



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
DOL				110 - 120	1	2
DOL				220 - 240	1	2
DOL				277 - 277	1	2
DOL				110 - 120	3	3
DOL				220 - 240	3	3
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						
Marking						
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.						

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



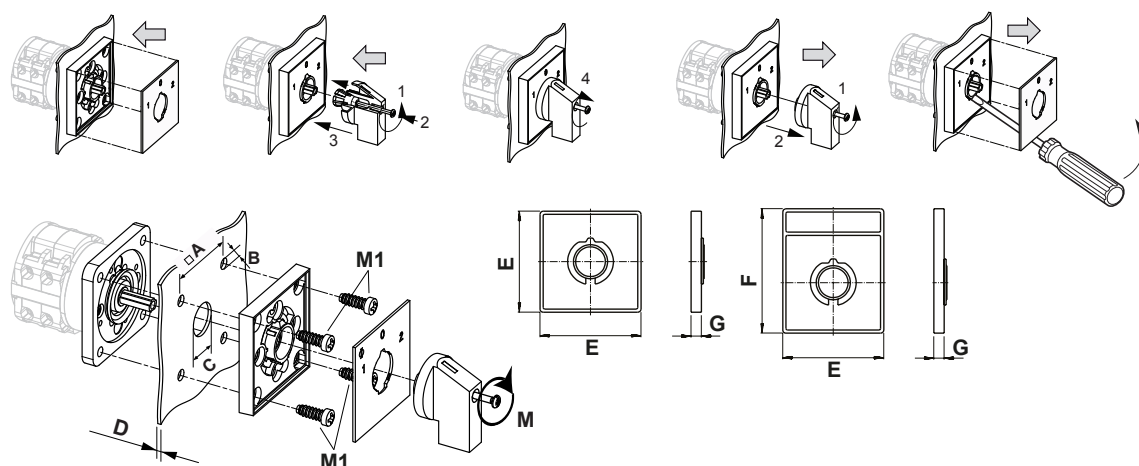
WARNING: This product can expose you to chemicals including nickel and lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

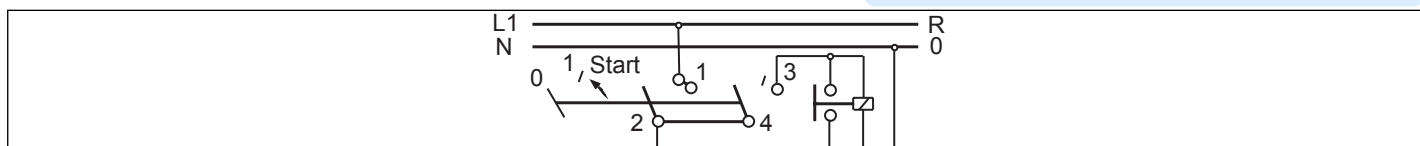
Mounting-EF



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

Wiring diagram

CA10.A178.EF



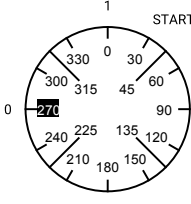
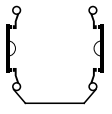
Switch program

CA10.A178.EF



Kraus & Naimer

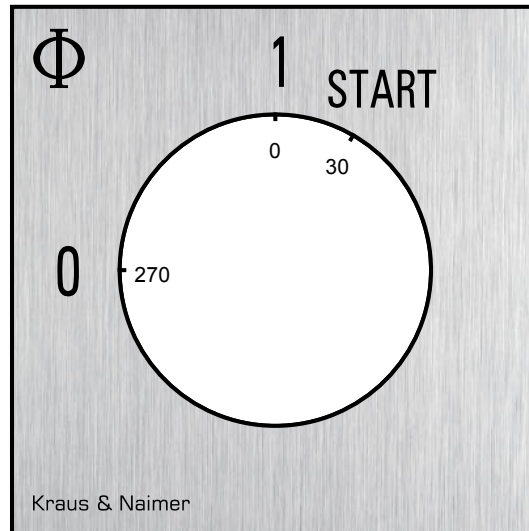
CA10
A178
Page 1 of 1

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

