



**GIOVENZANA
INTERNATIONAL B.V**

AUTOMATION TECHNOLOGIES



AUTOMATION

GENERAL CATALOGUE

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Phoenix

Cam switches

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AUTOMATION TECHNOLOGIES



Current rating from 12A to 630A with Base, Din and panel mounting with fixing screws or \varnothing 22,5 mm holes. Wide range of circuit diagrams available. Special versions made to order.

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Cam switches

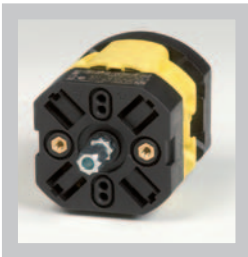
Range overview

PO12 - PO16 - PO20 SERIES



- Panel mounting by means of horizontal fixing holes, 28 mm distance, for M3 screws or vertical fixing holes, 32 mm distance, for self tapping screws.
- Wafers secured by means of screws
- Metal shaft as standard
- IP20 rated terminals

PX12 - PX16 - PX20 SERIES



- Panel mounting by means of horizontal fixing holes, 28 mm distance, for M3 screws or vertical fixing holes, 32 mm distance, for self tapping screws.
- Wafers secured by means of screws
- Metal shaft as standard
- IP10 rated terminals for special applications

CO25 - CO32 - CO40 SERIES



- Panel mounting by means of horizontal fixing holes for M3 screws
- Wafers secured by means of screws
- Metal shaft as standard
- IP20 rated terminals

CX25 - CX32 - CX40 SERIES



- Panel mounting by means of horizontal fixing holes for M3 screws
- Wafers secured by means of screws
- Metal shaft as standard
- IP10 rated terminals for special applications

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Cam switches

Range overview



AUTOMATION TECHNOLOGIES

CO63-CO80 SERIES



- Panel mounting by means of horizontal fixing holes 40 mm distance or on vertical fixing 46 mm with metrical screws M5
- Wafers secured by means of screws
- Standard metal shaft $\square 6$ mm
- Terminals with wiring clamp M4



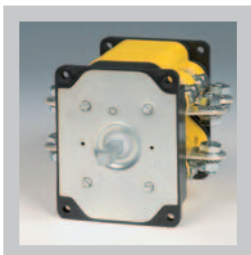
C100 SERIES



- Panel mounting by means of vertical fixing holes 65 mm with metrical screws M5
- Wafers secured by means of screws
- Contacts 4 brakes
- Standard metal shaft $\square 8$ mm
- Terminals screw with wiring clamp M5
- Unic version for panel and base fixing



C200 SERIES



- Panel mounting by means of 4 holes 114x84 with metrical screws M6
- Wafers secured by means of screws
- Contacts 4 brakes
- Standard metal shaft $\square 10$ mm
- Terminals for cable lugs connections with head exagonal screws M10
- Unic version for panel and base fixing
- C400 - C630 Series



On demand are realized series C400 lth 400 and series C630 lth 630A

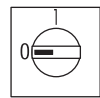
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Panel mounting switches : R

Switches - changeover switches



SWITCHES



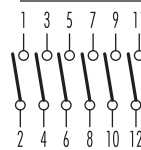
90°



60°

C100-C200 Series

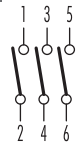
02.....06



07



45°



SERIES	NOM. CURRENT AC21A AMP.	1 POLE 1 WAFER	2 POLES 1 WAFER	3 POLES 2 WAFERS	4 POLES 2 WAFERS	5 POLES 3 WAFERS	6 POLES 3 WAFERS	3P WITH SPRIN RETURN 3 WAFERS
P012	12	P0120001R	P0120002R	P0120003R	P0120004R	P0120005R	P0120006R	P0120007R
P016	16	P0160001R	P0160002R	P0160003R	P0160004R	P0160005R	P0160006R	P0160007R
P020	20	P0200001R	P0200002R	P0200003R	P0200004R	P0200005R	P0200006R	P0200007R
C025	25	C0250001R	C0250002R	C0250003R	C0250004R	C0250005R	C0250006R	C0250007R
C032	32	C0320001R	C0320002R	C0320003R	C0320004R	C0320005R	C0320006R	C0320007R
C040	40	C0400001R	C0400002R	C0400003R	C0400004R	C0400005R	C0400006R	C0400007R
C063	63	-	C0630002R	C0630003R	C0630004R	-	C0630006R	-
C080	75	-	C0800002R	C0800003R	C0800004R	-	C0800006R	-
*C100	125	-	C1000002R	C1000003R	C1000004R	-	C1000006R	-
*C200	200	-	C2000002R	C2000003R	C2000004R	-	C2000006R	-

LINE CHANGEOVER SWITCHES



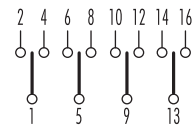
45°



60°

C100-C200 Series

08.....11



from 1 to 4 poles

SERIES	NOM. CURRENT AC21A AMP.	1 POLE 1 WAFER	2 POLES 2 WAFERS	3 POLES 3 WAFERS	4 POLES 4 WAFERS
P012	12	P0120008R	P0120009R	P0120010R	P0120011R
P016	16	P0160008R	P0160009R	P0160010R	P0160011R
P020	20	P0200008R	P0200009R	P0200010R	P0200011R
C025	25	C0250008R	C0250009R	C0250010R	C0250011R
C032	32	C0320008R	C0320009R	C0320010R	C0320011R
C040	40	C0400008R	C0400009R	C0400010R	C0400011R
C063	63	C0630008R	C0630009R	C0630010R	C0630011R
C080	75	C0800008R	C0800009R	C0800010R	C0800011R
*C100	125	C1000008R	C1000009R	C1000010R	C1000011R
*C200	200	C2000008R	C2000009R	C2000010R	C2000011R

* Series available also in base mounting version.

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Panel mounting switches: R

Reversing switches - motor changeover switches



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REVERSING SWITCHES

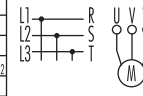
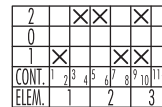
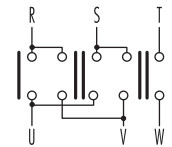
REVERSING AND REVERSING PHASE STARTER - SWITCHES

SERIES	NOM. CURRENT AC21A AMP.	3 POLES 3 WAFERS
P012	12	P0120012R
P016	16	P0160012R
P020	20	P0200012R
C025	25	C0250012R
C032	32	C0320012R
C040	40	C0400012R
C063	63	C0630012R
C080	75	C0800012R

12



45°

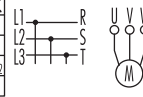
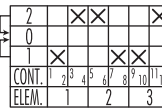
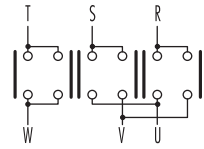


SERIES	NOM. CURRENT AC21A AMP.	3P WITH SPRING RETURN 3 WAFERS
P012	12	P0120013R
P016	16	P0160013R
P020	20	P0200013R
C025	25	C0250013R
C032	32	C0320013R
C040	40	C0400013R

13



45°



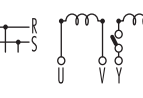
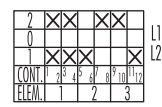
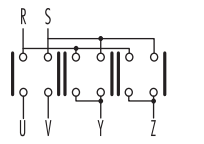
REVERSING SWITCH FOR SINGLE PHASE MOTOR WITH CENTRIFUGAL CUT-OUT

SERIES	NOM. CURRENT AC21A AMP.	3 WAFERS
P012	12	P0120016R
P016	16	P0160016R
P020	20	P0200016R
C025	25	C0250016R
C032	32	C0320016R
C040	40	C0400016R

16



45°



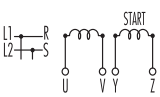
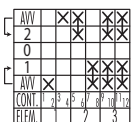
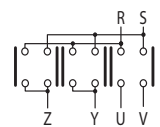
REVERSING SWITCH WITH AUXILIARY PHASE

SERIES	NOM. CURRENT AC21A AMP.	3 Wafers - REV. SWITCHES	3 Wafers - SWITCHES
P012	12	P0120018R	P0120017R
P016	16	P0160018R	P0160017R
P020	20	P0200018R	P0200017R

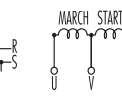
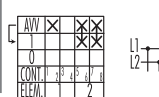
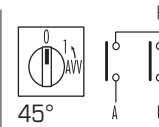
18



45°



17



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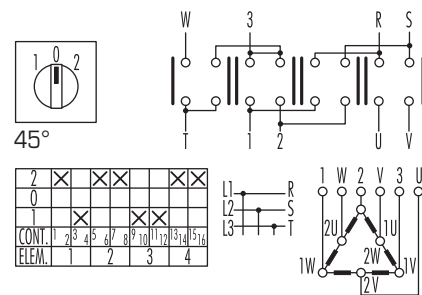
Panel mounting switches: R Motor changeover switches



MOTOR CHANGEOVER SWITCHES

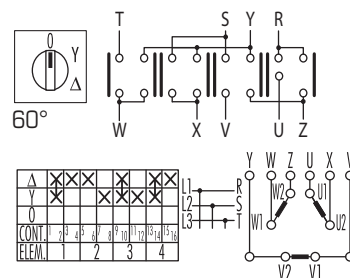
SERIES	NOM. POWER AC-23A kW-400V	DAHLENDER 2 SPEED SWITCH 3 WAFERS
PO12	5.5	PO120014R
PO16	7.5	PO160014R
PO20	9	PO200014R
CO25	11	CO250014R
CO32	15	CO320014R
CO40	18.5	CO400014R
CO63	22	CO630014R
CO80	30	CO800014R

14 Dahlander 2 speed switch



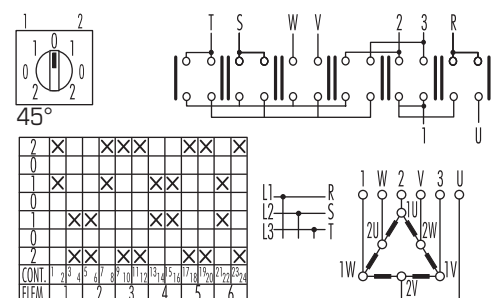
SERIES	NOM. POWER AC-23A kW-400V	STAR DELTA STARTER 4 WAFERS
PO12	5.5	PO120015R
PO16	7.5	PO160015R
PO20	9	PO200015R
CO25	11	CO250015R
CO32	15	CO320015R
CO40	18.5	CO400015R
C100	45	C1000015R

15 Star delta starter



SERIES	NOM. POWER AC-23A kW-400V	POLARITY CHANGEOVER SWITCH WITH REVERSE FUNCTION 6 WAFERS
PO12	5.5	PO120031R
PO16	7.5	PO160031R
PO20	9	PO200031R
CO25	11	CO250031R
CO32	15	CO320031R
CO40	18.5	CO400031R

31 Polarity changeover switch with reverse function





AMMETER SWITCHES

VOLTMETER SWITCHES

SERIES	NOM. CURRENT AC-21A AMP.	AMMETER 1 POLE FOR 3 CTS 3 WAFERS	19
P012	12	P0120019R	
P016	16	P0160019R	
P020	20	P0200019R	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE TO NEUTRAL 2 WAFERS	20
P012	12	P0120020R	
P016	16	P0160020R	
P020	20	P0200020R	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 2 WAFERS	21
P012	12	P0120021R	
P016	16	P0160021R	
P020	20	P0200021R	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 2 CIRCUITS 4 WAFERS	22
P012	12	P0120022R	
P016	16	P0160022R	
P020	20	P0200022R	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 3 PHASE TO NEUTRAL 3 WAFERS	23
P012	12	P0120023R	
P016	16	P0160023R	
P020	20	P0200023R	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 1 PHASE TO NEUTRAL 3 WAFERS	24
P012	12	P0120024R	
P016	16	P0160024R	
P020	20	P0200024R	

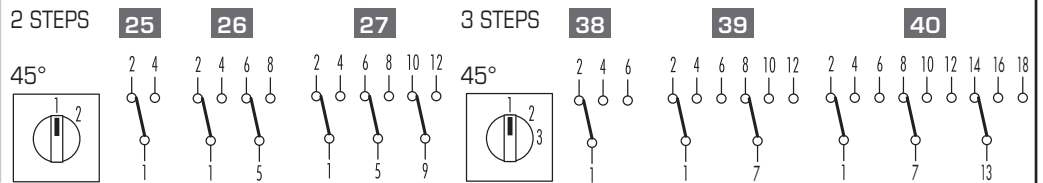
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Panel mounting bases : R

Changeover without off switches - step switches

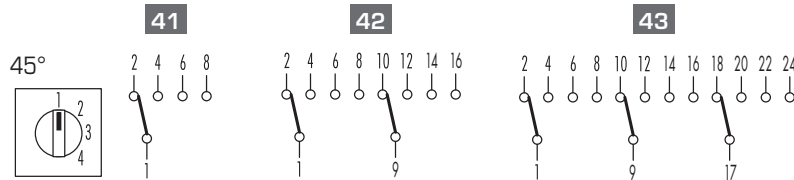


CHANGEOVER WITHOUT OFF SWITCHES



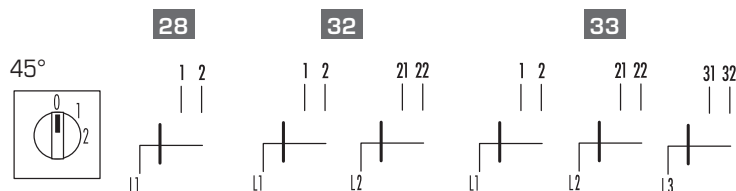
SERIES	NOM. CURRENT AC-21A AMP.	2 STEPS			3 STEPS		
		SINGLE POLE 1 WAFER	DOUBLE POLE 2 WAFERS	3 POLES 3 WAFERS	SINGLE POLE 2 WAFERS	DOUBLE POLE 3 WAFERS	3 POLES 5 WAFERS
P012	12	P0120025R	P0120026R	P0120027R	P0120038R	P0120039R	P0120040R
P016	16	P0160025R	P0160026R	P0160027R	P0160038R	P0160039R	P0160040R
P020	20	P0200025R	P0200026R	P0200027R	P0200038R	P0200039R	P0200040R

4 STEPS CHANGEOVER WITHOUT OFF SWITCHES



SERIES	NOM. CURRENT AC-21A AMP.	4 STEPS		
		SINGLE POLE 2 WAFERS	DOUBLE POLE 4 WAFERS	3 POLES 6 WAFERS
P012	12	P0120041R	P0120042R	P0120043R
P016	16	P0160041R	P0160042R	P0160043R
P020	20	P0200041R	P0200042R	P0200043R

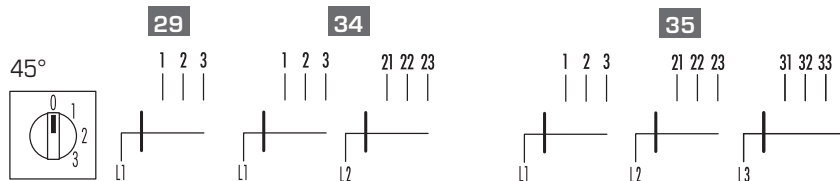
MULTI WAY STEP SWITCHES WITH 0



SERIES	NOM. CURRENT AC-21A AMP.	2 STEPS		
		SINGLE POLE 1 WAFER	DOUBLE POLE 2 WAFERS	3 POLES 3 WAFERS
P012	12	P0120028R	P0120032R	P0120033R
P016	16	P0160028R	P0160032R	P0160033R
P020	20	P0200028R	P0200032R	P0200033R



MULTI WAY STEP SWITCHES WITH "O"

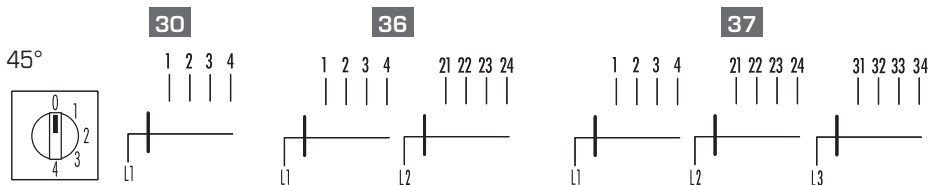


3 STEPS

SERIES	NOM. CURRENT AC-21A AMP.	SINGLE POLE 2 WAFERS	DOUBLE POLE 3 WAFERS	3 POLES 5 WAFERS
PO12	12	PO120029R	PO120034R	PO120035R
PO16	16	PO160029R	PO160034R	PO160035R
PO20	20	PO200029R	PO200034R	PO200035R



MULTI WAY STEP SWITCHES WITH "O"



4 STEPS

SERIES	NOM. CURRENT AC-21A AMP.	SINGLE POLE 2 WAFERS	DOUBLE POLE 4 WAFERS	3 POLES 6 WAFERS
PO12	12	PO120030R	PO120036R	PO120037R
PO16	16	PO160030R	PO160036R	PO160037R
PO20	20	PO200030R	PO200036R	PO200037R

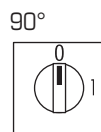
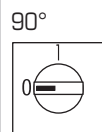
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Box mounting base: B door interlock

On-Off switches



ON-OFF SWITCHES P012 - P016 - P020 Series



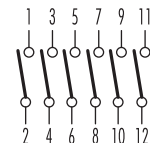
03 3 POLES



04 4 POLES



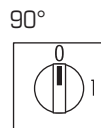
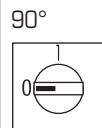
06 6 POLES



SERIES	NOM. CURRENT AC-21A AMP.	3 POLES 2 WAFERS	4 POLES 4 WAFERS	6 POLES 3 WAFERS
P012	12	P0120003B	P0120004B	P0120006B
P016	16	P0160003B	P0160004B	P0160006B
P020	20	P0200003B	P0200004B	P0200006B



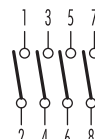
ON-OFF SWITCHES C025 - CP032 - C040 Series



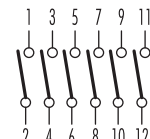
03 3 POLES



04 4 POLES



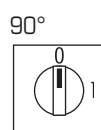
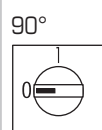
06 6 POLES



SERIES	NOM. CURRENT AC-21A AMP.	3 POLES 2 WAFERS	4 POLES 4 WAFERS	6 POLES 3 WAFERS
C025	25	C0250003B	C0250004B	C0250006B
C032	32	C0320003B	C0320004B	C0320006B
C040	40	C0400003B	C0400004B	C0400006B



ON-OFF SWITCHES C025 - CP032 - C040 Series



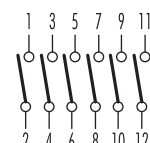
03 3 POLES



04 4 POLES



06 6 POLES



SERIES	NOM. CURRENT AC-21A AMP.	3 POLES 2 WAFERS	4 POLES 4 WAFERS	6 POLES 3 WAFERS
C063	63	C0630003B	C0630004B	C0630006B
C080	75	C0800003B	C0800004B	C0800006B

Phoenix

Box mounting base: B door interlock On-Off switches



AUTOMATION TECHNOLOGIES



ON-OFF SWITCHES C100 Series

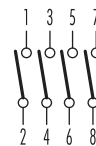
60°



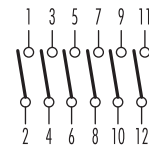
03 3 POLES



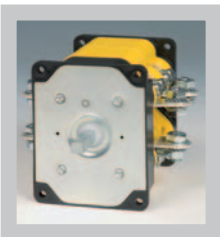
04 4 POLES



06 6 POLES



SERIES	NOM. CURRENT AC-21 AMP.	3 POLES 2 WAFERS	4 POLES 4 WAFERS	6 POLES 3 WAFERS
C100	125	C1000003R	C1000004R	C1000006R



ON-OFF SWITCHES C200 Series

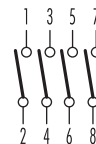
60°



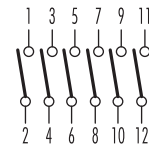
03 3 POLES



04 4 POLES



06 6 POLES



SERIES	NOM. CURRENT AC-21 AMP.	3 POLES 2 WAFERS	4 POLES 4 WAFERS	6 POLES 3 WAFERS
C200	200A	C2000003R	C2000004R	C2000006R

C100 - C200 Series are arranged in one execution one code for R and B fixing type.

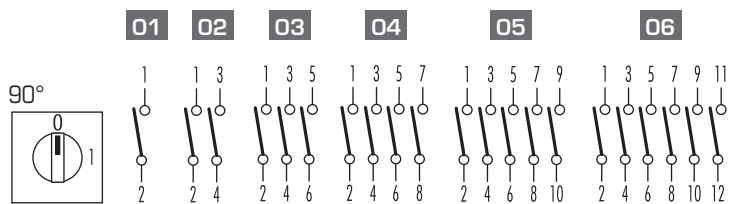
Phoenix

Complete switches Base-DIN rail mounting for standardised enclosures
On-Off switches - Instrumentation switches



ON-OFF SWITCHES

DIN rail mounting for 46 mm. standardised enclosures



SERIES	NOM. CURRENT AC-21A AMP.	SINGLE POLE 3 WAFERS	DOUBLE POLE 3 WAFERS	3 POLES 3 WAFERS	4 POLES 3 WAFERS	5 POLES 3 WAFERS	6 POLES 3 WAFERS
PO12	12	PO120001D027	PO120002D027	PO120003D027	PO120004D027	PO120005D027	PO120006D027
PO16	16	PO160001D027	PO160002D027	PO160003D027	PO160004D027	PO160005D027	PO160006D027

CHANGEOVER SWITCHES

SERIES	NOM. CURRENT AC-21A AMP.	AMMETER 1 POLE FOR 3 CTS 3 WAFERS	19
PO12	12	PO120019D027	
PO16	16	PO160019D027	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE TO NEUTRAL 3 WAFERS	20
PO12	12	PO120020D027	
PO16	16	PO160020D027	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 3 WAFERS	21
PO12	12	PO120021D027	
PO16	16	PO160021D027	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 3 PHASE TO NEUTRAL 3 WAFERS	23
PO12	12	PO120023D027	
PO16	16	PO160023D027	

SERIES	NOM. CURRENT AC-21A AMP.	VOLTMETER 3 PHASE CONCATENATED VOLTAGES 1 PHASE TO NEUTRAL 3 WAFERS	24
PO12	12	PO120024D027	
PO16	16	PO160024D027	

Phoenix

Screw fixing plates - panel mounting R



AUTOMATION TECHNOLOGIES

EN60529 - IP65 UL50 1 - 4 - 4x (*) NEMA 4X Protection



Grey plate
Black knob

- 48 **001/.....** 88 **201/.... - 241/....**
- 64 **007/.....** 130 **261/.....**

SERIES	PLATE	90°		45°		45°		45°		60°		45°	
		01.....06	01.....06	07	08....12-14-16	13	15	17					
P012	<input type="checkbox"/> 48	001/0001	001/0001-1	001/0007	001/0008	001/0013	001/0015	001/0017					
P020													
C025													
C032	<input type="checkbox"/> 64	007/0001	007/0001-1	007/0007	007/0008	007/0013	007/0015	007/0017					
C040													
C063	<input type="checkbox"/> 88	201/0001	201/0001-1	-	201/0008	-	-	-					
C080													
*C100	<input type="checkbox"/> 88	-	241/0001-1 [□]	-	241/0008 [□]	-	241/0015	-					
*C200	<input type="checkbox"/> 130	-	261/0001-1 [□]	-	261/0008 [□]	-	-	-					

SERIES	PLATE	45°		90°		45°		45°		45°		45°	
		18	19	24	20	21	22	23					
P012													
P016	<input type="checkbox"/> 48	001/0018	001/0019	001/0024	001/0020	001/0021	001/0022	001/0023					
P020													
C025													
C032	<input type="checkbox"/> 64	007/0018	007/0019	007/0024	007/0020	007/0021	007/0022	007/0023					
C040													











SERIES	PLATE	45°		45°		45°		45°		45°		45°	
		25-26-27	38-39-40	41-42-43	28-32-33	29-34-35	30-36-37	31					
P012...020	<input type="checkbox"/> 48	001/0025	001/0038	001/0041	001/0028	001/0029	001/0030	001/0031					
C025...040	<input type="checkbox"/> 64	007/0025	007/0038	007/0041	007/0028	007/0029	007/0030	007/0031					

C100 - C200 60° switch

Phoenix

Screws fixing plates - Panel mounting R Door locking B

EN60529 - IP65 UL50 1 - 4 - 4x (*) NEMA 4X Protection

				PANEL MOUNTING		DOOR LOCKING		
		SERIES	PLATES					
	Grey plate round Black knob	P012....P020	□ 48	001/0001	001/0001-1	020/0001	-	
		C025....C040	□ 64	007/0001	007/0001-1	-	-	
		C63....C80	□ 88	201/0001	201/0001-1	220/0001	-	
		C100	□ 88	-	241/0001-1□			
		C200	□ 130	-	261/0001-1□			
	Yellow plate round Red knob	P012....P020	□ 48	002/0001	002/0001-1	-	-	
		C025....C040	□ 64	008/0001	008/0001-1	-	-	
	Grey plate round Black knob With looking facility	P012....P020	□ 48	-	003/0001-1	*005/0001	-	
		C025....C040		*003/0001	-			
	Yellow plate round Red knob With looking facility	P012....P020	□ 48	-	*004/0001-1	*006/0001	-	
		C025....C040		*004/0001	-			
	Grey plate round Black knob With looking facility (max.3)	P012....P020	□ 67	*009/0001	*009/0001-1	*011/0001	*011/0001-A	
		C025....C040						
		C63....C80		□ 92	209/0001	209/0001-1	211/0001	211/0001-1
		C100		□ 92	-	249/0001-1□	-	251/0001-1□
		C200		□ 130	-	269/0001-1□	-	271/0001-1□
	Yellow plate round Red knob With looking facility (max.3)	P012....P020	□ 67	*010/0001	*010/0001-1	*012/0001	*012/0001-2	
		C025....C040						
		C63....C80		□ 92	210/0001	210/0001-1	212/0001	212/0001-1
		C100		□ 92	-	250/0001-1□	-	252/0001-1□
		C200		□ 130	-	270/0001-1□	-	272/0001-1□

□ C100 - C200 60° switch

Phoenix

Panel mounting Ø 22 mm hole Panel mounting R



AUTOMATION TECHNOLOGIES

EN60529 - IP65 UL50 1 - 4 - 4x (*) NEMA 4X Protection



Panel mounting Ø 22 mm hole
Grey plate
Black knob
□ 48

056

Panel mounting Ø 22 mm hole
Grey plate
with key
□ 48

057



SERIES	TYPE	90° 01.....06		90° 01.....06		45° 08.....12- 14-16		90° 19		45° 20		45° 21	
		Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram
P012	with knob	056/0001	056/0001-1	056/0008	056/0019	056/0020	056/0021						
P016													
P020	with key *	057/0001	057/0001-1	057/0008-CA	-	-	-						

SERIES	TYPE	45° 22		45° 23		45° 24		45° 25....27		45° 38...40		45° 41....43	
		Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram
P012	with knob	056/0022	056/0023	056/0024	056/0025	056/0038	056/0041						
P016													
P020	with key *	-	-	-	-	-	-						

SERIE	TIPO	45° 28-32-34		45° 29-34-35		45° 30-36-37							
		Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram
P012	with knob	056/0028	056/0029	056/0030									
P016													
P020	with key *	057/0028-CA	057/0029-CA	-									



Panel mounting Ø 22 mm hole
with knob
028

Panel mounting Ø 22 mm hole
with key
029

Key removal at position
0° and 180°
















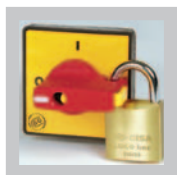













P012-P016-P020	028	029
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* Key removal at "0" position

Phoenix

Panel mounting Ø 22 mm hole Panel mounting R - door locking B

EN60529 - IP65 UL50 1 - 4 - 4x (*) NEMA 4X Protection

				PANEL MOUNTING		DOOR LOCKING	
	Grey plate round Black knob	SERIES	<input type="checkbox"/> PLATE				
		P012....P020 C025.....C040	<input type="checkbox"/> 48	056/0001 -	056/0001-1 -	095/0001	-
	Yellow plate round Red knob	SERIES	<input type="checkbox"/> PLATE				
		P012....P020 C025.....C040	<input type="checkbox"/> 48	058/0001 -	058/0001-1 -	070/0001	-
	Grey plate round Black knob With looking facility	SERIES	<input type="checkbox"/> PLATE				
		P012....P020 C025.....C040	<input type="checkbox"/> 48	059/0001 -	- -	* 077/0001	-
	Yellow plate round Red knob With looking facility	SERIES	<input type="checkbox"/> PLATE				
		P012....P020 C025.....C040	<input type="checkbox"/> 48	060/0001 -	060/0001-1 -	* 069/0001	-
	Grey plate round Black disc type knob With looking facility (max.3)	SERIES	<input type="checkbox"/> PLATE				
		P012....P020 C025.....C040	<input type="checkbox"/> 67	061/0001 -	061/0001-1 -	* 063/0001	* 063/0001-1
	Yellow plate round Red disc type knob With looking facility (max.3)	SERIES	<input type="checkbox"/> PLATE				
		P012....P020 C025.....C040	<input type="checkbox"/> 67	062/0001 -	062/0001-1 -	* 064/0001	* 064/0001-1

Phoenix

Panel mounting Ø 22 mm hole Panel mounting R - Special plates



AUTOMATION TECHNOLOGIES

EN60529 - IP65 UL50 1 - 4 - 4x (*) NEMA 4X Protection



Screw fixing
Grey plate
Black knob

48 **001**
 64 **007**

Panel mounting Ø 22 mm hole plate

Grey plate
Black knob

48 **056**



45° SWITCHING
ANGLE

PLATE	FIXING	45°	45°	45°	45°	45°	45°	45°
<input type="checkbox"/> 48	SCREW FIXING	001/0008-1	001/0008-4	001/0008-14	001/0840	-	001/0013-1	-
	Ø 22 MM HOLE	-	-	-	-	056/0008-3	-	-
<input type="checkbox"/> 64	SCREW FIXING	-	007/1481	-	-	-	007/0013-1	007/0008-1

45° SWITCHING
ANGLE

PLATE	FIXING	45°	45°	45°	45°	45°	45°	45°
<input type="checkbox"/> 48	SCREW FIXING	-	001/0023-2	001/0949	001/0845	-	-	001/0410
	Ø 22 MM HOLE	-	-	-	-	-	-	-
<input type="checkbox"/> 64	SCREW FIXING	007/0013-2	007/1135	-	-	007/0008-2	007/0354	-

90° SWITCHING
ANGLE

PLATE	FIXING	90°	90°	90°
<input type="checkbox"/> 48	SCREW FIXING	-	-	-
	Ø 22 MM HOLE	-	-	-
<input type="checkbox"/> 64	SCREW FIXING	007/1131	007/1133	007/1132

Phoenix

Cam switches

Accessories

IP65 THERMOPLASTIC ENCLOSURES



FOR FRONT KNOB AND PANEL MOUNTING SWITCHES: R

Black box - grey cover
RAL 7035
Dimension 120x100x83 mm
Nr. 8 knock-outs Pg.

PO12 - PO16 - PO20 Series

Max. 3 wafers

BF1/2NGO

CO25 - CO32 - CO40 Series

Max. 2 wafers

BF1/6NGO

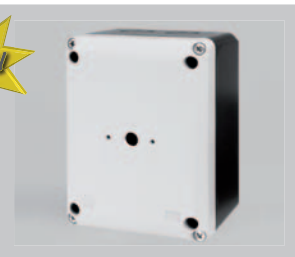
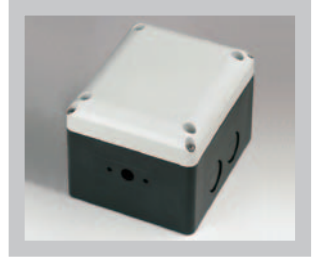
FOR SIDE KNOB AND PANEL MOUNTING SWITCHES: R

Black box - grey cover
RAL 7035
Dimension 120x100x83 mm
Nr. 8 knock-outs Pg.

PO12 - PO16 - PO20 Series

Max. 6 wafers

BL1/ONGO



FOR FRONT KNOB AND PANEL MOUNTING SWITCHES: R

Black box - grey cover
RAL 7035
Dimension 130x180x106 mm.
Nr. 4 knock-outs M25/M32 +
nr. 2 ø 22 mm closed hole on
the bottom

CO25 - CO32 - CO40 Series

Max. 3 wafers

BF4/GNGO

CO63 - CO80 Series

Max. 2 wafers

BF4/HNGO

FOR PROTECTED FRONT KNOB AND PANEL MOUNTING SWITCHES: R

Black box - grey cover
RAL 7035
Dimension 75x75x60 mm.
Nr. 4 knock-outs M20

PO12 - PO16 - PO20 Series

Max. 3 wafers

PROTECTED COVER WITH HANDLE

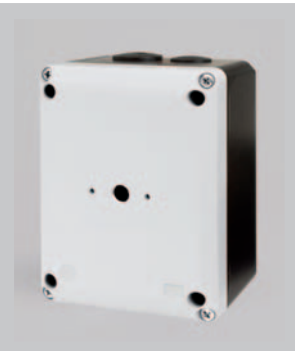
PQCPGN

FLAT COVER

PQCOGN



IP65 ALUMINIUM ENCLOSURES



FOR FRONT KNOB AND PANEL MOUNTING SWITCHES: R

Black box - grey cover
RAL 7035
Dimension 105x140x85 mm.
Complete with nr. 2 M25
and nr. 2 M20 taps

PO12 - PO16 - PO20 Series

Max. 3 wafers

BFA/ANGO

CO25 - CO32 - CO40 Series

Max. 2 wafers

BFA/BNGO



PROTECTION

BOOT PROTECTION



SERIES	N° OF WAF.	DIAM.	CODE
PO12.....PO20	Max.3	65	11706031
CO25.....CO40	Max.3	85	20101005

BOOT PROTECTION ADAPTER



SERIES	N° OF WAF.	DIAM.	CODE
PO12.....PO20	2 Ele.	65	11702038
CO25.....CO40	2 Ele.	85	11706332

SOFT PROTECTION



SERIES	N° OF WAF.	DIAM.	CODE
PO12.....PO20	Max.3	65	20101007

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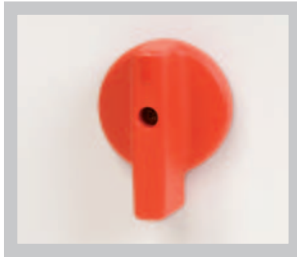
Cam switches

Accessories



AUTOMATION TECHNOLOGIES

KNOB



SERIES	CODE	COLOR
P012...C040	072	Black
	073	Red
C063...C080	218	Black
	219	Red

LONG KNOB



SERIES	CODE	COLOR
P012...C040	081	Black
	110	Red
-	-	-
-	-	-

LEVER



SERIES	CODE	COLOR
C100 □8	240	Black
C200 □10	260	Black

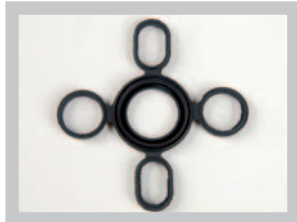
ROUND KNOB



SERIES	Ø	CODE	COLOR
P012...C040	34	018	Black
	34	111	Red
P012...C040	40	040	Black
	40	112	Red

GASKETS

For panel mounting R with knob only



SERIES	CODE
P012...P020	28000012



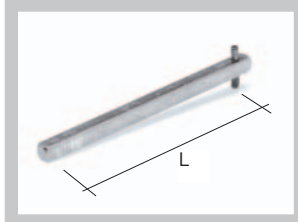
SERIES	CODE
C025...C040	15000015



SERIES	CODE
C063...C080	15010016

5 MM SQUARE LONG SHAFT

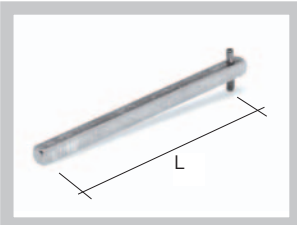
For panel mounting B door locking



SERIES	L/mm	CODE
P012...P020	185	20401089
C025...C040	300	20401164

6 MM SQUARE LONG SHAFT

For panel mounting B door locking



SERIES	L/mm	CODE
C063...C080	300	20900029
C100 □8	200	254
C200 □10	200	274

EXECUTIONS ON DEMAND

Fast on connections

Flat fast on terminals
Single or double terminals
From 6,3x0,8 or double
6,3x0,8 2 2,8x0,8
P012...P020 Series



Unidirectional turn

Unidirectional turn
C025...C040 Series



Axial interlock

"push and turn" interlock in
several positions
C025...C040 Series



Special shafts

Length and shape
on request



Phoenix

Characteristics

Electrical

EN 60947-3 CHARACTERISTICS				P012 - PX12	P016 - PX16
Rated operating voltage Ue		V		690	690
Rated insulation voltage Ui		V		690	690
Rated impulse withstand voltage Uimp (sectionable)		kV		4	4
Rated thermal current Ith		A		16	20
Rated thermal current in enclosed Ithe		A		12	16
Frequency		Hz		50/60	50/60
RATED OPERATING CURRENT Ie: alternate current					
AC-21A Switching resistive loads (☐) with light overloads		690V	A	12	16
AC-22A Switching mixed resistive and inductive loads at light overloads		690V	A	12	16
AC-23A Periodic switching of motors (☐)	single phase - 1 pole	110V	A/kW	12/1,1	14/1,5
		230V	A/kW	12/2,2	14/3
		230V	A/kW	10/3	13/4
	3 phase - 3 pole	400V	A/kW	10/5,5	13/7,5
		500V	A/kW	10/7,5	14/10
		690V	A/kW	10/7,5	14/10
AC3 Starting of cage motors (interruption while running)	single phase - 2 pole	110V	A/kW	10/0,75	12/1,1
		230V	A/kW	10/2	12/2,2
		230V	A/kW	8/2,2	10/3
	3 phase - 3 pole	400V	A/kW	8/4	10/5,5
		500V	A/kW	8/5,5	10/7,5
		690V	A/kW	6/5,5	8/7,5
RATED OPERATING CURRENT Ie: direct current					
DC-21A Switching resistive loads with light overloads	50V (1 phase)		A	10	12
DC-22A Switching mixed resistive and inductive loads at light overloads	30V (1 phase)		A	8	10
Nominal interruption power AC-23A (cosφ 0.45)	230V	A		80	104
	400V	A		80	104
	500V	A		80	112
	690V	A		80	112
Power dissipation per each phase			W	0,3*	0,35*
SHORT CIRCUIT CHARACTERISTICS					
Rated short-time short circuit withstand current Icw (1s)			A	300	300
Rated short circuit making capacity Icm			A	1200	1200
Conditional rated short circuit withstand current			kA	5	5
Fuse rating gG	690V		A	20	20
UL 508 CHARACTERISTICS					
General Use	600V ac		A	12	16
Standard motors load	single phase - 2 poles	120V ac	HP(FLA)	0,5 (9,8)	1 (16)
		240V ac	HP(FLA)	1 (8)	1,5 (10)
		200V ac	HP(FLA)	1,5 (9)	3 (14,4)
	3 phase - 3 poles	240V ac	HP(FLA)	3 (9,6)	5 (15,2)
		480V ac	HP(FLA)	5 (7,6)	7,5 (11)
		600V ac	HP(FLA)	5 (6,1)	7,5 (9)

* Values not reported on the IMG file ☐ Series C100 - C200 AC-21 - AC-23

Phoenix

Characteristics

Electrical



AUTOMATION TECHNOLOGIES

PO20 - PX20	CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	C100	C200
690	690	690	690	690	690	690	690
690	690	690	690	690	690	690	690
4	6	6	6	8	8	8	8
25	32	40	50	85	100	125	250
20	25	32	40	85	100	125	200
50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
20	25	32	40	63	80	125	250
20	25	32	40	63	80	-	-
18/2	25/2,2	30/2,5	35/3	45/4	63/5,5	-	-
18/4	25/4,5	30/5,5	35/6,5	45/7,5	63/11	70/13	108/20
16/5	25/7,5	30/9	35/11	50/15	58/18,5	94/30	175/55
16/9	22/11	27/15	32/18,5	40/22	54/30	81/45	162/90
16/11	22/15	27/18,5	32/22	40/30	54/37	80/55	158/110
16/12,5	20/15	22/18,5	25/22	32/30	40/37	-	-
16/1,5	22/2	25/2,2	30/2,5	36/3	45/4	-	-
16/3,5	22/3,7	25/4	30/5,5	35/6,5	45/7,5	82/15	130/24
12/4	18/5,5	23/7,5	27/9	37/11	47/15	97/31	144/46
12/6,5	18/9	23/11	27/15	35/18,5	44/22	67/37	139/77
12/8	18/11	23/15	27/18,5	35/22	44/30	53/37	85/59
10/9	14/11	18/15	20/18,5	25/22	32/30	-	-
16	20*	25*	32*	-	-	-	-
12	16*	20*	25*	-	-	-	-
128	200	240	280	400	464	-	-
128	176	216	256	320	432	648	1296
128	176	216	256	320	432	-	-
128	160	176	200	256	320	-	-
0,4*	-	-	-	-	-	-	-
300	500	500	500	1200	1200	2000	4000
1200	2840	2840	2840	2000	2000	-	-
5	10	10	10	10	10	-	-
20	40 *	40 *	40 *	100	100	-	-
20	25	32	40	63	85	-	-
1,5 (20)	1,5(20)	2 (24)	3 (34)	5 (56)	5(56)	-	-
2 (12)	3 (17)	5 (28)	5 (28)	7,5 (40)	10 (50)	-	-
5 (22,8)	7,5 (25,3)	7,5 (25,3)	10 (32,2)	-	-	-	-
5 (15,2)	7,5 (22)	7,5 (22)	10 (28)	15 (42)	20 (54)	-	-
10 (14)	15 (21)	20 (27)	20 (27)	30 (40)	40 (52)	-	-
10 (11)	15 (17)	20 (22)	20 (22)	40 (41)	50 (52)	-	-

* Fuses type gG 40a 500V

Phoenix

Technical data

General characteristics

Comply with rules		
Protection class control	control control with knob only terminals terminals PX e CX series	EN60529 (UL50*) NEMA 4X
Material group		EN60947-1
Pollution grade		EN60947-1
Flammability		UL 94
Ambient temperature		°C °C
Climate withstand		IEC68 part 2-3 IEC68 part 2-30
Terminal screw identification		
Connections:		
Terminal block caliber		EN60947-1
Terminal screw		
Screwing torque		EN60947-1 UL508
Connectable section:		
Flexible conductors min/max		mm ² AWG
Solid conductors min/max		mm ² AWG
Contacts		
Opening angles		
Mechanical lifetime at 120 operations per hour		mil./cl
Electrical lifetime at 120 operations per hour	AC21	mil./cl

CERTIFICATIONS

-  CE mark – Europa
-  cUL Listed – USA and Canada
-  Istituto Marchio Qualità (IMQ) – Italia
-  CCC Cina
-  GOST Russia

* See p/n device

Phoenix

Characteristics

General



AUTOMATION TECHNOLOGIES

IEC947-3, EN60947-3, UL508						IEC947-3, EN60947-3, UL508				
P012 - P016 - P020 PX12 - PX16 - PX20			C025 - C032 - C040 CX25 - CX32 - CX40			C063 - C080		C100	C200	
IP65 (Type 1 - 4 - 4X)			IP65 (Type 1 - 4 - 4X)			IP65		IP65	IP65	
IP40			IP40			IP40		-	-	
IP20			IP20			IPOO		IPOO	IPOO	
IP10			IP10			-		-	-	
II			II			II		I	I	
3			3			3		3	3	
VO: Live Parts						VO: Live Parts				
Operating: -25 +55						Operating: -25 +40				
Storage: -30 +70						Storage: -25 +60				
Hot Damp						Hot Damp				
Unsettled hot damp						Unsettled hot damp				
EN50013						EN50013				
A3			A5			A8		A8	-	
M 3,5			M4			2xM 4		2xM5	screws TE M10x20	
0,8 Nm (7,2 lb. in.)			1,2 Nm (10,6 lb. in.)			1,2 Nm (10,6 lb. in.)		2 Nm (18 lb. in.)	for rope terminals	
7,5 lb. in. (0,85 Nm)			12 lb in. (1,4 Nm)			10,62 lb. in. (1,2 Nm)		-	-	
1x0,75/4 - 2x0,75/2,5			2x2,5/10			2,5/35		6/35	-	
16-12			14-6			14/3		8/2	-	
1x0,75/4 - 2x0,75/2,5			2X2,5/10			2,5/35		10/35	-	
16-12			14-6			14/3		8/2	-	
Double gap contacts with positive opening action						Double contacts with double breaking				
30° - 45° - 60° - 90°			30° - 45° - 60° - 90°			45° - 60° - 90°		45° - 60° - 90°	45° - 60° - 90°	
1	1	1	1	1	1	1	1	0,5	0,5	
1	0,75	0,75	1	0,75	0,75	0,5	0,25	0,1	0,1	
P012 PX12	P016 PX16	P020 PX20	C025 CX25	C032 CX32	C040 CX40	C063	C080	C100	C200	
■	■	■	■	■	■	■	■	■	■	
●	●	●	●	●	●	●	●			
●	●	●	●	●	●	●	●			
●	●	●	●	●	●					
●	●	●	●	●	●					

■ Meets or exceed the minimum requirement

● Certified

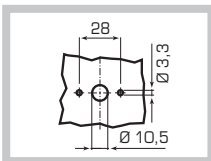
Phoenix

Dimensions

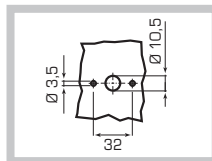
Fixing details

PANEL MOUNTING SWITCHES: R

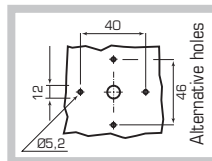
FIXING HOLES



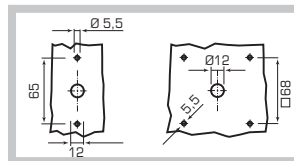
SERIES PO12 - P016 - P020
PX12 - PX16 - PX20



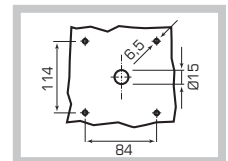
SERIES CO25 - C032 - C040
CX25 - CX32 - CX40



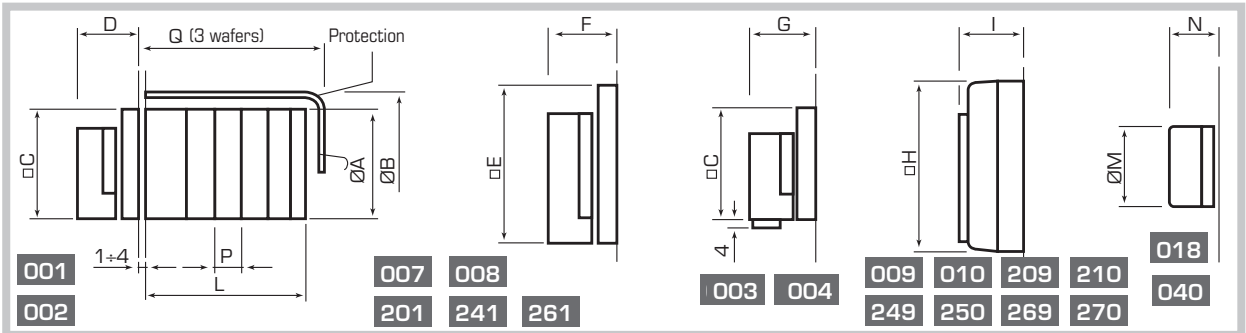
SERIES CO63 - C080



SERIES C100

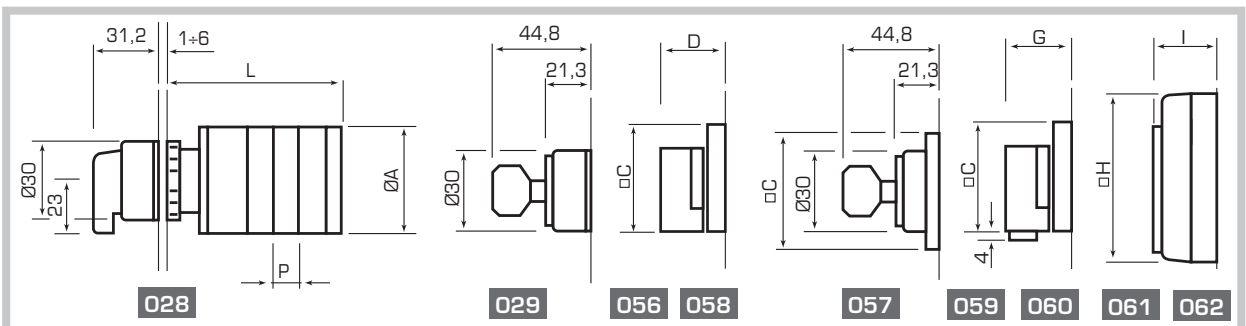


SERIES C200



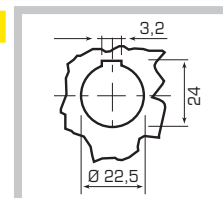
SERIES	L x WAFERS No.						P	A	B	C	D	E	F	G	H	I	M	N	Q
	1	2	3	4	5	6													
PO12 - P016 - P020	39	51,7	64,4	77,1	89,8	102,5	12,7	45	63	48	30,2	64	30,2	35,2	67	30,2	34	18,8	80
CO25 - C032 - C040	41,5	59	76,5	94	111,5	129	17,5	62	85	48	30,2	64	30,2	35,2	67	30,2	40	20,5	102
CO63 - C080	58,3	84,3	110,3	136,3	162,3	188,3	26	82	-	-	-	88	44	-	92	44	-	-	-
C100	69	97	125	153	181	209	28	84	-	-	-	88	38	-	92	56	-	-	-
C200	89	129	169	209	249	289	40	100x130	-	-	-	130	55	-	130	62	-	-	-

PANEL MOUNTED WITH DIAM. 22,5 HOLE



SERIES	L x WAFERS No.					
	1	2	3	4	5	6
PO12 - P016 - P020 PX12 - PX16 - PX20	58,2	70,9	83,6	96,3	109	121,7

FIXING HOLE



For the Series PX and CX, are valid the fixing holes and the dimensions of PO and CO Series.

Phoenix

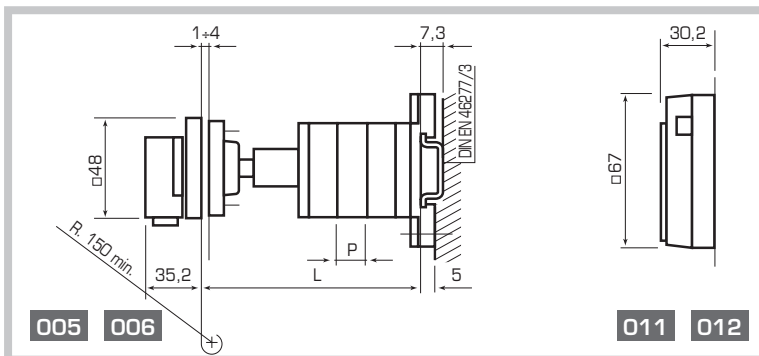
Dimensions

Fixing details



AUTOMATION TECHNOLOGIES

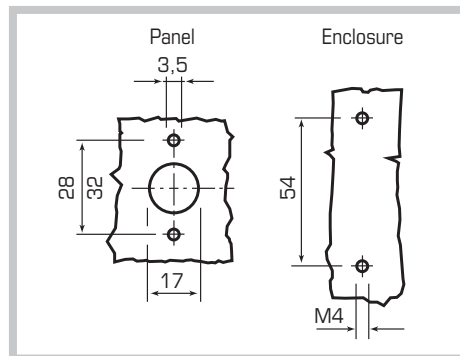
BASE MOUNTING FOR DOOR INTERLOCK - PANEL MOUNTING B



L x WAFERS No. WITH SHAFT AS STANDARD

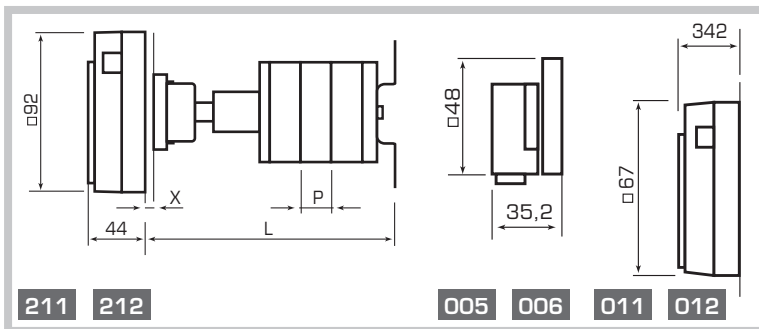
SERIES	L x WAFERS No. WITH SHAFT AS STANDARD							
		1	2	3	4	5	6	P
P012 - P016 - P020	min*	74,7	87,4	100,1	112,8	125,5	138,2	12,7
PX12 - PX16 - PX20	max	132,7	145,4	158,1	170,8	183,5	196,2	

FIXING HOLE



L x WAFERS No. WITH SHAFT EXTENSION 185 mm (ref. 20401089)

	L x WAFERS No. WITH SHAFT EXTENSION 185 mm (ref. 20401089)						
		1	2	3	4	5	6
min*	74,7	87,4	100,1	112,8	125,5	138,2	
max	232,7	245,4	258,1	270,8	283,5	296,2	

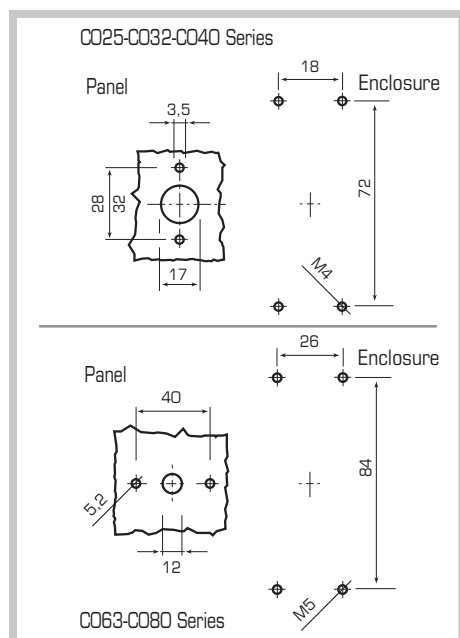


L x WAFERS No. WITH SHAFT AS STANDARD

SERIES	L x WAFERS No. WITH SHAFT AS STANDARD						
		1	2	3	4	P	X
C025 - C032 - C040	min*	94,5	112	129,5	147	17,5	1 ÷ 4
CX25 - CX32 - CX40	max	152,5	170	187,5	205		
C063 - C080	min*	129	155	181	207	26	1 ÷ 10
	max	177	203	229	255		

* L minimum length with cut shaft

DRILLING TEMPLATE



L x WAFERS No. WITH SHAFT EXTENSION 185 mm (ref. 20401089)

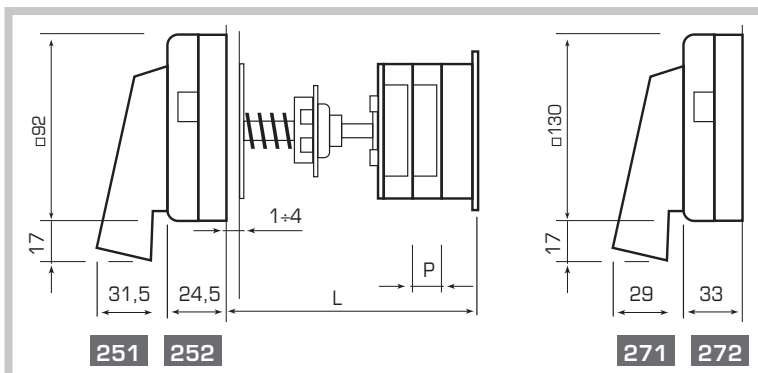
	L x WAFERS No. WITH SHAFT EXTENSION 185 mm (ref. 20401089)				
		1	2	3	4
min*	94,5	112	129,5	147	
max	252,5	270	287,5	305	
min*	129	155	181	207	
max	277	303	329	355	

Phoenix

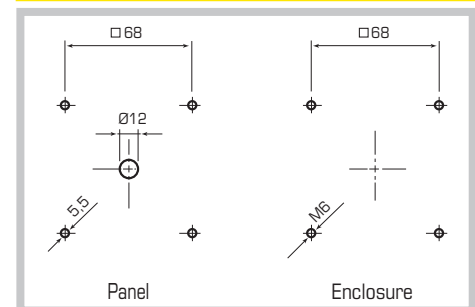
Dimensions

Fixing details

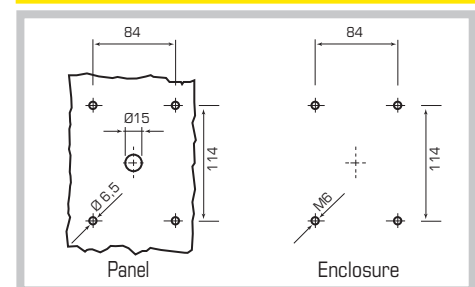
BASE MOUNTING FOR DOOR INTERLOCK - PANEL MOUNTING B



C100 SERIES



C200 SERIES



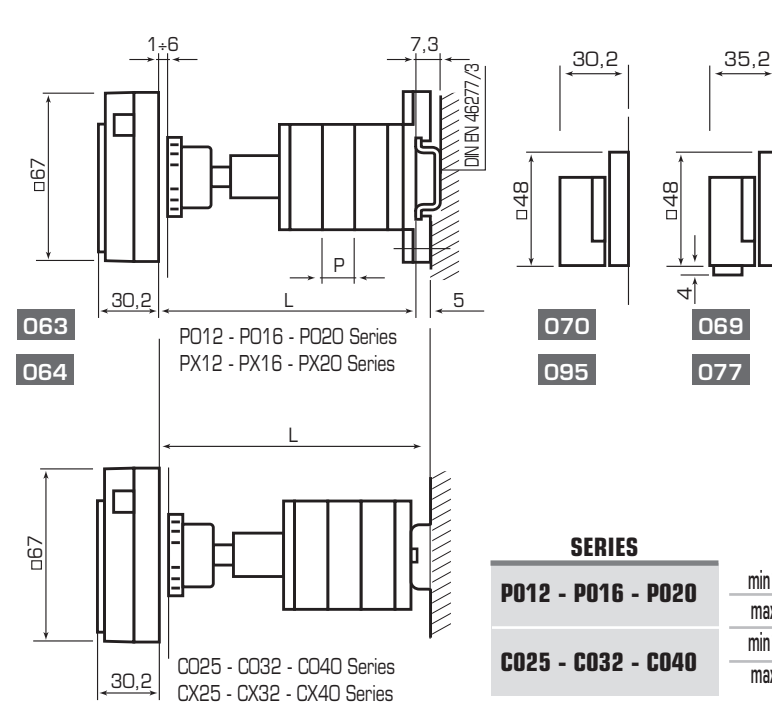
SERIES		L x WAFERS No. WITH SHAFT AS STANDARD				
		1	2	3	4	P
C100	min	134	162	190	218	28
	max	140	178	196	224	
C200	min	157	197	237	277	40
	max	163	203	243	283	

Length with long shaft = + 200 mm

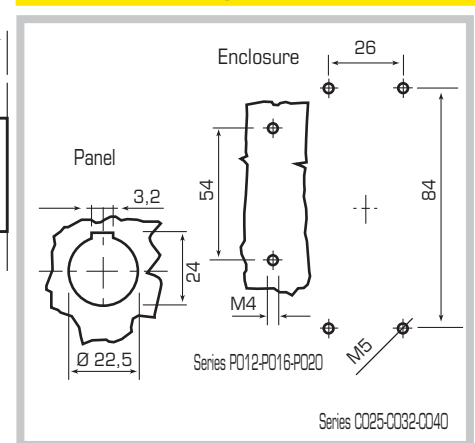
C 100 Series shaft cod. 254

C 200 Series shaft cod. 274

BASE MOUNTING Ø 22,5 FOR DOOR INTERLOCK - PANEL MOUNTING B



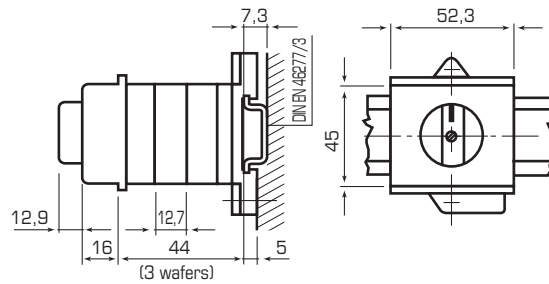
DRILLING TEMPLATE



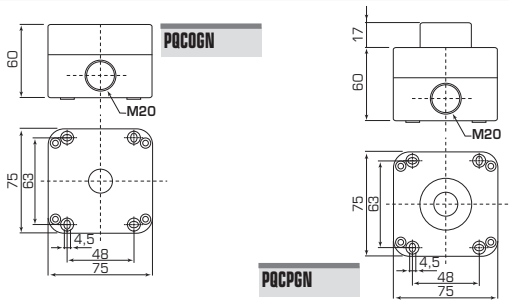
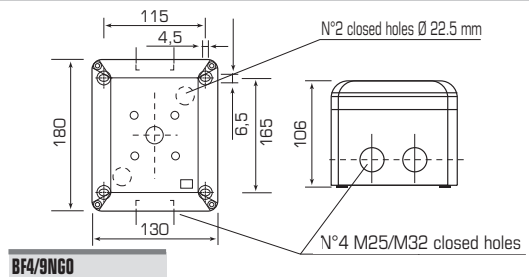
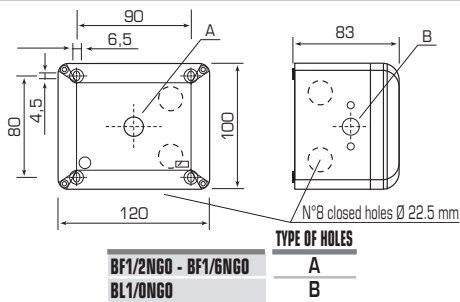
SERIES		L x WAFERS No. WITH SHAFT AS STANDARD				
		1	2	3	4	P
PO12 - PO16 - PO20	min*	79,5	92,2	104,9	117,6	12,7
	max	139	151,7	164,4	177,1	
CO25 - CO32 - CO40	min*	99,5	117	134,5	152	17,5
	max	159	176,5	194	211,5	

BASE MOUNTING - 46 mm - STANDARD ENCLOSURE

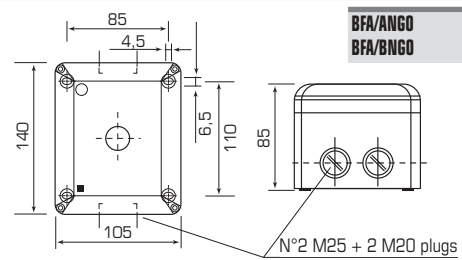
027



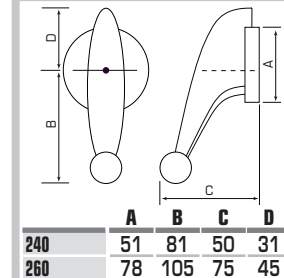
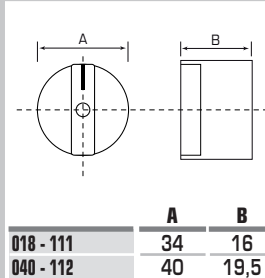
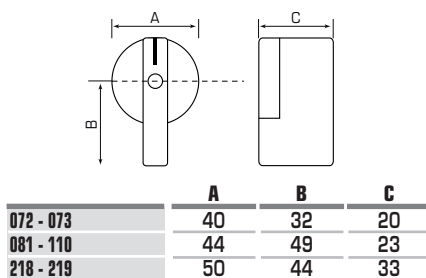
THERMOPLASTIC BOXES



ALUMINIUM BOX



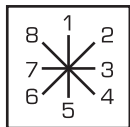
KNOBS AND LEVER



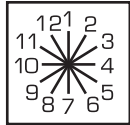
Phoenix

Cam switches

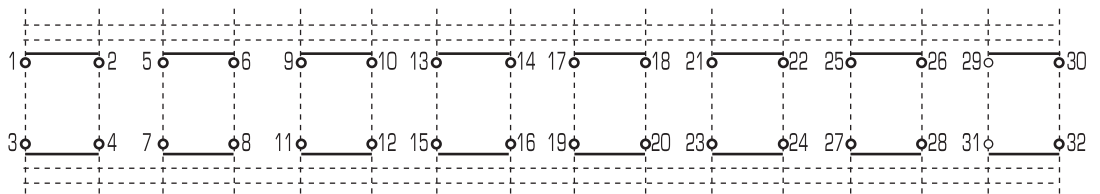
Special diagram on request



45 - 90

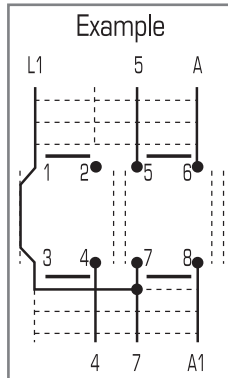


30 - 60



POS.	DESCRIPTION	POS.	DESCRIPTION
1		7	
2		8	
3		9	
4		10	
5		11	
6		12	

10	39-40		
	37-38		
9	35-36		
	33-34		
8	31-32		
	29-30		
7	27-28		
	25-26		
6	23-24		
	21-22		
5	19-20		
	17-18		
4	15-16		
	13-14		
3	11-12		
	9-10		
2	7-8		
	5-6		
1	3-4		
	1-2		
Wafer			
Contact			
			Position



2	7-8		X
	5-6	X	X
1	3-4	X	X
	1-2		X
Wafer			
Contact		0	1
			M
			Position

- Open contact
- Closed contact
- Break before make
- Contact closed: no interruption during change-over
- Spring return
- Make before break
- Open contact early make

Rated current Ie		Operational rated voltage Ue	
Category	Amp/kw	Volt	
<input type="checkbox"/> AC-21A	A		V
<input type="checkbox"/> AC-22A	A		V
<input type="checkbox"/> AC-23A	1Ph	kW	V
	3Ph	kW	V
<input type="checkbox"/> AC-3	1Ph	kW	V
	3Ph	kW	V

Series _____

Mounting:

Panel mounting

Base mounting

DIN rail

Operating:

Notes:

Company _____

Contact Mr _____

Ph. _____

Fax _____

E-mail _____

Quantity _____

Due date _____

Order No. _____



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