



Sample image

### **Datasheet**

Article number: 70024333

Designation: CA20.A291\*NLB403.PF1

Description: Switch

Rated insulation voltage Ui	17-3, VDE 0660 Teil 107						
			Voltage (V) AC / D	OC .			
			690 AC/E	C			
Rated uninterrupted current	lu/lth						
Current (A)	Ambient temperature (°C)	Peak temperat	ture (°C) additional re				
25	55		60 Ambient ter	mperature +55°C	during 24 hours v	rith peaks up to +60°C	
Rated operational current le							
Utilization category					ltage (V)		Current (
AC-15					20 - 240		
AC-15				3	80 - 440		
Rated operational power							
Utilization category		Voltage (V)	٨	lo. of phases		No. of poles	Power (kV
AC-3		220 - 240		3		3	
AC-3		380 - 440		3		3	7,5
AC-3		660 - 690		3		3	7,5
AC-3		220 - 240		1		2	
AC-3		380 - 440		1		2	3,7
AC-23A		220 - 240		3		3	5,5
AC-23A		380 - 440		3		3	1
AC-23A		660 - 690		3		3	1
AC-23A		220 - 240		1		2	
AC-23A		380 - 440		11		2	5,5
Max Fuse Rating IEC							
Fuse characteristic					No. of Fu	ses	Current (A
gG						1	3
III 60947-4-1 III 508	1						
UL60947-4-1 , UL508	3						
UL60947-4-1 , UL508 Nominal Voltage	3		Voltage (V) AC / F	00			
	3		Voltage (V) AC / E	OC .			
Nominal Voltage	3		Voltage (V) AC / E 600 AC	OC .			
	3		600 AC				
Nominal Voltage	3		600 AC  Voltage (V) AC / E				
Nominal Voltage	3		600 AC				
Nominal Voltage		0)	600 AC  Voltage (V) AC / E	OC .	turo (°C) Addition	nol Toyt	
Nominal Voltage	Current (A		600 AC  Voltage (V) AC / E			nal Text	
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current			600 AC  Voltage (V) AC / E	OC .	ture (°C) Additio 0 - 40	nal Text	
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current  Horsepower rating	Current (A 3		600 AC  Voltage (V) AC / E 600 AC	OC Ambient tempera	0 - 40		Ambient temperature 19
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current  Horsepower rating  Across-the-Line Motor Startin	Current (A 3		600 AC  Voltage (V) AC / E 600 AC	Ambient tempera	0 - 40 - No. of poles	Power (HP)	Ambient temperature [*
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current  Horsepower rating  Across-the-Line Motor Startin  Reversing	Current (A 3		600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120	Ambient tempera  No. of phases	0 - 40 No. of poles 2	Power (HP) 0,33	4
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing Reversing	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 100 AC	Ambient tempera  No. of phases 1 1	0 - 40 No. of poles 2 2	Power (HP) 0,33 0,75	4
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing Reversing Reversing Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277	OC  Ambient tempera  No. of phases  1 1 1	0 - 40  No. of poles  2  2  2	Power (HP) 0,33 0,75	4 4 4
Nominal Voltage  Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing Reversing Reversing Reversing Reversing Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415	No. of phases 1 1 1 1	0 - 40  No. of poles  2  2  2  2	Power (HP) 0,33 0,75 1	4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Starting Reversing Reversing Reversing Reversing Reversing Reversing Reversing Reversing Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480	No. of phases  1 1 1 1	No. of poles 2 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2	4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600	No. of phases 1 1 1 1 1 1	0 - 40  No. of poles 2 2 2 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2	4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120	No. of phases 1 1 1 1 1 3	0-40  No. of poles 2 2 2 2 2 2 2 3	Power (HP) 0,33 0,75 1 1,50 2 2 1	4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240	No. of phases  1 1 1 1 1 3 3	0 - 40  No. of poles 2 2 2 2 2 2 3 3	Power (HP) 0,33 0,75 1 1,50 2 2 1 1 2	4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415	No. of phases  1 1 1 1 1 3 3 3 3	0 - 40  No. of poles 2 2 2 2 2 2 3 3 3 3	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3	4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Starting Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415	No. of phases  1 1 1 1 1 3 3 3 3 3 3	0-40  No. of poles 2 2 2 2 2 2 2 3 3 3 3 3 3	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5	4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600	No. of phases  1 1 1 1 1 3 3 3 3 3 3	0-40  No. of poles 2 2 2 2 2 2 2 3 3 3 3 3 3 3	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 5	4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600 110 - 120	No. of phases  1 1 1 1 3 3 3 3 1	0 - 40  No. of poles  2 2 2 2 2 2 3 3 3 3 3 3 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 5 1,50	4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing DOL DOL	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240	No. of phases  No. of phases  1  1  1  3  3  3  1  1	0 - 40  No. of poles 2 2 2 2 2 2 3 3 3 3 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 1,50 3	4 4 4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing DOL DOL	Current (A 3		Voltage (V) AC / E 600 AC Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 277 - 277	No. of phases  1 1 1 1 3 3 3 1 1 1 1 1	0 - 40  No. of poles 2 2 2 2 2 3 3 3 3 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 1,50 3 3 3	4 4 4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing DOL DOL DOL DOL	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 277 - 277 415 - 415	No. of phases  1 1 1 1 3 3 3 1 1 1 1 1	0-40  No. of poles 2 2 2 2 2 2 3 3 3 3 2 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 5 1,50 3 3 3	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing DoL DoL DoL DoL	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 277 - 277 415 - 415	No. of phases  1 1 1 1 3 3 3 1 1 1 1 1 1 1 1 1 1 1 1	0-40  No. of poles  2 2 2 2 2 2 3 3 3 3 2 2 2 2 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 5 1,50 3 3 3 3 5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing DOL DOL DOL DOL DOL DOL DOL	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120 220 - 247 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 277 - 277 415 - 445 440 - 480 550 - 600	No. of phases  1 1 1 1 1 3 3 3 1 1 1 1 1 1 1 1 1 1 1	0-40  No. of poles  2 2 2 2 2 3 3 3 3 2 2 2 2 2 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 5 1,50 3 3 3 5 5 5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating  Across-the-Line Motor Startin Reversing Loud Doll Doll Doll Doll Doll Doll Doll Doll	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 277 - 277 415 - 415 440 - 480 550 - 600 110 - 120	No. of phases  1 1 1 1 3 3 3 1 1 1 1 1 1 3 3 3 3 3 3	0 - 40  No. of poles  2 2 2 2 2 2 3 3 3 3 2 2 2 2 2 2 3	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 1,50 3 3 5 1,50 3 3 3 5 5 1,50 3	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Rated insulation voltage Ui  Rated thermal current  Horsepower rating Across-the-Line Motor Startin Reversing DoL DoL DoL DoL DoL DoL DoL DoL	Current (A 3		Voltage (V) AC / E 600 AC  Voltage (V) AC / E 600 AC  Voltage (V) 110 - 120 220 - 247 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 415 - 415 440 - 480 550 - 600 110 - 120 220 - 240 277 - 277 415 - 445 440 - 480 550 - 600	No. of phases  1 1 1 1 1 3 3 3 1 1 1 1 1 1 1 1 1 1 1	0-40  No. of poles  2 2 2 2 2 3 3 3 3 2 2 2 2 2 2 2 2 2 2	Power (HP) 0,33 0,75 1 1,50 2 2 1 2 3 5 5 1,50 3 3 3 5 5 5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

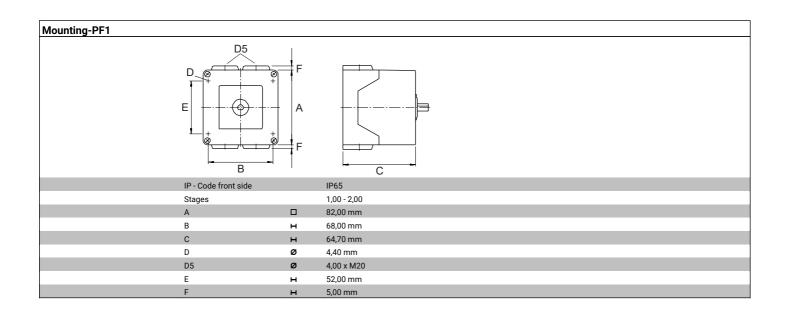


Horsepower rating							
Across-the-Line Motor Starting		Voltage (V)	No. of phases	No. of poles	Power (HP)	Ambient temp	
DOL		550 - 600	3	3	10		40
Pilot duty rating code							
Duty Code A600							
SCCR / Max. fuse rating							
Conditions of acceptability							
These devices are suitable for use on circuits capabintended for use as a motor disconnector are suitable.	le of delivering not more than 500	0 rms symmetrical an	peres, 600V ac r	nax. when protec	eted by Class RK1 fo	uses. Manual Motor Controlle	ers when
intended for use as a motor disconnector are suitab fuses.	le for use on a circuit capable of d	elivering not more tha	n 5000 rms symr	metrical amperes	s, 600V ac max. whe	en protected by 30A Class J t	ime delay
Temp. rating of wire							
	ure rating (°C)		Cu	rrent (A) Text			
·	75			, ,	pper wire only		
Connecting instructions							
Markings							
When intended for use as a motor disconnector the	device shall be provided with a me	thod of being locked	n the OFF-position	on.			
General Use         Voltage (V)         Current (A	No of phonon	No of malos				No. of contac	to in corio
AC / DC         Voltage (V)         Current (A           AC         600         30		No. of poles				No. or contac	ts in serie
AC 600 30		3					
	3		'				
CSA							
Nominal Voltage		1/ // 00 10 /0/					
		Voltage (V) AC / DO					
Rated insulation voltage Ui		600 AC					
nated modifical voltage of		Voltage (V) AC / DO					
		600 AC					
Rated thermal current		333 710					
	Current (A)	,	Ambient tempera	ture (°C) Additio	nal Text		
	30			0 - 40			
Horsepower rating							
Across-the-Line Motor Starting		Voltage (V)	No. of phases	No. of poles	Power (HP)	Ambient temp	-
DOL		110 - 120	1	2	1,50		4
DOL		220 - 240	1	2	3		4
DOL		277 - 277	1	2	3		40
DOL		415 - 415	1	2	5		40
DOL DOL		440 - 480	1	2 2	5 5		40
DOL		550 - 600 110 - 120	3	3	3		40
DOL		220 - 240	3	3	7,50		40
DOL		415 - 415	3	3	10		40
DOL		440 - 480	3	3	10		40
DOL		550 - 600	3	3	10		40
Pilot duty rating code							
Duty Code							
A600							
Temp. rating of wire							
Temperat	ure rating (°C)		Cu	rrent (A) Text			
Company	75			- only			
General Use         AC / DC         Voltage (V)         Current (A	) No. of phases	No. of poles				No. of contac	to in pario
AC / DC         Voltage (V)         Current (A           AC         600         30	•	No. or pores				No. or contac	us in series
	J 1						
GENERAL TECHNICAL INFORMATION							
Tightening torque of screws	Atb.	s torque (Als-)				4!	wanta /II.
	tigntening	torque (Nm)				tightening to	
Stripping length		1					Ġ
outphing length		Length (mm)					
			INGLENGTH				
Size of conductor							
				Cross section	n (mm²) or		
composition of conductor	Min. / Max. value	No. of con	ductor per termin	nal (AWG/kcmil)		Material of the wire	
solid wire	Min.			1 0.75mm²		Copper	
solid wire	Min.			2 0.75mm <sup>2</sup>		Copper	
flexible wire	Min.			1 1.5mm²		Copper	
flexible wire flexible wire	Max. Max.			2 AWG 12 2 4mm <sup>2</sup>		Copper Copper	
flexible wire	Min.			2 1.5mm <sup>2</sup>		Copper	
Single-core or stranded wire	Max.			2 AWG 10		Copper	
Single-core or stranded wire	Max.			2 4mm <sup>2</sup>		Copper	
flexible wire with ferrule according to DIN 46228	Min.			1 1mm²		Copper	
flexible wire with ferrule according to DIN 46228	Max.			2 2.5mm <sup>2</sup>		Copper	
flexible wire with ferrule according to DIN 46228	Min.			2 1mm²		Copper	
Approbations							
							Markin
Specification							
Specification							rm:
Specification  EAC							EHI



Approbations		
Specification		Marking
.,		
		$\sim$
CE marking		
		UK
UK Directives		CÀ
011 211 0011100		
		$oldsymbol{\mathfrak{G}}$
CSA C.22.2 No.14	4	<b>&amp;</b>
		(II)
GB/T14048.3		GB/T140463
Recommended s	screw driver	
Type of screw driv	iver	/alue
Cross Screwdrive	er F	PH1
Slot screwdriver a	according to DIN 5264	0,8x5,5
General Informat	tion	
Text		
- Do not lubricate	e or treat contacts.	
- Switches may or	only be mounted, connected and set into operation by qualified persons according to	the accepted rules of technology.
- Use copper wire	e only. Do not coat the wire end with tin.	
		ion to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring,
all terminal scre	ews must be tightened to recommended torque specifications.	
	n of the switches the spacings between the terminals must be sufficient to fulfill the	requirement of the applicable standards.
	& Electronic Equipment (WEEE)	
Picture name	Description	
Z.	Do not throw in the trash as care must be taken to ensure environmentally sound	disposal and recycling. Please either use an environmentally friendly waste disposal company; aimer. You can find local Kraus & Naimer offices at www.krausnaimer.com
Proposition 65	return to the supplier for disposal, or return direct to the manufacturer, reduce & re-	amer. For our fina food fraud a framer offices at www.kidushaimer.com
Picture name	Description	
$\Lambda$		which is known to the State of California to cause cancer. For more information go to

Classification Contact: Rigid contact bridge
Classification Contact Mat: Silver
Classification Terminal: Screw terminal





# Wiring diagram CA20.A291.PF1

1	3
٨,	٧٩
<b>\</b>	þ
2	4

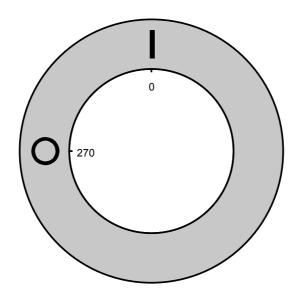


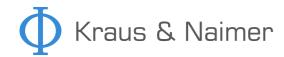
# Switch program CA20.A291.PF1

Mous & Maiman													
Traus & Naimer			CA20		A2	A291				Page 1 of 1			
Face Plate													
1		4	_			_	44	40	45	47	40	24	00
0 300 315 45 60 240 225 135 120 210 180 150		<u>1</u>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5	7	9	11	13	15_	17	19_	21	23
Switching Angle 90	1	2	4	6	8	10	12	14	16	18	20	22	24
Total switching Angle 90													
0	270												
	285												
	300												
	315												
	330			<u> </u>									
	345												
1	0												
	15												
	30			-									
	45												
	60 75			-									
	90			-									
	105			<del>                                     </del>									
	120												
	135												
	150												
	165												
	180												
	195												
	210												
	225												
	240												
	255												
												Versio	n: 96



# Face plate s1.F456/C10.V11H













Sample image

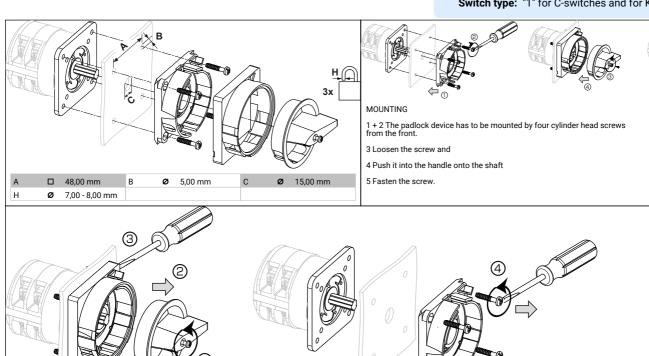
### **PADLOCK DEVICE with F**handle ring

Designation: S1.V840G/A71/C1 Colour of F-handle ring: "A" black Colour of face ring: "7" electro-grey Locking position: "1" at 09:00 (1x90°)

Type of mounting: "C" for type of mounting PN, PF,

PFA-PFF

Switch type: "1" for C-switches and for KG10.



- 1 Loose handle screw
- 2 remove handle.
- 3 Insert a proper auxiliary tool at those points of the frame of the device which are marked by a srew driver on the drawing and remove the frame.
- 4 Fixing screws can be loosen now.