



Concept

Our Rotary Cam Switches offer an economical and compact means of opening and closing electrical circuits. Numerous options allow us to create a switch to your specific requirements from a minimal number of basic components.

Design

The contacts of the switch are opened and closed by round disks called “cams”. The cams are notched to allow the contacts to open and close in the positions you desire. A spring forces the contact closed wherever the cam is notched. The cam holds the contact open wherever it is not notched. Each contact is operated by it’s own cam, independent of the other cams in the switch. The contacts and cams are mounted in decks, each deck holding up to two contacts. The decks are stacked onto each other until the number of contacts you require is reached, with a maximum of 24 contacts. The switches are securely held together with two metal rods (the PR12 series is ultra-sonically welded together instead of using the metal rods). A chamber at the top of the switch holds a special cam which determines the switching angle or detent of the switch. Switches are available with 30, 45, 60 or 90 degree switching angles. The handle is attached to a shaft which goes through the switch and rotates the cams as the handle is turned, thus opening and closing the contacts as you desire.

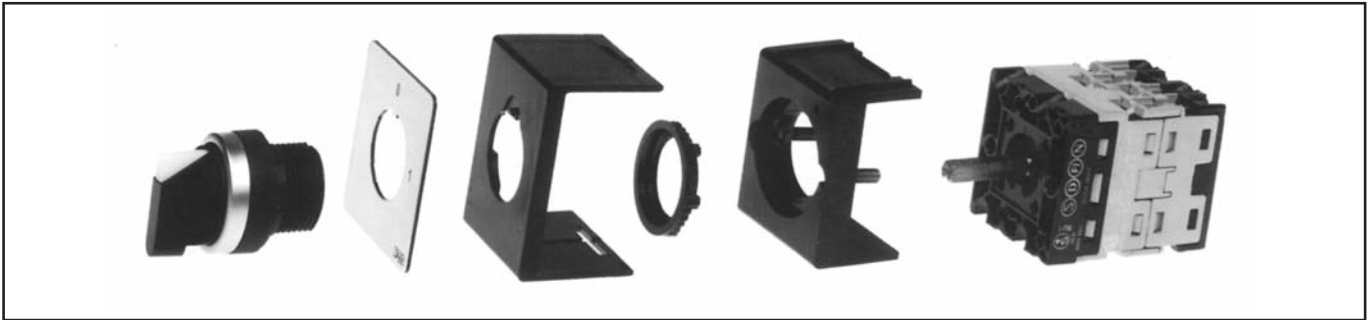
Flexibility

- 1 to 24 contacts
- 8 switch sizes
- numerous mounting options
- a large selection of handles and accessories

Full Line Cam Switch Catalog

The material shown in this catalog is intended as a brief introduction to our line of Rotary Cam Switches. For further details on our rotary cam switches please request our full line cam switch catalog.

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Part Numbers

Complete cam switch part numbers are developed sequentially, starting with the switch series and adding the reference numbers for the various features of the switch. These features are grouped in the following categories:

Category	Example Part Number
1) Switch series (electrical ratings)	PR12
2) Switch function (switching configuration)	1102
3) Switching angle (detent)	A4
4) Type of mounting	E
5) Type of legend / nameplate	Q48
6) Type of handle	PND

In the example above, the complete part number of the cam switch would be 'PR121102A4EQ48PND'.

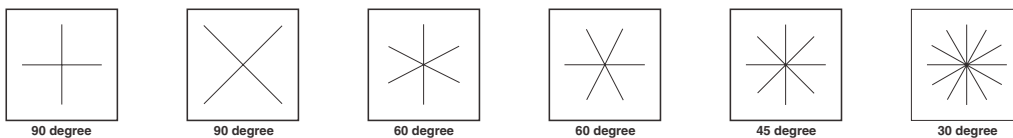
When all of the features of the switch have been selected, the part number is complete. The complete part numbers can sometimes become too long to be entered into computer systems. To accommodate this, a unique condensed part number is assigned to every cam switch ordered. The part numbers for the 'standard cam switches' on the following pages represent the condensed part numbers. You may order using either expanded or condensed part numbers.

Assistance in Ordering

Due to their unique flexibility, ordering a rotary cam switch can be quite challenging. Our rotary cam switches are offered in eight different electrical ratings, from 1 to 24 contacts, with numerous mounting, legend plate, and handle options.

We invite you to contact our technical department for assistance in selecting the rotary cam switch which will best meet your needs. In order that we can more promptly provide you with the part number of the specific switch you require, if possible, please be prepared to answer the following questions regarding your application when you contact us:

- in general, what do you want the switch to do?
- can you provide a chart showing the opening/closing of the contacts ('X' chart)?
- what is the maximum current rating, make/break and continuous?
- what is the maximum voltage, ac or dc?
- how do you want to mount the switch?
- what type of legend plate and handle do you prefer?
- are there any special environmental conditions where the switch will be located?





























































Rotary Cam Switches
standard versions

PR12 series

IP40 standard IP65 on request

UL / CSA / CE

















































PR12								
UL508	12A general use - inductive load							
	1-phase 110/120Vac 0.5HP							
	3-phase 220/240Vac 3.0HP							
	440/480Vac 5.0HP							
	550/600Vac 3.0HP							
IEC 947-3	AC21 - 16A resistive load							
			EN48MD50 22mm single hole mount small gray/black handle 48mm square legend	EC21RA03 22mm single hole mount small black knob handle no legend plate	EC21RB03 22mm single hole mount small black lever handle no legend plate	EC21RC00 22mm single hole mount key lock switch no legend plate		
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number	
On/Off switch								
1101 A4		1 pole		1	NB01AX80	NB01AC113	NB01AC123	NB01AC1C1
1102 A4		2 poles		2	NB02AX80	NB02AC113	NB02AC123	NB02AC1C1
1103 A4		3 poles		3	NB03AX80	NB03AC113	NB03AC123	NB03AC1C1
1104 A4		4 poles		4	NB04AX80	NB04AC113	NB04AC123	NB04AC1C1
Main Switch								
1103 GN		3 pole + gnd		3				
1104 GN		3 pole + late break neutral		4				
Change-Over Switch with "OFF"								
2201 C8		1 pole		2	NC01GX80	NC01GC113	NC01GC123	NC01GC1C1
2202 C8		2 poles		4	NC02GX80	NC02GC113	NC02GC123	NC02GC1C1
2203 C8		3 poles		6	NC03GX80	NC03GC113	NC03GC123	NC03GC1C1
2204 C8		4 poles		8	NC04GX80	NC04GC113	NC04GC123	NC04GC1C1
Change-Over Switch without "OFF"								
2251 D4		1 pole		2	NC51DX80	NC51DC113	NC51DC123	
2252 D4		2 poles		4	NC52DX80	NC52DC113	NC52DC123	
2253 D4		3 poles		6	NC53DX80	NC53DC113	NC53DC123	
2254 D4		4 poles		8	NC54DX80	NC54DC113	NC54DC123	
3-Way Selector Switch with "OFF"								
2301 A4		1 pole		3	ND01AX80	ND01AC113	ND01AC123	ND01AC1C1
2302 A4		2 poles		6	ND02AX80	ND02AC113	ND02AC123	ND02AC1C1
2303 A4		3 poles		9	ND03AX80	ND03AC113	ND03AC123	ND03AC1C1
3-Phase Motor Switches								
9151 C8		Forward/reverse 1 speed		5	NZ11GX80	NZ11GC113	NZ11GC123	NZ11GC1C1
9153 C8		Wye/delta starter for./rev., 1 speed		10	NZ13GX80	NZ13GC113	NZ13GC123	NZ13GC1C1
9551 B4		Wye/delta starter 1 direction, 1 spd.		8	NZ51GX80	NZ51GC113	NZ51GC123	NZ51GC1C1
9552 B4		Dahlander starter 1 direction, 2 spd.		8	NZ52GX80	NZ52GC113	NZ52GC123	NZ52GC1C1
9552 C4		Dahlander starter 1 direction, 2 spd.		8	NZ52CX80	NZ52CC113	NZ52CC123	NZ52CC1C1
Ammeter Switch - 3 phase								
8151 A4		3 current xfms with common point		6	NY11AX80	NY11AC113	NY11AC123	NY11AC1C1
8164 A4		Without current transformers		9	NY14AX80	NY14AC113	NY14AC123	NY14AC1C1
8157 A4		3 current xfms without common pt.		9	NY17AX80	NY17AC113	NY17AC123	NY17AC1C1
Voltmeter Switch - 3 phase								
8351 A4		Without neutral		4	NY31AX80	NY31AC113	NY31AC123	NY31AC1C1
8357 C8		With neutral		6	NY37GX80	NY37GC113	NY37GC123	NY37GC1C1






Rotary Cam Switches
standard versions

PR12 series

IP40 standard IP65 on request

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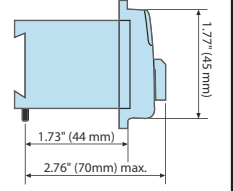
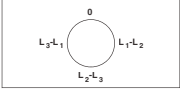
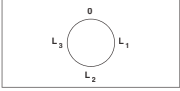
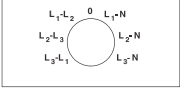
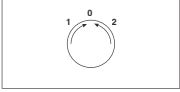
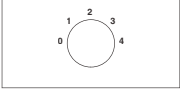
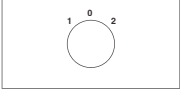
PR12 UL508 12A general use - inductive load 1-phase 110/120Vac 0.5HP 3-phase 220/240Vac 3.0HP 440/480Vac 5.0HP 550/600Vac 3.0HP IEC 947-3 AC21 - 16A resistive load							
				EQ48PN panel mount two screw small gray/black handle 48mm square legend	BPRQ48PN reduced size enclosure small gray/black handle 48mm square legend	BCQ3 standard size enclosure small black handle 64mm square legend	EJ483PND51 panel mount two screw yellow/red handle padlockable legend plate
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number
On/Off switch							
1101 A4		1 pole		NB01AQ1	NB01AGQ	NB01AXQ	
1102 A4		2 poles		NB02AQ1	NB02AGQ	NB02AXQ	
1103 A4		3 poles		NB03AQ1	NB03AHQ	NB03AXQ	
1104 A4		4 poles		NB04AQ1	NB04AHQ	NB04AXQ	
Main Switch							
1103 GN		3 pole + gnd					NS3EV493
1104 GN		3 pole + late break neutral					NS4EV493
Change-Over Switch with "OFF"							
2201 C8		1 pole		NC01GQ1	NC01GCQ	NC01GXQ	
2202 C8		2 poles		NC02GQ1	NC02GHQ	NC02GXQ	
2203 C8		3 poles		NC03GQ1		NC03GXQ	
2204 C8		4 poles		NC04GQ1		NC04GXQ	
Change-Over Switch without "OFF"							
2251 D4		1 pole		NC51DQ1	NC51DGQ	NC51DXQ	
2252 D4		2 poles		NC52DQ1	NC52DHQ	NC52DXQ	
2253 D4		3 poles		NC53DQ1		NC53DXQ	
2254 D4		4 poles		NC54DQ1		NC54DXQ	
3-Way Selector Switch with "OFF"							
2301 A4		1 pole		ND01AQ1	ND01AHQ	ND01AXQ	
2302 A4		2 poles		ND02AQ1		ND02AXQ	
2303 A4		3 poles		ND03AQ1		ND03AXQ	
3-Phase Motor Switches							
9151 C8		forward/reverse 1 speed		NZ11GQ1		NZ11GXQ	
9153 C8		wye/delta starter for./rev., 1 speed		NZ13GQ1		NZ13GXQ	
9551 B4		wye/delta starter 1 direction, 1 spd.		NZ51BQ1		NZ51BXQ	
9552 B4		Dahlander starter 1 direction, 2 spd.		NZ52BQ1		NZ52BXQ	
9552 C4		Dahlander starter 1 direction, 2 spd.		NZ52CQ1		NZ52CXQ	

					Contacts	L ₁ /L ₅	L ₂	L ₃	L ₄
					1-2	1.42"	2.01"	1.81"	3.03"
					3-4	1.81"	2.40"	2.28"	3.03"
					5-6	2.20"	2.80"	n/a	3.03"
					7-8	2.60"	3.19"	n/a	3.98"
					9-10	2.99"	3.58"	n/a	3.98"

Rotary Cam Switches
standard versions

PR12 series

UL / CSA / CE

PR12 UL508 12A general use - inductive load 1-phase 110/120Vac 0.5HP 3-phase 220/240Vac 3.0HP 440/480Vac 5.0HP 550/600Vac 3.0HP IEC 947-3 AC21 - 16A resistive load					PR12 cam switch for In-Panel mounting. Switch mounts to 35mm Din-Rail. Other standard and custom contact diagrams available. 6 contacts maximum.	
Diagram	Function	Contacts	Legend Plate	Part Number		
8351 A4	Voltmeter 3-phase without neutral	4		NDF01		
8151 A4	Ammeter 3-phase 3 current transformers with common point	6		NDF02		
8357 C8	Voltmeter 3-phase with neutral	6		NDF03		
2202 CR12	2-pole 2-way change-over switch with off spring return to off	4		NDF05		
2401 B8	1-pole 4-way selector switch with off	4		NDF06		
2202 C8	2-pole 2-way change-over switch with off	4		NDF15		

22mm single hole mounting operator heads

*For other collar options see page 3-58

Handle	
Color	Reference
Red	C21RA01
Green	C21RA02
Black	C21RA03
Gray	C21RA08

Lever Handle	
Color	Reference
Red	C21RB01
Green	C21RB02
Black	C21RB03
Gray	C21RB08

Key Lock 45°/90° Switching Angle	
Reference	Key Removable in Positions
C21RC00	1,3,5,7
C21RD00	3,7
C21RE00	1,5
C21RF00	2,4,6,8
C21RG00	2,8
C21RH00	4,8





Key Lock 30°/60° Switching Angle	
Reference	Key Removable in Positions
C21RJ00	1,3,5,7,9,11
C21RK00	1,7
C21RQ00	3,9
C21RR00	5,11
C21RL00	2,4,6,8,10,12
C21RM00	4,10
C21RS00	2,8
C21RT00	6,12




Rotary Cam Switches
standard versions

PR17 series

IP40 standard IP65 on request

UL / CSA / CE

PR17 UL508 16A general use - inductive load 1-phase 110/120Vac 1.0HP 3-phase 220/240Vac 5.0HP 440/480Vac 7.5HP 550/600Vac 10.0HP IEC 947-3 AC21 - 20A resistive load							
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number
On/Off switch							
1101 A4	0 1	1 pole	1	SB01AQ1	SB01AXQ		
1102 A4	0 1	2 poles	2	SB02AQ1	SB02AGQ		
1103 A4	0 1	3 poles	3	SB03AQ1	SB03AXQ		
1104 A4	0 1	4 poles	4	SB04AQ1	SB04AXQ		
Main Switch							
1103 GN	0 1	3 pole + gnd	3			SS3EV493	SS3EV493-IP65
1104 GN	0 1	3 pole + late break neutral	4			SS4EV493	SS4EV493-IP65
Change-Over Switch with "OFF"							
2201 C8	0 1 2	1 pole	2	SC01GQ1	SC01GXQ		
2202 C8	0 1 2	2 poles	4	SC02GQ1	SC02GXQ		
2203 C8	0 1 2	3 poles	6	SC03GQ1	SC03GXQ		
2204 C8	0 1 2	4 poles	8	SC04GQ1	SC04GXQ		
Change-Over Switch without "OFF"							
2251 D4	0 1 2	1 pole	2	SC51DQ1	SC51DXQ		
2252 D4	0 1 2	2 poles	4	SC52DQ1	SC52DXQ		
2253 D4	0 1 2	3 poles	6	SC53DQ1	SC53DXQ		
2254 D4	0 1 2	4 poles	8	SC54DQ1	SC54DXQ		
3-Way Selector Switch with "OFF"							
2301 A4	0 1 2 3	1 pole	3	SD01AQ1	SD01AXQ		
2302 A4	0 1 2 3	2 poles	6	SD02AQ1	SD02AXQ		
2303 A4	0 1 2 3	3 poles	9	SD03AQ1	SD03AXQ		
3-Phase Motor Switches							
9151 C8	0 1 2 3 4	forward/reverse 1 speed	5	SZ11GQ1	SZ11GXQ		
9153 C8	0 1 2 3 4 5 6 7 8 9	wye/delta starter for./rev., 1 speed	10	SZ13GQ1	SZ13GXQ		
9551 B4	0 1 2 3 4 5 6 7 8	wye/delta starter 1 direction, 1 spd.	8	SZ51BQ1	SZ51BXQ		
9552 B4	0 1 2 3 4 5 6 7 8	Dahlander starter 1 direction, 2 spd.	8	SZ52BQ1	SZ52BXQ		
9552 C4	0 1 2 3 4 5 6 7 8	Dahlander starter 1 direction, 2 spd.	8	SZ52CQ1	SZ52CXQ		

















































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			1-2	1.30"	3.03"
			3-4	1.77"	3.03"
			5-6	2.24"	3.03"
			7-8	2.72"	3.98"
			9-10	3.19"	3.98"




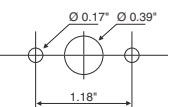
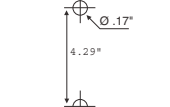
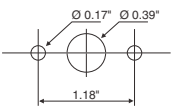
Rotary Cam Switches
standard versions

PR21 series

IP40 standard IP65 on request

UL / CSA / CE

PR21 UL508 20A general use - inductive load 1-phase 110/120Vac 1.5HP 3-phase 220/240Vac 5.0HP 440/480Vac 10.0HP 550/600Vac 15.0HP IEC 947-3 AC21 - 25A resistive load							
				EQ48PN panel mount two screw small gray/black handle 48mm square legend	BCQ3 standard size enclosure small black handle 64mm square legend	EJ483PND51 panel mount two screw yellow/red handle padlockable legend plate	EJ483PND51 panel mount two screw yellow/red handle padlockable legend plate
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number
On/Off switch							
1101 A4		1 pole		TB01AQ1	TB01AXQ		
1102 A4		2 poles		TB02AQ1	TB02AGQ		
1103 A4		3 poles		TB03AQ1	TB03AXQ		
1104 A4		4 poles		TB04AQ1	TB04AXQ		
Main Switch							
1103 GN		3 pole + gnd				TS3EV493	TS3EV493-IP65
1104 GN		3 pole + late break neutral				TS4EV493	TS4EV493-IP65
Change-Over Switch with "OFF"							
2201 C8		1 pole		TC01GQ1	TC01GXQ		
2202 C8		2 poles		TC02GQ1	TC02GXQ		
2203 C8		3 poles		TC03GQ1	TC03GXQ		
2204 C8		4 poles		TC04GQ1	TC04GXQ		
Change-Over Switch without "OFF"							
2251 D4		1 pole		TC51DQ1	TC51DXQ		
2252 D4		2 poles		TC52DQ1	TC52DXQ		
2253 D4		3 poles		TC53DQ1	TC53DXQ		
2254 D4		4 poles		TC54DQ1	TC54DXQ		
3-Way Selector Switch with "OFF"							
2301 A4		1 pole		TD01AQ1	TD01AXQ		
2302 A4		2 poles		TD02AQ1	TD02AXQ		
2303 A4		3 poles		TD03AQ1	TD03AXQ		
3-Phase Motor Switches							
9151 C8		forward/reverse 1 speed		TZ11GQ1	TZ11GXQ		
9153 C8		wye/delta starter for./rev., 1 speed		TZ13GQ1	TZ13GXQ		
9551 B4		wye/delta starter 1 direction, 1 spd.		TZ51BQ1	TZ51BXQ		
9552 B4		Dahlander starter 1 direction, 2 spd.		TZ52BQ1	TZ52BXQ		
9552 C4		Dahlander starter 1 direction, 2 spd.		TZ52CQ1	TZ52CXQ		





































			Contacts	L ₁ /L ₃	L ₂
L ₁	L ₂	L ₃	1-2	1.30"	3.03"
			3-4	1.77"	3.03"
			5-6	2.24"	3.03"
			7-8	2.72"	3.98"
			9-10	3.19"	3.98"
					


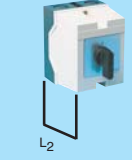

Rotary Cam Switches
standard versions

PR26 series

IP40 standard IP65 on request

UL / CSA / CE

PR26 UL508 25A general use - inductive load 1-phase 110/120Vac 2.0HP 3-phase 220/240Vac 7.5HP 440/480Vac 15.0HP 550/600Vac 20.0HP IEC 947-3 AC21 - 32A resistive load							
				EQ72MN panel mount two screw medium gray/black handle 72mm square legend	BCQ3 standard size enclosure small black handle 64mm square legend	EJ723MND51 panel mount two screw yellow/red handle padlockable legend plate	EJ723MND51 panel mount two screw yellow/red handle padlockable legend plate
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number
On/Off switch							
1101 A4		1 pole		1	ZB01AQ7	ZB01AXQ	
1102 A4		2 poles		2	ZB02AQ7	ZB02AXQ	
1103 A4		3 poles		3	ZB03AQ7	ZB03AXQ	
1104 A4		4 poles		4	ZB04AQ7	ZB04AXQ	
Main Switch							
1103 GN		3 pole + gnd		3		ZS3EV733	ZS3EV733-IP65
1104 GN		3 pole + late break neutral		4		ZS4EV733	ZS4EV733-IP65
Change-Over Switch with "OFF"							
2201 C8		1 pole		2	ZC01GQ7	ZC01GXQ	
2202 C8		2 poles		4	ZC02GQ7	ZC02GXQ	
2203 C8		3 poles		6	ZC03GQ7	ZC03GXQ	
2204 C8		4 poles		8	ZC04GQ7	ZC04GXQ	
Change-Over Switch without "OFF"							
2251 D4		1 pole		2	ZC51DQ7	ZC51DXQ	
2252 D4		2 poles		4	ZC52DQ7	ZC52DXQ	
2253 D4		3 poles		6	ZC53DQ7	ZC53DXQ	
2254 D4		4 poles		8	ZC54DQ7	ZC54DXQ	
3-Way Selector Switch with "OFF"							
2301 A4		1 pole		3	ZD01AQ7	ZD01AXQ	
2302 A4		2 poles		6	ZD02AQ7	ZD02AXQ	
2303 A4		3 poles		9	ZD03AQ7		
3-Phase Motor Switches							
9151 C8		forward/reverse 1 speed		5	ZZ11GQ7	ZZ11GXQ	
9153 C8		wye/delta starter for./rev., 1 speed		10	ZZ13GQ7		
9551 B4		wye/delta starter 1 direction, 1 spd.		8	ZZ51BQ7	ZZ51BXQ	
9552 B4		Dahlander starter 1 direction, 2 spd.		8	ZZ52BQ7	ZZ52BXQ	
9552 C4		Dahlander starter 1 direction, 2 spd.		8	ZZ52CQ7	ZZ52CXQ	





			Contacts	L ₁ /L ₃	L ₂
			1-2	1.42"	3.03"
			3-4	2.01"	3.03"
			5-6	2.60"	3.98"
			7-8	3.19"	3.98"
			9-10	3.78"	n/a




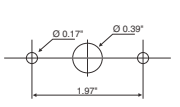
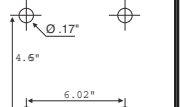
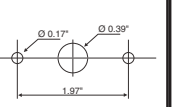
Rotary Cam Switches
standard versions

PR40 series

IP40 standard IP65 on request

UL / CSA / CE

PR40 UL508 50A general use - inductive load 1-phase 110/120Vac 3.0HP 3-phase 220/240Vac 15.0HP 440/480Vac 30.0HP 550/600Vac 30.0HP IEC 947-3 AC21 - 50A resistive load							
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number
On/Off switch							
1101 A4	0 1	1 pole	1	HB01AQ7	HB01AAQ		
1102 A4	0 1	2 poles	2	HB02AQ7	HB02AAQ		
1103 A4	0 1	3 poles	3	HB03AQ7	HB03ABQ		
1104 A4	0 1	4 poles	4	HB04AQ7	HB04ABQ		
Main Switch							
1103 GN	0 1	3 pole + gnd	3			HS3EV733	HS3EV733-IP65
1104 GN	0 1	3 pole + late break neutral	4			HS4EV733	HS4EV733-IP65
Change-Over Switch with "OFF"							
2201 C8	0 1 2	1 pole	2	HC01GQ7	HC01GAQ		
2202 C8	0 1 2	2 poles	4	HC02GQ7	HC02GBQ		
2203 C8	0 1 2	3 poles	6	HC03GQ7	HC03GCQ		
2204 C8	0 1 2	4 poles	8	HC04GQ7	HC04GDQ		
Change-Over Switch without "OFF"							
2251 D4	0 1 2	1 pole	2	HC51DQ7	HC51DAQ		
2252 D4	0 1 2	2 poles	4	HC52DQ7	HC52DBQ		
2253 D4	0 1 2	3 poles	6	HC53DQ7	HC53DCQ		
2254 D4	0 1 2	4 poles	8	HC54DQ7	HC54DDQ		
3-Way Selector Switch with "OFF"							
2301 A4	0 1 2 3	1 pole	3	HD01AQ7	HD01ABQ		
2302 A4	0 1 2 3	2 poles	6	HD02AQ7	HD02ACQ		
2303 A4	0 1 2 3	3 poles	9	HD03AQ7			
3-Phase Motor Switches							
9151 C8	0 REV FOR	forward/reverse 1 speed	5	HZ11GQ7	HZ11GCQ		
9153 C8	0 Y	wye/delta starter for./rev., 1 speed	10	HZ13GQ7			
9551 B4	0 Y	wye/delta starter 1 direction, 1 spd.	8	HZ51BQ7	HZ51BDQ		
9552 B4	0 LS HS	Dahlander starter 1 direction, 2 spd.	8	HZ52BQ7	HZ52BDQ		
9552 C4	0 LS HS	Dahlander starter 1 direction, 2 spd.	8	HZ52CQ7	HZ52CDQ		
























			Contacts	L ₁ /L ₃	L ₂
			1-2	2.36"	4.21"
			3-4	3.15"	4.21"
			5-6	3.94"	5.71"
			7-8	4.72"	5.71"
			9-10	5.51"	n/a




Rotary Cam Switches
standard versions

PR63 series

IP40 standard IP65 on request

UL / CSA / CE

<p>PR63 UL508 63A general use - inductive load</p> <p>1-phase 110/120Vac 5.0HP 3-phase 220/240Vac 20.0HP 440/480Vac 40.0HP 550/600Vac 40.0HP</p> <p>IEC 947-3 AC21 - 80A resistive load</p>							
				EQ72MN panel mount two screw medium gray/black handle 72mm square legend	BCFQ72MN standard size enclosure medium gray/black handle 72mm square legend	EJ723MND61 panel mount two screw yellow/red handle padlockable legend plate	EJ723MND61 panel mount two screw yellow/red handle padlockable legend plate
Diagram	Positions	Function	Contacts	Part Number	Part Number	Part Number	Part Number
On/Off switch							
1101 A4		1 pole	1	IB01AQ7	IB01AAQ		
1102 A4		2 poles	2	IB02AQ7	IB02AAQ		
1103 A4		3 poles	3	IB03AQ7	IB03ABQ		
1104 A4		4 poles	4	IB04AQ7	IB04ABQ		
Main Switch							
1103 GN		3 pole + gnd	3			IS3EV733	IS3EV733-IP65
1104 GN		3 pole + late break neutral	4			IS4EV733	IS4EV733-IP65
Change-Over Switch with "OFF"							
2201 C8		1 pole	2	IC01GQ7	IC01GAQ		
2202 C8		2 poles	4	IC02GQ7	IC02GBQ		
2203 C8		3 poles	6	IC03GQ7	IC03GCQ		
2204 C8		4 poles	8	IC04GQ7	IC04GDQ		
Change-Over Switch without "OFF"							
2251 D4		1 pole	2	IC51DQ7	IC51DAQ		
2252 D4		2 poles	4	IC52DQ7	IC52DBQ		
2253 D4		3 poles	6	IC53DQ7	IC53DCQ		
2254 D4		4 poles	8	IC54DQ7	IC54DDQ		
3-Way Selector Switch with "OFF"							
2301 A4		1 pole	3	ID01AQ7	ID01ABQ		
2302 A4		2 poles	6	ID02AQ7	ID02ACQ		
2303 A4		3 poles	9	ID03AQ7			
3-Phase Motor Switches							
9151 C8		forward/reverse 1 speed	5	IZ11GQ7	IZ11GCQ		
9153 C8		wye/delta starter for./rev., 1 speed	10	IZ13GQ7			
9551 B4		wye/delta starter 1 direction, 1 spd.	8	IZ51BQ7	IZ51BDQ		
9552 B4		Dahlander starter 1 direction, 2 spd.	8	IZ52BQ7	IZ52BDQ		
9552 C4		Dahlander starter 1 direction, 2 spd.	8	IZ52CQ7	IZ52CDQ		












			Contacts	L ₁ /L ₃	L ₂
			1-2	2.36"	4.21"
			3-4	3.15"	4.21"
			5-6	3.94"	5.71"
			7-8	4.72"	5.71"
			9-10	5.51"	n/a

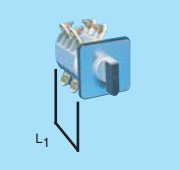
Rotary Cam Switches
standard versions

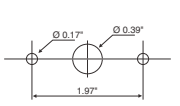
PR125 / PR160

IP40 standard IP65 on request

CE

PR125 IEC 947-3 AC21 - 160A resistive load				PR160 IEC 947-3 AC21 - 200A resistive load	
					
EQ96GN panel mount two screw large gray/black handle 96mm square legend				EQ96GN panel mount two screw large gray/black handle 96mm square legend	
Diagram	Positions	Function	Contacts	Part Number	Part Number
On/Off switch					
1101 A4		1 pole	1	LB01AQ9	MB01AQ9
1102 A4		2 poles	2	LB02AQ9	MB02AQ9
1103 A4		3 poles	3	LB03AQ9	MB03AQ9
1104 A4		4 poles	4	LB04AQ9	MB04AQ9
Change-Over Switch with "OFF"					
2201 C8		1 pole	2	LC01GQ9	MC01GQ9
2202 C8		2 poles	4	LC02GQ9	MC02GQ9
2203 C8		3 poles	6	LC03GQ9	MC03GQ9
2204 C8		4 poles	8	LC04GQ9	MC04GQ9
Change-Over Switch without "OFF"					
2251 D4		1 pole	2	LC51DQ9	MC51DQ9
2252 D4		2 poles	4	LC52DQ9	MC52DQ9
2253 D4		3 poles	6	LC53DQ9	MC53DQ9
2254 D4		4 poles	8	LC54DQ9	MC54DQ9
3-Way Selector Switch with "OFF"					
2301 A4		1 pole	3	LD01AQ9	MD01AQ9
2302 A4		2 poles	6	LD02AQ9	MD02AQ9
2303 A4		3 poles	9	LD03AQ9	MD03AQ9
3-Phase Motor Switches					
9151 C8		forward/reverse 1 speed	5	LZ11GQ9	MZ11GQ9
9153 C8		wye/delta starter for./rev., 1 speed	10	LZ13GQ9	MZ13GQ9
9551 B4		wye/delta starter 1 direction, 1 spd.	8	LZ51BQ9	MZ51BQ9
9552 B4		Dahlander starter 1 direction, 2 spd.	8	LZ52BQ9	MZ52BQ9
9552 C4		Dahlander starter 1 direction, 2 spd.	8	LZ52CQ9	MZ52CQ9

	Contacts	L ₁
	1-2	3.15"
	3-4	4.72"
	5-6	6.30"
	7-8	7.87"
	9-10	9.45"



		PR12	PR17	PR21	PR26	PR40	PR63	PR125	PR160
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 947-3*									
AC 3 (3 x 400 Vac)		4 kW	7.5kW	7.5 kW	11 kW	18.5 kW	22 kW	n/a	n/a
AC 23 (3 x 400 Vac)		7.5 kW	11kW	11 kW	15 kW	22kW	25 kW	n/a	n/a
AC 21		16 A	20 A	25 A	32 A	50 A	80A	160A	200A
DC1 (24 Vdc)		16 A	20 A	25 A	32 A	50 A	80A	n/a	n/a
* AC 3		Squirrel cage motors: starting, switching off of motors during running							
AC 23		Switching of motor loads or other highly inductive loads							
AC 21		Switching of resistive loads including moderate overloads							
DC 1		Non-inductive or slightly inductive loads, resistance furnaces							
Maximum Wire Gauge									
Rigid	mm ²	4	6 (4*)	6(4*)	6	16	16	8mm screw for eyelet	
	AWG	10	8 (10*)	8 (10*)	8	6	6		
Flexible	mm ²	2.5	4	4	6	16	16		
	AWG	14	12	12	8	6	6		
*These values correspond to wiring carried out on terminals with jumpers.									
Mechanical Life		1,250,000 operations, 150 per hour maximum.							
Operating Temperature Limits		-4° F to 158° F (-20° C to 70° C)							

Mounting Options:

- 1) Front mounting, installed from rear of panel, secured by 2 screws at 30mm or 50mm interval.
- 2) Front mounting, installed from rear of panel, secured by 4 screws at 36/48/68mm square intervals.
- 3) Rear mounting, secured by 4 screws at 48/68mm square intervals.
- 4) Rear mounting onto 35mm Din-rail.
- 5) Front mounting in 22mm single hole with knob handle (PR12 only).
- 6) Front mounting in 22mm single hole with key handle (PR12 only).
- 7) Front mounting in 22mm single hole with legend plate and handle (PR12 only).
- 8) Front mounting in a 30mm hole, one-piece assembly, with handle

