	Switching in the presence of the steer magnet
	KFM-02406	4	1 NC	

Ordering procedure

You should give designations according to table of type in the order.

The arrangement of the work Draw. 1

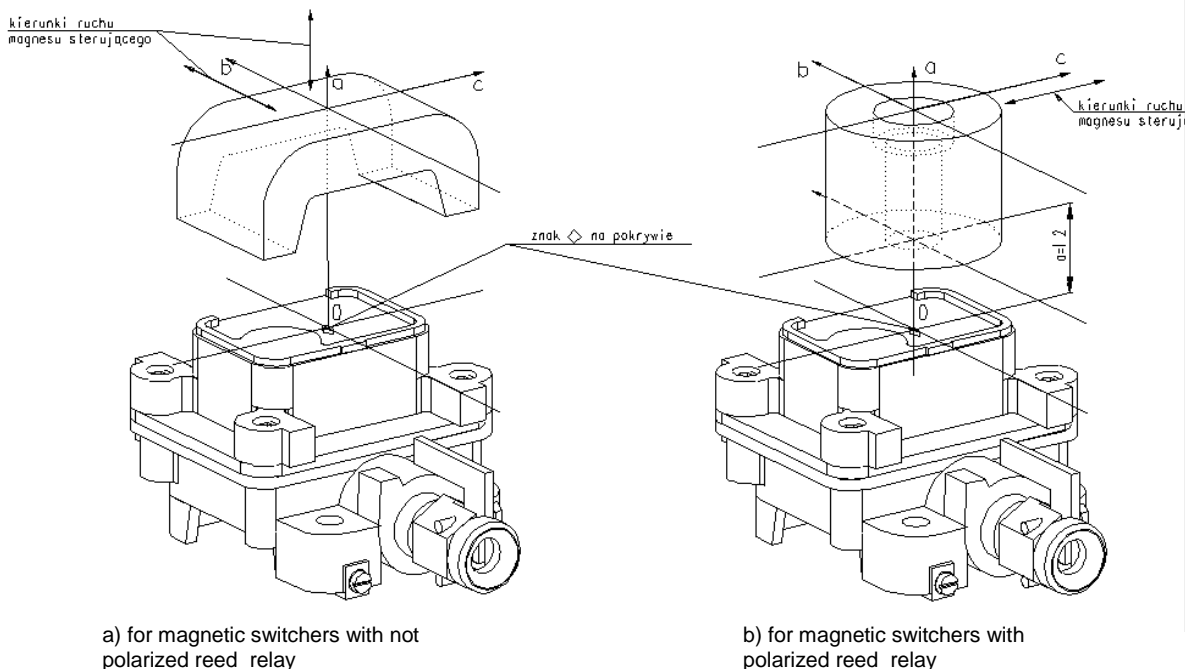
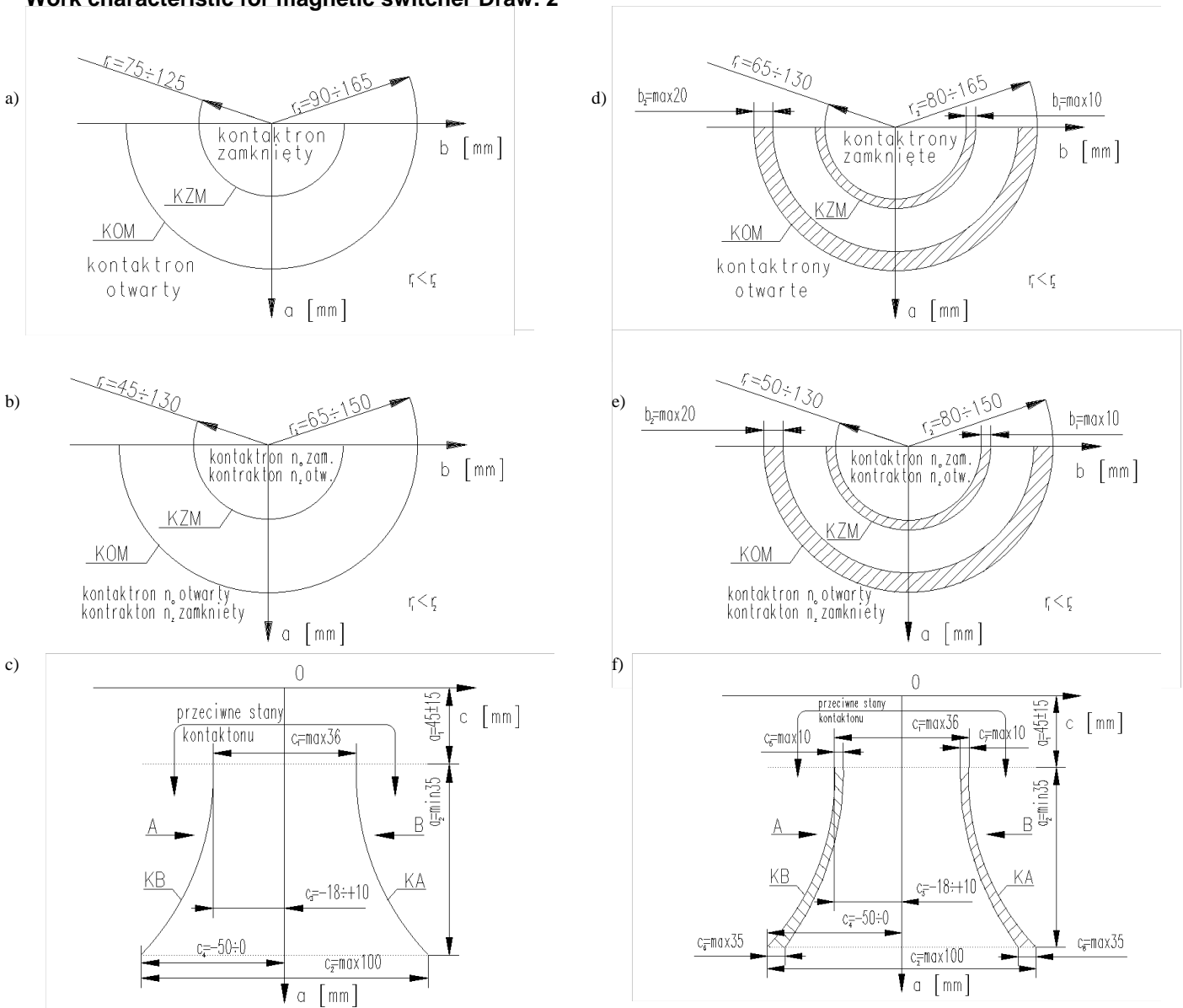


Table 4

CIRCUIT DIAGRAM			
VARIATION	CONTACTS	VARIATION	CONTACTS
KFM-02201		KFM-02204	
KFM-02301		KFM-02205	
KFM-02202		KFM-02305	
KFM-02302		KFM-02206	
KFM-02203		KFM-02306	
KFM-02401		KFM-02404	
KFM-02402		KFM-02405	
KFM-02403		KFM-02406	

Work characteristic for magnetic switcher Draw. 2



- KOM - switching curve when steering magnet is moving away from 0 point
- KZM - switching curve when steering magnet is bring nearer to 0 point
- A, B - direction of moving steering magnet
- KA, KB - switching curve for A, B directions.
- n_o - reed relay NO.
- n_c - reed relay NC.
- $r_1 < r_2$ - zone of Concurrent switching reed relay condition for every magnetic switcher