Cam Switches

► 1 SPEED STARTER, FORWARD/OFF/REVERSE - 3 PHASE MOTOR

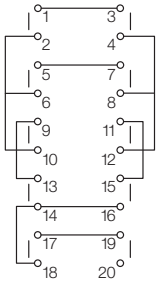
Technical Info (p. 224)

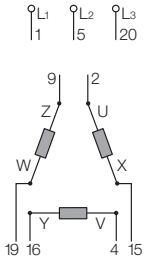
PANEL MOUNTING - TWO FIXING SCREWS

IP40 standard - IP65 available upon request

Contact Configuration - 9153

No. of contacts	REV Δ	REV Y	0	FWD Y	FWD Δ
1 - 2				X	X
3 - 4	X	X			
5 - 6	X	X			
7 - 8				X	X
9 -10	X				X
11 -12	X				X
13 - 14		X		X	
15 - 16		X		X	
17 - 18	X				X
19 - 20	X	X		X	X





NZ13GQ1

TZ13GQ1

ZZ13GQ7

IZ13GQ7

Mounting and Dimensions see pg 226 to 229

Switch Series	General use rating - amps	Number of contacts	Positions	Designation	Part Number
PR12	12	10		PR12 9153 C8 E Q48PN50	**NZ13GQ1**
PR17	16	10		PR17 9153 C8 E Q48PN50	**SZ13GQ1**
PR21	20	10		PR21 9153 C8 E Q48PN50	**TZ13GQ1**
PR26	25	10		PR26 9153 C8 E Q72MN50	**ZZ13GQ7**
PR40	50	10		PR40 9153 C8 E Q72MN60	**HZ13GQ7**
PR63	63	10		PR63 9153 C8 E Q72MN60	**IZ13GQ7**

Cam Switches

Technical Specifications

UL/CSA Characteristics		PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
UL/CSA									
1 phase	110/120 Vac	0.5 hp	1 hp	1.5 hp	2 hp	3 hp	5 hp	N/A	N/A
3 phase	110/120 Vac	1 hp	2 hp	3 hp	3 hp	7.5 hp	10 hp	N/A	N/A
	220/240 Vac	3 hp	5 hp	5 hp	7.5 hp	15 hp	20 hp	N/A	N/A
	440/480 Vac	5 hp	7.5 hp	10 hp	15 hp	30 hp	40 hp	N/A	N/A
	550/600 Vac	3 hp	10 hp	15 hp	20 hp	30 hp	40 hp	N/A	N/A
General Use (600 V) (Motor Controller)		12 A	16A	20 A	25 A	50 A	63 A	N/A	N/A
UL 508 Recognized		Yes	Yes	Yes	Yes	Yes	Yes	No	No
CSA Certified		Yes	Yes	Yes	Yes	Yes	Yes	No	No

IEC Characteristics	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
For thermal current AC-20 Ith Ic(A) (IEC 60 947-3)	20	25	32	40	63	80	200	250
Rated operating current for AC-21 A Ie(A) (IEC 60 947-3) Switching of resistive loads including moderate overloads	16	20	25	32	50	80	160	200
Rated operating current for AC-15 A Ie(A) at 230V AC (IEC 60 947-3) Control of electromagnetic loads	6	8	10	12	-	-	-	-
Performance in AC 23 (kW) (IEC 60 947-3) Switching of motors or other highly inductive loads								
- 3 x 230 V	4	5.5	7.5	11	15	18.5	-	-
- 3 x 400 V	7.5	11	11	11	22	25	-	-
- 3 x 500 V	5.5	11	11	11	25	25	-	-
- 3 x 690 V	4	10	10	11	18.5	22	-	-
Performance in AC 3 (IEC 60 947-3) Control of squirrel-cage motors starting and switching off motors while running - In kW								
- 3 x 230 V	3	4	4	5.5	11	15	-	-
- 3 x 400 V	4	7.5	7.5	11	18.5	22	-	-
- 3 x 500 V	5.5	7.5	7.5	11	18.5	22	-	-
- 3 x 690 V	3	7.5	7.5	11	18.5	22	-	-

Cam Switches

Technical Specifications

IEC Characteristics	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
Performance in AC 3 - cont.								
- In HP (for reference)								
- 3 x 230 V	4	5.5	5.5	7.5	15	20	-	-
- 3 x 400 V	5.5	10	10	15	25	30	-	-
- 3 x 500 V	7.5	10	10	15	25	30	-	-
- 3 x 690 V	4	10	10	15	25	30	-	-
Rated insulation voltage Ui (V)	690	690	690	690	690	690	690	690
- Max. rated voltage Ue(v) IEC	690	690	690	690	690	690	690	690
- CSA (Canada)	600	600	600	600	600	600	600	600
- UL (USA)	600	600	600	600	600	600	600	600
Rated short time withstand current Icw (A) for 1 sec	300	400	420	800	1000	1000	2000	2400
Maximum wire size (mm^2)								
- rigid	4	6/4(1)	6/4(1)	6	16	16	ø 8 screw for eyelet	
- flexible	2.5	4	4	6	16	16	ø 8 screw for eyelet	
Maximum wire size (AWG)								
- rigid	10	8/10(1)	8/10(1)	8	6	6		
- flexible	14	12	12	8	6	6		

(1): These values correspond to terminals with jumpers

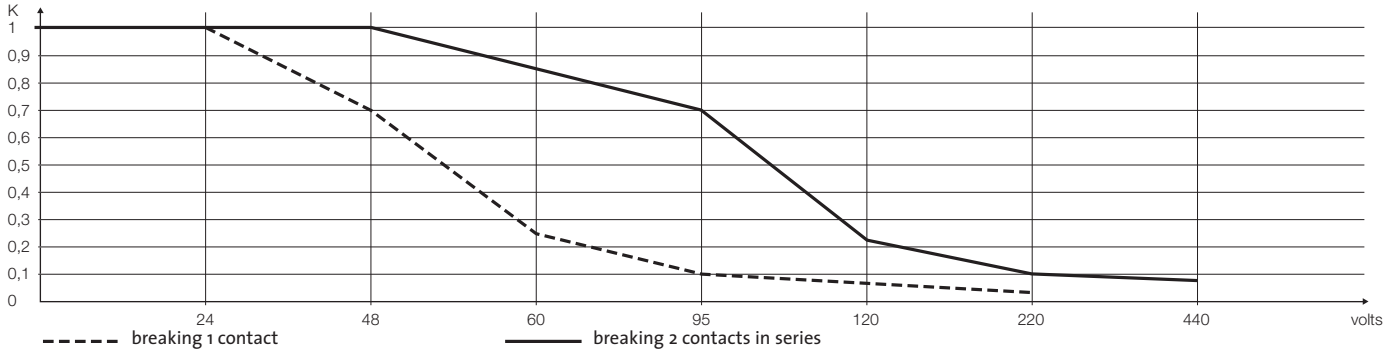
Mechanical durability 1,250,000 operations, maximum rate 150 operations per hour

Operating temperature limits - 20°C to + 70°C - 4°F to + 158°F (beyond these limits consult us)

Rated operating current in DC-1
low inductive loads
(< 1 ms)

	PR 12	PR 17	PR 21	PR 26	PR 40	PR 63	PR 125	PR 160
Rated operating current Ie (A) 24 V DC	16	20	25	32	50	80	-	-

Ie (A): rated current for breaking 1 contact. For higher voltages you must use a reduction coefficient K in the following graph

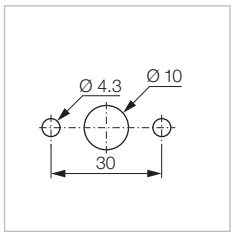


reduction coefficient K for rated operating current in DC-1 continuous current

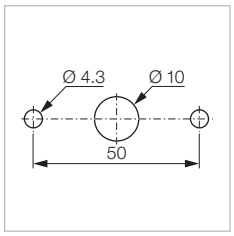
Cam Switches

► Mounting

2 SCREWS - 30 OR 50 MM INTERVAL

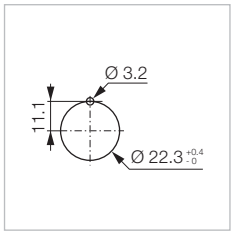


PR 12
PR 17
PR 21
PR 26



PR 40
PR 63

SINGLE HOLE MOUNTING Ø 22



For PR12 only

☐ 48 legend plate with handle
Handle
Lever
Key