



COMELETRIC

Specialized rotary and control switches

*Series FRMC 2000
- FRMM 2000*





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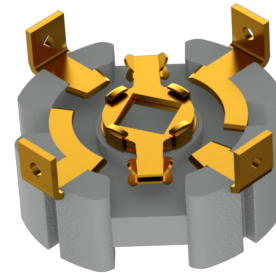
CONTROL YOUR SYSTEM

■ The Miniature Control Switches and Miniature Discrepancy Switches "FRMC 2000 - FRMM 2000" are mainly used in auxiliary circuits to connect and disconnect relays, electronically controlled valves, etc... They are particularly suitable for assembly in Mosaic Panels with tiles measuring 24 x 24mm.

■ Microcommutatori e Micromanipolatori "FRMC 2000 - FRMM 2000" vengono prevalentemente impiegati in circuiti ausiliari per l'inserzione e disinserzione di rele, elettrovalvole, etc... Sono particolarmente adatti per il montaggio in Quadri Mosaico a tessere 24 x 24mm.

■ Double bridge rotor contact in phosphor-bronze alloy, knife stationary contacts with wiping self-cleaning effects.

■ Contatto mobile in bronzo fosforoso a doppio ponte, contatti fissi a coltello con effetto strisciante autopulente.



■ Contacts thickly gold-plated.

■ Contatti dorati a forte spessore.

■ Welding type terminals.

■ Terminali a saldare diretti.

■ Main body anodised aluminium.

■ Struttura portante in alluminio anodizzato.

■ Low contact resistance 10mΩ

■ Bassa resistenza di contatto 10mΩ

■ Insulating elements in melamine UL94-VO.

■ Elementi isolanti in melamina UL94-VO.

■ Wide range of electrical diagrams.

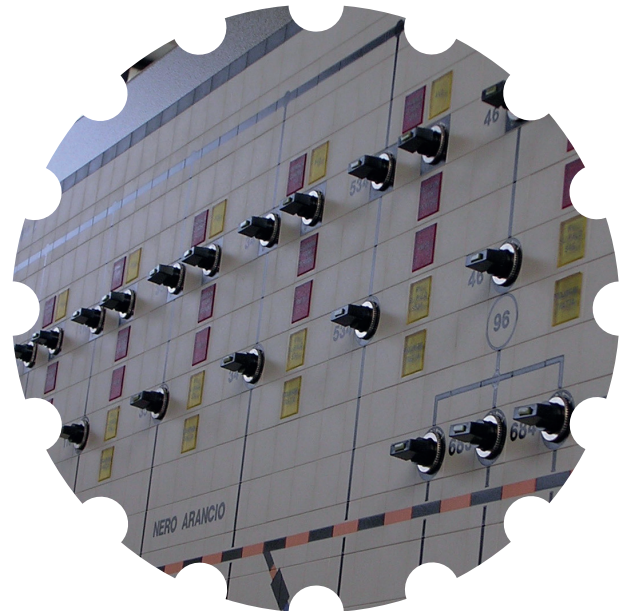
■ Numerose possibilità di schemi elettrici.

■ Metal parts zinc or nickel plated.

■ Parti metalliche zincate o nichelate

■ IP20 protection in conformity with the standard IEC 60529 provided by means of plastic transparent cover.

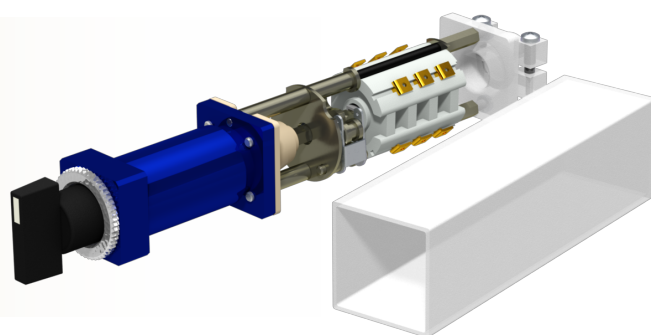
■ Protezione IP20 in conformità alla norma IEC 60529 grazie ad una cover in plastica.



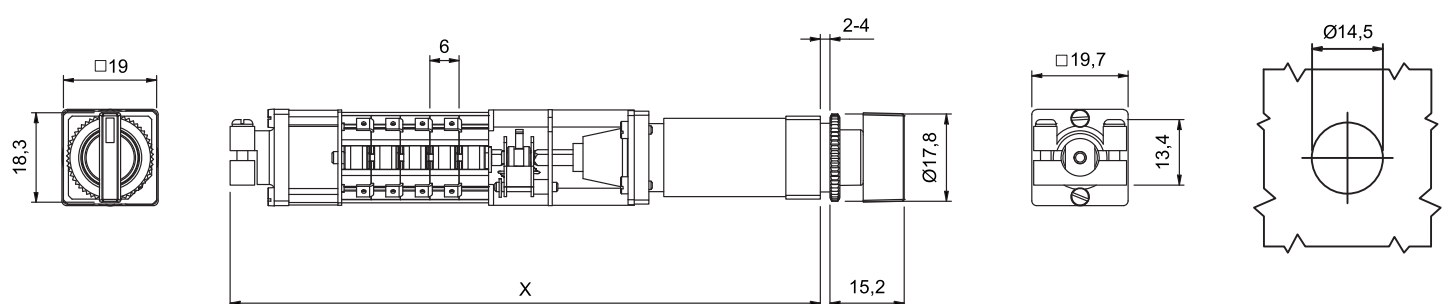
C201 Model:

-Designed to be fitted on mosaic panels with tiles of 24 x 24 mm. Can have from 2 to 8 positions with notching mechanism from 45° or 90°. The fitting made from the front of the panel using a threaded ring nut. Up to 8 contact packets can be assembled.

-Progettato per essere montato in quadri a mosaico con tessere 24 x 24 mm. Realizza da 2 a 8 posizioni con scatto 45° o 90°. Il fissaggio avviene dal fronte mediante ghiera filettata. Si possono assemblare fino a 8 pacchi di contatti.

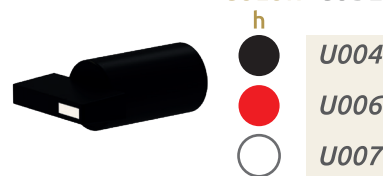


Dimensions

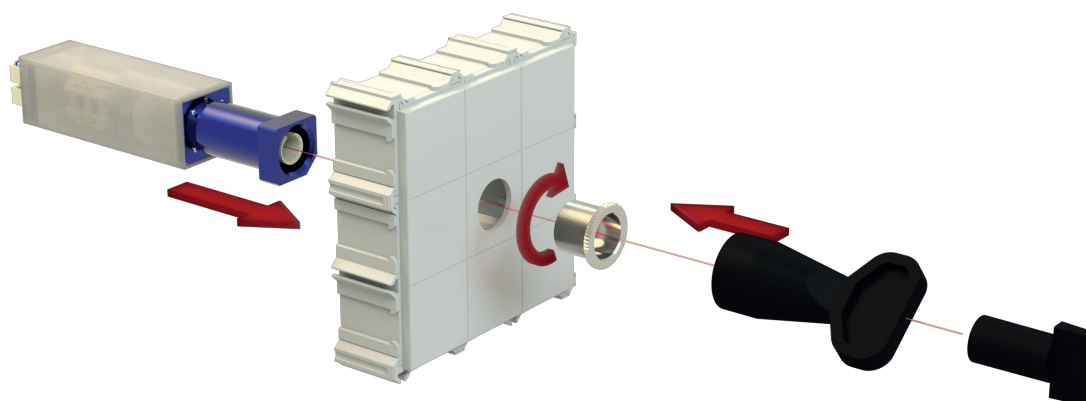


N° of packets	1	2	3	4	5	6	7	8
Length (mm)	102	108	114	120	126	132	138	144

COLOR CODE



Mounting instruction



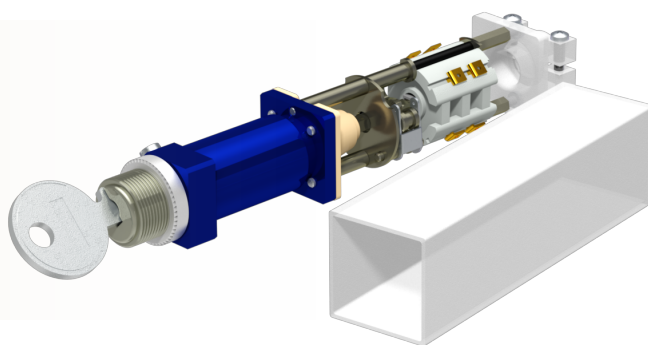
C202 Model:

-Miniature key operated switch for mosaic panels.

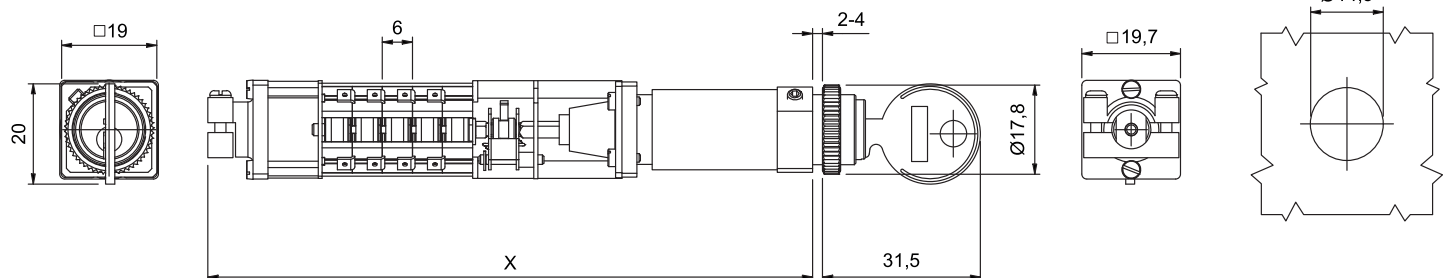
Particularly suitable for preventing activation by non authorized staff. Equipped with RONIS MICRO lock available with all the same numbering, with all different numbering or with numbering differentiated by group.

-Commutatore in miniatura a chiave per quadri a mosaico. Adatto per evitare l'azionamento da personale non autorizzato.

Dotata di serratura RONIS MICRO e disponibile con cifrature uguali, diverse o diverse a gruppi.



Dimensions

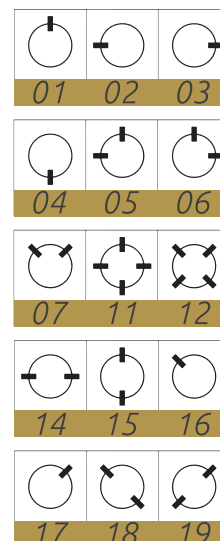


N° of packets	1	2	3	4	5	6	7	8
Length (mm)	102	108	114	120	126	132	138	144

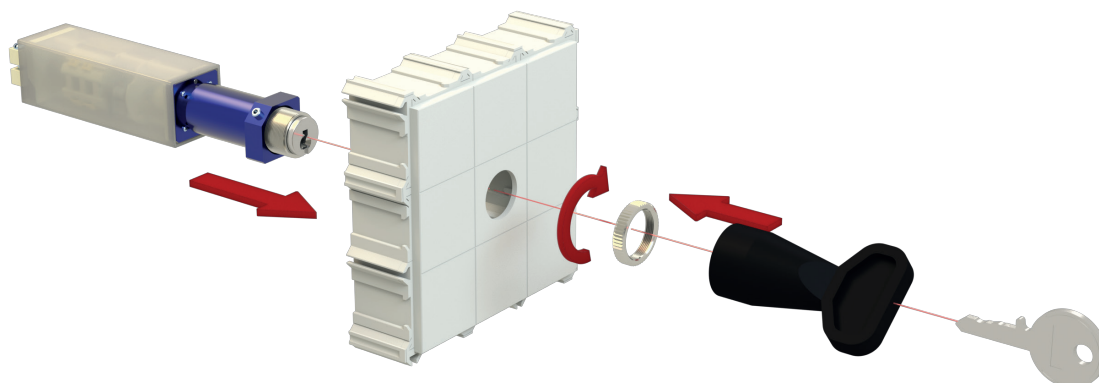
Locking Programs

La linea di riferimento indica la posizione in cui il commutatore viene bloccato e la chiave estratta.

The reference line shows where the switch is blocked and the key is withdrawn.



Mounting instruction

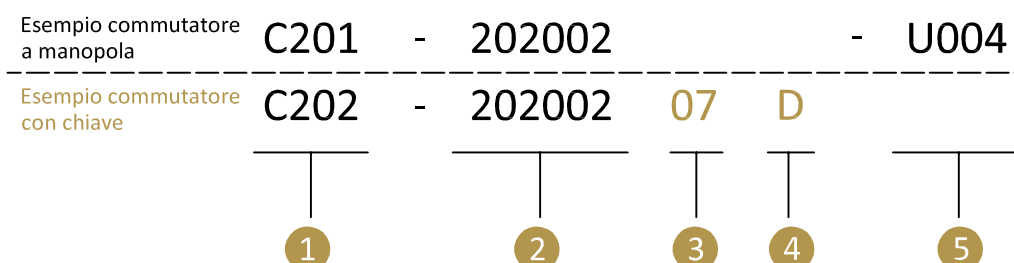


HOW TO ORDER

■ In questo catalogo si possono trovare alcuni schemi e le istruzioni per comporre autonomamente i codici d'ordinazione dei commutatori SERIE FRMC 2000 standard.

Per schemi Speciali o schemi non presenti in questo catalogo utilizzare il form. a pag. 23.

Gli schemi del presente catalogo ed il loro utilizzo nei codici sono applicabili esclusivamente alla serie di commutatori FRMC 2000 e on per altre serie.



1 Modello commutatore

Come n° di Modello si intende il montaggio e la forma costruttiva univoca di ogni commutatore

questo riferimento identifica la specifica costruzione meccanica del commutatore

Questo **n° di Modello** viene indicato nel catalogo insieme al relativo disegno di ingombro e della foratura del pannello

2 Schema elettrico

Questo numero rappresenta l'indicazione dello schema del commutatore richiesto.

Esso comprende lo schema elettrico ed il movimento della manopola, in riferimento agli schemi di seguito rappresentati.

3 Programma Bloccaggio/Estrazione chiave

Questo numero viene utilizzato solamente nei commutatori con chiave a comando. Esso rappresenta la posizione in cui il commutatore può essere bloccato.

Il bloccaggio dei commutatori con chiave di comando avviene mediante l'estrazione della chiave dallo stesso. La tabella di riferimento per il N° di programma di bloccaggio è presente a pag. 5 del presente catalogo e deve essere conforme allo spostamento della manopola previsto nello schema di riferimento commutatore.

4 Chiavi uguali fra di loro o chiavi differenti tra loro

Questo numero viene utilizzato solamente nei commutatori con chiave a comando, serratura a blocco. Esso rappresenta se le chiavi dei commutatori devono essere uguali o differenti tra loro.

La lettera "D" è l'indicazione di chiavi diverse tra loro, quindi ogni commutatore ordianto avrà una chiave unica (quindi non sarà possibile manovrare altri commutatori con la medesima chiave)

Se non indicata, i commutatori verranno forniti con medesima chiave

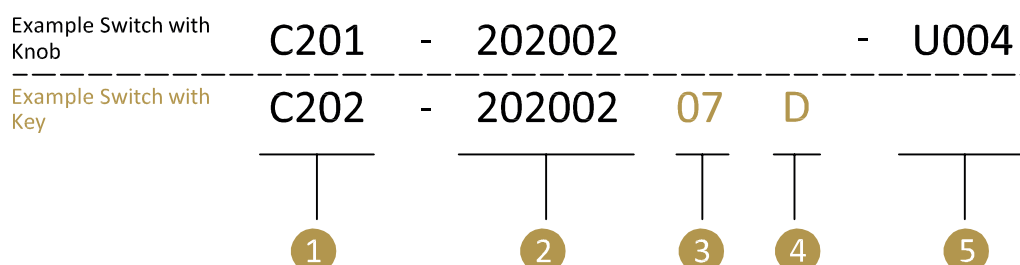
5 Tipo di manopola

Questo numero indica il tipo, la dimensione ed il colore delle manopole.

HOW TO ORDER

■ In the present catalogue you will find examples of diagrams and the instruction enabling you to the creation by yourself of the ordering codes of FRMC 2000 switches (standard). For all the other special diagrams or any scheme which is not present in this catalogue, please use the form on page 23.

The diagrams represented in this catalogue and their use in the codes are strictly related to FRMC 2000 switches and not to all the others.



1 Switch model

As switch model it is meant the kind of fitting and the mechanical structure of each specific switch.

This reference is mentioned in the catalogue along with the dimensional drawing and the cutout of the panel.

2 Electrical diagram

This reference is referred to the electrical diagram of the switch.

It includes the diagram and the movement of the knob, with reference to diagrams present in the following pages of the catalogue.

3 Locking/extraction program of keys

This reference is used in those switches key operated, with Key lock, padlockable or with removable knob. It gives the positions where the switch must be blocked.

The locking of any type of key switch is done by removing the key in the required position, the same for the switches with removable handle.

The table with locking references is on page xx of this catalogue and it must be conform to the switching positions foreseen in the electrical diagram referred to the switch.

4 Alike or different key references

This reference is present only in codes of switches with a key device.

It states if the switches must be equipped with keys with same references or all different ones.

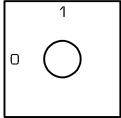
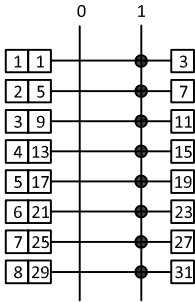
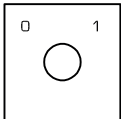
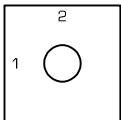
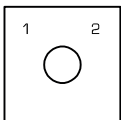
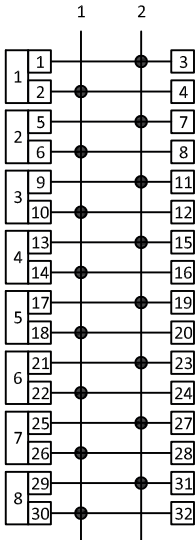
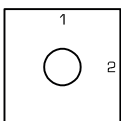
Letter "D" at the end of the code means all different key references, so each switch will be provided with a unique key, the key of one switch could not be used for operating any other switch of the same supply.

If not clearly mentioned in the order, the switches will be provided keys all alike.

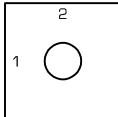
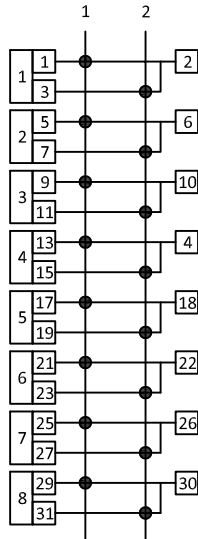
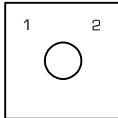
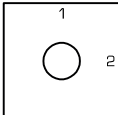
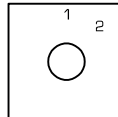
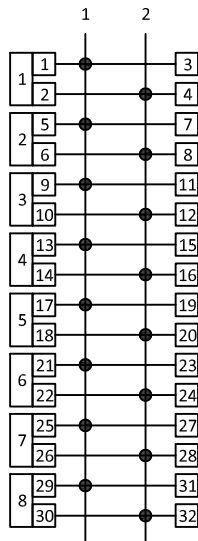
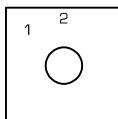
5 Handle

This is referred to the handle type and colour.

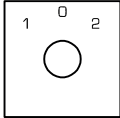
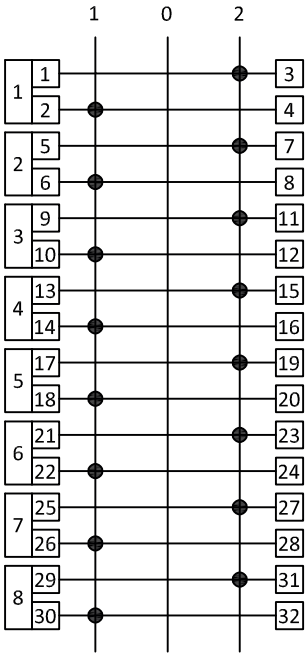
DIAGRAMS

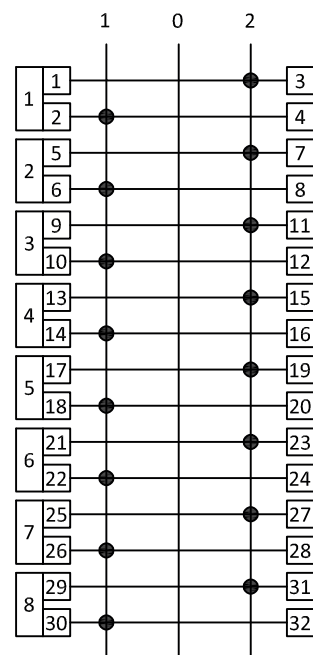
FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
On/Off Switches 1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201019 202019 203019 204019 205019 206019 207019 208019	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201020 202020 203020 204020 205020 206020 207020 208020	
Duble Trow Switch Without "0" position 1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201001 202001 203001 204001 205001 206001 207001 208001	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201002 202002 203002 204002 205002 206002 207002 208002	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201003 202003 203003 204003 205003 206003 207003 208003	

DIAGRAMS

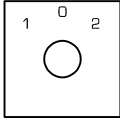
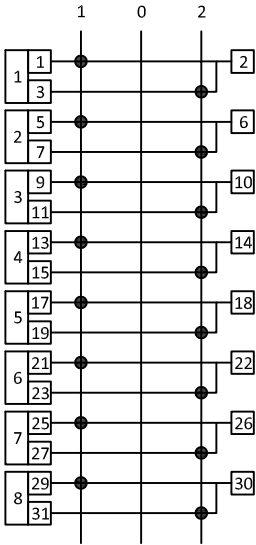
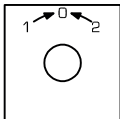
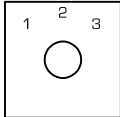
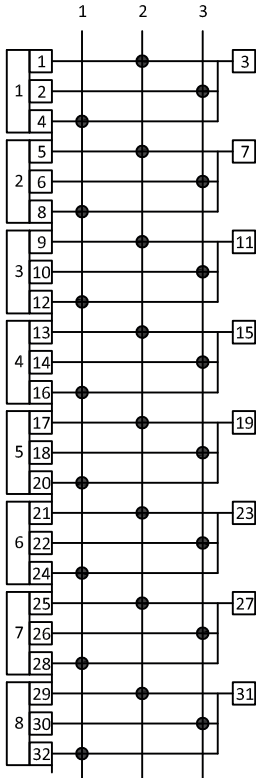
FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
2 position switch with 1 input & 2 output in each deck				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201007 202007 203007 204007 205007 206007 207007 208007	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201008 202008 203008 204008 205008 206008 207008 208008	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201009 202009 203009 204009 205009 206009 207009 208009	
2 position switch with 45° movements				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201032 202032 203032 204032 205032 206032 207032 208032	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	201072 202072 203072 204072 205072 206072 207072 208072	

DIAGRAMS

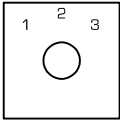
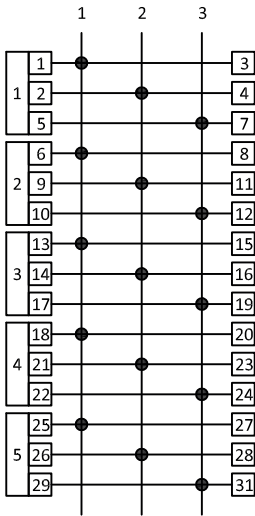
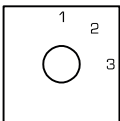
FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
3 position switch with "0" position with electrically isolated contacts				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	301001 302001 303001 304001 305001 306001 307001 308001	
With spring return to "0" position from pos. "1" & pos. "2"		1 2 3 4 5 6	M301001 M302001 M303001 M304001 M305001 M306001	
With spring return to "0" position from pos. "1"		1 2 3 4 5 6	301012 302012 303012 304012 305012 306012	
With spring return to "0" position from pos. "2"		1 2 3 4 5 6	301020 302020 303020 304020 305020 306020	



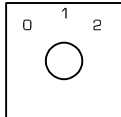
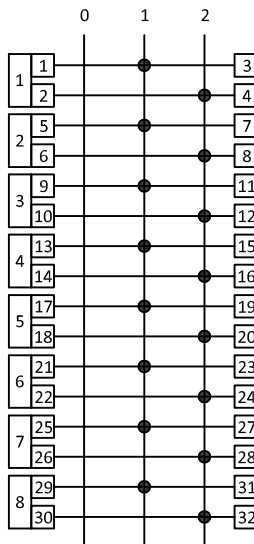
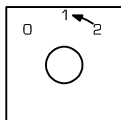
DIAGRAMS

FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
2 position switch with 1 input & 2 output in each deck				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	301003 302003 303003 304003 305003 306003 307003 308003	
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole		1 2 3 4 5 6	M301003 M302003 M303003 M304003 M305003 M306003	
3 position switch without "0" position with 1 input and 3 output in each deck				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	301004 302004 303004 304004 305004 306004 307004 308004	

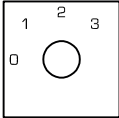
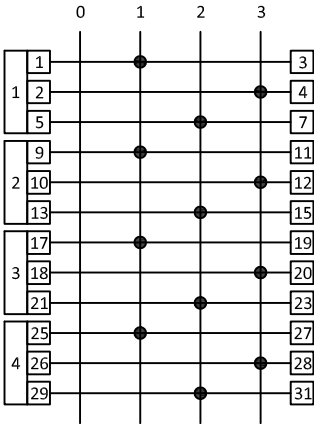
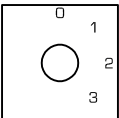
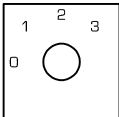
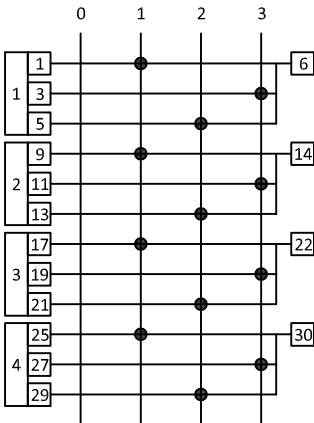
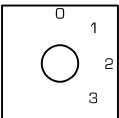
DIAGRAMS

FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
3 position switch without "0" position, with electrically isolated contacts				
1 pole 2 pole 3 pole 4 pole 5 pole		2 3 5 6 8	302078 303078 305078 306078 308078	
1 pole 2 pole 3 pole 4 pole 5 pole		2 3 5 6 8	302134 303134 305134 306134 308134	

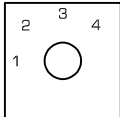
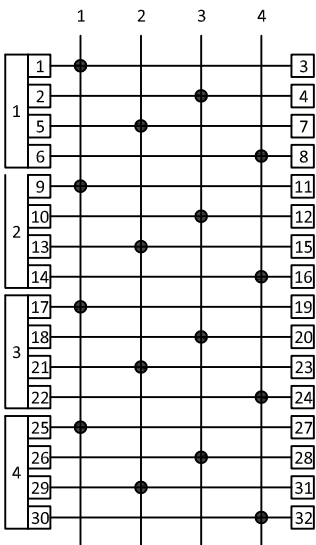
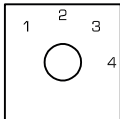
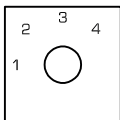
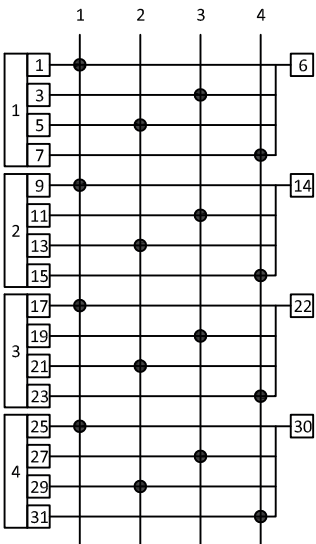
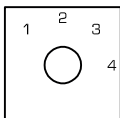
3 position switch without "0" position, with electrically isolated contacts

1 pole 2 pole 3 pole 4 pole 5 pole 6 pole 7 pole 8 pole		1 2 3 4 5 6 7 8	301016 302016 303016 304016 305016 306016 307016 308016	
With spring return to "0" position from pos. "2"				
1 pole 2 pole 3 pole 4 pole 5 pole 6 pole		1 2 3 4 5 6	301048 302048 303048 304048 305048 306048	

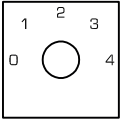
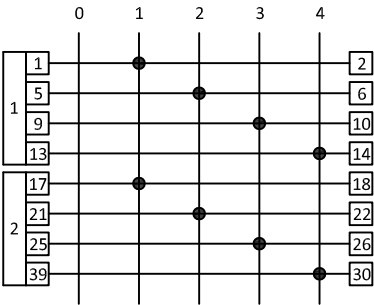
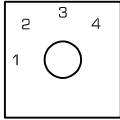
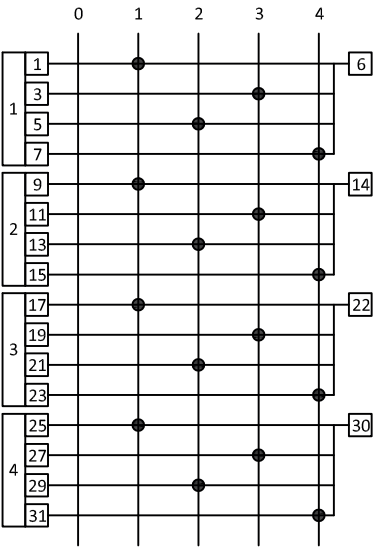
DIAGRAMS

FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
4 position switch with “0” position, with electrically isolated contacts				
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402008 404008 406008 408008	
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402087 404087 406087 408087	
4 position switch without “0” position, with 1 input and 3 output per pole				
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402011 404011 406011 408011	
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402088 404088 406088 408088	

DIAGRAMS

FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
4 position switch without “0” position, with electrically isolated contacts				
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402003 404003 406003 408003	
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402017 404017 406017 408017	
4 position switch without “0” position, with 1 input and 4 output per pole				
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402007 404007 406007 408007	
1 pole 2 pole 3 pole 4 pole		2 4 6 8	402089 404089 406089 408089	

DIAGRAMS

FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
5 position switch with "0" position, with electrically isolated contacts				
1 pole 2 pole		2 8	504002 508002	
5 position switch with "0" position, with 1 input and 4 output per pole				
1 pole 2 pole 3 pole 4 pole		2 4 6 8	502010 504010 506010 508010	

DIAGRAMS

FUNCTION

HANDLE
MOVEMENTS

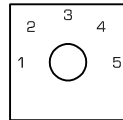
DECKS

CODE

CONNECTION
DIAGRAM

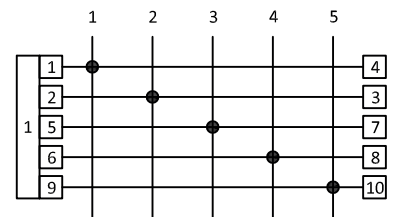
5 position switch without "0" position, with electrically isolated contacts

1 pole



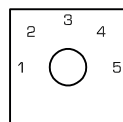
5

505001



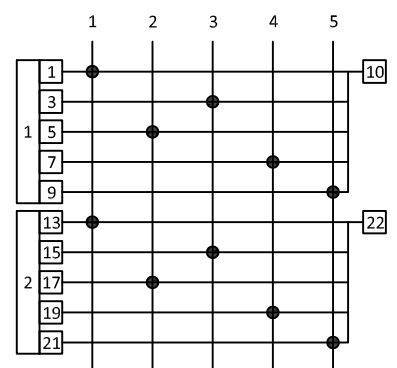
5 position switch without "0" position, with 1 input and 5 output per pole

1 pole
2 pole

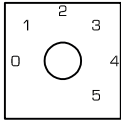
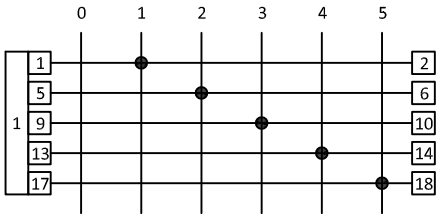
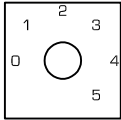
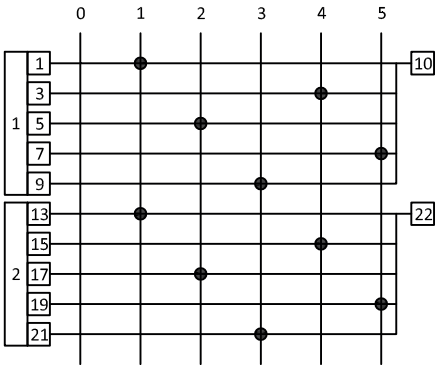


3
6

503013
506013



DIAGRAMS

FUNCTION	HANDLE MOVEMENTS	DECKS	CODE	CONNECTION DIAGRAM
6 position switch with "0" position, with electrically isolated contacts				
1 pole		5	605011	
6 position switch without "0" position, with 1 input and 5 output per pole				
1 pole 2 pole		3 6	603003 606003	

DIAGRAMS

FUNCTION

HANDLE
MOVEMENTS

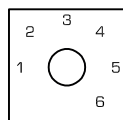
DECKS

CODE

CONNECTION
DIAGRAM

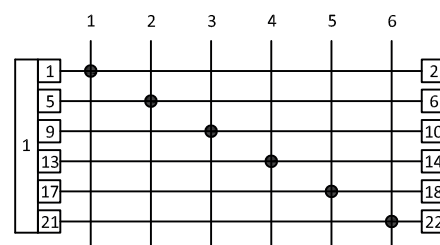
6 position switch without "0" position, with electrically isolated contacts

1 pole



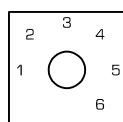
6

606012



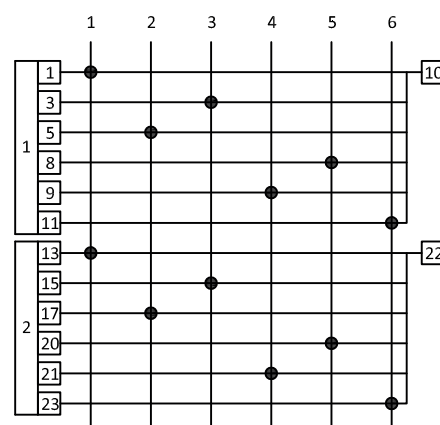
6 position switch without "0" position, with 1 input and 6 output per pole

1 pole
2 pole



3
6

603004
606004



DIAGRAMS

FUNCTION

HANDLE
MOVEMENTS

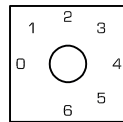
DECKS

CODE

CONNECTION
DIAGRAM

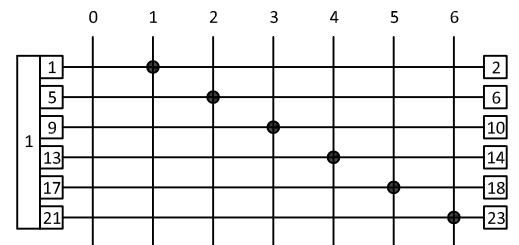
7 position switch with "0" position, with electrically isolated contacts

1 pole



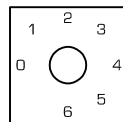
6

706017



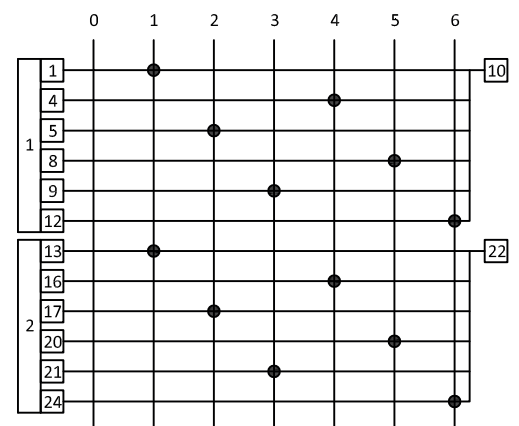
7 position switch with "0" position, with 1 input and 6 output per pole

1 pole
2 pole



3
6

703006
706006



DIAGRAMS

FUNCTION

HANDLE
MOVEMENTS

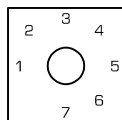
DECKS

CODE

CONNECTION
DIAGRAM

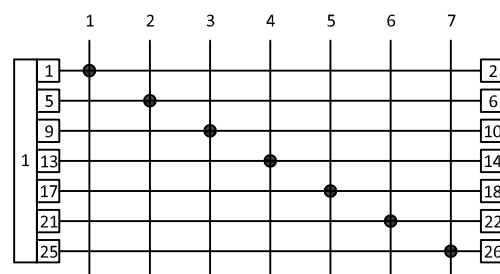
7 position switch without "0" position, with electrically isolated contacts

1 pole



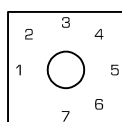
8

708018



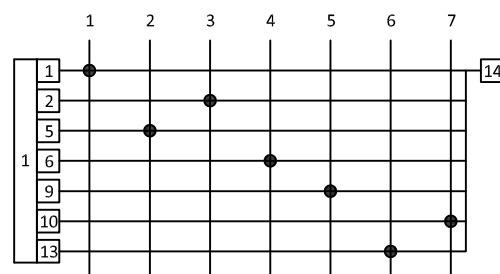
7 position switch without "0" position, with 1 input and 7 output per pole

1 pole
2 pole



4
8

704013
708013



DIAGRAMS

FUNCTION

HANDLE
MOVEMENTS

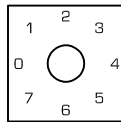
DECKS

CODE

CONNECTION
DIAGRAM

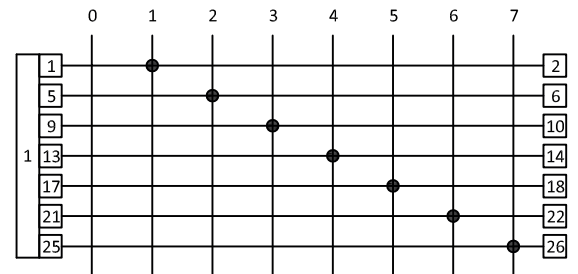
8 position switch with "0" position, with electrically isolated contacts

1 pole



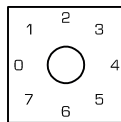
8

808007



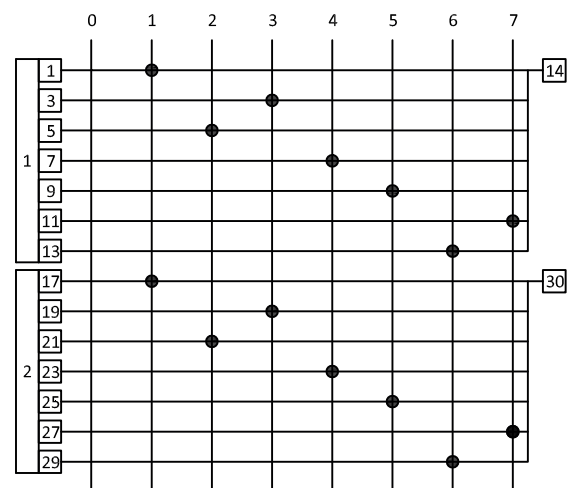
8 position switch with "0" position, with 1 input and 7 output per pole

1 pole
2 pole



4
8

804005
808005



DIAGRAMS

FUNCTION

HANDLE
MOVEMENTS

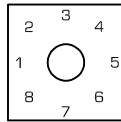
DECKS

CODE

CONNECTION
DIAGRAM

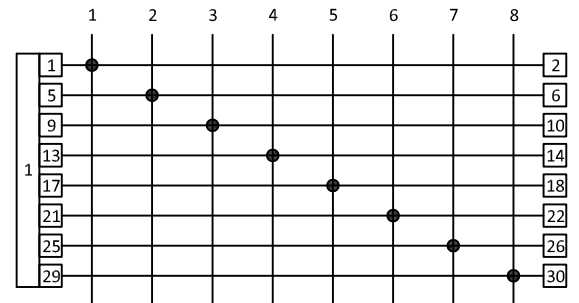
8 position switch without "0" position, with electrically isolated contacts

1 pole



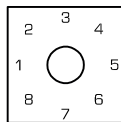
8

808008



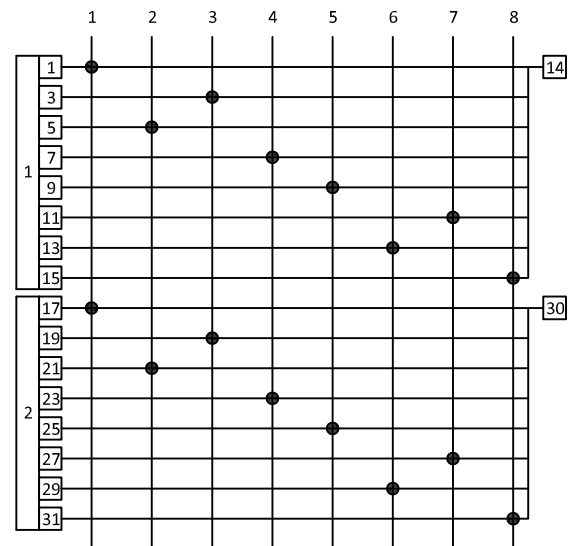
8 position switch without "0" position, with 1 input and 8 output per pole

1 pole
2 pole

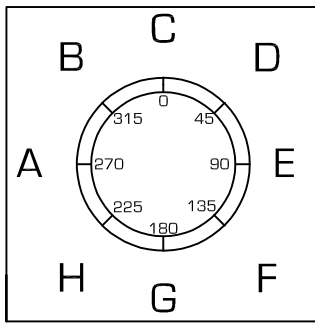


4
8

804002
808002



SPECIAL DIAGRAM



Switch Positions	
Position	Reference
A	
B	
C	
D	
E	
F	
G	
H	

Lock in Pos.								
Spring Return								
	Positions							
	A	B	C	D	E	F	G	H

[illegible]

Switch Action :					
Stayput	☐	Spring return	☐	Stayput and Spring return	☐
Specification: 					

Model number:

Ordering Code : (it will provided by COMELETRIC)

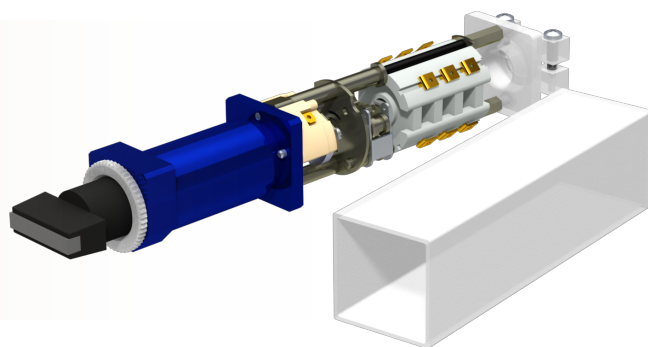
Accessories / Informations:		
Key Operated (Different Keys) ☐		

Legenda Symbols			
	Closed Contact		Spring Return
	Closed Contact Two consecutive Positions		Spring Return from Left and Right

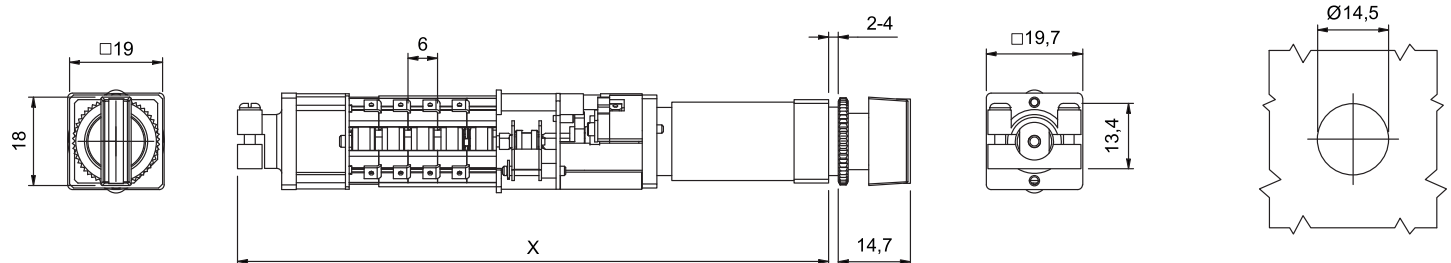
m201 Model:

-Discrepancy switch suitable for fitting on mosaic tile system mm.24x24.
Light provided by means of Led lamp T5.5 in different colours.
Large variety of electric diagrams are available.

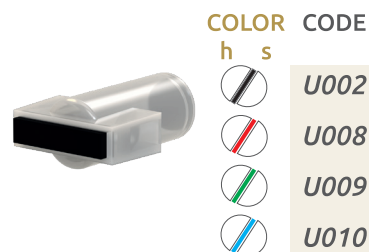
-Manipolatore Luminoso adatto per fissaggio su mosaico a tessere mm.24x24.
Illuminazione frontale grazie ad una lampada Led tipo T5.5, disponibile in differenti colori.
Grande varietà di schemi elettrici realizzabili.



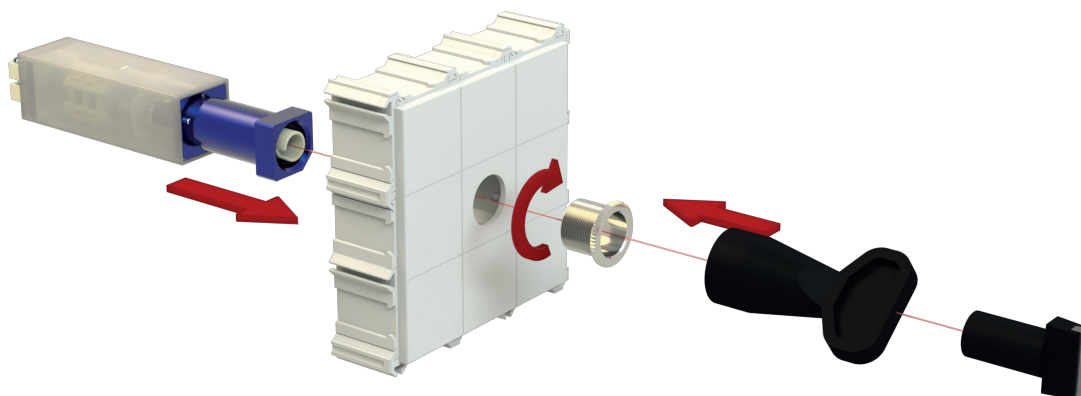
Dimensions



N° of packets	1	2	3	4	5	6	7	8
Length (mm)	102	108	114	120	126	132	138	144



Mounting instruction



m202 Model:

-Discrepancy switch suitable for fitting on mosaic tile system mm.24x24.

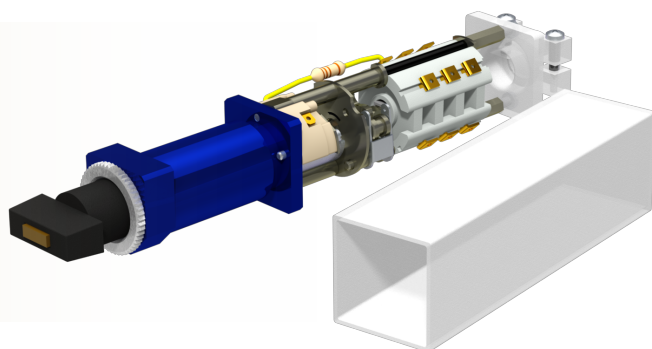
In this kind of discrepancy switch, the light is provided by means of an electronic rectangular Led available in different colours.

Wide range of electrical diagrams can be developed.

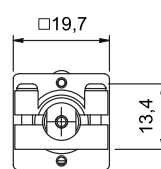
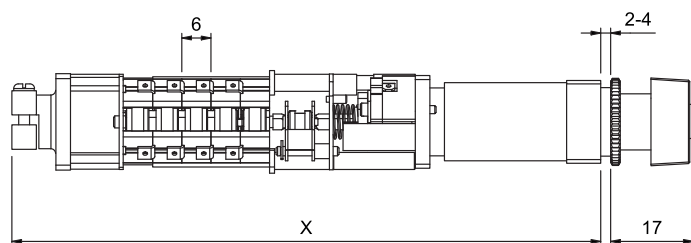
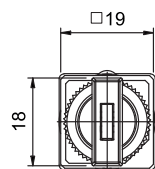
-Manipolatore Luminoso adatto per fissaggio su mosaico a tessere mm.24x24.

Questa tipologia prevede un Led rettangolare di tipo elettronico a 24V posto nel centro della manopola e disponibile in differenti colori.

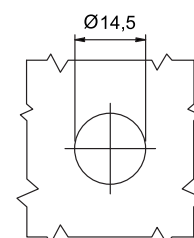
Vasta gamma di schemi elettrici sono realizzabili.



Dimensions



PANEL DRILLING



N° of packets	1	2	3	4	5	6	7	8
Length (mm)	108	114	120	126	132	138	144	150

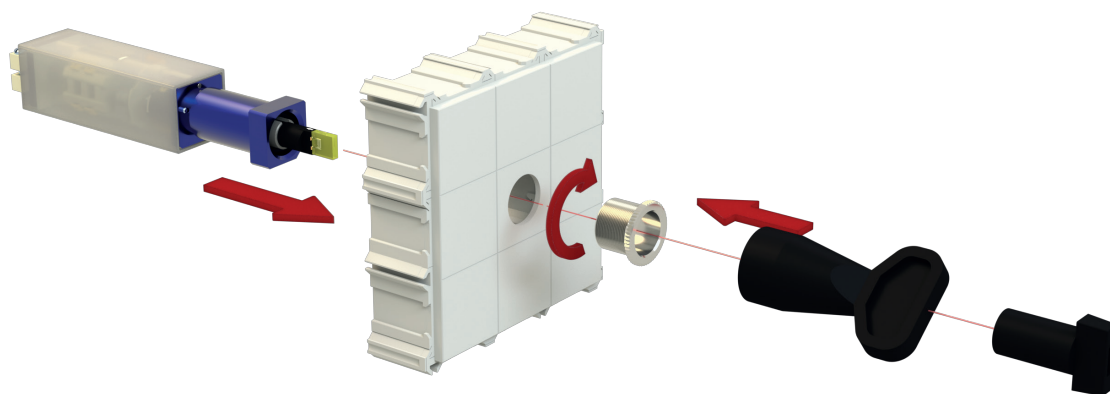
COLOR CODE

h l



U001
U011
U012
U013
U005

Mounting instruction



DIAGRAMS

FUNCTION

HANDLE MOVEMENTS

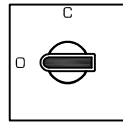
DECKS

CODE

CONNECTION DIAGRAM

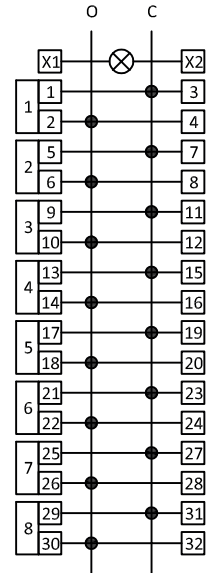
Indication the position of the CB or DS

1 pole
2 pole
3 pole
4 pole
5 pole
6 pole
7 pole
8 pole



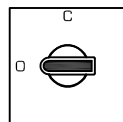
1
2
3
4
5
6
7
8

A01001
A02001
A03001
A04001
A05001
A06001
A07001
A08001



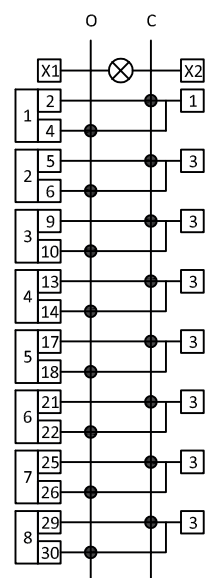
Indication the position of the CB or DS

1 pole
2 pole
3 pole
4 pole
5 pole
6 pole
7 pole
8 pole



1
2
3
4
5
6
7
8

B01001
B02001
B03001
B04001
B05001
B06001
B07001
B08001



DIAGRAMS

FUNCTION

HANDLE MOVEMENTS

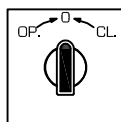
DECKS

CODE

CONNECTION DIAGRAM

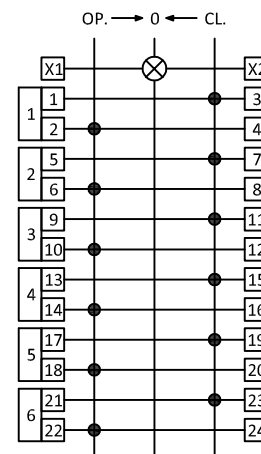
Indication the position of the CB or DS

1 pole
2 pole
3 pole
4 pole
5 pole
6 pole



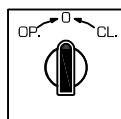
1
2
3
4
5
6

C01001
C02001
C03001
C04001
C05001
C06001



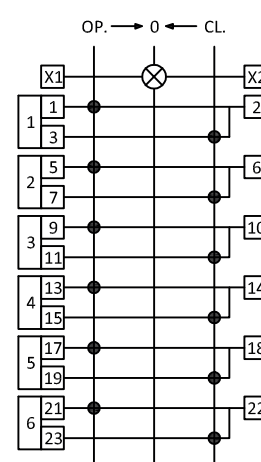
Indication the position of the CB or DS

1 pole
2 pole
3 pole
4 pole
5 pole
6 pole



1
2
3
4
5
6

C01003
C02003
C03003
C04003
C05003
C06003



DISCREPANCY SWITCH FUNCTION AND CONFIGURATION

■ PRINCIPLE OF OPERATION TYPE: D and E

The switches with the movements type D and E are basically called control discrepancy switches. The control discrepancy switch has two fixed position with a movement of 90° and two extra impulses of 45° on the positions of open and close. The knob is first rotated by 90° to command the relative disconnector Switch/Circuit breaker. This is however a “pre-selection” phase of the desired command. The operation is confirmed by pressing and rotating the knob by 45°, which, once released, will return automatic

■ PRINCIPIO DI OPERAZIONE TIPO: D ed E

I manipolatori con l'azionamento tipo D ed E sono tipicamente chiamati Manipolatori di Comando e Segnalazione di Discordanza. Questi manipolatori hanno 2 posizioni con spostamento di 90° e 2 extra impulsi di 45° per il comando di apertura e di chiusura. La manopola viene ruotata di 90° per comandare il relativo Interruttore/Seriatore. Questa tuttavia è solamente una fase di preselezione del comando. Il comando viene confermato tramite la pressione della manopola e la relativa rotazione, una volta rilasciata la manopola essa ritorna automaticamente nella relativa posizione.

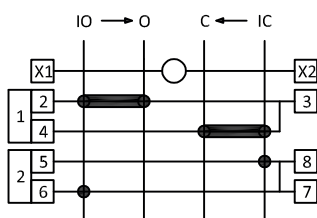
HANDLE MOVEMENTS



CODE

D02001

CONNECTION DIAGRAM



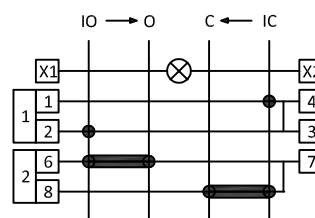
HANDLE MOVEMENTS



CODE

D02006

CONNECTION DIAGRAM



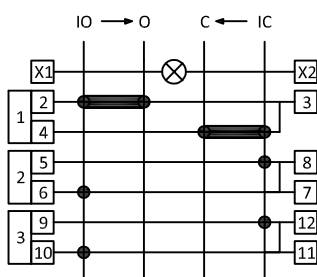
HANDLE MOVEMENTS



CODE

D03001

CONNECTION DIAGRAM



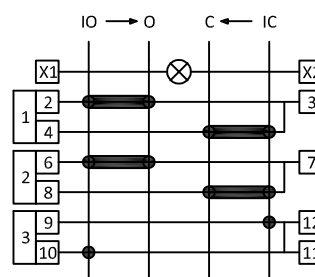
HANDLE MOVEMENTS



CODE

D03002

CONNECTION DIAGRAM



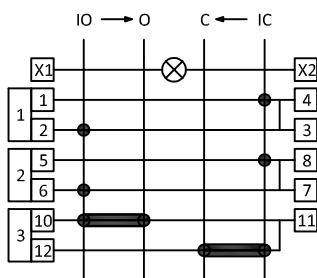
HANDLE MOVEMENTS



CODE

D0300621

CONNECTION DIAGRAM



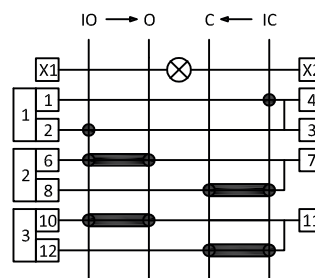
HANDLE MOVEMENTS



CODE

D0300612

CONNECTION DIAGRAM



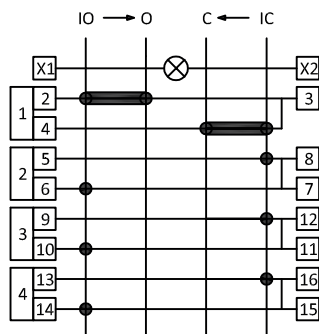
DISCREPANCY SWITCH FUNCTION AND CONFIGURATION

HANDLE MOVEMENTS



CODE
D04001

CONNECTION DIAGRAM

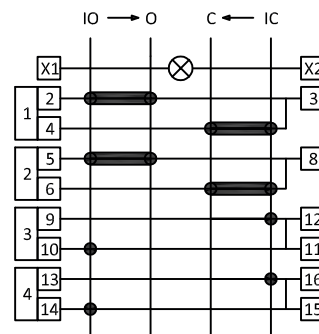


HANDLE MOVEMENTS



CODE
D04002

CONNECTION DIAGRAM

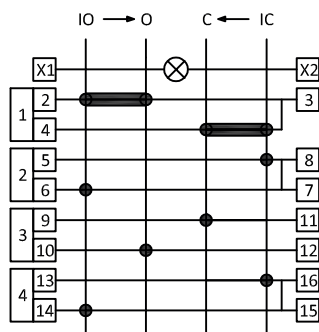


HANDLE MOVEMENTS



CODE
E04001

CONNECTION DIAGRAM

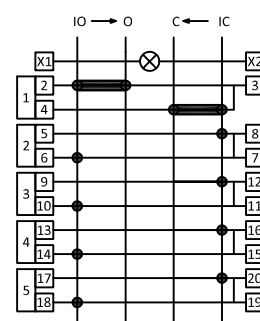


HANDLE MOVEMENTS



CODE
D05001

CONNECTION DIAGRAM

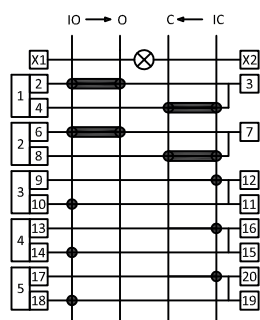


HANDLE MOVEMENTS



CODE
D05002

CONNECTION DIAGRAM

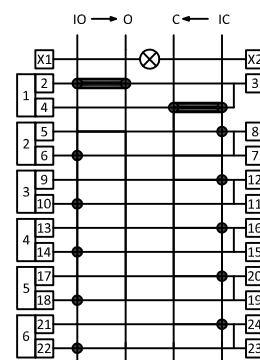


HANDLE MOVEMENTS



CODE
D06001

CONNECTION DIAGRAM

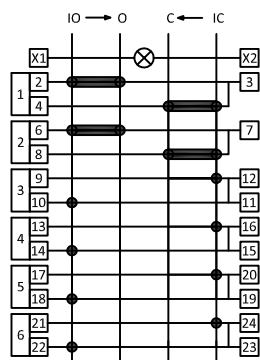


HANDLE MOVEMENTS



CODE
D06002

CONNECTION DIAGRAM

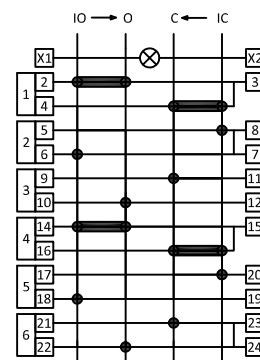


HANDLE MOVEMENTS



CODE
E06001

CONNECTION DIAGRAM



Standard utilization categories Categorie di utilizzazione normalizzate

Kind of current Tipo di corrente	Category Categoria	Typical applications Applicazioni tipiche
Alternative current Corrente alternata	AC14 AC15	Control of small electromagnetic load with rated power = 72VA Comando di piccoli carichi elettromagnetici con potenza = 72VA Control of electromagnetic load with rated power > 72VA Comando di carichi elettromagnetici con potenza > 72VA
Direct current Corrente continua	DC13 DC14	Control of electromagnets Comando di elettromagneti Control of electromagnetic loads having economy resistor in circuit Comando di carichi elettromagnetici aventi resistori economizzatori nel circuito

Utilization category Categoria utilizzazione	NORMAL CONDITIONS CONDIZIONI NORMALI				ABNORMAL CONDITIONS CONDIZIONI ANOMALE			
	Make Chiusura I/Ie	Break Interruzione I/Ie	U/Ue	cos Φ	Make Chiusura I/Ie	Break Interruzione I/Ie	cos Φ	
AC14	6	1	1	0.3	6	6	1.1	0.7
AC15	10	1	1	0.3	10	10	1.1	0.3
				T _{0.95} [ms]				T _{0.95} [ms]
DC13	1	1	1	6xP	1.1	1.1	1.1	6xP
DC14	10	1	1	15	10	10	1.1	15

- I/Ie** : Current to be made or broken and Rated operational current ratio.
Rapporto tra la corrente che l'apparecchiatura è in grado di stabilire o interrompere e la corrente d'impiego.
- U/Ue** : Voltage before make and Rated operational voltage ratio.
Rapporto tra la tensione prima della chiusura e la tensione d'impiego.
- T_{0.95}** : Time to reach 95% of the steady-state current.
Tempo per raggiungere il 95% della corrente di regime.
- P=Ue x Ie** : Steady-state power consumption in W.
Potenza assorbita a regime in W.

The value "6xP" result from empirical relationship which is found to represent most d.c. magnetics loads to an upper limit of P =50W, i.e. 6 x P=300 ms. Load having power-consumption greater than 50W are assumed to consist of smaller loads in parallel. Therefore, 300 ms is to be an upper limits irrespective of the power. (REFERENCE STANDARD IEC 60947-5-1 tab. 5).

La relazione matematica "6xP" è valida per tutti carichi induttivi rappresentativi fino ad un massimo di P pari a 50W cioè 6xP =300ms. Si assume che i carichi aventi una potenza assorbita superiore a 50W siano costituiti da piccoli carichi collegati in parallelo, di conseguenza 300ms è il valore massimo a prescindere dalla potenza assorbita. (RIFERIMENTO NORMA IEC 60947-5-1 tab. 5)

RATED ELECTRICAL CHARACTERISTICS

Conventional free air thermal current Corrente convenzionale termica in aria	(I _{th})	8A
Rated insulation voltage Tensione di isolamento nominale	(U _i)	300V
Rated impulse with stand voltage Tensione di tenuta ad impulso nominale	(U _{imp})	2,5KV
Frequency Frequenza di impiego		50/60Hz

Relevant information about the associated short circuit protective device Dati relativi al dispositivo di protezione contro il corto circuito associabile

Rated conditional short-circuit current (Max peak current) Massima corrente di picco ammissibile		100A
Rated maximum jule integral Integrale di Jule massimo		7KA ² s
Contact resistance Resistenza di contatto		mΩ 10

MAKING AND BREAKING CAPACITIES POTERI DI CHIUSURA E INTERRUZIONE

Utilization category Categorie di utilizzazione	(U _e)	(I _e)
AC 14	230V	4A
AC 15	230V	2,5A
DC13	130V	1A
DC14	110V 130V	1A 0,5A

Type of connecting terminals Tipo di terminale utilizzabile



Terminal to be welded



Permissible wire gage Sezione di conduttore

Single - core or stranded wire Cavo rigido o intrecciato	(mm ²)	0,5 AWG25
Flexible wire Cavo flessibile	(mm ²)	0,5 AWG25

ENVIRONMENTAL DATA DATI AMBIENTALI

Temperature range Temperatura ambientale

Operating temperature Esercizio	-25°C +60°C
Storage temperature Stoccaggio	-40°C +80°C

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