



Sample image

Datasheet

Article number: 70001945
Designation: CA10.A178.EF
Description: Switch

IEC 60947-3 EN 60947-3, VDE 0660 Teil 107						
Rated insulation voltage Ui						
Voltage (V) AC / DC						
690 AC / DC						
Rated impulse withstand voltage Uimp						
Voltage (kV)		Overvoltage category	Pollution degree	Supply system		Function
4		III	3	Valid for lines with grounded common neutral termination		Switch disconnecter
Rated uninterrupted current Iu/Ith						
Current (A)		Ambient temperature (°C)	Peak temperature (°C)	additional requirements		
20		55	60	Ambient temperature +55°C during 24 hours with peaks up to +60°C		
Rated operational current Ie						
Utilization category				Voltage (V)		Current (A)
AC-15				220 - 240		6
AC-15				380 - 440		4
Rated operational power						
Utilization category		Voltage (V)		No. of phases	No. of poles	Power (kW)
AC-3		220 - 240		3	3	3
AC-3		380 - 440		3	3	5,50
AC-3		660 - 690		3	3	5,50
AC-3		220 - 240		1	2	2,20
AC-3		380 - 440		1	2	3
AC-23A		220 - 240		3	3	3,70
AC-23A		380 - 440		3	3	7,50
AC-23A		660 - 690		3	3	7,50
AC-23A		220 - 240		1	2	2,50
AC-23A		380 - 440		1	2	3,70
Max Fuse Rating IEC						
Fuse characteristic				No. of Fuses		Current (A)
gG				1		25
UL60947-4-1 , UL508						
Nominal Voltage						
Voltage (V) AC / DC						
300 AC / DC						
Rated insulation voltage Ui						
Voltage (V) AC / DC						
300 AC						
Rated thermal current						
Current (A)		Ambient temperature (°C)		Additional Text		
20		0 - 40		--		
Horsepower rating						
Across-the-Line Motor Starting			Voltage (V)	No. of phases	No. of poles	Power (HP)
Reversing			110 - 120	1	2	0,17
Reversing			220 - 240	1	2	0,50
Reversing			277 - 277	1	2	0,60
Reversing			110 - 120	3	3	0,50
Reversing			220 - 240	3	3	1
DOL			110 - 120	1	2	0,50
DOL			220 - 240	1	2	1
DOL			277 - 277	1	2	2
DOL			110 - 120	3	3	1,50
DOL			220 - 240	3	3	3
Pilot duty rating code						
Duty Code						
A300						
SCCR / Max. fuse rating						
Conditions of acceptability						
These devices are suitable for use on circuits capable of delivering not more than 5000 rms symmetrical amperes, 600V ac max. when protected by Class RK1 fuses. Manual Motor Controllers when intended for use as a motor disconnecter are suitable for use on a circuit capable of delivering not more than 5000 rms symmetrical amperes, 600V ac max. when protected by 30A Class J time delay fuses.						
Temp. rating of wire						
Temperature rating (°C)			Current (A) Text			
60 - 75			– Use copper wire only			

Connecting instructions
Markings

When intended for use as a motor disconnecter the device shall be provided with a method of being locked in the OFF-position.

General Use

AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series
AC	300	20	1	2	1
AC	300	20	3	3	1

CSA
Nominal Voltage

Voltage (V)	AC / DC
300	AC

Rated insulation voltage Ui

Voltage (V)	AC / DC
300	AC

Rated thermal current

Current (A)	Ambient temperature (°C)	Additional Text
20	0 - 40	--

Horsepower rating

Across-the-Line Motor Starting	Voltage (V)	No. of phases	No. of poles	Power (HP)	Ambient temperature [°C]
DOL	110 - 120	1	2	0,50	40
DOL	220 - 240	1	2	1	40
DOL	277 - 277	1	2	2	40
DOL	110 - 120	3	3	1,50	40
DOL	220 - 240	3	3	3	40

Pilot duty rating code
Duty Code

A300

Temp. rating of wire

Temperature rating (°C)	Current (A)	Text
75	--	only

General Use

AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series
AC	300	20	1	1	1

GENERAL TECHNICAL INFORMATION
Tightening torque of screws

tightening torque (Nm)	tightening torque (lb-in)
0,60	5

Stripping length

Length (mm)	--
8	STRIPPINGLENGTH

Size of conductor

composition of conductor	Min. / Max. value	No. of conductor per terminal	Cross section (mm²) or (AWG/kcmil)	Material of the wire
solid wire	Min.	1	0.5mm²	Copper
solid wire	Min.	2	0.5mm²	Copper
flexible wire	Min.	1	0.75mm²	Copper
flexible wire	Min.	2	0.75mm²	Copper
flexible wire	Max.	2	2.5mm²	Copper
flexible wire	Max.	2	AWG 14	Copper
Single-core or stranded wire	Max.	2	AWG 12	Copper
Single-core or stranded wire	Max.	2	2.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	1	0.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Max.	2	2.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	2	0.5mm²	Copper

Approbations
Specification

EAC

CE marking

UK Directives

CSA C.22.2 No.14

GB/T14048.3

Recommended screw driver

Type of screw driver	Value
Cross Screwdriver	PH1
Slot screwdriver according to DIN 5264	0,8x4

General Information
Text

- Do not lubricate or treat contacts.
- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.

Marking


General Information

Text

- Use copper wire only. Do not coat the wire end with tin.
- Terminals with factory fitted jumper links are tightened during production. Take care during installation to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring, all terminal screws must be tightened to recommended torque specifications.
- After installation of the switches the spacings between the terminals must be sufficient to fulfill the requirement of the applicable standards.

Waste Electrical & Electronic Equipment (WEEE)

Picture name Description



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; return to the supplier for disposal; or return direct to the manufacturer, Kraus & Naimer. You can find local Kraus & Naimer offices at www.krausnaimer.com

Proposition 65

Picture name Description



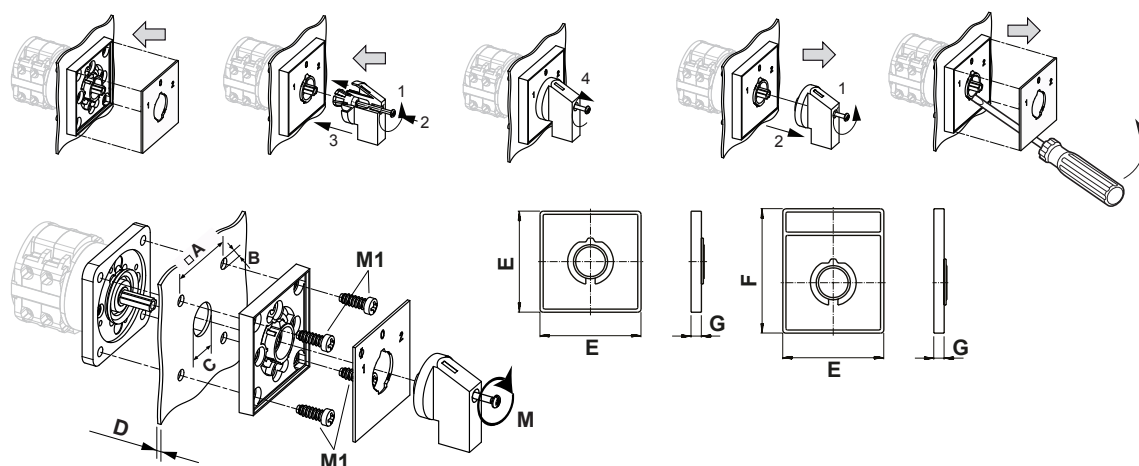
WARNING: This product can expose you to chemicals including nickel and lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

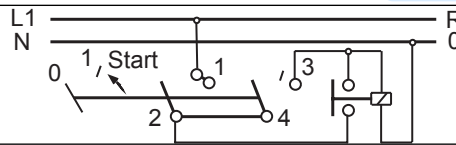
Classification Terminal: Screw terminal

Mounting-EF



IP - Code front side		IP66, IP67, IP69k
Stages		1,00 - 12,00
A	□	36,00 mm
B	∅	5,00 mm
C	∅	15,00 - 19,00 mm
D	H	<= 4,00 mm
E	H	48,00 mm
F	H	59,00 mm
G	H	6,70 mm
M	↺	0,50 Nm
M1	↺	0,90 Nm

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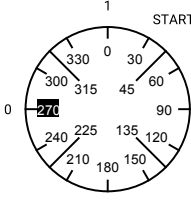
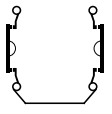
Switch program

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Kraus & Naimer

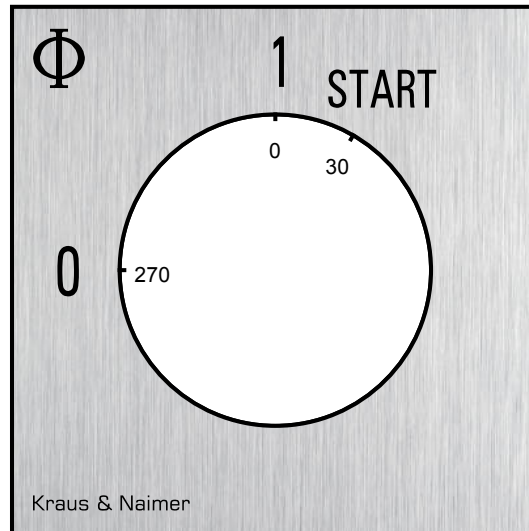
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Face Plate													
		1	3	5	7	9	11	13	15	17	19	21	23
													
Switching Angle 90 Total switching Angle 120		2	4	6	8	10	12	14	16	18	20	22	24
	0												
	270												
	285												
	300												
	315												
	330												
	345												
	1												
	0												
	15												
	START												
	30												
	45												
	60												
	75												
	90												
	105												
	120												
	135												
	150												
165													
180													
195													
210													
225													
240													
255													

Version: 131

Face plate

S0.F119/A1B.PEL



HANDLES

Designation: S0C.G251

Handle colour: "1" black

