

**RANGE OVERVIEW AND GENERAL CHARACTERISTICS**



**COMPLY WITH RULES**

IEC 947-3, EN 60947-3, UL508



SERIES		PO12-PO16-PO20 PX12-PX16-PX20	C025-C032-C040 CX25-CX32-CX40		
Protection class	control EN 60529 (UL50) NEMA 4X control with knob only terminals	IP65 (Type 1 - 4 -4X) IP40 IP20 (PO) - IP10 (PX)	IP65 (Type 1 - 4 -4X) IP40 IP20 (PO) - IP10 (PX)		
Material group	EN 60947-1	II	II		
Pollution grade	EN 60947-1	3	3		
Flammability	UL94	VO (Live Electrical parts)	VO (Live Electrical parts)		
Ambient temperature	°C	Operating: -40 +85 Storage: -40 +70	Operating: -40 +85 Storage: -40 +70		
Climate Withstand	IEC 68 part 2-3 IEC 68 part 2-30	Hot damp Unsettled hot damp	Hot damp Unsettled hot damp		
Terminal screw identification		EN50013	EN50013		
Connections	Terminal block caliber EN60947-1 Terminal screw Screwing torque EN60947-1 UL508	A3 M3,5 0,8 Nm (7,2 lb. in.) 7,5 lb. in. (0,85 Nm)	A5 M4 1,2 Nm (10,6 lb. in.) 12 lb. in. (1,4 Nm)		
Connectable section	Flexible conductors min/max AWG Solid conductors min/max mm <sup>2</sup> AWG	1x0,75/4 - 2x0,75/2,5 10 - 18 1x0,75/4 - 2x0,75/2,5 10 - 18	2x2,5/10 14 - 6 2x2,5/10 14 - 6		
Contacts		Double breaking	Double breaking		
Opening angles		30° - 45° - 60° - 90°	30° - 45° - 60° - 90°		
Mechanical lifetime at 120 operations for hour	mil./cl	1 1 1	1 1 1		
Electrical lifetime at 120 operations for hour	mil./cl	1 0,75 0,75	1 0,75 0,75		

CERTIFICATIONS		PO12 PX12	PO16 PX16	PO20 PX20	C025 CX25	C032 CX32	C040 CX40
CE	CE mark - Europe	■	■	■	■	■	■
cUL	cUL Listed - USA and Canada	●	●	●	●	●	●
IMQ	IMQ Istituto Marchio Qualità - Italy	●	●	●	●	●	●
CCC	CCC Cina	●	●	●	●	●	●
EAC	EAC Russia	●	●	●	●	●	●

C063-C080		G125	G200
IP65		IP65	IP65
IP40		-	-
IP00		IP00	IP00
II		IIIA	IIIA
3		3	3
VO (Live Electrical parts)		VO (Live Electrical parts)	VO (Live Electrical parts)
Operating: -40 +70		Operating: -15 +55	Operating: -15 +55
Storage: -40 +70		Storage: -25 +70	Storage: -25 +70
Hot damp		-	-
Unsettled hot damp		-	-
EN50013		-	-
A7		-	-
2xM4		Hex. screw M8 for bars and cable lugs	Hex. screw M10 for bars and cable lugs
1,2 Nm (10,6 lb. in.)		-	-
10,62 lb. in. (1,2 Nm)		-	-
2,5/35		-	-
14 - 3		-	-
2,5/35		-	-
14 - 3		-	-
Double breaking		Double breaking	Double breaking
45° - 60° - 90°		60° - 90°	60° - 90°
1	1	0,1	0,1
0,5	0,25	0,01	0,01

C063	C080	G125	G200
■	■	■	■
●	●	●	●
●	●		

**PHOENIX CAM SWITCHES**
**PHOENIX CAM SWITCHES**
**ELECTRICAL CHARACTERISTICS**

EN 60947-3 CHARACTERISTICS			PO12 - PX12	PO16 - PX16	PO20 - PX20
Rated operating voltage Ue	V		690	690	690
Rated insulation voltage Ui	V		690	690	690
Rated impulse withstand voltage Uimp (sectionable)	kV		4	4	4
Rated thermal current Ith	A		16	20	25
Rated thermal current in enclosed Ithe	A		12	16	20
Frequency	Hz		50/60	50/60	50/60

RATED OPERATING CURRENT Ie: alternate current			PO12 - PX12	PO16 - PX16	PO20 - PX20
AC-21A Switching resistive loads with light overloads	690V	A	12	16	20
AC-22A Switching mixed resistive and inductive loads at light overloads	690V	A	12	16	20
AC-23A Periodic switching of motors	single phase - 1 pole	110V A/kW	12/1,1	14/1,5	18/2
		230V A/kW	12/2,2	14/3	18/4
	3 phases - 3 poles	230V A/kW	10/3	14/4	16/5
		400V A/kW	10/5,5	14/7,5	16/9
		500V A/kW	10/7,5	14/10	16/11
AC3 Starting of cage motors (interruption hile running)	single phase - 2 poles	110V A/kW	10/0,75	12/1,1	16/1,5
		230V A/kW	10/2	12/2,2	16/3,5
	3 phases - 3 poles	230V A/kW	8/2,2	10/3	12/4
		400V A/kW	8/4	10/5	12/6
		500V A/kW	8/5,5	10/7,5	12/8
Nominal interruption power AC-23A (cosφ 0,45)	230V	A	80	104	128
		A	80	104	128
		A	80	112	128
		A	80	112	128
Power dissipation for each pole	W	0,3*	0,35*	0,4*	

RATED OPERATING CURRENT Ie: direct current			PO12 - PX12	PO16 - PX16	PO20 - PX20
DC-21A Switching resistive loads with light overloads	50V (1 phase)	A	10	12	16
DC-22A Switching mixed resistive and inductive loads at light overloads	30V (1 phase)	A	8	10	12

SHORT CIRCUIT CHARACTERISTICS			PO12 - PX12	PO16 - PX16	PO20 - PX20
Rated short-time short circuit withstand current Icw (1 s)	A		300	300	300
Rated short circuit making capacity Icm	A		1200	1200	1200
Conditional rated short circuit withstand current	kA		5	5	5
Fuse rating gG	690V	A	20	20	20

UL 508 CHARACTERISTICS			PO12 - PX12	PO16 - PX16	PO20 - PX20
General Use	600V AC	A	12	16	20
Standard motor load	single phase - 2 poles	120V AC HP (FLA)	0,5 (9,8)	1 (16)	1,5 (20)
		240V AC HP (FLA)	1 (8)	1,5 (10)	2 (12)
	3 phases - 3 poles	200V AC HP (FLA)	1,5 (6,9)	3 (11,04)	5 (17,5)
		240V AC HP (FLA)	3 (9,6)	5 (15,2)	5 (15,2)
		480V AC HP (FLA)	5 (7,6)	7,5 (11)	10 (14)
		600V AC HP (FLA)	5 (6,1)	7,5 (9)	10 (11)

CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
690	690	690	690	690	690	690
690	690	690	690	690	690	690
6	6	6	8	8	6	6
32	40	50	85	100	150	225
25	32	40	85	100	150	225
50/60	50/60	50/60	50/60	50/60	50/60	50/60

CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
25	32	40	63	80	125	200
25	32	40	63	80	125	200
25/1,5	30/2,2	35/3	45/4	63/5,5	-	-
25/4	30/5,5	35/6,5	45/7,5	63/11	-	-
25/7,5	30/9	35/11	50/15	58/18,5	140/45	169/55
22/11	24/15	32/18,5	40/22	54/30	78/45 (415V)	95/55 (415V)
22/11	27/18,5	32/22	40/30	54/37	65/45	79/55
20/15	22/18,5	25/22	32/30	40/37	47/45	57/55
22/1,1	25/1,5	30/2,5	36/3,7	45/4	-	-
22/3,7	25/4	30/5,5	36/6,5	45/7,5	-	-
18/5,5	23/7,5	27/9	37/11	47/15	115/37	140/45
18/7,5	23/11	27/15	35/18,5	44/22	64/37 (415V)	78/45 (415V)
18/11	23/15	27/18,5	35/22	44/30	53/37	64/45
14/11	18/15	20/18,5	25/22	32/30	39/37	47/45
200	240	280	400	464	-	-
176	216	256	320	432	-	-
176	216	256	320	432	-	-
160	176	200	256	320	-	-
-	-	-	-	-	-	-

CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
20 ▼	25 ▼	32 ▼	-	-	-	-
16 ▼	20 ▼	25 ▼	-	-	-	-

CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
500	500	500	1200	1200	-	-
2840	2840	2840	2000	2000	-	-
10	10	10	10	10	20	20
40 ■	40 ■	40 ■	100	100	125 ▲	200 ▲

CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
25	32	40	63	85	125	175
1,5 (20)	2 (24)	3 (34)	5 (56)	5 (56)	-	-
3 (17)	5 (28)	5 (28)	7,5 (40)	10 (50)	-	-
7,5 (25,3)	7,5 (25,3)	10 (32,2)	-	-	10 (56)	15 (84)
7,5 (22)	7,5 (22)	10 (28)	15 (42)	20 (54)	20 (54)	25 (68)
15 (21)	20 (27)	20 (27)	30 (40)	40 (52)	40 (52)	50 (65)
15 (17)	20 (22)	20 (22)	40 (41)	50 (52)	50 (52)	50 (52)